Crystal Lake Watershed Initiative
Steering Committee – Informational Update

To:	Steering Committee Stutsman County Commission and WRD Kidder County Commission and WRD Stakeholder email list - as of the date of this update, Stutsman County Web Site
From:	Michael H. Gunsch, PE, CFM, Senior Project Manager Josh Loosmore, Peritiacon
Subject:	Project Status Update and Presentation Information
Date:	December 22, 2025 – Public Information Meeting Summary and Responses
Project:	HEI No. 12808-0001-007

The following is an abbreviated summary of the September 12, 2025, Public Informational meeting held at the Steele Community Building. This summary was prepared as a tabulation versus a transcript of the meeting and related discussions; the meeting was recorded and provided for distribution. The attendance sheets for this public informational meeting, both for those in person and those online are attached.

This summary's format focuses on key elements/questions/responses, rather than attempting to document specific commentary. The first two statements at the meeting are noted below, the second is the basis for what is presented here, that being options for solutions. Understand in this context it's not productive to list every issue that involves consequences, concerns, perspectives and perceptions related to an individual landowner's property, but to focus on potential generalized solutions, to the extent practical.

> "***What are we here to solve?" – Harold Hamm (Continental Petroleum)***
> ***"Focus on the solution not the problem"*** **– Jim Rohn (Motivational Speaker and Author)**

Overall, during the meeting many concerns and issues were presented ranging from local to regional, with each to be considered proactively versus negatively. One essentially was - don't send us any of your water as we have enough already and are unable to accommodate "any more", meaning project waters. Others were questions related to impacts due to the new or project water, costs, operations, and maintenance. In retrospect many landowners appeared to have greater concern about any water, without knowing what that really meant in terms of stream flows or volume. The ability to convey these waters in the existing natural tributary located in Kidder County was previously evaluated and discussed. One attendee noted the 9,000 gallons per minute flow would only fill a 24" culvert about half full. This is not entirely accurate, more on that later, as it relates to channel improvements along the tributary and culvert upgrades at each roadway (stream) crossing. These improvements have been identified as a project cost and not an expense for either Kidder County or the landowners along this system.

To move the project development forward to the Preliminary Engineering Report (PER) the Houston Engineering team has completed services outside the original and amended Feasibility Study scope. These resulted from landowner insight, commentary and a need to respond to public inquiries. While these are generally addressed in the PER, it seemed prudent to touch on some items at this stage in the Feasibility Study. We appreciate that insight and have requested additional funding under **Addendum #2** to address and/or initially document these items and responses.

Kidder County Concerns and Responses

BUDGET ADDENDUM #2 AND ADDENDUM #3 - SCOPE AND BUDGET FOR THE PRELIMINARY ENGINEERING REPORT

Addendum #2 (attached)- About half the out-of-scope services have been completed or near completed, so these costs are ineligible for cost share (ND Department of Water Resources), as are additional services without cost share preapproval. **Addendum #2** includes an initial response to the concerns and questions raised within the limitations of the time allowed to reasonably complete the Feasibility Study and move forward. Given the timeline for an additional cost share request and the amount of that request, it is recommended not to pursue that route and instead push the larger or focused portion of this work into the Preliminary Engineering Report.

The scope and budget process for the Preliminary Engineering Report (**Addendum #3**) is also not an eligible cost. In the interest of maximizing cost share it is recommended that the services necessary to complete and formalize evaluating irrigation removal/use alternative, updated provisions related to capacity improvements to the discharge tributary, and investigating the Long Lake Refuge water management and control issues would be included in the Preliminary Engineering Report. The projected cost to complete the Scope and Budget for the PER remains to be determined as there are various components that remain under consideration.

While the LLNWR outfall structure is in Burleigh County there are no improvements or system upgrades included or subject to evaluation downstream from the LLNWR as part of the Feasibility Study. This area is a larger natural tributary on Long Lake Creek, and unless and until there is regulatory requirement no additional evaluation will be conducted in Burleigh County. The area of Long Lake Creek, McKenzie Slough and Apple Creek were mentioned as having issues needing to be addressed. The answer to this is “no” they are independent elements with capacity to convey project flows. Therefore, tying project planning and development to requiring improvements in this reach is premature and counterproductive.

Considering these factors **Addendum #2,** in the amount of $21,300, has been submitted to complete the Feasibility Study, based on the out-of-scope services to date, including the Kidder County Public Informational meeting summary, along with the issues noted. The following are the expanded components that will require additional services. These will be completed as supplemental appendices to the Feasibility Study, as part of the Preliminary Engineering Report.

Irrigation Potential and Benefits (Irrigation Appendix)

Landowners have suggested a project alternative to remove excess surface water or including groundwater removal through its use for irrigation. The purpose would not only be for floodwater removal, but to provide economic development opportunities. This alternative was not included in the original Feasibility Study Scope as it was not material at the time as the groundwater review was limited, though the evaluation of groundwater's influence has since been expanded. This appendix will provide a more in-depth review of the ability to remove water from the lake system and/or groundwaters to consider those potential economic opportunities. Removal of these waters after discharge into the receiving tributary is potentially viable as an irrigation source. Removal or distribution of water directly from the pipeline is not an option for individual users but may be a consideration for an established irrigation district. It is our understanding that the Central Dakota Irrigation District is active and may encompass all lands in Kidder County. It is recommended they be contacted to discuss how this project or related investigations could be used to benefit that district.

The utilization of project water from its pipeline for irrigation was discussed, but no formal determinations were made. This approach is problematic based on the principal funding source being for flood control. The ability to use such water for alternative purposes will require regulatory review and permitting, as well as consideration related to project funding and repayment by the participating beneficiaries. Assigning benefits not tied to floodwater removal could create issues related to construction timeline as well as acceptability to the project owners/operators and funding agencies. Groundwater recharge was suggested in some locations, however that was not deemed viable given the excessively high groundwaters within the regional area. The availability of irrigation water in some areas appears to be potentially related to well capacity and their location.

Solution – to further evaluate the viability and consequences of an irrigation alternative, is this a feasible solution and how might it or some variation be implemented? The initial assessment was that it is not a viable solution, for reasons noted above, however a further review would be completed for the Preliminary Engineering Report, as part of the final alternative selection.

Kidder Couty Tributary (Tributary Appendix)

There was considerable discussion regarding the potential and perceived impacts to the tributary channel into which the pumped waters would be discharged. The landowner(s) position was there was no way they could or would accept any additional water. It appears the greatest unknown is a perception related to the actual amount of water they will receive (0 to 20 cfs, 0 to 9,000 gpm) and how these discharges are accommodated. One solution, and the focus of the Feasibility Study is to create a system that can accommodate the discharges without adverse impacts and/or to mitigate the impacts. It was noted that during high flows in the tributary during flood flows the pumps could be shut down, thus avoiding impacts all together. However, if the tributaries' capacity was adequately increased halting pumping may not be required. In addition, a system that had to go through shut down periods would be a less reliable irrigation supply during that period.

There were questions related to the pump shut down procedures and if the landowners would be in control of that system? The answer was no, in that the system operating authority would be in control, and any releases regulated by the approved drainage and water quality permits and their conditions.

Initially the Feasibility Study objective was limited to channel maintenance necessary on the stream (e.g. vegetation removal, control and spraying), along with an additional culvert at each crossing to accommodate the limited project discharges. This recognized that the additional flows can be conveyed in the existing system with limited system improvements. Several attendees acknowledge that the amount of new water could be conveyed in a 24" culvert, which initial appears viable from a stream crossing and impact assessment on backwaters and flow depth.

Solution – The proposed approach to be evaluated in the Preliminary Engineering Report is excavation of a two-foot-deep conveyance channel, with a 12-foot bottom width and 6:1 side slope. This would be supplemented by installing a 36" x 24" arch culvert at each crossing. The project releases would be accommodated within this improved channel and the culverts limit backwaters to a two-foot depth that would not have water flowing in the existing culverts. Though long-term channel conditions could create this situation as the project ages. The channel would be revegetated, and if dry, suitable for mowing. Though given high groundwaters in this area there is no assurance for to occur at least in the near term. An added value with an excavated channel is the lowering or removal of groundwater at the surface immediately adjacent to the channel. The scope of services, in the Preliminary Engineering Report, will include individual landowner meetings, to discuss specific problems being experienced on their properties and potential solutions that have merit. Also important to understand is that the channel and culvert maintenance would be a project cost with any work and future maintenance being completed with easements obtained from the landowners.

Long Lake National Wildlife Refuge (LLNWR Appendix)

There were numerous concerns expressed regarding the localized effects of flooding around the Long Lake National Wildlife Refuge. However, the specifics and location of these impacts remain to be determined. This appendix would focus on defining the elements and impacts at issue associated with the refuge, which include and are not limited to the following items noted below. However, the evaluation would focus on refuge compliance rather than any defined solution. While observations and recommendations can be provided through this review, this is a federal refuge, with state permitting, and a federal nexus, leaving refuge compliance to the State of North Dakota or potentially the Burleigh County Water Resource District relative to any illegal obstruction to the flow of water. To be clear these issues are related to existing conditions and not project related. It is understood that these issues need to be evaluated and addressed by the proper authorities and impacted parties as the Preliminary Engineering Report is being completed.

A detailed refuge evaluation is outside the project scope, as the issues are related to a federal refuge located in Kidder County and Burleigh County, and the pre-existing conditions. Therefore, any inclusion in the Crystal Lake Watershed Initiative project needs to be discussed after the refuge provides the requested information. Apparent elements at issue with the refuge are as follows:

- ✓ Stored waters in the refuge appear to be flooding land that is either not on refuge property or within its easements. The initial assessment is based on GIS mapping provided by the US Fish and Wildlife Service. These waters include the potential to increase groundwater saturation on lands adjacent to the refuge. This might also be a situation like the Crystal Springs Lake area where groundwater inflows to the lake are a significant contributing factor, which remains to be determined.

- ✓ Management of the internal refuge gate system appears to influence upstream water levels to the north and thus impacting tributaries to the refuge, located on private lands. There is a question as to whether the refuge and gate system is being managed according to a defined plan or if there have been alterations due to current high water conditions.

- ✓ The wooden stop log gate system that separates the northern and southern refuge areas was replaced in 2015 with aluminum logs to allow for improved ability to adjust their setting. After several visits to the site in late 2024 and in 2025, it was evident that there were no changes made to the stop logs during this period. During several visits it was noted that significant flows were occurring to the north through the gates versus being discharged through the outfall structure.

- ✓ The outfall structure's elevation appears to have been modified via the placement of rocks on top of the concrete weir system. These rocks do not appear to be associated with the original construction and appears to add 12"-18" to the refuge water surface elevation. Information on this structure (i.e., construction plans) has been requested from the refuge manager; however, these remain to be provided.

Information obtained from the NDDOT Bismarck Regulatory District was reviewed related to Highway #83 crossing downstream from the refuge. While the downstream channel and concrete box structure structures appear to contain some sediments, they are not obstructing flows. The concrete box culverts at Highway #83 were installed around the mid-1960s' and there have been no modifications or changes that affect the refuge or its outlet capacity.

Another observation of the channel, Long Lake Creek, is that there is a notable drop in the downstream channel elevation below the refuge. Therefore, this channel does not require any modifications to accommodate project releases, though normal maintenance is not unreasonable. The maximum project release after a full season of inflow is 20 cfs, which based on the length of the outfall structure, the additional water depth would be approximately 1.5" to discharge this flow.

FEASIBILITY STUDY SCHEDULE – SUMMARY

There are many considerations related to the next steps and timing for the Feasibility Study. The following are set at the time of this memorandum, and subject to revision as the project development continues:

1. **Addendum #2 – Approval ($22,300) – December/January**
2. **Feasibility Study Report - Completion January 2026**
    a. Receipt by the Stutsman County Commission and Water Resource District
    b. Distribute to involved and interested parties
    c. Request final cost share from the NDDWR
    d. Long Lake Refuge Data review (TBD)
3. Consideration of **Addendum #3** (Budget TBD)
    a. Authorize development of the Preliminary Engineering Report – Scope and Budget
4. Authorize **Addendum #3** Services (TBD Tentative February – April 2026)
5. Complete **Addendum #3** Services
    a. **Review of the Scope of Services (Phases and Development Components)**
    b. Funding requests to participation entities (BNSF, NDDOT, Camp, County, Others)
    c. DWR Web Grant and DES funding applications - Preliminary Engineering Report
6. **Preliminary Engineering Report** (18 – 24 months) – Budget TBD via **Addendum #3**
    a. Alternative Analysis
    b. Preferred Alternative Selection
    c. Preliminary Design and Opinion of Probable Costs
    d. Funding and Project Implemenation Recommendations

There are considerable complexities to be evaluated and considered in the Scope and Budget for the Preliminary Engineering Report. These will take considerable time to step through to determine the best route to evaluate the final preferred alternative and the ability to fund, implement and operate the project.

If there are questions, please contact:

Michael Gunsch, Senior Project Manager
Houston Engineering, Inc.
701-527-2134 or mgunsch@houstoneng.com.

Crystal Springs Watershed Initiative

Public Informational Meeting - October 17, 2024, Steele Community Center

Attendance Sign In Sheet

Name	Address	City/State	Zip
Levi Taylor		Ypsilanti, ND	58497
Chad Wolsky		Dawson, ND	58401
Mike Hansen		Monpelior, ND	58472
Dan. P. Mittleider		Tappen, ND	58487
Thomas Binder		Steele, ND	58482
Russ Well		Jamestown, ND	58401
Bryan Behm		Medina, ND	58467
Darrell Guthmiller			
Pat Erdelt		Steele, ND	58482
Karen Dockter		Medina, ND	
John Schock		Jamestown, ND	
Greg Spenningsby		Jamestown, ND	58401
Dennis Clark		Woodworth, ND	58496
Dennis Morlock		Pettibone, ND	58475
David & Barb Heaton		Steele, ND	58482
Rick Dewitz		Tappen, ND	58487
Gary Auhely		Steele, ND	58482
Mike & Michelle Keily		Tappen, ND	58487
Brett Stroh		Tappen, ND	58487
Jesse Christenson		Jamestown, ND	58401
Leroy ?		Jamestown, ND	
Donavon Hoffer		Tappen, ND	
David Lang		Dawson	
Mark Staloch		Medina, ND	
Patrick Carroll		Moffit, ND	58560
Steve Koester		Steele, ND	58482
John Patzner		Bismarck, ND	58504
Steven & Stacy Eberl		Dawson, ND	58428
Chance Schaffner		Dawson, ND	58428
Tim & Deb Staloch		Medina, ND	58437
Bill Adams		Steele, ND	58482
Joel Lees		Buchanan, ND	58420
Loren Dewitz		Bismarck, ND	58503
Neil & Becky Fanta		Dawson, ND	58428
Mark Stphens		Bismarck, ND	58504
Craig Kemmet		Tappen, ND	58427
Jane Thomas		Tappen, ND	58487

1. Summary

Meeting title	**Crystal Springs Informational Meeting - October 17th**
Attended participants	**12**
Start time	10/17/25, 4:53:44 PM
End time	10/17/25, 8:04:07 PM
Meeting duration	3h 10m 23s
Average attendance time	1h 29m 1s

2. Participants

Name	First Join	Last Leave	In-Meeting Duration
Michael Gunsch	10/17/25, 5:00:21 PM	10/17/25, 8:04:07 PM	1h 12m 6s
Sherwin Wanner	10/17/25, 4:53:54 PM	10/17/25, 7:25:31 PM	1h 55m 47s
Mike May (External)	10/17/25, 4:59:45 PM	10/17/25, 7:20:00 PM	2h 20m 14s
Dean Sommerfeld	10/17/25, 5:00:12 PM	10/17/25, 6:05:08 PM	1h 4m 55s
Stein, Grace (External)	10/17/25, 5:00:36 PM	10/17/25, 6:17:50 PM	1h 17m 14s
Nat Strutz	10/17/25, 5:06:19 PM	10/17/25, 6:38:22 PM	1h 32m 2s
Thad Kuntz (External)	10/17/25, 5:06:31 PM	10/17/25, 7:20:07 PM	2h 13m 36s
Nancy (Unverified)	10/17/25, 5:10:58 PM	10/17/25, 5:42:02 PM	31m 4s
Josh Loosmore (External)	10/17/25, 5:11:13 PM	10/17/25, 7:19:56 PM	2h 8m 42s
Shawn Mistelski	10/17/25, 5:33:04 PM	10/17/25, 7:09:54 PM	2m 21s
Nancy Braun (Unverified)	10/17/25, 5:43:46 PM	10/17/25, 7:24:51 PM	1h 41m 4s
Travis Johnson	10/17/25, 6:14:59 PM	10/17/25, 8:04:07 PM	1h 49m 7s

3. In-Meeting Activities

Name	Join Time	Leave Time	Duration
Michael Gunsch	10/17/25, 5:00:21 PM	10/17/25, 6:11:57 PM	1h 11m 36s
Michael Gunsch	10/17/25, 8:03:37 PM	10/17/25, 8:04:07 PM	30s
Sherwin Wanner	10/17/25, 4:53:54 PM	10/17/25, 6:48:22 PM	1h 54m 27s
Sherwin Wanner	10/17/25, 7:24:11 PM	10/17/25, 7:25:31 PM	1m 20s
Mike May (External)	10/17/25, 4:59:45 PM	10/17/25, 7:20:00 PM	2h 20m 14s
Dean Sommerfeld	10/17/25, 5:00:12 PM	10/17/25, 6:05:08 PM	1h 4m 55s
Stein, Grace (External)	10/17/25, 5:00:36 PM	10/17/25, 6:17:50 PM	1h 17m 14s
Nat Strutz	10/17/25, 5:06:19 PM	10/17/25, 6:38:22 PM	1h 32m 2s
Thad Kuntz (External)	10/17/25, 5:06:31 PM	10/17/25, 7:20:07 PM	2h 13m 36s
Nancy (Unverified)	10/17/25, 5:10:58 PM	10/17/25, 5:42:02 PM	31m 4s
Josh Loosmore (External)	10/17/25, 5:11:13 PM	10/17/25, 7:19:56 PM	2h 8m 42s
Shawn Mistelski	10/17/25, 5:33:04 PM	10/17/25, 5:33:19 PM	15s
Shawn Mistelski	10/17/25, 6:21:00 PM	10/17/25, 6:21:38 PM	37s
Shawn Mistelski	10/17/25, 7:08:25 PM	10/17/25, 7:09:54 PM	1m 29s
Nancy Braun (Unverified)	10/17/25, 5:43:46 PM	10/17/25, 7:24:51 PM	1h 41m 4s
Travis Johnson	10/17/25, 6:14:59 PM	10/17/25, 8:04:07 PM	1h 49m 7s

This is **Appendix 1, Scope of Services and Engineers Standard Hourly Rates**, - ***ADDENDUM #2*** referred to in and part of the Short Form of Agreement between Owner and Engineer for Professional Services dated **August 20, 2024**

APPENDIX A – SCOPE OF SERVICES – *ADDENDUM #2*
CRYSTAL SPRINGS WATERSHED INITIATIVE - FEASIBILITY STUDY

Total Budget Amendment	**$22,300**	**Revised Total Contract**	**$284,300**
Prime	**Houston Engineering, Inc**		
Subcontractor	**Peritiacon LLC**		
Subcontractor (added)	**Adaptive Resources, Inc**		

Phase 002 - Groundwater Influence Review **$40,400 + $2,500 = $42,900**

The additional funds will be utilized to expand on the discussion of groundwater and potential irrigation opportunities within the regional area, to be included in the Feasibility Study. This will not include an in-depth review of irrigation as a project alternative, as that option will be considered in the Preliminary Engineering Report.

Phase 009 - Feasibility Report **$21,300 + $2,000 = 23,300**

The report will be expanded to include the various items in Addendum #2**.** The increased report costs are incorporated in the other addendum revisions and new phases.

Phase 010 – Kidder County Concerns and Public Information Meeting (New Phase) **$10,500**

This phase involves addressing various items raised during discussions with Kidder County (County Commission, Water Resource District and Landowner) and their concerns related to downstream impacts. Many of these relate to issues not normally considered during a feasibility study level revision, including project funding details and system management. The report will now include information related to those issues, but not full details that are to be developed and evaluated in the Preliminary Engineering Report. A limited amount of time was spent on discussions with Burleigh County representatives to increase project awareness. One deliverable in this phase is the Steering Committee Informational update that documents the Kidder County meeting and project status.

Phase 011 - Long Lake Wildlife Refuge (New Phase) **$7,300**

These services are limited to communications, contacts and requests to the USFWS, regarding their Long Lake Refuge Facilities. This includes securing information on design, permits and management to determine, to the degree practical, related to compliance with their permits and identification of risks to adjoining properties. This will not include detailed evaluations or extended communications related to potential solutions to identified concerns. Additional services related to this issue are to be incorporated into the Preliminary Engineering Report.

STUDY SCHEDULE

The Feasibility Study completion schedule is amended to end of January 2026. These additional services are subject to funding from the Owner and do not include additional grant funding either locally or through the NDSWC. This is due to the fact some services were provided prior to requesting additional cost share assistance and requesting the remaining amount would increase costs and extend the report completion deadline. This deadline includes acceptance of the Stutsman County Commission and the Stutsman County Water Resource District.