MINNESOTA ENVIRONMENTAL QUALITY BOARD

MEETING MINUTES Thursday, November 15, 2006 State Office Building, Hearing Room 5

EQB Members Present: Dana Badgerow, Jonathan Bloomberg, Gene Hugoson, Susan McCarville, Brad Moore, Paige Winebarger, Lt. Gov. Molnau

Others Present: Robert Roche, Michael Sullivan

EQB Members Absent: Ward Einess, Randy Kramer, Dianne Mandernach, Gene Merriam,

Glenn Wilson

I. Call to Order:

Chair Badgerow called the meeting to order at 9:05 a.m. The Consent Agenda was moved by Member Bloomberg and seconded by Member Winebarger. The motion passed.

II. Executive Director's Report:

Mr. Sullivan advised the Board that EQB staff had been approached by Applied Ecological Services (AES) with a request that the EQB partner with AES in responding to the LCCMR proposal for their strategic planning effort. That effort is directed at completing a comprehensive statewide preservation and conservation plan to allow the LCCMR to direct funding from the Natural Resources Trust Fund, and other funding sources, toward those projects that conserve, preserve, restore, and enhance Minnesota's environment and natural resources. The EQB played a small role in that effort and Chair Badgerow testified before the LCCMR regarding the submission put together by the Board based upon information supplied by member agencies. The primary role of the EQB in this proposal would be for staff to facilitate and coordinate public and stakeholder participation in the plan's development; to collaborate in the review and summarization of existing resource plans that various agencies and groups develop; and to work with the state demographer and Land Management Information Center to provide critical information and information oversight. The process requires submissions on November 16; there are details that are continuing to be discussed. The expectation is that the EQB staff role would not exceed the agency's ability to provide it. There is funding support for staff. If the EQB is selected, staff will keep in close contact with the Board and keep it advised of processes and accomplishments. Sullivan believes that it aligns with conversations from the past few months in regard to the types of things the Board may want to do in the future future. Staff will advise the Board as to the outcome of the process.

Member Winebarger asked for clarification on who AES is, the type of organization it is and who, if anyone, it is affiliated with. She also inquired as to the end of the process, when the plan is completed, who the ultimate audience would be).

Sullivan explained that AES is a for-profit organization that has done this type of work as part of its portfolio. Other applicants include the University of Minnesota, and they have asked for permission to use the EQB in their proposal also. Sullivan believes this indicated a recognition on the part of proposers that, given the make-up of the Board, that it would sound good in their proposals to make reference to the entity that represents so many of the key state in natural resources agencies. The use of the plan is for LCCMR, to help it focus its decisions and expenditures on the things that are most important in terms of the planning process. It's an effort to give structure to how funding decisions are made so that they are more directed than may have been the case in the past.

Winebarger asked if this was the type of plan something that LCMR did in the past and whether it just needs to be updated.

Sullivan responded that LCMR has from time to time made efforts similar to this. But this is different from what's been done in the past; people have been asked to respond and give ideas about what they think are important. Given their reorganization, they see it as an attempt to step back and define more specifically what those priorities are.

Winebarger indicated that she wants EQB staff to be involved and that it is important for them to be involved, but more than just figuratively. She wants the EQB to see if there is a way to collaborate with other entities trying to put together long range plans for conservation in the state as a way to combine rather than split up resources and not have duplication of efforts. She felt that Board action could benefit the plan by offering support and leadership.

Sullivan responded that since the proposal has not yet been finalized, when it is completed a copy will be provided to all members of the Board. Reference is made to all of the member agencies sitting on the EQB Board, but this is one proposal that provides a formal role for the EQB and its staff to actively participate in at this point, other than as an advisory/stakeholder role.

Chair Badgerow indicated that she has been reviewing the various drafts and agreed that the EQB should not be involved unless it is substantive and meaningful. One bit of feedback received in presenting the initial report to the LCCMR was the need to better integrate GIS into the strategic planning process. It is a natural fit that the Land Management Information Center is positioned to become a partner. This proposal does include LMIC and their vast databases and systems, unlike the University of Minnesota. Chair Badgerow assured the Board that the EQB would not be mentioned as a figurehead in any proposal and would only allow the EQB name to be used if it is substantively involved. She agreed that there are

many private and public initiatives to strategically plan the environment and offered that as a topic for the January retreat.

Member McCarville asked if the makeup of the LCCMR likely to change or their mission likely to deviate in light of the recent election.

Sullivan responded that their direction is unlikely to change. The institution created is part of an extensive negotiation and there is agreement from legislators and the governor's office in regard to that. In terms of membership, that is unclear.

Sullivan explained the format of the EQB retreat proposed to be held in January.

III. Legal Counsel Report

Mr. Roche had nothing to report.

IV. Status Report on Environmental Review Program Rules/Public Comments

Gregg Downing told the Board that the Phase 1 rules that the Board adopted went into effect on October 30, 2006, and that process is completely over. At the Revisor of Statutes' Website, all of the amendments are incorporated into the text of Chapter 4410.

Phase 2 was started this past summer by publishing the required Request for Comments notice. The comment period ran through October 16, 2006. Downing reported that he would summarize the comments received, the issues raised, and his assessment of where Phase 2 will be going. Downing directed Board members' attention to the handout entitled "Phase 2 Summary of Comments Received and Options and Staff Recommendations." Downing reported that he would only be explaining items that received significant comments. Item #4, dealing with Rule Part 4410.1700, subp. 7, item B deals with criteria that an RGU needs to consider in deciding if an EIS should be prepared after an EAW has been done. At the request of the Board, staff indicated that comments were sought about whether to proceed to clarify the Rules by working within the guidelines given by the Supreme Court or take a different route and what would that be. Three comments were received; two indicated that the EQB should follow the guidelines of the Supreme Court and use that guidance as clarification on how to deal with a cumulative nature in EAWs and EIS. The Center for Environmental Advocacy advocated that the EQB go back and start with a clean slate, throw out all confusing language, language that is different from NEPA or that used in other states, and adopt the federal language. The Board now has two options: one is to continue implementing something based on what the Supreme Court said, or two go back and start over again with language similar to NEPA language. In order to make that decision, staff needs a better understanding of what the NEPA guidance and case law is regarding what cumulative impacts have been interpreted by the federal courts to be. That information needs to be compared to the guidance the Minnesota Supreme Court has provided to see how the scopes differ. Staff will work with Mr. Roche to look at the federal process and how that

would compare and present that information at a later meeting for a decision on which option to follow.

Member Winebarger asked Mr. Roche about how much time would be required to gather the federal information required. Mr. Roche replied that it would not be a lengthy process; a memo on the federal analysis will be ready for the Board meeting in December.

Member Bloomberg asked Mr. Roche about the Supreme Court decision and if that referred to our Rules and did not go back to the statute. Mr. Roche replied that the decision turned on the EQB 4410 Rules and how the term "cumulative impacts" is used for a GEIS and the term "cumulative effects" is used for a site-specific EIS need determination. Bloomberg wondered if we elect not to amend the Rules that there's nothing in the Supreme Court decision to inhibit that from being done. Mr. Roche replied that he was correct.

Member Winebarger asked Commissioner Moore, relative to the EQB's first step being to understand the federal definitions in relation to Rules 4410, but whether there were examples elsewhere in the conservation work in the state that gives a framework for how to define cumulative impacts/cumulative effects, and if somewhere in the permitting process there is a work product from technical staff that might be available to help clarify. Commissioner Moore replied that he would talk with his staff about permitting. Through his experience at DNR and PCA, what is and is not a cumulative impact is the most difficult issue and the issue with the least amount of consensus among user groups and others. Whenever an EIS worksheet is completed it is one of the issues addressed and all worksheets look different in terms of analysis. The EQB recommendation and having the federal language research would provide a good background. Moore indicated he would talk to his staff about whether there are guidelines that have been developed over the years from doing EAWs and EIS's.

Roche indicated that he has looked at a substantial amount of federal case law and that the federal information will not bring clarity because the federal government has struggled with the issue just as much as the state has. Roche indicated he would provide a cross-section of federal case law for the Board's benefit, but there appeared to be no clear answer to the question. Member Winebarger replied that her goal is for the Board to tackle the issue as best it can given the complexities, and before the issue reaches a critical nature.

Downing continued with item 5, the first of proposals to the AUAR process. Subpart 2 deals with allowing a small project not requiring review to be dropped out of an AUAR analysis once it had started. A process for that had originally been proposed in Phase 1 and there had been an objections; most notably, the MN Center for Environmental Advocacy (MCEA) objected on legal grounds and Mr. Roche advised that it would be best to drop the amendment and revisit the amendment in Phase 2, but accompanying it with a statement in the Rules that countered the argument made by the Center for Environmental Advocacy. The Board's position is that ordering an AUAR by a local unit of government, and setting the boundary of that AUAR, does not imply that every project built within that boundary

automatically requires environmental review. Staff believes that is how the law should be read now, but since the issue has arisen it is a good time to clarify that. MCEA strongly opposes that amendment and remains firm in their interpretation of the law. Staff is convinced it should remain firm it its interpretation and arguments will be made before an administrative law judge. Other comments did support the change.

Item 6 is an additional revision in the AUAR process. This issue arises from the Appeals Court decision where the court said that the boundary of the AUAR was the boundary for the analysis and there was no need to look outside the boundary for impacts or sources of impacts or consider them along with the affects of things happening inside the boundary. Staff believes that is a bad idea and that the Rules should be amended to include an explicit statement that the boundary does not limit the analysis in that way. There were no adverse comments; comments from the Twin Cities Builders Association indicated that they wanted to take a close look at the proposed language and had concerns about how the language would affect certain geographic boundaries and the scope of cumulative-type analyses. They are concerned about the scope of the required analysis being expanded by the language we choose.

Item 7 is carried over from Phase 1 and is a revision that adds a scoping process step at the beginning of the AUAR process in those cases where the AUAR was going to review a single project over an EIS threshold or took up at least 50 percent of the area of the AUAR. The point of having that scoping process was to make sure that there was input from agencies and the public on development scenarios that were going to be examined in the AUAR to make sure that all reasonable alternatives to the larger project were being considered. That amendment was withdrawn, largely because the Appeals Court decision came out at the same time and staff was concerned that the court's decision would affect the intent of the amendment. Phase 2 proposes the same version as Phase 1 and staff believe that the Appeals Court decision does not alter it after all. The issues from Phase 1 are unchanged; the Builder's Association letter raised the same issues and objected to the same 50 percent area trigger, believing that it was arbitrary and had no good basis. The Builder's Association and some others are concerned that the Rules would allow alternative development scenarios that might be suggested for study to the scoping process could be outside the AUAR boundary and outside the jurisdiction of the local government in question. These are good issues that need to be dealt with.

Item 10a is a proposal to clarify in the Rules that the environmental review program does not apply to quasi-legislative actions, such as zoning decisions and planning decisions. The Center for Environmental Advocacy strongly objected to that amendment in their comment letter. They believe that it is contrary to a proper reading of MEPA and that zoning actions do fit the definition of project, as defined in the Rules. They also think that the AUAR process is evidence that zoning decisions are being considered in the process. Other commenter's, including the Builder's Association, strongly support the amendment. Staff continues to believe that moving forward with the amendment is appropriate. Staff is not

aware of any case where the program has ever reviewed a quasi-legislative action, even if it could be argued to be within the scope of the wording in the statutes.

Item 10c is a proposal to clarify that RGUs only need to look at adverse environmental effects when deciding if discretionary review is required. This comes out of the Supreme Court decision in the case about cumulative effects. In passing, the Court noted that there was nothing they could see in the law that said only adverse impacts needed to be taken into account. Staff proposed clarifying that to state that only adverse impacts do need to be taken into account. MCEA commented that the amendment was unnecessary and could create the basis for future controversy and litigation that wouldn't arise if the rule was left alone. At this point, staff agrees with MCEA's observations but will have to reconsider the idea in the future. It may be that using the word "adverse" in the part of the Rules that every RGU needs to look at in making the decision after an EAW, that perhaps issues that were never raised would be raised. Staff urges caution on this and suggest backing off on this amendment.

Three additional possible amendments were suggested in the comments; these were not in the original request for comments. A fourth possible amendment has arisen since the handout was prepared. The first two of the possible amendments are essentially the same comment. The Center for Environmental Advocacy noted that content rules for EAWs, EIS's, and AUARs do not give guidance about looking at cumulative impacts or cumulative potential effects. Staff has glossed over this omission in its guidance and advocated that the analyses be treated the same way as you would if you were under federal law. In its guidance materials, staff recommends consulting the federal handbook on cumulative impacts that the Federal Council on Environmental Quality has issued. Staff agrees that MCEA raises a good point and that should be incorporated in the content Rules.

The third item is a small error, likely created by the Revisor's Office, but not caught by staff. When the category for recreational trails was added several years ago, a mistake was made in the citations to the list in the exemptions. The DNR recently discovered the mistake, and staff believe it should be corrected.

The item not listed on the handout deals with clarification in the rules about whether it is permissible to issue notice of the availability of EAW and a draft permit for a project concurrently. It is common practice by state agencies and local units of government often hold hearings on plats before the EAW comment process is over. Staff has been copied on a number of letters recently from the Center for Environmental Advocacy to the Pollution Control Agency, in which they complain about this procedure and believe that it is contrary to MEPA. Mr. Roche has been consulted regarding this matter and staff does not believe it is contrary to law and EQB guidance documents indicate that it is a permissible practice. However, this might be another area where the Rules ought to be more clear that it is okay and staff proposes to add this item as a fourth item.

After consultation with Mr. Roche, staff believes it would be wise to issue a new supplemental request for comments covering these four items to alert the public to the likelihood that the items will be amended and offer the opportunity for comments. With the Board's permission, staff will prepare such a document and have the chair sign it and have it issued as soon as possible. Staff does not believe that issuing the request for comments would slow down the Phase 2 process since the timeframe for issuance is relatively short, as compared to the time it will take to figure out shoreland categories and cumulative effects issues. Chair Badgerow asked if there were objections amongst members. Member Winebarger commented that she is troubled about the sequence of events as related to the timing of issuance of an EAW notice and the permitting process and felt she was not prepared today to speak to the technical part without further information and an overview. Mr. Roche responded that the staff request is not committing the EQB to issue a rule. The notice would simply state that it is something the EQB is thinking about doing and the EQB wants to hear from the public. Mr. Roche felt there would be a strong objection from MCEA, who raised the issue initially. To clarify the issue, Mr. Roche explained that permits would not be issued before an environmental review is completed and as a matter of law it is prohibited. What many agencies, including the PCA do is have a permit that by law has to be put on a public 30-day notice before they can take final action. Since action on the notice and the EAW comment period are similar and inform each other, both are often put out on public notice at the same time in order to get all of the comments and then present both documents to the PCA Board. MCEA objects to that practice. EQB guidance for RGUs to use does not indicate that that is prohibited. Commissioner Moore commented that it is important to bring this issue up in the rulemaking process because it is a contentious issue. Without doing this, litigation will be inevitable. The rulemaking process provides a forum to get these issues worked out.

Member McCarville inquired if the MCEA advocated stretching out the process for an added period of time. Mr. Roche responded that MCEA felt that until the environmental review process is complete that no governmental unit can even prepare a draft permit for a project much less public notice it. The Board will have to look at arguments on all sides of the issue. Having the permit and knowing what the terms and limitations for the project are can be helpful when the time comes to make the environmental review decision. Member Bloomberg replied that MCEA would argue that by the time you produce the draft permit that things are well along in the process and that environmental review may inform draft permit terms that are put out on public notice. MCEA would like to see them happen consecutively and not simultaneously. Commissioner Moore agreed that environmental review informs the permitting decision and the public has time to look at the permitting issues. With agency staff, the perspective is that environmental review does inform permitting and there is a fine line between the two. Oftentimes, interveners are mixed up between what is a permitting issue and what is an environmental review issue because of the complexities; it becomes a matter of what is treated in permitting. As an example, PCA is working on an EIS for Minnesota Steel and there are issues related to regional haze. The

way to resolve the issues is in the air permit versus the environmental review, that talks about significant impacts of the project and what the potential problems are.

Mr. Downing referred to the handout Summary of Alternative Categories. The DNR/EQB proposal was included in the request for comments and is based on recommendations from the DNR. In looking at the structure of the table, Downing reminded the Board of the various factors used in the original proposal. The many factors resulted in a wide array of possible thresholds. Many people think that the scheme is overly complicated. There were more comments on this issue than anything else. Amongst those were three counterproposals. These came from the MN Association of County Planning & Zoning Administrators (MACPZA), who submitted a simplified version; Minnesota Waters, formerly the Lakes Association; and comments also from the Center for Environmental Advocacy. The Minnesota Waters and MCEA proposals are very similar but are quite different from the zoning administrators proposal. All are very different from what had originally been proposed.

Mr. Downing summarized the three proposals. The MACPZA proposal incorporates two critical factors in the original staff proposal. First, they use the same concept of sensitive shoreland areas, with the same list of what those would be; and second, they pick up on a density standard factor that was used in some residential categories, but not all, and they have applied it everywhere. Their proposal would lump all types of residential and resort developments together and thresholds would vary depending on whether the shoreland was sensitive or not. The specific numbers for density would be 15 units in a sensitive area and 25 units in a non-sensitive area. Those numbers would apply if the overall project density is no more than 15 percent greater than would be allowed under the shoreland standards for single, unsewered units. If the project was more dense than the 15 percent threshold, then any project of that density would require an EAW. In addition, there would not be a category based on shoreland alterations and a category based on controlled access lots (a riparian lot that gives access to non-riparian lots. There would be no categories based on the percent impervious surface or based on whether DNR shoreland standards had been adopted. They would make no reference to the alternative 6120 standards that the DNR has developed. Their proposal is quite different and a lot simpler than what EQB staff have proposed. They propose no change at all for EIS's for residential categories that would apply.

The Minnesota Waters and Center for Environmental Advocacy proposals are similar to the MACPZA proposal, except that they add back in some elements that were in the EQB proposal. They would have categories based on controlled access lots, categories dealing with alteration of the shorelands, but they would not have one based on impervious surface. They would distinguish between types of resorts and have different thresholds for the different types of resorts. They would take into account whether a shoreland ordinance had been adopted. They added some new EIS categories.

Overall, staff is faced with finding some way to go forward and combine our fairly complicated original proposal, the simple MACPZA proposal, and the Minnesota Waters/MCEA proposal that is somewhere in between. The first step staff will take is to meet with DNR staff to see if there is some acceptable simplification that could get us closer to the counter proposals. After that, staff would sit down with the other groups and discuss a proposal that everyone could agree with before moving into hearings.

Member McCarville asked if there was a state law that required staff to take into consideration whether there was a shoreland ordinance. If not, why was a distinction made between whether there was or wasn't. Mr. Downing responded that over the years, some EAW and EIS categories have incorporated the distinction when a project involved a shoreland area as to whether the local unit had adopted the DNR standards. At one point, the commercial/industrial mandatory categories did have an additional category that applied when local units had not adopted the standards; that was dropped a number of years ago when more communities had adopted those standards. There are still some cities that have not adopted the DNR standards. The theory is that without those minimum standards being in place there is a higher potential of having a significant environmental effect from a project on shoreland than if those minimum standards are in place. The DNR proposal used that as one of the factors for that reason. If there is not a shoreland ordinance in place the project may have undesirable features that would not be allowable where there are shoreland ordinances in place, so it made sense to distinguish those two situations. Not everyone agrees with that and the zoning administrators feel that it doesn't make a lot of sense, but you must keep in mind that zoning administrators do county business and almost all counties do have adopted shoreland ordinances. It is cities with lakes where there would be a large number of situations that this might apply to. City planners have not been heard from about that.

V. Status Report on Water Projects of the EQB and Partners

John Wells recapped the four items being presented. Status reports on them were presented two months ago. The first report is the PCA report that is required to be completed every two years to submit to the EQB for its learning about groundwater monitoring and for incorporation of what is a high priority in that assessment into EQB reports that are required, specifically the Water Priorities report that EQB is required to complete every even-numbered year. The second report is the groundwater quality trend assessment report that informs the assessment of how well programs are addressing issues and the issues they are uncovering. The last report is the Water Sustainability 2030 project.

Tom Clark, Senior Hydrologist with the PCA, talked about the 2006 groundwater monitoring status report. Historically, the report goes back to the 1989 Groundwater Protection Act, chapter 103H in the statutes, as it was amended in 1994. That set up different reporting requirements for the various water agencies. Beginning in 1994, this is the seventh biennial

report that has been done. Report have varied over the years, depending on the amount of staff resources able to be put into them. Mostly, the reports have been 10-12 pages of summary about what the various water agencies in Minnesota are doing with regard to groundwater monitoring. Mr. Clark referred members to the Table 1 attachment at the end of the report, that it becomes apparent that there are a multiplicity of agencies in Minnesota dealing with groundwater monitoring. The focus of the table is on groundwater, although it also discusses the interrelationships between groundwater and service water. In terms of the number of agencies PCA is working with, there are eight state agencies, Metropolitan Council, and U.S. Geologic Survey that has a district office in Mounds View. It has become apparent that the various water agencies needed to do more in terms of coordination with one another. In 2004, PCA entered into a fairly major memorandum of agreement between the Department of Agriculture and the Minnesota Health Department. The purpose was to bring together the different goals and roles in groundwater quality monitoring. This was done in an effort to avoid the situations where PCA would sample a well one week and the Department of Agriculture would come out a week later to sample the same well. There is more cooperation now in terms of picking out sampling points, how often they are visited, along with the parameters and chemicals being monitored. It's not a perfect system but it is working.

In cooperation with other agencies, PCA is trying to bring data resources together. Given the number of agencies, there is a large amount of data being collected. There is now a Webbased groundwater information resources guide that brings together a lot of information and serves the public asking questions about chemicals or what the PCA is doing in monitoring volatile organic compounds. It's a good resource for researchers and the interested public. There is a Minnesota groundwater directory that is a who's who in groundwater in Minnesota and who the contact people are in the various state agencies. There is the groundwater data access initiative that attempts within PCA to bring together groundwater data collected via regulatory programs or ambient groundwater monitoring. It is part of a larger initiative involving other environmental data. It recently went online for air quality and groundwater will follow soon.

Another intention of the report is to bring current and emerging issues up to date. Volatile organic chemicals include chemical agents that PCA has been trying for the last 25 years to clean up through programs like Super Fund. They are not naturally occurring in Minnesota groundwaters. If PCA is doing a good job of clean-up and keeping additional VOCs from getting into the environment, the overall trend should be toward decreasing VOCs in Minnesota groundwaters. PCA is trying now to do more effective monitoring of this intention and determine how good a job has been done and what is actually happening to VOCs on more of an ambient basis. PCA is working closely with the Department of Agriculture on pesticides, herbicides, and their degradates. There are a number of monitoring programs in sensitive areas of the state. An example would be the rapidly urbanizing area between the northwest metro and St. Cloud, which is referred to as the Central Sand Plain. Groundwater levels are relatively shallow; there are a lot of communities

and individual farms that depend on groundwater and it is also intense in agricultural activity. Another area that has emerged in the last few years is the idea of looking for pesticide degradates; degradates are the breakdown compounds of the primary pesticide that can, in some cases, be more persistent than the parent pesticide. There is a lot of cutting edge analytical technique involved in this and the labs at the Department of Agriculture have been in the forefront in looking at these and developing the analytical methods. PCA looks more at the urban use of pesticides and herbicides, the Department of Agriculture has more of a statewide view and concentrates on rural areas.

Another area that has been in the news recently is the issue of fluoropolymers, PFOS, PFOA in groundwater. These have been found in fish tissue in the Mississippi River in the vicinity of 3Ms Cottage Grove plant. PCA has started looking at these; the analyses are extremely expensive and done by only a few labs in the country and so have been limited in the number of samples that could be taken. Last year, PCA looked at 17 targeted wells and did not find any detectable levels of PFOS or PFOA. PCA is continuing to monitor as the budgets allow.

Member Bloomberg asked if there were any significant gaps in the groundwater data, things that are not known but would be good to know. Mr. Clark responded that there are a lot of gaps and much relates back to analytical methods and the idea of developing a method sensitive enough that you are likely to find it. PFOS and PFOA are examples of chemicals that were not looked for previously. As PCA is able to look for new things it is starting to do that.

Member Bloomberg asked about known contaminants and geographic regions and if there were things that are known about that could be looked for but haven't yet. Mr. Clark indicated that there are areas in the state that need more work, most relating to how complex the hydrology is. One area is southeast Minnesota where there is coarse limestone where there is very little soils protection. Groundwater travels very rapidly in that area. And that is an area where more information needs to be collected. PCA is fortunate that the DNR and Geological Survey have focused some of the hydrogeologic atlas efforts in that part of the state; the counties have also done much to support that work financially. That also is an area in the state, between the metro area and Rochester, that is rapidly urbanizing and there are a lot of groundwater pressures. In terms of parameters, the simplest would be a greater database on nitrates. It's a common contaminant in groundwater, particularly as subdivisions with cluster septic systems or individual septic tanks and their own private wells are built in rural areas. PCA knows where the pockets of nitrate are but in terms of a statewide overview there is a need for more data.

Member Winebarger asked how many wells there are in Minnesota. Mr. Clark replied that wells number in the low six figures. There is a county well index, a computerized database that is supported by well drillers, who are required to file their logs and the information doesn't go back to the very old wells. Member Winebarger asked how many of those wells are sampled or tested. Mr. Clark replied that only one percent might be tested.

Mr. Sullivan referred to the section on needs and inquired how much damage to the ability to use the information in a positive way is caused when there is a gap in data. Mr. Clark replied that as regards groundwater it is hard to give a straightforward answer. In an area of very deep and old groundwater, two or three years might not make much difference; water is moving slowly and the quality changes slowly. In a karst area or an area of very coarse sand, such as the Anoka Sand Plain, PCA tries to monitor some wells on a seasonal basis to determine how water changes with use and the seasons. Gaps in sensitive areas are going to be an issue.

Commissioner Hugoson followed up on the question of the number of wells and indicated that more important than the number of wells is the volume of water coming out of the wells that are tested. There are 80,000 farms in Minnesota and all of them have had at least one well; some farms in the southwest are on a central water system, but not that many. If you factor in the number of residences being built outside of municipalities that all have their own wells, and every municipality has at least one and sometimes up to a dozen wells that are required to be tested by the Department of Health. By looking at the amount of water consumed by people, the percentage is probably larger than one percent in terms of the affected people involved. There are also volunteer testing programs that the Department of Agriculture is involved with, and there are a number of farmers that have their wells tested as well. So the numbers could be higher in terms of the number of wells existing and the amount of water consumed by people is at a higher percentage. Mr. Clark replied that it was a good point. The term "well" takes into account everything from a large municipal well pumping thousands of gallons a minute versus a small farm well producing 10-15 gallons. Volume needs to be considered as well as the number of individual wells.

Member McCarville asked if PCA took into account wells that were privately sampled or only wells that the state sampled. Mr. Clark replied that those samples were not reported to PCA. An important testing procedure is done after a new well is installed and well drillers are required to collect samples for nitrate and bacteria and have that done to show that the well is potable and will meet potable needs. But that information is normally not submitted to the PCA, nor is local information submitted. If a county or soil and water conservation district sampled for a county program, that information wouldn't be reported to PCA.

Commissioner Hugoson inquired as to how much sharing of information exists between PCA and the Department of Health as it relates to well-testing results. Mr. Clark replied that there is quite a bit of information sharing. The Department of Health has the responsibility under the Safe Drinking Water act to sample all public wells. Very few of those are sampled. The only situation when PCA would sample those would be if there wasn't raw water information available. Much of what the Health Department does is compliance monitoring to determine that the finished water is suitable to drink. That was one reason to bring the MDH into the monitoring agreement. Mr. Clark clarified that the Health Department does require some

raw water sampling and PCA does access that data and will include it in the groundwater trends report.

Mr. Wells mentioned that a committee of the EQB was instrumental in getting the agencies together to do the MOA on monitoring. EQB tried to do an assessment of groundwater quality trends in 1990-91 and gathered a lot of information and realized that the data was not good enough to assess trends; that process is complicated and there needs to be an understanding of the conditions at each point in time when a sample is taken, and if you take one in 1985 and go back to the well 10-15 years later, there is no way to know what the antecedent conditions were before the well was sampled originally and then subsequently. Trends can be defined on given wells, but statewide it is more complicated. That fact will be pointed out when the groundwater quality trends assessment is completed.

The PCA effort is going to be an important document to include in the conclusions on the groundwater quality trends assessment, as well as potential elements in the priorities report. Mr. Wells reminded members that when he briefed the Board in August on the package of water programs, the normal approach is to work the priorities through the Clean Water Cabinet. The Cabinet has not met for several months and it is unclear on what the status will be with the governor's office on making those decisions. The Cabinet is connecting with the governor's office to see how they want priorities approached for the biennium. The clear priority is funding for the Clean Water Legacy Initiative and designing the package that the governor is putting forward to the legislature.

EQB staff are required by law to work with the PCA and Department of Agriculture on the Groundwater Quality Trends Assessment. Other partners will include the Department of Health and the U.S. Geological Survey. The MN Geological Survey is interested in working with this also. Staff will bring to the Board the monitoring that Agriculture does in the trends assessment that they do. The Health Department has done work for EQB staff that has not yet been assessed. That information will help identify some specific areas, such as wells around Hastings, that illustrate what could be done statewide.

Regarding the Water Sustainability project, staff have worked with DNR Waters and have come to a joint agreement with the Division of Waters on an outline for preparing the report. That information is included in the handout. There is a joint agreement on how to prepare the paper, what the major pieces will be; staff will keep it at a high level and keep it concise and focused on the main points. There will be an attachment that deals with the numerical data. As a first step, DNR asked EQB staff to change the title; it will now be called "Water Supply Management in Minnesota: Moving Toward Sustainability." The change will emphasize that the report speaks to ways to improve the management of water supply in the state. Primary partners include the U.S. Geological Survey, the Electric Power Research Institute, Department of Health, Metropolitan Council, MN Geological Survey, and University of Minnesota; other partners will be important in the review of the draft document.

Ms. VanBuren reported that this is a timely project. Water supply discussions have become more prominent in Minnesota. The Star Tribune has done a series called "Water in Mind in Minnesota." The drought in 2006 brought forth discussions with parts of the state still struggling with the effects and are now looking at some of the supply issues. State agencies are involved in discussions, and EQB staff members receive requests from local levels. The Rochester Public Utilities contacted staff and are interested in the project and the findings and want to look at supply values in their local planning efforts. Next month it is hoped that additional information can be shared with the Board.

Ms. VanBuren discussed the process. The first issue is quantifying sustainable supply in Minnesota by county. There are a variety of accepted methods that will be brought together to give the supply value. Current use in Minnesota will be analyzed; in October, the DNR provided EQB staff with an extensive data base contains information from 1988 through 2005 and allows analysis of current use in Minnesota. Given that, staff will analyze future use, looking out to 2030 to say that as the population increases and an increase in water demand is made related to population and not looking at only water use but also permitted use. The DNR issues permits based on maximum volume of estimates of what will be needed over the next 3-5 years. Staff will compare current use to sustainable supply, how future projections of use compare to sustainable supply, and what has been permitted and how does it compare to what is available. Between 1988-2005, annual water use in Minnesota has increased; some variety is weather dependent, but there is little variation. As a whole, there is a roughly 30 percent increase in 17 years. As population has increased, daily per capita water use has increased by 7 percent, a figure that has held steady. In looking at the 2030 project, it is an opportunity that allows EQB staff (the Board?) to address a timely topic. Because this is the first time through, it provides a framework within which staff can better address those questions for the next report, and continue to increase the knowledge base on the scientific information available. The Metropolitan Council is also working in its master water plan and the efforts EQB is doing complements and parallels the work that the Metropolitan Council is doing. It helps in aiding what information needs exist; in looking for data and doing analyses, that is when deficiencies or opportunities for growth become better articulated and it helps in looking at what can be done differently in the future. It supports other efforts in Minnesota, such as the county geologic atlas program or some of the other efforts in supply studies. Lastly, it helps strengthen state water supply efforts and local water management plans.

Commissioner Hugoson asked if analysis of the 7 percent increase in per capita water usage increase included where or why it has taken place. Ms. VanBuren replied that the increase is personal consumption that has increased 16 percent, greater than the total use seen. Additionally, it is industry and other uses that make up the bulk of water consumption in Minnesota. Residential use is a smaller fraction of that. Residential use has increased at a greater rate, but there are different water use efficiency fixtures that are being implemented. At the residential level, it is hoped that the level will decrease with time.

Member Winebarger inquired about the headings and framework for the report but commented that she was unable to determine where in the report the issue of water quality is addressed. Mr. Wells explained that the issue has not been explicitly addressed in this analysis. The issue has been discussed along with its potential concern. If quality were to degrade significantly, that water would be unavailable to certain uses. Groundwater quality trends analysis and an overall water quality trends analysis should be connected with the availability analysis. Staff is not able to do that now.

Member Winebarger responded that since this is the first report and the framework to be built upon for subsequent reports, the report coming out of the EQB would be stronger if there was somewhere in the report where criticality of quality is tied to all that is said about quantity. Mr. Wells agreed with the suggestion and stated that it would be built into the framework for next year. The overall framework for overall water supply would be considered.

Chair Badgerow indicated that the statutory requirement is to produce the report in evennumbered years and inquired as to the timetable for completion of the report. Mr. Wells replied that a draft would be brought to the Board at the December meeting.

VI. Status of EQB Retreat Planning

Mr. Sullivan discussed the handout prepared for members. The retreat date range is January 22-February 9, 2007. The plan is to run the event from 9 a.m. to 3 p.m. Contact has been made with Dodge Nature Center and the facility is available and would be a good location. Contact has been made with Management Analysis & Development (MAD), who will provide a facilitator for the event. Ryan Church from MAD has indicated that he would like to do interviews with members of the Board or computer surveys of Board members and staff, so members should anticipate contact from Mr. Church. Staff would like feedback on background information or material that would be of general use to prepare for the event.

Staff would like feedback from members on any particular background type of materials that you feel would be generally of use to prepare you for a retreat.

Chair Badgerow advised that the Board is fortunate in having the availability of Ryan Church for this effort. He has facilitated all of the activities of the LCCMR in its formation and in its mission and visioning and so forth. And he's now been engaged to also facilitate the Governor's (unintelligible) Conservation Legacy Council. So he will have a foot in each camp in the sense of knowing a lot about what those organizations are doing and I think he will bring some of that to our retreat and discussion. The two items that I did ask be prepared in advance so that we could study them would be a matrix or chart of all of the known, current, ongoing efforts to strategically plan our environment, whether public or private. And we know that there are many in each case, so that we can at least see what else is going on. And my commitment there, at least, is to meet with the governor's office in advance of

our retreat and at least get the governor's office viewpoints around the executive branch's view of those various efforts and how they intersect and what the intent might be.

The second thing I've asked for is a benchmark of what other states are doing. I think we can oftentimes learn from them. And so I've asked to see how other states coordinate within their executive branch or within state government and the environmental efforts of their agencies, with or without public input, just to see if there's a new model or a model that we could build upon as we try to reshape the Environmental Quality Board, at least -- it's not reshape, but at least to re-energize ourselves around our mission.

Mr. Sullivan added that staff will prepare a memorandum based on any discussions generated this morning, including the information that members have received at this meeting and get it to the members who are not present. Staff will contact everyone within a week on the scheduling issue in terms of locking in a date. Along with that, the staff will probably do is make sure that the governor's office is contacted to make sure that the retreat is not scheduled on top of any date.

Chair Badgerow mentioned that the window was picked because the first several weeks in January are involved in orienting the new legislative members but also those are the several weeks before the governor's budget presentation, and all of the commissioners are going to be very heavily involved in preparing materials in support of that. So the governor's budget presentation is on January 24. If members are not familiar with the Dodge Nature Center, it is conveniently located in West St. Paul. It is relatively inexpensive, which commends it. And it's in a natural environment, so it's a very pleasant environment to have this kind of meeting.

Mr. Sullivan explained that to the extent that members have particular issues or items that are on the front of their minds regarding the general question, please let staff know so staff can use that information to structure the agenda so that it will be of the greatest interest to members. He explained the proposed timeline in terms of how staff would see things unfolding.

Commissioner Moore asked that there be some discussion of the original intent of the EQB and what the vision was for it, and use it to determine where the EQB goes from here. Commissioner Badgerow commented that items related to the EQB's statutory responsibility should be included in the discussion.

Mr. Sullivan added that there was information prepared by a governor's task force during the Perpich administration, that discusses a major reassessment of the EQB, its function, it's authorities, what it ought to do, what it ought not do. The board prepared a follow up report wherein it indicated what it agreed with or if it didn't agree with in terms of that report. So staff will include that as background material that follows along the lines of what Commissioner Moore was talking about.

Commissioner Hugoson added that it would be helpful if staff looked at what other states are doing in the area of environmental review, and if the states have something similar or what might they do instead. It would be good for members to see or know or have an update in terms of where we fit into what's going on elsewhere.

Member Winebarger asked if it would be helpful for commissioners from this board to serve on preparation of the agenda. Time devoted that day is something that the key commissioners buy into in terms of this being a retreat event that they wouldn't miss for any reason.

Commissioner Moore responded to Commissioner Hugoson's comment that PCA was required by the legislature last year to do a benchmark report related to environmental review in Minnesota as compared to other states and countries. That will be done sometime in early January and PCA can provide that to EQB. In addition, the University of Minnesota, Dr. Mike Kilgore, is doing a cumulative impacts analysis review of Minnesota compared to other states as well. And looking at that whole issue. And that also will be due sometime in January. And both reports would be useful to inform the board.

There being no further business, moved and seconded a motion to adjourn. Passed.

The meeting was adjourned at 11:15 a.m.