Appendix F

Testimony Hearing Transcript

Transcript of April 9, 2008 Testimony
Hearing before the California
Regional Water Quality Control
Board, San Francisco Bay Region

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN FRANCISCO BAY REGION

1515 Clay Street, Suite 1400

Oakland, California 94612

BOARD MEETING

April 9, 2008

Item 6:

Proposed Amendment to the Water Quality Control Plan
(Basin Plan) for the San Francisco Bay Region to
Establish a Total Maximum Daily Load (TMDL) and
Implementation Plan for Pathogens in Richardson Bay.

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ITEM 6 - Proposed Amendment to the Water Quality

Control Plan (Basin Plan) for the San Francisco Bay

Region to Establish a Total Maximum Daily Load

(TMDL) and Implementation Plan for Pathogens in

Richardson Bay.

PROCEEDINGS

CHAIR MULLER: Moving on to Item 6 and these are quite lengthy. What we'll do is we'll take Item 6 and then take a quick break.

MR. WOLFE: Right. Is Item 6 is the testimony hearing for the proposed amendment to the Basin Plan that would establish Total Maximum Daily Load, or TMDL, and implementation plan for pathogens in Richardson Bay in Marin County. And Farhad Ghodrati and Naomi Feger will be making the staff presentation on this. Farhad will start off.

MR. GHODRATI: Good morning.

CHAIR MULLER: Good morning.

20 MR. GHODRATI: My name is Farhad Ghodrati.

21 | I'm an Environmental Scientist in the TMDL Division.

22 | I will be presenting the technical portion of this

23 doc describing the details of Richardson Bay TMDL,

and Naomi Feger will then present an overview of the

25 | public comments we have received.

This is the first of two planned hearings on the proposed Richardson Bay TMDL Basin Plan amendment. Today is the public testimony hearing, which provides an opportunity for stakeholders to communicate their interest directly to you and for you to ask questions of staff and the stakeholders.

In February, we public noticed the Basin

Plan Amendment Package that when adopted will

establish a TMDL and implementation plan to control

pathogen discharges in Richardson Bay and to protect

the public from exposure to waterborne diseases.

This TMDL is similar to the Tomales Bay, Napa River,

and Sonoma Creek pathogen TMDLs that you have

adopted in the past.

To orient you geographically, here is a map of Richardson Bay. She is a small arm of San Francisco Bay located just northeast of the Golden Gate in Southern Marin County. The Bay provides an important habitat for aquatic species and wildlife and is widely used for recreational activities including boating, kayaking, windsurfing, swimming, and fishing. It also has a number of marinas and has the largest number of houseboats in all of San Francisco Bay.

Because of its shallow waters, enclosed

shape, and limited tidal flushing, Richardson Bay is 1 2 particularly susceptible to pollutant contamination. 3 This and the heavy recreational use of Richardson 4 Bay led to this Board passing a resolution in 1986 5 to prohibit the discharge of sewage from vessels and 6 led to a designation of the Bay as a no-vessel waste 7 discharge zone by the EPA in 1987. The Richardson 8 Bay Regional Agency, or RBRA, was formed to, among 9 other things, enforce the vessel waste discharge 10 prohibition. RBRA is a joint powers agency made up 11 of five municipal jurisdictions: The County of 12 Marin, and the Cities of Sausalito, Mill Valley, 13 Tiburon, and Belvedere. 14 Since the designation of the Bay as a novessel waste discharge zone and the creation of 15 16 Richardson Bay Regional Agency, a number of measures have been taken to address vessel waste discharges. 17 18 For example, all unconnected houseboats have now 19 been connected to municipal sewer lines, and a 20 mobile sewage pump-out service has been provided. 21 However, Richardson Bay remains listed as an 22 impaired water body because it exceeds the water 23 quality objectives for water contact recreation and 24 shellfish harvesting, two Basin Plan designated 25 beneficial uses of the Bay.

1 Water quality monitoring results from as 2 far back as the 1970s to the present have shown that 3 certain parts of Richardson Bay have higher pathogen 4 levels than are considered safe for these beneficial 5 uses. Because of this impairment, the Clean Water 6 Act requires us to establish a TMDL for this water 7 body. 8 Before I go any further, I would like to 9 define what we mean by pathogens or more 10 specifically about waterborne pathogens. Basically, 11 any microorganism that can make you sick is broadly 12 speaking a pathogen. Waterborne pathogens almost always enter the water through fecal contamination 13 14 from either humans or other warm-blooded animals. There are hundreds of potential waterborne 15 16 pathogens. Some of the more notorious ones are 17 Hepatitis A, E. coli, Salmonella, Cryptosporidium, 18 and Giardia. 19 Waterborne pathogens make up a diverse 20 group of organisms and many are difficult or 21 impossible to detect in the environment. For this 22

group of organisms and many are difficult or impossible to detect in the environment. For this reason, we monitor for pathogen indicators. These are easily identified bacteria found in the intestine of warm-blooded animals including humans and thus indicate the presence of fecal

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1 contamination and the potential presence of 2 pathogenic organisms. Fecal Coliforms, E. coli, and 3 Enterococcus are the primary bacteria group used as 4 pathogen indicators. For simplicity, the terms 5 pathogens and pathogen indicators are often used 6 interchangeably. So when someone says he or she 7 monitored for pathogens, they almost always mean 8 pathogen indicators.

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This is a graph of the most recent data we collected from summer 2006 and winter 2007. In this graph, the light blue flat line at the top shows the water quality objective for the water contact recreation beneficial use. And the yellow flat line shows the water quality objective for shellfish harvesting beneficial use. The red line shows the concentration of indicator bacteria during the summer, and the dark blue line shows the concentration of indicator bacteria during the winter. As you can see, there are only a couple of sampling locations where Bay waters exceed the water contact recreation objective. On the other hand, the lower shellfish harvesting objective is exceeded at more locations but only significantly at a few locations.

So where are these pathogens coming from?

1 We have identified four primary categories of

controllable pathogen sources. Sanitary sewer lines

- 3 are a source of pathogens, which flood the Bay.
- 4 | Sanitary sewer overflows, such as those reported in
- 5 Richardson Bay in January, usually occur during the
- 6 | wet season, but faulty sanitary sewer lines can
- 7 | flood the Bay during any time of the year.
- 8 The stormwater runoff, which is a
- 9 widespread problem in most urban areas during the
- 10 | wet season, is another source. Pathogen sources in
- 11 the stormwater runoff include pet waste as well as
- 12 human waste. Additionally, the storm drains are
- 13 often times a pathway for sanitary sewer overflows
- 14 to reach the Bay.

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- 15 Houseboats, which stakeholders have pointed
- 16 out are really technically called floating homes,
- 17 | are another potential source. Richardson Bay has
- 18 more than 400 floating homes. These floating homes
- 19 are connected to sanitary sewer lines but may still
- 20 discharge sewage into the Bay if their sewage
- 21 | systems are not properly checked, repaired, and
- 22 | maintained.
- 23 Another important source category is
- 24 | vessels, a category which includes recreational
- 25 liveaboard boats and anchor-out boats. Richardson

- 1 Bay has more than 2400 recreational vessels with
- 2 | roughly ten percent of them used as long-term
- 3 residences or liveaboards. In addition, Richardson
- 4 Bay houses approximately 100 more anchor-out
- 5 | vessels, which 40 of them are used as long-term
- 6 | residences. Obviously, any direct sewage discharge
- 7 from these vessels into the Bay could be a
- 8 | significant source of pathogens.
- 9 And finally, wildlife is also a
- 10 | contributing source of pathogens; however, we do not
- 11 believe wildlife to be a readily controllable
- 12 source, so we are not including it in the
- 13 | implementation plan.
- 14 The first step in solving the problem is to
- 15 establish water quality targets and a TMDL to
- 16 achieve those targets. The risk of waterborne
- 17 | illness is measured by the number of bacteria per
- 18 unit volume of water. In other words, it is
- 19 measured by concentration rather than by number or
- 20 mass alone; therefore, our targets and TMDL are
- 21 expressed in terms of bacteria concentration.
- 22 | We have selected three water quality
- 23 targets. The Basin Plan shellfish harvesting
- 24 objective, which is media and fecal coliform below
- 25 | 14; the Basin Plan's water contact recreation

objective, which is fecal coliform below 200 on average; and the U.S. EPA recommended water contact recreation criteria of enterococci below 35 on average. We have selected two different targets for water contact recreation because we are anticipating a future switch from traditionally fecal coliform target to the enterococci target recommended by the EPA.

Since the TMDL must be designed to attain all existing water quality objectives, we are proposing the TMDL that is the same as the more stringent objective for shellfish harvesting. With targets established, the next step is to allocate the acceptable level of pathogens to each of the sources we have identified. Allocations tell each source category how much pollutant they can discharge and yet still achieve the target if all other sources meet their allocations.

The stormwater runoff and wildlife sources have allocations equal to the shellfish target.

Sources of human waste such as sanitary sewer line, houseboats, and vessels have an allocation of zero. This is consistent with the various existing waste discharge prohibitions in the Basin Plan including the no-vessel waste discharge prohibition.

To meet the allocations, and thus the targets, the proposed implementation plan requires responsible parties to undertake measures to reduce and eliminate discharges of waste to the Bay. Ιt builds on ongoing actions. The plan capitalizes on existing efforts and relies in part upon regulatory programs that are already in place. For example, the stormwater runoff and sanitary sewer overflows are already regulated by the Water Board. The plan proposes new requirements to control houseboat and vessel waste discharges that are already prohibited by various Basin Plan waste discharge prohibitions. The implementation plan also includes a monitoring program whose results will be used to adaptively manage the TMDL implementation and revise targets if necessary.

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So what are some of the specific actions proposed in the implementation plan? Municipal runoff sources are required to comply with their existing approved stormwater management plans. They are also required to update those plans as necessary to include specific measures to reduce pet and human waste discharges. Such measures may include public education campaigns, putting up 'pick up after your pet' signs, or providing additional pet waste

receptacles.

The Basin Plan amendment addresses failures in sanitary sewer collection systems, which refer to incidences where raw sewage is not contained within the collection system by building on the Water Board's existing sanitary sewer overflow program. The sanitary sewer overflow program prohibits sanitary sewer overflows that would reach a water body and would create a nuisance. It also requires responsible agencies to develop a management plan, which includes inspection and repair activities to address problems.

To address waste discharges from houseboats and vessel source categories, the plan points to various existing waste discharge prohibitions for Richardson Bay. Board staff will work with the main jurisdictional and enforcement authorities for these source categories. We expect that Richardson Bay Regional Agency, Marin County, and local cities will assist with the implementation of these prohibitions by evaluating the adequacy and integrity of waste handling systems for these sources. The houseboats and vessels owners are required to comply with the prohibitions by making any necessary improvements identified in the above evaluation such that they do

1 not discharge any waste into the Bay. 2 Another element of the implementation plan 3 is monitoring an adaptive implementation. Our Basin 4 Plan amendment includes a water quality monitoring 5 plan that would allow us to track pathogen levels in 6 the Bay. This monitoring plan will help evaluate 7 how effective the implementation measures are and 8 which areas need more effort and attention. 9 intend to work with the stakeholders to refine the 10 monitoring plan as we need to answer specific 11 questions and as we learn more about the sources of 12 pathogens in the Bay. This is consistent with other 13 TMDLs you have adopted, which allows action to take 14 place now while we continue to gather information. In this adaptive process, we will continue 15 16 to review relevant scientific data and assess while 17 actions, whether it's outreach, technical 18 assistance, or more regulatory oversight, are 19 necessary to achieve our goal of protecting water 20 quality. And with that, I will turn it over to 21 Naomi who will summarize the comments we have 22 received from our stakeholders. 23 CHAIR MULLER: Thank you. Very well. 24 MS. FEGER: Thank you, Farhad. Good 25 morning, Chair Muller and Board Members. My name is

Naomi Feger and I'm Supervisor in the TMDL Planning
Division. I'm going to be presenting some of the
highlights from the ten letters we received during
our public comment period, which closed March 24th.

The letter from U.S. EPA indicates their support for the TMDL, the targets, the allocations, and specifically calls out their support of the fecal coliform water quality objectives protective of shellfish harvesting that we've included. They urge the Board to adopt the TMDL but also encourage the Board to include additional appropriate measures to improve the maintenance of sanitary sewer collection systems to prevent sanitary sewer overflows.

The Baykeepers are also supportive of the TMDL. However, they ask for some changes and more details to the implementation plan including additional requirements for sanitary sewer systems, treatment plants, and collection systems to reduce sewage spills. In light of the recent sewage spills, we'll be closely reviewing the comments related to additional management measures for sanitary sewer systems, and we'll be coming up with some recommendations to address these concerns.

The Baykeeper also in their letter

1 requested that we look at stormwater allocations for 2 both the wet and the dry season and that numeric 3 limits be required for the dry season. 4 reference the example of the Los Angeles Board that 5 incorporated dry weather waste load allocations from 6 their pathogen TMDL for Santa Monica Bay into their 7 stormwater permit in order to protect recreational 8 uses. We'll take a look at that example that the LA 9 Board put together and they adopted and see if it's 10 relevant for Richardson Bay. 11 There are three letters about stormwater 12 management. They were from the Marin County Public 13 Works Department, the City of Sausalito, and 14 They're all supportive of the goals of Caltrans. the TMDL to reduce pathogen loading but raise 15 16 concerns about the achievability of the allocation 17 for stormwater, which is equal to the shellfish 18 harvesting water quality objective. In addition, 19 some of these stakeholders ask that we look at 20 attainment of the TMDL where the shellfish 21 harvesting beneficial use could potentially and 22 feasibly occur.

We acknowledge that through the process of developing the Richardson Bay TMDL a number of issues related to the shellfish harvesting

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beneficial use have been raised. This TMDL is
designed to attain all pathogen-related standards
designated for Richardson Bay, and thus, must
include the shellfish harvesting beneficial use.

The shellfish harvesting beneficial use and associated water quality objectives are receiving more attention here in the region as well as throughout the state. In fact, the State Board is undertaking a statewide survey to evaluate the shellfish harvesting beneficial use along the coast and in our bays and estuaries. The results of this statewide effort could take a couple of years to complete but it will be likely helpful in addressing some of the concerns that our stakeholders are raising about the applicability of a shellfish harvesting beneficial use. Because these concerns cannot be addressed in a short timeframe, we will need to rely on our adaptive implementation framework to resolve these issues.

The Marin County Community Development

Agency raised some issues about our expectations on
the county to enforce implementation requirements
for marinas and floating homes; however, they're
comments also reflect a commitment to work with us
in collaboration with marinas and floating home

representatives on these issues and we welcome that.

We also received some important input from two marina owners, Sausalito Yacht Club and the Pelican Harbor, as well as the Floating Homes Association. All of these letters state that they are concerned about pathogen loading to Richardson Bay and express collective agreement that contact recreation standards should be met, but they echo the comments we received from other stakeholders about the applicability about the shellfish harvest beneficial use. They also identify wildlife and stormwater runoff as important sources of elevated pathogens. As Farhad mentioned, we intend to collaborate with stakeholders on a monitoring plan for Richardson Bay to address some of these concerns.

So what are our next steps? At this testimony hearing, we're not fully responding to all the comments we received. We intend to develop a formal response to all comments as our next step in preparation for the adoption hearing. We intend to work with stakeholders on these issues and may revise the amendment and staff report as necessary.

It's important to note that the goal of this TMDL has to been to seek continuous improvement

- 1 | in our ability to control pathogens discharging to
- 2 Richardson Bay. There have been many improvements
- 3 | since the no-vessel discharge zone was established
- 4 and this TMDL builds on some of those improvements.
- 5 The adoption hearing has been publicly noticed for
- 6 June 2008 and we anticipate being ready to bring
- 7 | this TMDL back to you then ready for adoption.
- 8 We're happy to answer any questions you may have.
- 9 CHAIR MULLER: Thank you, Naomi. Jim? I'm
- 10 going to start there.
- 11 BOARD MEMBER MCGRATH: I have two
- 12 questions. If you could go back to the map of the
- 13 Bay and the time series that showed the spikes,
- 14 | there were two spikes in those. And what I --
- 15 MS. FEGER: Do you want the map or the
- 16 data?
- 17 BOARD MEMBER MCGRATH: Well, start with the
- 18 data.
- MS. FEGER: Okay.
- 20 BOARD MEMBER MCGRATH: As a time series,
- 21 and the question I have is you've got two really
- 22 | clear locations where there's a -- there's seems to
- 23 be a spike, and so eventually I'd like to see the
- 24 | staff report dig a little bit into what the probably
- 25 causes of that are geographically.

- 1 So the first question is to orient the
- 2 Board as to where those spikes are physically on the
- 3 map, and then the second part of that question is in
- 4 the staff report there's a list of the sewer
- 5 | overflows -- the sewer system and sanitary system
- 6 overflows and there's quite a few from about four of
- 7 | them, 47 and the like. This is on page, I think, 28
- 8 of the staff report. I'd like to see those located
- 9 on the map so we could have a physical orientation
- 10 towards where the spikes are and where the sewer
- 11 overflows are.
- MR. GHODRATI: Right.
- 13 BOARD MEMBER MCGRATH: So those are two
- 14 | spikes. You've got that.
- 15 MR. GHODRATI: Right. Let's go back to the
- 16 map.
- 17 BOARD MEMBER MCGRATH: Let's go back to the
- 18 map.
- 19 MR. GHODRATI: Okay, so the two spikes.
- 20 | The larger of the two is -- Okay.
- 21 CHAIR MULLER: We don't -- We don't want to
- 22 | pick out someone's specific boat there.
- MR. GHODRATI: Okay. The larger of the two
- 24 | is roughly in this area here.
- 25 BOARD MEMBER MCGRATH: Okay.

1 MR. GHODRATI: And the smaller of the two 2 is this area here. This one is easy to determine 3 what's causing it. There are some of --4 MS. DICKEY: Just for the record, Farhad, 5 can you say in words what you're pointing to. 6 looks to me like you're pointing to the two areas 7 that stick out near Clipper Point Harbor. 8 MR. GHODRATI: Right. It's not actually 9 labeled on this map, but the area is called Waldo 10 Point Harbor. It's a small section of Waldo Point 11 Harbor called Gates Coop and that has some of the 12 oldest houseboats or floating homes. 13 BOARD MEMBER MCGRATH: And it's a near 14 shore monitoring location? MR. GHODRATI: Yes, it's in the near shore. 15 16 And that's been a problem since the '70s and '80s 17 and continuing on. There is a project in place. 18 There's a plan to build new docks for those boats 19 and move them (inaudible) location so they have 20 proper sewage hookups and all. It's been, again, 21 that plan has been in the works for decades, and the 22 good news is that finally seems to be moving 23 forward, and hopefully within the next couple of 24 years it may happen. 25 The second spike you saw is in this area of

- 1 | Sausalito Marina, Yacht Harbor, and Pelican Harbor.
- 2 | That one is more difficult to determine what's
- 3 causing it. The water quality monitoring that we
- 4 do, as I mentioned, we use pathogen indicators, but
- 5 | they're not specific unfortunately. They detect
- 6 | bacteria from all warm-blooded animals, so it could
- 7 be some wildlife. It could be human sewage. That
- 8 | may need a little more refinement.
- 9 CHAIR MULLER: Is that specific enough,
- 10 Jim?
- BOARD MEMBER MCGRATH: Yeah. And then the
- 12 second questions, as long as we've got this map, is
- 13 where are -- there were quite a few sanitary
- 14 overflows that got press last year.
- MR. GHODRATI: Right.
- 16 BOARD MEMBER MCGRATH: There's a quite a
- 17 | number. Where are they?
- MR. GHODRATI: Yeah. Unfortunately, this
- 19 map doesn't show it. We probably have to --
- 20 MS. FEGER: Yeah. I don't think we could
- 21 (inaudible).
- 22 MR. GHODRATI: Right. No, we have not
- 23 plotted those.
- 24 BOARD MEMBER MCGRATH: Okay.
- MR. GHODRATI: That's not something that we

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   have to --
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            BOARD MEMBER MCGRATH: That can be done?
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            MR. GHODRATI:
                          Yes.
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            CHAIR MULLER: Okay. Excuse me one second.
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   We'll come up for Bill. Are you all right, Shalom?
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            BOARD MEMBER ELIAHU: Yeah. I just have
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   here also a question. I understand from this in
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   here that the main contributor for the pathogens is
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   from the vessels and the houseboats. Actually, the
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   houseboats are the main ones and the sewer may be
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   something also. We can control this, I think, very
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   easy. The question is how do we control wildlife
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   and urban runoff. If you have too much pathogen in
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   the urban runoff, how do you remove it?
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            CHAIR MULLER: We have a speaker that will
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   speak to that soon here possibly.
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            MR. WOLFE: Well, I think that also goes to
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   you saw the allocations that for those things we
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   feel that already we have a prohibition or that are
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   appropriately controlled, there is a zero
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   allocation, the human waste --
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            BOARD MEMBER ELIAHU:
                                   Right.
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            MR. WOLFE: -- through sanitary waste.
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            BOARD MEMBER ELIAHU: Yeah, we can control
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   that.
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1 MR. WOLFE: Whereas through stormwater, 2 which is obviously pet waste and other animal waste 3 is the predominant pathogen source, that's where we 4 have the allocation at the shellfish objective. 5 Likewise, the wildlife is that shellfish objective. 6 This is why it's going to be important to continue 7 doing monitoring and adaptive implementation to see, 8 as we ideally get the levels at the sanitary waste 9 as close to zero as possible and have some controls, as Farhad said, outreach or other controls on pet 10 waste and other approaches, how close are we coming 11 12 overall to meeting that shellfish objective. then look are there other methods that can be put in 13 14 place. 15 BOARD MEMBER ELIAHU: Actually, then we are not asking today to remove the pathogens from 16 17 stormwater runoff. 18 MR. WOLFE: We're not advocating a 19 treatment system per se in stormwater. We're 20 looking at more the actions that might make people 21 aware of the contributions say of pet waste and 22 others and to keep those out of the stormwater 23 system. 24 BOARD MEMBER ELIAHU: Okay. 25 CHAIR MULLER: Okay. Dr. Singh?

BOARD MEMBER SINGH: In fact, I have a similar kind of question to what Mr. James McGrath When I look at this chart, it seems like in one area the water contact sports is violated within the summer time. And I guess that when you took the samples from there, most of the problem is from the houseboats and vessels in that particular area. not saying about shellfish. Shellfish is a bigger question to me, that requirement, but everywhere else almost you meet the water contact requirement. I think inspecting and some kind of setting up a standard for these boats and vessels might solve the problem and make the whole area water contact acceptable. Now as far as stormwater is concerned, it is a bigger concern I tell you. And the only way I know to control it right now is the basin management. We can put -- return some basin -return some basins, turf strips to intercept the water before it gets into the storm system and all these things. And people have to modify where the water is coming from in those houses which are all already in place. And new development we put these

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requirements.

requirements, the BMP requirement, basin management

But the houses which are already in place to modify the water coming from the roof and coming from the imperviable areas, if they go through a strip of lawn or some of those requirements, they will need some money, and I don't know what your plan calls for to give some incentives, or tax benefits, or something to the people who can modify those areas. I think commercial areas, industrial areas probably can impose them and the industry can modify the existing land and the runoff system they have from the parking lots and other areas. But the homes, the people have to modify that. I don't know how to -- The Basin Management Plan have not studied it all.

MR. WOLFE: Well, I think you addressed the area that we're trying to look at on the broad base control of urban runoff and recognize that a lot of opportunities and measures that can put be put in place that either slow the flow or infiltrate the flow can have multiple benefits on controlling sediment runoff or controlling pathogen and other materials.

What we're saying here is that we want the stormwater programs to continue taking that approach of looking for the opportunities to address new

- 1 development to do all their other controls and to
- 2 | make sure that we're maximizing our outreach
- 3 specific to issues such as pet waste.
- But on the other hand, we're not saying, at
- 5 | this point at least, that we want to put in a whole
- 6 | new system of structures that would be specific to
- 7 | controlling just pathogens, so that we're looking at
- 8 how the stormwater program as it evolves and
- 9 addresses all types of contaminants that might be in
- 10 stormwater runoff and how that can also address the
- 11 pathogens in the runoff.
- 12 CHAIR MULLER: Thank you. Terry? We have
- 13 a couple of cards and then you can -- we can
- 14 | respond. I think we'll start with Brooke first,
- 15 | please. She's the Executive Director of Richardson
- 16 Bay Audubon Center, so she might be the bird lady
- 17 expert.
- MS. LANGSTON: Good morning, Board. Thank
- 19 you for hearing me this morning and thank you to
- 20 | staff for your support in the work that we're doing.
- 21 I'm Brooke Langston. I'm the Director of the
- 22 Richardson Bay Audubon Center, which is a 50-year-
- 23 old organization, which has lease or fee title to
- 24 900 acres of Richardson Bay subtidal lands
- 25 | encompassing all of the land that you see on the

map, the subtidal land that you see on the map from

Strawberry Point over to the town of -- to the

island of Belvedere, the peninsula of Belvedere, and

everything within -- up to mean high tide line

within the main basin of Richardson Bay.

We have been there for 50 years as a steward and as a protector of the land and water. And for the last two years, we've been doing oyster -- native oyster and eelgrass restoration within those 900 acres and partnering with other agencies and NGOs around the greater San Francisco Bay looking at oyster and eelgrass within San Francisco and San Pablo Bays as well.

We are Audubon California, of which I'm a part, is in support and favors the increased water quality measures, the TMDL loads that staff is working on, and we think those are good for the Bay and, regardless of shellfish harvest or not, we're excited about the improved water quality. And we, as you see by where the monitoring has been done, we're not included in that. We would be interested in working with staff and doing -- implementing your water quality measures up with the water quality work that we're doing. We're not testing for pathogens currently, but we'd be interested in

- 1 | figuring out how we could find the funding to
- 2 | implement that along with the work that we are
- 3 doing.
- And I'm sorry to say I can't address the
- 5 | Chair's issues on how to reduce wildlife impacts to
- 6 pathogen load of the Bay. What I would be
- 7 | interested in doing is starting to test there on a
- 8 regular basis because as you see in our section of
- 9 the Bay there are no marinas or anchor-outs or
- 10 anything such as that, so we could -- testing up
- 11 | there would show what the wildlife impacts -- could
- 12 | show what the wildlife impacts are since that's
- 13 about the only impacts that are within Richardson
- 14 | Bay would be storm runoff maybe from the towns of
- 15 | Tiburon and Belvedere and Strawberry, but also what
- 16 the wildlife load is doing to the Bay.
- 17 CHAIR MULLER: Thank you. Any questions of
- 18 Brooke? I think this is the first time you've
- 19 testified here, is it not?
- 20 MS. LANGSTON: This is my first time being
- 21 here. I've been at this position for about two and
- 22 | a half years and have been.
- 23 CHAIR MULLER: Thank you for coming over
- 24 and giving us this testimony. And I know you've
- 25 submitted the written testimony also.

1 MS. LANGSTON: I have not but I'm here 2 instead --3 CHAIR MULLER: Okay. 4 MS. LANGSTON: -- since I did not submit 5 written testimony. 6 CHAIR MULLER: Sorry about that. 7 MS. LANGSTON: Thank you. 8 CHAIR MULLER: All right. Amy, please. 9 Mary, did we receive any other cards on this item? 10 Okay, thank you. 11 MS. CHASTAIN: Good morning, Chair Muller 12 and Members of the Board. Ms. Feger did such a good job summarizing my comments I'm almost reluctant to 13 14 go into detail here, but the two points that she hit are the two issues that I'd like to raise before you 15 16 today in terms of what we're asking to be changed. 17 In general, we do support this TMDL and 18 especially the 14 MPN, Most Probably Number, per 100 19 mils target. It's the TMDL; the actual load itself 20 as well as targets. We believe that having the 21 Total Maximum Daily Load set at that level is 22 necessary to ensure that all of Richardson Bay's 23 beneficial uses are protected. 24 The two issues that I want to discuss in a 25 little bit more detail, again, Ms. Feger already

1 went in to, and the first is that we've asked that the dry weather waste load allocation for municipal 2 3 storm sewer systems be set at zero and be 4 incorporated into the stormwater permit, be it the 5 Municipal Regional Permit when it's adopted by this Board or the current permits, in order to ensure 6 7 that are no -- that there's no dry weather loading 8 of fecal indicator bacteria to Richardson Bay. 9 think this makes sense because any fecal indicator 10 bacteria loading coming during the dry weather is 11 going to be from sanitary sewer overflows or from 12 illicit discharges, both of which are prohibited. 13 The second thing that we've asked is that 14 the TMDL implementation plan more specifically address some of the flaws that have been identified 15 16 or some of the problems that have been identified 17 with the sanitary sewer collection systems for 18 Southern Marin. Specifically, there are two sources 19 that you can look to for more specific 20 implementation measures. One is the inspection 21 reports that were recently released by the 22 Environmental Protection Agency. Those are the 23 results of their inspections of, I think, it was 24 seven of the collection systems that feed into the 25 Sewage Agency of Southern Marin's Treatment Plant.

1 They identified a number of problems with how these 2 collection systems are currently being operated and 3 maintained. And also there was a Marin Grand Jury 4 report, which I believe was 2003/2004, that had some 5 specific recommendations intended to address the 6 collection -- some of the collection systems

problems that exist in Southern Marin.

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Specifically, I just want to call out a few of the items that were identified in the inspection reports and the Marin Grand Jury report. One is to require collection systems to undertake an inflow and infiltration study. We know that inflow and infiltration was probably a significant contributor to the SASM spill. Also to require these collection system agencies to develop and implement formal sewage spill response, containment procedures, and reporting procedures.

It's kind of interesting to read the reports. I guess most of these agencies currently rely on Roto-Rootor to contain and respond to spills, and so there's significant room for improvement in terms of response and also reporting. Also require the collection system agencies to undertake a comprehensive evaluation of their CMOM, which are Capacity Management Operations and

1 Maintenance. 2 And finally, one of the points that was 3 raised in the Grand Jury report, which is 4 interesting, is this idea that it would be 5 beneficial to establish a forum to facilitate 6 communication, information sharing, and dispute 7 resolution amongst all of these agencies. 8 And I just want to emphasize that, in 9 recommending that the TMDL more specifically address 10 sanitary sewer overflows, I don't mean to deflect 11 attention from the obvious need to address illegal 12 discharges from houseboats and vessels. Thanks for 13 your time. 14 CHAIR MULLER: Thanks, Amy. At this time, I have no further cards. EPA is not in the room, I 15 16 don't believe. They're not represented here to 17 comment, so this is again we will continue to 18 compile information. I'll come back to the Board, 19 so we are not voting to move this forward. There's 20 no --21 MR. WOLFE: Correct. 22 CHAIR MULLER: -- action necessary. 23 is strictly receiving more testimony. 24 MR. WOLFE: Yeah. As Naomi pointed out

that legally we must respond to all comment, not

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- 1 only written, but what we've received today. With
- 2 | that in our mind, provides the opportunity then to
- 3 work with all stakeholders to address the concerns
- 4 raised, and address the issues and come up with a
- 5 | mechanism for moving forward before we come back to
- 6 you for adoption.
- 7 CHAIR MULLER: Okay. All right. I'll go
- 8 to the Vice Chair.
- 9 VICE CHAIR YOUNG: Yes. The staff asked
- 10 | for our thoughts going forward as you go into this
- 11 | next phase and I have some thoughts, so I'm always
- 12 happy to oblige.
- 13 First of all, the shellfish harvesting
- 14 beneficial use and associated water quality
- 15 standards seem totally appropriate to me, and -- so
- 16 | I hope there is no big controversy with that.
- 17 | Secondly, the allocations seem very appropriate
- 18 particularly the zero allocations. That's just as
- 19 it should be.
- I was impressed with Baykeeper's
- 21 | recommendations specifically with respect to the
- 22 additional implementation measures for the sanitary
- 23 sewer systems and the houseboat and vessel
- 24 | implementation measures. And I hope that staff will
- 25 have a chance to take a look at those closely. It

seems to me that, based on our recent experience, we can do -- as a community we can do a lot better with these sanitary sewer overflows.

And the recommendations that were in the EPA study -- that came out of the EPA study and out of the Grand Jury report, I think, deserve a lot of very, you know, serious study. I noticed that EPA made a very similar recommendation in their comment letter and that seemed to be a very good point that they made also. That was their Item 6 relating to sanitary sewer systems.

Finally, to the extent that we know that pet waste are a big issue here and I'm not sure to what extent we're completely confident about that, but to the extent that we are, perhaps we could be a little bit more aggressive than we -- than I sense we were in the draft about requirements relating to pet waste, and I offer that for your consideration as well. Thank you.

CHAIR MULLER: Jim?

BOARD MEMBER MCGRATH: First of all, let me agree with everything that Terry said and not repeat it. Three things I think. I'd like a sense of priorities in the next round and in particular what to do about anchor-outs. As anybody that's been

1 around a marina knows, that anchor-outs tend to be

- 2 | the most libertarian and least subject to
- 3 | regulation. So I guess the question that I've got
- 4 of you, they're difficult to deal with, how
- 5 | important is it? So that's the first question that
- 6 | I would have and hopefully monitoring information.
- 7 | I mean that's why I'm digging around is what are the
- 8 biggest sources and where should we put most of our
- 9 resources.
- 10 Second, I found the slide on the time
- 11 series and the locations to be extremely valuable.
- 12 I'd love to see some more data about the longer time
- 13 particularly in the hot spots so we can get some
- 14 | idea of what's the rate of recovery and those
- 15 things.
- 16 And then in response to some of the
- 17 questions that I inherently have about where the
- 18 problems are and the comments of the City of
- 19 | Sausalito, maybe a little bit of time on monitoring
- 20 | in the past and how maybe it should be changed in
- 21 | the future so we'd have a little better idea. I
- 22 | found the offer of the Audubon Society to help with
- 23 that by providing a far field to be useful. So put
- 24 some thought into how we might want to change
- 25 monitoring so we've got a more powerful tool, but it

1 was an excellent staff report. 2 CHAIR MULLER: Thank you. Bill? 3 BOARD MEMBER ELIAHU: No. Just one thing 4 in here, the priorities really should be the 5 houseboats and the vessels, and this is the main 6 source of the pathogens. And I think we should put 7 more emphasis on controlling these. There's no 8 reason why we cannot control that 100 percent maybe. 9 CHAIR MULLER: Thank you. Dr. Singh? 10 BOARD MEMBER SINGH: I would like to say 11 that this is the planning phase. This is the 12 planning phase and we are getting inputs from 13 everybody, but one thing I like what Eliahu says. 14 Something which can be easily done and can be 15 implemented, we can regulate and check those 16 houseboats because they are discharging sanitary sewer and creating local deterioration in the 17 18 quality of the water over there. That probably can 19 be easily prevented. 20 As far as stormwater management is 21 concerned, that's the bigger question and a long-22 term effort. It needs the basin modification and 23 there could be some costs to that, so that should be 24 tried and should be encouraged. People should be 25 educated. And local government agencies, cities,

and other agencies should be encouraged to try to manage their stormwater runoff problem.

But I think one other thing we can achieve and make the contact level of sports easily available in the entire Richardson Bay is by controlling the houseboats and regulating them, and so I agree with Eliahu.

CHAIR MULLER: Thank you. My brief comment would be that this area has a long history of a unique lifestyle to the whole San Francisco Bay, and so I'm not, you know, out to move all of these people around, but I think we have to enforce the Water Code regulations to the best of our ability there.

And I agree with the shellfish, I can't even say it, monitoring, and I think I'm sure the community is stepping up as best as they can in this whole process there, and I appreciate the Audubon and Baykeeper's comments. But I think this is a unique part of our San Francisco Bay and I don't think we're going to change it and move it around. It's just we have to ensure that whatever is there is done properly when it comes to waste water, and so I would support that we listen to the recommendations of the Board and move forward with

1 this.

MR. WOLFE: Yeah. I think your points are well taken especially those about the sanitary sewer overflows. You'll note that we circulated this report essentially at the beginning of February, which was about at the time some of our significant overflows occurred, and that EPA was initially coming out with its reports. So we recognize and in fact we want to go back and look at what is there and see how we can, as Naomi said, how we can incorporate that better in here.

I think Mr. McGrath's points on the monitoring and how can we make sure that we have moving forward the appropriate monitoring locations and times of year represented. And I was very pleased to hear the comments about Audubon because that is an area of the Bay that we do have less data on and also less vessels and houseboats up there, so it will be very useful to be able to use that information or to get more information from that area.

And certainly, as Chair Muller notes, the houseboat situation in this area has tremendous history. All the parties, in fact I think the commenters, recognize that certainly, if they're

- 1 living there on houseboats or other vessels, at one
- 2 | level this is their backyard. They want the water
- 3 quality to be high, so they do support that. It's
- 4 | just how it is done.
- 5 And likewise, we fully support moving
- 6 forward with robust urban runoff controls. I think
- 7 | it's worth noting that last month when we were
- 8 talking about the Regional Permit that that permit
- 9 does not include Marin County because that was not
- 10 historically part of the phase one programs.
- 11 Nonetheless, the Marin County program has
- 12 been a member of the Bay Area Stormwater Management
- 13 Association and they are implementing a lot of
- 14 | measures consistent with those phase one permits but
- 15 are under the quote/unquote phase two permit. So
- 16 | they're at a little different level regulatory-wise,
- 17 but they have been very proactive over the years at
- 18 implementing measures that get good bang for the
- 19 buck, as you were. And I think this is an area
- 20 where we definitely want to see that continued and
- 21 that there is more opportunities for that bang for
- 22 the buck.
- 23 CHAIR MULLER: Good. Thank you, staff.
- 24 | Shalom?
- 25 BOARD MEMBER ELIAHU: One question. Do

- 1 they still give permits to put houseboats? I want
 2 to put one there now.
- 3 CHAIR MULLER: We're not in the land use
- 4 business, Shalom.
- MR. WOLFE: Yeah. That's more of a land
- 6 | use issue and I think there's a lot of --
- 7 CHAIR MULLER: We all want in.
- 8 MR. WOLFE: -- fathering in. You may want
- 9 to talk with your representative on BCDC, Mr.
- 10 McGrath, because I know this has been issue in front
- 11 BCDC for a long time so.
- 12 CHAIR MULLER: Pretty soon we'll be
- 13 monitoring those windsurfers, too, out there, you
- 14 know.
- MR. WOLFE: Oh, those rogue windsurfers we
- 16 do have to watch out for.
- 17 BOARD MEMBER MCGRATH: You don't want to
- 18 know what we do in our wetsuits.
- 19 CHAIR MULLER: So what we're going to do --
- 20 | So what we're going to do right now is Ray is going
- 21 to pass out envelopes for a quick fill out of the
- 22 lunch. We're going to take quick break and then we
- 23 | will come back and handle Item 7, please.
- MR. WOLFE: Good.
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