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JE Fuller/ Hydrology & Geomorphology, Inc.

JONATHAN E. FULLER, P.E., R.G., P.H., D. WRE, CFM Founder

Jon Fuller is the Founder of JE Fuller/ Hydrology & Geomorphology, Inc. He has served as a project manager, project geomorphologist, and project engineer for studies and projects in Arizona, Nevada, California, and Utah. His experience includes:

- Applied Geomorphology
- Sediment Transport
- Erosion Hazard Analysis
- Arid Land Hydrology
- Drainage Design
- Floodplain Delineation Studies
- Bridge Hydraulics
- Subdivision Drainage and Improvement Plan Review
- Alluvial Fan Flooding

Mr. Fuller has extensive experience using HEC-1, HEC-2, HEC-RAS, HEC-6, FLUVIAL-12, FLO-2D, WSPRO, TR-20, TR-55, HY-8, PSRM, and RAINFLO computer models.

Professional Registration

Professional Engineer (Civil), Arizona #26846
Professional Engineer (Civil), Nevada #011393
Professional Engineer (Civil), Utah #96-319476-2202
Professional Engineer (Civil), Oregon #19442PE
Professional Engineer (Civil), Colorado #36981
Professional Engineer (Civil), Texas #90752
Professional Hydrologist - #93-H-1024, American Institute of Hydrology
Certified Floodplain Manager (CFM)
Diplomat, Water Resource Engineer (D.WRE)
Registered Geologist, Arizona #38732

Education

M.S., Quaternary and Environmental Geology (Geomorphology), Univ. of Arizona, 1987
B.S., Geology, Calvin College, Grand Rapids, Michigan, 1983

Professional Experience

Principal. JE Fuller/ Hydrology & Geomorphology, Inc	January 1995 - Present
Engineer. CH2M HILL, Inc.	May 1990 - August 1994
Principal Hydrologist. Pima Co. Flood Control District	August 1986 - April 1990
Research Assistant. University of Arizona Geosciences	August 1984 - August 1986

Representative Projects

Some of the studies and projects that Mr. Fuller has managed or was a key participant are summarized below. More detailed information can be obtained by contacting JE Fuller/ Hydrology and Geomorphology, Inc. at (480) 752-2124 or the references listed below. I am proud of the work I do. Please feel free to contact my past clients and references.

Fluvial Geomorphology/River Engineering

- Agua Fria Channelization Concept Design and Resource Development; Maricopa Co., AZ
- Agua Fria River Watercourse Master Plan; Maricopa County, AZ
- Alluvial Fan Data Collection & Monitoring Study; Maricopa County, AZ
- Aravaipa Canyon Geomorphic & Hydrologic Analysis; Aravaipa Canyon, AZ
- Aravaipa Creek Paleoflood Study; Aravaipa Canyon, AZ
- Arizona Oxide Site Erosion Hazard Evaluation; Phoenix, AZ
- Big Willow Creek Geomorphic Analysis; Salt Lake City, UT
- California Avenue Bridge Replacement Scour Evaluation; Salt Lake City, UT
- Cedar City Alluvial Fan Analysis – Dry Canyon; Cedar City, UT
- Cedar City Alluvial Fan Analysis – Fiddlers Canyon; Cedar City, UT
- Cedar City Alluvial Fan Analysis – Stephens Canyon; Cedar City, UT
- Colorado River Bank Stability Assessment; Ehrenberg, AZ
- Combs Canyon Sedimentation Study; Carson City, NV
- Coyote Creek Sedimentation Engineering Study; San Jose, CA
- Erosion Hazard Guidelines for Residential Development; Maricopa County, AZ
- Fort Pearce Wash Stability Study; St. George, UT
- Fort Pearce Wash Tamarix and Sedimentation Maintenance; St. George, UT
- Fossil Creek Paleoflood Analysis & Geomorphic Assessment; Childs, AZ
- Gila River Geomorphic Analysis – Phelps Dodge 404 Mitigation Project; Safford, AZ
- Gila River Navigability Study Geomorphic Analysis; State of Arizona
- Gila River Ordinary High Water Mark Delineation; Maricopa County, AZ
- Guzman Sand & Gravel Mine 404 Permit; Globe, AZ
- Hidden Valley Geomorphic and Bank Protection Design – Colorado River; Parker, AZ
- Jordan River Stability Study; Salt Lake County, UT
- Millstone Manor Wash Historical Geomorphology Analysis; Tucson, AZ
- Navigability Study for Burro Creek; Mohave County, AZ
- Navigability Study for Cienega Creek; Pima & Santa Cruz Counties, AZ
- Navigability Study for Sonoita Creek; Santa Cruz County, AZ
- Navigability Study for the Big Sandy River; Mohave County, AZ
- Navigability Study for the Hassayampa River; Maricopa & Yavapai Counties, AZ
- Navigability Study for the Lower Salt River; Maricopa County, AZ
- Navigability Study for the San Francisco River; Greenlee County, AZ
- Navigability Study for the San Pedro River; Cochise County, AZ
- Navigability Study for the Santa Maria River; Yavapai County, AZ
- Navigability Study for the Upper Gila River; Graham County, AZ
- Navigability Study for the Upper Salt River; Gila County, AZ
- Navigability Study for the Verde River; Yavapai County, AZ
- Navigability Study for the Virgin River; Mohave County, AZ
- Navigability Study, Small Watercourses Pilot Study; Mohave, La Paz, & Yuma Co., AZ
- Navigability Studies: Small & Minor Watercourse Update; Yuma County, AZ
- Navigability Studies: Small & Minor Watercourse Update; La Paz County, AZ
- Navigability Studies: Small & Minor Watercourse Update; Mohave County, AZ
- Navigability Study for Oak Creek; Yavapai & Coconino Counties, AZ

- Navigability Study for West Clear Creek; Yavapai & Coconino Counties, AZ
- Navigability Study for Small & Minor Watercourses; State of Arizona
- Navigability Study for the Blue River; Graham County, AZ
- Navigability Study for Wet Beaver Creek; Yavapai & Coconino Counties, AZ
- Navigability Study: Feasibility Study for Small & Minor Watercourses; AZ
- NDOT Bridge Scour Studies – 99 Sites; State of Nevada
- North Peoria Area Drainage Master Plan; Peoria, AZ
- Pantano Wash FLUVIAL-12 Analysis; Tucson, AZ
- Pantano Wash HEC-6 Analysis; Tucson, AZ
- Pantano Wash River Management Plan; Tucson, AZ
- Piedmont Flood Hazard Assessment Manual Review; Maricopa County, AZ
- Pima Mine Road Recharge Pipeline Crossing; Santa Cruz River, Tucson, AZ
- Pinal Creek Pipeline Scour & Lateral Stability Study; Gila County, AZ
- Provo River Bypass HEC-2 Evaluation and Geomorphic Analysis; Salt Lake City, UT
- Quailwood Estates/Agua Fria River Geomorphic Investigation; Prescott Valley, AZ
- Rio Virgin Estates Stream Stability Evaluation; St. George, UT
- Roger Creek Erosion Hazard Delineation; Maricopa County, AZ
- Rose Creek Geomorphic Analysis; Salt Lake City, UT
- Santa Clara River Stability Study; St. George, UT
- Silverbow Creek Geomorphic Analysis; Butte, MT
- Skunk Creek Watercourse Master Plan; Phoenix, AZ
- Skunk Tank Erosion Hazard Delineation; Maricopa County, AZ
- South Ranch Geomorphic and Bank Protection Design – Colorado River; Parker, AZ
- Spook Hill Area Drainage Master Plan; Mesa, AZ
- St. George River Stability Assessment & Geomorphic Analysis; St. George, UT
- State Standard for Development in Sheet Flow Areas; State of Arizona
- Tatum Wash Sedimentation Engineering and Geomorphic Analysis; Phoenix, AZ
- Tiger Wash Alluvial Fan Floodplain Delineation Study; Maricopa County, AZ
- Tramonto Geomorphic Analysis; Phoenix, AZ
- UDOT Bridge Scour Studies; State of Utah
- Upper Cave Creek/Apache Wash Watercourse Master Plan; Phoenix, AZ
- Upper Provo River Geomorphic Analysis; Kamas, UT
- Vicee Canyon Sedimentation Engineering and Geomorphic Analysis; Carson City, NV
- Virgin River Fish Barrier Geomorphic Analysis; St. George, UT
- Walker River Restoration Study and Geomorphic Analysis; Schurz, NV
- Wash Stability Analysis - Cornville Watershed Project; Cornville, AZ
- Wet Beaver Creek Sedimentation Engineering & Stability Study; Lake Montezuma, AZ
- White Tank Alluvial Fan Floodplain Delineation Study; Maricopa County, AZ

Geomorphology - Alluvial Fans

- Alluvial Fan Data Collection & Monitoring Study; Maricopa County, AZ
- Bunkerville Detention Basin Conceptual Design Report; Bunkerville, NV
- Cedar City Alluvial Fan Analysis – Dry Canyon; Cedar City, UT
- Cedar City Alluvial Fan Analysis – Fiddlers Canyon; Cedar City, UT

- Cedar City Alluvial Fan Analysis – Stephens Canyon; Cedar City, UT
- Combs Canyon Sedimentation Study; Carson City, NV
- Las Piedras Subdivision Alluvial Fan CLOMR; Scottsdale, AZ
- Piedmont Flood Hazard Assessment Manual Revision; Maricopa County, AZ
- Rawhide Wash Dam Preliminary Design; Scottsdale, AZ
- Rawhide Wash Detention Basin Feasibility Study; Scottsdale, AZ
- Sedona Area Alluvial Fan – Litigation Support; Sedona, AZ
- Sutherland Wash Floodplain Delineation Study; Oro Valley, AZ
- Tatum Wash Sedimentation Engineering and Geomorphic Analysis; Phoenix, AZ
- Tiger Wash Alluvial Fan Floodplain Delineation Study; Maricopa County, AZ
- Tortolita Fan Flood Insurance Study Appeal; Pima County, AZ
- Vicee Canyon Sedimentation Engineering and Geomorphic Analysis; Carson City, NV
- Virgin Creek Alluvial Fan Review; Alyeska, AK
- White Tank Alluvial Fan Floodplain Delineation Study; Maricopa County, AZ

Paleoflood Hydrology

- Aravaipa Creek Paleoflood Study; Aravaipa Canyon, AZ
- Childs/Irving Hydroelectric Plant FERC Permit; Fossil Creek, AZ
- Salt and Verde River Paleoflood & Post-1993 Forensic Study; Salt & Verde River, AZ
- Salt River Canyon Paleoflood Studies; Salt River Canyon, AZ
- Salt River Paleoflood Study - Tempe Buttes; Salt River Project, AZ
- Tonto Creek Paleoflood Study; Gisela, AZ
- Tortolita Fan Flood Insurance Study Appeal; Pima County, AZ
- Verde River Paleoflood Method Calibration Study; Sheep's Bridge, Yavapai Co., AZ
- Verde River Paleoflood Study; Verde River at Red Creek, AZ
- Wet Beaver Creek 1993 Flood Evaluation; Lake Montezuma, AZ
- White Tanks Wash Paleoflood Study; Flood Control District of Maricopa County, AZ

Sedimentation Engineering/Scour Analysis

- Agua Fria River Watercourse Master Plan; Maricopa County, AZ
- Arizona Oxide Site Erosion Hazard Evaluation; Phoenix, AZ
- Bunkerville Detention Basin Conceptual Design Report; Bunkerville, NV
- California Avenue Bridge Replacement Scour Evaluation; Salt Lake City, UT
- Casandro Wash Detention Basin Design; Wickenburg, AZ
- Cedar City Alluvial Fan Analysis – Dry Canyon; Cedar City, UT
- Cedar City Alluvial Fan Analysis – Fiddlers Canyon; Cedar City, UT
- Cedar City Alluvial Fan Analysis – Stephens Canyon; Cedar City, UT
- Colorado River Bank Stability Assessment; Ehrenberg, AZ
- Combs Canyon Sedimentation Study; Carson City, NV
- Coyote Creek Sedimentation Engineering Study; San Jose, CA
- Fort Pearce Wash Stability Study; St. George, UT
- Fort Pearce Wash Tamarix and Sedimentation Maintenance; St. George, UT
- Guzman Sand & Gravel Mine 404 Permit; Globe, AZ
- Hidden Valley Geomorphic and Bank Protection Design – Colorado River; Parker, AZ

- Horseshoe Bend Grade Control Design; Gila County, AZ
- I-10 San Gabriel River Bridge Scour Analysis; El Monte, CA
- I-5 Aliso Creek Bridge Scour Analysis; Orange County, CA
- I-5 Oso Creek Bridge Scour Analysis; Orange County, CA
- Interstate 5 Expansion Project; Irvine, CA
- Jordan River Stability Study; Salt Lake County, UT
- Las Piedras Subdivision Alluvial Fan CLOMR; Scottsdale, AZ
- Mesquite Master Plan Update; Mesquite, NV
- Mesquite/Bunkerville Master Plan Update; Clark County, NV
- Millstone Manor Wash Historical Geomorphology Analysis; Tucson, AZ
- Morningstar Ranch/Josephine Canyon Drainage Crossing; Santa Cruz County, AZ
- NDOT Bridge Scour Studies; State of Nevada
- New River Bank Stabilization Alternative Analysis; Peoria, AZ
- North Peoria Area Drainage Master Plan; Peoria, AZ
- Nugget Wash Grade Control Design; Gila County, AZ
- Pantano Wash FLUVIAL-12 Analysis; Tucson, AZ
- Pantano Wash HEC-6 Analysis; Tucson, AZ
- Pantano Wash River Management Plan; Tucson, AZ
- Pima Mine Road Recharge Pipeline Crossing; Santa Cruz River, Tucson, AZ
- Pinal Creek Pipeline Scour & Lateral Stability Study; Gila County, AZ
- Pinal Creek Water Treatment Plant Floodplain Delineation Project; Globe, AZ
- Pipe Springs Water Treatment Facility; Laughlin, NV
- Provo River Bypass HEC-2 Evaluation and Geomorphic Analysis; Salt Lake City, UT
- Rawhide Wash Dam Preliminary Design; Scottsdale, AZ
- Rawhide Wash Detention Basin Feasibility Study; Scottsdale, AZ
- Rillito Recharge Project Dam Operations Plan; Tucson, AZ
- Rio Virgin Estates Stream Stability Evaluation; St. George, UT
- Salt River HEC-6 Analysis; Tempe/Phoenix, AZ
- Sand & Gravel Mining Guidelines; Maricopa County, AZ
- Santa Clara River Stability Study; St. George, UT
- Sedona West Subdivision Drainage Study; Sedona, AZ
- Skunk Creek Watercourse Master Plan; Phoenix, AZ
- South Ranch Geomorphic and Bank Protection Design – Colorado River; Parker, AZ
- Spook Hill Area Drainage Master Plan; Mesa, AZ
- SR 30 Lytle Creek Bridge Scour Study; Rialto, CA
- SR 86 Main Canal Bridge Scour Study; Westmorland, CA
- SR 86 Westside Canal Bridge Scour Study; Westmorland, CA
- SRPMIC Irrigation Pipeline Design Scour Analysis; Maricopa County, AZ
- St. George River Stability Assessment & Geomorphic Analysis; St. George, UT
- Tanque Verde Creek Bank Stabilization Project; Tucson, AZ
- Tatum Wash Sedimentation Engineering and Geomorphic Analysis; Phoenix, AZ
- Town Wash Detention Basin Design; Mesquite, NV
- UDOT Bridge Scour Studies; State of Utah
- Upper Cave Creek/Apache Wash Watercourse Master Plan; Phoenix, AZ

- Upper Provo River Geomorphic Analysis; Kamas, UT
- Vicee Canyon Sedimentation Engineering and Geomorphic Analysis; Carson City, NV
- Wet Beaver Creek Sedimentation Engineering & Stability Study; Lake Montezuma, AZ

Bridge Scour Studies

- California Avenue Bridge Replacement Scour Evaluation; Salt Lake City, UT
- Fort Pearce Wash Stability Study; St. George, UT
- Fort Pearce Wash Tamarix and Sedimentation Maintenance; St. George, UT
- I-10 San Gabriel River Bridge Scour Analysis; El Monte, CA
- I-5 Aliso Creek Bridge Scour Analysis; Orange County, CA
- I-5 Oso Creek Bridge Scour Analysis; Orange County, CA
- Interstate 5 Expansion Project; Irvine, CA
- Morningstar Ranch/Josephine Canyon Drainage Crossing; Santa Cruz Co., AZ
- NDOT Bridge Scour Studies; State of Nevada
- Santa Clara River Stability Study; St. George, UT
- Saylor v. Amtrak Litigation Support; Kingman, AZ
- SR 30 Lytle Creek Bridge Scour Study; Rialto, CA
- SR 86 Main Canal Bridge Scour Study; Westmorland, CA
- SR 86 Westside Canal Bridge Scour Study; Westmorland, CA
- St. George River Stability Assessment & Geomorphic Analysis; St. George, UT
- Tanque Verde Creek Bank Stabilization Project; Tucson, AZ
- UDOT Bridge Scour Studies; State of Utah

Flood Control Master Plans

- North Peoria Area Drainage Master Plan; Peoria, AZ
- Spook Hill Area Drainage Master Plan; Mesa, AZ
- Wagon Wheel Master Drainage Study; Pinetop-Lakeside, AZ
- Clarkdale Area Master Drainage Plan; Clarkdale, AZ
- Mesquite Master Plan Update – 1991; Mesquite, NV*
- Mesquite/Bunkerville Master Plan Update – 1994; Clark County, NV
- Salt Lake City Storm Water Master Plan; Salt Lake City, UT*
- Maryvale Area Drainage Master Plan; Phoenix, AZ
- Reviewer for Basin Management Plan Studies; Pima Co. Flood Control District, AZ*

Floodplain Studies

- Andora Hills/Galloway Wash Floodplain Delineation Study; Maricopa County, AZ
- Avenal Letter of Map Revision Flood Insurance Study; Avenal, CA
- Black Wash Floodplain/Floodway Delineation Study; Pima County, AZ
- Bullard Wash CLOMR; Goodyear, AZ
- Christopher Creek Floodplain Permit Floodway Analysis; Gila County, AZ
- Clarkdale Area Master Drainage Study; Clarkdale, AZ
- Coconino Wash Floodplain Delineation; Tusayan, AZ
- FEMA Training Seminar – State Standard 2-96; San Francisco, CA
- Floodplain Management Training Seminars – ADWR 1996-1997; State of Arizona

*Denotes projects completed for previous employer.

- Floodplain Management Training Seminars – LTAP 1998-1999; State of Arizona
- Iona Wash Flood Insurance Study; Maricopa County, AZ
- Las Piedras Subdivision Alluvial Fan CLOMR; Scottsdale, AZ
- Pima Mine Road Recharge Floodplain/ Floodway Evaluation; Tucson, AZ
- Pinal Creek Water Treatment Plant Floodplain Delineation Project; Globe, AZ
- Rawhide Wash Dam Preliminary Design; Scottsdale, AZ
- Rio Verde North Floodplain Delineation Study; Maricopa County, AZ
- Rio Verde South Extension #1 Floodplain Delineation Study; Maricopa County, AZ
- Schneider Floodway Analysis; Pine, AZ
- Sinclair Wash Letter of Map Revision, Reach 1; Flagstaff, AZ
- Sinclair Wash Letter of Map Revision, Reach 2; Flagstaff, AZ
- State Standard for Development in Sheet Flow Areas; State of Arizona
- State Standard for Estimating Peak Discharges for Ungaged Watersheds; Arizona
- State Standard for Floodway Modeling of Supercritical Streams; State of Arizona
- Sutherland Wash Floodplain Delineation Study; Oro Valley, AZ
- Tiger Wash Alluvial Fan Floodplain Delineation Study; Maricopa County, AZ
- Tolleson Area Floodplain Delineation Study; Tolleson, AZ
- Tortolita Fan Flood Insurance Study Appeal; Pima County, AZ
- Town Wash Conditional Letter of Map Revision; Mesquite, NV
- Tropicana Wash Flood Insurance Study; Las Vegas, NV
- Walnut Springs Wash Floodplain Delineation; Punkin Center, AZ
- White Tank Alluvial Fan Floodplain Delineation Study; Maricopa County, AZ
- Winona Assembly of God Church Floodplain Encroachment Study; Winona, AZ
- Woodland Wash Letter of Map Amendment; Tucson, AZ

Hydrologic Modeling

- Alameda County Hydrology Manual Review; Alameda County, CA
- Amberjack Subdivision Floodplain Analysis; Scottsdale, AZ
- Andora Hills/Galloway Wash Floodplain Delineation Study; Maricopa County, AZ
- Boulder Shadows Drainage Investigation; Tucson, AZ
- Bullard Wash CLOMR; Goodyear, AZ
- Bunkerville Detention Basin Conceptual Design Report; Bunkerville, NV
- Casandro Wash Detention Basin Design; Wickenburg, AZ
- Cedar City Alluvial Fan Analysis – Dry Canyon; Cedar City, UT
- Cedar City Alluvial Fan Analysis – Fiddlers Canyon; Cedar City, UT
- Cedar City Alluvial Fan Analysis – Stephens Canyon; Cedar City, UT
- City of Safford Drainage Manual Project; Safford, AZ
- City of Williams HEC-1 Hydrologic Study; Williams, AZ
- Clarkdale Area Master Drainage Study; Clarkdale, AZ
- Coconino Wash Floodplain Delineation; Tusayan, AZ
- Coconino Wash HEC-1 Hydrology Analysis; Tusayan, AZ
- Combs Canyon Sedimentation Study; Carson City, NV
- Craycroft Wash Hydrologic Analysis; Tucson, AZ
- Demetrie Wash Hydrologic Analysis; Green Valley, AZ

- Eastern Transportation Corridor/Laguna Interchange; El Toro, CA
- Ephraim Canyon Wash Drainage Investigation and Litigation Support; Nogales, AZ
- Ferreo Wash Hydrologic Analysis; Tucson, AZ
- Fossil Creek Paleoflood Analysis & Geomorphic Assessment; Childs, AZ
- Fuller Wash Hydrologic Analysis; Tucson, AZ
- Goldfield Ranch Drainage Investigation; Maricopa County, AZ
- Goodyear Site Analysis; Goodyear, AZ
- Grand Canyon Suites Drainage Report; Tusayan, AZ
- Guzman Mining Company Hydrologic Analysis; Globe, AZ
- Holiday Inn Express Site Drainage; Tusayan, AZ
- Home Depot Drainage Investigation; Scottsdale, AZ
- Hughes Wash Hydrologic Analysis; Tucson, AZ
- Interstate 17 Demonstration Project; Phoenix, AZ
- Kaibab Estates Hydrologic Study; Williams, AZ
- Lee Moore Wash Hydrologic Analysis; Tucson, AZ
- Maryvale Area Drainage Master Plan; Phoenix, AZ
- Mayo Clinic Drainage Site Investigation; Phoenix, AZ
- Mesquite Master Plan Update 1991; Mesquite, NV
- Mesquite/Bunkerville Master Plan Update; Clark County, NV
- Miller Lot Split Floodplain Delineation and Drainage Report; Scottsdale, AZ
- Millstone Manor Wash Historical Geomorphology Analysis; Tucson, AZ
- Mirage Summit Development Drainage Report; Scottsdale, AZ
- Morningstar Ranch Floodplain Delineation; Santa Cruz County, AZ
- Morningstar Ranch/Josephine Canyon Drainage Crossing; Santa Cruz Co., AZ
- Navahopi Tours NPDES Permit; Phoenix, AZ
- Navajo County Hydrologic Modeling Guidelines; Navajo County, AZ
- Navajo-Hopi Relocation Project; Sanders, AZ
- Osborn Development/SICC Drainage Report; Scottsdale, AZ
- Pasqua Yaqui Farm Development Drainage Design; Tucson, AZ
- Pima Road Drainage Area Delineation Study; Scottsdale, AZ
- Pinal Creek Water Treatment Plant Floodplain Delineation Project; Globe, AZ
- Pinnacle Vista Floodplain Delineation and Drainage Report; Scottsdale, AZ
- Rawhide Wash Detention Basin Feasibility Study; Scottsdale, AZ
- Rillito Recharge Project Dam Operations Plan; Tucson, AZ
- Sedona West Subdivision Drainage Study; Sedona, AZ
- Sky-Hi Retreat Subdivision Drainage Mitigation Project; Pinetop, AZ
- Smoke Rise Subdivision Drainage Investigation & Forensic Hydrology Study; Flagstaff, AZ
- State Standard for Estimating Peak Discharges for Ungaged Watersheds; AZ
- Sutherland Wash Floodplain Delineation Study; Oro Valley, AZ
- Tanuri Hills Hydrologic Analysis; Tucson, AZ
- The Preserve Drainage Investigation; Maricopa County, AZ
- Tolleson Area Floodplain Delineation Study; Tolleson, AZ
- Town Wash Conditional Letter of Map Revision; Mesquite, NV
- Town Wash Detention Basin Design; Mesquite, NV

*Denotes projects completed for previous employer.

- Tusayan Wendy's Drainage Report and Floodplain Analysis; Tusayan, AZ
- Upper Cave Creek/Apache Wash Watercourse Master Plan; Phoenix, AZ
- Upper Provo River Geomorphic Analysis; Kamas, UT
- Vicee Canyon Sedimentation Engineering and Geomorphic Analysis; Carson City, NV
- Wagon Wheel Area Drainage Master Study; Pinetop, AZ
- Walnut Springs Subdivision Drainage Report; Punkin Center, AZ
- Westland Subdivision Floodplain Delineation and Hydrologic Study; Scottsdale, AZ
- Wet Beaver Creek Hydrology Study; Lake Montezuma, AZ
- Wickenburg School Wetlands Project Floodplain Delineation; Wickenburg, AZ
- Woodland Wash Letter of Map Amendment; Tucson, AZ
- Woodlands Village Subdivision Preliminary Drainage Investigation; Flagstaff, AZ

Site Drainage

- Amberjack Subdivision Floodplain Analysis; Scottsdale, AZ
- Antonek Clean Water Act Prosecution Expert Witness; Tucson, AZ
- Barbara Rose Litigation Support; Paradise Valley, AZ
- Boulder Shadows Drainage Investigation; Tucson, AZ
- Casandro Wash Detention Basin Design; Wickenburg, AZ
- City of Safford Drainage Manual Project; Safford, AZ
- Desert View Drainage Impact Fee Study; Phoenix, AZ
- Ephraim Canyon Wash Drainage Investigation and Litigation Support; Nogales, AZ
- Goldfield Ranch Drainage Investigation; Maricopa County, AZ
- Goodyear Site Analysis; Goodyear, AZ
- Grand Canyon Suites Drainage Report; Tusayan, AZ
- Holiday Inn Express Site Drainage; Tusayan, AZ
- Mayo Clinic Drainage Site Investigation; Phoenix, AZ
- McCormick Ranch Floodplain Delineation; Scottsdale, AZ
- Middle Verde Area Drainage Evaluation; Camp Verde, AZ
- Miller Lot Split Floodplain Delineation and Drainage Report; Scottsdale, AZ
- Mirage Summit Development Drainage Report; Scottsdale, AZ
- Morningstar Ranch Floodplain Delineation; Santa Cruz County, AZ
- Morningstar Ranch/Josephine Canyon Drainage Crossing; Santa Cruz Co., AZ
- Munds Park Drainage Investigation; Munds Park, AZ
- Navajo-Hopi Relocation Project; Sanders, AZ
- New River Bank Stabilization Alternative Analysis; Peoria, AZ
- Osborn Development/SICC Drainage Report; Scottsdale, AZ
- Pasqua Yaqui Farm Development Drainage Design; Tucson, AZ
- Pima Mine Road Recharge Project Preliminary Design; Tucson, AZ
- Pinnacle Vista Floodplain Delineation and Drainage Report; Scottsdale, AZ
- Rio Virgin Estates Stream Stability Evaluation; St. George, UT
- Sedona West Subdivision Drainage Study; Sedona, AZ
- Sky-Hi Retreat Subdivision Drainage Mitigation Project; Pinetop, AZ
- The Preserve Drainage Investigation; Maricopa County, AZ
- Turcott Drainage Analysis – Litigation Support; Scottsdale, AZ

- Tusayan Development Conceptual Channel Design; Tusayan, AZ
- Tusayan Wendy's Drainage Report and Floodplain Analysis; Tusayan, AZ
- Walnut Springs Subdivision Drainage Report; Punkin Center, AZ
- Westland Subdivision Floodplain Delineation and Hydrologic Study; Scottsdale, AZ
- Wet Beaver Creek Restoration Study; Lake Montezuma, AZ
- Wet Beaver Creek Sedimentation Engineering & Stability Study; Lake Montezuma, AZ
- White Tanks FRS #3 Spillway Inundation and Emergency Action Plan; Maricopa Co., AZ
- Wickenburg School Wetlands Project Floodplain Delineation; Wickenburg, AZ
- Woodlands Village Subdivision Preliminary Drainage Investigation; Flagstaff, AZ

Road Drainage

- Eastern Transportation Corridor/Laguna Interchange; El Toro, CA *
- Interstate 5 Expansion Project; Irvine, CA *
- Interstate 17 Demonstration Project; Phoenix, AZ *
- Interstate 205 Interchange; Tracy, CA *
- Navajo-Hopi Relocation Project; Sanders, AZ *
- Sedona Wastewater Project Storm Drain Design; Sedona, AZ

Public Involvement

- Agua Fria River Watercourse Master Plan; Maricopa County, AZ
- City of Safford Drainage Manual Project; Safford, AZ
- Clarkdale Area Master Drainage Study; Clarkdale, AZ
- FEMA Training Seminar – State Standard 2-96; San Francisco, CA
- Floodplain Management Training Seminars – ADWR 1996-1997; State of Arizona
- Floodplain Management Training Seminars – LTAP 1998-1999; State of Arizona
- Iona Wash Flood Insurance Study; Maricopa County, AZ
- Pantano Wash River Management Plan; Tucson, AZ
- Pima Co. Flood Control District Public Information Program; Tucson, AZ
- Santa Clara River Stability Study; St. George, UT
- Skunk Creek Watercourse Master Plan; Phoenix, AZ
- Sky-Hi Retreat Subdivision Drainage Mitigation Project; Pinetop, AZ
- St. George River Stability Assessment & Geomorphic Analysis; St. George, UT
- Upper Cave Creek/Apache Wash Watercourse Master Plan; Phoenix, AZ
- Wagon Wheel Area Drainage Master Study; Pinetop, AZ
- Wet Beaver Creek Sedimentation Engineering & Stability Study; Lake Montezuma, AZ

Navigability Studies

- Navigability Study for Burro Creek; Mohave County, AZ
- Navigability Study for Cienega Creek; Pima & Santa Cruz Counties, AZ
- Navigability Study for Sonoita Creek; Santa Cruz County, AZ
- Navigability Study for the Big Sandy River; Mohave County, AZ
- Navigability Study for the Hassayampa River; Maricopa & Yavapai Counties, AZ
- Navigability Study for the Lower Salt River; Maricopa County, AZ
- Navigability Study for the San Francisco River; Greenlee County, AZ
- Navigability Study for the San Pedro River; Cochise County, AZ

*Denotes projects completed for previous employer.

- Navigability Study for the Santa Maria River; Yavapai County, AZ
- Navigability Study for the Upper Gila River; Graham County, AZ
- Navigability Study for the Upper Salt River; Gila County, AZ
- Navigability Study for the Verde River; Yavapai County, AZ
- Navigability Study for the Virgin River; Mohave County, AZ
- Navigability Study, Pilot Study: Minor Watercourses; Mohave, La Paz, & Yuma Co., AZ
- Navigability Study for Oak Creek; Yavapai & Coconino Counties, AZ
- Navigability Study for West Clear Creek; Yavapai & Coconino Counties, AZ
- Navigability Study for Small & Minor Watercourses; State of Arizona
- Navigability Study for the Blue River; Graham County, AZ
- Navigability Study for Wet Beaver Creek; Yavapai & Coconino Counties, AZ
- Navigability Study, Feasibility Study for Small & Minor Watercourses; State of Arizona
- Navigability & Boundary Study, Kotsina River, Chitna, AK
- Navigability Study, Mosquito Fork of Forty Mile River, Chicken, AK

Gauging/ALERT/Flood Warning Systems

- Alluvial Fan Data Collection & Monitoring Study; Maricopa County, AZ
- Arizona Statewide Flood Warning Network Design; State of Arizona
- Pima County ALERT Operations and Maintenance; Pima County, AZ
- Pima County Stream Gauge Rating Curve Project; Pima County, AZ
- Rillito Recharge Project Dam Operations Plan; Tucson, AZ
- Skunk Creek Watercourse Master Plan; Phoenix, AZ
- Vicee Canyon Sedimentation Engineering and Geomorphic Analysis; Carson City, NV

Expert Witness/Litigation Support

- 35th Avenue Land Use Assessment – Phoenix, AZ
- Agnes Pearsall Drainage Analysis – Litigation Report; Flagstaff, AZ
- Alexander et al v. Boy Scouts of America – Litigation Support, Payson, AZ
- Anderson v. Thunder Mountain HOA - Litigation Support, Scottsdale, AZ
- ANSAC Hearings - Expert Testimony for State of Arizona; State of Arizona
- Antonek Clean Water Act Prosecution Expert Witness; Tucson, AZ
- Arizona Public Service v. 1st American Title – Buckeye, AZ
- Arizona v. DTN LLC – Litigation Support, Phoenix, AZ
- Bar Lazy R Ranch v. Arlington Canal Company – Litigation Support, Buckeye, AZ
- Barbara Rose Litigation Support; Paradise Valley, AZ
- BNSF v. State of Arizona Defense Litigation Support - Kingman, AZ
- Bramlett v. Willenberg – Litigation Support, Sedona, AZ
- City of Phoenix v. BCW – Litigation Support, Phoenix, AZ
- City of Phoenix v. Gomez – Litigation Support, Phoenix, AZ
- City of Phoenix v. Levy – Litigation Support, Phoenix, AZ
- City of Phoenix v. Levy (SRP Easement) – Litigation Support, Phoenix, AZ
- City of Phoenix v. Martinez – Litigation Support, Phoenix, AZ
- City of Phoenix v. Michelena – Litigation Support, Phoenix, AZ
- City of Phoenix v. Serrato – Litigation Support, Phoenix, AZ

- City of Phoenix v. Southbank Property Owners' Association – Phoenix, AZ
- City of Phoenix v. Swindle – Litigation Support, Phoenix, AZ
- Coconino County v. Nesbit – Litigation Support, Flagstaff, AZ
- Cohasset v. Cella Barr Associates - Litigation Support, Gold Canyon, AZ
- Colorado River Bank Stability Assessment; Ehrenberg, AZ
- Cook v. Loma Vista Farms – Litigation Support, Maricopa Co., AZ
- Crystal Point – Litigation Support; Phoenix, AZ
- Davidson v. Thunder Mountain HOA - Litigation Support, Scottsdale, AZ
- Domina et. al. v. Del Webb et. al. – Litigation Support, Las Vegas, NV
- Ephraim Canyon Wash Drainage Investigation and Litigation Support; Nogales, AZ
- Gila River Navigability Study Geomorphic Analysis; State of Arizona
- Gila River Ordinary High Water Mark Delineation; Maricopa County, AZ
- Hidden Valley Geomorphic and Bank Protection Design – Colorado River; Parker, AZ
- Horkins/Fratianni v. Holdsworth Construction - Litigation Support, Flagstaff, AZ
- Kimery v. St. Gabriel Roman Catholic Church – Phoenix, AZ
- Kroshus et. al. v. United States et. al. – Litigation Support, Fernley, NV
- McCleary v. State of Nevada – Litigation Support, Carson City, NV
- Montana v. PPL – Litigation Support, Montana
- Monterra Litigation Support – Scottsdale, AZ
- Monterra Subdivision Phase II Expert Review – Scottsdale, AZ
- Mountainbrook Village v. J&C Builders - Litigation Support, Apache Junction, AZ
- Oak Wash Drainage Impact Assessment – Cottonwood, AZ
- Patagonia Schools v. Cal Wadsworth et. al., - Litigation Support, Patagonia, AZ
- Pentacor v. Trail of Light – Litigation Support, Surprise, AZ
- Priscilla Wolfe Drainage Investigation – Cave Creek, AZ
- Robles, Fernando & Verrue, Michelle V. City of Phoenix – Phoenix, AZ
- Santa Cruz Ranch Drainage Investigation – Maricopa, AZ
- Santa Vallarta Subdivision Drainage Investigation – Queen Creek, AZ
- Sedona Area Alluvial Fan – Litigation Support; Sedona, AZ
- Seylor v. Amtrak Litigation Support; Kingman, AZ
- Smoke Rise Subdivision Drainage and Forensic Hydrology Study; Flagstaff, AZ
- Susee v. Rio Verde Services - Litigation Support, Rio Verde, AZ
- Tortolita Fan Flood Insurance Study Appeal; Pima County, AZ
- Turcott Drainage Analysis – Litigation Support; Scottsdale, AZ
- Uhouse et. al. v. United States et. al. – Litigation Support, Fernley, NV
- Verna v. McArthur – Litigation Support, Tonopah, AZ
- Winona Assembly of God Church Floodplain Encroachment Study; Winona, AZ
- Woodson Litigation Support; Paradise Valley, AZ
- Zimmerman, et al v. Boy Scouts of America – Litigation Support, Payson, AZ

Note: On-going cases not listed above

Environmental Permitting

- Childs/Irving Hydroelectric Plant FERC Permit; Fossil Creek, AZ *
- Citizen's Bus Company NPDES Permit; Tucson & Flagstaff, AZ *

*Denotes projects completed for previous employer.

- Fort McDowell Indian Community 404 Jurisdictional Delineation; AZ *
- Fort Pearce Wash Tamarix and Sedimentation Maintenance; St. George, UT
- Glade's Hidden Valley 404 Permit; Blythe, CA
- Guzman Sand & Gravel Mine 404 Permit; Globe, AZ
- Navahopi Tours NPDES Permit; Phoenix, AZ *
- Rawhide Wash Detention Basin Feasibility Study; Scottsdale, AZ *
- Waste Management NPDES Permit; Lake Havasu City, AZ *

Professional Memberships

Arizona Floodplain Management Association:

Past Vice-Chair (1995-1997)

Past Chair of Technical Advisory Review Committee (1996-1998)

Technical Advisory Review Committee Member (1988-2003)

Board Member: Central Arizona Representative (1992-1993)

Board Member: Associate Member-at-Large (1990-1992)

Past Chair, Education/Public Information Committee (1986-1990)

Association of State Floodplain Managers:

Arid West Committee (1986-present)

Alluvial Fan Task Force (1988-1996)

American Society of Civil Engineers

American Institute of Hydrology

Arizona Department of Water Resources State Standards Workgroup, Member (1988-1990)

Continuing Education

ALERT Hardware Training, 1991, NovaLynx Corporation

Computer Programs for Sediment Transport, 1988, University of Arizona

Hydrogeomorphic Approach for Arizona Stream Restoration, 2002, Corps of Engineers

Financial Management for Engineers, 2001, ASCE

Floodproofing Workshop, 1988, US Army Corps of Engineers

HEC-RAS Training Seminar, 1996, AFMA - Maricopa County

HEC-RAS Unsteady Flow Modeling, 2004, AFMA – Maricopa County

HEC-1 Training Seminar, 1988, Univ. of Calif.-Davis

HEC-2 Training Seminar, 1987, Univ. of Calif.-Davis

HY-8, Culvert Hydraulics, 1988, FHWA/ADOT Training Seminar

Stream Stability and Scour at Highway Structures, 1991, FHWA/CALTRANS

TR-20/TR-55 Training Seminar, 1988, Soil Conservation Service

Technical Training Seminars Taught by Mr. Fuller

Advanced HEC-2 Training – Supercritical Floodway Modeling – AFMA Short Course

Arizona Water Law – Arizona Navigable Streams – CLE International, 1993

Encroachment Analysis & Floodway Modeling – Pima County 2004

Floodplain Analysis for Environmental Assessment – ASLD In-House Training, March 2000

Floodplain Issues in Transportation Design – ADWR State Standards Workgroup 2003-2004

Floodplain Management Training – ADOT LTAP Seminars, 1998-2004

Floodplain Management Training – ADWR State Standards Workgroup, 1997, 1999, 2001

Geomorphology for Floodplain Managers – AFMA Short Course, Feb. & Sept. 2000

*Denotes projects completed for previous employer.

Geomorphology for Floodplain Managers – FCDMC Short Course, December 2000
Geomorphology for Floodplain Managers – NMFMA Short Course, April 2003
HEC-1 Modeling – AFMA Short Course, March 1991
HEC-2 Modeling Basics – PCFCD In-House Training, June 1989
HEC-1/HEC-HMS Modeling – February 2004
HEC-RAS Modeling – April 2004
High & Dry – A Guide to Floodplain Management – Tucson Board of Realtors, 1989
Introduction to Geomorphology – Arizona Riparian Council, April 1996
Introduction to Scour & Erosion – Pima County 2004

Professional References

Tim Phillips, PE, Chief Engineer – Maricopa County Flood Control, AZ	602-506-1501
Charlie Cave, PE, Chief Engineer – Yavapai County Flood Control	928-771-3197
Kim Gavigan, PE, Planning Section Chief – US Army Corps of Engineers	602-640-2015
Craig Kennedy, PE, DHS-FEMA	202-646-1643
Julie Lemmon, Attorney	480-350-9138