Arizona Tri-University Recharge and Water Reliability Project

NEWSLETTER

• SUMMER 2026 •

PROJECT UPDATES

Project Report and Accompanying Products Now Available! We are pleased to announce the ATUR Project Report and associated products are now available on our website. The report includes 6 sections of research findings and guidance for stakeholders, organized around two dozen Key Messages that highlight the most important findings of the project. See Page 2 for more.

One-Year No-Cost Extension The ATUR project was originally set to wrap up by June 30, 2026, and we are delivering our contracted products on time. However, this past fall, the project was granted a no-cost extension by our ABOR funders. Student research activities and next phase project activities will continue through June of 2027.

Project Leadership Change The ATUR project is undergoing a change in leadership this spring, as Professor Kathy Jacobs, lead PI for the project, is retiring from the University of Arizona after 23 years of service. Professor Neha Gupta of the University of Arizona will become the new lead and project PI. We are grateful to Kathy for her stewardship of the project since 2022. And we congratulate Dr. Gupta on her new position!

ABOUT THE ATUR PROJECT

The Arizona Tri-University Recharge and Water Reliability Project (ATUR) is a research project funded by the Arizona Board of Regents at the request of the Arizona Department of Water Resources. The project is focused on identifying opportunities to enhance water supplies through capture of precipitation that would otherwise evaporate. Our work has reinforced prior studies that estimated that more than 95% of the water that falls on Arizona's land surface evaporates, sublimates or transpires through plants before reaching a channel or recharging groundwater. Capturing even a small percentage of this water for groundwater aquifer recharge or direct use could provide additional supplies for Arizona's communities and ecosystems.

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INTRODUCING THE ATUR PROJECT REPORT

CLICK HERE TO READ AND DOWNLOAD THE FULL REPORT

Section 1: Introduction **lays out the project background and Arizona's unique hydrogeology**

Section 2: Statewide Water Summary **includes 10 Key Messages related to the water balance and state of groundwater across Arizona**

Section 3: Recharge Across Diverse Landscapes **features 14 Key Messages and provides many details about specific conditions and opportunities for groundwater recharge in our arid climate**

Section 4: Decision Support Framework **provides an invaluable resource for natural resource managers and decision makers looking to evaluate potential recharge opportunities**

Section 5: Data Gaps & Future Research **offers insight into how this important work can be continued for the benefit of communities and the environment in Arizona**

Looking for a synthesis of the report? Check out these additional standalone resources:

EXECUTIVE SUMMARY **REPORT CONCLUSIONS**

The report and associated products include new data and conclusions on topics of great interest to water managers in Arizona. These conclusions fall into a few major categories:

- Current and future water supplies within the state
- The dominance of evapotranspiration in AZ's water balance
- Specific findings on recharge opportunities in various landscapes
- Recommendations and tools for land and water professionals

TOOLS FOR WATER MANAGERS & DECISION MAKERS

Decision Support Framework

We have developed the Decision Support Framework to aid water managers and decision-makers. This flow-chart based tool guides land and water managers through the questions and processes needed to identify possible capture and recharge opportunities and determine whether recharge in a given location warrants site-specific investigations.

CLICK HERE TO VIEW THE DECISION SUPPORT FRAMEWORK

Opportunities & Constraints Matrix

There is a broad range of capture and recharge options that can be and have been utilized across the diverse landscapes of Arizona. The report includes a matrix of approaches and the opportunities, limitations, and environmental implications for each.

CLICK HERE TO VIEW THE MATRIX

Groundwater Basin Profiles

ATUR researchers have developed individual water supply profiles for each of the state's 51 groundwater basins. The profiles highlight key information about the basins such as current and estimated future annual precipitation, recharge, runoff, and temperatures, focused on the supply side of the water balance – how much water might be available for capture and recharge. They also include maps that show areas of highest recharge potential within each basin, and projections of future water supply conditions. These are a foundation for future work in specific basins.

CLICK HERE TO VIEW THE GROUNDWATER BASIN PROFILES

RESEARCH HIGHLIGHT: OPPORTUNISTIC RECHARGE ENHANCEMENT (ORE)

A pond-and-plug structure, an example of ORE in flood water management. (Source: Gupta et al, 2026)

A key theme in our project is the development of the Opportunistic Recharge Enhancement framework. This framework focuses on capture and storage of water that would otherwise have been evaporated and lost to the atmosphere, and, in particular, on recharge projects that can be integrated into existing land management and development processes. Relatively inexpensive modifications to activities such as forest thinning or subdivision design can yield substantial groundwater benefits. A paper on this topic, led by Neha Gupta, is now published by in the journal *Groundwater.*

CLICK HERE TO VIEW THE FULL PUBLICATION

ATUR by the Numbers

The ATUR Project has spanned 3 years, included dozens of team members and contributors, and conducted a wide range of research and outreach activities in pursuit of answers about Arizona's groundwater recharge opportunities.

Take a look at ***ATUR by the Numbers*** (right) for a summary of this massive research effort!

Team Members across UA, ASU and NAU

Total Team Members past & present	Students	Faculty	Post Docs	Project Subteams	Technical Advisory Committee members
45	23	15	4	5	10

Stakeholders / outreach

Stakeholder Groups Engaged	Arizona Tribal Groups Engaged	Stakeholder Meetings & Events	Conferences, Workshops, & Poster Presentations	Outreach products
82	22	88	15	15

Final Report

Key Messages	Recharge Decision Support Tools	Infographics	Works Cited	Literature Reviews
24	3	12	107	25

Research

Publications	Groundwater Basins	Recharge Opportunities Surveyed	Public Data Sets
11	51	51	4

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TEAM NEWS

Project P.I. Kathy Jacobs received the Lifetime Acheivement Award for Convergence Reseearch from the Office of Research & Partnerships at UArizona

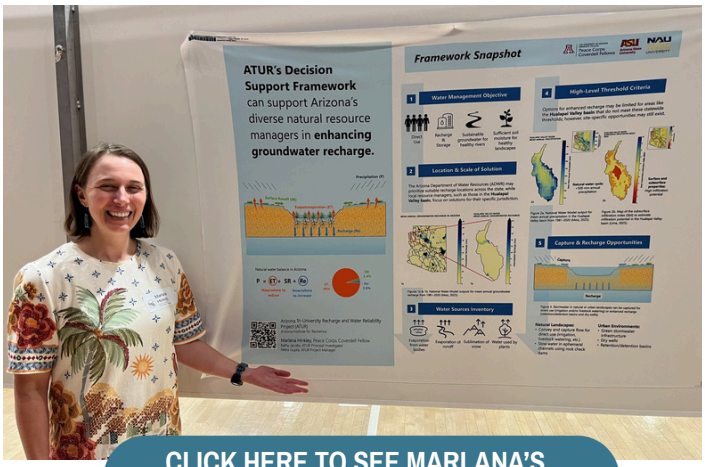
Kathy Jacobs Wins Lifetime Achievement Award

The ATUR project team congratulates lead project P.I. Kathy Jacobs for receiving the Lifetime Achievement Award from the Office of Research & Partnerships at University of Arizona in honor of her long career advancing interdisciplinary research on water policy and climate change adaptation. Prior to the U of A Kathy worked 23 years as a groundwater manager at the Arizona Department of Water Resources; she built the Arizona Water Institute from 2006-2009; and she served as the director of the US National Climate Assessment in the White House Office of Science and Technology Policy from 2009-2013. In her time at U of A, Kathy also founded and led the Center for Climate Adaptation Science and Solutions. Congratulations, Kathy!

Marlana Hinkley Wins Poster Contest

We extend further congratulations to graduate student Marlana Hinkley, who is a member of our project management team and heads the ATUR stakeholder engagement efforts, for winning “Best in Overall Outreach” at the Poster Showcase of the Coverdell Fellowship Program. Her poster was titled, “ATUR’s Decision Support Framework can support Arizona’s diverse natural resource managers in enhancing groundwater recharge.” She also recently won a leadership award from the Coverdell Program. We are grateful for Marlana’s enormous contributions to our project; she will be moving on to other adventures in July. Congratulations and all the best in your next endeavor!

Team Member Marlana Hinkley with her winning poster at the Coverdell Fellowship Poster Showcase in March 2026



CLICK HERE TO SEE MARLANA’S FULL POSTER

Dr. Caelum Mroczek (left) with Project co-P.I., Dr. Abe Springer (right)

Welcome to the Management Team, Caelum!

We are excited to announce that one of our student team members, Caelum Mroczek graduated this May with his PhD in Earth Sciences and Environmental Sustainability from NAU. He will be joining our project management team as a Post Doc at UArizona. Welcome to our management team, Caelum! We’re grateful for all your work as a student contributor, and we’re excited to see what great things are in store for you!

UPCOMING

Interested in learning more about the ATUR Report, Conclusions, and Tools? Join us for an upcoming event!

ATUR Project Webinar Series: June-September 2026

In order to help land and water managers as well as other interested audiences to understand and use the findings and conclusions of the report, we will be presenting a series of recorded webinars from June through September 2026 on key features of the report. Visit our website for the full schedule of webinars (coming soon).

ATUR Report Release Webinar: "Navigating the ATUR Report"

June 29, 2026 | 12:00-1:00 PM AZ The first webinar in our series will introduce the components of the newly released report and provide a guide to navigating the report, the website, and associated tools. Register HERE to receive link to join via zoom.

WRRC ATUR Webinar: August 13, 2026 | 12 PM

Join this webinar, hosted by the Water Resources Research Center (WRRC) at the University of Arizona, to learn more about the research behind the ATUR report. More info HERE.

Arizona Hydrological Society (AHS) Annual Symposium: September 9-11, 2026

Want to learn even more about the project and our findings? ATUR will be presenting at the Arizona Hydrological Society (AHS) Annual Symposium in September. Find more information on AHS's website here.

ATUR StoryMaps Series: Coming Soon!

We are developing a series of ArcGIS StoryMaps to further educate stakeholders and environmental professionals about the findings and impacts of our research. Stay tuned for these products which will be ready this summer!

PARTNERSHIPS

We are currently brainstorming ways to continue our research, support the continuation of our collaborative cross-university team, and continue to educate about our findings. We are actively exploring partnerships to help us design and implement new phases of our work. Please reach out to Neha Gupta at nehagupta@arizona.edu for more information about getting involved.

For more information, please contact:
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