Zachary Libbin, PE

1121 Birch Drive Las Cruces, NM 88001 (575) - 635 - 8979 zlibbin@gmail.com

Areas of Expertise

- Broad Civil Engineering Experience
- Irrigation/Agricultural Engineering
- O&M of Flood Control Dams
- Hydrology and Hydraulics Modeling
- Stormwater Drainage Management
- Drainage and Flood Control
- Soil and Water Conservation
- Irrigation and Drainage Design
- Construction Management
- Efficient Project Management

District Engineer

Elephant Butte Irrigation District Engineering Department

Las Cruces, NM 03/2011-Present

- Design of cost efficient and constructible hydraulic structures and systems
- Construction oversight including surveying, inspection, safety, and supervision
- Administration of District licensing, rights of ways, and various property issues
- Supervision of surface water right land records and water right transfers
- Hydraulics and hydrology modeling, dam breach analysis, EAP development
- Operations, Maintenance, and Inspection of flood control dams
- Design of multi-objective stormwater capture and habitat restoration projects
- Effective management of Engineering Department personnel and consultants

Principal Engineer

Libbin Consulting Engineering, LLC

09/2015-Present

- Design of erosion solutions and stormwater quality improvements
- Design of agricultural irrigation, ditch improvements, and new farm layouts
- Design of CLC and DAC UDC approved landscaping and site grading
- Construction oversight including surveying, inspection, safety, and coordination
- Hydraulics and hydrology modeling and solutions for post development erosion

Junior Engineer

Elephant Butte Irrigation District Engineering Department

Las Cruces, NM 07/2010-03/2011

- Design of hydraulic structures and systems
- Construction surveying, inspection, supervision

Graduate Research Assistant and Teaching Assistant

New Mexico State University Civil Engineering Department

Agricultural engineering

Evapotranspiration research

Las Cruces, NM 05/2007-06/2010

- Statistical data analysis
- Soil properties analysis

Teaching Assistant: Introduction to Fluid Mechanics Laboratory

Undergraduate Research Assistant

New Mexico State University Civil Engineering Department

- Agriculture and riparian ET research Agricultural Economics Department
- Agricultural land sales data research

Las Cruces, NM 05/2003-05/2007

- Irrigation efficiency research 08/2002-05/2003
- SAS modeling

Bridge Inspection Co-Op

New Mexico State University New Mexico Department of Transportation

Inspection of bridges for NMDOT

New Mexico-Statewide 05/2005-12/2005

Inspection report preparation

12/2013

Education

New Mexico State University

M.S. Civil Engineering-Water Resources emphasis

Thesis: Development of Crop Coefficients for a Vineyard Under Drip Irrigation in Southern New Mexico by Measurement of Microclimate and Evapotranspiration Flux

New Mexico State University

B.S. Civil Engineering-Water Resources emphasis

05/2007

Pertinent Instruction

- Design of Hydraulic Structures
- Surface Water Hydrology
- Design of Earthen Dams
- Groundwater Hydrology
- Design of Foundations

- Irrigation and Drainage Design
- Design of Wells and Pumping Systems
- Statistical Hydrology
- Foundation Design

Licensure

Registered Professional Engineer - New Mexico #22908 Certified Floodplain Manager – New Mexico #NM-12-00317

Professional Involvement

American Society of Civil Engineers
New Mexico Floodplain Managers Association
South Central New Mexico Stormwater Management Coalition
New Mexico Watershed and Dam Owners Coalition
Association of State Dam Safety Officials
United States Council on Irrigation and Drainage

Professional Leadership

South Central New Mexico Stormwater Management Coalition

Chairman 2014- Present

New Mexico Watershed and Dam Owners Coalition

Steering Committee 2014-Present Chairman 2018-Present