

GARRISON DIVERSION CONSERVANCY DISTRICT**ENGINEERING & OPERATIONS COMMITTEE**

**Garrison Diversion Conservancy District
Carrington, North Dakota
August 22, 2023**

A meeting of the Engineering & Operations Committee of the Garrison Diversion Conservancy District was held at the Garrison Diversion headquarters in Carrington, North Dakota, on August 22, 2023. The meeting was called to order by Chairman Tweed at 9:00 a.m.

MEMBERS PRESENT

Board Chairman Alan Walter
Committee Chairman Mike Tweed
Director Cliff Hanretty
Director Jeff LeDoux
Director Jim Pellman
Secretary Kip Kovar

OTHERS PRESENT

Staff members of the Garrison Diversion Conservancy District were present along with others. The registration sheet is attached to these minutes as Annex I.

The meeting was recorded to assist with compilation of the minutes.

CITY OF MCCLUSKY/SHERIDAN COUNTY WATER RESOURCE DISTRICT

Josh Hassell, Moore Engineering, provided background information on the water project proposed by the City of McClusky and the Sheridan County Water Resource District (SCWRD) to assist with excess water in the McClusky area. In doing so, he referred to aerial photos, maps, lab reports, a graph and field datasheets from surface water assessments included with the meeting materials provided to the committee.

Mr. Hassell said what is happening to the City of McClusky is not uncommon throughout North Dakota. A lot of old basin sloughs have filled up over time. Because of this, the City of McClusky approached the SCWRD to determine if there was potential to help alleviate the flooding that has occurred around McClusky.

Mr. Hasell stated the SCWRD consulted with Moore Engineering. The city and the SCWRD then jointly applied for grant funding through the ND Department of Emergency Services' (DES) Hazard Mitigation Grant Program. Those funds are set aside to help mitigate for potential disasters. The idea behind the funds received was to get to a point where the city and the SCWRD would be in a position to apply for federal dollars through the Building

Resilient Infrastructure and Communities (BRIC) Program. As part of their application, the maps were submitted to the DES showing the areas causing problems to the infrastructure around McClusky.

Mr. Hassell commented the primary area to be discussed today is Lake Lily, which is located on the southwest side of McClusky. There is city infrastructure, lift stations, a school and houses located in this area. This water body was built up as a small make-shift levee and has been at risk of spilling over in the last few years. Some holes had developed and have been plugged.

Mr. Hassell remarked this problem is occurring throughout McClusky, and are wondering how to address all of it together. In meetings with the city and SCWRD, a number of alternatives were discussed. A meeting was also held with Garrison Diversion and the Bureau of Reclamation (Reclamation) to evaluate alternatives. These alternatives included storing the water in a different location, pumping the water over the hill toward the Sheyenne River, constructing another levee and gravity flow.

Mr. Hassell added with gravity flow, the only place for the water to go is to the McClusky Canal. It could go north where it naturally flows today. Looking at potential alternatives to store water, the water eventually still gets to the McClusky Canal.

Mr. Hassell reported Moore Engineering has come up with some high level options, which he reviewed with the committee. They understand projects of this type are not easy to get permitted and take a lot of time. A step-by-step approach was taken to develop a project where the ultimate goal was to control all the water bodies within McClusky. This would be done minimizing impacts to local landowners by a gravity buried pipe system. The closest water body was looked at, which is south Hoffer Lake. Once they reached that point, environmental comments were solicited from various agencies. Some of the comments were in regard to water quality and, ultimately, would require congressional authorization to allow for additional discharge, aside from what gets there naturally, into the McClusky Canal or any of the facilities associated with the canal.

Mr. Hassell said one alternative that came out of the meeting with Garrison Diversion and Reclamation was to discharge the water from north Hoffer Lake, which may have less water quality concerns and is its own closed basin lake.

Mr. Hassel stated they understand the gravity flow alternative would require congressional authorization. The SCWRD is here today to determine if there is a way to pursue this project and would like to exhaust all efforts. Because of the congressional authorization needed for this project to occur, the SCRWD and the City of McClusky would like Garrison Diversion's support, along with the other entities tied to the canal.

Mr. Hassell commented if Garrison Diversion does not support the project, the SCRWD does not wish to spend additional dollars on the project since they bear the local share of the cost.

Mr. Hassel said to be clear, this is not a project to drain all of the water. It is to maintain an elevation to prevent further damage to city infrastructure or residences. Ultimately, the water level would be drawn down such that the easement rights and wetlands would be maintained but remove the high water to allow restoration if there is a significant rainfall event that could compromise the infrastructure.

The committee discussed the gravity flow alternative being proposed to assist with the City of McClusky's water problems. Questions from the committee members were addressed by Mr. Hassell and the SCRWD members in attendance.

Kip Kovar, Secretary, asked if landowners were approached about the possibility of storing water.

Mr. Hassell said there were discussions with a number of landowners around the area, who indicated they did not want any more water. They also looked into pockets where water could potentially be stored. There were no areas that would store enough water to alleviate the problem long term.

Ben Varnson, Upper Sheyenne Joint Water Resource Board, asked if cleaning the flow path one to three feet has been explored to get some relief.

Mr. Hassell stated in terms of clean out, you have to very careful; some ditching may be able to be done. Ditching would require a permit and from a federal side, would still be considered moving water that does not flow naturally. From a state's perspective, if capacity is being increased by deepening or widening a channel, even if it is natural, a permit is required. A clean out is not going to release enough water.

Director LeDoux said if approval was given to move the water north, what analysis is needed to show it has no impact on the federal project.

Mr. Hassell said they are working with Reclamation and Garrison Diversion and do not have all the answers yet. More work needs to be done on what those requirements will be. From a state perspective, what has been done to date meets their water quality requirements.

Director Walter asked where Reclamation stands on this issue.

Nathan Kraft, Bureau of Reclamation, replied federal legislation precludes the acceptance of non-project drainage into the canal or any of the Garrison Diversion Unit projects. Unless it was designed to enter into the canal during construction, or if irrigation water returns into the canal using Garrison Diversion Unit water, non-project drainage is prohibited. In order to do so, it would take a change in the law.

Mr. Kovar said the McClusky Canal is a dead end because of the plugs. There is poorer water quality from Mile Marker 0 to 59, and gets worse because of the evaporation effect. Bringing the bad water in with no place for it to go will lead to evaporation and make things worse. Because of this, he has urged the City of McClusky and the SCWRD to find a different solution. He does not believe congress would approve the gravity flow alternative.

Director Walter asked if there is a Plan B.

Mr. Hassell said Plan B is to do nothing or beef up the current levee protecting the infrastructure on the south side of town. There are only so many points where the water could be taken to. Going to the Sheyenne River is not economically feasible and probably would not get permitted either.

Mr. Kovar said going to the Sheyenne River could be done.

Mr. Hassell said you can do it, but there will be similar obstacles with water quality on the Sheyenne River side. Economically, he does not believe it would be feasible. A benefit cost ratio of one is needed to receive federal funds, and he does not think the Sheyenne River alternative is going to be greater than one.

Mr. Hassell added Moore Engineering has put together some cost estimates for those options, but they have not completed the benefits analysis for McClusky on all these alternatives. They did not want to use the city's and the water district's dollars if the project was not going to move forward.

Mr. Kovar suggested looking into the Sheyenne River alternative instead of wasting efforts on the gravity flow alternative to the McClusky Canal.

Director Walter asked if nothing is done, how much will the City of McClusky be inundated.

Mr. Hassell replied it would be quite a bit on the southwestern side, the cemetery on the east side, and the roads and houses in between. Approximately 15-20% of the city would be affected. The lagoons could also be compromised.

Mr. Kovar said it sounds like there is a lot of potential for damages. He thinks those should be totaled up for the benefit cost ratio. The lagoon alone could have huge effects on paper.

Mr. Hassell stated if the SCWRD directs Moore Engineering to pursue the other route, it is an option.

Mr. Kovar suggested keeping the gravity flow option to north Hoffer Lake but find the best second option, then pursue both.

Director Walter said Garrison Diversion does not want to reopen the Dakota Water Resources Act to approve the gravity flow alternative. Every time that has been done; benefits have been lost. The state has lost enough already.

Mr. Hassell said he will report to the SCRWD full board and the City of McClusky based on what was heard today. They will proceed with whatever is in the best interest of the city with the funding resources available to them.

Damon Tessmann, SCWRD, said he does not see the gravity flow alternative working without the support of the entities in this room. If the committee is not in favor of this project moving forward in any fashion, that is something the SCWRD should understand before making a decision.

Mr. Vietz asked for clarification as to whether Garrison Diversion is against the project in any way, shape or form.

Director LeDoux said until all the other information is available, it is hard to support the gravity flow alternative.

OTHER BUSINESS

There being no further business to come before the committee, the meeting adjourned at 10:00 a.m.

(SEAL)

Mike Tweed, Chairman

Kip Kovar, Secretary

