PROJECT TEAM MEETING MINUTES December 9, 2008

- 1. ATTENDANCE: Bill Baer Corp of Engineers, Paul Wannarka DNR Regional Operations, Terry Wolfe DNR, Jim Courneya MPCA, Brian Dwight BWSR, Dan Thul DNR Waters, Bryan Paradis LID, Lawrence Woodbury Houston Engineering, Gary Huberty DNR Fisheries, Wayne Goeken Red River Watershed Management Board Monitoring, Brian Dwight BWSR, Harold Vig Sand Hill River Watershed Manager, Roger Hanson Sand Hill River Watershed Manager, April Swenby SHRWD Administrative Assistant, and Daniel Wilkens SHRWD Administrator.
- **2. AGENDA REVIEW:** No new items were added to the agenda.
- **3. MODEL/OVERALL PLAN UPDATE:** Woodbury reviewed the discussions that took place at the last project team meeting in August. Model results are now completed. Alternatives are able to be reviewed and analyzed.

The most effective items from this analysis from the stand point of flood reductions were increasing flood volume and flood storage, and this study has focused on these two items after the previous project team meeting.

Woodbury presented alternative maps representing the middle upstream area (Garden Slough, Bear Park Dam, & Winger Dam). Woodbury reported a 20% reduction of flow on the Red River with several of the possible alternatives. In his presentation, all three projects were given as examples and the results were evaluated keeping in mind the drainage area in Climax. Woodbury provided this basin geometry summary of options:

Option 7: The elevation of the riser at Bear Park is raised to 1159.0'. The geometry of the riser structure is identical to the existing conditions, except for the increase in elevation. The roadway was raised 4 feet to match the raise in elevation of the riser structure. The drawdown pipe was eliminated to simulate gating. All other geometry within the basin is equal to the existing conditions. This is better explained as an improvement to Bear Park Dam with a gated structure on the upstream side.

Option 10: Winger Dam was added to the model just upstream of Highway 59. The top of dam elevation was set to 1186.0. The riser elevation is equal to 1176.0' providing 22 feet of weir flow. The outlet pipe is an 8' x 8' RCBC with an inlet elevation of 1168.0 and an outlet elevation of 1167.63. The drawdown pipe was not included in the structure's rating curve to simulate gating. It was assumed that the water could be detained until a later date and then be released after the peak has passed. All other geometry within the basin is equal to existing conditions. This alternative offers a temporary depth lesser than what was offered in historical Winger Dam analysis. Woodbury offers something similar to the Bear Park Dam structure – upstream of the highway, rather than at the highway. Safety evaluations still need to be made on this alternative.

Option 13: This alternative has modifications to both Winger Dam and Bear Park. The structure geometry of the Bear Park site has the riser elevation lowered 2.0' from Option 7. Other than this modification, all the geometric characteristics for Bear Park are the same as listed in Option 7. The modifications to Winger Dam are similar to Option 10 except that the riser elevation was lowered 2.0'. All the other geometric characteristics are the same as the existing conditions. Besides these two modifications, the basin model remained the same as the existing conditions.

Option 14: The modifications to this alternative involve both Winger Dam and Bear Park. The riser structure was set to 1156.5 at Bear Park, and all other geometry of the Bear Park outlet remains the same as Option 7. The riser at Winger Dam was set to 1173.0 and all other geometry with the riser is the same as Option 10. Outside of these modifications, all the other geometry in the basin remains the same as the existing conditions.

Option 16: Bear Park is the same as option 14. Winger Dam is in series. There are two Dam sites, one upstream of Highway 59 (Lower Winger), and the other at the proposed location upstream (Upper Winger). For Lower Winger, the riser is set to an elevation of 1174.0 providing 24' of weir flow. The outlet pipe is an 8' x 6' RCBC. Upper Winger Dam consists of a riser at an elevation of 1188.0 providing 22 feet of weir flow. The outlet pipe is a 6' x 6' RCBC. In both dam locations, the low flow pipe was omitted in the development of the outlet hydrograph to simulate a gated structure.

Garden Slough: Twenty percent could not be reached on Garden Slough – assuming that you can control the drainage area.

Dwight felt it was beneficial to include the Corp of Engineers in our review of the planning process because we have had a difficult time justifying the need for certain projects. It would be beneficial to seek their assistance in the points of concurrence process and developing a purpose and need statement. Woodbury or the district board of managers present were not opposed to inviting the Corp of Engineers in the technical process. Dwight will invite the Corp of Engineers along with Woodbury in the process. This will set the concept that the RRWMB will maintain the benefits of the projects. Bill Baer added that the purpose and need is usually the most difficult step of the whole process. If the Corp of Engineers is involved in the process it will make the permitting process easier.

Cathy Henry provided a wetland inventory map. Woodbury offered the suggestion as using restorable wetlands as storage area. Norman County was not available; however Polk was available. Garden Slough was not available on the map. Modeling has not been done on the wetland part of the assessment. Terry Wolfe expressed concern about the district restoring wetlands due to the lack of cooperation of landowners and added that legal issues may pertain to agencies purchasing land. Each wetland will be treated with individuality and coordinated efforts will need to be made.

Woodbury suggests looking at combinations of the options and reviewing all of the possibilities including the wetlands.

- 4. FUTURE AGENDA: Woodbury is moving forward with the overall plan. The alternatives discussed become a part of the overall plan. Dwight suggested the SHRWD proceeding along with the US Army Corp of Engineers to develop a RRWMB Purpose and Need Statement. The process will be local but the effects will fall on the RRWMB. Dwight suggested inviting the CAC and TAC members. The project team would welcome Henry Van Offelen's analysis. Dwight will draft a letter asking the Corp for their participation in the SHRWD purpose and need and points of concurrence.
- 5. ADJOURN: Meeting was adjourned 2:05 PM. The next meeting will be held on the second Tuesday in March of 2009 at 10:30 a.m. or when the planning process dictates the need, at the Sand Hill River Watershed District office in Fertile, MN.

Minutes respectfully submitted:

April Swenby – Administrative Assistant