

## **10.0 ACKNOWLEDGEMENTS**

### **10.1 ARID WEST WATER QUALITY RESEARCH PROJECT**

The WQRP is funded through an EPA Assistance Agreement (No. XP-99926701) and directed by the Pima County Wastewater Management Department in Tucson, Arizona. Key personnel in the management and direction of this project include the following:

- Kathleen Martyn Goforth, EPA Project Officer, EPA Region 9, San Francisco, California
- Kathleen M. Chavez, P.E., Director, Pima County Wastewater Management Department, Tucson, Arizona
- Paul M. Bennett, P.E., Deputy Director - Administration, Pima County Wastewater Management Department, Tucson, Arizona
- Edward F. Curley, Project Director, Pima County Wastewater Management Department, Tucson, Arizona
- Karen Ramage Sierra, Program Manager, Pima County Wastewater Management Department, Tucson, Arizona

### **10.2 WASTEWATER TREATMENT FACILITIES**

Ten wastewater treatment facilities provided support throughout this project by providing access to sites during site reconnaissance activities, providing historical data collected by the facility and reviewing draft reports prepared by the research team. Facilities and key personnel providing this support include the following:

- Riverside Public Works Department, Riverside, California [Santa Ana River], Rodney Cruze
- Pima County Wastewater Management Department, Tucson, Arizona [Santa Cruz River, Tucson], Byron Gaines
- Colorado Springs Utilities, Colorado Springs, Colorado [Fountain Creek], Tara Harlan
- Denver Metro Wastewater, Denver, Colorado [South Platte River], Todd Harris
- Municipal Water Department, San Bernardino, California [Santa Ana River], Valerie K. Hausel
- City of Phoenix Water Services Department, Phoenix, Arizona [Salt River], Robert Hollander

- Cheyenne Utilities, Cheyenne, WY [Crow Creek], Jim Hughes
- City of Santa Fe, Santa Fe, New Mexico [Santa Fe River], Qustandi (Costy) Kassisieh
- City of Las Vegas, Las Vegas, Nevada [Las Vegas Wash], David Mendenhall
- Carrizo Springs Wastewater Treatment Plant, Carrizo Springs, Texas [Carrizo Creek], Hector Robles
- Nogales International Wastewater Treatment Plant, Rio Rico, Arizona [Santa Cruz River, Nogales], Steve Tencza
- Colorado Springs Utilities, Colorado Springs, Colorado [Fountain Creek]. Bill Van Derveer
- City of Phoenix Water Services Department, Phoenix, Arizona [Salt River], Forrest Woodwick
- Cheyenne Utilities, [Crow Creek], Jack Young

### **10.3 REGULATORY WORKING GROUP (RWG)**

The WQRP established the RWG to assist with identification of regulatory issues that should be addressed by research. Consisting of a maximum of 15 members, the RWG includes representatives from state and regulatory agencies, municipalities, Indian tribes, industry, environmental organizations, consulting firms and universities. At key points during this project, the RWG provided critical review and comment on draft documents. Currently, the RWG membership includes the following:

- Kathleen M. Chavez, Chair, Pima County Wastewater Management, Tucson, Arizona
- Edward C. Anton, California State Water Resources Control Board, retired, Sacramento, California
- Rodney W. Cruze, Riverside Regional Water Quality Control, Riverside, California
- Paul D. Frohardt, Colorado Water Quality Control Commission, Denver, Colorado
- Michael Gritzuk, City of Phoenix Water Services, Phoenix, Arizona
- Catherine Kuhlman, U.S. EPA, Region 9, San Francisco, California
- Andrew Laurenzi, The Nature Conservancy, Tucson, Arizona
- Susan MacMullin, U.S. Fish and Wildlife Service, Albuquerque, New Mexico

- Patrick J. Maley, Mining Industry, Boise, Idaho
- S. Lynn Mays, Malcom Pirnie, Inc., Houston, Texas
- James F. Pendergast, U.S. EPA, Office of Science and Technology, Washington, D.C.
- Sam Rector, Arizona Department of Environmental Quality, Phoenix, Arizona
- Eric Rich, Navajo Environmental Protection Agency, Tuba City, Arizona
- Daniel Santantonio, City of Las Cruces, Utilities Division, Las Cruces, New Mexico
- Neil Stessman, Volunteer, National Audubon Society, National Wildlife Federation, Billings, Montana

Appreciation is also extended to the following former RWG members:

- Daniel P. Beard, National Audubon Society, Washington, D.C.
- Jaqualyn Forrest, Heal the Bay, Santa Monica, California
- Patrick Antonio, Navajo Environmental Protection Agency, Window Rock, Arizona
- Barbara Tellman, University of Arizona, College of Agriculture, Tucson, Arizona

#### **10.4 SCIENTIFIC ADVISORY GROUP (SAG)**

The WQRP established the SAG to provide technical oversight of ongoing and planned research. During the course of the Habitat Characterization Study, the SAG provided critical review of research team work products. SAG members include the following:

- Paul Adamus, Ph.D., Corvallis, Oregon – Terrestrial ecology, wetland-riparian systems, ornithology and aquatic invertebrates
- Gary A. Chapman, Ph.D., Paladin Water Quality Consulting, Corvallis, Oregon – Water quality criteria development, aquatic and sediment toxicology
- Robert Gray, Ph.D., Richland, Washington – Aquatic toxicology, environmental assessment, environmental compliance, fisheries, herpetology/amphibian malformations, environmental monitoring, natural resources, water quality
- Karmen E. King, Colorado Mountain College, Leadville, Colorado – Aquatic toxicology, fisheries biology and aquatic chemistry
- Robert W. McFarlane, Ph.D., McFarlane & Associates, Environmental Consultants, Houston, Texas – Aquatic and terrestrial ecology, threatened and endangered species, environmental impact assessments, habitat evaluation and wetlands

- Benjamin R. Parkhurst, Ph.D., HAF, Inc., Laramie, Wyoming – Ecological risk assessment, aquatic toxicology, fisheries biology and aquatic ecology
- Carlton Sims White, Ph.D., University of New Mexico, Albuquerque, New Mexico – nutrient cycling, ecosystems

Appreciation is also extended to the following former SAG members:

- Ray Alden, Ph.D., University of Nevada at Las Vegas, Las Vegas, Nevada
- William H. Clements, Ph.D., Colorado State University, Fort Collins, Colorado
- Emily Stanley, Ph.D., University of Wisconsin, Madison, Wisconsin

### **10.5 QUALITY ASSURANCE/QUALITY CONTROL TEAM (QAC)**

The QAC provided review of the quality assurance/quality control plan prepared by the research team and provided comment on draft reports. During the course of this project the following individuals provided QAC support:

- Frederick A. Amalfi, Ph.D., Aquatic Consulting and Testing, Tempe, Arizona
- James H. Duke, Jr., P.E., Ph.D., Austin, Texas
- Susan B. Hopf, University of Arizona, Tucson, Arizona

### **10.6 RESEARCH TEAM**

The Habitat Characterization Study was conducted by multi-disciplinary team including geomorphologists, hydrologists, chemists, aquatic and terrestrial biologists and regulatory specialists. Key participants included the following:

#### **URS Corporation**

- Mark Murphy, Ph.D., URS Phoenix
- Jennifer Wennerlund, URS Phoenix

#### **CDM**

- Richard Meyerhoff, Ph.D., CDM Phoenix
- Susan Morea, CDM Denver
- Nicole Rowan, CDM Denver
- Richard Chappell, CDM Denver

- Tony Gendusa, CDM Missoula
- Lonnie Johnson, CDM Phoenix

**Environmental Planning Group, Inc.**

- Linwood Smith, Ph.D.
- Tom Strong

**Other Individuals**

- Tad Foster, Attorney, Colorado Springs, Colorado
- Tim Moore, Risk Sciences, Inc., Brentwood, Tennessee
- Waite Osterkamp, Ph.D., U.S. Geological Survey, Tucson, Arizona
- Richard “Pete” Hawkins, Ph.D., University of Arizona, Tucson, Arizona
- Steve Canton, Ph.D., Chadwick Ecological Consultants, Littleton, Colorado
- Robert Gensemer, Ph.D., ENSR International, Fort Collins, Colorado
- Jim Loftis, Ph.D., Colorado State University, Fort Collins, Colorado
- Larry Roesner, Ph.D., Colorado State University, Fort Collins, Colorado

**10.7 DOCUMENT PRODUCTION TEAM**

- Keryn Darr, URS Corporation, Lead Editor
- Jennifer Wennerlund, URS Corporation, GIS Coordinator
- Lori Zito, URS Corporation, Technical Reviewer
- John Qoyawayma, URS Corporation, Graphics and Compact Disc Producer
- Patty Renter, URS Corporation, Assistant Editor
- Tony Corralejo, URS Corporation, Word Processing and Formatting

**10.8 OTHER PARTICIPANTS**

Throughout this project, numerous individuals have provided support in a variety of ways, including review of documents, discussion of ideas, preparation of meeting materials and logistical support. Key individuals included the following:

- Judy Guidotti, Pima County Wastewater Management Department, Tucson, Arizona
- Don Baumgartner, University of Arizona, Tucson, Arizona
- Dean Radtke, University of Arizona, Tucson, Arizona
- Richard Phipps, University of Arizona, Tucson, Arizona
- Byron McMillan, Pima County Wastewater Management Department, Tucson, Arizona
- Harlan Agnew, Pima County Attorneys Office, Tucson, Arizona
- Sandy Gourlay, URS Corporation, Phoenix Arizona
- John Egan, URS Corporation, Tucson, Arizona
- Paul J. Gorder, CDM, Albuquerque, New Mexico
- Jane Ryckman-Siegwarth, CDM, Phoenix, Arizona
- Art Chapa, Attorney at Law, Tucson, Arizona
- Greg Hess, Pima County Association of Governments, Tucson, Arizona
- B.J. Voekel, Pima County Wastewater Management Department, Tucson, Arizona
- Cheryl Traiger, Pima County Wastewater Management Department, Tucson, Arizona
- Marci Brown, Pima County Wastewater Management Department, Tucson, Arizona
- Suzy Hunt, Pima County Wastewater Management Department, Tucson, Arizona

## **10.9 SPECIAL THANKS**

Finally, we especially wish to recognize George Brinsko, Director of Pima County Wastewater Management Department (1979 – 2000), who envisioned the need for a research program focused on arid West waters. His vision and persistent effort ultimately resulted in the establishment of the WQRP.