

# Memorandum

To: Papio-Missouri River Natural Resources District Finance, Expenditure & Legal Subcommittee  
From: Paul W. Woodward, PE, Groundwater Management Engineer  
Date: May 8, 2020  
Re: ENWRA: UNL-CSD Test Hole Drilling, Account 01-05-191-4400 over 110%

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In May 2017, the PMRNRD entered into an agreement with UNL-CSD to complete as many as eighteen new testholes along the Missouri River valley as shown on attached Figure 1. The proposed total drilling depth for all the holes is 4,000 feet and CSD was able to provide all the equipment, drill crew labor and travel costs for approximately \$19.50 per foot. The drilling was to be completed over a three-year period beginning in 2017 for a total cost of \$78,100.

The District has paid yearly invoices to UNL based on the amount of feet drilled for each testhole. Previous invoices in both 2017 and 2018 were for \$15,620 each or a total of \$31,240, and covered 12 testholes drilled in Washington, Burt and Thurston counties. This last year, 5 deeper testholes were drilled in Dakota County and the invoice amount is \$39,147.56. This is roughly 130% above the \$30,000 budgeted in FY20. However, the total project cost sits at \$70,387.56 and UNL and the NRD still plan to drill one remaining testhole in Dakota County with the budget remaining in the agreement.




**Management recommends that the Subcommittee recommend to the Board of Directors that Account 01-05-191-4400 (Eastern Nebraska Water Resources Assessment (ENWRA) – Professional Services) be allowed to exceed 110% of the budgeted amount, up to a maximum of \$39,148.**



# New Missouri Valley Testholes

Completed as of 05/2020

## Legend

-  New Completed Testhole
-  Prior Testholes
-  Uncompleted Testhole

Sioux City

175

30

680  
80

Google Earth

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Omaha 30 mi

N

**FIGURE 1**