

# Agricultural Water Center SW Groundwater SAS

## Introducing the New Project Manager



We would like to introduce and welcome Felix Ogunmokun. He will be joining the team as the new project manager and postdoc in the Kisekka's lab.

*Brief bio: I just completed my PhD in soil hydrology from the Hebrew University of Jerusalem, Israel. For fun I love to play volleyball and chess. I look forward to seeing you all!*

## SW Groundwater SAS GIS Webmap

All the active fields in this project have been updated in a [GIS map](#) (by Charlie Chen, UCD). You are welcome to explore the different fields by clicking the dots on the map (select "open in Map Viewer Classic" and "open in Map Viewer"). and please let us know [here](#) of any new fields or updates to the current fields.

## Updates from the field: 4H Water Wizards and field trip to Elkus Ranch.

Frank McPherson, UC ANR - Extension and Education group member:

The program was successfully launched at Cherryl Elementary School in the Hayward Unified School District. The program started with four classes of 30+ students each. Approximately 120 students are reached every week.

Principal, teachers and students were extremely excited to have the program delivered to them. Fun activities included making of 'Water Wizard Hats', farm trips and a visit to the ocean. Most of the students have not been on a farm or to the ocean before.

**Special shout out** to the new Water Wizards Educator, Tanya Henderson who did an excellent job delivering the program and quickly built rapport with the students.



**Thank you to Sam Sandoval from UC Davis, LAWR for joining the field trip.**

**[A link to media coverage of the field trip.](#)**



## Student and postdoc onboarding

- Welcome to all the students and postdocs just joining the project! We held the first onboarding meeting with 6 in-person and 8 remote participants.
- A dedicated Slack channel for the students and postdocs was created and it will host monthly meetings to promote collaborations and share experiences amongst them.
- As students and postdocs join the project, please share their contact information with Iael and Isaya so they can be added to the AgWater Center website, invited to future onboarding, Slack meetings, etc.



## Field day at New Mexico State University

The **NMSU Leyendecker Plant Science Research Center** hosted the 2022 Biochar and Soil Health Field Day, organized and facilitated by Dr. John Idowu, Professor & Extension Agronomist.

Participants walked through the field, examined cover crops plots, and watched field demonstrations of soil compaction measurements, taken with a penetrometer, and infiltration measurements, taken with a single ring infiltrometer.

Participants also had the opportunity to watch a demonstration of biochar production from pecan wood waste using the “Ring of Fire” kiln.







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## SAVE THE DATE #1

Annual project symposium  
November 2nd to 4th, 2022 in UC Davis, CA

## Registration information

## SAVE THE DATE #2

### Annual project report to NIFA important dates and timeline:

Sept. 1st - a template will be sent to all key personnel to be submitted by **Sept. 30th**.

On the template: report for year 1, work plan and budget for year 2. We expect to have the full report ready by the end of October and share it during the annual symposium.

## Conferences & meetings highlights



Isaya and LeAnne, the project evaluation expert, at the Project Directors USDA NIFA SAS project meeting in Kansas City. Isaya presented the project overview and got to meet with other project directors from around the country.



Members of the Groundwater team at ISMAR11.

In April, the ISMAR11 conference was held in person. Many of our groundwater team members participated and got to hang out!

- LEmami, M., A. Ahmadi, A. Daccache, S. Nazif, S.-F. Mousavi, and H. Karami (2022), County-Level Irrigation Water Demand Estimation Using Machine Learning: Case Study of California, *Water* 2022, Vol. 14, Page 1937, 14(12), 1937, doi:10.3390/W14121937.
- Kisekka, I., S. R. Peddinti, W. P. Kustas, A. J. McElrone, N. Bambach-Ortiz, L. McKee, and W. Bastiaanssen (2022), Spatial-temporal modeling of root zone soil moisture dynamics in a vineyard using machine learning and remote sensing, *Irrig. Sci.*, 1, 3, doi:10.1007/s00271-022-00775-1.
- Parker, L. E., N. Zhang, J. T. Abatzoglou, S. M. Ostojic, and T. B. Pathak (2022), Observed Changes in Agroclimate Metrics Relevant for Specialty Crop Production in California, *Agron.* 2022, Vol. 12, Page 205, 12(1), 205, doi:10.3390/AGRONOMY12010205.
- Peddinti, S. R., and I. Kisekka (2022), Effect of aggregation and disaggregation of land surface temperature imagery on evapotranspiration estimation, *Remote Sens. Appl. Soc. Environ.*, 27, 100805, doi:10.1016/J.RSASE.2022.100805.
- Peddinti, S. R., and I. Kisekka (2022), Estimation of turbulent fluxes over almond orchards using high-resolution aerial imagery with one and two-source energy balance models, *Agric. Water Manag.*, 269, 107671, doi:10.1016/J.AGWAT.2022.107671.
- Thorp, K. R., S. Calleja, D. Pauli, A. L. Thompson, and D. E. Elshikha (2022), Agronomic Outcomes of Precision Irrigation Management Technologies with Varying Complexity, *J. ASABE*, 65(1), 135–150, doi:10.13031/JA.14950.
- Vanella, D., S. R. Peddinti, and I. Kisekka (2022), Unravelling soil water dynamics in almond orchards characterized by soil-heterogeneity using electrical resistivity tomography, *Agric. Water Manag.*, 269, 107652, doi:10.1016/J.AGWAT.2022.107652.

### How to cite the project support in publications:

This work was fully funded or partially funded by USDA NIFA (Award # 2021-68012-35914)

**Don't forget to send us your publications and conference presentations to feature them on this page**



We have started a [YouTube channel](#) for the Agricultural Water Center. We look forward to adding project member presentations and or project generated videos.



Iael is sharing a Box folder with files and resources relevant to the project.

We hope you can find there everything you need there.

Please reach out if there is anything else you would like to see there.

**RIP Kevin Rodgers.**

**Kevin was a member of the advisory board, representing the Arizona Cotton Growers.**

