## GROUNDWATER DEPLETION AS VIEWED FROM SPACE AND IMPLICATIONS FOR THE WESTERN UNITED STATES

PRESENTED BY VISITING SPEAKER JAY FAMIGLIETTI,
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Marley Building, Room 230 and on Zoom



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JAY FAMIGLIETTI is a hydrologist, a Global Futures Professor at Arizona State University, and Chief Scientist of the Arizona Water Innovation Initiative.

He is Executive Director Emeritus of the Global Institute for Water Security at the University of Saskatchewan, where he held the Canada 150 Research Chair in Hydrology and Remote Sensing. In this talk, over two decades of observations from NASA's GRACE and GRACE Follow-On missions are used to show how global and regional freshwater availability are rapidly changing. Of particular concern is the disappearance of groundwater around the world. Recent GRACE/FO-based estimates of large-scale groundwater depletion, e.g. in Arizona and California, where groundwater losses appear to be accelerating, will be presented. The case for the need to elevate the groundwater discussion, both regionally and globally, will be made, with examples provided. Opportunities to collaborate within the ASU/Arizona Water Innovation Initiative will be discussed.

Photo credit: NASA Earth Observatory