

Appendix F

October 11, 2006 Hearing
Transcript

THIS PAGE IS INTENTIONALLY LEFT BLANK

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

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

WATER QUALITY CONTROL BOARD HEARING
OCTOBER 11, 2006

REPORTER'S TRANSCRIPT OF PROCEEDINGS
BY: JOANNA BROADWELL, CSR 10959

CLARK REPORTING

2161 SHATTUCK AVENUE, SUITE 201

BERKELEY, CALIFORNIA 94704

(510) 486-0700

1 (Agenda Item 12)

2 PROCEEDINGS

3 MR. MULLER: Let's move on to Item 12, and we'll
4 try to kind of do a summary version if we can because of
5 time.

6 MR. WOLFE: Item 12 is a proposed Basin Plan
7 amendment for establishing a TMDL for mercury in the Walker
8 Creek watershed. This is the testimony hearing, the
9 preliminary hearing, and I would like Jill Marshall and
10 Diane Whyte to do the presentation.

11 MS. MARSHALL: Good morning, Chairman Muller and
12 Board members. My name is Jill Marshall, and I am a
13 geologist in the TMDL division. I have been working with
14 Diane Whyte in the Walker Creek watershed for over ten
15 years now, and I am delighted to showcase a proposed TMDL
16 plan for minimizing mercury and implementing beneficial
17 usage in the Walter Creek watershed.

18 Walker Creek and its tributaries in beautiful west
19 Marin support a diverse ecosystem and provides habitat for
20 critters ranging from Salmon, red- and yellow-legged frogs
21 and an array of birds ranging from riparian song birds to
22 ospreys. Walker creek drains to Tomales Bay, a pristine
23 estuary that is a significant wildlife nursery and refuge
24 for migratory species. The map in front of you shows
25 Walker Creek and its main tributaries. Arroyo Sausal

1 Creek, which is located on the southeastern end of the
2 watershed over here, once a significant tributary is now
3 impounded behind Soulejule reservoir, which is -- behind
4 the Soulejule dam, which is right here.

5 There are three main sources of mercury in the
6 Walker Creek watershed today. Mercury occurs naturally
7 throughout California's coast range. In the 1960s and '70s
8 there were several active mercury mines in the watershed as
9 well as a mercury processing facility at the Gambonini mine
10 site which is located here on the map. The Gambonini mine
11 site was also the largest of the mine operations. The
12 Gambonini mine site drains to Walker Creek, which you can
13 see here, and remains a source of mercury today.

14 Two other mines are located on Arroyo Sausal Creek
15 over here which was later dammed by Marin Municipal Water
16 District to form Soulejule Reservoir in the valley, the
17 base of Arroyo Sausal Creek here. It is likely there is
18 mine waste on the shoreline in the reservoir. This
19 mercury, if not properly managed, will lead to increased
20 methylmercury production in the reservation. Finally
21 mercury from the Gambonini mine can be found lower down
22 Walker Creek in its flood plains. The main lightly
23 depositional areas are outlined in red on this graphic.
24 This TMDL sets forth actions related to these sources.

25 Birds in the watershed, such as the kingfisher and

1 osprey who feed exclusively on fish are threatened by
2 mercury. In Walker Creek, its tributaries, and Soulejule
3 reservoir there are elevated levels of mercury in small
4 fish such as roach that these birds eat. A health advisory
5 is in effect for Soulejule Reservoir due to elevated
6 mercury levels in sport fish such as black crappie and
7 large-mouthed bass. Region-wide, only sport fish from
8 Santa Clara reservoirs have higher mercury concentrations
9 than the Soulejule fish.

10 With this TMDL we propose adding two new water
11 quality objectives to our Basin Plan and vacating an
12 outdated mercury standard to better protect water quality
13 in the watershed. The two new fish-tissue water quality
14 objectives will serve as our TMDL targets. Bigger birds
15 can eat bigger fish. The U.S. Fish and Wildlife Service
16 helped us develop fish-tissue based mercury water quality
17 targets that apply to different-sized fish in order to
18 protect both small and larger birds.

19 More specifically, we want to protect the Delta
20 Kingfisher and the larger osprey that reside in the
21 watershed. These objectives will also protect people who
22 consume local fish. When we reduce mercury levels in
23 sediment and water, methylmercury production will decline.
24 This means less mercury will bio-accumulate in fish and
25 wildlife. This TMDL will establish levels of mercury in

1 sediment and water that will achieve our goal of protecting
2 fish, wildlife and humans. This TMDL allocates mercury
3 sediment concentration to mine sites, downstream
4 depositional areas and reservoir discharges that a water
5 column mercury concentration for Soulejule Reservoir. The
6 concentration-based water quality allocation for the
7 reservoir is the same as the California Toxic Rule level
8 required to protect human health. The allocations will be
9 met through the proposed implementation actions summarized
10 on this table.

11 Property owners at the Gambonini mine will need to
12 continue to manage the property to minimize mercury loading
13 to the watershed. Marin Municipal Water District needs to
14 evaluate mercury sources both in the reservoir and
15 Soulejule watershed and implement solutions that improve
16 water quality in both the reservoir and downstream in
17 Walker Creek. Property owners of downstream depositional
18 areas may need to minimize discharges of mercury-laden
19 sediment to Walker Creek by taking action such as
20 stabilizing eroding creek banks.

21 Earlier this year the state awarded us \$400,000
22 from the Cleanup and Abatement Account to investigate and
23 clean up mercury-contaminated downstream depositional
24 areas. Marin County will work with downstream property
25 owners to minimize mercury discharges. They will modify

1 the West Marin Stream Permit Program accordingly. We are
2 committed to providing technical expertise as needed to any
3 and all of the responsible parties in the watershed. Our
4 work out of the mine site has been a very successful early
5 implementation effort. The picture on the slide shows the
6 mine site after mining stopped. The red line on the slide
7 here outlines a waste pile. How big was this waste pile?
8 Well, for scale, the arrow that is pointing to this pink
9 dot is pointing to a car. There is a car underneath that
10 little pink dot that you can just see.

11 The mine channel that drains to Walker Creek is
12 represented by the blue dashed line on the picture. During
13 the record storms of 1982, mercury-laden waste from the
14 Gambonini mine filled that small channel with talons 30 to
15 40 feet deep which were then transported downstream,
16 overtopping creek banks and blanketing the flood plains of
17 Walker Creek with mining waste. That is why downstream
18 banks, channels, and flood plains are a significant source
19 of mercury today.

20 Our early implementation efforts, however, were so
21 successful that we had a party to celebrate. One year ago
22 board member Eliahu joined Bruce Wolfe, Alexis Strause and
23 a host of stakeholders for a group pat on the back. The
24 event commemorated the successful partnership that resulted
25 in a 90-percent reduction in mercury loading from the

1 Gambonini property to Walker Creek. In this photo you can
2 see Soulejule reservoir behind Diane Whyte.

3 By continuing to manage the mine site as required
4 under the implementation plan, the Gambonini mine site
5 allocation will be met. We will be applying lessons
6 learned at the Gambonini mine about mercury transport and
7 containment when working with stakeholders to implement the
8 TMDL through the watershed.

9 I will now turn to rest of the presentation over to
10 Diane, who will summarize the comments received. Thanks.

11 MS. WHYTE: Good morning. We received two comment
12 letters, one from the EPA and one from Marin Municipal
13 Water District. First I will say, I believe the small
14 amount of comment letters we received on this is really a
15 reflection of the amount of time and energy we spent in
16 this watershed, not only working to clean up the Gambonini
17 mine site and participating on the Tomales Bay Advisory
18 Committee, but also working closely with Marin County to
19 inform residents about some safety issues with some of the
20 fish out there and letting them know what fish they can
21 safely consume and not consume. So we have been out there
22 for years.

23 EPA, in their letter, identified some gaps in our
24 analysis in terms of the standards action and some
25 inconsistencies in our Basin Plan. More specifically they

1 asked us to clarify that the fish-tissue objectives that we
2 are proposing will also protect human health. So we have
3 met with EPA, and we are confident that we will be able to
4 address their concerns with some minor revisions and
5 additions to the Basin Plan amendment. Marin Municipal
6 Water District expressed support for the implementation
7 plan downstream of Soulejule Reservoir and a willingness to
8 conduct monitoring. However, they assert that the mines
9 adjacent to and within the reservoir are not contributing
10 mercury and that the District should not be held
11 responsible for methylmercury controls.

12 And frankly, we are asking the District here to
13 step up to the plate and take on more of a role of
14 stewardship leader here. The implementation plan requires
15 them to determine whether mining waste is still being
16 transported to the reservoir and the extent of mining waste
17 already in the reservoir. In addition, the TMDL requires
18 them to evaluate options for controlling methylmercury
19 production in the reservoir. We believe this request is
20 not only reasonable but that methylmercury controls may be
21 feasible.

22 And recently, last week, in fact, I learned that
23 down in Santa Clara Valley, the Santa Clara Valley Water
24 District is observing a 90-percent reduction in
25 methylmercury in Lake Almaden where they had their pilot

1 study underway. Just as a reminder, last month we
2 presented a stewardship award to the Santa Clara Valley
3 Water District for investing over a million dollars in
4 technical studies for the Guadalupe River mercury TMDL and
5 also for applauding them for moving forward and taking
6 these innovative, proactive approaches down there in their
7 reservoirs.

8 So for us, really, the bottom line is that the
9 Marin Municipal Water District constructed this reservoir
10 with knowledge of the mines, and we are asking them to
11 manage it in a way that protects human health and wildlife.

12 This is a photo up here of the estuary where Walker
13 Creek drains into Tomales Bay. And it is one of my
14 favorite spots in the watershed out there. It's right off
15 of Highway One near the Highway One crossing. And I
16 included it in here to emphasize what may be obvious, that
17 this TMDL implementation plan is a key step in not only
18 protecting the Walker Creek wildlife but also reducing
19 mercury loads to Tomales Bay.

20 As a result of cleanup efforts at the Gambonini
21 mine and other actions called for by this TMDL, we know
22 that the sediments coming down off Walker Creek are cleaner
23 and will continue to improve. We expect that these cleaner
24 sediments are bearing the older mercury-laden sediments
25 within the Bay and taking this mercury out of the food

1 chain.

2 As you may recall from the Tomales Bay Pathogens
3 TMDL, we developed a model with UC Berkeley that helps us
4 better understand sediment and pollutant transport within
5 Tomales Bay. We are now using this model to track where
6 Walker Creek mercury is being deposited downstream as part
7 of our effort in developing the Tomales Bay mercury TMDL.
8 So as we move forward with our Tomales Bay studies, we will
9 continue to work on Walker Creek and reduce sources in that
10 watershed.

11 Our next task for this TMDL is to respond in
12 writing to comments received and make appropriate revisions
13 to the Basin Plan amendment. Because some of these
14 revisions relate to the standards action in our
15 environmental analysis, we plan to redistribute the Basin
16 Plan amendment to stakeholders. So therefore we anticipate
17 bringing you the TMDL for consideration in January rather
18 than December as noted in your board package. With that I
19 would be happy to answer any questions.

20 MR. MULLER: Thank you. May I ask quickly if you
21 have any idea by comparison -- Santa Clara is pretty
22 big-time compared to Marin. Marin is a good district, but,
23 I mean, size-wise financial capabilities, Santa Clara is
24 much larger to handles larger debt load.

25 MS. WHYTE: You know, I can't quite give you a

1 comparison, and we do have someone here from the Marin
2 Municipal Water District, but certainly as we move forward
3 and work with them on identifying actions, Feasibility,
4 economic feasibility would certainly be something that
5 would be considered. And we will work with the District to
6 make sure they can find something that can be done. And
7 again it is just embarking on the first step here to
8 evaluate whether something can be done, how much it is
9 going to cost, and then making a decision down the road
10 before moving ahead. So we are not requiring a specific
11 action at this time. We are requiring an investigation
12 into potential actions.

13 MR. MULLER: Okay. Thank you.

14 MS. BRUCE: When the Soulejule reservoir was
15 built -- I love that name -- what its the purpose? Was it
16 irrigation water? Was it drinking water? Was it flood
17 control? What was the --

18 MS. WHYTE: My understanding it was an emergency
19 drinking water supply. So it was built for drinking water.

20 MS. BRUCE: Thank you.

21 MR. ELIAHU: I did visit the Gambonini work you did
22 there. Very impressive. I thought that it was very
23 effective, very efficient. It that going to be the example
24 for the rest of them?

25 MS. WHYTE: I think for mine sites it is a very

1 good example for mercury mine sites because of the use of
2 the biotechnical erosion control. Certainly other mine
3 sites that have acid-mine drainage problems it would not be
4 an example. But when we look for those biotechnical
5 engineering work and we look further downstream in the
6 watershed, what we learn there would apply equally as well
7 to a lot of bank stabilization and how we are going to
8 approach these depositional areas downstream.

9 MR. ELIAHU: Every site needs special treatment?

10 MS. WHYTE: Yes.

11 MR. MULLER: We have from Marin, here, the general
12 manager, Paul Helliher, please.

13 MR. HELLIKER: Thank you, Mr. Chair, and I would
14 also like to congratulate Ms. De Luca on all her excellent
15 work that she's done here. And I am sorry I didn't get a
16 chance to work with you more closely during the past few
17 years, but I wish you well in your new endeavors. And I
18 also wish the Chairman well with his pumpkin-growing
19 opportunities.

20 MR. MULLER: As soon as I get through this meeting
21 I can get home and sell some.

22 MR. HELLIKER: There you go. Thanks for the
23 opportunity to be here today and to discuss what our
24 comments have been. And, actually, I would like to point
25 out that our district is fully committed to doing whatever

1 is necessary to protect aquatic resources. We spent
2 \$10 million so far on restoring salmon in the Lagunitas
3 Creek. So it is not like we are not willing to spend money
4 to make sure that the environment is going to be improved.
5 Our concern is we that we have not found any mine sites
6 that are above the water in Soulejule that are on our
7 property. That's one of the issues that's been raised in
8 this TMDL. We've sent our staff out there to look and see
9 what might have been there, and nothing that looks like a
10 mine exists there. So when it comes to storm water runoff
11 we are not sure there is anything that we can do. We do
12 know that there were some historic mining operations in the
13 valley. The locations where those took place were likely
14 underwater.

15 What we know about the operations were that the
16 materials were dug up and transported over to the Gambonini
17 mine site where they were actually processed. And the
18 information we have about what the extraction sites were in
19 the Soulejule Reservoir watershed indicate those shafts
20 were plugged so they are likely underwater. So there is
21 not much that we can do other than to try to characterize
22 whether there is significant concentrations of mercury
23 there.

24 That is partly the reason that we suggested that
25 the numbers -- and, actually, let me point out that one of

1 our comments had to do with what is apparently a typo in
2 terms of the concentrations that were identified for water
3 quality in the Soulejule Reservoir that is listed in the
4 Basin Plan and in the staff report as .05 milligrams per
5 kilogram, and apparently that is supposed to be
6 .5 milligrams per kilogram. So that is consistent with
7 downstream depositional areas and we are happy to see that.

8 But in terms of water quality, we have done
9 monitoring to identify what concentration of methylmercury
10 and mercury in the water column is, and it is lower than
11 the proposed Basin Plan amendment, the proposed .5
12 micrograms per liter. So we are glad to know that the
13 water quality is going to meet the standard and we can get
14 this specific numbers that we got.

15 We would be happy to do some further
16 characterization of the fish in the reservoir. We know
17 that the samples that were taken were relatively limited.
18 We would like to get a better idea of what the
19 concentrations of mercury are in different fish species so
20 we know when we want to update our notification information
21 that is out at the Reservoir for fisher-people, that they
22 will have the accurate information about what they should
23 or shouldn't eat and also to characterize what the
24 concentrations of mercury might be in the soil in the area.

25 But we do have the information from the Surface

1 Water Monitoring Program about other reservoirs in the Bay
2 Area and two of which we operate, the Bon Tempe Reservoir
3 and the Cazio Reservoir, both of which we aerate and both
4 of which have concentrations of mercury in fish tissue that
5 is above the screening level, in fact, well over the
6 screening level, almost double it.

7 Now, Soulejule does have higher levels, but I know
8 what Santa Clara Valley is doing is they are aerating their
9 reservoir and trying to reduce nutrient input. We already
10 have examples of that that we have done in other locations,
11 and we are finding that it is still not meeting the
12 proposed fish-tissue concentration standard, which is the
13 OEI screening level.

14 So our main concern is we could be spending money
15 but not doing anything to meet the standard. And we are --
16 Soulejule is a drinking water reservoir. We use it
17 infrequently, which is one of the reasons we don't aerate
18 it, because we don't need to keep the taste and odor
19 problems in Soulejule under control as much as we do in the
20 other reservoirs. And it is relatively remote. Very few
21 people go out there. There is a few fisher-people that go
22 out there, and so it is going to be difficult to get power
23 out there and aeration systems installed and so on. And so
24 on. That us our main concern. We are not convinced it is
25 actually going to do anything to meet the standard. As

1 custodians of the public dollar, we want to make sure we
2 are spending our dollars wisely. We do appreciate all the
3 work the staff has done. They were generous enough to come
4 over and meet with us and talk about the information we
5 have and the concerns we have. And I know it's been a
6 long-standing problem. It is throughout the whole Bay
7 Area, in all of the reservoirs that you have sampled. So
8 we would like to help solve the problem, and we want to
9 make sure that we do.

10 MR. MULLER: Thank you. Any other questions or
11 comments for Paul? Okay. If not, we'll move on. This is
12 strictly just --

13 MR. WOLFE: Right. This is the public testimony
14 hearing, and as you heard from staff that we anticipate at
15 this point coming back in January.

16 MR. MULLER: Okay. We can take it up there. Very
17 good.

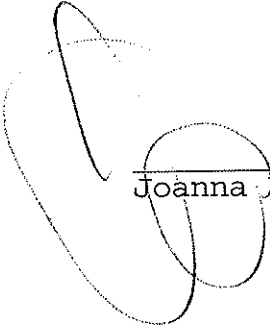
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

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

REPORTER'S CERTIFICATE

I, Joanna Broadwell, Certified Shorthand Reporter No. 10959 in and for the State of California, hereby certify that the foregoing is a full, true and correct transcript of the proceedings to the best of my ability.

Date: 12/11/06



Joanna Broadwell CSR # 10959

1 CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

WATER QUALITY CONTROL BOARD HEARING

OCTOBER 11, 2006

REPORTER'S TRANSCRIPT OF PROCEEDINGS
BY: JOANNA BROADWELL, CSR 10959

CLARK REPORTING

2161 SHATTUCK AVENUE, SUITE 201

BERKELEY, CALIFORNIA 94704

(510) 486-0700

1 (Agenda Item 12)

2 PROCEEDINGS

3 MR. MULLER: Let's move on to Item 12, and we'll
4 try to kind of do a summary version if we can because of
5 time.

6 MR. WOLFE: Item 12 is a proposed Basin Plan
7 amendment for establishing a TMDL for mercury in the Walker
8 Creek watershed. This is the testimony hearing, the
9 preliminary hearing, and I would like Jill Marshall and
10 Diane Whyte to do the presentation.

11 MS. MARSHALL: Good morning, Chairman Muller and
12 Board members. My name is Jill Marshall, and I am a
13 geologist in the TMDL division. I have been working with
14 Diane Whyte in the Walker Creek watershed for over ten
15 years now, and I am delighted to showcase a proposed TMDL
16 plan for minimizing mercury and implementing beneficial
17 usage in the Walter Creek watershed.

18 Walker Creek and its tributaries in beautiful west
19 Marin support a diverse ecosystem and provides habitat for
20 critters ranging from Salmon, red- and yellow-legged frogs
21 and an array of birds ranging from riparian song birds to
22 ospreys. Walker creek drains to Tomales Bay, a pristine
23 estuary that is a significant wildlife nursery and refuge
24 for migratory species. The map in front of you shows
25 Walker Creek and its main tributaries. Arroyo Sausal

1 Creek, which is located on the southeastern end of the
2 watershed over here, once a significant tributary is now
3 impounded behind Soulejule reservoir, which is -- behind
4 the Soulejule dam, which is right here.

5 There are three main sources of mercury in the
6 Walker Creek watershed today. Mercury occurs naturally
7 throughout California's coast range. In the 1960s and '70s
8 there were several active mercury mines in the watershed as
9 well as a mercury processing facility at the Gambonini mine
10 site which is located here on the map. The Gambonini mine
11 site was also the largest of the mine operations. The
12 Gambonini mine site drains to Walker Creek, which you can
13 see here, and remains a source of mercury today.

14 Two other mines are located on Arroyo Sausal Creek
15 over here which was later dammed by Marin Municipal Water
16 District to form Soulejule Reservoir in the valley, the
17 base of Arroyo Sausal Creek here. It is likely there is
18 mine waste on the shoreline in the reservoir. This
19 mercury, if not properly managed, will lead to increased
20 methylmercury production in the reservation. Finally
21 mercury from the Gambonini mine can be found lower down
22 Walker Creek in its flood plains. The main lightly
23 depositional areas are outlined in red on this graphic.
24 This TMDL sets forth actions related to these sources.

25 Birds in the watershed, such as the kingfisher and

1 osprey who feed exclusively on fish are threatened by
2 mercury. In Walker Creek, its tributaries, and Soulejule
3 reservoir there are elevated levels of mercury in small
4 fish such as roach that these birds eat. A health advisory
5 is in effect for Soulejule Reservoir due to elevated
6 mercury levels in sport fish such as black crappie and
7 large-mouthed bass. Region-wide, only sport fish from
8 Santa Clara reservoirs have higher mercury concentrations
9 than the Soulejule fish.

10 With this TMDL we propose adding two new water
11 quality objectives to our Basin Plan and vacating an
12 outdated mercury standard to better protect water quality
13 in the watershed. The two new fish-tissue water quality
14 objectives will serve as our TMDL targets. Bigger birds
15 can eat bigger fish. The U.S. Fish and Wildlife Service
16 helped us develop fish-tissue based mercury water quality
17 targets that apply to different-sized fish in order to
18 protect both small and larger birds.

19 More specifically, we want to protect the Delta
20 Kingfisher and the larger osprey that reside in the
21 watershed. These objectives will also protect people who
22 consume local fish. When we reduce mercury levels in
23 sediment and water, methylmercury production will decline.
24 This means less mercury will bio-accumulate in fish and
25 wildlife. This TMDL will establish levels of mercury in

1 sediment and water that will achieve our goal of protecting
2 fish, wildlife and humans. This TMDL allocates mercury
3 sediment concentration to mine sites, downstream
4 depositional areas and reservoir discharges that a water
5 column mercury concentration for Soulejule Reservoir. The
6 concentration-based water quality allocation for the
7 reservoir is the same as the California Toxic Rule level
8 required to protect human health. The allocations will be
9 met through the proposed implementation actions summarized
10 on this table.

11 Property owners at the Gambonini mine will need to
12 continue to manage the property to minimize mercury loading
13 to the watershed. Marin Municipal Water District needs to
14 evaluate mercury sources both in the reservoir and
15 Soulejule watershed and implement solutions that improve
16 water quality in both the reservoir and downstream in
17 Walker Creek. Property owners of downstream depositional
18 areas may need to minimize discharges of mercury-laden
19 sediment to Walker Creek by taking action such as
20 stabilizing eroding creek banks.

21 Earlier this year the state awarded us \$400,000
22 from the Cleanup and Abatement Account to investigate and
23 clean up mercury-contaminated downstream depositional
24 areas. Marin County will work with downstream property
25 owners to minimize mercury discharges. They will modify

1 the West Marin Stream Permit Program accordingly. We are
2 committed to providing technical expertise as needed to any
3 and all of the responsible parties in the watershed. Our
4 work out of the mine site has been a very successful early
5 implementation effort. The picture on the slide shows the
6 mine site after mining stopped. The red line on the slide
7 here outlines a waste pile. How big was this waste pile?
8 Well, for scale, the arrow that is pointing to this pink
9 dot is pointing to a car. There is a car underneath that
10 little pink dot that you can just see.

11 The mine channel that drains to Walker Creek is
12 represented by the blue dashed line on the picture. During
13 the record storms of 1982, mercury-laden waste from the
14 Gambonini mine filled that small channel with talons 30 to
15 40 feet deep which were then transported downstream,
16 overtopping creek banks and blanketing the flood plains of
17 Walker Creek with mining waste. That is why downstream
18 banks, channels, and flood plains are a significant source
19 of mercury today.

20 Our early implementation efforts, however, were so
21 successful that we had a party to celebrate. One year ago
22 board member Eliahu joined Bruce Wolfe, Alexis Strause and
23 a host of stakeholders for a group pat on the back. The
24 event commemorated the successful partnership that resulted
25 in a 90-percent reduction in mercury loading from the

1 Gambonini property to Walker Creek. In this photo you can
2 see Soulejule reservoir behind Diane Whyte.

3 By continuing to manage the mine site as required
4 under the implementation plan, the Gambonini mine site
5 allocation will be met. We will be applying lessons
6 learned at the Gambonini mine about mercury transport and
7 containment when working with stakeholders to implement the
8 TMDL through the watershed.

9 I will now turn to rest of the presentation over to
10 Diane, who will summarize the comments received. Thanks.

11 MS. WHYTE: Good morning. We received two comment
12 letters, one from the EPA and one from Marin Municipal
13 Water District. First I will say, I believe the small
14 amount of comment letters we received on this is really a
15 reflection of the amount of time and energy we spent in
16 this watershed, not only working to clean up the Gambonini
17 mine site and participating on the Tomales Bay Advisory
18 Committee, but also working closely with Marin County to
19 inform residents about some safety issues with some of the
20 fish out there and letting them know what fish they can
21 safely consume and not consume. So we have been out there
22 for years.

23 EPA, in their letter, identified some gaps in our
24 analysis in terms of the standards action and some
25 inconsistencies in our Basin Plan. More specifically they

1 asked us to clarify that the fish-tissue objectives that we
2 are proposing will also protect human health. So we have
3 met with EPA, and we are confident that we will be able to
4 address their concerns with some minor revisions and
5 additions to the Basin Plan amendment. Marin Municipal
6 Water District expressed support for the implementation
7 plan downstream of Soulejule Reservoir and a willingness to
8 conduct monitoring. However, they assert that the mines
9 adjacent to and within the reservoir are not contributing
10 mercury and that the District should not be held
11 responsible for methylmercury controls.

12 And frankly, we are asking the District here to
13 step up to the plate and take on more of a role of
14 stewardship leader here. The implementation plan requires
15 them to determine whether mining waste is still being
16 transported to the reservoir and the extent of mining waste
17 already in the reservoir. In addition, the TMDL requires
18 them to evaluate options for controlling methylmercury
19 production in the reservoir. We believe this request is
20 not only reasonable but that methylmercury controls may be
21 feasible.

22 And recently, last week, in fact, I learned that
23 down in Santa Clara Valley, the Santa Clara Valley Water
24 District is observing a 90-percent reduction in
25 methylmercury in Lake Almaden where they had their pilot

1 study underway. Just as a reminder, last month we
2 presented a stewardship award to the Santa Clara Valley
3 Water District for investing over a million dollars in
4 technical studies for the Guadalupe River mercury TMDL and
5 also for applauding them for moving forward and taking
6 these innovative, proactive approaches down there in their
7 reservoirs.

8 So for us, really, the bottom line is that the
9 Marin Municipal Water District constructed this reservoir
10 with knowledge of the mines, and we are asking them to
11 manage it in a way that protects human health and wildlife.

12 This is a photo up here of the estuary where Walker
13 Creek drains into Tomales Bay. And it is one of my
14 favorite spots in the watershed out there. It's right off
15 of Highway One near the Highway One crossing. And I
16 included it in here to emphasize what may be obvious, that
17 this TMDL implementation plan is a key step in not only
18 protecting the Walker Creek wildlife but also reducing
19 mercury loads to Tomales Bay.

20 As a result of cleanup efforts at the Gambonini
21 mine and other actions called for by this TMDL, we know
22 that the sediments coming down off Walker Creek are cleaner
23 and will continue to improve. We expect that these cleaner
24 sediments are bearing the older mercury-laden sediments
25 within the Bay and taking this mercury out of the food

1 chain.

2 As you may recall from the Tomales Bay Pathogens
3 TMDL, we developed a model with UC Berkeley that helps us
4 better understand sediment and pollutant transport within
5 Tomales Bay. We are now using this model to track where
6 Walker Creek mercury is being deposited downstream as part
7 of our effort in developing the Tomales Bay mercury TMDL.
8 So as we move forward with our Tomales Bay studies, we will
9 continue to work on Walker Creek and reduce sources in that
10 watershed.

11 Our next task for this TMDL is to respond in
12 writing to comments received and make appropriate revisions
13 to the Basin Plan amendment. Because some of these
14 revisions relate to the standards action in our
15 environmental analysis, we plan to redistribute the Basin
16 Plan amendment to stakeholders. So therefore we anticipate
17 bringing you the TMDL for consideration in January rather
18 than December as noted in your board package. With that I
19 would be happy to answer any questions.

20 MR. MULLER: Thank you. May I ask quickly if you
21 have any idea by comparison -- Santa Clara is pretty
22 big-time compared to Marin. Marin is a good district, but,
23 I mean, size-wise financial capabilities, Santa Clara is
24 much larger to handles larger debt load.

25 MS. WHYTE: You know, I can't quite give you a

1 comparison, and we do have someone here from the Marin
2 Municipal Water District, but certainly as we move forward
3 and work with them on identifying actions, Feasibility,
4 economic feasibility would certainly be something that
5 would be considered. And we will work with the District to
6 make sure they can find something that can be done. And
7 again it is just embarking on the first step here to
8 evaluate whether something can be done, how much it is
9 going to cost, and then making a decision down the road
10 before moving ahead. So we are not requiring a specific
11 action at this time. We are requiring an investigation
12 into potential actions.

13 MR. MULLER: Okay. Thank you.

14 MS. BRUCE: When the Soulejule reservoir was
15 built -- I love that name -- what its the purpose? Was it
16 irrigation water? Was it drinking water? Was it flood
17 control? What was the --

18 MS. WHYTE: My understanding it was an emergency
19 drinking water supply. So it was built for drinking water.

20 MS. BRUCE: Thank you.

21 MR. ELIAHU: I did visit the Gambonini work you did
22 there. Very impressive. I thought that it was very
23 effective, very efficient. It that going to be the example
24 for the rest of them?

25 MS. WHYTE: I think for mine sites it is a very

1 good example for mercury mine sites because of the use of
2 the biotechnical erosion control. Certainly other mine
3 sites that have acid-mine drainage problems it would not be
4 an example. But when we look for those biotechnical
5 engineering work and we look further downstream in the
6 watershed, what we learn there would apply equally as well
7 to a lot of bank stabilization and how we are going to
8 approach these depositional areas downstream.

9 MR. ELIAHU: Every site needs special treatment?

10 MS. WHYTE: Yes.

11 MR. MULLER: We have from Marin, here, the general
12 manager, Paul Helliher, please.

13 MR. HELLIKER: Thank you, Mr. Chair, and I would
14 also like to congratulate Ms. De Luca on all her excellent
15 work that she's done here. And I am sorry I didn't get a
16 chance to work with you more closely during the past few
17 years, but I wish you well in your new endeavors. And I
18 also wish the Chairman well with his pumpkin-growing
19 opportunities.

20 MR. MULLER: As soon as I get through this meeting
21 I can get home and sell some.

22 MR. HELLIKER: There you go. Thanks for the
23 opportunity to be here today and to discuss what our
24 comments have been. And, actually, I would like to point
25 out that our district is fully committed to doing whatever

1 is necessary to protect aquatic resources. We spent
2 \$10 million so far on restoring salmon in the Lagunitas
3 Creek. So it is not like we are not willing to spend money
4 to make sure that the environment is going to be improved.
5 Our concern is we that we have not found any mine sites
6 that are above the water in Soulejule that are on our
7 property. That's one of the issues that's been raised in
8 this TMDL. We've sent our staff out there to look and see
9 what might have been there, and nothing that looks like a
10 mine exists there. So when it comes to storm water runoff
11 we are not sure there is anything that we can do. We do
12 know that there were some historic mining operations in the
13 valley. The locations where those took place were likely
14 underwater.

15 What we know about the operations were that the
16 materials were dug up and transported over to the Gambonini
17 mine site where they were actually processed. And the
18 information we have about what the extraction sites were in
19 the Soulejule Reservoir watershed indicate those shafts
20 were plugged so they are likely underwater. So there is
21 not much that we can do other than to try to characterize
22 whether there is significant concentrations of mercury
23 there.

24 That is partly the reason that we suggested that
25 the numbers -- and, actually, let me point out that one of

1 our comments had to do with what is apparently a typo in
2 terms of the concentrations that were identified for water
3 quality in the Soulejule Reservoir that is listed in the
4 Basin Plan and in the staff report as .05 milligrams per
5 kilogram, and apparently that is supposed to be
6 .5 milligrams per kilogram. So that is consistent with
7 downstream depositional areas and we are happy to see that.

8 But in terms of water quality, we have done
9 monitoring to identify what concentration of methylmercury
10 and mercury in the water column is, and it is lower than
11 the proposed Basin Plan amendment, the proposed .5
12 micrograms per liter. So we are glad to know that the
13 water quality is going to meet the standard and we can get
14 this specific numbers that we got.

15 We would be happy to do some further
16 characterization of the fish in the reservoir. We know
17 that the samples that were taken were relatively limited.
18 We would like to get a better idea of what the
19 concentrations of mercury are in different fish species so
20 we know when we want to update our notification information
21 that is out at the Reservoir for fisher-people, that they
22 will have the accurate information about what they should
23 or shouldn't eat and also to characterize what the
24 concentrations of mercury might be in the soil in the area.

25 But we do have the information from the Surface

1 Water Monitoring Program about other reservoirs in the Bay
2 Area and two of which we operate, the Bon Tempe Reservoir
3 and the Cazio Reservoir, both of which we aerate and both
4 of which have concentrations of mercury in fish tissue that
5 is above the screening level, in fact, well over the
6 screening level, almost double it.

7 Now, Soulejule does have higher levels, but I know
8 what Santa Clara Valley is doing is they are aerating their
9 reservoir and trying to reduce nutrient input. We already
10 have examples of that that we have done in other locations,
11 and we are finding that it is still not meeting the
12 proposed fish-tissue concentration standard, which is the
13 OEI screening level.

14 So our main concern is we could be spending money
15 but not doing anything to meet the standard. And we are --
16 Soulejule is a drinking water reservoir. We use it
17 infrequently, which is one of the reasons we don't aerate
18 it, because we don't need to keep the taste and odor
19 problems in Soulejule under control as much as we do in the
20 other reservoirs. And it is relatively remote. Very few
21 people go out there. There is a few fisher-people that go
22 out there, and so it is going to be difficult to get power
23 out there and aeration systems installed and so on. And so
24 on. That us our main concern. We are not convinced it is
25 actually going to do anything to meet the standard. As

1 custodians of the public dollar, we want to make sure we
2 are spending our dollars wisely. We do appreciate all the
3 work the staff has done. They were generous enough to come
4 over and meet with us and talk about the information we
5 have and the concerns we have. And I know it's been a
6 long-standing problem. It is throughout the whole Bay
7 Area, in all of the reservoirs that you have sampled. So
8 we would like to help solve the problem, and we want to
9 make sure that we do.

10 MR. MULLER: Thank you. Any other questions or
11 comments for Paul? Okay. If not, we'll move on. This is
12 strictly just --

13 MR. WOLFE: Right. This is the public testimony
14 hearing, and as you heard from staff that we anticipate at
15 this point coming back in January.

16 MR. MULLER: Okay. We can take it up there. Very
17 good.

18
19
20
21
22
23
24
25

REPORTER'S CERTIFICATE

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

I, Joanna Broadwell, Certified Shorthand Reporter No. 10959 in and for the State of California, hereby certify that the foregoing is a full, true and correct transcript of the proceedings to the best of my ability.

Date: _____

12/11/06



Joanna Broadwell CSR # 10959