## University of Arizona Water Resources Research Center, Annual Report 2015 Appendix B

Section 1 - Grants Received	
Title	Sponsor
Creation of self-sterilizing irrigation pipelines	Arizona Department of Agriculture Specialty Crop Block Grant Program
Bacterial dieoff in agricultural waters	Department of Agriculture Specialty Crop Block Grant Program
Occurrence, proliferation, and persistence of antibiotics and antibiotic resistance during wastewater treatment	Water Environment Research Foundation
Water Resources Research Institute Annual Base Program	USGS/NIWR G11AP20065
Connecting water quantity and water quality in meeting policy objectives in the arid Southwest	USDA/Hatch ARZT-1360700-H55-101
Defining normal ranges for exDNA and DNaseI in human plasma	Accelerate for Success Seed Funding Program, University of Arizona Office of Research and Development
Developing a sustainable seafood industry infrastructure in Myanmar	United States Agency for International Development
Creation of self-sterilizing harvesting tools	Arizona Department of Agriculture Specialty Crop Block Grant Program
Antibiotics in agroecosystems: state of the science	USDA/NIFA Agriculture and Food Research Initiative Competitive Grants Program
Collaborative Research: A two-year college/four- year university partnership to transform chemistry and biotechnology curricula using FT-NMR. (McLain is external evaluator on this grant).	National Science Foundation, Division of Undergraduate Education

Section 2 – 104b Water Research Grants				
Title	University	Amount		
2014				
Improving Integrated Surface Water and Groundwater Management in the United States: Case studies of innovative groundwater governance approaches	UA	\$7,500		
Development of Antibiotic Resistance During Wastewater Treatment	UA	\$7,500		
2015				
Water Sources Over Time for a Semi-Arid River: Implications for water resources and groundwater modeling	UA	\$9,985		
Impact of Upgraded Wastewater Reclamation Facilities on Chemicals of Emerging Concern in the Effluent-dependent Lower Santa Cruz River	UA	\$9,998		
Characterization of Uranium and Arsenic in Unregulated Water Sources on the Navajo and Hope Reservations	UA	\$10,000		

Date	Title	ICES Media Outlet
February 18,	Students learn to live with less water;	Wildcats
2015	interview with Zayro Jimenez	http://www.wildcat.arizona.edu/article/2015/02/water
A		
April 7, 2015	Contest seeks to drive innovation in water- conservation education by Samantha	Cronkrite News
	Shotzbarger	http://www.conkritenewsonline.com/2015/04/water-
		conservation-education/
May 14, 2015	As Colorado River Shortage Looms,	KJZZ Radio
	Arizona Water Managers Look Elsewhere;	http://kizz.org/content/145015/colorado-river-shortage-
	interview with Will Stone	looms-arizona-water-managers-look-elsewhere
June 15, 2015	Water, a precious commodity, becomes a	E&E Daily
	sound investment for senators and their families, Jennifer Yachnin, E&E reporter,	http://www.eenews.net/stories/1060020217
	E&E Daily	
June 30, 2015		Arizona Daily Star
	symbolic	http://tucson.com/news/state-and-regional/lake-mead-
		decline-below-feet-is-symbolic/article_7807dda8-2d6c-
July 26, 2015	Rain Catchment Systems Catching On	<u>53b5-a129-42592c0caf41.html</u> Arizona Daily Sun
July 20, 2015	Rain caterinient systems catering on	
		http://azdailysun.com/news/local/rain-catchment- systems-catching-on/article_ccd888b6-8d8f-5188-adab-
		<u>55881fa99026.html</u>
July 28, 2015	Arizona Faces Long-Term Water Shortfall .	KJZZ Radio
August 4,	UA Center Educates Public on Water Issues	UA News
2015		http://uanews.org/story/ua-center-educates-
		public-on-water-issues?utm_source=uanow&utm_
		<u>medium=email&amp;utm_campaign=biweeklyuanow?utm_</u> <u>source=uanow&amp;utm_medium=email&amp;utm_</u>
		campaign=biweekly-uanow
August 28,	UA Aids Myanmar's Seafood Industry	UA News
2015		http://uanews.org/story/ua-aids-myanmar-s-seafood-
		industry
September 9, 2015	Gov. Ducey to attend water conference in Israel	The Associated Press
2015		http://www.kpho.com/story/29995929/gov-ducey-to-
Conta l C		attend-water-conference-in-israel#ixzz3qYglDJ00
September 9, 2015	Arizona Gov. Ducey to attend water conference in Israel	Washington Times
		http://www.washingtontimes.com/news/2015/sep/9/ arizona-gov-ducey-to-attend-water-conference-in-is/
September	Water Festival Helps Student Learn	AZDailySun
18, 2015	Conservation	http://azdailysun.com/news/local/water-festival-helps-
		fourth-graders-learn-conservation/article_08bb8258-
		5853-5067-aafd-b1d49f8c83a1.html

September 25, 2015	Looking to the Gila River watershed's future by David Sowders	Eastern Arizona Courier <u>http://www.eacourier.com/news/looking-to-the-gila-river-watershed-s-future/article_b7d58406-6212-11e5-9dc5-47984887969f.html</u>
October 7, 2015	interview of Sharon B. Megdal by Melissa Mauzy	KXCI Radio Podcast URL: <u>kxci.org/2015/10/fathoming-water-episode-</u> <u>1-dr-sharon-megdal-2</u> /
October 15, 2015	What Arizona can learn from Israel on water use: a Q & A	The Arizona Republic http://www.azcentral.com/story/news/arizona/ investigations/2015/10/15/israel-water-use-arizona- conference/73953346/
October 29, 2015	Planning mitigates potential water crisis by Jorge Encinas	Arizona Sonora News http://arizonasonoranewsservice.com/planning-mitigates- potential-water-crisis/
November 1, 2015	My Turn: Israel's water lesson for Arizona	The Arizona Republic <u>http://www.azcentral.com/story/opinion/op-</u> <u>ed/2015/11/01/israel-water-desalination/74844270/</u>
November 3, 2015	Lo que El Niño puede significar en California: 5 avisos	iagua <u>http://www.iagua.es/blogs/rafael-mujeriego/lo-que-nino-</u> <u>puede-significar-california-5-avisos</u>
November 5, 2015	UA, Central Arizona Project Really Want You To Attend a Water Sustainability Forum Happening Friday	Tucson Weekly <u>http://m.tucsonweekly.com/TheRange/</u> <u>archives/2015/11/05/ua-central-arizona-project-</u> <u>really-want-you-to-attend-a-water-sustainability-forum-</u> <u>happening-friday</u>
December 4, 2015	Interview of Sharon B. Megdal for Beyond the Mirage web experience and documentary film	Cody Sheehy, filmmaker, Tucson AZ
December 11, 2015	Interview of Sharon B. Megdal for independent documentary film, Our Desert Farms	Anna Augustowska, filmmaker, Tucson, AZ

Section 4 -	Section 4 – WRRC Brown Bag Seminars			
Date	Speaker	Title		
January 22, 2015	Robert Glennon, Regents' Professor/Morris K. Udall Professor of Law and Public Policy in the Rogers College of Law, at the University of Arizona	Shopping for Water: How the Market Can Mitigate Water Shortages in the American West		
January 28, 2015	Don Gross, Water Resources Engineer, Colorado River Management Section, Arizona Department of Water Resources	Colorado River Simulation System (CRSS) – Overview and Use in Planning and Operation of the Colorado River		
February 19, 2015	Alba Ballester Ciuro, Researcher at University of Seville and University Autonoma of Barcelona	Public Participation in the Implementation of the Water Framework Directive in Spain		
February 26, 2015	Alistair Boxall, University of York and Eddie Cytryn, Volcani Center, Bet Dagan, Israel	Antibiotic Resistance in Agroecosystems		

March 9, 2015	Jeff Biggs, Tucson Water Interim Deputy Director; Fernando Molina, Tucson Water Public information Officer and Wally Wilson, Tucson Water Chief Hydrologist	Tucson Water Recycled Water Program
March 11, 2015	Gary C. Woodard, Senior Water Policy and Economics Consultant, Montgomery and Associates	The Surprising Slide in Domestic Demand: Be careful what you wish for
March 26, 2015	Lon W, House, PhD, Water and Energy Consulting	A New Paradigm: Electric Utilities Investing in Water Conservation
March 31, 2015	Alon Rimmer, Israel Oceanographic and Limnological Research, Lake Kinneret Limnological Laboratory	Salinity in the Sea of Galilee, Its History, Environmental Challenges, and Management
April 21, 2015	Tice Supple, Audubon Arizona Director of Bird Conservation	Shift Happens
May 6, 2015	Kelly Mott Lacroix, Senior Research Analyst, Water Resources Research Center, and Brittany Xiu, Outreach Coordinator, Water Resources Research Center	Driving Water Conservation: The Conserve2Enhance Water Use Dashboard
September 15, 2015	Mike Crimmins, Associate Professor, Dept. of Soil, Water and Environmental Sciences, University of Arizona	2015 El Nino
September 22, 2015	Ardeth Barnhart, Program Director, Renewable Energy, Institute of the Environment, University of Arizona	UA Renewable Energy Network
October 2, 2015	Donovan Neese, Superintendent, Roosevelt Irrigation District, and Joel Peterson, PE, Synergy Environmental	Roosevelt Irrigation District Ground water Remediation Project (RID Approach to Water Treatment)
October 8, 2015	N.W. "Bill" Plummer, President, Agribusiness and Water Council of Arizona and Dr. Paul Brown, College of Life Sciences, University of Arizona	A Case Study in Efficiency – Agriculture and Water Use in the Yuma, Arizona Area
October 29, 2015	Zach Sugg, PhD Candidate in Geography, University of Arizona	Pumps, pipelines, and property rights: legal and political challenges for decentralized groundwater governance in Central Texas, could be a placeholder for his topic
November 4, 2015	Stephen Schoenholtz, Director, Virginia Tech Water Center	Virginia Water Resources Research Center, Addressing Water Challenges and Opportunities
November 12, 2015	Doug Bennett, Conservation Manager, Southern Nevada Water Authority	Conservation Loves A Crisis: Lessons from North America's Driest City

Section 5 – WRRC-WSP Co-Sponsored Events				
Event	Title	Date	Feature	Co-sponsors
Chocolate Fest	Like Water, Like Chocolate	February 13, 2015	Introduction to "Beyond the Mirage"	
Distinguished Lecture and Book Signing	Chasing Water: A Guide for Moving from Scarcity to Sustainability	March 5, 2015	Brian Richter, Chief Scientist, Global Water Program, The Nature Conservancy	Water Sustainability Program, Udall Center for Studies in Public Policy

University of Arizona Water Policy Forum	Arizona Solutions to Colorado River Supply Challenges, convened by U.S. Senator Jeff Flake	April 10, 2015	Panelists from Arizona Department of Water Resources, Central Arizona Project, Tucson Water and the Water Resources Research Center	Water Sustainability Program, Udall Center for Studies in Public Policy
Film showing and panel discussion	Restoration of the Colorado River Delta: One Year After	April 14, 2015	Panel of experts on cross border politics and science discuss impacts on vegetation, wildlife, and groundwater recharge	Water Sustainability Program
Lecture	Drought and Sustainable Water Management in California: Behind the Scenes	October 19, 2015	Lester Snow, Executive Director, California Water Foundation	Center for Climate Adaptation Science and Solutions), UA Dept. of Soil, Water and Environmental Science
Community forum	Sustainable Water for Southern Arizona: Current Conditions and Future Prospects	November 6, 2015	Panel of experts on water supply in southern Arizona engage citizens of in discussion of regional water issues	Central Arizona Project , Southern Arizona Leadership Council, Southern Arizona Water Users Association, and KXCI Radio
Resource fair and film screening	Native Eyes Showcase	November 8, 2015	Films and speakers on Native American water issues	Arizona State Museum and multiple others

### **SECTION 6 – PUBLICATIONS (BY FIRST AUTHOR)**

Cusimano, J., J. McLain, C. Rock, and S. Eden, 2015. Agricultural use of recycled water for crop production in Arizona. Arizona Cooperative Extension Publication, AZ1670.

Eden, S. and S. B., Megdal, 2015. Climate change-driven stakeholder engagement in Arizona, Box 2.1. In OECD, Stakeholder Engagement for Inclusive Water Governance, p.58, OECD Studies on Water. OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264231122-en.

Eden, S., Cleveland, J., Moxley, J., and Audrey, A., 2015. Charting a Path Toward Integrated Water Resources: Using water harvesting as a community scale problem solver. Water Efficiency, 10(5):2-43.

Eden, S., & Roudaut, M.-B., 2015. Conference Themes Emerge from a Program of Diverse Perspectives. Arizona Water Resource, Vol. 23, No. 4, Fall 2015.

Eden, S., Ryder, M., and Capehart, M. A., 2015. Closing the Water Demand-Supply Gap in Arizona. Arroyo.

Ferris, K, Porter, S., Springer, A., Eden, S., Megdal, S. B., 2015. Keeping Arizona's Water Glass Full. 107th Arizona Town Hall Research Committee Background Report. Available at http://www.aztownhall.org/resources/Documents/107%20 Background%20Report%20web.pdf

Gerlak, A. K., S. B. Megdal, and R. G. Varady, 2015. Evaluation of the World Water Assessment Programme. Paris: UNESCO.

Harshman, D.K., B.M. Rao, J.E. McLain, G.S. Watts, and J.-Y. Yoon, 2015. Interfacial effects revolutionize real-time PCR enabling low threshold cycle detection and inhibition relief. Science Advances, 1(8):e1400061, 12 pp.; DOI: 10.1126/ sciadv.1400061.

McLain, J.E., C. Gerba, and C.M. Rock, 2015. Environmental antibiotic resistance associated with land application of biosolids. Antimicrobial Resistance in Wastewater Treatment Processes, Keen, P., R. Fugére (Eds.) Wiley-Blackwell, Hoboken, N.J., USA, in preparation for submission.

McLain, J. E., K. Newman, D.L. Quintinar, C. Caggiano, and R.G. Arnold, 2015. Perspectives on research in water. The Kachina News, 20-23, Fall 2015.

McLain, J. E., D. Snow, L. Durso, and J.B. Sallach, 2015. Antibiotics in Agroecosystems: State of the Science, ARASOS Workshop Summary. Society for Ecotoxicology and Chemistry (SETAC) Globe (online). Available at http://globe.setac. org/2015/february/antibiotics-in-agroecosystems.html

Megdal, S. B., 2015. "15 Water Wishes for 2015," Arizona Water Resource. Vol.23, No.1, Winter 2015.

Megdal, S. B., January 2, 2015. "What you should know about Arizona's water future" AZ Central: http://www.azcentral. com/story/opinion/op-ed/2015/01/02/arizona-water-future/21129377/

Megdal, S.B., 2015. My Turn: Israel's water lesson for Arizona; Reprinted as "Israelis prove desalinating water a potent strategy for parched Arizona." The Arizona Republic; Arizona Jewish Post, 4. Available at http://azjewishpost.com/2015/ israelis-prove-desalinating-water-a-potent-strategy-for-parched-arizona/

Megdal, S. B., 2015. Water Resource Management Challenges in a Time of Changing Climate. Paper prepared for the Institute on Science for Global Policy, Climate Change Arctic Program: Living with Less Water, Tucson Arizona. February 20, 2015.

Megdal, S. B., 2015. "Water resources group welcomes a forum," Letter to the Editor, Arizona Daily Star, p. A7. February 3, 2015.

Megdal, S. B., 2015. "Soak it in: Water is scarce, but by staying informed, Arizonans can do their part of avert a crisis," Arizona Republic, January 3, 2015. Available at http://www.azcentral.com/story/opinion/op-ed/2015/01/02/arizona-water-future/21129377/.

Megdal, S.B., 2015. Tucson's groundwater recharge – S&R approach, Box 4.7. In OECD, Water and Cities: Ensuring Sustainable Futures, p. 132, OECD Studies on Water. OECD Publishing, Paris. Available at http://dx.doi. org/10.1787/9789264230149-en

Megdal, S.B., 2015. Connecting Students to Water Policy and Management in Practice. Arizona Water Resource 23 (2), p. 11. Spring 2015

Medgal, S.B., 2015. Water Banking through Artificial Aquifer Recharge, Western Governors' Drought Forum. Available at http://westgov.org/drought-forum/case-studies?limitstart=0

Megdal, S.B., 2015. Details matter. Arizona Water Resource, 23(3). Summer 2015

Megdal, S.B., K., Chief, and J.E., McLain, 2015. Collaborative Conference Planning and Continuing the Dialogue, Arizona Water Resource, 23 (4):15. Fall 2015. Available at https://wrrc.arizona.edu/Collaborative\_Conference\_Planning

Megdal, S.B. and P., Dillon, 2015. Policy and economics of managed aquifer recharge and water banking, in Megdal, S.B., and P. Dillon (Eds.), Special Issue on Policy and Economics of Managed Aquifer Recharge and Water Banking]. Water 7(2), pp. 592-598. doi: 10.3390/w7020592.

Medgal, S.B., and A. Forrest, 2015. How a drought-resilient water delivery system rose out of the desert: The case of Tucson Water. Journal of the American Water Works Association, 107(9), pp. 46-52. Available at http://dx.doi.org/10.5942/ jawwa.2015.107.0136.

Megdal, S.B., Gerlak, A.K., Varady, R.V., Huang, Y.L., 2015. Improving Integrated Surface Water and Groundwater Management: Three Case Studies of Innovative Groundwater Governance Approaches. Report on USGS 104b project, grant number: 2014AZ529B. December 14, 2015. Available at https://extension.arizona.edu/sites/extension.arizona.edu/ files/pubs/az1688-2015.pdf.

Mott Lacroix, K.E., Hullinger, A., Apel, M. Brandau, W. and Megdal, S.B., 2015. Using Scenario Planning to Prepare for Uncertainty in Rural Watersheds. Arizona Cooperative Extension Publication, 1688, 10 pp. Tucson, Arizona: University of Arizona.

Mott Lacroix, K. and Megdal, S.B, 2015. Tracking participation to evaluate stakeholder engagement in water planning in Arizona, Box 6.8. In OECD, Stakeholder Engagement for Inclusive Water Governance, p.153. OECD Studies on Water. OECD Publishing, Paris. Available at http://dx.doi.org/10.1787/9789264231122-en.

Shamir, E., Megdal, S. B., Carrillo, C., Castro, C. L., Chang, H. I., Chief, K., and Prietto, J., 2015. Climate change and water resources management in the Upper Santa Cruz River, Arizona. Journal of Hydrology (521): 18–33.

#### **SECTION 7-PRESENTATIONS (BY CHRONOLOGICAL ORDER)**

January 14, 2015, Kelly Mott Lacroix. Roadmap for Considering Water for Arizona's Natural Areas, Phoenix, AZ. Arizona Water Association Research Committee Forum, Phoenix, AZ.

January 14, 2015, Jean E. McLain. Antibiotic resistance/public information case study, Arizona Water Research Committee Forum, Phoenix, AZ.

January 16, 2015, K. Brown and Jean E. McLain. The critical challenge of antibiotic resistance: are wastewater treatment plants a concern? Research Corporation for Scientific Advancement Capstone Meeting, San Diego, CA.

January 21, 2015, Brittany Xiu. Arizona Water Challenges and Opportunities. Guest lecturer Prescott College, Prescott, AZ.

January 28, 2015, Jean E. McLain. How to construct an effective presentation: it's not as hard as you think. Guest lecturer, Soil, Water and Environmental Science, University of Arizona, Tucson, AZ.

January 30, 2015, Susanna Eden. Tour of University of Arizona Water Harvesting Sites for four mechanical engineering students from Gyung Sang National University in South Korea, University of Arizona, Tucson, AZ.

Jan 30, 2015, Brittany Xiu. WRRC Programs. Guest lecturer, SWES Careers Class, University of Arizona, Tucson, AZ.

February 3, 2015, Kelly Mott Lacroix. Explore, Synthesize, and Repeat: Process Design for Effective Stakeholder Engagement in Water Management. Guest lecturer, Sustainable Water ActioN (SWAN), University of Arizona, Tucson, AZ and webinar (Europe).

February 4, 2015, Sharon B. Megdal. Bridging waters: Good water stewardship in Arizona, Israel and beyond, Anshei Israel, Tucson, AZ.

February 6, 2015, Sharon B. Megdal. Challenged but unbroken: Water management in Arizona, the Colorado River Basin and beyond, the Yale Club of Southern Arizona, The Arizona Inn, Tucson, AZ.

February 9-11, 2015, Sharon B. Megdal. Presiding officer (President), panelist and moderator, National Institutes for Water Resources Annual Meeting, Washington, DC.

February 20, 2015, Sharon B. Megdal. Water Resource Management Challenges in a Time of Changing Climate, Institute on Science for Global Policy Climate Change Arctic Program: Living with Less Water, Tucson. AZ.

February 22, 2015, Kelly Mott Lacroix. Water for the Environment in a Changing Climate, Splendido Water Series, Oro Valley, AZ.

February 25, 2015. Kelly Mott Lacroix. Roadmap for Considering Water for Arizona's Natural Areas. Arizona County Health Supervisors Monthly Meeting, Phoenix, AZ.

March 3, 2015, Sharon B. Megdal. Water Management in Arizona and the Colorado River Basin, Breakfast Club of Tucson, AZ.

March 4, 2015, Brittany Xiu. Challenges and Opportunities for Water Management in Arizona, Osher Lifelong Learning Institute (OLLI) Green Valley Series, Arizona Water Resources: Introduction, Groundwater, Reclaimed water and Value, Canoa Ranch Golf Club, Green Valley, AZ.

March 11, 2015, Kerry L. Schwartz. Groundwater, Osher Lifelong Learning Institute (OLLI) Green Valley Series, Arizona Water Resources: Introduction, Groundwater, Reclaimed water and Value, Canoa Ranch Golf Club, Green Valley, AZ.

March 17, 2015, Brittany Xiu. Driving Water Conservation with Conserve2Enhance, Financial Innovations for River and Watershed Conservation Webinar, River Network New Ideas and Innovations Quarterly Forum.

March 18, 2015, Sharon B. Megdal. Testimony for the U.S. House of Representatives Committee on Appropriations, Subcommittee on Interior, Environment, and Related Agencies, presented on behalf of the National Institutes for Water Resources, Washington, DC.

March 18, 2015, Susanna Eden. The Value of Water, Osher Lifelong Learning Institute (OLLI) Green Valley Series, Arizona Water Resources: Introduction, Groundwater, Reclaimed water and Value, Canoa Ranch Golf Club, Green Valley, AZ.

March 24, 2015, Jean E. McLain. Science and the general public: how do we bridge this gap? Integrating Science and the Law in Practice, guest lecturer, James E. Rogers College of Law, University of Arizona, Tucson, AZ.

March 25, 2015, Jean E. McLain. Public health and environmental safety of recycled municipal wastewater: current research, Osher Lifelong Learning Institute (OLLI) Green Valley Series, Arizona Water Resources: Introduction, Groundwater, Reclaimed water and Value, Canoa Ranch Golf Club, Green Valley, AZ.

March 31, 2015, Jean E. McLain. Canal maintenance effects on irrigation water quality, First Annual Desert Produce Safety Collaborative Field Conference, Yuma, AZ.

April 8, 2015, Sharon B. Megdal. Arizona Water Management and Colorado River Drought, One Size Doesn't Fit All: Why Variation in Hydrology and Legal Structures Means that Drought Looks Different across the West, Western Governors' Association Drought Forum Webinar Series.

April 8, 2015, Brittany Xiu and Christopher Fullerton. Overview of the Proposed Watershed Planning Steps, Gila Watershed Partnership Monthly Meeting, Safford, AZ.

April 9, 2015, Brittany Xiu. C2E, Low Impact Development Workshop. Tucson, AZ.

April 10, 2015, Sharon B. Megdal. Forum Moderator and Panelist, Water Policy Forum: Arizona Solutions to Colorado River Supply Challenges convened by U.S. Senator Jeff Flake, Center for Creative Photography, University of Arizona, Tucson, AZ.

April 11, 2015, K. Diaz, B.J. Woodcroft, G.W. Tyson, V.I. Rich and Jean E. McLain. Characterizing natural antibiotic resistance in a pristine permafrost environment, Soil, Water, Environmental Science, Science of the Environment Earth Day Poster Presentation, University of Arizona, Tucson, AZ.

April 13, 2015, Garner, E., Jean E. McLain, M. Edwards, and A. Pruden. Comparison of antibiotic resistance and pathogen gene markers in reclaimed vs. potable water distribution systems, International Symposium on Waterborne Pathogens, American Water Works Association, Savannah, GA.

April 16, 2015, Sharon B. Megdal. Keeping Our Water Glass Full, Arizona NOW the Campaign for the University of Arizona, Denver area alumni event, Denver, CO.

May 6, 2015, Susann Eden. Defining the Value of Water in Arizona, It Depends ... Arizona Water Association 88th Annual Conference & Exhibition, Glendale, AZ.

May 6, 2015, Brittany Xiu. Driving Water Conservation with Conserve2Enhance, Arizona Water Association 88th Annual Conference & Exhibition, Glendale, AZ.

May 6, 2015, Kerry L. Schwartz. Strategic Arizona Water Plan Step #1: Building Hydro-literacy and a Community Conversation about Our Water Future and Wise Use, Arizona Water Association 88th Annual Conference & Exhibition, Glendale, AZ.

May 7, 2015. Susanna Eden. Case Study and Transferability Research on a Methodology for Linking Climate with Groundwater Management, Arizona Water Association 88th Annual Conference & Exhibition, Glendale, AZ.

May 7, 2015, Kelly Mott Lacroix. Water Planning in Rural Arizona: Small Town Water Forum, Arizona Water Association 88th Annual Conference & Exhibition, Glendale, AZ.

May 7, 2015, Kelly Mott Lacroix. Roadmap for Considering Water for Arizona's Natural Areas, Arizona Water Association 88th Annual Conference & Exhibition, Glendale, AZ.

May 7, 2015, Malott, E., K. Nolte, P. Kahn-Rivadeneira, Jean E. McLain and C. Rock. Pathogen transmission to crops from animals, Western Food Safety Summit, Hartnell College Agricultural, Business, and Technology Institute, Salinas, CA.

May 8, 2015, Jean E. McLain. Antibiotic resistance in treated wastewater reservoirs in Arizona, U.S.A. First Annual Meeting: New and Emerging Challenges and Opportunities in Wastewater Reuse, European Cooperation in the Field of Scientific and Technical Research, COST Action oc-2013-2-16816, Barcelona, Spain.

May 8, 2015, Jean E. McLain, , K. Burke, D.M. Engelthaler, R.J. Hart, B. Hill, A. Pruden, C.M. Rock, and S. Snyder, presented by Channah Rock. Separating science from emotion in perceptions of recycled water: a case study of Flagstaff, Arizona Water Association 88th Annual Conference & Exhibition, Glendale, AZ.

May 8, 2015, Susanna Eden. Case Study and Transferability Research on a Methodology for Linking Climate with Groundwater Management & Exhibition. Arizona Water Association 88th Annual Conference & Exhibition, Glendale, AZ.

May 29, 2015, Sharon B. Megdal. Briefing with Congresswoman McSally, AZ, The UA WRRC: Our federal role, water issues, and an overview of our programs, WRRC, University of Arizona, Tucson, AZ.

June 1, 2015, Jean E. McLain. Water quality microbiology: current research (presented to four faculty/student groups), Yangon University, Yangon, Burma and Pathein Technological University, Pathein, Burma.

June 9-10, 2015, Jean E. McLain. Organizer and moderator, University of Arizona Water Resources Research Center Annual Conference - Indigenous Perspectives on Sustainable Water Practices, Wild Horse Pass Hotel and Casino, Chandler, AZ.

June 9-10, 2015, Sharon B. Megdal. Organizer and moderator, WRRC 2015 Annual Conference – Indigenous Perspectives on Sustainable Water Practices, Wild Horse Pass Hotel and Casino, Chandler, AZ.

June 14, 2015, Garner, E., J. McLain, M. Edwards, and A. Pruden. Antibiotic resistance and opportunistic pathogen gene markers in reclaimed vs. potable water distribution systems, Engineering and Science Professors 2015 Annual Conference, Yale University, New Haven, CT.

June 16, 2015, Kerry L. Schwartz, K. L. Educating Today; Innovative Solutions Tomorrow, UCOWR/NIWR/CUAHSI Annual Conference, Water is Not for Gambling: Utilizing Science to Reduce Uncertainty, Henderson, NV.

June 16-18, 2015, Sharon B. Megdal. Panel moderator, UCOWR/NIWR/CUAHSI Annual Conference, Water is Not for Gambling: Utilizing Science to Reduce Uncertainty, Henderson, NV.

June 17, 2015, Susanna Eden. A methodology for informing management decisions in groundwater dependent communities coping with climate uncertainty, UCOWR/NIWR/CUAHSI Annual Conference, Water is Not for Gambling: Utilizing Science to Reduce Uncertainty, Henderson, NV.

July 6, 2015, Jean E. McLain. Moderator, University of Arizona One Health Symposium, University of Arizona, Tucson, AZ.

July 15, 2015, Garner, E., Jean E. McLain, M. Edwards, and A. Pruden. Metagenomic investigations of antibiotic resistance and opportunistic pathogen gene markers in reclaimed vs. potable distribution systems, 4th Annual Conference on Microbiology of the Built Environment, University of Colorado, Boulder, CO.

August 5, 2015, Sharon B. Megdal. Water Challenges and Solutions in Arizona, Arizona Cooperative Extension Conference, College of Agriculture and Life Sciences, University of Arizona, Tucson, AZ.

August 5, 2015, Kerry L. Schwartz. Project Based Learning Using the School Water Audit Program (SWAP), Project WET Foundation Annual Conference, Quartz Mountain, OK.

August 6, 2015, Kerry L. Schwartz. STEM Academy, Project WET Foundation Conference, Quartz Mountain, OK.

August 8, 2015, Kelly Mott Lacroix. Desert Flows Database, Desert Landscape Conservation Cooperative Large Landscape Workshop, Tucson, Arizona.

August 21, 2015, Sharon B. Megdal. Water Banking: The Role of Recharge & Recovery in the Mitigation of Colorado River Shortages to Arizona, with Ken Seasholes, Arizona Water Law, CLE International, Scottsdale, AZ.

September 2, 2015, Jean E. McLain. How to construct an effective presentation, guest lecturer, Topics in Soil, Water and Environmental Science, University of Arizona, Tucson, AZ.

September 8, 2015, Sharon B. Megdal. Facing an Uncertain Water Future in Pima County, Pima County Energy and Water Summit, Tucson, AZ.

September 9, 2015, Sharon B. Megdal. Importance of jurisdictional issues, guest lecturer, James E. Rogers College of Law, University of Arizona, Tucson, AZ.

September 13-16, 2015, Jean E. McLain. Biological Filtration, Session D7, 30th Annual WateReuse Symposium, Seattle, WA.

September 28, 2015, Jean E. McLain. How to construct an effective presentation, guest lecturer, Scientific Writing for Environmental, Agricultural, and Life Sciences, University of Arizona, Tucson, AZ.

October 5, 2015, Elia Tapia and Kelly Mott Lacroix. Desert Flows Database, Desert Landscape Conservation Cooperative Large Landscape Workshop, Aguascalientes, Mexico.

October 7, 2015, Susanna Eden. New Water Harvesting Assessment Tool for the Desert Southwest, WaterSmart Innovations Conference and Exposition, Las Vegas, NV.

October 7, 2015, Kerry L. Schwartz and Haley Paul. Working Smarter to Offer Transformative Learning, Water Smart Innovations and Exposition, Las Vegas, NV. October 12, 2015, Sharon B. Megdal. Mechanisms for Transboundary Cooperation at the United-States Mexico Border, AGAM International Conference, Critical Issues in Water Policy and Technology in the 21st Century, Tel Aviv, Israel.

October 13, 2015, Sharon B. Megdal. Efforts to Close the Gap Between Water Supply and Demand in the Colorado River Basin, WATEC 2015 Conference, Session on Management of National Water Systems in Arid Regions, Tel Aviv, Israel.

October 13, 2015, Sharon B. Megdal. Management of National Water System in Arid Regions, the Pre-WATEC 2015 Conference, Tel Aviv, Israel.

October 14, 2015, Claire Zucker. Opportunities for engineering to positively impact the environmental health of the region, Guest Lecture, Introduction to Biosystems and Agricultural and Biosystems Engineering Seminar in Engineering Careers and Professionalism, University of Arizona, Tucson, AZ.

October 15, 2015, Susanna Eden. How Full is Our Water Glass? Lifelong learning in retirement at the highlands, Marana, AZ.

October 26, 2015, Claire Zucker. Career choices in water policy, Guest panel presentation, Water, Society, and Policy M.S. Program Seminar, School of Natural Resources and the Environment, University of Arizona, Tucson, AZ.

October 29, 2015, Sharon B. Megdal. Issues and Opportunities in Demand-side Management, Western Water Conference, Salt Lake City, UT.

November 2, 2015, Sharon B. Megdal. Speaker-Panelist, A Drop to Drink: A Case study in Resolving Water Scarcity and Quality Issues, with Dr. Miki Haran. Sponsored by the Israel Public Diplomacy Forum and the Kyl Center for Water Policy at the Morrison Institute, Arizona State University, Phoenix, AZ.

November 5, 2015, Sharon B. Megdal. Drought, Shortage, and Closing the Gap in Water Supply and Demand in the Colorado River Basin and in Arizona, University of Arizona Federal Relations Office Briefing for Arizona-based congressional staff, WEST Center, Tucson, AZ.

November 5, 2015, Jean E. McLain. Human health and environmental risks of using recycled wastewater for irrigation of food crops, Arizona Registered Sanitarian Conference, Phoenix, AZ.

November 6, 2015, Sharon B. Megdal. Moderator, Sustainable Water for Southern Arizona: Current Conditions and Future Prospects, Leo Rich Theater, Tucson, AZ.

November 10, 2015, Sharon B. Megdal. Drought, Shortage, and Closing the Gap Between Water Supply and Demand, Environmental Law Society, James E. Rogers College of Law, University of Arizona, Tucson AZ.

November 10, 2015, Sharon B. Megdal. Addressing Water Management Challenges in Tucson and Regionally, UA Campus Community Relations Committee, Tucson, AZ.

November 12, 2015. Kelly Mott Lacroix. The Good, The Bad and The Complicated - Water Management in Arizona. Master Watershed Steward Class, Payson, AZ.

November 15-18, 2015, Jean E. McLain. Soils as the New Frontier in Antibiotic and Antibiotic Resistance Discovery, 2015 ASA CSSA SSSA International Annual Meetings, Minneapolis, MN.

November 16, 2015, Sharon B. Megdal. Keeping Arizona's Water Glass Full, Arizona Town Hall Authors' Panel, Arizona Town Hall, Mesa, AZ.

November 17, 2015, Jean E. McLain, and M. Rothrock, Jr. Addressing the natural antibiotic resistome in soils, 2016 ASA CSSA SSSA International Annual Meetings, Minneapolis, MN.

November 17, 2015, Kelly Mott Lacroix. Stakeholder Engagement in Water Resource Management, Arizona, American Water Resources Association Annual Meeting, Denver, CO.

November 19, 2015, Kelly Mott Lacroix. Participatory Watershed Assessment and Planning for the Upper Gila River, Arizona, American Water Resources Association Annual Meeting, Denver, CO.

November 18, 2015, Garner, E., Jean E. McLain, M. Edwards, and A. Pruden. Comparison of antibiotic resistance and pathogen gene markers in reclaimed vs. potable water systems, 2015 Water Quality Technology Conference, American Water Works Association, Salt Lake City, UT.

November 20, 2015, Sharon B. Megdal. Water Resource Planning and Opportunities, WEST Center Grand Opening Morning Program, Agua Nueva Water Reclamation Facility, Tucson, AZ.

November 25, 2015, Sharon B. Megdal. Drought, Shortage, and Closing the Projected Gap in Water Supply and Demand, Marana Chamber of Commerce, Marana, AZ.

December 1, 2015, Sharon B. Megdal. Sustainable Water Use in the Arid Southwest, Renewable Natural Resources Foundation Congress on Sustaining Western Water, RNRF, Washington, DC.

# SECTION 8 – ARIZONA PROJECT WET PRESENTATIONS AND PROGRAM EVENTS

January 7, 2015. Chuck Dugan. Casa Grande Water Festival Class Visits, 4th grade. Evergreen Elementary, Casa Grande, AZ

January 9, 2015. Chuck Dugan. Casa Grande Water Festival Class Visits, 4<sup>th</sup> grade. Saguaro Elementary, Casa Grande, AZ

January 12, 2015. Chuck Dugan. Casa Grande Water Festival Class Visits, 4<sup>th</sup> grade. Cottonwood, Casa Grande, AZ

January 13, 2015. Chuck Dugan. Casa Grande Water Festival Class Visits, 4th grade. Cholla Elementary, Casa Grande, AZ

January 15, 2015. Chuck Dugan. Casa Grande Water Festival Class Visits, 4<sup>th</sup> grade. McCartney Ranch, Casa Grande, AZ

January 16, 2015. Chuck Dugan. Casa Grande Water Festival Class Visits, 4<sup>th</sup> grade. Palo Verde Elementary, Casa Grande, AZ

January 21, 2015. Chuck Dugan. Casa Grande Water Festival Class Visits, 4<sup>th</sup> grade. Ironwood Elementary, Casa Grande, AZ

January 23, 2015. Chuck Dugan. Casa Grande Water Festival Class Visits, 4<sup>th</sup> grade. Desert Willow 4th, Casa Grande, AZ

January 26, 2015. Chuck Dugan. Casa Grande Water Festival Class Visits, 4<sup>th</sup> grade. Mesquite Elementary, Casa Grande, AZ

January 27, 2015. Holly Thomas-Hilburn. Training to potential WIP volunteers. 90 adults were in attendance. Surprise City Hall, Surprise, AZ.

February 9, 2015. Betsy Wilkening. APW hosted the 6<sup>th</sup> grade Groundwater Flow Model Lesson with 83 students and 4 teachers. Sponsored by Tucson Water. Robins K-8<sup>th</sup> School, Tucson.

February 9, 2015. Holly Thomas-Hilburn. Cassandra Rickertsen gave the Riparian Presentation to 60 6<sup>th</sup> grade students. Sponsored by the Pulliam Foundation. Desert Valley Elementary School.

February 9, 2015. Betsy Wilkening. APW hosted the 3<sup>rd</sup> grade Groundwater Flow Model Lesson with 82 students and 3 teachers. Sponsored by Tucson Water. Gale Elementary School, Tucson.

February 11, 2015. Betsy Wilkening. APW hosted the 3<sup>rd</sup> grade Groundwater Flow Model Lesson with 50 students and 2 teachers. Sponsored by Tucson Water. Oyama Elementary School, Tucson.

February 10, 2015. Betsy Wilkening. APW hosted the Sweetwater Wetlands Water Festival with 80 students, 3 teachers, and 12 adults from Gale Elementary School in attendance. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

February 10, 2015. Holly Thomas-Hilburn. APW facilitated an Indoor School Water Audit with 117 students and 2 volunteers. 27 aerators were rechecked from previous years. Julie Hasty, Cassandra Rickertsen and Tara Oakes attended. Sponsored by the Pulliam Foundation. Tempe High School, Tempe.

February 13, 2015. Holly Thomas-Hilburn. Cassandra Rickertsen gave the Riparian Presentation to 117 6<sup>th</sup> grade students. Sponsored by the Pulliam Foundation. Champion School.

February 15, 2015. Tara Oakes. Da Vinci Family event, discussion about watersheds and groundwater, 19 total adult attendees, 5 total youth attendees. Sponsored by Pulliam Foundation. Phoenix Art Museum

February 16, 2015. Betsy Wilkening. APW facilitated an indoor school water audit with 19 students and 2 teachers. Sponsored by Tucson Water. Satori Charter School, Tucson.

February 16, 2015. Betsy Wilkening. APW hosted the 6<sup>th</sup> grade Groundwater Flow Model Lesson with 98 students and 5 teachers. Sponsored by Tucson Water. Mansfield Middle School, Tucson.

February 17, 2015. Betsy Wilkening. APW hosted the Sweetwater Wetlands Water Festival with 46 students, 2 teachers, and 9 adults from Hudlow Elementary School. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson,

February 18, 2015. Betsy Wilkening. APW hosted the Sweetwater Wetlands Water Festival with 39 students, 2 teachers, and 6 adults from Red Rocks Elementary School. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

February 18, 2015. Betsy Wilkening. APW participated in Science Night by presenting the groundwater flow model to 22 students and 10 adults. Sponsored by Tucson Water. Mansfield Middle School, Tucson.

February 18, 2015. Betsy Wilkening. APW hosted the 3<sup>rd</sup> grade Groundwater Flow Model Lesson with 39 students and 2 teachers. Sponsored by Tucson Water. Pueblo Gardens School, Tucson.

February 18, 2015. Holly Thomas-Hilburn. APW facilitated an Indoor School Water Audit with 50 students and 2 volunteers. 12 aerators were rechecked from previous years. Julie Hasty, Cassandra Rickertsen and Tara Oakes attended. Sponsored by the Pulliam Foundation. TG Barr Elementary School, Phoenix.

February 19, 2015. Sean Sederstrom. APW hosted the Casa Grande Water Festival with 700 4<sup>th</sup> grade students, 28 teachers, 42 adult volunteers, and 4 parents. Sponsored by CAP and Abbott Fund. Mesquite Elementary School, Casa Grande.

February 19, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 16 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> grade students and 1 teacher from Canyon Valley High School and 2 volunteers. Tara Oakes and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

February 19, 2015. Chuck Dugan. Casa Grande Water Festival. Mesquite Elementary, Casa Grande, AZ

February 20, 2015 Betsy Wilkening. APW participated in the STEM Day Science Fair by presenting the elevation model activity and the large watershed model to 73 students and 36 adults. Sponsored by Tucson Water. Arizona School for the Deaf and Blind, Tucson.

February 20, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 95 6<sup>th</sup> grade students, 3 teachers, and 20 parent volunteers from Apache Elementary School and 5 other volunteers. Tara Oakes and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

February 20, 2015. Betsy Wilkening. APW hosted the Sweetwater Wetlands Water Festival with 51 students, 2 teachers, and 5 adults from Oyama Elementary School. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

February 21, 2015. Betsy Wilkening. APW participated in the Family SCIfest by presenting the H2Olympics activities and the elevation models to 126 students and 62 adults. Sponsored by Tucson Water. Children's Museum, Tucson.

February 23, 2015. Betsy Wilkening. APW hosted the 3<sup>rd</sup> grade Groundwater Flow Model Lesson with 57 students and 3 teachers in attendance. Sponsored by Tucson Water. Borman Elementary School, Tucson.

February 23, 2015. Betsy Wilkening. APW hosted the 6<sup>th</sup> grade Groundwater Flow Model Lesson with 96 students and 5 teachers. Sponsored by Tucson Water. Mansfield Middle School, Tucson.

February 24, 2015. Betsy Wilkening. 4th grade and 8th grade students presented their water savings results from doing a drinking fountain and bathroom faucet audit. High school students from Ironwood Ridge returned to Wilson to talk about the audit they did as 6th grade students. 126 students, 6 teachers, and 17 adults. Sponsored by Tucson Water. Wilson K-8 School, Tucson.

February 25, 2015. Betsy Wilkening. APW hosted the Sweetwater Wetlands Water Festival with 58 students, 2 teachers, and 10 adults from Borman Elementary School. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

February 25, 2015. Betsy Wilkening. APW hosted the 6<sup>th</sup> grade Groundwater Flow Model Lesson with 48 students and 2 teachers. Sponsored by Tucson Water. C.E. Rose Elementary School, Tucson.

February 26, 2015. Holly Thomas-Hilburn. Cassandra Rickertsen gave the Riparian Presentation to 40 6<sup>th</sup> grade students. Sponsored by the Pulliam Foundation. Madison Meadows Middle School.

February 26, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 30 6<sup>th</sup> grade students, 2 teachers and 3 parent volunteers from Arlington Elementary School and 7 other volunteers. Tara Oakes and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

February 27, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 90 6<sup>th</sup> grade students, 1 teacher and 20 parent volunteers from Oakwood Elementary School and 2 other volunteers. Tara Oakes and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area.

March 2, 2015. Betsy Wilkening. APW hosted the 3<sup>rd</sup> grade Groundwater Flow Model Lesson with 112 students and 5 teachers. Sponsored by Tucson Water. Gallego Elementary School, Tucson.

March 2, 2015. Betsy Wilkening. APW hosted the 6<sup>th</sup> grade Groundwater Flow Model Lesson with 130 students and 5 teachers. Sponsored by Tucson Water. Gridley Middle School, Tucson.

March 2, 2015. Holly Thomas-Hilburn. Cassandra Rickertsen gave the Riparian Presentation to 103 6<sup>th</sup> grade students. Sponsored by the Pulliam Foundation. Copper Creek School.

March 3, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 150 7<sup>th</sup> – 8<sup>th</sup> grade students, 1 teacher and 22 parent volunteers from ASU Polytechnic Preparatory School and 1 other volunteer. Tara Oakes attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

March 4, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 11 6<sup>th</sup> grade students, 2 teachers and 3 parent volunteers from Bright Beginnings School. Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

March 5, 2015. Sean Sederstrom. APW hosted the Gilbert Water Festival with 912 4<sup>th</sup> grade students, 32 teachers, and 37 adult volunteers present. Sponsored by Town of Gilbert and Gilbert Public Schools. Crossroads Park, Gilbert.

March 6, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 48 7<sup>th</sup> grade students, 2 teachers and 3 parent volunteers from TG Barr Elementary School and 7 other volunteers. Tara Oakes and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

March 6, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 32 6<sup>th</sup> grade students, 2 teachers and 4 parent volunteers from Bethune School. Tara Oakes and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

March 7, 2015. Betsy Wilkening. APW participated in by presenting the H2Olympics activities and the elevation models to 59 students and 114 adults. Sponsored by Tucson Water. Marana SciTech Event.

March 7, 2015. Betsy Wilkening. APW participated in the Expanding Your Horizons Engineering Workshop by presenting the Engineering Water Wheels lessons to 19 students and 2 teachers. Sponsored by Tucson Water. Sahuarita.

March 9, 2015. Betsy Wilkening. APW facilitated an outdoor school water audit with 92 students and 1 teachers. Sponsored by Tucson Water. Amphitheatre High School, Tucson.

March 9, 2015. Betsy Wilkening. APW hosted the 6<sup>th</sup> grade Groundwater Flow Model Lesson with 128 students and 5 teachers. Sponsored by Tucson Water. Doolen Middle School, Tucson.

March 10, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 44 7<sup>th</sup> grade students, 3 teachers and 6 parent volunteers from Highland Lakes School and 6 other volunteers. Tara Oakes and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

March 10, 2015. Betsy Wilkening. APW hosted the Sweetwater Wetlands Water Festival with 115 students, 3 teachers, and 48 adults from Gallego Elementary School. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

March 11, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 79 6<sup>th</sup> grade students, 4 teachers and 5 parent volunteers from Park Meadows School and 7 other volunteers. Tara Oakes and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

March 11, 2015. Betsy Wilkening. APW participated in the Future Innovators Night by presenting the H2Olympics activities and the elevation models to 160 students and 72 adults. Sponsored by Tucson Water. Tucson.

March 11, 2015. Betsy Wilkening. APW hosted the 3<sup>rd</sup> grade Groundwater Flow Model Lesson with 69 students and 3 teachers. Sponsored by Tucson Water. Borton Elementary School, Tucson.

March 12, 2015. Betsy Wilkening. APW hosted the 6<sup>th</sup> grade Groundwater Flow Model Lesson with 91 students and 4 teachers in attendance. Sponsored by Tucson Water. Gridley Middle School, Tucson.

March 13, 2015. Betsy Wilkening., APW hosted the 3<sup>rd</sup> grade Groundwater Flow Model Lesson with 100 students and 4 teachers in attendance. Sponsored by Tucson Water. BASIS School, Tucson.

March 13, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 69 7<sup>th</sup> grade students, 4 teachers and 15 parent volunteers from Mountain View School and 8 other volunteers. Tara Oakes and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

March 14 - 15, 2015. Betsy Wilkening. APW participated in the Festival of Books by hosting a rainwater harvesting demonstration, a piping system challenge, and by presenting the watershed model, groundwater model, and H2Olympics activities to 3000 students and 2572 adults. Sponsored by Tucson Water. University of Arizona, Tucson.

March 14, 2015. Tara Oakes and Cassandra Rickertsen participated in the da Vinci Family event by discussing watersheds and groundwater with attendees. Sponsored by Pulliam Foundation. Phoenix Art Museum.

March 17, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 99 9<sup>th</sup> – 10<sup>th</sup> grade students, 1 teacher and 3 parent volunteers from Tempe High School and 6 other volunteers. Tara Oakes, Carey Miller and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

March 18, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 125 6<sup>th</sup> grade students, 1 teacher and 24 parent volunteers from Mountainside Middle School and 5 other volunteers. Tara Oakes, Holly Thomas-Hilburn, Mary Ann Stoll, Carey Miller, and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

March 19, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 115 6<sup>th</sup> grade students, 3 teachers and 12 parent volunteers from Settlers Point Elementary School and 5 other volunteers. Tara Oakes, Pam Justice, Sean Sederstrom, Carey Miller and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

March 24, 2015. Betsy Wilkening. APW hosted the Sweetwater Wetlands Water Festival with 67 students, 4 teachers, and 7 adults from Borton Elementary School. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

March 24, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 50 6<sup>th</sup> grade students, 2 teachers and 4 parent volunteers from Liberty Traditional School and 7 other volunteers. Tara Oakes, Cassandra Rickertsen and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

March 24, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 38 6<sup>th</sup> grade students, 2 teachers and 8 parent volunteers from Madison Meadows School. Tara Oakes, Cassandra Rickertsen and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

March 24, 2015 Holly Thomas-Hilburn. Cassandra Rickertsen gave the Riparian Presentation to 41 6<sup>th</sup> grade students. Sponsored by the Pulliam Foundation. Canyon Valley School.

March 25, 2015. Betsy Wilkening. APW hosted the Sweetwater Wetlands Water Festival with 78 students, 4 teachers, and 13 adults from Soleng Tom Elementary School. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

March 25, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 110 6<sup>th</sup> – 7<sup>th</sup> grade students, 5 teachers and 6 parent volunteers from Champion School and 4 other volunteers. Tara Oakes, Pam Justice, Mary Ann Stoll, Carey Miller and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

March 25, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 42 6<sup>th</sup> – 7<sup>th</sup> grade students, 3 teachers and 2 parent volunteers from New School for the Arts and Academics and 3 other volunteers. Tara Oakes, Pam Justice, Mary Ann Stoll, Carey Miller and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

March 26, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 90 6<sup>th</sup> grade students, 4 teachers and 24 parent volunteers from Copper Creek Elementary School and 8 other volunteers. Tara Oakes, Cassandra Rickertsen and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

March 26, 2015. Sean Sederstrom. APW hosted the Southern Gila County Water Festival with 380 4<sup>th</sup> grade students, 16 teachers, 42 parents and 47 adult volunteers. Sponsored by Freeport-McMoRan, Capstone Pinto Valley Mine, Gila County, and Arizona Water. Bouillon Park, Miami.

March 26, 2015. Betsy Wilkening. APW hosted the 3<sup>rd</sup> grade Groundwater Flow Model Lesson with 49 students and 2 teachers. Sponsored by Tucson Water. Howell Elementary School, Tucson.

March 27, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 26 6<sup>th</sup> grade students, 3 teachers and 2 parent volunteers from Summit School and 2 other volunteers. Tara Oakes, Kerry Schwartz and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

March 27, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 12 9<sup>th</sup> grade students, 1 teacher and 1 parent volunteer from Canyon Valley School and 2 other volunteers. Tara Oakes, Kerry Schwartz and Julie Hasty attended. Sponsored by the Pulliam Foundation. Rio Salado Habitat Restoration Area, Phoenix.

March 31, 2015. Betsy Wilkening. APW hosted the Sweetwater Wetlands Water Festival with 45 students, 2 teachers, and 4 adults from Howell Elementary School. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

April 1, 2015. Betsy Wilkening. APW hosted the Discovery Journey with 26 students and 4 adults from Amphi High School. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

April 1, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 150 6<sup>th</sup> grade students, 1 teacher and 32 parent volunteers from Verrado Middle School and 11 other volunteers. Tara Oakes, Julie Hasty, and Cassandra Rickertsen attended. Sponsored by the Pulliam Foundation. Hassayampa River Preserve, Wickenburg.

April 2, 201.5. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 130 6<sup>th</sup> grade students, 1 teacher and 29 parent volunteers from Verrado Middle School and 12 other volunteers. Tara Oakes, Julie Hasty, and Cassandra Rickertsen attended. Sponsored by the Pulliam Foundation. Hassayampa River Preserve, Wickenburg.

April 2, 2015. Sean Sederstrom. APW hosted the Tucson Water Festival with 473 4<sup>th</sup> grade students, 19 teachers, and 25 adult volunteers present. Sponsored by Tucson Water. James Kreigh Park, Oro Valley.

April 3, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 125 6<sup>th</sup> grade students, 1 teacher and 30 parent volunteers from Sunset Hills Elementary School. Tara Oakes and Cassandra Rickertsen attended. Sponsored by the Pulliam Foundation. Hassayampa River Preserve, Wickenburg.

April 3, 2015. Betsy Wilkening. APW hosted the Discovery Journey with 36 students and 4 adults from Amphi High School in attendance. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

April 6, 2015. Betsy Wilkening. APW hosted a tour of the wetlands with 36 students, 1 teacher and 4 adults from Tucson High Magnet School. Sponsored by Tucson Water. Sweetwater Wetlands.

April 6, 2015. Betsy Wilkening. APW hosted the 3<sup>rd</sup> grade Groundwater Flow Model Lesson with 48 students and 2 teachers. Sponsored by Tucson Water. Robison Elementary School, Tucson.

April 7, 2015. Betsy Wilkening. APW hosted the Sweetwater Wetlands Water Festival with 50 students, 2 teachers, and 5 adults from Robison Elementary School. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

April 8, 2015. Betsy Wilkening. APW hosted the 3<sup>rd</sup> grade Groundwater Flow Model Lesson with 26 students and 2 teachers. Sponsored by Tucson Water. Castle Hill County Day School, Tucson.

April 9, 2015. Holly Thomas-Hilburn. 20 students delivered presentations on their Field Day Investigations to their peers. 1 teacher was present. Cassandra Rickertsen attended. Sponsored by the Pulliam Foundation. Canyon Valley High School, Mesa.

April 10, 2015. Betsy Wilkening. APW hosted a tour of the wetlands with 38 students, 1 teacher and 4 adults from Tucson High Magnet School. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

April 10, 2015. Holly Thomas-Hilburn. Tara Oakes, Julie Hasty, & Cassandra Rickertsen participated in the Arizona Game and Fish Department Home School event by facilitating macroinvertebrate sampling in Biscuit Tank with 7 adults and 13 students. Sponsored by Pulliam Foundation. Ben Avery Shooting Facility, Phoenix.

April 10, 2015. Betsy Wilkening. APW hosted the 3<sup>rd</sup> grade Groundwater Flow Model Lesson with 29 students and 3 teachers in attendance. Sponsored by Tucson Water. Walter Douglas K-8, Tucson.

April 12, 2015. Betsy Wilkening. APW participated in Spring Fling by presenting the H2Olympics activities to 68 students and 25 adults. Sponsored by Tucson Water. University of Arizona, Tucson.

April 13, 2015. Betsy Wilkening. APW hosted the Sweetwater Wetlands Water Festival with 26 students, 2 teachers, and 2 adults from Castle Hill County Day School. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

April 17, 2015. Betsy Wilkening. APW hosted the Sweetwater Wetlands Water Festival with 40 students, 4 teachers, and 2 adults from Academy Adventures Midtown. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

April 19, 2015. Betsy Wilkening. APW facilitated the Engineering Water Wheels activity to 48 students and 10 adults from Girl Scout Imagine Engineering. Sponsored by Tucson Water. Girl Scout Hacienda, Tucson.

April 21, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 93 8<sup>th</sup> grade students, 4 teachers and 5 parent volunteers from Sunset Hills Elementary School and 3 other volunteers. Tara Oakes and Cassandra Rickertsen attended. Sponsored by the Pulliam Foundation. Hassayampa River Preserve, Wickenburg.

April 22, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 51 6<sup>th</sup> grade students, 2 teachers and 10 parent volunteers from Desert Valley Elementary School and 8 other volunteers. Tara Oakes, Julie Hasty, and Cassandra Rickertsen attended. Sponsored by the Pulliam Foundation. Hassayampa River Preserve, Wickenburg.

April 22, 2015. Betsy Wilkening. APW participated in Earth Day Celebration Activities by presenting the Water Conservation lesson to 254 students and 12 adults. Sponsored by Tucson Water. Estes Elementary School, Tucson.

April 22, 2015. Betsy Wilkening. APW participated in Earth Day Celebration Activities by presenting the H2Olympics and Water Conservation lesson to 186 students and 25 adults. Sponsored by Tucson Water. Sam Hughes Elementary School, Tucson.

April 20, 2015. Betsy Wilkening. APW hosted the 6<sup>th</sup> grade Groundwater Flow Model Lesson with 58 students and 2 teachers. Sponsored by Tucson Water. Richardson Middle School, Tucson.

April 20, 2015. Betsy Wilkening. APW hosted a Groundwater Flow Model Lesson with 10 students and 2 teachers. Sponsored by Tucson Water. Teenage Parent High School, Tucson.

April 23, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 111 6<sup>th</sup> grade students, 4 teachers and 24 parent volunteers from garden Lakes Elementary School and 6 other volunteers. Tara Oakes, Julie Hasty, and Cassandra Rickertsen attended. Sponsored by the Pulliam Foundation. Hassayampa River Preserve, Wickenburg.

April 23, 2015. Sean Sederstrom. APW hosted the Apache Junction Water Festival with 296 4<sup>th</sup> grade students, 11 teachers, 11 parents, and 32 adult volunteers present. Sponsored by City of Apache Junction, Apache Junction Parks and Rec, Arizona Water, SRP, CAP, and the Abbott Fund. Prospector Park, Apache Junction.

April 23, 2015. Betsy Wilkening. APW hosted the 3<sup>rd</sup> grade Groundwater Flow Model Lesson with 64 students and 3 teachers. Sponsored by Tucson Water. Borton Elementary School, Tucson.

April 23, 2015. Chuck Dugan. Apache Junction Water Festival. Prospector Park, Apache Junction, AZ

April 24, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 55 6<sup>th</sup> grade students, 2 teachers and 4 parent volunteers from Orangewood Elementary School and 9 other volunteers. Tara Oakes, Julie Hasty, and Cassandra Rickertsen attended. Sponsored by the Pulliam Foundation. Hassayampa River Preserve, Wickenburg.

April 24, 2015. Holly Thomas-Hilburn. APW hosted a Field Day as part of the Water Investigations Program (WIP) with 30 6<sup>th</sup> grade students, 1 teacher and 3 parent volunteers from Finley Farms Elementary School and 6 other volunteers. Tara Oakes, Julie Hasty, and Cassandra Rickertsen attended. Sponsored by the Pulliam Foundation. Hassayampa River Preserve, Wickenburg.

April 25, 2015. Holly Thomas-Hilburn. Cassandra Rickertsen presented APW watershed model for 17 children and 18 adults. Sponsored by The Nature Conservancy. River Festival in Winkleman Flats, Hayden, AZ.

April 27, 2015. Betsy Wilkening. APW hosted the 3<sup>rd</sup> grade Groundwater Flow Model Lesson with 43 students and 2 teachers in attendance. Sponsored by Tucson Water. Roskruge School, Tucson.

April 29, 201. Betsy Wilkening. APW hosted the Sweetwater Wetlands Water Festival with 46 students and 2 teachers from Roskruge School. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

April 30, 2015. Betsy Wilkening. APW hosted the Discovery Journey with 18 students and 4 adults from Amphi High School. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

April 30, 2015. Sean Sederstrom. APW hosted the Avondale/Goodyear Water Festival with 425 4<sup>th</sup> grade students, 17 teachers, and 40 adult volunteers present. Sponsored by Avondale Public Works. Festival Park, Avondale.

May 3, 2015. Betsy Wilkening. APW participated in the STEM festival by presenting the H2Olympics and paper watershed lessons to 246 students and 180 adults. Sponsored by Tucson Water. Tucson Hebrew Academy, Tucson.

May 4, 2015. Betsy Wilkening. APW hosted the 3<sup>rd</sup> grade Groundwater Flow Model Lesson with 60 students and 3 teachers. Sponsored by Tucson Water. Wright Elementary School, Tucson.

May 5, 2015. Betsy Wilkening. APW hosted the 3<sup>rd</sup> grade Groundwater Flow Model Lesson with 98 students and 4 teachers in attendance. Sponsored by Tucson Water. Santa Clara Elementary School, Tucson.

May 5, 2015. Betsy Wilkening. APW facilitated a SWAP outdoor irrigation audit with 105 students and 3 teachers. Sponsored by Tucson Water. Walter Douglas School, Tucson.

May 6, 2015. Betsy Wilkening. APW hosted the 3<sup>rd</sup> grade Groundwater Flow Model Lesson with 91 students and 4 teachers. Sponsored by Tucson Water. CE Rose Elementary School, Tucson.

May 6, 2015. Kerry Schwartz. Presentation of *Strategic Arizona Water Plan Step #1: Building Hydro-literacy and a Community Conversation about Our Water Future and Wise Use* at the 2015 Arizona Water Conference. Cosponsored by City of Yuma. Glendale Renaissance Hotel and Spa.

May 7, 2015. Betsy Wilkening. APW facilitated the calculations associated with the SWAP outdoor irrigation audit with 105 students and 3 teachers. Sponsored by Tucson Water. Walter Douglas School, Tucson.

May 7, 2015. Sean Sederstrom. APW hosted the Maricopa Water Festival with 175 4<sup>th</sup> grade students, 7 teachers, and 10 parents present. Sponsored by Nissan, SRP, CAP, Arizona Department of Corrections, and Abbott Fund. University of Arizona Maricopa Agricultural Center, Maricopa.

May 7, 2015. Betsy Wilkening. APW hosted the 3<sup>rd</sup> grade Groundwater Flow Model Lesson with 120 students and 4 teachers. Sponsored by Tucson Water. Summit View Elementary School, Tucson.

May 7, 2015. Chuck Dugan. Maricopa Water Festival. UA Agriculture Center, Maricopa, AZ

May 8, 2015. Betsy Wilkening. APW hosted the Sweetwater Wetlands Water Festival with 85 students and 4 teachers from Summit View Elementary School. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

May 12, 2015. Betsy Wilkening. APW hosted the Sweetwater Wetlands Water Festival with 86 students and 4 teachers from CE Rose Elementary School. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

May 12, 2015. Holly Thomas-Hilburn. 38 6<sup>th</sup> grade students delivered presentations on their experience as part of APW's Water Investigation Program to their peers. 1 teacher was present. Julie Hasty, Tara Oakes and Cassandra Rickertsen attended. Sponsored by the Pulliam Foundation. Madison Meadows Elementary School, Phoenix.

May 12, 2015. Holly Thomas-Hilburn. Madison Meadows Middle School, Phoenix, 38 6<sup>th</sup> grade students delivered presentations on their year-long WIP experiences to their peers. 1 teacher was present. Tara Oakes, Cassandra Rickertsen and Julie Hasty attended. Sponsored by the Pulliam Foundation.

May 13, 2015. Betsy Wilkening. APW hosted the Discovery Journey with 100 students, 3 teachers and 4 other adults from Walter Douglas School. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

May 18, 2015. Holly Thomas-Hilburn. 430 6<sup>th</sup> – 8<sup>th</sup> grade students from multiple schools delivered presentations on their experience as part of APW's Water Investigation Program to their peers. 10 teachers, 6 volunteers, and 30 other adults were present. Julie Hasty, Tara Oakes, Cassandra Rickertsen, Holly Thomas-Hilburn, Kerry Schwartz, Pam Justice, Mary Ann Stoll and Sean Sederstrom attended. Sponsored by the Pulliam Foundation. Phoenix College, Phoenix.

May 19, 2015. Holly Thomas-Hilburn. 310 6<sup>th</sup> – 7<sup>th</sup> grade students from multiple schools delivered presentations on their experience as part of APW's Water Investigation Program to their peers. 11 teachers, 6 volunteers, and 20 other adults were present. Julie Hasty, Tara Oakes, Cassandra Rickertsen,

May 19, 2015. Betsy Wilkening. APW hosted a Groundwater Flow Model Lesson with 19 students and 1 teacher. Sponsored by Tucson Water. Academy of Math and Sciences, Tucson.

May 20, 2015. Holly Thomas-Hilburn. 30 7<sup>th</sup> grade students delivered presentations on their experience as part of APW's Water Investigation Program to their peers. 1 teacher was present. Julie Hasty and Tara Oakes attended. Sponsored by the Pulliam Foundation. Mountain View Elementary School, Phoenix.

May 22, 2015. Holly Thomas-Hilburn. 140 7<sup>th</sup> – 8<sup>th</sup> grade students from ASU Preparatory Academy delivered presentations on their experience as part of APW's Water Investigation Program to their peers. 3 teachers, 4 volunteers, and 4 other adults were present. Julie Hasty, Tara Oakes, Cassandra Rickertsen and Holly Thomas-Hilburn attended. Sponsored by the Pulliam Foundation. ASU Polytechnic Campus, Mesa.

May 22, 2015. Chuck Dugan. Presentation of the Incredible Journey Activity to 75 K-8<sup>th</sup> grade students as part of Maricopa Summer Safety Event. Sponsored by Abbott Fund. Copper Sky Recreation Complex, Maricopa.

May 26, 2015. Chuck Dugan. Camp Hope Watershed Activity. Camp Hope, Oracle, AZ

May 27, 2015. Chuck Dugan. Presentation of the Watershed model lesson to 40 adults from Camp Hope. Sponsored by Abbott Fund. Triangle Y Ranch Camp, Oracle.

June 8, 2015. Betsy Wilkening. APW worked with teachers on chemistry kits as part of GK-12 workshop with Dr. Kim Ogden and Stephanie Sikora. Sponsored by Tucson Water. The University of Arizona, Tucson.

June 11, 2015. Betsy Wilkening. APW hosted a Groundwater Flow Model Lesson with 20 students and 2 teacher in attendance. Sponsored by Tucson Water. Santa Rita High School, Tucson.

June 12, 2015. Betsy Wilkening. APW hosted the Rainwater Harvesting Solar Panel Engineering lessons with 30 students and 1 teacher in attendance. Sponsored by Tucson Water. Tucson Village Farms Sumer Camp, Tucson.

June 15, 2015. Betsy Wilkening. APW hosted an Engineering Water Wheels lesson with 19 students and 4 teacher in attendance. Sponsored by Tucson Water. Santa Rita High School, Tucson.

June 23, 2015. Betsy Wilkening. APW hosted the Incredible Journey Lesson with 40 students and 4 adults in attendance. Sponsored by Tucson Water. Jacob's Park YMCA, Tucson.

June 24, 2015. Betsy Wilkening. APW hosted the Sweetwater Wetlands Water Festival for La Petite Academy with 21 students and 4 adults in attendance. Sponsored by Tucson Water. Sweetwater Wetlands Park, Tucson.

June 25, 2015. Betsy Wilkening. APW hosted the Water Conservation lesson at the Splash and Dash event with 24 students and 3 adults in attendance. Sponsored by Tucson Water. Jacob's Park YMCA, Tucson.

June 29, 2015. Betsy Wilkening. APW hosted the Rainwater Harvesting and Incredible Journey lessons at the Tech Wizard's Camp event with 52 students and 2 adults in attendance. Sponsored by Tucson Water. Laguna Elementary, Tucson.

June 30, 2015. Betsy Wilkening. APW hosted the Rainwater Harvesting and Incredible Journey lessons at the Tech Wizard's Camp event with 67 students and 2 adults in attendance. Sponsored by Tucson Water. Laguna Elementary, Tucson.

August 26, 2015. Betsy Wilkening. Arizona-Sonora Desert Museum and APW's Tucson Ed Program hosted Teacher Night. 45 students and 55 adults were in attendance. Arizona-Sonora Desert Museum, Tucson.

August 27, 2015. Julie Hasty, Tara Oakes, and Kerry Schwartz. Thinkified Groundwater presentation. 45 students and one teachers. Bethune School, Phoenix.

September 1, 2015. Tara Oakes. Groundwater Lesson. Sunset Hills Elementary, Surprise, AZ.

September 9, 2015. Tara Oakes. Groundwater Presentation. 130 6th grade students and one teacher. Verrado Middle School, Buckeye, AZ.

September 10, 2015. Tara Oakes and Julie Hasty. Groundwater Presentation. 130 6th grade students and one teacher. Verrado Middle School, Buckeye, AZ.

September 14, 2015. The 3<sup>rd</sup> Grade Groundwater Flow Model Presentation. Two APW water educators.. 52 students and two teachers. Henry Elementary, Tucson.

September 15, 2015. The Groundwater Presentation. One APW water educator. 25 students in a teacher preparation program and one teacher in attendance. Northern Arizona University in Tucson.

September 15, 2015. Tara Oakes. The Groundwater Presentation. 16 6th grade students and one teacher. Arlington Elementary, Arlington, Arizona.

September 16, 2015. Tara Oakes. The Starshine Academy Family Event hosted by the UA Cooperative Extension Family Wellness Program. 20 adult and 30 youth attendees were present. Starshine Academy, Phoenix.

September 17, 2015. Sean Sederstrom. Flagstaff Water Festival. 735 students, 28 teachers, 61 volunteers, and 68 parents were in attendance. Sponsored by the City of Flagstaff and SCA Tissue. Foxglenn Park, Flagstaff.

September 17, 2015. Tara Oakes. The Groundwater Presentation. 50 6th grade students and one teacher. Copper Creek Elementary, Glendale, AZ.

September 19, 2015. Betsy Wilkening. The Water Conservation Lesson and Tour. APW educators. 8 Girl Scouts and 7 adults. Sweetwater Wetlands, Tucson.

September 22, 2015. Betsy Wilkening. The 3<sup>rd</sup> Grade Groundwater Flow Model Presentation. APW water educators. 75 students and three teachers. Sam Hughes Elementary, Tucson.

September 22, 2015. Julie Hasty. The Groundwater Presentation. 107 6th grade students and one teacher. Copper Trails School, Goodyear, AZ.

September 23, 2015. Tara Oakes. The Groundwater Presentation. 98 7th grade students and one teacher. Mountain View School, Phoenix, AZ.

September 24, 2015. Julie Hasty. The Groundwater Presentation. 55 7th grade students and one teacher. Champion Chandler, Chandler, AZ.

September 24, 2015. Betsy Wilkening. APW presented at STEM Night. 29 adults and 18 students attended. Mansfield Magnet School, Tucson.

September 25, 2015. Betsy Wilkening. Sweetwater Wetlands Water Festival. 48 students, 2 teachers, and 40 adults from Henry Elementary School in attendance. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

September 28, 2015. Betsy Wilkening. Sweetwater Wetlands Water Festival. 45 students, 2 teachers, and 10 adults from Holladay Elementary School in attendance. Sponsored by Tucson Water. Sweetwater Wetlands, Tucson.

September 29, 2015. Betsy Wilkening. Groundwater Flow Model Presentation. APW water educators. 40 students and one teacher. Desert View High School, Tucson.

September 30, 2015. Betsy Wilkening. Groundwater Flow Model Presentation. APW water educators. 65 students and one teacher. Desert View High School, Tucson.

September 30, 2015. Betsy Wilkening. The 3<sup>rd</sup> Grade Groundwater Flow Model Presentation. APW water educators. 75 students and three teachers. Myers Ganoung Elementary, Tucson.

October 1, 2015. Betsy Wilkening. Water Scene Investigation. 58 students and one teacher. Dietz School, Tucson.

October 2, 2015. Sean Sederstrom. Payson Water Festival. Payson, AZ

October 3, 2015. Betsy Wilkening. Ocean Night. 40 students and 20 adults were in attendance. Biosphere 2, Oracle, AZ.

October 4, 2015. Tara Oakes. Orangewood CO River Trip, Water Quality Testing. Lee's Ferry/Horseshoe Bend/Glen Canyon, AZ.

October 5, 2015. Betsy Wilkening. Sweetwater Wetlands Water Festival. Myers Ganoung Elementary, Tucson, AZ

October 6, 2015. Betsy Wilkening. 3rd Grade Groundwater Presentation. Pueblo Gardens Elementary, Tucson, AZ

October 7, 2015. Tara Oakes. 6th Grade Groundwater Presentation. Desert Valley Elementary School, Glendale, AZ

October 8, 2015. Betsy Wilkening. Sweetwater Wetlands Water Festival. Pueblo Gardens Elementary, Tucson, AZ

October 8, 2015. Sean Sederstrom. Verde Valley Water Festival. Verde Valley, AZ

October 9, 2015. Tara Oakes. Water Quality Testing. Goldwater Lake in Prescott, AZ

October 14, 2015. Tara Oakes. 6th Grade Groundwater Presentation. Sonoran Foothills School, Phoenix, AZ

October 16, 2015. Tara Oakes. Rainwater Harvesting Activity. Arlington Elementary, Arlington, AZ

October 17, 2015. Betsy Wilkening. Expanding Your Horizons. Sahuarita Middle School, Tucson, AZ

October 17, 2015. Betsy Wilkening. Biosphere 2 Soil Day. Biosphere 2, Oracle, AZ

October 19, 2015. Betsy Wilkening. 6th Grade Groundwater Presentation. Pistor Middle School, Tucson, AZ

October 19, 2015. Betsy Wilkening. 3rd Grade Groundwater Presentation. Collier Elementary, Tucson, AZ

October 21, 2015. Betsy Wilkening. 3rd Grade Groundwater Presentation. Cavett Elementary, Tucson,

October 22, 2015. Betsy Wilkening. Discovery Program. Walter Douglas Elementary, Tucson, AZ

October 23, 2015. Betsy Wilkening. Sweetwater Wetlands Water Festival. Cavett Elementary, Tucson, AZ

October 24, 2015. Betsy Wilkening. City of Tucson Boo Bash. Tucson, AZ

October 26, 2015. Betsy Wilkening. Sweetwater Wetlands Water Festival. Sam Hughes Elementary, Tucson, AZ October 28, 2015. Betsy Wilkening. Sweetwater Wetlands Water Festival. Hollinger Elementary, Tucson, AZ October 29, 2015. Betsy Wilkening. 3rd Grade Groundwater Presentation. Hudlow Elementary, Tucson, AZ October 29, 2015. Betsy Wilkening. 3rd Grade Groundwater Presentation. Fruchthendler Elementary, Tucson, AZ October 29, 2015. Julie Hasty. Mystery Box Presentation. Bethune Elementary School, Phoenix, AZ October 30, 2015. Betsy Wilkening. Sweetwater Wetlands Water Festival. Soleng Tom Elementary, Tucson, AZ November 1, 2015. Betsy Wilkening. Cyclovia. Tucson, AZ

November 3, 2015. Betsy Wilkening. 3rd Grade Groundwater Presentation. White Elementary, Tucson, AZ November 4, 2015. Tara Oakes. Mystery Box Presentation. Verrado Middle School, Buckeye, AZ

November 5, 2015. Betsy Wilkening. 3rd Grade Groundwater Presentation. Leman Academy, Tucson, AZ

November 5, 2015. Betsy Wilkening. 3rd Grade Groundwater Presentation. White Elementary, Tucson, AZ

November 5, 2015. Tara Oakes. Mystery Box Presentation. Verrado Middle School, Buckeye, AZ

November 6, 2015. Betsy Wilkening. Sweetwater Wetlands Water Festival. Collier Elementary, Tucson, AZ

November 7, 2015. Betsy Wilkening. Camp Wildcat. Tucson, AZ

November 9, 2015. Betsy Wilkening. Sweetwater Wetlands Water Festival. Fruchthendler Elementary, Tucson, AZ November 10, 2015. Tara Oakes. Mystery Box Presentation. Desert Valley Middle School, Glendale, AZ

November 12, 2015. Betsy Wilkening. 3rd Grade Groundwater Presentation. Pistor Middle School, Tucson, AZ

November 12, 2015. Betsy Wilkening. 6th Grade Groundwater Presentation. Collier Elementary, Tucson, AZ

November 12, 2015. Tara Oakes. Rainwater Harvesting Activity. Verrado Middle School, Buckeye, AZ

November 13, 2015. Tara Oakes. Rainwater Harvesting Activity. Verrado Middle School, Buckeye, AZ

November 13, 2015. Betsy Wilkening. STEM Adventure. Tucson, AZ

November 14, 2015. Betsy Wilkening. Expanding Your Horizons. Amphi Middle School, Tucson, AZ

November 17, 2015. Betsy Wilkening. 6th Grade Groundwater Presentation. St Elizabeth Ann Seton, Tucson, AZ

November 17, 2015. Julie Hasty. Mystery Box Presentation. Poston Butte High School, San Tan Valley, AZ

November 17, 2015. Betsy Wilkening. 6th Grade Groundwater Presentation. Roberts Naylor K-8, Tucson, AZ

November 17, 2015. Pam Justice. Water Scene Investigation. Superstition Springs, Mesa, AZ

November 18, 2015. Julie Hasty. 6th Grade Groundwater Presentation. Fees Middle School, Tempe, AZ

November 18, 2015. Tara Oakes. Mystery Box Presentation. Copper Creek Elementary School, Glendale, AZ

November 18, 2015. Betsy Wilkening. 6th Grade Groundwater Presentation. Desert Sky Middle School, Vail, AZ

November 18, 2015. Pam Justice. Water Scene Investigation. Superstition Springs, Mesa, AZ

November 19, 2015. Betsy Wilkening. 6th Grade Groundwater Presentation. St Elizabeth Ann Seton, Tucson, AZ

November 19, 2015. Betsy Wilkening. 3rd Grade Groundwater Presentation. Hendricks Elementary, Tucson, AZ

November 19, 2015. Tara Oakes. Mystery Box Presentation. Copper Creek Elementary School, Glendale, AZ

November 19, 2015. Julie Hasty. Rainwater Harvesting Activity. Bethune Elementary School, Phoenix, AZ November 19, 2015. Pam Justice. Water Scene Investigation. Superstition Springs, Mesa, AZ November 20, 2015. Betsy Wilkening. Sweetwater Wetlands Water Festival. Hudlow Elementary, Tucson, AZ November 20, 2015. Betsy Wilkening. STEAM night Craycroft Elementary. Craycroft Elementary, Tucson, AZ November 21, 2015. Tara Oakes. AZGFD Educators Fair at Adobe Mountain. Adobe Mountain Wildlife Rehab Center November 21, 2015. Betsy Wilkening, Family Festival Reid Park. Reid Park, Tucson, AZ November 22, 2015. Tara Oakes. AZGFD Educators Fair at Adobe Mountain. Adobe Mountain Wildlife Rehab Center November 23, 2015. Tara Oakes. Mystery Box Presentation. Sunset Hills, Surprise, AZ November 23, 2015. Betsy Wilkening. Sweetwater Wetlands Water Festival. Hendricks Elementary, Tucson, AZ November 23, 2015. Julie Hasty. Mystery Box Presentation. Sunset Hills, Surprise, AZ November 24, 2015. Betsy Wilkening. Discovery Program. Rivera Elementary, Tucson, AZ November 25, 2015. Betsy Wilkening. 6th Grade Groundwater Presentation. McCorkle K-8, Tucson, AZ November 30, 2015. Betsy Wilkening. 3rd Grade Groundwater Presentation. Walter Douglas Elementary, Tucson, AZ November 30, 2015. Betsy Wilkening. 6th Grade Groundwater Presentation. Billy Lauffer Middle School, Tucson, AZ December 1, 2015. Betsy Wilkening. 3rd Grade Groundwater Presentation. Robins Elementary, Tucson, AZ December 1, 2015. Betsy Wilkening. 3rd Grade Groundwater Presentation. Wright Elementary, Tucson, AZ December 2, 2015. Tara Oakes. Rainwater Harvesting Activity. Sunset Hills, Surprise, AZ December 2, 2015. Pam Justice. Water Scene Investigation. Eduprize, Gilbert, AZ December 3, 2015. Betsy Wilkening. 3rd Grade Groundwater Presentation. Grijalva Elementary, Tucson, AZ December 3, 2015. Tara Oakes. Rainwater Harvesting Activity. Desert Valley Elementary, Glendale, AZ December 3, 2015. Pam Justice. Water Scene Investigation. Eduprize, Gilbert, AZ December 3, 2015. Pam Justice. Water Scene Investigation. CTA Freedom, Gilbert, AZ December 4, 2015. Betsy Wilkening. Sweetwater Wetlands Water Festival. Robins Elementary, Tucson, AZ December 4, 2015. Tara Oakes. Mystery Box Presentation. Orangewood Elementary School, Phoenix, AZ December 4, 2015. Pam Justice. Water Scene Investigation. CTA Freedom, Gilbert, AZ December 5, 2015. Pam Justice. Water Scene Investigation. CTA Freedom, Gilbert, AZ December 6, 2015. Pam Justice. Water Scene Investigation. CTA Freedom, Gilbert, AZ December 7, 2015. Betsy Wilkening. Sweetwater Wetlands Water Festival. Wright Elementary, Tucson, AZ December 7, 2015. Julie Hasty. Mystery Box Presentation. Copper Trails School, Goodyear, AZ December 8, 2015. Betsy Wilkening. 6th Grade Groundwater Presentation. Dodge Middle School, Tucson, AZ December 8, 2015. Pam Justice. Water Scene Investigation. Val Vista, Gilbert, AZ December 9, 2015. Betsy Wilkening. Sweetwater Wetlands Water Festival. CHET Homeschool Group, Tucson, AZ December 9, 2015. Pam Justice. Water Scene Investigation. Val Vista, Gilbert, AZ December 10, 2015. Betsy Wilkening. 3rd Grade Groundwater Presentation. Whitmore Elementary, Tucson, AZ December 10, 2015. Betsy Wilkening. Sweetwater Wetlands Water Festival. Centennial Elementary, Tucson, AZ December 14, 2015. Betsy Wilkening. Sweetwater Wetlands Water Festival. White Elementary, Tucson, AZ

December 15, 2015. Betsy Wilkening. 6th Grade Groundwater Presentation. Continental Middle School, Green Valley, AZ

December 15, 2015. Betsy Wilkening. 6th Grade Groundwater Presentation. Roskruge K-8, Tucson, AZ

December 16, 2015. Betsy Wilkening. 3rd Grade Groundwater Presentation. Laguna Elementary, Tucson, AZ

December 16, 2015. Betsy Wilkening. 3rd Grade Groundwater Presentation. Homer Davis Elementary, Tucson, AZ

December 17, 2015. Betsy Wilkening. 3rd Grade Groundwater Presentation. Vesey Elementary, Tucson, AZ

December 17, 2015. Betsy Wilkening. 6th Grade Groundwater Presentation. Utterback Middle School, Tucson, AZ

#### **SECTION 9 – ARIZONA PROJECT WET WORKSHOPS**

February 11, 2015. Kerry Schwartz facilitated a 3 hour workshop for 20 Tohono Chul Park docents focusing on the groundwater system in Tucson, the Colorado River Watershed, and its importance to Tucson's water supply. Sponsored by Tohono Chul Park.

February 21, 2015. Kerry Schwartz, Sean Sederstrom and Carey Miller delivered the Southern Gila County Water Festival Teacher Workshop to 8 4<sup>th</sup> grade teachers at Globe Education Center, Tucson. Sponsored by Freeport-McMoRan Foundation and Capstone Mining.

February 23, 2015. Holly Thomas-Hilburn. APW delivered a 7 hour training for the NCCC Team for the Rio Salado Restoration project. Sponsored by the Pulliam Foundation. Maricopa County Cooperative Extension office

February 24 and 26, 2015. Sean Sederstrom and Pam Justice facilitated the Avondale Teacher Workshop with 11 4<sup>th</sup> grade teachers. Sponsored by Avondale Public Works at Municipal Operations Service Center, Avondale.

March 9, 10, and 13, 2015. Mary Ann Stoll and Kerry Schwartz facilitated the "Effective STEM with Project Based Learning" Academy with 5 teachers present at the Maricopa County Cooperative Extension Office, Phoenix. Sponsored by ADWR and SRP.

March 14-15, 2015. Betsy Wilkening and Kerry Schwartz facilitated the "Integrating Engineering into the Curriculum" Academy with 11 teachers. Sponsored by Tucson Water.

March 25, 2015. Kerry Schwartz and Chuck Dugan delivered the Apache Junction Water Festival Teacher Workshop to 5 4<sup>th</sup> grade teachers at Saguaro Elementary School, Apache Junction. Sponsored by CAP, Arizona Department of Corrections, SRP, Arizona Water Company, the City of Apache Junction, and Abbott Fund.

April 8, 2015. Sean Sederstrom and Pam Justice facilitated the Avondale Teacher Workshop with 5 4<sup>th</sup> grade teachers at Estrella Vista Elementary School, Avondale. Sponsored by Avondale Public Works.

April 28, 2015. Chuck Dugan facilitated the Maricopa Teacher Workshop with 2 4<sup>th</sup> grade teachers at the Maricopa District office, Maricopa. Sponsored by Nissan, SRP, CAP, Arizona Department of Corrections, and Abbott Fund.

May 2, 2015. Kerry Schwartz and Betsy Wilkening facilitated the Tucson STEM Academy Follow-up Workshop with 15 teachers at the Water Resources Research Center, Tucson. Sponsored by Tucson Water.

June 1, 2, 3, 4, and 5, 2015.Kerry Schwartz and Betsy Wilkening delivered the Tucson STEM Academy to 28 elementary, middle, and high school teachers at the University of Arizona, Tucson. Sponsored by Tucson Water.

June 9, 2015. Kerry Schwartz and Tara Oakes facilitated an 8 hour STEM based workshop for 35 elementary school teachers at Biosphere 2, Oracle. Sponsored by Avondale Public Works.

June 9, 2015. Mary Ann Stoll and Kerry Schwartz facilitated a three hour STEM workshop with a focus on Project Based Learning for 5 teachers at the University of Arizona Maricopa County Cooperative Extension Office, Phoenix. Sponsored by ADWR and SRP.

June 10, 2015. APW hosted the Water Investigations Program Unit 1 Workshop with 18 teachers in attendance at the University of Arizona Maricopa County Cooperative Extension Office, Phoenix. Holly Thomas-Hilburn, Kerry Schwartz, Tara Oakes and Cassandra Rickersten facilitated. Sponsored by the Pulliam Foundation.

June 16-17, 2015. Pam Justice and Mary Ann Stoll hosted the Avondale STEM Academy with 14 teachers in attendance at the City of Avondale Municipal Operations Center, Avondale. Sponsored by the City of Avondale.

June 23-25, 2015. Pam Justice, Kerry Schwartz, and Mary Ann Stoll facilitated the Greater Phoenix STEM Academy with 6 teachers in attendance at Gateway Community College, Phoenix. Sponsored by SRP, Gateway Community College, and ADWR.

June 29 - July 1, 2015. Kerry Schwartz and Jessica Ahlstrom facilitated the STEMazing Water Energy Teacher Workshop with 12 teachers in attendance at University of Arizona Technical Park, Tucson. Sponsored by the Pima Association of Governments and Tucson Water.

July 2, 2015. Kerry Schwartz, Sean Sederstrom and Jessica Ahlstrom delivered the Tucson Water Festival Workshop to 26 4<sup>th</sup> Grade Teachers at the University of Arizona Technical Park, Tucson. Sponsored by Tucson Water and Pima Association of Governments.

July 13-17, 2015. Kerry Schwartz, Mary Ann Stoll, and Pam Justice delivered the SRP STEM Academy to 19 elementary and middle school teachers at SRP's PERA Club, Tempe. Sponsored by the Salt River Project.

July 21, 2015. Pam Justice and Sean Sederstrom facilitated the Litchfield Water Festival Teacher Workshop with twenty-three 4<sup>th</sup> grade teachers in attendance at Palm Valley Elementary in Goodyear. Sponsored by EPCOR Utilities and Liberty Utilities.

August 27, 2015. Flagstaff Water Festival Teacher Workshop facilitated by Sean Sederstrom. Flagstaff Unified School District's Family Resource Center in Flagstaff. To a group of five teachers. Sponsored by the city of Flagstaff, Flagstaff Unified School District, and SCA Tissue.

September 8, 2015. Verde Valley Water Festival Teacher Workshop facilitated by Sean Sederstrom. Yavapai County Annex, Cottonwoord, Arizona. Six teachers were in attendance. Sponsored by Yavapai County.

September 15, 2015. Chuck Dugan. Casa Grande WF Teacher Training (vol#1). Casa Grande District Office, Casa Grande, AZ

September 17, 2015. Chuck Dugan. Casa Grande WF Teacher Training (vol#2). Casa Grande District Office, Casa Grande, AZ

September 17, 2015. The Arizona Hydrological Society 2015 Teacher Workshop facilitated by Kerry Schwartz and Gail Cordy. Desert Willow Conference Center, Phoenix, Arizona. 19 teachers. Sponsored by Arizona Cooperative Extension and the Arizona Hydrological Society.

September 19, 2015. The Yuma Water Festival Teacher workshop facilitated by Sean Sederstrom. Yuma Public Works Department, Yuma, AZ. There were 13 teachers in attendance. Sponsored by City of Yuma.

October 17, 2015. Betsy Wilkening. Sustainability Curriculum Development Biosphere 2. Biosphere 2, Oracle, AZ

October 24, 2015. Holly Thomas-Hilburn. WIP Unit 3 Teacher Workshop. Maricopa Cooperative Extension Office, Phoenix, AZ

November 6, 2015. Betsy Wilkening. EXCEL-ling at Data Analyis at Arizona Science Teachers Association conference. NAU Campus, North Phoenix, AZ

November 7, 2015. Betsy Wilkening. Pump It Up! Engineering Design Workshop at Arizona Science Teachers Association Conference, NAU Campus, North Phoenix, AZ

November 7, 2015. Holly Thomas-Hilburn. I Think Therefore I Am: DSRP Workshop at Arizona Science Teachers Association, NAU Campus, North Phoenix, AZ

November 21, 2015. Kerry Schwartz. Discover a Watershed: the Colorado Workshop. City of Yuma Training Room, Yuma, AZ

November 21, 2015. Pam Justice. Groundwater: Why do we care? Maricopa Cooperative Extension Office, Phoenix, AZ

#### **SECTION 10 – ARIZONA PROJECT WET VOLUNTEER TRAINING**

January 29, 2015. Chuck Dugan. Casa Grande Kiwanis Volunteer Recruiting. Kiwanis Meeting, Holiday Inn, Casa Grande, AZ

February 17, 2015. Mondo Anaya Community Center, Casa Grande. Sean Sederstrom, Carey Miller, Kerry Schwartz and Chuck Dugan facilitated a Casa Grande Water Festival Volunteer Training. Sponsored by CAP and Abbott Fund.

February 18, 2015. Justice of Peace, Casa Grande. Sean Sederstrom, Carey Miller, Kerry Schwartz and Chuck Dugan facilitated a Casa Grande Water Festival Volunteer Training. Sponsored by Abbott Fund.

February 18, 2015. Chuck Dugan. Casa Grande WF Volunteer Training. UA Extension Office, Casa Grande, AZ

February 24, 2015. Holly Thomas-Hilburn. APW delivered an 8 hour training for the NCCC Team for the Rio Salado Restoration project. Sponsored by the Pulliam Foundation. Arizona-Sonora Desert Museum, Tucson.

February 25, 2015. Holly Thomas-Hilburn. APW delivered an 8 hour training for the NCCC Team for the Rio Salado Restoration project, as well as professional development for APW staff. Sponsored by the Pulliam Foundation. Various SRP and CAP sites.

February 26, 2015. Gilbert Public Works, Gilbert. Sean Sederstrom, Carey Miller, and Kerry Schwartz facilitated the Gilbert Water Festival Volunteer Training. Sponsored by Town of Gilbert and Gilbert Public Schools.

March 23, 2015. Bullion Plaza Cultural Center, Miami. Sean Sederstrom, Carey Miller, and Kerry Schwartz facilitated the Southern Gila Water Festival Volunteer Training. Sponsored by Freeport-McMoRan, Capstone Pinto Valley Mine, Gila County, and Arizona Water.

March 31, 2015. Tucson Water office, Tucson. APW hosted a Water Festival Volunteer Training as part of the Tucson Water Festival. Sean Sederstrom and Carrie Miller attended. Sponsored by Tucson Water.

April 1, 2015. Metro Water office, Tucson, APW hosted a Water Festival Volunteer Training as part of the Tucson Water Festival with 11 people in attendance. Sean Sederstrom, Carrie Miller and Betsy Wilkening attended. Sponsored by Tucson Water.

April 14, 2015. Apache Junction Multi-Generational Center, APW hosted a Water Festival Volunteer Training as part of the Apache Junction Water Festival with 23 people in attendance. Sean Sederstrom and Chuck Dugan attended. Sponsored by the City of Apache Junction, Apache Junction Parks and Rec, Arizona Water, SRP, CAP, and the Abbott Fund.

April 23, 2015. Municipal Operations Service Center, Avondale, APW hosted a Water Festival Volunteer Training as part of the Avondale Water Festival with 17 people in attendance. Sean Sederstrom attended. Sponsored by Avondale Public Works.

May 4, 2015. Nissan Test Facility, Stanfield, APW hosted a Water Festival Volunteer Training as part of the Maricopa Water Festival with 17 Nissan employees and volunteers in attendance. Chuck Dugan attended. Sponsored by Nissan, SRP, CAP, Arizona Department of Corrections, and Abbott Fund.

September 10, 2015. Flagstaff Water Festival volunteer training. NAU's College of Education, Flagstaff. Sean Sederstrom administered with 14 volunteers in attendance. Sponsored by the City of Flagstaff and SCA Tissue.

September 14, 2015. Flagstaff Water Festival volunteer training. NAU's College of Education, Flagstaff. Sean Sederstrom administered with 30 volunteers in attendance. Sponsored by the City of Flagstaff and SCA Tissue

September 28, 2015. Payson Water Festival Volunteer Training with Sean Sederstrom. Payson Unified School District Office. 15 adult volunteers. Sponsored by the City of Payson.

September 29, 2015. Verde Water Festival Volunteer Training with Sean Sederstrom. Yavapai county Roads Department. 27 adult volunteers. Sponsored by Yavapai County.

October 14, 2015. Sean Sederstrom. Litchfield Elementary School District. WF Volunteer Training, Litchfield, AZ

#### **Section 11 – WSP Fellowships**

#### **TRIF Student Fellowship Recipients 2014/2015**

David Hogan, Ph.D. candidate	Dept. of Soil, Water, and Environmental Science	Advisor: Dr. Raina Maier	Remediating Contaminated Waste Water Using Ion Flotation with Biosurfactant Collector
Shanshan Hou, Ph.D. candidate	Dept. of Systems and Industrial Engineering	Advisor: Dr. Neng Fan	Coordinated Planning and Operations of Water Systems with Renewable Energy Integration
Guangbin Li, Ph.D. candidate	Dept. of Chemical and Environmental Engineering	Advisors: Dr. Jim Field and Dr. Reyes Sierra	Improving the Reliability of Novel Nutrient Nitrogen Removal Technology: Attenuation of Nitrite Inhibition to Anaerobic Ammonium Oxidation (Anammox)

	Dept. of Soil, Water, and Environmental Science		A Comparison of the State-of-the Art of Bardenpho Process with Conventional Activated Sludge and Trickling Filter Process
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	WRRC Students		
Name	Major/Department	Degree Sought	Graduation Date
Aleman, Miriam	Environmental Sciences	BS	May - 18
Amaro-Silva, Joaquin	Public Health	MS	May - 17
Barker-Perez, Emma	Development Practice	MA	May - 16
Batts, Iesha	Chemical Engineering/ Mathematics	BS	May - 16
Bernat, Rebecca	Soil, Water and Environmental Science	Ph.D.	May - 19
Bonfield, Jana	Library / Information Science	MS	May - 16
Brill-Duisberg, Emilie	GIS	MIS	
Bui, Nicole	Biosystems Engineering	BS	May - 17
Callaway, Kristen	Language, Reading, Culture	MA	May - 17
Capehart, Mary Ann	Education	MA	May - 15
Clinkenbeard, Dixie	Anthropology/French	BA	May - 15
Currie, Jordan	Chemistry	BS	May - 16
Delano, Nathaniel	Water, Society & Policy	MS	May - 16
DeMoulin, Jade	French, Language and Culture	ВА	May - 15
DeWalt, Emily	Anthropology/Public Health	BS	May - 15
Diaz, Krystalle	Environmental Sciences	BS	
Farah, Amina	Hydrology/Water Resources	BS	
Fullerton, Christopher	Geography	Ph.D.	May - 19
Gebremariam, Reshet	Water, Society & Policy	MS	December - 15
Gray, Erin	Computer Science & Hydrology	BS	
Gudvangen, Emily	Pre-physiology	BS	
Hancock, Scott	Pre-neuroscience/ Cognitive Science	BS	
Huang, Ling-Yee	Water, Society & Policy	MS	May - 15
Hullinger, Ashley	Planning	MA	May - 15
Hummer, Nejlah	Anthropology/ Environmental Studies	ВА	May - 15
Joe, Valerisa	Environmental Microbiology	MS	May - 15
Kennett, Bailey	Water, Society & Policy	MS	May - 17

Kleiman, Beth	Water, Society & Policy	MS	May - 17
Miller, Hennessy	Water, Society & Policy	MS	May - 17
Nelson, Craig	Water, Society & Policy	MS	May - 17
O'Neill, Brian	Water, Society & Policy	MS	May - 16
Posegate, Ann	Soil, Water, and Environmental Science	MS	May - 15
Prescott, Alexander	Geosciences/ Mathematics	BS	May - 15
Riccio, Joshua	Computer Science	BS	May - 17
Richard, Danielle	Biology/Public Health	BS	
Roudaut, Marie-Blanche	Arid Lands Resource Sciences	Ph.D.	May - 19
Serwon, Daniel	Environmental Engineering	MS	
Tapia, Elia	Arid Lands Resource Sciences	Ph.D.	May - 18
Trimble, McKenzie	Social Sciences/Law	BS	
Vimont, Ethan	Water, Society & Policy	MS	May - 17
White, Alissa	Hydrology	Ph.D	
Wilkening, Patrick	Computer Science	BS	Dec- 16
Zimmermann, Nicholas	GIST	MS	December - 15