

Northern Nevada Water Planning Commission

STAFF REPORT

DATE: October 1, 2020
TO: Chairman and Members, Northern Nevada Water Planning Commission
FROM: Chris Wessel, Interim Program Manager
SUBJECT: Review, discussion and possible recommendation to the Western Regional Water Commission (WRWC) concerning a draft letter of commitment to the National Science Foundation (NSF) for membership in the Center for Water Sustainability, Health, Equity, and Resilience, proposed by the University of Nevada Reno (UNR) for NSF grant funding.

SUMMARY

UNR is seeking support from the founders of the Nevada Water Innovation Institute for the proposed Center for Water Sustainability, Health, Equity, and Resilience (WaSHER). UNR and the University of California Irvine are collaboratively pursuing grant funding for WaSHER from the NSF Industry / University Cooperative Research Center (I/UCRC). If selected by NSF for funding, and if the WRWC agrees, the WRWC would commit to joining WaSHER as a full member at the membership level of \$50,000/year for five years, pending clarification of intellectual property implications and availability of funds on an annual basis.

A draft letter of commitment is attached which describes possible areas of research and other details of the commitment. Dr. Krishna Pagilla will be available to provide additional comments and answer questions.

CW:jp

Attachment

Date:

To: National Science Foundation

Subject: NSF I/UCRC – Phase I: Center for Water Sustainability, Health, Equity, and Resilience

Should **Center for Water Sustainability, Health, Equity, and Resilience (WaSHER)** be selected by NSF for funding, *Western Regional Water Commission (WRWC) commits to joining the **Center** as a full member at the membership level of **\$50,000/year**, pending clarification of intellectual property implications, according to NSF membership agreement, and availability of funds on an annual basis. This commitment will be for a duration of 5 years corresponding with Phase I of I/UCRC.*

The University of Nevada, Reno (UNR) and WRWC have long history of collaborative research to address water issues in northern Nevada. WRWC is a founder of the Nevada Water Innovation Institute at UNR and has funded numerous ongoing research projects with the university. This is a collective and collaborative innovation institute which addresses regional water issues through collaboration of 6 regional agencies and government entities.

Based on the technology roadmap of Center for WaSHER being proposed by the two universities (University of Nevada, Reno and University of California, Irvine), we have interests in all the proposed areas as follows:

- Online, near real-time pathogen detection in water and reclaimed water systems
- Low flow, low HRT effects on plumbing systems (whether from coronavirus shut-downs, water conservation, or other factors).
- Algae control in water storage systems.
- Salt and energy reduction in WWTPs.
- Policy questions surrounding growing communities with limited water sources.
- Impacts of infiltration in detention basins on underlying soil and groundwater properties.
- Quantifying environmental and social benefits of in-home and community level water recycling.
- Advanced analytics to reduce water footprint.
- Public communication strategies to build trust and confidence toward reclaimed water.

WRWC will serve on the Industrial Advisory Board of the Center for WaSHER and participate in research projects conducted at the University of Nevada, Reno and other sites as desired. The Western Regional Water Commission promotes and supports water issues in the region and regional capacity at UNR and innovation will aid in the economic development and water resiliency of our region.

Sincerely,

Name

Program Manager

Western Regional Water Commission
Reno, Nevada