

From: Angela Carpenter
To: Diane Beaulaurier
Date: 12/10/01 2:39PM
Subject: Fwd: Feedback on Region Three 303(d) List

Hi Diane,

I sent you the attached e-mail a while ago providing you feedback on the Region Three 303(d) List. I provided you with our Board's motion.

Now I want to give you an update. Our Regional Board will hear staff's recommendation for motion components three through five at our February 1, 2002 Regional Board public hearing. (Motion components one and two are a "done" deal.)

We are planning to list other San Lorenzo River tributaries for sediment (motion component three). And we are planning to change some TMDL priorities and schedules (this deals with motion component five). Staff is not proposing to add other listings for Carpinteria Marsh and/or Carpinteria Creek (or other appropriate Santa Barbara County south coast beaches) (motion component four).

We will mail you a draft around the first of the year.

Please feel free to contact me if you have comments or questions.

Angela G. Carpenter
Water Resources Control Engineer
Central Coast Regional Water Quality Control Board

(805) 542-4624
acarpent@rb3.swrcb.ca.gov

CC: Lisa McCann; Tim Stevens

From: Angela Carpenter
To: Diane Beaulaurier
Date: 11/19/01 9:52AM
Subject: Feedback on Region Three 303(d) List

Hi Diane,

At the TMDL Roundup, you asked me to let you know what the Regional Board recommended and you asked me you let you know issues the State Board should be aware of.

Motion: Recommend the State Board adopt changes shown in Attachment Two. Also (1) add Santa Maria River Estuary for "organochlorines." (2) keep the San Lorenzo River Estuary Listing for sedimentation/siltation, (3) add San Lorenzo River tributaries for sedimentation/siltation. (at a minimum, these should include Zayante Creek, Bean Creek, and Kings Creek. Others can be added by staff and we are in the process of determining if other listings should be made), (4) add Carpinteria Marsh and/or Carpinteria Creek (or other appropriate Santa Barbara County south coast beaches) after staff reviews available information again and if staff determines listing is warranted, and (5) evaluate changing starting date for Pacific Ocean at Arroyo Burro Creek or at Mission Creek to an earlier date.

Since our Board asked us to reevaluate listings for San Lorenzo River (#3 above) and Carpinteria Marsh/Carpinterina Creek (#4 above), we need to do this to satisfy our Board. We plan to give you this information as soon as we can.

Issues for the State Perspective

One issue the State Board should consider pertains to bacteria and ocean waters. Regional Boards may be applying different objectives when determining impairment. I applied the Ocean Plan and Basin Plan. Other Regional Boards may be using Assembly Bill 411 criteria. One may come up with different results dependant upon which criteria is used.

(The August 31, 2001 letter from Santa Barbara County discusses this issue when they provided comments on Jalama Creek.)

Hope this makes sense. If you need more information, please feel free to contact me.

Angela G. Carpenter
Water Resources Control Engineer
Central Coast Regional Water Quality Control Board

(805) 542-4624
acarpent@rb3.swrcb.ca.gov

CC: Lisa McCann; Tim Stevens

From: Lisa McCann
To: Wilson, Craig J.
Date: 2/12/02 1:24PM
Subject: 303d List Recommendations Final Tweaks for Reg 3

On Feb. 1 our Board concurred with final recommendations to State Board on our 2002 303d List. Here's what you need to know:

-- On Feb. 1 we proposed adding ten waterbodies for sediment and revised almost ALL priorities and schedules. The attached staff report and attachments reflects the details and supporting documentation for these changes.

- This is follow on to our October recommendations. At that time, we sent you our proposed recommendations with rationale, explanation, data, etc. as requested by Val. After the Board meeting in October, we informed you of a couple of additional changes (see email/transmittal from Angela Carpenter regarding leave San Lorenzo River Estuary listed for Sediment and add Santa Maria River for organochlorine pesticides).

The attached Attachment Two should embody all of the additions, delists, priorities and schedules per our staff's analysis and our Board's additional direction and approvals. Rest assured we won't be tweaking with this anymore and will leave the rest of the work to you guys. Let us know if you have questions about this information.

Lisa Horowitz McCann
Environmental Specialist IV
Supervisor, Watershed Assessment Unit
Central Coast Regional Water Quality Control Board
81 S. Higuera Street, Suite 200
San Luis Obispo, CA 93401

lmccann@rb3.swrcb.ca.gov
(805) 549-3132

CC: Carpenter, Angela; Harris, Ken

From: Tim Stevens
To: Emanuel, Melenee
Date: 2/28/02 10:51AM
Subject: More Stuff

Melenee,

Here are some more messages from Region 3:

1. from Lisa McCann (TMDL related--hopefully unimportant)
2. from Angela Carpenter (@ Texas 303(d) guidance--probably unimportant)
3. from Angela Carpenter (@ scan of CCAMP data)
4. from Angela Carpenter (warning about contents of "scan")

Tim

From: Lisa McCann
To: Stevens, Tim; Wilson, Craig J.
Date: 2/14/02 11:22AM
Subject: Listing re: San Lorenzo River Nitrate TMDL Status

Ken Harris requested that I send this information to you for the listing process and administrative record. The attached memo contains a description of the current status of this TMDL, which is to postpone its development and approval, as explained in the memo. The memo also indicates that State Board staff may propose to revise the TMDL priority for the 2002 303d list update from High to low based on the information contained in the memo. Region 3 staff does not necessarily recommend changing the priority (and did not suggest this to our Board either) because 1) it doesn't change anything or provide any immediate benefit to make this change and 2) it may result in the appearance that the Region and State do not support the local efforts to control nitrate discharges and septic system problems. If, however, State Board staff thinks we ought to change the priority, this information should provide you with the justification. Let me know if you have any questions. Sorry I didn't have this together when I sent the email of final recommendations for the 2002 303d list the otehr day.

Lisa Horowitz McCann
Environmental Specialist IV
Supervisor, Watershed Assessment Unit
Central Coast Regional Water Quality Control Board
81 S. Higuera Street, Suite 200
San Luis Obispo, CA 93401

lmccann@rb3.swrcb.ca.gov
(805) 549-3132

CC: Harris, Ken; Lillebo, Paul

Memorandum



To: San Lorenzo River Nitrate Total Maximum Daily Load File

CC: [Click here and type name]

From: Lisa H. McCann

Date: 03/12/02

Re: Status of the San Lorenzo River Nitrate Total Maximum Daily Load- Determination to Postpone Further Action.

The status of the San Lorenzo Nitrate Total Maximum Daily Load (TMDL) has been in question for approximately one year while State Water Resources Control Board (State Board) staff deliberated about presenting the TMDL to the State Board as a Basin Plan Amendment. In December 2001, State Board staff communicated to Regional Board staff that this TMDL would not be approved by the Office of Administrative Law and therefore, could not be presented to the State Board for approval as a Basin Plan Amendment.

On January 17, 2002, Regional Board staff convened a phone meeting among staff representatives of the State Board and US Environmental Protection Agency (EPA) to determine how to respond to State Board staff's determination and how to proceed. At this meeting, we all agreed to postpone the TMDL and the Basin Plan Amendment.

According to David Smith from the US EPA, if a water body is currently impaired or threatened, and is therefore a water quality limited segment, there are only four possible outcomes for the water body involving pollutant issues under the current regulations. These four are: 1) the water is listed and a TMDL is completed for it; 2) the water is listed and later we find a TMDL is not necessary because it is now meeting standards, in which case the water is delisted at the next listing decision opportunity; 3) the water is not listed because of the existence of "other pollution control requirements (that are) stringent enough to implement (any applicable standard);" or 4) the water is listed with a low priority to give other controls a chance to work, which eventually leads to option two or three above.

We agreed option four is how the Regional Board will proceed because the water body is listed and the Basin Plan already contains a control mechanism, as mentioned earlier, to reduce nitrate discharges. We expect this control mechanism to attain 30% reduction in nitrate loads. This reduction will reduce the nitrate threat to water quality. We also agreed that State Board could

consider changing the TMDL priority status from a “high” priority to a “low” priority for the San Lorenzo River “nutrients” listing on the 303(d) List.

The following information provides background and some history of Regional Board action taken within this watershed related to nutrient and other water quality issues. In 1995, the Regional Board adopted a basin plan amendment that states discharges are allowed in the San Lorenzo watershed provided the County of Santa Cruz implements the *Wastewater Management Plan for the San Lorenzo River Watershed* and the *San Lorenzo Nitrate Management Plan* (Nitrate Management Plan). The amendment also requires the County of Santa Cruz to assure to the Regional Board that wastewater disposal systems protect and enhance water quality; that beneficial uses are protected and restored; and that nuisance, pollution, and contamination are abated.

Regional Board staff and US EPA staff determined this 1995 amendment satisfied many but not all TMDL components. For example, US EPA staff suggested to Regional Board staff that a numeric target, expressed as a concentration, rather than 30% reduction in nitrate, should be determined. The Regional Board staff recommended adoption of the TMDL because nitrate concentrations in the San Lorenzo watershed have increased since the 1950s and appear to be threatening the municipal water supply beneficial use in terms of violations of the taste and odor narrative objectives. Nitrate could also be threatening to adversely affect the water contact and non-contact water recreation beneficial uses. The Regional Water Quality Control Board adopted a TMDL on September 15, 2000 that included the Nitrate Management Plan as the TMDL Implementation Plan. Regional Board staff submitted the amendment and administrative records documents to the State Board on October 18, 2000.

In December 2001, the State Board staff informed Regional Board staff that they had determined the amendment does not meet the “necessity for the regulations” requirement for approval by the California Office of Administrative Law. This determination was made because the peer reviewer of this TMDL indicated the Regional Board had not established 1) a causal connection between the level of nitrate in the river and any adverse impacts on water quality, nor 2) any justifiable reason for the mandated 30% reduction.

Regional Board staff does not necessarily concur with the determination that the “necessity” test cannot be met (and responded accordingly to the peer review in “response to comments” in the Regional Board Hearing Staff Report for the TMDL adoption). However, Regional Board staff supports this outcome because the current Basin Plan already requires the County to implement the Nitrate Management Plan, monitor, and report on progress and effectiveness of the plan. The TMDL adopted by the Regional Board is based upon the Nitrate Management Plan. Furthermore, Regional Board staff does not support continuing to invest limited staff and contract resources in development of a TMDL for a water body with an existing water quality control mechanism in place.

The experience with this TMDL raises a some outstanding issues:

- 1) How much weight does the opinion of the peer reviewer carry? In this case, State Board staff overturned the assertions of the local community and the Regional Board based on the peer reviewer’s comments. In this case, the local community and the Regional Board agreed that nitrate was the indicator constituent representing on-site sewage disposal system problems in the San Lorenzo River watershed. The local community supported nitrate control mechanisms and the County of Santa Cruz developed and is implementing the control mechanisms necessary. The peer reviewer, however, disagreed with the basis for the control mechanisms and proposal of a goal of 30% reduction.
- 2) How should TMDLs being developed for waterbodies with “threatened” conditions be handled in order to meet the “necessity for regulations” requirement of Office of Administrative Law? It will

March 12, 2002

often be difficult to determine a causal connection between a water quality parameter and water quality conditions when the water quality level of the parameter is not yet causing a violation of a numeric water quality objective. It will also be difficult to determine with certainty targets and links to targets. However, we want the flexibility to implement plans with measurable targets to protect threatened waters before they become impaired and clear causal connections can be made.

From: Angela Carpenter
To: Tim Stevens
Date: 2/27/02 9:24AM
Subject: Texas Guidance

Tim,

FYI...

I'm looking at a document titled "Guidance for Assessing Texas Surface and Finished Drinking Water Quality Data, 2002." This document provides useful guidance about how to assess water quality data. It indicates a water body is fully supporting an applicable use if the exceedance rate is 10 percent or less; partially supporting if greater than 10 percent and less than or equal to 25 percent; and not supporting if greater than 25 percent. It also indicates that sampling should be over at least two seasons. For conventional pollutants, the minimum sample size is 10 samples.

I like many aspects of the Texas assessment because it clearly defines qualifying information. You might want to consider useful portions for the next listing policy.

Angela

CC: Lisa McCann

From: Angela Carpenter
To: Tim Stevens
Date: 2/27/02 9:35AM
Subject: 303(d) List Info

Tim,

I sent all the data we received to the State Board even if we did not recommend a new listing based on this data.

I'm going to fax you a rough (and I mean VERY rough) first scan of Central Coast Ambient Monitoring Data (CCAMP) data. I'll get this to you in the early afternoon. We should probably discuss this sheet together after you get a chance to look at it.

Angela

CC: Lisa McCann

From: Angela Carpenter
To: Tim Stevens
Date: 2/27/02 4:11PM
Subject: Preliminary 303(d) Scan

Tim,

I started to look at the scan I'm sending you. I want to warn you this scan contains errors. There are also other problems with this scan, so PLEASE do not take it at face value when you (or Melenee) look at it.

Angela

CC: Angela Carpenter

From: Lisa McCann
To: Stevens, Tim; Wilson, Craig J.
Date: 3/1/02 11:09AM
Subject: Contacts for 303d Listing Recommendation

Please include and copy Doug Gouzie (and me) on all the additional transmittals to Angela re: both this current 2002 List update and future listing policy development. Thank you.

Lisa Horowitz McCann
Senior Environmental Scientist
Supervisor, Watershed Assessment Unit
Central Coast Regional Water Quality Control Board
81 S. Higuera Street, Suite 200
San Luis Obispo, CA 93401

lmccann@rb3.swrcb.ca.gov
(805) 549-3132

CC: Carpenter, Angela; Gouzie, Doug

From: Angela Carpenter
To: Craig J. Wilson
Date: 3/4/02 2:17PM
Subject: Santa Maria Estuary Listing For Organochlorine Pesticides

Craig,

You asked me to provide you the listing rationale for Santa Maria Estuary.

Two data sources indicated a problem. BPTC sampling on 2-9-93 indicated dieldrin and Total DDT exceeded ERM values and PEL values, respectively. TSM sampling on 9-21-99 indicated Toxaphene and Total DDT exceeded NAS criteria and NAS/FDA criteria, respectively.

Karen Worchster may also have some other information, but she isn't in the office at the moment.

Angela G. Carpenter
Water Resources Control Engineer
Central Coast Regional Water Quality Control Board

(805) 542-4624
acarpent@rb3.swrcb.ca.gov

CC: Doug Gouzie; Karen Worcester; Lisa McCann; Melenee Emanuel; Tim Stevens

From: Angela Carpenter
To: Craig J. Wilson
Date: 3/7/02 12:23PM
Subject: Re: Region 3 303(d) data

Craig,

Thanks for your e-mail and questions. In response to your four questions, it seems best to us to list our approach to the 2002 list in light of your questions and the language used.

It is true that the data available to us (Central Coast Ambient Monitoring Program (CCAMP) monitoring program and submitted by others) was highly variable in terms of chemical, spatial, and temporal coverage. Once we had assembled the data, we used the following three steps to arrive at our proposed listings. To summarize, we first looked at data that exceeded objectives by 50% or more. We then looked at corroborating lines of evidence (regardless of % exceedence) and utilized best professional judgment (regardless of % exceedence). (Listings based upon less than 50% exceedence may be applicable in some cases, for example fish tissue impairment).

We used the following process:

1. Our first review was to begin with our ambient monitoring program data (CCAMP). We looked at all stations on a subwatershed basis. We considered all data for which we had a specific Basin Plan numeric Objective (e.g., ammonia, fecal coliform, nitrate, boron, sodium, and dissolved oxygen). In the initial (CCAMP) data review, we considered that any constituent at any given sampling location with a minimum of six samples and a preponderance (>50%) of those samples exceeding objectives should be listed (if not already on the list).

2. Then we considered those waters where our CCAMP data was less than the minimum sample number or less than 50% of data indicated impairment. (Our staff report states "there are no specific minimum data requirements or a specific frequency of exceedences for making a finding that water quality objectives are not attained.") We also looked at other data sources. In this consideration, we sought any corroborating independent lines of evidence of impairment. Many waters had no other information suggesting impairment (and thus were not listed based on our professional judgment). (For this reason, we stated in the staff report that we listed where 50% of greater of all samples for a given water body exceed applicable... standards.)

3. After completing our analysis of our CCAMP database, we then considered any other data submitted (in response to the statewide data request) for impairment indications we had not already considered in steps one and two. For this evaluation we used Best Professional Judgment on a case-by-case basis to consider the source of the data (sampling/ analytical program quality), the amount of data (both spatially and temporally), and any other factors relevant to our professional judgment. This review did result in additional listings beyond our CCAMP database review (e.g., Majors Creek for sediment).

I'd also like to discuss the approach we took for two particular conditions.

1. For bacteria beach listings, we applied the following criteria to the beach data. For beach data, we considered stations with a minimum of 20 samples (due to the larger spatial representation). We applied Ocean Plan objectives. In areas where shellfish harvesting occur, we applied a portion of the shellfish harvesting objective "not more than 10 percent of samples shall exceed 230 per ml." This objective is more stringent than water contact objectives in the Ocean Plan. Staff used this objective because it is more protective of water quality than AB 411.

2. We did not list "Oxygen Saturation" or "Dissolved Oxygen" as a single impairment. It is difficult to determine if this is reflective of a pollution problem or a flow problem. For all sites with oxygen constituents violating greater than 50% of the time, we listed if there was corroborating evidence. If exceedences ranged from 10%-50% we would list if corroborating evidence existed, but we found no corroborating

evidence for these conditions. We only listed sites where we had corroborating evidence to indicate this condition as a pollution (emphasis added) problem.

3. For fish tissue, we listed if there was two violations of Bay Protection and Toxic Cleanup Program data, Toxic Substances Monitoring data, or State Mussel Watch data.

For your concerns about a potential "Watch List," attached are inland waters that fall within 10% to 50% exceedence of water quality objectives (based upon CCAMP data). The potential problem for all these waters is fecal coliform. All of the waters on the table (with the exception of Oso Flaco Creek) are upstream of an existing water body proposed or listed for fecal coliform or pathogens. We believe these waters will be evaluated by the existing TMDL process and schedule. The process will provide a watershed-wide assessment for the "listed water bodies" in the table including consideration of impairment for the "waters in question" in the table.

We hope this clarifies our process and addresses your questions, please contact me or Lisa McCann. I'll be out of the office until Monday.

Angela G. Carpenter
Water Resources Control Engineer
Central Coast Regional Water Quality Control Board

(805) 542-4624
acarpent@rb3.swrcb.ca.gov

>>> Craig J. Wilson 03/01/02 12:32PM >>>
Angela,

Thanks for sending us the table of data used by your Region to develop the 303(d) list. After talking to Lisa, I realize the table may have errors. After taking a look at it I can see a pattern in how you generally evaluated these data. Do you think the following statements are true?:

1. In most cases it seems that the data you had could be highly variable (e.g., O2, nutrients, total and fecal coliform, etc.).
2. A water body was put on the list if there was more than one line of evidence (e.g., nutrients plus an O2 problem; nutrients and coliform problem, etc.).
3. 50% was generally used as the cutoff to make sure you were bring forward your most compelling and supported problems.
4. Water bodies didn't make the list if the exceedances were below 50% or the data were conflicting or if there were not multiple lines of evidence.

OK, that said:

It seems that many water bodies almost made the list but not quite. As Lisa and I discussed, the RB staff may still have concerns about these waters.

So:

It seems appropriate to place several of these waters that almost made the list on a "Watch List" (this is a list proposed not to be included in the 303(d) list that could be used to set monitoring priorities).

Based on your data table, should the following water bodies be place on a Watch List?

Arroyo Seco River
Dairy Creek

Estrella River
LaBrea Creek
Pennington Creek
San Antonio River
Sisquoc River
Uvas Creek

Let's discuss early next week as we are under the gun to finish off our staff report.....Thanks!

CJWilson
(916) 341-5560

CC: Doug Gouzie; Ken Harris; Lisa McCann; Melenee Emanuel; Tim Stevens

Water in Question	% Exceedence Overall Watershed	% Exceedence at Worst Case Station (Sub-watershed)	Listed Water Body
Arroyo Seco River	17%	20%	Moss Landing Harbor
Atascadero Creek	36%	36%	Moss Landing Harbor
Bradley Channel	47%	47%	Blosser Creek
Chorro Creek	27%	43%	Morro Bay
Chumash Creek	27%	27%	Morro Bay
Corralitos Creek	31%	31%	Pajaro River
Cuyama River	20%	42%	Santa Maria River
Dairy Creek	22%	26%	Morro Bay
La Brea	21%	21%	Santa Maria River
Llagas Creek	36%	75%	Pajaro River
Los Osos Creek	26%	27%	Morro Bay
Moro Cojo Slough	14%	14%	Moss Landing Harbor
Old Salinas River	32%	33%	Moss Landing Harbor
Oso Flaco Creek	31%	43%	None
Pacheco Creek	23%	23%	Pajaro River
Pennington Creek	26%	26%	Morro Bay
Salinas River (Lower)	26%	50%	Moss Landing Harbor
Salinas River (Mid)	7%	13%	Moss Landing Harbor
Salinas River (Upper)	3%	14%	Moss Landing Harbor
San Benito River	42%	42%	Pajaro River
San Bernardo Creek	45%	45%	Morro Bay
San Luisito Creek	43%	43%	Morro Bay
Uvas Creek	29%	29%	Pajaro River
Walters Creek	50%	50%	Morro Bay
Warden Creek	41%	52%	Morro Bay

From: Angela Carpenter
To: Diane Beaulaurier
Date: 2/21/02 7:44AM
Subject: 303 (d) References

Diane,

I'm attaching the updated tracking sheet of information we used (in addition to CCAMP). I placed new information on the bottom of the spreadsheet under the heading "Information Added Since Original Submittal To State Board." (I already sent the upper portion of this tracking sheet to you.)

The new information is all in hard copy form. I will express mail it to you.

Also, I want to mention a typographical error within the February 1, 2001 staff report. (Lisa McCann sent this report to Craig Wilson on 2-12-02 via an e-mail already. Please let me know if you'd like me to forward it to you.) The Staff Report Attachment One, Table 3, should read as follows under the "Criteria" column: (1) "Riffle/Run Embeddedness < 25% " and (2) "Fine Riffles < 30%."

Please let me know if I can assist you in any way.

Angela G. Carpenter
Water Resources Control Engineer
Central Coast Regional Water Quality Control Board

(805) 542-4624
acarpent@rb3.swrcb.ca.gov

CC: Lisa McCann; Mark Angelo

From: Angela Carpenter
To: Craig J. Wilson
Date: 3/4/02 2:17PM
Subject: Santa Maria Estuary Listing For Organochlorine Pesticides

Craig,

You asked me to provide you the listing rationale for Santa Maria Estuary.

Two data sources indicated a problem. BPTC sampling on 2-9-93 indicated dieldrin and Total DDT exceeded ERM values and PEL values, respectively. TSM sampling on 9-21-99 indicated Toxaphene and Total DDT exceeded NAS criteria and NAS/FDA criteria, respectively.

Karen Worchster may also have some other information, but she isn't in the office at the moment.

Angela G. Carpenter
Water Resources Control Engineer
Central Coast Regional Water Quality Control Board

(805) 542-4624
acarpent@rb3.swrcb.ca.gov

CC: Doug Gouzie; Karen Worcester; Lisa McCann; Melenee Emanuel; Tim Stevens

From: Angela Carpenter
To: Craig J. Wilson
Date: 3/7/02 12:23PM
Subject: Re: Region 3 303(d) data

Craig,

Thanks for your e-mail and questions. In response to your four questions, it seems best to us to list our approach to the 2002 list in light of your questions and the language used.

It is true that the data available to us (Central Coast Ambient Monitoring Program (CCAMP) monitoring program and submitted by others) was highly variable in terms of chemical, spatial, and temporal coverage. Once we had assembled the data, we used the following three steps to arrive at our proposed listings. To summarize, we first looked at data that exceeded objectives by 50% or more. We then looked at corroborating lines of evidence (regardless of % exceedence) and utilized best professional judgment (regardless of % exceedence). (Listings based upon less than 50% exceedence may be applicable in some cases, for example fish tissue impairment).

We used the following process:

1. Our first review was to begin with our ambient monitoring program data (CCAMP). We looked at all stations on a subwatershed basis. We considered all data for which we had a specific Basin Plan numeric Objective (e.g., ammonia, fecal coliform, nitrate, boron, sodium, and dissolved oxygen). In the initial (CCAMP) data review, we considered that any constituent at any given sampling location with a minimum of six samples and a preponderance (>50%) of those samples exceeding objectives should be listed (if not already on the list).

2. Then we considered those waters where our CCAMP data was less than the minimum sample number or less than 50% of data indicated impairment. (Our staff report states "there are no specific minimum data requirements or a specific frequency of exceedences for making a finding that water quality objectives are not attained.") We also looked at other data sources. In this consideration, we sought any corroborating independent lines of evidence of impairment. Many waters had no other information suggesting impairment (and thus were not listed based on our professional judgment). (For this reason, we stated in the staff report that we listed where 50% of greater of all samples for a given water body exceed applicable... standards.)

3. After completing our analysis of our CCAMP database, we then considered any other data submitted (in response to the statewide data request) for impairment indications we had not already considered in steps one and two. For this evaluation we used Best Professional Judgment on a case-by-case basis to consider the source of the data (sampling/ analytical program quality), the amount of data (both spatially and temporally), and any other factors relevant to our professional judgment. This review did result in additional listings beyond our CCAMP database review (e.g., Majors Creek for sediment).

I'd also like to discuss the approach we took for two particular conditions.

1. For bacteria beach listings, we applied the following criteria to the beach data. For beach data, we considered stations with a minimum of 20 samples (due to the larger spatial representation). We applied Ocean Plan objectives. In areas where shellfish harvesting occur, we applied a portion of the shellfish harvesting objective "not more than 10 percent of samples shall exceed 230 per ml." This objective is more stringent than water contact objectives in the Ocean Plan. Staff used this objective because it is more protective of water quality than AB 411.

2. We did not list "Oxygen Saturation" or "Dissolved Oxygen" as a single impairment. It is difficult to determine if this is reflective of a pollution problem or a flow problem. For all sites with oxygen constituents violating greater than 50% of the time, we listed if there was corroborating evidence. If exceedences ranged from 10%-50% we would list if corroborating evidence existed, but we found no corroborating

evidence for these conditions. We only listed sites where we had corroborating evidence to indicate this condition as a pollution (emphasis added) problem.

3. For fish tissue, we listed if there was two violations of Bay Protection and Toxic Cleanup Program data, Toxic Substances Monitoring data, or State Mussel Watch data.

For your concerns about a potential "Watch List," attached are inland waters that fall within 10% to 50% exceedence of water quality objectives (based upon CCAMP data). The potential problem for all these waters is fecal coliform. All of the waters on the table (with the exception of Oso Flaco Creek) are upstream of an existing water body proposed or listed for fecal coliform or pathogens. We believe these waters will be evaluated by the existing TMDL process and schedule. The process will provide a watershed-wide assessment for the "listed water bodies" in the table including consideration of impairment for the "waters in question" in the table.

We hope this clarifies our process and addresses your questions, please contact me or Lisa McCann. I'll be out of the office until Monday.

Angela G. Carpenter
Water Resources Control Engineer
Central Coast Regional Water Quality Control Board

(805) 542-4624
acarpent@rb3.swrcb.ca.gov

>>> Craig J. Wilson 03/01/02 12:32PM >>>
Angela,

Thanks for sending us the table of data used by your Region to develop the 303(d) list. After talking to Lisa, I realize the table may have errors. After taking a look at it I can see a pattern in how you generally evaluated these data. Do you think the following statements are true?:

1. In most cases it seems that the data you had could be highly variable (e.g., O2, nutrients, total and fecal coliform, etc.).
2. A water body was put on the list if there was more than one line of evidence (e.g., nutrients plus an O2 problem; nutrients and coliform problem, etc.).
3. 50% was generally used as the cutoff to make sure you were bring forward your most compelling and supported problems.
4. Water bodies didn't make the list if the exceedances were below 50% or the data were conflicting or if there were not multiple lines of evidence.

OK, that said:

It seems that many water bodies almost made the list but not quite. As Lisa and I discussed, the RB staff may still have concerns about these waters.

So:

It seems appropriate to place several of these waters that almost made the list on a "Watch List" (this is a list proposed not to be included in the 303(d) list that could be used to set monitoring priorities).

Based on your data table, should the following water bodies be place on a Watch List?

Arroyo Seco River
Dairy Creek

Estrella River
LaBrea Creek
Pennington Creek
San Antonio River
Sisquoc River
Uvas Creek

Let's discuss early next week as we are under the gun to finish off our staff report.....Thanks!

CJWilson
(916) 341-5560

CC: Doug Gouzie; Ken Harris; Lisa McCann; Melenee Emanuel; Tim Stevens

Water in Question	% Exceedence Overall Watershed	% Exceedence at Worst Case Station (Sub-watershed)	Listed Water Body
Arroyo Seco River	17%	20%	Moss Landing Harbor
Atascadero Creek	36%	36%	Moss Landing Harbor
Bradley Channel	47%	47%	Blosser Creek
Chorro Creek	27%	43%	Morro Bay
Chumash Creek	27%	27%	Morro Bay
Corralitos Creek	31%	31%	Pajaro River
Cuyama River	20%	42%	Santa Maria River
Dairy Creek	22%	26%	Morro Bay
La Brea	21%	21%	Santa Maria River
Llagas Creek	36%	75%	Pajaro River
Los Osos Creek	26%	27%	Morro Bay
Moro Cojo Slough	14%	14%	Moss Landing Harbor
Old Salinas River	32%	33%	Moss Landing Harbor
Oso Flaco Creek	31%	43%	None
Pacheco Creek	23%	23%	Pajaro River
Pennington Creek	26%	26%	Morro Bay
Salinas River (Lower)	26%	50%	Moss Landing Harbor
Salinas River (Mid)	7%	13%	Moss Landing Harbor
Salinas River (Upper)	3%	14%	Moss Landing Harbor
San Benito River	42%	42%	Pajaro River
San Bernardo Creek	45%	45%	Morro Bay
San Luisito Creek	43%	43%	Morro Bay
Uvas Creek	29%	29%	Pajaro River
Walters Creek	50%	50%	Morro Bay
Warden Creek	41%	52%	Morro Bay

From: Angela Carpenter
To: Tim Stevens
Date: 8/23/01 8:29AM
Subject: E-mails Received Regarding 303(d) List

Hi Tim,

I placed all electronic items we received in the 303(d) desktop folder. (Somehow I didn't get a prompt to place it in the Region Three folder, but I clearly named the folder so you can find it.) The 303(d) desk top folder does not include many of the e-mail attachments we have, so I am forwarding you approximately ten e-mails I received regarding the 303(d) list.

In an attempt to organize the info, I prepared a tracking sheet. For each item we received, the sheet lets you know where you can find the electronic data. If only a hard copy is available, the sheet lets you know that also.

Please feel free to contact me if you have questions.

Angela G. Carpenter
Water Resources Control Engineer
Central Coast Regional Water Quality Control Board

(805) 542-4624
acarpent@rb3.swrcb.ca.gov

CC: Lisa McCann

From: "Cindy Wu" <Cindywu@co.santa-barbara.ca.us>
To: <Acarpent@rb3.swrcb.ca.gov>
Date: 7/10/01 2:05PM
Subject: Re: Quality Assurance/Quality Control Information

Angela,

Thanks for letting me know about which beaches are on the 303d list. I would like to emphasize on the fact that Arroyo Quemada Beach is a private beach in a private community about 10 miles away from the nearest urbanized area. We are sampling the beach due to requests from the private community, the supervisor from that district, and the Solid Waste Division because the Tijiguas Landfill is close by. Are TMDLs required if it is a private beach?

I am in the process of putting together a Sampling Analysis Plan for the Ocean Monitoring Program, which includes quality assurance procedures. Can I send it to you by next Thursday (7/19) instead? Thank you.

Cindy

p.s. Just to clarify, we are only sampling for INDICATOR bacteria (total and fecal coliform, enterococcus) and not for specific pathogens. So the data we sent you are indicator bacteria data and not "pathogen data". Thanks.

~::~^

~::~^

Cindy Wu
 Ocean Monitoring Program
 Santa Barbara County
 Environmental Health Services
 phone: (805)681-4935
 fax: (805)681-4901

>>> "Angela Carpenter" <Acarpent@rb3.swrcb.ca.gov> 07/10/01 08:56AM >>>
 Cindy,

Thank you for sending us pathogen data for Santa Barbara County beaches. I want let you know we are recommending three beaches, Arroyo Quemado Beach, Mission Creek Beach, and Jalama beach, be placed on the 2001 303(d) list. TMDLs are required for waters placed on the 303(d) list.

There is something that I need from you. Would you please provide me a description of your quality assurance procedures? Can you provide this by this Thursday, July 12th?

Please feel free to contact me if you have any comments or questions.

Thanks in advance.

Angela G. Carpenter
 Water Resources Control Engineer
 Central Coast Regional Water Quality Control Board

(805) 542-4624
 acarpent@rb3.swrcb.ca.gov

CC: "David Brummond" <Brummond@co.santa-barbara.ca.us>, "Dan Reid"

<Dreid@co.santa-barbara.ca.us>

From: "Willie Brummett" <Wbrumme@co.santa-barbara.ca.us>
To: <Acarpent@rb3.swrcb.ca.gov>
Date: 6/27/01 8:37AM
Subject: Re: Santa Barbara County Creek Data for Pathogens

Angela,

Mary Adams and the folks at CCAMP have all of our data in a database that I understood was available to you. Here is our 99/00 data in Excel format, all taken during storm events. If you have any other questions about creek data feel free to contact me.

From: "Hideki Miyashita" <hideki@usgs.gov>
To: <Acarpent@rb3.swrcb.ca.gov>
Date: 6/6/01 5:43PM
Subject: Request for Clarification

Angela G. Carpenter,

Pat Shiffer is currently away from her office. In her absence, she had asked me to take care of her email inquiries. This is in response to your recent email in which you had stated:

I work for the Central Coast Regional Water Quality Control Board. In April of this year, you sent us water quality data for this region. The spread sheet included site locations. However, the site description column is truncated, and it is not possible to read the complete site description.

Would you please sent me complete site descriptions? I'd like this by Monday, June 11 at the latest. (I attached a copy of what I received FYI.)

I have attached your Excel file with the station names. In the future you can also look up the names yourself by going to our website at <http://water.wr.usgs.gov/>. You can click on <site info> and follow the directions to get the name of the stations by entering the station number.

Let me know if you have problems opening or reading the attachment.

(See attached file: USGS Data.xls)

Henry Miyashita
Hydrologic Clerk
US Geological Survey
TEL: (916) 278-3112
EMAIL: hideki@usgs.gov
FAX: (916) 278-3190

CC: "Patricia A Shiffer" <pshiffer@usgs.gov>

From: 303dlist
To: Angela Carpenter; Bruce Gwynne; Daniel McClure; David Leland
Date: 5/23/01 5:11 PM
Subject: Fwd: Submission for 303d list

This submission was sent to me and Steve Moore at RB 2. There is data for sites in Monterey, Imperial, and Sonoma Counties. You may already be aware of this information, but the Pesticide Action Network is recommending listings, so I thought you might want to consider their comments.

Joe Karkoski
916-255-3368

CC: Nancy Richard

From: Don Funk <Don.Funk@ca.usda.gov>
To: "Carpenter, Angela" <acarpent@rb3.swrcb.ca.gov>
Date: 5/17/01 1:45PM
Subject: H2O Data

Angela,

I converted the Upper Salinas River data to excel and included them as attachments along with the letter. Sometimes converted files include some small glitches, but hopefully they should be okay.

DJ Funk
USLT-RCD

From: "sbck2" <sbck2@email.msn.com>
To: <acarpent@rb3.swrcb.ca.gov>
Date: 5/15/01 4:41 PM
Subject: water quality information

Angela,

I just faxed you a letter, but I've realized that the data would probably not be very clear if I faxed it. So, I've attached it in this email, and can send a hard copy if you want one. We don't have very much data for you, but I think some of it is in areas that others may not be looking.

let me know if you have any questions,

Jessie

Jessica Altstatt
Program Director
Santa Barbara ChannelKeeper
120 W. Mission St.
Santa Barbara, CA 93101
805 563-3399
fax 805 687-5635
jessie@sbck.org

From: Stephan Orme <stephanorme@PANNA.org>
To: <303dlist@rb5s.swrcb.ca.gov>
Date: 5/15/01 7:26AM
Subject: Submission for 303d list

Joe Karkoski
303(d) List Update Coordinator
California Regional Water Quality Control Board
Central Valley Region
3443 Routier Road, Suite A
Sacramento, CA 95827-3003
voice: (916) 255-3000
fax: (916) 255-3015

Steve Moore
Regional Water Quality Control Board
San Francisco Region
1515 Clay St. Suite 1400
Oakland, CA 94612
Phone # (510)622-2300
Fax # (510)622-2460

Dear Mr. Karkoski and Mr. Moore:

I am writing to submit the enclosed data from the Department of Pesticide Regulation's Pesticide Surface Water Database for your consideration in updating the 303(d) list. Each of the records attached below documents an exceedence of a water quality guideline by a pesticide detection in California surface waters.

Please don't hesitate to contact me at 510-845-7323 if you have any questions or if I can be of further service.

Respectfully,

Stephan Orme, Data Specialist
Pesticide Action Network North America (PANNA)

49 Powell St., Suite 500
San Francisco, CA 94102
(415) 981-6205 ext. 308; (415) 981-1991 (fax)
StephanOrme@panna.org

Enclosed:

Extraction from DPR's Pesticide Surface Water Database

DPR_Ex.pdf 110 pages, DPR surface water dbase w/ exceedences
DPR_Stud.pdf attachment, list of studies
DPR_Loc.pdf attachment, list of locations
AQ_Meth.pdf attachment, methodology

From: Jill Carlson <jillc@rain.org>
To: <acarpent@rb3.swrcb.ca.gov>
Date: 5/15/01 12:36PM
Subject: Creek Watchers water quality data

Angela,

Attached you will find Community Environmental Council's database of water quality information dating back to the inception of the Creek Watchers Program in 1998. The program has evolved and improved over time so the information in the database needs to be reviewed with an understanding of the program. The Creek Watchers Program is a volunteer water quality monitoring program in Santa Barbara. Anyone interested in monitoring a creek or creeks in Santa Barbara County can become a Creek Watcher. Volunteers go through a training (approximately one hour) to learn how to use the test kits and go over a physical habitat survey that they complete the first time they visit their sample site. We use La Motte's Green Low Cost Monitoring Kit. They are asked to sample their site(s) once a month. As you can see from the database, some volunteers are more reliable/committed than others, creating a somewhat sporadic data set. The La Motte Kit has been tested at a QA/QC workshop held in Long Beach. It was determined that although the results of the kit were not precise they were very accurate. I can give you more information about the ranges the kit works from and/or any other details that you might need about the kit. In the end of 1999 we started using a different method for testing coliform. The La Motte coliform test only tells us if the sample has more than 20 coliform colonies per 100 mL of water. Consequently, when testing creek water, the test is positive most of the time. The new method for testing coliform uses Micrology Labs EasyGel test. Using the EasyGel method, we can count how many coliform colonies there are and we can tell the difference between general and fecal coliform. The treated petri dishes sit at room temperature for 48 hours before they are ready to read. We found that we had to do a x10 dilution in most creeks in order to be able to count the colonies. In January 2000, we purchased an incubator that keeps the samples at 100 degrees F and allows us to read the results after 24 hours. At that time the results were coming out much lower than they had been before they were incubated, so we stopped diluting the samples. We are currently working with Micrology Labs to understand why the results from incubated and non-incubated samples are different. You'll notice that the Coliform section of the database has the "Positive" results before we switched methods, the x10 dilution indicator, a "n/d" indicator if the sample was incubate and not diluted or a "n/a" if the test was not done. Please let me know if you need clarification of these details.

Also, you will notice that some of the nitrate results have the word (yellow) next to them. For the last couple of months, some of the Creek Watchers have been getting strange results from their nitrate tests. We are working with La Motte to figure out if it is a flaw in the nitrate tablet, or if the test is picking up something else.

I have been with the program since August 1, 2000. Before me, there was Sharyn Main, then Jennifer Ayres. I would be happy to discuss our information/program with anyone who has questions. Please feel free to email me or call me at 805-963-0583 ext.149.

Thank You,

Jill Carlson, Creek Watchers Program Coordinator

From: John Hunt <jwhunt@ucdavis.edu>
To: <acarpent@rb3.swrcb.ca.gov>
Date: 4/24/01 5:20PM
Subject: 303(d) WQ info

Hi Angela,

Hope all is well with you. I received a notice requesting water quality information for the 303(d) listing. We're pretty swamped here and I don't think we'll be able to pull together our most recent data on the Salinas River (Karen Worcester is involved with this work), but I've attached a manuscript recently submitted to the journal Environmental Monitoring and Assessment. It documents work done from 9/98 to 1/00, and indicates widespread presence and toxicity of chlorpyrifos and diazinon in the lower Salinas River watershed. I've attached the text and tables, but didn't want to bog down your email with the figures. Let me know if you'd like the figures, too, and I'll send them.

The solicitation requested multiple hard copies and electronic versions, etc., but I thought I'd better get this off to you now. If I wait until I get a chance to hang out at the xerox machine, I might miss the May 15 deadline. Hopefully, this will serve as a placeholder to let you know the information is available, and you can contact me if you need more in other formats. Good luck with the listing process.

John W. Hunt
Research Specialist
Department of Environmental Toxicology
University of California, Davis

Marine Pollution Studies Laboratory
34500 Highway 1, Monterey, CA 93940

Tel: 831-624-0947 Fax: 831-626-1518
jwhunt@ucdavis.edu

From: "Patricia A Shiffer" <pshiffer@usgs.gov>
To: <acarpent@rb3.swrcb.ca.gov>
Date: 4/11/01 4:16PM
Subject: Central Coast Region Water Quality data-July 1997 forward

The subject of the first email I sent you should have said
Central Coast Region Water Quality data-July 1997 forward
WATER YEAR 2000 and 2001 DATA IS SUBJECT TO REVISION!

Pat Shiffer "SAFETY FIRST, EVERY JOB, EVERY TIME"
U.S. Geological Survey
6000 J. St, Placer Hall
Sacramento, CA 95819-6129
(916) 278-3100
pshiffer@usgs.gov <http://ca.water.usgs.gov>
----- Forwarded by Patricia A Shiffer/WRD/USGS/DOI on 04/11/01 04:17 PM

Patricia A
Shiffer To: acarpenter@rb3.swrcb.ca.gov
cc:
04/11/01 Subject: Central Coast Region Water Quality
02:25 PM data- 1997 forward

Angela Carpenter,

We have retrieved the water quality data for your region from our database for 1997 and forward. The data is in ascii text files called ccr.txt, ccr.txt.parnames and ccrtbl.txt. The ccr.txt file is the data in a format which can be placed in another software program such as EXCEL. The file ccr.txt.parnames are the parameter names associated with the data in ccr.txt. The file ccrtbl.txt is the same data in a table format. This data can be printed. We will not be sending hard copy.

To get the files with FTP software:

```
ftp ftpdcascr.wr.usgs.gov
login as anonymous
cd data
get filename
quit
```

To get the files with a Netscape browser:

Type in where the http etc is <ftp://ftpdcascr.wr.usgs.gov/data/>
(try clicking on the ftp:// etc above and you should go directly to the ftp directory and then choose your file.)
put the filename of the file you want after that last / and you will go directly to the file.
(the one you are trying to get from the directory.)

EX: <ftp://ftpdcasr.wr.usgs.gov/data/sm92>

Please let me know when you have successfully downloaded the file or files so I can erase them.

Thanks.

If you have questions, let me know.

WATER YEAR 2000 and 2001 DATA IS SUBJECT TO REVISION!

Pat Shiffer "SAFETY FIRST, EVERY JOB, EVERY TIME"
U.S. Geological Survey
6000 J. St, Placer Hall
Sacramento, CA 95819-6129
(916) 278-3100
pshiffer@usgs.gov <http://ca.water.usgs.gov>