

FINAL APPROVED MINUTES

Meeting #7– Monday, December 8th, 2008
 Mennonite Heritage Village
 Steinbach, Manitoba
 10:00 am - 4:00 pm

1. Call to Order

Meeting #7 of the Southeast Regional Groundwater Management Plan (SRGMP) group was called to order at 10:10 am on Monday, December 8th, 2008 at the Mennonite Heritage Village by Cornie Goertzen, Chair of the SRGMP.

Present:

Last Name	First Name	Agency
Anderson	Kristina	Manitoba Water Stewardship
Barker	Corinne	Manitoba Water Stewardship
Betcher	Bob	Manitoba Water Stewardship
Buhler	Ernest	RM of Morris
Butler	Robert	AAFC - PFRA
Carriere	Les	Manitoba Métis Federation Inc.
Evans	Laurie	RM of Ste. Anne
Fontaine	Ron	Sagkeeng First Nation
Gibson	Janine	Pansy Groundwater Committee
Goertzen	Cornie	Seine Rat River Conservation District
Gunning	Ed	RM of St. Clements
Heppner	Neil	RM of Taché
Hinrichs	Albert	RM of Whitemouth
Kalyta	Phil	City of Steinbach
Keller	Greg	STEM
Kopelow	Sacha	Manitoba Eco-Network
Lucko	Ken	RM of Springfield
Matile	Gaywood	STEM
Maynard	Gerry	RM of De Salaberry
McCulloch	Gabriele	Canadian Gold Beverages
McDonald	Bill	RM of Victoria Beach
McRae	Curtis	Keystone Agricultural Producers
Mihaychuk	Ron	RM of Franklin

Present (continued):

Last Name	First Name	Agency
Moquin	Claude	RM of La Broquerie
Morris	Lawrence	RM of East St. Paul
Nedotiafko	Rob	Manitoba Water Stewardship
Oswald	Barry	Manitoba Water Stewardship
Peters	Sonny	RM of Hanover
Rackham	Jay	Manitoba Conservation
Ross	Marc	Cooks Creek Conservation District
Sawka	Earl	RM of Piney
Schaible	Frank	Holds industrial water bottling license
Stefaniuk	Bob	RM of Ritchot
Steinke	Glenn	Town of Beausejour
Summach	Dwayne	Manitoba Forage Council
Swidersky	Jim	RM of Stuartburn
Toop	David	Manitoba Water Stewardship
Wang	Jianrong	Manitoba Water Stewardship
Young	Dave	RM of Reynolds

Regrets:

Last Name	First Name	Agency
Holtmann	Henry	Dairy Farmers of Manitoba
Martel	Gordon	Pembina Valley Water Cooperative
Riekman	Marla	Manitoba Agriculture, Food and Rural Initiatives
Stewart	Jennifer	Red River Basin Commission
Teillet	Mike	Manitoba Pork Council

2. Acceptance of Proposed Agenda

The proposed agenda was accepted.
 Moved by Dave Young – RM of Reynolds
 Seconded by Earl Sawka – RM of Piney
 Carried.

3. Adoption of Minutes of Meeting #6

The addition of Ron Mihaychuk, RM of Franklin to the list of those present at the November 3rd, 2008 meeting was proposed.

The preliminary minutes were accepted.

Moved by Janine Gibson – Pansy Groundwater Coalition

Seconded by Bob Stefaniuk – RM of Ritchot

Carried.

4. New Business

a. Issues Identification: Agencies Submission Request Follow-up

Rob Nedotiafko reminded the Group that all agencies are invited to submit to the Coordinators, via agency letterhead, the issues their agency feels the management plan should address.

b. Science Members & Local Knowledge Presentations

Summary: 2009 Planning Session – Agencies Requests

The handout circulated at the November 3rd, 2008 meeting on this subject was prepared in order to highlight the presentations that need to occur, as well as those that have been presented to date. Rob reminded the Group that they may suggest potential presentations if they feel that certain subject areas are missing or have not been addressed.

Rob also informed the Group of his recent correspondence with Grant Melnychuk of Manitoba Intergovernmental Affairs (MIA) regarding a question that was posed to Grant at the November 3rd, 2008 meeting. The question addressed the impact of geothermal and alternative energy on aquifers and if this is being considered in the current drafting of Provincial Land Use Policies. Grant indicated that MIA is currently awaiting input on a geothermal policy from Science, Technology, Energy and Mines (STEM).

c. Science Members Presentations

- i. Jianrong Wang – Aquifer Sustainability Hydrogeologist, MWS made a PowerPoint presentation titled “Groundwater Resource Evaluation in Southeastern Manitoba (Preliminary)”

Q: What is the meaning of the units used in this presentation (e.g.: E-04 m/s), and what does this translate to? Can this be translated into metres per year?

A: This unit is used to describe hydraulic conductivity. In this case, metres per second (m/s) is the typical unit used for this work and effort was made to standardize the units throughout the presentation.

Q: What exactly is the “Sandilands area”? If this area is only contributing 6.3% to aquifer recharge, where is the rest coming from?

A: The Sandilands area is the area covered by the Sandilands complex of glacial deposits.

A: Bob Betcher: Recharge into the upper sand unit of the Sandilands complex is somewhere in the order of 2 inches per year. We have to remember that under this sand is clay and glacial till units, and the majority of the 2 inches do not infiltrate far enough to recharge the bedrock formations. Therefore, the average recharge going into the Sandilands complex is not the same amount as the recharge to bedrock. Originally we had thought that almost all of the recharge into the bedrock aquifers was coming from Sandilands, and now we are finding that this is not the case. We are probably getting a lot more leakage from the overburden areas throughout the aquifer, into the bedrock.

Q: Is it correct to think of swampy areas as aquifer recharge areas?

A: It depends on the area. In some wetland/swamp areas, the groundwater level is at the surface, and in this case these wetlands could be considered discharge areas.

Q: This changes how we look at recharge. Is it true then that aggregate areas aren't as large contributors to recharge as we previously thought?

A: Yes and no. Aggregate areas have high recharge rates, but if they are underlain by layers with low permeability, this will limit recharge to aquifers.

Barry Oswald indicated that the Coordinators are hoping to have a science expert come to speak to the Group regarding the topic of wetland recharge/discharge areas.

Q: This 6.3% is going into which aquifer?

A: To both aquifers. This represents how much water from the east (Sandilands) gets into the 2 bedrock areas.

Q: How does the water get through the impervious layers between the aquifers?

A: Even 'impervious' clay layers will let a small amount of water through over time. Even if the amount is only 0.1mm/year, if we apply this to the entire aquifer this translates to a large amount of water into the aquifer every year.

Barry addressed the Group and indicated that we will have Jianrong come back to address these issues as many times as needed in the future. Barry noted that we are not here to figure these issues out, but to listen to what the science experts are telling us, which will most likely include identifying information gaps. The Group was reminded that we will never have as much knowledge as we would like. Barry reminded the group that we are here to identify what we do know, and move forward to prioritize those areas that we feel there is a need for more information.

-----Break for Lunch-----

Following the lunch break, Jianrong presented a demonstration of the TopoDrive and ParticleFlow 2-dimensional computer models to illustrate how contaminants move through soil and bedrock layers.

Bob Betcher indicated to the group that the hydraulic conductivity numbers from Jianrong's earlier presentation are not of great importance; the important point to take away from Jianrong's presentation is they were able to simulate the system quite well, and they now have a working model. Bob informed the Group that hydraulic conductivity is part of a mathematical relationship between groundwater flow and the properties of the materials. The rate of

groundwater flow is equal to the hydraulic conductivity times the gradient, divided by the porosity of the material.

- ii. Bob Betcher – Manager of Groundwater Management Section, MWS made a PowerPoint presentation titled “Groundwater Quality and Contamination”

Q: You stated that entire aquifers don’t get contaminated; only portions do. Can you explain this further?

A: For example, if you were to look at the Assiniboine Delta Aquifer, it is about the same size as Prince Edward Island. If you have a spill in one location on the aquifer, the groundwater movement is so slow that it will only cover very local areas.

Q: What is the life expectancy of E.Coli or other bacteria in groundwater?

A: We will look this up to get an actual number. Our best estimate is a number of months, but there are temperature controls that would have a large effect on the lifespan.

Barry Oswald informed the Group that Janine Gibson will be the first of the “local knowledge” presenters. The Coordinators had intended on bringing all of the science members to the table first, but have had difficulty getting a number of the experts to commit to a date for their presentations. Barry asked the Group if they would like him to suggest to the science members that the Group has requested that the science members complete their presentations during this planning year.

Motioned by Albert Hinrichs – RM of Whitemouth

Seconded by Claude Moquin – RM of La Broquerie

Carried.

- iii. Janine Gibson – Pansy Groundwater Committee made a PowerPoint presentation titled “Indigenous Ground Water Knowledge from South East Manitoba – An Interactive Session”

Following Janine’s presentation, the Group was divided into four groups. Each group worked to compile their observations about groundwater where they live and any stories they have

heard about groundwater from previous generations. Each of the four smaller groups presented their compilations to the Group.

Laurie Evans addressed the group in response to a comment during Janine Gibson's presentation regarding the lack of Conservation Districts in the study area. The two conservation districts in the study area are the Cooks Creek Conservation District and the Seine Rat River Conservation District. Laurie encouraged other RMs in the area to join a CD.

Bob Betcher mentioned to the group that there is a study that was done by Charron in the 1960's, for an area within southeast Manitoba, which involved interviews with local people to address the history of groundwater conditions in their wells.

5. Next Meeting

The next meeting was previously scheduled at the November 3rd meeting, and will be on January 26th at Oakbank United Church.

Rob Nedotiafko suggested that the group continue to schedule two meetings in advance. The Group decided the following meeting will occur on Monday, February 23rd. The Coordinators will work to organize this meeting in Beausejour.

6. Adjournment

The Chair thanked the group for attending. The meeting was adjourned at 3:41 pm.