

Appendix B

Section 1 – WRRRC Grants and Contracts Received

Title	Sponsor
Arizona Project WET	Arizona Department of Water Resources
Arizona Project WET - Tucson AMA Intergovernmental Agreement	Arizona Department of Water Resources
Arizona Project WET - Abbott Foundation Support	Abbott Family Foundation
Arizona Project WET - City of Goodyear	City of Goodyear
Arizona Project WET Program City of Peoria	City of Peoria
Arizona Project WET - Freeport McMoRan Water Festival Support	Freeport McMoRan
Arizona Project WET Nissan Water Festival Support	Nissan Corporation
Arizona Project WET - SRP Water Festival Support	Salt River Project
Arizona Project WET - Recharge the Rain: Community Resilience through STEM Education	Watershed Management Group
Bringing Microbiology and Water Quality	US Department of Agriculture
Building Water Scenarios to Support Community Planning in Rural Arizona Through Collaborative Stakeholder Engagement Process Design	Bureau of Reclamation
City of Avondale Educational Outreach Program	City of Avondale
Diving Into Task Assignment Bias	Environmental Defense Fund
Lake Havasu City Project WET Water Festival Support	Lake Havasu City

Section 2 – WRRRC 104b Water Research Grants

Title	University	Amount
2017		
Impact of Projected Climate Changes on Mountain-block Recharge Processes	University of Arizona	\$10,000
Might Recycled Wastewater Solve the Rising Problem of Toxin Producing Algae?	University of Arizona	\$9,463
2018		
Microplastic Contamination in the Lower Santa Cruz River	University of Arizona	\$8,641
Using Fresh Water Algae to Remove Lead from Water	University of Arizona	\$9,903
2019		
Detecting Colorado River Tamarix Phenology Using Publicly Available Satellite Images	Northern Arizona University	\$9,152
A Citizen Science Approach to Monitoring Water Resources in a Vulnerable Aquifer	University of Arizona	\$10,000
Solar Nanofiltration for Off-Grid Water Purification in Navajo Nation	University of Arizona	\$8,000

Section 3- WRRC Media Appearances

DATE	TITLE	OUTLET	URL
March 19, 2019	Tech On Tap: UA Inventors Address World Water Woes	UA News	https://uanews.arizona.edu/story/tech-tap-ua-inventors-address-world-water-woes
March 20, 2019	Amid 19-Year Drought, States Sign Deal to Conserve Colorado River Water	New York Times	https://www.nytimes.com/2019/03/19/climate/colorado-river-water.html
March 21, 2019	Four Questions: UA Experts Discuss Drought Contingency Plan	UA News	https://uanews.arizona.edu/story/four-questions-ua-experts-discuss-drought-contingency-plan?utm_source=uanow&utm_medium=email&utm_campaign=
April 15, 2019	Prince Hassan encourages joint work to address water problems in Jordan, region	The Jordan Times	http://www.jordantimes.com/news/local/prince-hassan-encourages-joint-work-address-water-problems-jordan-region
April 16, 2019	Calmly, Mexico, U.S. discuss cross-border aquifers	EcoAméricas	https://www.ecoamericas.com/issues/article/2019/4/A7CF8B8C-F34F-485A-94F6-C91C570D666E
May 7, 2019	WRRC thanks community	Arizona Silver Belt	https://silverbelt.com/article/wrrc-thanks-community
May 28, 2019	UA water resources program best in world (Republished Western Free Press)	Chamber Business News	https://chamberbusinessnews.com/2019/05/28/ua-water-resources-program-best-in-world/
June 6, 2019	Episode 41: Freshwater Research at the Border	Making Waves podcast	https://freshwater-science.org/news/making-waves-ep-41
June 20, 2019	La rana no bebe de su propio estanque	UNAM Global	http://www.unamglobal.unam.mx/?p=67375
June 20, 2019	Proud to be desert dwellers	UArizona Homepage	https://www.arizona.edu/proud-be-desert-dwellers
September 12, 2019	Fresh Thinking: Freshwater Science Is Being Pioneered in Arizona	Harvard Business Review	https://hbr.org/sponsored/2019/09/fresh-thinking-freshwater-science-is-being-pioneered-in-arizona
October 11, 2019	UA Joins Global Effort with JNF and Israel to secure food, water, energy	Arizona Jewish Post	https://azjewishpost.com/2019/ua-joins-global-effort-with-jnf-and-israel-to-secure-food-water-energy/
October 11, 2019	Deciphering Deadly Algae	YouTube	https://www.youtube.com/watch?v=hAD7yobwqJc
November 14, 2019	Arizona water — here are the reasons to be optimistic	AZBIGMEDIA Business News	https://azbigmedia.com/business/environment/arizona-water-here-are-the-reasons-to-be-optimistic/
November 18, 2019	As Arizona's suburban water tables drop, some potential solutions begin to emerge	Arizona Daily Star	https://tucson.com/news/local/arizona-s-suburban-water-tables-drop-as-long-warned-but/article_edd80082-be1a-56cf-ab3a-eb5f5a27576b.html

Section 4 - WRRC Brown Bag Seminars

Date	Title	Speaker	Presentation
January 30, 2019	Jeanne M. VanBriesen	Dr. Jeanne M. VanBriesen, Professor, Civil and Environmental Engineering and Public Policy, Carnegie Mellon University	Source Water Bromide Concentrations and Drinking Water Risks
February 13, 2019	Emery Coppola Jr.	Dr. Emery Coppola Jr., President NOAH LLC	An Abbreviated History and Overview of AI with Example Applications to Hydrology
February 20, 2019	Mark L. Brusseau	Mark L. Brusseau, Professor, UA Department of Soil Water and Environmental Science	The Occurrence and Fate of PFAS (Per-/Poly-Fluoroalkyl Substances) in the Environment
March 14, 2019	Crystal Tulley-Cordova	Crystal Tulley-Cordova, Principal Hydrologist, Navajo Nation Department of Water Resources - Water Management Branch	Stable isotopes in precipitation and meteoric waters: Investigating the North American monsoon across the Four Corners region

March 19, 2019	Mónica Ramírez-Andreotta	Mónica Ramírez-Andreotta, Director/PI and Assistant Professor, Soil, Water and Environmental Science, UA and Project Harvest Team Members	Project Harvest Be Informed. Grow Smarter
March 28, 2019	Amanda Minke, Drew Eppehimer, 104b students	Amanda Minke, student, Dept. of Hydrology and Atmospheric Science, 104b grant recipient Drew Eppehimer, Ph.D. student, Arid Land Resource Sciences Program, 106b grant recipient	Testing the capability of freshwater algae to remove lead (Pb) from water A case study on the Santa Cruz River: Can treated wastewater support desert fishes?
April 22, 2019	Brian Studenka	Brian Studenka, ITC Grid Development Director, Engineering and Policy	Big Chino Valley Pumped Storage Project
April 24, 2019	Tanya M. Quist	Tanya M. Quist, PhD. Associate Professor, School of Plant Sciences. Director, University of Arizona Campus Arboretum	Urban Desert Landscapes – Creating Climate Resilience One Tree at a Time
September 10, 2019	Vanessa Buzzard	Dr. Vanessa Buzzard, Sr. Research Specialist, School of Natural Resource and Environment	The Ecology of Water Harvesting
September 18, 2019	Paul Hirt	Dr. Paul Hirt, Professor of History and Senior Sustainability Scholar, ASU	Water and Sustainability in Arizona: A Mixed Record
October 8, 2019	Maya Teyechea, Dick Thompson	Maya Teyechea, Project Hydrologist, Tucson Water Dick Thompson, Lead Recharge Hydrologist, Tucson Water	An Update on the Santa Cruz River Heritage Project
October 16, 2019	Channah Rock	Channah Rock, Professor and Water Quality Specialist, Department Environmental Science, University of Arizona	Lesson Learned from the 2018 E. coli Outbreak Investigation and the Future of Food Safety
October 23, 2019	Itzhak Kornfeld	Itzhak Kornfeld, Ph.D., The Hebrew University of Jerusalem	You've Got It All Wrong About Water
October 28, 2019	Eran Feitelson	Eran Feitelson, The Hebrew University of Jerusalem	Will Desalination Resolve the Israeli-Arab Water Conflicts? And If Not, Why?
November 8, 2019	Haley Paul	Haley Paul, Policy Manager Audubon Arizona	The Economic Impact of Arizona's Rivers, Lakes, and Streams: How water-based outdoor recreation contributes to state and local economies
November 19, 2019	Ladd Keith, Nicole Iroz-Elardo, Betsy Wilkening, Kirk Dimond, Penelope Cottrell-Crawford	Betsy Wilkening, Education Program Coordinator, Arizona Project WET Ladd Keith, Assistant Professor of Planning and Chair, Sustainable Built Environments* Nicole Iroz-Elardo, PhD, Assistant Research Professor, Planning Degree Program* Kirk Dimond, Assistant Professor, Landscape Architecture* Penelope Cottrell-Crawford, Graduate Student, Landscape Architecture* * University of Arizona College of Architecture, Planning and Landscape Architecture	Heat Mitigation through Green Infrastructure
December 4, 2019	Laura Condon	Laura Condon, PhD, Assistant Professor, University of Arizona, Department of Hydrology and Atmospheric Sciences	Integrated hydrologic modeling at the continental scale; scientific advances and research needs

Section 5-WRRC Co-Sponsored Events

Date	Title	Co-sponsors
January 30, 2019	Source Water Bromide Concentrations and Drinking Water Risks	UArizona Hydrology and Atmospheric Sciences and SWES
October 23, 2019	You've Got It All Wrong About Water	Udall Center for Studies in Public Policy

Section 6- WRRC Publications (By First Author)

Akhmouch, A., Clavreul, D., Hendry, S., Megdal, S.B., Nickum, J.E., Nunes-Correia, F., Ross, A., Eds. *OECD Principles on Water Governance – From Policy Standards to Practice*, Book Version of Special Issue of *Water International*, Routledge, Oxon, UK, 136 pp. ISBN 13: 978-1-138-32976-8

Bernat, R.F.A., Megdal, S.B. and Eden, S., Long-Term Storage Credits: Analyzing Market-based Transactions to Achieve Arizona Water Policy Objectives, *Water* (submitted December 31, 2019).

Cruz Ayala, M.B. and Megdal, S.B. Use of Managed Aquifer Recharge to Improve Water Management in Arid and Semi-Arid Regions of Mexico (Extended Abstract), in Enrique Fernández Escalante, Ed. *Proceedings of the International Symposium on Managed Aquifer Recharge (ISMAR 10) Managed Aquifer Recharge: Local solutions to the global water crisis*, pp. 192-195. <https://www.ismar10.net/en/2019/11/04/ismar-10-proceedings-book-release/>.

Cruz Ayala, M.B. and Megdal, S.B., An Overview of Managed Aquifer Recharge in Mexico and Its Legal Framework, *Water, Special Issue on Managed Aquifer Recharge for Water Resilience* (submitted November 2019).

Hamilton, K., Ahmed, W., Rauh, E., Rock, C., Mclain, J., & Muenich, R. (2020). Comparing microbial risks from multiple sustainable waste streams applied for agricultural use: Biosolids, manure, and diverted urine. *Current Opinion in Environmental Science & Health*, 14, pp. 37-50.

Megdal, S.B. Reflections on a Successful Israeli Conference Experience, *Weekly Wave*, December 6, 2019. <https://wrrc.arizona.edu/reflections-successful-israeli-conference-experience>

Megdal, S.B. Reflections on Spring as a Time for Growth, *Weekly Wave*, May 17, 2019. University of Arizona Water Resources Research Center. <https://wrrc.arizona.edu/reflections-spring-time-growth>

Megdal, S.B. Reflections on the 10th Anniversary of the Transboundary Aquifer Assessment Program and the Importance of Its Joint Cooperative Process, *Weekly Wave*, August 23, 2019. University of Arizona Water Resources Research Center. <https://wrrc.arizona.edu/reflections-10th-anniversary-taap>

Megdal, S.B. World Water Day Reflections, *Weekly Wave*, March 22, 2019. University of Arizona Water Resources Research Center. <https://wrrc.arizona.edu/reflections-world-water-day>

Megdal, S.B. and Petersen-Perlman, J.D. (2018) Decentralized groundwater governance and water nexus issues in the United States, *Jurimetrics* 59 (1), pp. 99 - 119.

Megdal, S.B., Reflections on Earth Day 2019 (2019) *Weekly Wave*, Special Earth Day Issue, April 22, 2019. University of Arizona Water Resources Research Center. <https://wrrc.arizona.edu/reflections-earth-day-2019>

Petersen-Perlman, J.D., Albrecht, T.R., Megdal, S.B., Varady, R.G., and Tapia-Villaseñor, E.M. Bidirectionality in the Transboundary Aquifer Assessment Program in the Arizona-Sonora Border Region, *Global Environmental Politics* (submitted June 2019).

Petersen-Perlman, Jacob D. (2019). Institutional Frameworks for Effluent Water Use in the Ambos Nogales Region. *The Water Report*, 188, pp. 9.

Rock, C., Brassill, N., Dery, J., Carr, D., Mclain, J., Bright, K., & Gerba, C. Review of water quality criteria for water reuse and risk-based implications for irrigated produce under the FDA Food Safety Modernization Act, produce safety rule. *Environmental Research*, 172, 616-629.

Seasholes, K. and Megdal, S.B., The Arizona Water Banking Authority: The Role of Institutions in Supporting Managed Aquifer Recharge, Case Study. In *UNESCO-IAH-GRIPP MAR Case Studies Book*, edited by Zheng, Y., Ross, A., Villholth, K., and Dillon, P. In Press. (6 pp.)

Tapia-Villaseñor, E.M., Shamir, E., Megdal, S.B., and Petersen-Perlman, J.D. Impacts of Variable Climate and Effluent Flows on The Transboundary Santa Cruz Aquifer, *Journal of the American Water Resources Association* (revision submitted September 2019).

Section 7- WRRC Presentations (Chronological Order)

January 10, 2019, Jean McLain, What's new in recycled water research? Presentation, AZ Water Southern Arizona Technical Luncheon, Tucson, AZ.

January 14, 2019, Sharon Megdal, Issues in Groundwater Governance and Their Relationship to Graduate Student Training. Seminar, Department of Soil, Water and Environmental Science Colloquium, University of Arizona, Tucson, AZ.

January 16, 2019, Jean McLain, How to construct an effective presentation: it's not as hard as you think. Lecture, ENV5697: Topics in Environmental Science, University of Arizona, Tucson, AZ.

February 5, 2019, Jacob Petersen-Perlman, Governing Invisible Water: Transboundary Groundwater Governance and Management. Lecture, International Governance and Sustainability (McMaster University class; lecture delivered via Skype).

February 19, 2019, Sharon Megdal, Water Issues of the Tucson Region. Presentation, retired members of the Tucson Education Association, Tucson, AZ.

February 20, 2019, Sharon Megdal, Issues in Water Resources. Lecture, AED 150, University of Arizona, Tucson, AZ.

February 20, 2019, Sharon Megdal, Pinal County Agriculture and Colorado River Drought Planning. Presentation and Discussion, University of Arizona SBAR Project Team, Tucson, AZ.

March 7, 2019, Jacob Petersen-Perlman, Governing and Managing Shared Groundwater: International issues in the San Pedro and Santa Cruz aquifers. Lecture, Osher Lifelong Learning Institute at the University of Arizona, -Vail, AZ.

March 7, 2019, Sharon Megdal, Reclaimed Water as a Way to Stretch Limited Water Supplies. Presentation, Tribal Water in the Southwest Conference, Law Seminars International, Laveen, AZ.

March 8, 2019, Sharon Megdal, Water Supply and Policy in the Southwest. Presentation, Splendido Intellectual Pursuits Program, Oro Valley, AZ.
March 11, 2019, Jean McLain, Are we spreading antibiotic resistance in the environment with recycled wastewater? Separating the knowns from the unknowns. Presentation, Science Advocacy Speaker Series, March for Science Arizona, Tucson, AZ.
March 14, 2019, Jean McLain, Public health and environmental safety of recycled municipal wastewater: current research. Presentation, Osher Lifelong Learning (OLLI) Institute at the University of Arizona, Vail, AZ.
March 14, 2019, Susanna Eden, Decentralized Water Augmentation. Lecture, Osher Lifelong Learning Institute at the University of Arizona, -Vail, AZ.
March 14, 2019, Sharon Megdal, Arizona Water 101. Presentation, Briefing on water provided to Arizona congressional delegation staff, WEST Center, University of Arizona, Tucson, AZ.
March 14, 2019, Sharon Megdal, Issues in Groundwater Governance and Management. Presentation, Department of Hydrology & Atmospheric Sciences Weekly Colloquium, University of Arizona, Tucson, AZ.
March 17, 2019, Jean McLain, M. Ramírez-Andreotta, L. Davis, S. Buxner, A. Kilungo, R. Root, L. Abrell, and F. Sandoval, Effect of environmental monitoring method on participant self-efficacy for science in underrepresented communities. Presentation, Citizen Science Conference, Raleigh, NC.
March 21, 2019, Susanna Eden and Chris Freimund, Know About Your Water. Presentation, Green Valley Council, Green Valley, AZ.
March 21, 2019, Sharon Megdal, About the water policy and management work of the WRRC. Presentation, Western States Water Council Water Resources Committee, Chandler, AZ.
March 26, 2019, Sharon Megdal, Water Challenges in the Lower Colorado River Basin and the Drought Contingency Plan. Presentation, Utah State University Spring Runoff Conference, Logan, UT.
April 2, 2019, Elia Tapia, Desert Flows Assessment: Establishing a Baseline with Science. Presentation, Desert Waters International Symposium, University of Arizona, Tucson, AZ.
April 2, 2019, Sharon Megdal, Perspectives on Policy. Opening Remarks and Panelist, Desert Waters International Symposium, University of Arizona, Tucson, AZ.
April 5, 2019, Jacob Petersen-Perlman, Transboundary Wastewater Issues on the Sonora-Arizona Border. Presentation, Association of American Geographers Annual Meeting, Washington, DC.
April 10, 2019, Sharon Megdal, The Transboundary Aquifer Assessment Program as a Model for Multi-Level Collaboration. Keynote Presentation, Binational Summit on Groundwater at the U.S.-Mexico Border, El Paso, TX.
April 11, 2019, Jacob Petersen-Perlman, TAAP Stakeholder Engagement in the Arizona-Sonora Border Region. Presentation, Binational Summit on Groundwater at the U.S.-Mexico Border, El Paso, TX.
April 11, 2019, Elia Tapia, Impacts of Variable Climate and Effluent Flows on The Transboundary Santa Cruz. Presentation, Summit on Groundwater at the U.S.-Mexico Border, El Paso, TX.
April 12, 2019, Jacob Petersen-Perlman and Elia Tapia, Lessons Learned in U.S.-Mexico Transboundary Aquifer Assessment. Lecture, University of Texas at El Paso, El Paso, TX.
April 14, 2019, Sharon Megdal, Water Management Challenges, Pathways to Solutions, and Collaboration Opportunities. Opening Ceremony Remarks and Keynote Presentation, International Workshop on Sustainable Development of Arid Lands, Hashemite University, Zarqa, Jordan.
April 18, 2019, Jean McLain, Searching for toxin-producing algae in recycled wastewater. Presentation, 2019 AZ Water Conference, Phoenix, AZ.
April 23, 2019, Sharon Megdal, A Water Management Overview with a Focus on the CAGRD. Presentation, Green Valley-Sahuarita Association of Realtors, Green Valley, AZ.
May 7, 2019, Sharon Megdal, Challenges and Opportunities to Moving to a New Paradigm of Water Governance. Keynote Presentation, National Autonomous University of Mexico (UNAM), Special Sustainability Conference, Mexico City, MX.
May 8, 2019, Sharon Megdal, Meeting Arizona's Water Needs. Presentation, The Graduate Club, Tucson, AZ.
June 11, 2019, Sharon Megdal, Connecting Land and Water: Research in the Colorado River Basin. Panelist, Overview of the Colorado River Basin Drought Contingency Plans, Universities Council on Water Resources (UCOWR) Annual Conference, Snowbird, UT.
June 12, 2019, Sharon Megdal, Colorado River Drought Contingency Planning and What it Means for Municipal, Tribal, and Agricultural Water Users in Arizona. Presentation and Discussion, Universities Council on Water Resources (UCOWR) Annual Conference, Snowbird, UT.
June 14, 2019, Sharon Megdal, Water Challenges and Solutions in the West. Presentation and Discussion, Research Experience for Undergraduates (REU) Program, University of Arizona, Tucson, AZ.
June 27, 2019, Jean McLain, Environmental antibiotic resistance: how does it fit in with the One Health concept? Presentation, 2019 Arizona Infectious Disease Conference, Phoenix, AZ.
July 9, 2019, Sharon Megdal, Water Challenges and Solutions in Arizona and the West. Presentation, Sustainable Bioeconomy for Arid Regions Summer Education Program, University of Arizona, Tucson, AZ.
August 26, 2019, Sharon Megdal, Exploring the Essential Nature of Water for Sustained and Resilient Manufacturing. Panelist, Congressional Conference on Water, Arizona State University, Tempe, AZ.
September 11, 2019, Sharon Megdal, Video remarks. Presentation, Arizona Israel Technology Alliance, Phoenix, AZ.
September 12, 2019, Sharon Megdal, Report of the Science Committee. Presentation, JNF-University of Arizona-Arava Region Joint Institute for Global Food, Water and Energy Security, Washington, DC.
September 21, 2019, Sharon Megdal, Award Acceptance Remarks on behalf of the University of Arizona. Arizona Forward's 39th Annual Environmental Excellence Awards and 50th Anniversary Gala and Video, Phoenix, AZ.

September 23, 2019, Jean McLain, Recycled municipal wastewater and antibiotic resistance: is there a connection? Presentation, Idaho State University Department of Biology Fall Seminar Series, Pocatello, ID.
September 25, 2019, Sharon Megdal, Institutional Setting for Upper Santa Cruz Watershed Binational Groundwater Assessment. Presentation, Geological Society of America (GSA) Annual Conference, Phoenix, AZ.
September 25, 2019, Elia Tapia, Impacts of Variable Climate and Effluent Flows on the Transboundary Santa Cruz Aquifer. Presentation, Geological Society of America (GSA) Annual Conference, Phoenix, AZ.
September 25, 2019, Jacob Petersen-Perlman, Institutional Frameworks for Effluent Water Use in the Ambos Nogales Region of Arizona and Sonora. Presentation, Geological Society of America (GSA) Annual Conference, Phoenix, AZ.
October 4, 2019, Sharon Megdal, Water for Agriculture and Other Water Challenges in the West. Presentation, National Young Farmer's Alliance, Tucson, AZ.
October 12, 2019, Susanna Eden & Claire Zucker, Know About Your Water Green Valley – Sahuarita. Presentation, Democratic Club of the Santa Rita Area, Green Valley, AZ.
October 14, 2019, McLain, J.E. K. Cooper, K. Pogreba-Brown, and M. Verhougstraete. Breaking down scientific silos: using One Health to address the world's wicked problems. TENWEST Impact Festival, Tucson, AZ.
October 17, 2019, Claire Zucker & Susanna Eden, Arizona Runs on Water - Water 101. Presentation, Maricopa County Cooperative Extension, Phoenix, AZ.
October 18, 2019, Sharon Megdal, Water in Region. Presentation, Metropolitan Pima Alliance Monthly Breakfast Meeting, Tucson, AZ.
October 25, 2019, Sharon Megdal, Academia's Role in Science Diplomacy-Connecting Regions: Bridging through Water. Presentation, Conference on Sustainable Development for the Americas: Science, Health and Engineering Policy and Diplomacy, Tucson, AZ.
October 25, 2019, Elia Tapia, The U.S.-Mexico Transboundary Aquifer Assessment Program: Implementation, Evolution, and Lessons Learned. Presentation, Conference on Sustainable Development for the Americas: Science, Health and Engineering Policy and Diplomacy, Tucson, AZ.
October 30, 2019, Sharon Megdal, Closing Reflections, Panel presentation, Colorado River Conversations: Integrating Science and Identifying Solutions Conference, The University of Arizona, Tucson, AZ.
October 31, 2019, Jean McLain, Antimicrobial resistance and the environment: separating the knowns from the unknowns. Lecture, EPID679: One Health Applications and Practice, University of Arizona, Tucson, AZ.
November 1, 2019, Susanna Eden & Claire Zucker, Know About Your Water Green Valley – Sahuarita. Presentation, Town of Sahuarita Council Chambers, Sahuarita, AZ.
November 5, 2019, Sharon Megdal, Getting to Yes in Arizona on the Lower Colorado River Drought Contingency Plan. Presentation, American Water Resources Association Annual Conference, Salt Lake City, UT.
November 6, 2019, Jean McLain, The unique role of the Extension specialist. Presentation, New Extension Faculty Orientation, Tucson, AZ.
November 7, 2019, Sharon Megdal, Arizona Water Policy and the Drought Contingency Plan. Lecture, University of Arizona (LAW 669: Environmental Law, Professor Kirsten Engel), Tucson, AZ.
November 15, 2019, Elia Tapia, Elia, Determinación del impacto del cambio climático y decisiones binacionales de manejo de agua en el Acuífero Transfronterizo Río Santa Cruz, en la frontera Sonora-Arizona. Lecture, Semana Cultural de Geología, Universidad de Sonora, Hermosillo, Mexico.
November 16, 2019, Susanna Eden & Claire Zucker, Know About Your Water Green Valley – Sahuarita, Presentation, Green Valley Recreation East Campus, AZ.
November 19, 2019, Sharon Megdal, Implementing Technologies Across Borders. Session moderator, WATEC 2019, Tel Aviv, Israel.
November 19, 2019, Sharon Megdal, Water and Politics. Panelist, WATEC 2019, Tel Aviv, Israel.
November 20, 2019, Jean McLain, Negotiation techniques. Presentation, University of Arizona Women in STEM Student Council, Tucson, AZ.
December 3, 2019, Sharon Megdal, Tribal Water in Arizona and the Colorado River Basin. Presentation, The National Academies of Sciences, Engineering, Medicine Board on Agriculture and Natural Resources, Ak-Chin Hotel and Casino, AZ.
December 4, 2019, Sharon Megdal, Water Issues in Israel and Arizona. Discussion Leader, Jewish Federation of Greater Phoenix, Scottsdale, AZ.

Section 8 - Arizona Project Wet Presentations

Date	Title	Presenter/Contact	Location / School	Attendance (if available)
January 8, 2019	Groundwater Flow Model	APW	Henry Elementary, Tucson, AZ	30
January 14, 2019	Groundwater Flow Model	APW	Walter Douglas Elementary, Tucson, AZ	90
January 15, 2019	Sweetwater Wetlands Festival	APW	Henry Elementary, Tucson, AZ	30
January 15, 2019	Riparian Presentations	Sandra Hurlbut	Sonoran Foothills, Phoenix, AZ	15
January 16, 2019	Groundwater Flow Model	APW	Howell Elementary, Tucson, AZ	52
January 17, 2019	Groundwater Flow Model	APW	Carrillo Magnet School, Tucson, AZ	48
January 18, 2019	Sweetwater Wetlands Festival	APW	Howell Elementary, Tucson, AZ	45
January 22, 2019	Groundwater Flow Model	APW	Paulo Freire Freedom School, Tucson, AZ	52

January 22, 2019	Groundwater Flow Model	APW	Paulo Freire Freedom School, Tucson, AZ	60
January 23, 2019	Water Quality Testing	APW	Andrada Polytechnic High School, Tucson, AZ	75
January 23, 2019	Groundwater Flow Model	APW	Andrada Polytechnic High School, Tucson, AZ	55
January 24, 2019	Sweetwater Wetlands Festival	APW	Carrillo Magnet School, Tucson, AZ	43
January 25, 2019	Sweetwater Wetlands Festival	APW	Banks Elementary, Tucson, AZ	54
January 30, 2019	Groundwater Flow Model	APW	Richardson Elementary, Tucson, AZ	50
January 31, 2019	Groundwater Flow Model	APW	Roberts-Naylor K-8 , Tucson, AZ	40
February 3, 2019	CAP Engineering Challenge	Sandra Hurlbut	Maryland School, Phoenix, AZ	99
February 4, 2019	Water Quality Testing	APW	Walter Douglas Elementary, Tucson, AZ	90
February 4, 2019	Groundwater Flow Model	APW	Collier Elementary, Tucson, AZ	34
February 5, 2019	Groundwater Flow Model	APW	Soleng Tom Elementary, Tucson, AZ	70
February 5, 2019	Groundwater Flow Model	APW	John E. White Elementary, Tucson, AZ	66
February 5, 2019	Riparian Presentations	Sandra Hurlbut, Annapurna Chitnavis	Casa Grande Middle School, Casa Grande, AZ	125
February 6, 2019	Riparian Presentations	APW	Desert Spirit Elementary, Glendale, AZ	92
February 8, 2019	Groundwater Flow Model	APW	Centennial Elementary, Tucson, AZ	57
February 8, 2019	Sweetwater Wetlands Festival	APW	Fruchthendler Elementary, Tucson, AZ	57
February 8, 2019	AquaSTEM	Sandra Hurlbut	Desert Spirit Elementary, Glendale, AZ	112
February 11, 2019	Water Quality Testing	APW	Flowing Wells High, Tucson, AZ	93
February 11, 2019	Groundwater Flow Model	APW	Canyon del Oro High, Tucson, AZ	49
February 11, 2019	Sweetwater Wetlands Festival	APW	Collier Elementary, Tucson, AZ	32
February 11, 2019	Riparian Presentations	Sandra Hurlbut, Annapurna Chitnavis, Ely Duarte	Maryland School, Phoenix, AZ	75
February 12, 2019	Sweetwater Wetlands Festival	APW	Richardson Elementary, Tucson, AZ	50
February 12, 2019	Groundwater Flow Model	Sandra Hurlbut	Tempe High School, Tempe, AZ	60
February 13, 2019	Sweetwater Wetlands Festival	APW	Soleng Tom Elementary, Tucson, AZ	90
February 13, 2019	AquaSTEM	Sandra Hurlbut	Verrado Middle, Buckeye, AZ	36
February 14, 2019	Groundwater Flow Model	APW	Hendricks Elementary, Tucson, AZ	78
February 14, 2019	AquaSTEM	Sandra Hurlbut	Verrado Middle, Buckeye, AZ	50
February 15, 2019	Groundwater Flow Model	APW	Homer Davis Elementary, Tucson, AZ	52
February 15, 2019	Groundwater Flow Model	APW	Laguna Elementary, Tucson, AZ	53
February 18, 2019	Sweetwater Wetlands Festival	APW	Centennial Elementary, Tucson, AZ	57
February 19, 2019	Water Quality Testing	APW	Canyon del Oro High, Tucson, AZ	25
February 19, 2019	Sweetwater Wetlands Festival	APW	Hendricks Elementary, Tucson, AZ	74
February 19, 2019	Groundwater Flow Model	Sandra Hurlbut	Highland High, Gilbert, AZ	13
February 20, 2019	Sweetwater Wetlands Festival	APW	Homer Davis Elementary, Tucson, AZ	66

February 25, 2019	Groundwater Flow Model	APW	Walter Douglas Elementary, Tucson, AZ	73
February 25, 2019	Groundwater Flow Model	Ely Duarte, Annapurna Chitnavis	New World Educational Center, Phoenix, AZ	56
February 26, 2019	Groundwater Flow Model	Ely Duarte, Annapurna Chitnavis	Mountain View High, Tucson, AZ	90
February 27, 2019	Groundwater Flow Model	APW	Mary Meredith K-12, Tucson, AZ	10
February 28, 2019	Sweetwater Wetlands Festival	APW	Laguna Elementary, Tucson, AZ	49
March 4, 2019	Groundwater Flow Model	APW	Craycroft Elementary, Tucson, AZ	104
March 4, 2019	Rainwater Harvesting Challenge	Sandra Hurlbut, Annapurna Chitnavis	Verrado Middle, Buckeye, AZ	48
March 5, 2019	Groundwater Flow Model	APW	Doolen Middle School, Tucson, AZ	53
March 5, 2019	Rainwater Harvesting Challenge	Sandra Hurlbut, Annapurna Chitnavis	Verrado Middle, Buckeye, AZ	36
March 6, 2019	Riparian Presentations	Sandra Hurlbut	Copper Creek Elementary, Oro Valley, AZ	60
March 7, 2019	Riparian Presentations	Sandra Hurlbut	Copper Creek Elementary, Oro Valley, AZ	60
March 8, 2019	Sweetwater Wetlands Discovery Journey	APW	Santa Clara Elementary, Tucson, AZ	70
March 14, 2019	Sweetwater Wetlands Festival	APW	Innovation Academy, Tucson, AZ	52
March 15, 2019	Groundwater Flow Model	APW	St. Michael's, Tucson, AZ	32
March 15, 2019	Sweetwater Wetlands Festival	APW	Craycroft Elementary, Tucson, AZ	63
March 19, 2019	Groundwater Flow Model	Annapurna Chitnavis	Odessey Prep Academy, Buckeye, AZ	81
March 21, 2019	Sweetwater Wetlands Festival	APW	Walter Douglas Elementary, Tucson, AZ	80
March 22, 2019	Sweetwater Wetlands Festival	APW	St. Michael's School, Tucson, AZ	34
March 25, 2019	Groundwater Flow Model	APW	Gale Elementary, Tucson, AZ	45
March 25, 2019	Sweetwater Wetlands Festival	APW	John E. White Elementary, Tucson, AZ	35
March 26, 2019	Sweetwater Wetlands Discovery Journey	APW	Hendricks Elementary, Tucson, AZ	23
March 26, 2019	Groundwater Flow Model	Annapurna Chitnavis	Sonoran Heights Elementary, Surprise, AZ	120
March 27, 2019	Sweetwater Wetlands Discovery Journey	APW	Mary Meredith K-12, Tucson, AZ	2
March 28, 2019	Sweetwater Wetlands Festival	APW	Grijalava Elementary, Tucson, AZ	110
March 29, 2019	Sweetwater Wetlands Festival	APW	John E. White Elementary, Tucson, AZ	51
April 1, 2019	Groundwater Flow Model	APW	Los Amigos Technology Academy, Tucson, AZ	100
April 2, 2019	Sweetwater Wetlands Festival	APW	Gale Elementary, Tucson, AZ	46
April 3, 2019	Groundwater Flow Model	Sandra Hurlbut	Surprise Elementary, Surprise, AZ	100

April 4, 2019	Sweetwater Wetlands Festival	APW	Castlehill Country Day School, Tucson, AZ	22
April 8, 2019	Groundwater Flow Model	APW	Cavett Elementary, Tucson, AZ	27
April 11, 2019	Groundwater Flow Model	APW	McCorkle Academy K-8, Tucson, AZ	42
April 12, 2019	Groundwater Flow Model	APW	Canyon del Oro High, Tucson, AZ	25
April 15, 2019	Sweetwater Wetlands Festival	APW	Cavett Elementary, Tucson, AZ	38
April 16, 2019	Sweetwater Wetlands Festival	APW	Craycroft Elementary, Tucson, AZ	60
April 17, 2019	Groundwater Flow Model	APW	Roskrige Bilingual K-8, Tucson, AZ	39
April 18, 2019	Groundwater Flow Model	APW	Esperanza Elementary School, Tucson, AZ	52
April 22, 2019	Groundwater Flow Model	APW	Lynn/Urquides Elementary, Tucson, AZ	51
April 24, 2019	Groundwater Flow Model	APW	Wheeler Elementary, Tucson, AZ	52
April 25, 2019	Sweetwater Wetlands Discovery Journey	APW	Butterfield Elementary, Tucson, AZ	80
April 25, 2019	Rainwater Harvesting Challenge	Sandra Hurlbut	Desert Spirit Elementary, Glendale, AZ	100
April 26, 2019	Sweetwater Wetlands Festival	APW	Lynn/Urquides Elementary, Tucson, AZ	58
April 29, 2019	Sweetwater Wetlands Festival	APW	Esperanza Elementary School, Tucson, AZ	64
April 30, 2019	Sweetwater Wetlands Festival	APW	Los Amigos Technology Academy, Tucson, AZ	100
May 1, 2019	Groundwater Flow Model	APW	Lawrence 3-8, Tucson, AZ	50
May 2, 2019	Sweetwater Wetlands Festival	APW	Roskrige Bilingual K-8, Tucson, AZ	42
May 2, 2019	Rainwater Harvesting Challenge	Sandra Hurlbut	Orangewood Elementary, Phoenix, AZ	70
May 3, 2019	Sweetwater Wetlands Festival	APW	Wheeler Elementary, Tucson, AZ	58
May 6, 2019	Groundwater Flow Model	APW	Canyon del Oro High, Tucson, AZ	30
May 7, 2019	Groundwater Flow Model	APW	Borman K-8 Tucson, AZ	50
May 7, 2019	Groundwater Flow Model	APW	Holladay Magnet Elementary, Tucson, AZ	25
May 9, 2019	Sweetwater Wetlands Festival	APW	Borman K-8, Tucson, AZ	65
May 9, 2019	Sweetwater Wetlands Festival	APW	Holladay Magnet Elementary, Tucson, AZ	29
May 9, 2019	Groundwater Flow Model	Sandra Hurlbut	Desert Oasis Elementary, Phoenix, AZ	70
May 10, 2019	Groundwater Flow Model	APW	Tolson Elementary, Tucson, AZ	50
May 10, 2019	Groundwater Flow Model	Sandra Hurlbut	Sonoran Heights Elementary, Surprise, AZ	112
May 13, 2019	Sweetwater Wetlands Festival	APW	Vesey Elementary, Tucson, AZ	62
May 14, 2019	Groundwater Flow Model	Sandra Hurlbut	Legacy Traditional, Tucson, AZ	132
May 15, 2019	Sweetwater Wetlands Festival	APW	Vesey Elementary, Tucson, AZ	76
May 15, 2019	Groundwater Flow Model	Sandra Hurlbut	Legacy Traditional, Tucson, AZ	99
May 17, 2019	Sweetwater Wetlands Festival	APW	Tolson Elementary, Tucson, AZ	48
August 22, 2019	Groundwater Flow Model	APW	Anza Trail School, Sahuarita, AZ	28
August 29, 2019	Groundwater Flow Model	Sandra Hurlbut	Verrado Middle, Buckeye, AZ	180
September 3, 2019	Groundwater Flow Model	APW	Paulo Freire Freedom School, Tucson, AZ	24

September 12, 2019	Groundwater Flow Model	APW	Los Niños Elementary, Tucson, AZ	60
September 16, 2019	Groundwater Flow Model	APW	Esperanza Elementary School, Tucson, AZ	90
September 17, 2019	Groundwater Flow Model	APW	Mission Manor Elementary, Tucson, AZ	86
September 17, 2019	Groundwater Flow Model	APW	Project MORE High, Tucson, AZ	14
September 19, 2019	Sweetwater Wetlands Festival	APW	Los Niños Elementary, Tucson, AZ	64
September 20, 2019	Groundwater Flow Model	APW	Summit View Elementary, Tucson, AZ	57
September 23, 2019	Sweetwater Wetlands Festival	APW	Esperanza Elementary School, Tucson, AZ	90
September 24, 2019	Groundwater Flow Model	APW	Sierra 2-8, Tucson, AZ	120
September 25, 2019	Groundwater Flow Model	APW	Drexel Elementary, Tucson, AZ	37
September 25, 2019	Groundwater Flow Model	APW	Rivera Elementary, Tucson, AZ	79
September 26, 2019	Sweetwater Wetlands Festival	APW	Sierra 2-8, Tucson, AZ	120
September 27, 2019	Sweetwater Wetlands Festival	APW	Summit View Elementary, Tucson, AZ	74
September 30, 2019	Groundwater Flow Model	APW	Elvira Elementary, Tucson, AZ	79
September 30, 2019	Groundwater Flow Model	APW	Alice Vail Middle, Tucson, AZ	79
October 1, 2019	Sweetwater Wetlands Festival	APW	Rivera Elementary, Tucson, AZ	85
October 3, 2019	Rainwater Harvesting Challenge	APW	Apollo Middle, Tucson, AZ	90
October 3, 2019	Sweetwater Wetlands Festival	APW	Elvira Elementary, Tucson, AZ	92
October 8, 2019	Rainwater Harvesting Challenge	APW	Apollo Middle, Tucson, AZ	86
October 9, 2019	Groundwater Flow Model	Sandra Hurlbut	Asante Prep Academy, Surprise, AZ	32
October 10, 2019	Groundwater Flow Model	Sandra Hurlbut	Marley Park Elementary, Surprise, AZ	90
October 11, 2019	Groundwater Flow Model	Sandra Hurlbut	Mountain View School, Tucson, AZ	99
October 14, 2019	Groundwater Flow Model	APW	Presidio High, Tucson, AZ	35
October 15, 2019	Groundwater Flow Model	APW	Liberty Elementary, Tucson, AZ	115
October 17, 2019	Rainwater Harvesting Challenge	APW	Gallego Intermediate, Tucson, AZ	160
October 18, 2019	Sweetwater Wetlands Festival	APW	Liberty Elementary, Tucson, AZ	120
October 18, 2019	Groundwater Flow Model	Sandra Hurlbut	Kyrene Middle, Tempe, AZ	136
October 21, 2019	Rainwater Harvesting Challenge	APW	Lauffer Middle, Tucson, AZ	167
October 22, 2019	Groundwater Flow Model	Sandra Hurlbut	Sonoran Heights Elementary, Surprise, AZ	64
October 23, 2019	Groundwater Flow Model	Nat Tilden	Sunset Hills Elementary, Surprise, AZ	127
October 25, 2019	Groundwater Flow Model	Nat Tilden	El Mirage Elementary, El Mirage, AZ	77
October 28, 2019	Rainwater Harvesting Challenge	APW	Apollo Middle, Tucson, AZ	93

October 29, 2019	Sweetwater Wetlands Festival	APW	Mission Manor Elementary, Tucson, AZ	90
October 29, 2019	Groundwater Flow Model	Nat Tilden	Dysart Elementary, El Mirage, AZ	93
October 29, 2019	Rainwater Harvesting Challenge	Sandra Hurlbut	Maryland School, Phoenix, AZ	99
October 30, 2019	Groundwater Flow Model	Sandra Hurlbut	West Point Elementary, Surprise, AZ	87
October 31, 2019	Groundwater Flow Model	Nat Tilden	Surprise Elementary, Surprise, AZ	90
November 1, 2019	Rainwater Harvesting Challenge	APW	Apollo Middle, Tucson, AZ	90
November 1, 2019	Sweetwater Wetlands Festival	APW	Drexel Elementary, Tucson, AZ	64
November 1, 2019	Groundwater Flow Model	Sandra Hurlbut	Canyon Ridge Elementary, Tucson, AZ	93
November 4, 2019	Groundwater Flow Model	APW	Santa Clara Elementary, Tucson, AZ	60
November 4, 2019	Rainwater Harvesting Challenge	APW	Challenger School, Tucson, AZ	96
November 5, 2019	Rainwater Harvesting Challenge	APW	Challenger School, Tucson, AZ	91
November 5, 2019	Groundwater Flow Model	Sandra Hurlbut	Kingswood Elementary, Surprise, AZ	84
November 6, 2019	Groundwater Flow Model	Sandra Hurlbut	Arlington Elementary, Arlington, AZ	40
November 7, 2019	Rainwater Harvesting Challenge	APW	Challenger School, Tucson, AZ	85
November 8, 2019	Sweetwater Wetlands Festival	APW	Santa Clara Elementary, Tucson, AZ	58
November 8, 2019	Groundwater Flow Model	Sandra Hurlbut	Ashton Ranch Elementary, Surprise, AZ	50
November 12, 2019	RainMAX	APW	Sierra 2-8, Tucson, AZ	80
November 12, 2019	Groundwater Flow Model	Sandra Hurlbut	Western Peaks Elementary, Surprise, AZ	82
November 13, 2019	Groundwater Flow Model	Nat Tilden	Freedom Traditional Academy, Surprise, AZ	29
November 15, 2019	RainMAX	APW	Sierra 2-8, Tucson, AZ	86
November 18, 2019	RainMAX	APW	Sierra 2-8, Tucson, AZ	85
November 20, 2019	Groundwater Flow Model	Sandra Hurlbut	Maryland School, Phoenix, AZ	99
November 22, 2019	Groundwater Flow Model	Sandra Hurlbut, Nat Tilden	Rancho Gabriela Elementary, Surprise, AZ	78
November 29, 2019	Groundwater Flow Model	APW	Basis North, Tucson, AZ	23
December 3, 2019	Groundwater Flow Model	APW	Craycroft Elementary, Tucson, AZ	124
December 6, 2019	Sweetwater Wetlands Festival	APW	Craycroft Elementary, Tucson, AZ	123
December 6, 2019	Groundwater Flow Model	Sandra Hurlbut	Canyon Ridge Elementary, Tucson, AZ	93
December 17, 2019	Sweetwater Wetlands Discovery Journey	APW	McCorkle Academy K-8, Tucson, AZ	83
December 19, 2019	Groundwater Flow Model	Sandra Hurlbut, Nat Tilden	Imagine Rosefield, Surprise, AZ	150

Section 9 - Arizona Project Wet Events

Date	Title	Presenter/ Contact	Location / School	Attendance (if available)
January 10, 2019	Water Scene Investigation	APW	Doolen Middle, Tucson, AZ	127
January 11, 2019	Face Event	APW	Changemaker High, Tucson, AZ	15
January 11 – 18, 2019	Water Scene Investigation	APW	Canyon Breeze Elementary, Avondale, AZ	33
January 11 – 18, 2019	Water Scene Investigation	APW	Canyon Breeze Elementary, Avondale, AZ	32
January 11 – 18, 2019	Water Scene Investigation	APW	Canyon Breeze Elementary, Avondale, AZ	32
January 16, 2019	Field Days	APW	Cragin Elementary, Tucson, AZ	42
January 17, 2019	Field Days	APW	Roadrunner Elementary, Tucson, AZ	60
January 17, 2019	STEM Expo	APW	Senita Valley Family Elementary, Tucson, AZ	35
January 18, 2019	Face Event	APW	Changemaker High, Tucson, AZ	16
January 18, 2019	Field Days	APW	Safford Elementary, Tucson, AZ	50
January 18 and 25, 2019	Water Scene Investigation	APW	Michael Anderson Elementary, Avondale, AZ	33
January 18 and 25, 2019	Water Scene Investigation	APW	Michael Anderson Elementary, Avondale, AZ	32
January 18 and 25, 2019	Water Scene Investigation	APW	Michael Anderson Elementary, Avondale, AZ	32
January 18 - 31, 2019	Water Festival	Chuck Dugan	Casa Grande In-Class, Casa Grande, AZ	810
January 23, 2019	Science Night	APW	Legacy Traditional, Tucson, AZ	49
January 24, 2019	Science Night	APW	Estes Elementary, Marana, AZ	98
January 28 – February 4, 2019	Water Scene Investigation	APW	Canyon del Oro High, Tucson, AZ	55
January 29 – February 5, 2019	Water Scene Investigation	APW	AZ College Prep-Oakland, Chandler, AZ	26
January 29 – February 5, 2019	Water Scene Investigation	APW	AZ College Prep-Oakland, Chandler, AZ	27
January 29 – February 5, 2019	Water Scene Investigation	APW	AZ College Prep-Oakland, Chandler, AZ	26
January 29 – February 5, 2019	Water Scene Investigation	APW	AZ College Prep-Oakland, Chandler, AZ	22
January 29 – February 5, 2019	Water Scene Investigation	APW	AZ College Prep-Oakland, Chandler, AZ	25
January 31, 2019	STEM Night	APW	Cross Middle, Tucson, AZ	17
February 1, 2019	Science Night	APW	Presidio School, Tucson, AZ	49
February 1, 2019	Science Night	APW	El Presidio Day School, Tucson, AZ	49
February 5, 2019	Science Night	APW	Kellond Elementary, Tucson, AZ	60
February 6, 2019	STEM Night	APW	Walter Douglas Elementary, Tucson, AZ	20
February 6, 2019	Outreach	APW	Tucson Children’s Museum, Tucson, AZ	65

February 6, 2019	Water Festival	Julie Hasty	Peoria, AZ	768
February 7, 2019	Ted Walker Day	APW	Old Tucson Studios, Tucson, AZ	648
February 7, 2019	Science Night	APW	Cottonwood Elementary, Tucson, AZ	125
February 8, 2019	Face Event	APW	Changemaker High, Tucson, AZ	15
February 11, 2019	Toilet Tank Bank	Chuck Dugan	Casa Grande Elementary Schools, Casa Grande, AZ	837
February 12, 2019	Face Event	APW	Paulo Freire Freedom School, Tucson, AZ	36
February 12 and 19, 2019	Water Scene Investigation	APW	Garden Lakes Elementary, Avondale, AZ	34
February 12 and 19, 2019	Water Scene Investigation	APW	Garden Lakes Elementary, Avondale, AZ	35
February 12 and 19, 2019	Water Scene Investigation	APW	Garden Lakes Elementary, Avondale, AZ	36
February 14, 2019	Water Festival	Chuck Dugan	Casa Grande, AZ	480
February 14, 2019	Water Festival	Chuck Dugan	Casa Grande, AZ	320
February 16, 2019	Discovery Engineering	APW	Park Place Mall, Tucson, AZ	47
February 19, 2019	Science Night	APW	Banks Elementary, Tucson, AZ	70
February 20, 2019	Water Festival	Nicole Kallman	Lake Havasu, AZ	425
February 25, 2019	School Water Audit Program	APW	Tucson Country Day School, Tucson, AZ	69
February 27, 2019	Field Days	Sandra Hurlbut Annapurna Chitnavis	Rio Salado College, Tempe, AZ	21
February 28, 2019	Mega Night	APW	Booth-Fickett Magnet, Tucson, AZ	17
February 28, 2019	Field Days	Sandra Hurlbut, Annapurna Chitnavis	Rio Salado College, Tempe, AZ	97
March 1, 2019	Field Days	Sandra Hurlbut, Annapurna Chitnavis, Ely Duarte, Pam Justice	Rio Salado College, Tempe, AZ	106
March 1, 2019	Water Festival	Nicole Kallman	Sahuarita, AZ	565
March 2, 2019	Outreach	APW	Tucson Festival of Books, Tucson AZ	465
March 3, 2019	Outreach	APW	Tucson Festival of Books, Tucson AZ	112
March 6, 7, and 19, 2019	Water Festival	Julie Hasty	Gilbert, AZ	1749
March 7, 2019	Family Math and Science Night	APW	Leman Academy, Tucson, AZ	366
March 9, 2019	Teach Outreach	APW	Camp Cooper, Tucson, AZ	12
March 12, 2019	Field Days	Sandra Hurlbut	Rio Salado College, Tempe, AZ	15

March 13, 2019	STEM Night	APW	Robins K-8, Tucson, AZ	45
March 14, 2019	Field Days	Sandra Hurlbut	Rio Salado College, Tempe, AZ	53
March 14, 2019	Water Festival	Julie Hasty	Madison School District, Phoenix, AZ	507
March 19 and 26, 2019	Water Scene Investigation	APW	Estrella Vista Elementary, Avondale, AZ	29
March 19 and 26, 2019	Water Scene Investigation	APW	Estrella Vista Elementary, Avondale, AZ	27
March 19 and 26, 2019	Water Scene Investigation	APW	Estrella Vista Elementary, Avondale, AZ	32
March 19 and 26, 2019	Water Scene Investigation	APW	Estrella Vista Elementary, Avondale, AZ	33
March 20, 2019	STEM Night	Sandra Hurlbut, Ely Duarte, Annapurna Chitnavis	Alta Loma Elementary, Peoria, AZ	21
March 21, 2019	Water Festival	Julie Hasty	Littleton, Avondale, AZ	673
March 23, 2019	Sustainable Landscape Expo	APW	Tucson, AZ	20
March 26, 2019	Water Festival	Chuck Dugan	Mesquite Elementary, Casa Grande, AZ	90
March 27, 2019	School Water Audit Program	APW	Mesquite High, Gilbert, AZ	26
March 27, 2019	Field Days	Sandra Hurlbut	Hassayampa, AZ	115
March 28, 2019	Water Festival	Nicole Kallman	Tucson-Amphi, Oro Valey, AZ	682
March 29, 2019	Field Days	Sandra Hurlbut	Hassayampa, AZ	63
March 29 and April 8, 2019	Water Scene Investigation	APW	Doolen Middle, Tucson, AZ	80
April 7, 2019	STEM Event	APW	Tucson Hebrew Academy, Tucson, AZ	42
April 10, 2019	Water Festival	Chuck Dugan	Cottonwood Elementary, Vail, AZ	70
April 17 and 24, 2019	Water Scene Investigation	APW	Mary Meredith K-12, Tucson, AZ	8
April 20, 2019	Outreach	APW	Tucson Earth Day Festival, Tucson, AZ	120
April 25, 2019	Water Festival	Chuck Dugan	Apache Junction, AZ	330
April 25, 2019	Water Festival	Chuck Dugan	Apache Junction, AZ	330
April 27, 2019	Face Event	APW	University of Arizona, Tucson, AZ	105
May 2, 2019	Water Festival	Julie Hasty	Southern Gila County, Globe, AZ	357
May 3, 2019	Water Festival	Julie Hasty	Osborn School District, Phoenix, AZ	305
May 8, 2019	School Water Audit Program	APW	Mary Meredith K-12, Tucson, AZ	4
May 9, 2019	Water Festival	Nicole Kallman	Nogales, AZ	475
May 13, 2019	Water Scene Investigation	APW	Canyon del Oro High, Tucson, AZ	30

May 15, 2019	School Water Audit Program	Chuck Dugan	Mesquite Elementary, Casa Grande, AZ	26
May 20, 2019	Face Event	APW	McCorkle Academy K-8, Tucson, AZ	45
July 13, 2019	Back to School Bash	APW	Ward 4, Tucson, AZ	425
August 5, 2019	Make it Mondays! Science	APW	Tucson Children's Museum, Tucson, AZ	30
August 14, 2019	Exploring Heat Monitoring	APW	Basis High, Tucson, AZ	10
August 17, 2019	Teacher Appreciation Night	APW	Arizona-Sonora Desert Museum, Tucson, AZ	
August 20, 2019	Water Scene Investigation	APW	Borton Elementary, Tucson, AZ	20
August 21, 2019	Water Scene Investigation	APW	Basis North, Tucson, AZ	10
September 16, 2019	Exploring Heat Monitoring	APW	Canyon del Oro High, Tucson, AZ	152
September 17, 2019	Water Festival	Julie Hasty	Payson, AZ	180
September 19, 2019	Water Festival	Julie Hasty	Flagstaff, AZ	736
September 23, 2019	Exploring Heat Monitoring	APW	Drachman K-8, Tucson, AZ	16
September 26, 2019	Water Festival	Chuck Dugan	Maricopa, AZ	
October 3, 2019	Water Festival	Pam Justice	Verde Valley, AZ	429
October 7, 2019	Field Days	APW	Innovation Academy, Tucson, AZ	57
October 8, 2019	Field Days	APW	Innovation Academy, Tucson, AZ	29
October 9, 2019	Water Festival	Julie Hasty	North Peoria, AZ	668
October 16, 17, 19, 2019	Water Festival	Julie Hasty	Litchfield Park, AZ	1183
October 21 and 28, 2019	Water Scene Investigation	APW	Navarette Elementary, Chandler, AZ	25
October 21 and 28, 2019	Water Scene Investigation	APW	Navarette Elementary, Chandler, AZ	26
October 21 and 28, 2019	Water Scene Investigation	APW	Navarette Elementary, Chandler, AZ	25
October 21 and 28, 2019	Water Scene Investigation	APW	Navarette Elementary, Chandler, AZ	26
October 24, 2019	Field Days	APW	Innovation Academy, Tucson, AZ	58
October 24, 2019	Field Days	Sandra Hurlbut	Hassayampa, AZ	162
October 24, 2019	Science Night	Pam Justice, Sandra Hurlbut	Santa Fe Elementary, Peoria, AZ	75
October 24, 2019	Water Festival	Julie Hasty	Roosevelt Elementary, Tucson, AZ	570
October 25 and November 1, 2019	Water Scene Investigation	APW	Canyon Breeze Elementary, Avondale, AZ	32
October 25 and November 1, 2019	Water Scene Investigation	APW	Canyon Breeze Elementary, Avondale, AZ	32
October 25 and November 1, 2019	Water Scene Investigation	APW	Canyon Breeze Elementary, Avondale, AZ	32
October 29, 2019	Water Festival	Julie Hasty	Tempe, AZ	317

November 5, 2019	Water Festival	Pam Justice	Buckeye, AZ	350
November 6, 2019	Field Days	APW	DeGrazia Elementary, Tucson, AZ	26
November 7, 2019	Water Festival	Kerry Schwartz	Yuma, AZ	
November 7, 8, and 19, 2019	Water Festival	Julie Hasty	Chandler, AZ	1413
November 14, 2019	Water Festival	Pearl Lam	Marana, AZ	795
November 21, 2019	Water Festival	Chuck Dugan	Florence, AZ	
November 22, 2019	Outreach	APW	Arizona STEM adventure, Tucson, AZ	400
December 2, 2019	Blended Learning	APW	Vail, AZ	19
December 9 – 10, 2019	Field Days	APW	Bonillas Elementary, Tucson, AZ	19
December 10, 2019	Water Festival	Miriam Aleman-Crouch	Florence, AZ	718
December 11, 2019	Field Days	APW	Presidio School, Tucson, AZ	38
December 12, 2019	Water Festival	Miriam Aleman-Crouch	Maricopa, AZ	535

Section 10 - Arizona Project Wet Volunteer Training

Date	Title	Presenter/ Contact	Location / School	Attendance (if available)
January 30, 2019	Peoria Volunteer Training	Julie Hasty, Nicole Kallman	Peoria Public Safety Administration Building, Peoria, AZ	23
February 8, 2019	CG Water Festival Training	Chuck Dugan	Abbott Nutrition, Casa Grande, AZ	10
February 12, 2019	CG Water Festival Training	Chuck Dugan	UA Extension Office - Casa Grande, AZ	8
February 14, 2019	Volunteer Affiliates	Chuck Dugan	Wells Fargo, Casa Grande, AZ	36
February 19, 2019	Lake Havasu Volunteer Training	Nicole Kallman, Ely Duarte	Lake Havasu City Operations, Lake Havasu, AZ	10
February 19, 2019	Lake Havasu Volunteer Training	Nicole Kallman, Ely Duarte	Lake Havasu High, Lake Havasu, AZ	20
February 19, 2019	Sahuarita HS Volunteer Training	Miriam Aleman-Crouch	Sahuarita High, Sahuarita, AZ	5
February 20, 2019	Osborn Volunteer Training	Julie Hasty	Maricopa County Cooperative Extension, Phoenix, AZ	15
February 26, 2019	HydroCats Volunteer Training	Betsy Wilkening, Miriach	Water Resources Research Center, Tucson, AZ	7
February 26, 2019	Sahaurita HS Volunteer Training	Tucson Water Educators	Sahuarita High, Sahuarita, AZ	16
February 28, 2019	Gilbert WF Volunteer Training	Julie Hasty	Gilbert Public Works, Gilbert, AZ	47

February 28, 2019	Sahuarita WF Volunteer Training	Betsy Wilkening, Holly Thomas-Hilburn	Sahuarita Police Department, Sahuarita, AZ	12
February 28, 2019	Sahuarita WF Volunteer Training	Nicole Kallman	Sahuarita Middle, Sahuarita, AZ	22
March 11, 2019	Madison WF Volunteer Training	Julie Hasty, Ely Duarte	Longview Community Rec Center, Phoenix, AZ	9
March 19, 2019	Littleton WF Volunteer Training	Julie Hasty, Ely Duarte	Avondale Municipal Operations Center, Avondale	5
March 19, 2019	CG Water Festival Training (AmeriCorps)	Chuck Dugan	Pinal County Fairgrounds, Casa Grande, AZ	12
March 26, 2019	Volunteer Affiliates	Chuck Dugan	Wells Fargo, Mesquite Creek, AZ	12
April 10, 2019	Volunteer Affiliates	Chuck Dugan	Wells Fargo, Cottonwood, AZ	10
April 23, 2019	AJ Water Festival Training	Chuck Dugan, Ely Duarte	AJ Multi-Generational Center, Apache Junction, AZ	24
April 25, 2019	Volunteer Affiliates	Chuck Dugan, Nicole Kallman	Apache Junction Water Festival, Apache Junction, AZ	52
April 26, 2019	Osborn Volunteer Training	Julie Hasty, Ely Duarte	Symantec, Phoenix, AZ	12
April 30, 2019	Southern Gila WF Volunteer Training	Julie Hasty, Nicole Kallman	Bullion Plaza, Miami, AZ	19
May 7, 2019	Nogales High School Volunteer Training	Holly Thomas-Hilburn, Kerry Schwartz	Nogales High, Nogales, AZ	47
August 26, 2019	Verde Valley Volunteer Training	Nicole Kallman, Pearl Lam	Yavapai County Roads Office, Camp Verde, AZ	2
September 10, 2019	Payson Volunteer Training	Julie Hasty	Payson Town Hall, Payson, AZ	10
September 11, 2019	Flagstaff NAU Volunteer Training	Kerry Schwartz	Northern Arizona University, Flagstaff, AZ	60
October 2, 2019	Peoria Volunteer Training	Julie Hasty	Peoria Public Safety Administration Building, Peoria, AZ	25
October 10, 2019	Litchfield Volunteer Training	Julie Hasty	Avondale Municipal Operations Center, Avondale, AZ	8
October 10, 2019	Litchfield Volunteer Training	Julie Hasty	Palm Valley Water Reclamation Facility, Goodyear, AZ	10
October 15, 2019	Roosevelt HS Volunteer Training	Bailey Harper, Julie Hasty	South Mountain High, Phoenix, AZ	13
October 18, 2019	Roosevelt Volunteer Training	Julie Hasty	Maricopa County Cooperative Extension, Phoenix, AZ	6
October 22, 2019	Tempe Volunteer Training	Julie Hasty	Eisendrath House, Tempe, AZ	7
October 22, 2019	Tempe Volunteer Training	Julie Hasty	Symantec, Phoenix, AZ	16
October 30, 2019	Buckeye Volunteer Training	Pam Justice	Sundance Park, Tucson, AZ	8

October 30, 2019	Chandler HS Volunteer Training	Bailey Harper, Julie Hasty	Hamilton High, Chandler, AZ	40
October 31, 2019	Chandler Volunteer Training	Julie Hasty	Tumbleweed Recreation Center, Chandler, AZ	8
October 31, 2019	Carollo Volunteer Training/ Yuma WF	Julie Hasty	Carollo Engineers, Yuma, AZ	3
November 5, 2019	Florence Volunteer Training	Miriam Aleman-Crouch	Florence High, Florence, AZ	22
November 6, 2019	Marana Volunteer Training	Pearl Lam	Water Resources Research Center, Tucson, AZ	14
November 6, 2019	Florence Volunteer Training	Miriam Aleman-Crouch	Anthem Parkside, Florence, AZ	2
November 7, 2019	Marana Volunteer Training	Pearl Lam	Marana Utilities Department, Marana, Arizona	13
November 13, 2019	Florence Volunteer Training	Miriam Aleman-Crouch	UA Extension Office - Casa Grande, Casa Grande, AZ	7
December 4, 2019	Maricopa Volunteer Training	Miriam Aleman-Crouch	UA Extension Office - Casa Grande, Casa Grande, AZ	5
December 4, 2019	Maricopa Volunteer Training	Miriam Aleman-Crouch	MAC Farm, Maricopa, AZ	4
December 9, 2019	Maricopa Volunteer Training	Miriam Aleman-Crouch	Abbott Nutrition, Casa Grande, AZ	4
December 10, 2019	Maricopa Volunteer Training	Kerry Schwartz	Nissan, Maricopa, AZ	7

Section 11 - Arizona Project Wet Workshops

Date	Title	Presenter/ Contact	Location / School	Attendance (if available)
January 15, 2019	Gilbert Water Festival Teacher Workshop	Julie Hasty	Gilbert Public Schools District Offices	14
January 15, 2019	Southern AZ WF Teacher Workshop	Holly Thomas-Hilburn	Sahuarita District Office	5
January 31, 2019	Madison and Osborn WFs Teacher Workshop	Julie Hasty	Madison Camelview Elementary, Phoenix, AZ	13
February 2, 2019	Littleton Teacher Workshop	Julie Hasty	Country Place Elementary, Tolleson, AZ	13
March 30, 2019	Nogales Teacher Workshop	Nicole Kallman	Nogales School District Office	7
April 5, 2019	Southern Gila Teacher Mini Workshop	Julie Hasty	Rice Elementary, Phoenix, AZ	5
July 24, 2019	Litchfield Teacher Workshop	Julie Hasty	Palm Valley Elementary, Goodyear, AZ	31
August 11, 2019	Watershed Moments in Western Expansion	Sandra Hurlbut	Desert Caballeros Museum	48
August 15, 2019	Payson Teacher Workshop	Julie Hasty	Julia Randall Elementary, Payson, AZ	8
August 23, 2019	Going Viral - Human Health is at Risk with Climate Change	Sandra Hurlbut, Pam Justice	Arizona Science Center	30

August 24, 2019	Chandler Teacher Workshop	Julie Hasty	ASU Techshop	18
August 27, 2019	Flagstaff Teacher Workshop	Nicole Kallman, Pearl Lam	Willow Bend Environmental Education Center	8
September 5, 2019	Verde Valley Teacher Workshop	Kerry Schwartz	Yavapai County ROADS Office	12
September 7, 2019	Roosevelt/Tempe Teacher Workshop	Julie Hasty	Maricopa County Cooperative Extension	16
September 11, 2019	Peoria Teacher Workshop	Julie Hasty	Peoria Unified School District Office	23
September 12, 2019	How Does AZ Water Cycle Rule My World	Kerry Schwartz, Betsy Wilkening, Sandra Hurlbut, Pearl Lam	Prescott College - AAEE Conference	17
September 28, 2019	Buckeye Teacher Workshop	Pam Justice	Buckeye Public Library	8
October 2, 2019	Water Conservation on School Grounds	Sandra Hurlbut	Watersmart Innovations Conference	30
October 24, 2019	Tucson Area Teacher Workshop	Pearl Lam	Amphi School District	32
October 24, 2019	Maricopa Teacher Workshop	Kerry Schwartz	Maricopa School District	25
November 19, 2019	Sahuarita Teacher Workshop	Pearl Lam	Sahuarita District Office	21
December 4, 2019	Peoria Teacher Workshop	Julie Hasty	Peoria Unified School District Office	26

Section 12 - WRRC Students

UNDERGRADUATES

Bilden, Finlay	Political Science	BS	May 2020
Castrichini, Emillie	Public Health	BS	May 2020
Christensen, Mackenzie	Care, Health and Society	BS	May 2020
Flynn, Brian			
Hamie, Mohamed	BioWater Quality Testing and Mathematics	BS	May 2021
Hill, Matthew			
Landavazo, Andrea			
Martinez, Hiram	Public Health	BS	
McGuire, Grace	Sustainable Built Environments	BS	May 2019
O'Loughlin, Trinity	Environmental Studies	BS	May 2021
Thomas, Corine	College of Ag and Life Sciences	BS	
Valdez, Kelsey	Sociology and Gender & Women Studies	BA	May 2020

GRADUATES

Bigler, Matthew	Soil, Water, and Environmental Science	PhD	May 2021
Joiner, Emily	Ag & Resource Econ	MS	May 2020
La Farga, Paul	Urban Planning (CAPLA)	MS	May 2021
Loos, Chloe	School of Government and Public Policy	MPA	May 2021