# **Appendix A**

One of the goals of multi-state groups is to foster development of projects that can address the various agency priority areas. Our group has been successfully addressing these priority areas and securing extramural funding from various sponsors. Examples from the previous iteration of this project include dozens of funded grants totalling more than ::

Asher, Nadhadhemi, Ghane (Co-PIs) obtained a USDA NRCS Conservation Innovation Grant (CIG) to develop a decision-support tool to evaluate the nutrient reduction benefit of a conservation drainage practice, $614,348 (2021-2024).

Asher, Nadhadhemi, Ghane (Co-PIs) obtained a grant from the Michigan Department of Environment, Great Lakes and Energy to explore the economic costs of utilizing institutional controls to address groundwater contamination, $350,000 (2021-2022).

Asher, Nadhadhemi, Ghane (Co-PIs) obtained a grant from USDA-NIFA (through the Keweenaw Bay Ojibwe Community College) to continue groundwater modeling of arsenic and uranium contamination on tribal land in Michigan’s Upper Peninsula, $120,000 (2022-2023).

Asher was awarded a $200,000 grant to continue monitoring subsurface drains and conduct wetland research.

Dinar, A., Regional Aquifer Management: Economics and Institutional Arrangements of Managed Aquifer Recharge in the Central Valley, California. USDA—Research, Education, and Economics ($150,000), September 2017-August, 2019.

Dinar (Co-PI). 2022. Giannini Foundation Mini Grant to study “Cooperative and Market Approaches to Regional Nonpoint Pollution Control: Application to the San Joaquin Valley (SJV), California.”

Edwards (Co-PI), “A Framework to Enhance North Carolina’s Natural Resources Through Sustainable Manure Nutrient Cycling and Export.” With Sharara, Jones and Charles. North Carolina Department of Justice (NCDOJ). $268,342 (2022-2024).

Ghane (Co-PI), Michigan Department of Environment, Great Lakes, and Energy (EGLE) 2022—2025 Title: Dissolved Phosphorus Capture from Controlled Tile Drainage to the WLEB. PI: Steven Safferman. $529,248.

Ghane (PI), Corn Marketing Program of Michigan 2022 Title: Controlled Drainage, A Water Conservation Practice for Reducing Phosphorus Loss from Subsurface-Drained Fields. $21,871.

Hansen received funding from the UW Water Research Program/USGS to conduct an assessment (regional economic impacts, value of storage) of voluntary conservation/water transfers and mandatory cutbacks in the Wyoming portion of the Colorado River Basin.

Hansen received funding through the WY NSF EPSCoR Track I grant (on which Hansen is a team member) to estimate the value of water in recreational uses (angling, float trips) on the Snake River.

Lambert, AFRI grant NO2019-68012-29888 from the USDA NIFA (term: 2019-2024) will inform local winter wheat producers about selecting cover and summer crops to improve soil moisture use efficiency, nitrogen application rate, land productivity, risk management, and farm income.

Levers, Peterson, awarded NSF Cooperative Agreement to lead Water Quality priority area within the Midwest Big Data Hub.

Maas et al. received a USDA-SAS (2020-69012-31) grant to investigate sustainable dairy production with a focus on improving water quality through nutrient management and the creation of a circular bioeconomy. He is also part of several CIG and Climate Smart projects focused on soil health, which have substantial implications for water quality and drought resilience.

Nejadhashemi and O’Neil we obtained a USDA NRCS Conservation Innovation Grant (CIG) to develop a decision-support tool to evaluate the nutrient reduction benefit of a conservation drainage practice. $614,348 for 2021-2024.

Rouhi Rad (PI), Suter (Co-PI) received grant funding from USDA-NIFA to initiate research that uses integrated modeling to assess economic tradeoffs associated with the management of water salinity in the Lower Arkansas Basin of Colorado, $499,900.

Rouhi Rad (PI), Hrozencik (Co-PI) received grant funding from USDA-NIFA to study the adaptation of irrigation organizations and agricultural producers to water scarcity, $649,900.

Quintana Ashwell (Co-PI), “Development of Best Management Practices and Technologies to Optimize Water Use in the Lower Mississippi River Basin”, $1,781,994 with D. Gholson (PI) and Tsz Him Lo.

Sampson (Co-PI), “Supporting Rural Livelihoods in the Water-stressed Central High Plains: Microbial Innovations for Climate-resilient Agriculture (MICRA),” National Science Foundation, $1,418,382, with M. Derby (PI), G. Jha (Co-PI), and four other investigators. (2023 – 2027).

Sears (Co-PI), “Water Scarcity in the Serbian Danube: Agricultural Land Use Change and Irrigation”, $450,000 with S. Woznicki (PI), T. Lie (Co-PI) and two other collaborators.

Schoengold (PI), “Assessing Producer Preferences for Conservation Program Participation and Ecosystem Service Provision: A focus on irrigation status” (2022 - 2023), $17,500. Daugherty Water for Food Global Institute, student support grant program.

Schoengold (PI), “Assessing Producer Preferences for Conservation Program Participation and Ecosystem Service Provision” (2021 - 2026), $187,096, University of Nebraska Agricultural Research Division.

Suter (Co-PI) received grant funding through the National Science Foundation to understand the economic benefits of reductions in salinity and the economic feasibility of solar powered reverse osmosis desalination technologies.

Suter (Co-PI) received grant funding from USDA-NIFA to initiate research that uses integrated modeling to assess economic tradeoffs associated with the management of water salinity in the Lower Arkansas Basin of Colorado.

Suter and Guilfoos (Co-PIs) received grant funding from USDA NIFA to investigate the relationship between stress and cooperative groundwater management.