Judicial Ditch #19 Project Work Team Meeting
November 14, 2017 10:00 a.m. Strandquist Community Center

The meeting was held to review and finalize the Project Purpose and Need for Action Statement and to review the Scope of Environmental Assessment Document that includes the resource concerns as set forth in Section 501.24 of Title 390 – National Watershed Program Manual for NRCS Review Point #2.

Meeting attendees:
Tony Nordby, HEI
Joel Praska, MSTRWD
Kyle Schlomann, MSTRWD
Ken Borowicz, Marshall County Commissioner
Bill Peterson, MSTRWD
Chuck Edgar, Lincoln Twp
Lyle Braff, Lincoln Twp
Lon Aune, MCHD
Gary Kiesow, Marshall County Commissioner
David Bakke, MSTRWD
Jerry Grochowski, Landowner
Craig Jarnot, ACOE
Ben Kleinwachter, Landowner
Rory Anderson, Lincoln Twp
Darren Carlson, Marshall County SWCD
Matt Waterworth, NRCS
Ruth Anne Franke, MN DNR
Denise Oakes, MPCA

MSTRWD Administrator, Joel Praska, called the meeting to order and had everyone introduce themselves. Several documents were distributed, including an agenda for the meeting, the minutes of the July 26 PWT meeting, an updated Purpose and Need for Action document, and a draft version of the Scope of Environmental Assessment document.

The Project Work Team reviewed and unanimously approved the minutes from the July 26, 2017 Project Work Team meeting.
Tony Nordby of Houston Engineering briefly went over NRCS RCPP guidelines and provided an update on where the JD 19 RCPP is currently at in the PL83-566 planning process. During the July PWT meeting, a proposed purpose and need for action document was distributed to the Project Work Team for review. In August, Tony held a conference call with Craig Jarnot of the U.S. Army Corps of Engineers and MSTRWD staff to discuss Purpose and Need for USACE 404 Concurrence Point #1. Tony then went over the updated Purpose and Need document with the changes recommended by the PWT, as well as Craig Jarnot’s recommendations.

Tony presented modeling results of the existing hydrology and hydraulic conditions of the JD 19 sub watershed. The JD 19 sub watershed was delineated using LiDAR and field survey. The sub watershed covers approximately 104 square miles in portions of Roseau and Marshall County. For modeling hydrology, HEC-HMS software was used to convert rainfall data to runoff. For in channel hydraulics, HEC-RAS software was used to simulate unsteady flows for determining peak flow and flood duration.

Synthetic events of 2, 5, 10, 25, 50, and 100-year frequency were simulated in the existing conditions model for durations of 24 hours, 4 days, and 10 days. Due to the size of the watershed, it was found that the 4-day rainfall events produced the largest peak discharges.

Three reporting locations along JD 19 were selected for hydrograph analysis: MN Hwy 32, US Hwy 59, and the outlet into the Tamarac River. Stream flow patterns at MN Hwy 32 demonstrated a bell curve shape of a typical hydrograph, whereas the other two reporting locations indicated a more gradual decrease from peak flow to base flow. Tony stated that Nelson Slough is most likely the reason for the discrepancy, being that it continuously releases water through an un-gated structure.

Tony presented inundation maps of different rainfall events, indicating the areas within the JD 19 sub watershed where water tended to pool. Landowner, Ben Kleinwachter, asked if the models took into consideration pre-saturated soil conditions with steady precipitation spread over the course of several days or weeks. Tony clarified that the synthetic events used for the H&H models are based on average precipitation over the entire sub watershed for the durations modeled and soil types are also factored into the modeling effort.

Tony then presented the total inundated acres within the sub watershed for each synthetic event modeled. He also separated out the acreage for inundations to just agricultural lands using the 2016 National Agricultural Statistics Service dataset GIS data layer. This information will aid the project through the permitting process, and will be useful quantifying agricultural damages in the cost-benefit analysis step of the NRCS RCPP process. It also provides supporting information for the purpose and need for action statement. Craig Jarnot of the Corps of Engineers asked if there was a certain threshold in terms of depth and duration that dictated flood damages vs saturation. Tony answered that he was not aware of the specific threshold the NRCS used, but indicated that any pooling areas shown in the maps displayed depths greater than 1” that were displayed by the model.
A discussion then took place on resource concerns and the Scope of Environmental Assessment document. Tony reviewed the feedback that he received from the comment forms that were distributed during the September 2016 public meeting. These comment forms were used as the framework for the scope of environmental assessment document. The document lists the 31 resource concerns identified in Section 501.24 of Title 390 – National Watershed Program Manual that were ranked as high, medium, low, or not applicable based on their relevance to the study area. Tony requested that the Project Work Team review the document for any resource concerns that may not be addressed in the document or ranked inappropriately as a high, medium, or low priority concern.

Lon Aune of the Marshall County Highway Department asked if the feedback from the public comment forms largely came from landowners vs agency representatives. Tony indicated that a majority, eight out of the ten comment forms he got back were from landowners.

Lon commented that flooding and flood damages was one of the general water resource concerns identified on the cover page of the Scope of Environmental Assessment Document, and one that was presented for public consideration on the comment forms. However, flooding is not specifically referenced in the list of 31 concerns. Craig Jarnot stated that it is implied that the nature of any resulting project would be for flood damage reduction. The overall purpose of the document is to address any resources that would likely be impacted and would also need certain considerations in a potential project.

Lon stated that resource concern #17 “Prime and unique farmland, and farmland of statewide significance” should probably be ranked as high instead of medium, since cropland is prominent throughout the JD-19 subwatershed.

Landowner, Jerry Grochowski, stated his concerns about the ditches that drain into Judicial Ditch #19. These ditches have not really been maintained over the years. Some have collapsed in on themselves and others have become plugged with sediment, causing localized drainage issues and overland flooding. Jerry asked if a potential project would help address some of these issues. Tony suggested that the RCPP project effort would likely of larger scale then identified local drainage issues. Lon indicated that Marshall County may be willing to work with Jerry in to resolve some of the local drainage issues.

Tony concluded his presentation by going over the next steps in the planning process: The submittal of NRCS Review Point #2 and USACE Concurrence Point #1, Scope of Environmental Assessment and Affected Environmental Inventory for Review Point #3, and then beginning the discussion on alternatives. At this point the floor was open for discussion and questions.

Ben Kleinwachter inquired about the review points of the PL-566 RCPP planning process and what the overall timeline for the project is. Tony answered that there are six review points all together. Review point #1 was submitted and accepted by the NRCS last year. Review point #2 should be submitted before the end of 2017. The purpose and need can still be changed even after being submitted if the project scope changes further into the
process. As far as the timeline, the JD19 RCPP federal project funding deadline for completion is through September 2019.

Ben referenced Dave Jones’ (NRCS) comments from the July 26, 2017 meeting minutes where Dave had mentioned that rehab was not allowed, looking for some clarification on the definition of rehab. Ben asked what should happen if the RCPP process fails. Tony answered that in order to receive or use federal dollars through the RCPP, the project would need to comply with NRCS guidelines. Tony also mentioned that the PWT could go back to the more traditional state/local FDR funding source if the RCPP process does not fit the scope of the PWT’s goals. Craig Jarnot recommended a follow up with the NRCS to get their definition of Rehab. If it is determined that Nelson Slough is in need of repair and that public safety is a real concern, then it should be easy to get a permit.

Tony asked Craig if he had any concerns about Purpose and Need for USACE Concurrence Point #1. Craig indicated that he did not but recommended including the modeling results with the submission.

Lyle Braff, Lincoln Township Supervisor, asked about Nelson Slough’s capacity potentially being reduced by sediment. Tony indicated that without a means of comparing the current conditions to the original design he didn’t know for sure, but assumed that sediment has deposited within the facility over the years of use.

The meeting adjourned at approximately 11:30 a.m. with the next JD-19 RCPP Project Team Meeting to be scheduled at a later date.

Kyle Schlomann
Acting Secretary