Nebraska Water Sustainability Fund Grant Application No. 5220

Titled: MRNRD Phase 2 High Tech Irrigation Implementation Project Grant Amount: \$250,000.00

Project Progress:

The project progress this past year has included ordering 50 units from McCrometer Connect so that we could be installing them in the spring of 2019. We have currently found homes for most of the units with individual producers from all of the district. The MRNRD is still in progress of finding a summer intern to help install and provide up-keep for these units for the producers.

Project Activities for coming year:

The next project activities include installing these units over the coming months as well as working with the producers to understand this data and be able to use it in their operations to help conserve water. Later in the summer after the irrigation has been completed we will be working on extracting the probes and equipment so that we can keep them healthy so they are ready to go again next spring. We will continue this process every year for the next two years. As we come to the end of the project we will be giving the equipment to the producer to keep using and implementing in their operations. We would then like to have more grant funding so that we can keep growing this project over the whole entire district.

Projected project expenses for remainder of project:

Under this project the MRNRD expects to spend \$40,000.00 in FY 19. The remaining total project expense is \$60,000.00 and that will be for the WSF.

Reassessment of the Project Benefits:

We have documented this project has saved on average 0.75 inches pumped per acre for each field utilizing this technology thus far.

Summary:

The MRNRD has found this to be a exciting start to some great partnerships with our local producers. We had a strong attraction to this project from local producers that are wanting that extra tool to help them conserve their water. This will offer real-time data that provides growers with the information needed to make quick, effective management decisions. The benefits of these systems for our producers will avoid over or under watering, set alarms for critical events, make timely decisions about power, fertilizer, chemicals, and more. The project will help producers reduce their costs while improving their yields and reducing water usage. The MRNRD feels that by implementing these wireless irrigation systems we are allowing our producers to properly use the precious natural resource of water in a more efficient manner. We also feel that our producers have been given these restrictions and implications that are preserving the water resource by abiding their allocations and then ensuring that they are protecting the water from over use. This helps the District achieve our goal that efficiency is a core element of a sustainable water source.