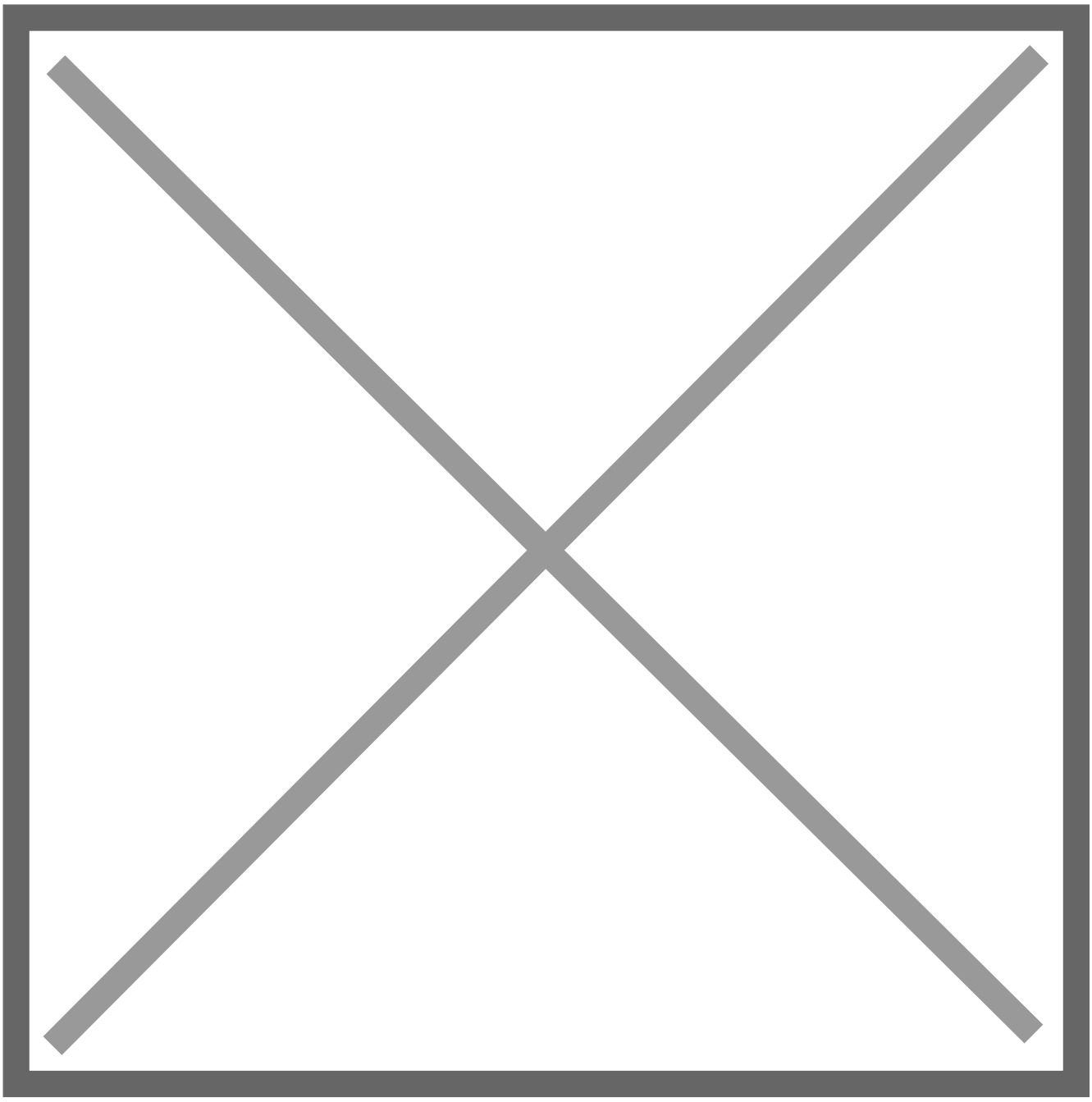

Publication

Managing PFAS and seawater intrusion in California’s groundwater

Key takeaways:

- Two recent articles by Raghavendra Suribhatla Maruti probe technical challenges related to groundwater management in California.
- The first examines PFAS flow and transport models aimed at guiding more informed compliance decisions.
- The second focuses on managing seawater intrusion in coastal aquifers.

Environmental and Water Resources Engineer Raghavendra Suribhatla Maruti, Ph.D., P.E., has published two articles in the Groundwater Research Association of California's summer 2026 issue of *HydroVisions*. Both articles probe technical challenges related to groundwater management.

The first — "Modeling the PFAS Leaching to Groundwater Pathway for Regulatory Compliance" — summarizes the mathematical basis and available tools for evaluating a group of chemicals known as PFAS leaching from the soil into groundwater through the unsaturated zone. This summary aims to guide more informed regulatory compliance decisions. Raghavendra co-authored it with John Stults, Ph.D.; Faran Torres, Ph.D.; Jenny Lagerquist; and Hiroko Hort, Ph.D., P.E.

In the article, Raghavendra draws on practical insights from his related research into a new methodology for better site conceptual models of per- and polyfluoroalkyl substances' (PFAS') fate and transport, which is funded by the Department of Defense's prestigious Environmental Security Technology Certification Program.

Raghavendra co-authored the second article, "Seawater Intrusion in California Coastal Aquifers," with Kyle Young, Ph.D.; Rick Cramer; Hannah Fitzpatrick, GIT; Patrick Connor Wickham; and Hanni Blair. This article provides an overview of seawater intrusion in California's coastal aquifers and highlights why understanding basin stratigraphic architecture is critical to developing a seawater intrusion conceptual model. It also launches a broader series on analytical and numerical modeling tools, sea-level and groundwater-rise data sets, and guidance on coastal vulnerability analysis to support coastal resilience planning and the implementation of California's Sustainable Groundwater Management Act.

Read more of Raghavendra's groundwater management insights in the summer 2026 issue of *HydroVisions*.