

Daniel Cozad, Executive Director
Central Valley Salinity Coalition.
360 Lakeside Ave., Redlands, CA 92373

Sept 5, 2018

Dear Daniel:

I am writing to request a letter of endorsement from CVSALTS for a NSF proposal, led by Professor Sebnem H. Düzgün, entitled "INFEWS/T1: FEW (Food/ Energy/Water) Interdependencies in California and Colorado under Natural and Anthropogenic Stressors Using Big Data Analytics and Systems Dynamic Analysis". I am a co-Principal Investigator on the project. The INFEWS grant program supports modeling of the food, energy water system (FEWS) nexus for states such as California under stress where the important interactions among these components can be comprehensively assessed using historical data. Outcomes of these projects will advance knowledge of FEW systems potentially be used to inform future decisions regarding resource management in California and by extension elsewhere.

CVSALTS, under your leadership, has developed an impressive archive of original data and analysis that has helped to define the current state of the Central Valley's surface and groundwater resource as it relates to current and future salt and nitrate management. Analytical tools such as the WARMF water quality model and Central Valley Hydrologic Model (CVHM) have been updated and enhanced as a result of having access to these data and analyses. We intend to use these models in the development of an integrated FEW modeling system focused on the San Joaquin Valley.

In 2016 your letter of endorsement from CVSALTS and your in-kind cost estimate of the effort expended in further development and use of the WARMF model were important factors in our stakeholder-led, successful Proposition 84 grant applications to DWR. Through these grants we will be able to enhance existing sensor networks measuring drainage flow and salinity within the San Joaquin River Basin as part of the real-time salinity management initiative, promoted by the California regional Water Quality Control Board.

The National Science Foundation has provided a form letter for signature by entities willing to provide in-kind support to FEWS projects. We would be grateful if you could present this letter (attached) to the CVSALTS Executive Committee for their endorsement and your signature on their behalf. If CVSALTS is willing - the signed letter should be returned to Dr Duzgun for submittal with our joint proposal to NSF.

With thanks

Nigel W.T. Quinn

Research Group Leader, HEADS
Berkeley National laboratory, Berkeley, CA 94720.