

PUBLIC INTEREST ADVISORY COMMITTEE (PIAC) MEETING
April 29, 2002, 3:30 to 5:00 PM, WHOI Carriage House
FINAL MINUTES

ATTENDANCE

Members Present: Patty Foley, Save the Harbor/Save the Bay (chair); Bruce Berman, Save the Harbor/Save the Bay; Peter Borrelli, Center for Coastal Studies; and Steve Tucker, Cape Cod Commission.

Observers: Cathy Coniaris, MADEP; Steve Lipman, MADEP; Mike Mickelson, MWRA; Andrea Rex, MWRA; and Larry Schafer, retired.

SUMMARY OF ACTION ITEMS

1. PIAC approved the October 2001 minutes with no amendments.
2. P. Foley will contact A. Solow to discuss OMSAP meeting format and the mussel tissue exceedance.
3. P. Foley will communicate to MWRA PIAC's interest and priorities related to the review of the Monitoring Plan.

MINUTES

REVIEW OF DRAFT OCTOBER 16, 2001 MINUTES

ACTION: PIAC approved the October 16, 2001 minutes with no amendments.

BIOACCUMULATION OF CHLORDANE AND PAH IN MUSSEL TISSUE: A CAUTION LEVEL EXCEEDANCE

P. Foley noted that since all of the members present were at the OMSAP meeting, that another presentation from MWRA on the summer 2001 mussel tissue contaminant exceedance was not needed. She is glad that there will be mussel testing and review for summer 2002. P. Borrelli thought that there was a lack of clarity on the part of OMSAP as to what "action" was before the panel. For example, there were times where the words "approve" and "accept" were used interchangeably. By Roberts Rules, if a committee is submitting a report, the group can move to accept the report, but not necessarily approve it, and the issue can be revisited. However, in the end, he thought the correct actions were taken. Relative to the issue of the threshold, a more thorough, scientific, and regulatory discussion has been left for future discussion, but he thought this could have been resolved today.

S. Tucker thought that there was a fundamental level of confusion during the OMSAP discussion. Perhaps it would have been worth discussing the use of an additional species for the bioaccumulation monitoring to make sure that uptake and retention are similar. He also was surprised that OMSAP was discussing cost and practicality since he does not think that is in their charter. Though OMSAP wants to be responsible, he thinks that is an agency/management issue. He thinks greater clarity would be welcomed as well as a thoughtful evaluation of the material and a clear grounding in the material ahead of time.

B. Berman thinks that had MWRA asked for a change in the mussel tissue contaminant thresholds ahead of time, he thinks OMSAP's response would have been more structured and focused. Overall, he was initially very anxious when he first heard about the exceedance, but through this process, the "comfort-level" of his understanding of this situation has increased. In many ways, the process worked, but he does agree with both S. Tucker and P. Borrelli that the discussion was awkward.

However, he is not sure that if it had been less awkward that he would have been as happy with the outcome. P. Borrelli thinks we should be realistic in that frequently issues of science and methodology do bring up concerns of cost. However, there is a certain attendant responsibility to articulate how one would spend the money otherwise. For example, there was some discussion on the possibility of gaining more understanding by conducting more analyses of the effluent rather than using caged mussels. B. Berman asked if the caged mussels are placed directly in the effluent plume. A. Rex replied that they are suspended 30 feet above the bottom in the plume.

S. Tucker was happy about the Inter-Agency Advisory Committee discussion about continuing the mussel monitoring, although he would not necessarily advocate mussel monitoring to be continued indefinitely. He also does not think that the 60-day “snapshot” [period when the caged mussels are deployed in the summer] is an accurate picture of the effluent. B. Berman would also like to see the mussels deployed for longer than 60 days. A. Rex explained that the reason why the deployment time is 60 days is because this is during the stratified period (i.e. lowest dilution), after the mussels have spawned, and during the period of most activity. This also matches the deployment time for the baseline studies. B. Berman thinks that there would be different results if MWRA tested an organism that lived there for a longer period of time. A. Rex added that they also collect lobster and flounder for tissue analysis. B. Berman noted that these are migratory species and that is somewhat different. He added that it also matters in what form the contaminant is in when the mussels come in contact with it, dissolved or particulate. M. Mickelson replied that this study examines dissolved phase contaminants that equilibrate quickly, and thus the mussel results are a good view of what was happening at the time.

P. Foley thinks it would be useful that once the minutes of this meeting are prepared, for her to contact A. Solow to make sure that PIAC weighs in on the mussel issue. P. Borrelli said that he did not think that the OMSAP discussion on mussels was structured well. M. Mickelson said that after MWRA explained their analysis, some OMSAP members asked “why monitor mussels”, and this turned the conversation in a direction that was unexpected. P. Borrelli thinks that MWRA should give more guidance on what is it from the agenda items that is expected from OMSAP. A. Rex replied that MWRA did ask for them to comment on MWRA’s proposal for additional work. OMSAP did comment by saying that MWRA should not move forward with the additional work. They also reviewed the mussel material and those who are known to have a deep scientific understanding of the material agreed that it was not an issue of mussel health or public health. Those are the questions that MWRA wanted reviewed by OMSAP and this was accomplished at the meeting. B. Berman thinks that in other cases where OMSAP has had sharper discussions, they have been within the context of a request for a change to a standard. This was an exceedance report as opposed to a requested action.

ACTION: P. Foley will contact A. Solow to discuss OMSAP meeting format and the mussel tissue exceedance.

DEVELOPMENT OF PROCESS FOR REVIEW OF AND MODIFICATIONS TO MWRA'S EFFLUENT OUTFALL AMBIENT MONITORING PLAN

P. Foley thinks that it is a good time to review the Monitoring Plan. She also noted that while monitoring has been conducted for 10 years, monitoring for the new outfall has only been conducted for two years. She asked the PIAC members if they had any issues they would like to discuss pertaining to this. P. Borrelli thought that the information briefing from MWRA was excellent. He thinks a review is called for, to see if things can be done better. The outcome of some of the early investigations during the post-outfall period may be sufficient to address issues of station placement and frequency, and dollars saved in one area could be possibly applied in another area. There may also be some monitoring ideas that were left behind the first time around that could be revisited. He asked

how much flexibility MWRA has in the next 6-18 months with respect to budgeted expenses. A. Rex replied that they are flexible contractually but it is the requirements of the permit and the Contingency Plan that guide MWRA. P. Borrelli thinks that it is important to have flexibility, otherwise this review will be nothing more than a management exercise. A. Rex said that the Monitoring Plan is attached to the permit, but there is a process in place for making modifications to the Monitoring Plan. P. Borrelli thought that was good. A. Rex noted that effluent and toxicity testing were not discretionary unless there is a major permit modification. M. Mickelson added that MWRA is currently not requesting any modifications to any thresholds.

B. Berman agreed with how the review will begin, by describing what is currently monitored. He urged that the purpose of the review be not to merely reduce monitoring. It would be a mistake not to consider at this time what we might also be doing. He also thought the information briefing was helpful and prompted a useful discussion. A. Rex said that MWRA can not maintain this intense level of monitoring effort over the long term, and it would be wrong for them to waste money. B. Berman said that he was not suggesting that they waste money, but he does think that there may be more science and additional monitoring that should be considered. It may be that there are new questions that need to be answered. He is concerned that the first goal is cost. P. Foley thinks his point is well taken but we are still in the beginning of this process. P. Borrelli thinks MWRA will always be concerned about cost because of its revenue stream. P. Foley agreed and said that most members of this group and others from the public would argue against merely reducing the monitoring. P. Borrelli thinks that everyone needs to be open-minded and flexible during this process. It may be that the plan evolves and priorities shift, but one day something terrible will occur and MWRA would not want to be in the position to not have the capacity to be able to respond quickly. Two years of post-discharge monitoring is not enough to have a history to look back on.

S. Tucker thinks an evaluation of the Monitoring Plan is a good idea. He has some of the same reservations that B. Berman articulated. He understands the practicality of the situation and the needs that are at stake. He also believes that with the foundation of knowledge that has built up and new science, new monitoring options will become available and he hopes that they are considered. He asked MWRA about their idea of a screening criteria or a mechanism of testing to get at unanswered questions. A. Rex replied that they have been thinking of various ways of looking at statistical significance. There are also other structures of monitoring programs that have been considered such as a tiered monitoring program where there is more intensive monitoring if an incident occurs. MWRA may want to move toward these approaches in the future. B. Berman thinks that monitoring not only answers questions, but also increases public confidence. P. Foley would not be surprised if MWRA did ask to reduce some monitoring. A. Rex noted that MWRA is cutting back on its rate support (debt service) this year. P. Foley said that PIAC will come back to MWRA with some sense of their interest and priorities as it relates to monitoring and figure out how the group can be helpful.

ACTION: P. Foley will communicate to MWRA PIAC's interest and priorities related to the review of the Monitoring Plan.

P. Borrelli said that in all likelihood, the Cape groups would want to revisit some of the issues pertaining to the farfield. The Center for Coastal Studies (CCS) has some preliminary data that are potentially alarming. The last Center for Coastal Studies nitrogen isotope monitoring report (fall 2001), did not report any acute findings within the areas of investigation (phytoplankton, zooplankton, dissolved inorganic nitrogen, and physical oceanographic measurements). It did, however, make note of two things, a "nitrogen front" that was at the entrance of Cape Cod Bay and a nitrogen "hot spot" in the vicinity of Plymouth. As Stormy Mayo reported to OMSAP, the right whale situation in Cape Cod

Bay is alarming given the lengthy 20-year CCS database. This is the first time in 20 years that such low numbers have been observed. In 2001, ~115 individual right whales were seen in Cape Cod Bay, and their period of residency was high. This year, ~20 individuals have been observed and their period of residency was low. The reason why was a complete breakdown in the zooplankton food supply (*Calanus*) in quantity and quality. Overall, there is a lot more that needs to be looked at. What worries him is that the biochemistry that is essential to the food web may in some way be disrupted. This could be the beginning of a story that would require a lot more investigation and would be alarming both from an environmental and a public policy standpoint. Perhaps an impact on the farfield could be due to something that happens in the nearfield that alters the biology throughout the system and ultimately has an impact in the farfield. We do not know if the changes we have seen are due to changes from well outside the system such as the large chlorophyll bloom in the fall of 2000. We would like to increase our efforts if we can obtain more funding, because these are not observations that we expected after only a year and a half. It is surprising that these events all coincided in time.

B. Berman asked whether other years with low number of right whale observations were also dry years. P. Borrelli replied that in 1986 there were low numbers but they remained in the summer. 2002 is worse because of the very low numbers of right whales and the plankton did not set up the way it has in the past 20 years. Perhaps this is the beginning of a cycle that we have not seen before in our data, but has occurred many times in the past. C. Coniaris asked about the right whales that are feeding in Great South Channel on zooplankton patches. P. Borrelli replied that the federal surveying does not relate to behavior or habitat so they do not know if the whales are feeding. In the case of the whales north and east of Stellwagen Bank, we have sent a research vessel to take samples and have determined that they are feeding and there is the critical mass of patches sufficient for them to feed. Overall, the 2002 observations in Cape Cod Bay are a concern but all of the scientists involved are being properly cautious because the connection between cause and effect is very difficult to determine.

ADJOURNED

MEETING HANDOUTS:

- Agenda
- April 2002 OMSAP/PIAC/IAAC membership lists
- October 2001 draft PIAC minutes
- MWRA information briefings and copies of presentations

Summary prepared by C. Coniaris. Post-meeting comments are included in [brackets]. All such comments have been inserted for clarification only. They do not, nor are they intended to, suggest that such insertions were part of the live meeting components and have been expressly set-off so as to avoid such inference.