

University of Arizona Water Resources Research Center 2019 METRICS REPORT

Progress toward Goals Outlined in University of Arizona Water Resources Research Center (WRRC) 2021 STRATEGIC PLAN

2019 Metrics Report Completed May 6, 2020

Goal 1: To increase WRRC capacity to engage in water policy and management research that is highly relevant to the real world through increased external funding and support and recruitment of skilled faculty and staff.

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|--------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Grant Funding Received | | | | | | |
| Federal grants and contracts | \$245,199 | \$374,803 | \$397,374 | \$456,246* | \$407,240 | \$418,834 |
| State grants and contracts | \$40,569 | \$161,062 | \$127,882 | \$89,100 | \$94,500 | \$93,961 |
| Foundation funds | \$564,249 | \$233,249 | \$101,871 | \$117,500 | \$211,590 | \$245,533 |
| Private grants and contracts | \$100,158 | \$411,252 | \$473,973 | \$270,012 | \$363,791 | \$286,985 |
| WRRC Staffing | | | | | | |
| Faculty | 4 (1 emeritus) |
| Staff | 15 | 22 | 21 | 20 | 20 | 20 |
| Students | 42 | 24 | 19 | 24 | 20 | 12 |
| Grant-Funded Projects | | | | | | |
| Number of new projects | 11 | 3 | 6 | 5 | 8 | 8 |
| Project funding | \$385,926 | \$154,924 | \$559,661 | \$387,699.00 | \$661,365 | \$576,607 |
| Indirect Costs (IDC) Received | | | | | | |
| Total | \$55,369 | \$76,548 | \$89,659 | \$79,513.97 | \$94,789 | \$86,508 |
| University | \$33,221 | \$45,928 | \$53,795 | \$47,708.38 | \$56,874 | \$51,905 |
| CALS | \$13,288 | \$18,372 | \$21,518 | \$19,083.35 | \$22,749 | \$20,762 |
| Other departments | \$3,778 | \$485 | \$1,496 | \$1,185.05 | \$1,422 | \$1,298 |
| WRRC | \$5,082 | \$11,763 | \$12,850 | \$11,537.19 | \$13,745 | \$12,543 |

Goal 2: To increase recognition, both within and beyond the University, of the WRRC as an excellent provider of skills and knowledge for future generations of water professionals

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|-----------------------------------------------------------|------|------|------|------|------|------|
| Students Mentored Through WRRC Programs | | | | | | |
| Graduate | 24 | 20 | 14 | 19 | 16 | 3 |
| Undergraduate | 6 | 13 | 7 | 7 | 4 | 2 |
| Project WET | 27 | 22 | 22 | 20 | 22 | 22 |
| WRRC Faculty Participation on Student Committees | | | | | | |
| Master's | 6 | 8 | 12 | 8 | 2 | 3 |
| Ph.D. | 3 | 5 | 9 | 10 | 12 | 13 |
| Number of Students Instructed in Classroom Setting | | | | | | |
| Formal class | 16 | 15 | 15 | 101 | 102 | 131 |
| Guest lectures | 165 | 225 | 260 | 92 | 151 | 172 |

Goal 3: Through the activities of Arizona Project WET, support teacher professional development, offer real-world learning experiences for K-12 students, and train community and business members to facilitate student learning.

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|-----------------------------------------------------------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Number of teachers with 7+ hours of professional development | 550 | 341 | 522 | 563 | 451 | 566 |
| Number of teachers with 90%+ positive response rate to professional development questionnaire | 523 (95%) | 317 (93%) | 496 (95%) | 534 (95%) | 421 (92%) | 511(90%) |
| Number of students instructed by participating teachers | 46,456 | 31,759 | 35,695 | 44,470 | 22,614 | 33,739 |
| Number of students engaged | 40,100 | 33,392 | 46,776 | 25,681 | 32,828 | 37,678 |
| Projected gallons of water saved | 5,364,514 | 3,688,811 | 3,656,230 | 2,151,214 | 2,478,420 | 1,476,722 |

Goal 4: To enhance WRRC leadership in the dissemination of sound and independent water management and policy information and research results through increasing communication with a broad network of professional contacts around the State and beyond.

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|-------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Brown Bag Seminars | 18 | 16 | 21 | 17 | 22 | 16 |
| Annual Conference Registrations | 341 | 341 | 286 | 357 | 333 | 390 |
| Number of Presentations (Estimates of audience attendance) | | | | | | |
| Local (Tucson) | 49 (1,470) | 16 (480) | 47 (1,410) | 21 (630) | 32 (960) | 21(630) |
| State (Arizona) | 32 (1,920) | 27 (1,620) | 32 (1,920) | 30 (1,800) | 7 (420) | 20(1200) |
| National | 23 (2,185) | 18 (1,710) | 25 (2,375) | 14 (1,330) | 30 (2,850) | 12(1140) |
| International | 5 (800) | 7 (1,120) | 10 (1,600) | 13 (2,080) | 5 (800) | 4 (600) |
| Media Contacts | | | | | | |
| Radio | 3 | 2 | 7 | 3 | 1 | 0 |
| Print | 10 | 8 | 15 | 13 | 12 | 7 |
| Video | 6 | 2 | 8 | 5 | 1 | 1 |
| Online | 8 | 3 | 7 | 22 | 6 | 20 |
| Subscribers to WRRC Publications | | | | | | |
| UA | 209 | 215 | 198 | 198 | 198 | 115 |
| National | 1,719 | 1,852 | 1,545 | 1,533 | 1,520 | 1299 |
| International | 12 | 15 | 11 | 11 | 10 | 11 |
| Online | 5,700 | 5,512 | 5,956 | 5,356 | 2,475 | 2500 |
| Weekly Wave | 1,780 | 1,822 | 2,027 | 2,198 | 2,630 | 2734 |

2019 University of Arizona Water Resources Research Center (WRRC) Partnership Metrics

Completed April 20, 2020

Note: Programs in blue text were added in 2019.

| Program | Strategic Plan Objective | FTE | | | Mission Focus (%) | | | Partners/Collaborators/Engagement | | | | | | | | | | | |
|------------------------------------------------------------|--------------------------|-------------|-------------|-----------------|-------------------|-------------|---------------------|-----------------------------------|------------------|--------------|------------|------------|-----------------|-----------|-----------|------------------|-------------------|--------------------------|-------------|
| | | WRRC Staff | Student | Volunteer Hours | Research | Instruction | Extension/ Outreach | Intra-university | Inter-university | Private/NGOs | | Government | | | | | Tribal Engagement | International Engagement | Total |
| | | | | | | | | | | Profit | Non-profit | City | County/Regional | State | Federal | School Districts | | | |
| WRRC 2019 Annual Conference | 2,4 | 0.5 | 0.3 | 80 | 20 | 30 | 50 | 2 | | 12 | 8 | 4 | 16 | 4 | 2 | | 4 | | 52 |
| WRRC Brown Bag Seminars (Including Co-sponsored) | 4 | 0.1 | | | | 40 | 60 | 8 | 1 | 2 | 1 | 1 | | | | | 1 | 2 | 16 |
| WRRC External Advisory Committee | 1,4 | 0.1 | | | | 30 | 70 | | 1 | 8 | 7 | 3 | 3 | 2 | | | 2 | | 29 |
| Arroyo | 2,4 | 0.3 | 0.2 | | | 10 | 90 | 1 | | 5 | 3 | 1 | 1 | 3 | 1 | | 1 | | 16 |
| Water Quality Research Program | 1,2 | 1.9 | 1.0 | | 40 | 50 | 10 | 10 | 31 | | 3 | 35 | 10 | 20 | 2 | 10 | 2 | 20 | 143 |
| WRRRA 104 Program | 1,4 | 0.4 | | | 40 | 30 | 30 | 11 | | 3 | 1 | | 3 | | 1 | | | | 19 |
| Aqua STEM Program (AS) | 3 | 1.0 | | 491 | 10 | | 90 | 1 | 1 | 3 | 1 | 2 | 1 | 1 | | 15 | | | 25 |
| Tucson Water Education Program (TWE) | 3 | 2.0 | 5.0 | | 1 | | 99 | 5 | | | 2 | 5 | 2 | 1 | 1 | 9 | | | 25 |
| Arizona Water Festivals Program (AWF) | 3 | 2.0 | | 6924 | 5 | | 95 | 4 | 1 | 11 | 2 | 26 | 1 | 1 | 1 | 32 | | | 79 |
| Teacher Professional Development Program (TACD) | 3 | 2.5 | | | 10 | | 90 | 1 | 2 | | | 16 | | 1 | 1 | 132 | | | 153 |
| Water Scene Investigation Program (WSI) | 3 | 0.4 | | | 1 | | 99 | | | | 1 | 2 | | | | 4 | | | 7 |
| Recharge the Rain | 3 | 0.5 | | 400 | 5 | | 95 | 1 | 2 | | 2 | 1 | | | | 7 | | | 13 |
| Pinal Water Education Program (PWE) | 3 | 1.0 | | 1116 | 1 | | 99 | 1 | | 2 | | 5 | 1 | 1 | | 7 | | | 17 |
| Underwater ROV's | 3 | 0.5 | | 304 | 20 | | 80 | | 1 | 1 | | | | 1 | | 11 | | | 14 |
| Cobre Valley Ecosystem Services Study | 1,4 | 0.7 | 0.5 | 56 | 50 | | 50 | 4 | 1 | 6 | 5 | 3 | 3 | 4 | 3 | 1 | 2 | | 32 |
| Babbitt Center Collaborative Research Agreement | 1,4 | 0.5 | | | 60 | | 40 | 1 | | | 4 | 8 | | 4 | 3 | | 1 | | 21 |
| Sky Island Waters | 1,4 | 0.1 | | 80 | 30 | | 70 | 5 | 2 | 2 | 6 | | 2 | | 2 | | 2 | 4 | 25 |
| UA Water Network | 1,4 | 0.2 | | | | | 100 | 59 | | | | | | | | | | | 59 |
| Transboundary Aquifer Assessment Program (TAAP) | 1,4 | 0.85 | 0.5 | | 90 | | 10 | 3 | 4 | | 7 | | | | 4 | | | 8 | 26 |
| Extension Outreach | 1,4 | 0.4 | 0.1 | | 10 | | 90 | 10 | | 2 | | | | | | | | | 12 |
| Know About Your Water | 1,4 | 0.4 | 0.2 | | 10 | | 90 | | | 3 | 5 | 2 | 1 | 3 | 1 | | | | 15 |
| Santa Cruz Watershed Collaborative | 1,4 | | | | 10 | | 90 | 2 | | 6 | 11 | 6 | 4 | 2 | 5 | 2 | 1 | | 39 |
| Other Programs, Projects, and Initiatives | 1,2,4 | 0.2 | | | | | | 4 | | 3 | 4 | | 1 | 1 | 2 | | | | 15 |
| Director's Programs and Activities (not covered elsewhere) | 1,2,4 | | | | 20 | 10 | 70 | 31 | 68 | 9 | 29 | 3 | 3 | 4 | 14 | | 4 | 18 | 183 |
| Totals 2019 | | 16.6 | 7.8 | 9451 | | | | 164 | 115 | 78 | 102 | 123 | 52 | 54 | 45 | 230 | 20 | 52 | 1035 |
| Totals 2018 | | 15.4 | 9.7 | 7025 | | | | 82 | 116 | 80 | 130 | 124 | 56 | 59 | 61 | 201 | 17 | 47 | 973 |
| Totals 2017 | | 14.6 | 10.7 | 7099 | | | | 127 | 109 | 70 | 99 | 104 | 46 | 57 | 64 | 223 | 16 | 35 | 950 |
| Totals 2016 | | 13.6 | 10.8 | 7516 | | | | 121 | 103 | 71 | 80 | 105 | 37 | 60 | 49 | 235 | 11 | 30 | 902 |
| Totals 2015 | | 15.6 | 9.5 | 7699 | | | | 50 | 151 | 85 | 80 | 73 | 22 | 43 | 50 | 53 | 37 | 30 | 674 |
| Totals 2014 | | 15.5 | 9.2 | 6677 | | | | 89 | 99 | 89 | 123 | 82 | 37 | 42 | 42 | 39 | 13 | 42 | 697 |
| Totals 2013 | | 15.3 | 8.4 | 6194 | | | | 60 | 94 | 120 | 122 | 103 | 21 | 50 | 47 | 50 | 15 | 8 | 690 |

Objectives, University of Arizona Water Resources Research Center 2021 Strategic Plan

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Objective 2: To increase recognition, both within and beyond the University, of the WRRC as an excellent provider of skills and knowledge for future generations of water professionals.

Objective 3: Through the activities of Arizona Project Wet, support teacher professional development, offer real-world learning experiences for K-12 students, and train community and business members to facilitate student learning.

Objective 4: To enhance WRRC leadership in the dissemination of sound and independent water management and policy information and research results through increasing communication with a broad network of professional contacts around the State and beyond.