

Northern Nevada Water Planning Commission

STAFF REPORT

DATE: November 26, 2019
TO: Chairman and Members, Northern Nevada Water Planning Commission
FROM: Jim Smitherman, Water Resources Program Manager
SUBJECT: Discussion and possible recommendation to the Western Regional Water Commission (“WRWC”) to appoint two voting members to the NNWPC: a public at large member to represent environmental, biological, conservation or public concerns, and a member to represent the owners of domestic wells; and possible direction to staff.

SUMMARY

At the October 16, 2019, meeting of the WRWC, staff identified two Northern Nevada Water Planning Commission (“NNWPC”) positions for which terms have expired and are up for reappointment. The positions identified were 1) a member of the public at large to represent environmental, biological, conservation or public concerns, last held by Mickey Hazelwood; and, 2) a member to represent owners of domestic wells, last held by Michael DeMartini. The WRWC Board directed staff to conduct a public recruitment to identify qualified candidates and have the NNWPC review the qualified candidates and make recommendations to the WRWC concerning appointments.

Staff initiated a recruitment to identify qualified candidates to fill the two NNWPC positions. An advertisement for applications was placed in the Reno Gazette-Journal and notification was distributed to the Washoe County Citizen Advisory Boards and numerous citizen involvement groups. Staff has received interest from the following qualified candidates for these positions.

At-Large Representative

Mickey Hazelwood
Arthur O’Connor
Jeanne Ruefer
Matt Sundquist

Domestic Well Owner Representative

Michael DeMartini
Michael Widmer
Jeanne Ruefer

A review of each candidate’s resume (attached) shows that they have varying educational, employment and volunteer backgrounds, and that they all meet the statutory qualifications to serve on the Commission.

PREVIOUS ACTION

None

BACKGROUND

The Western Regional Water Commission Act (the “Act”), Chapter 531 Statutes of Nevada 2007, Section 36, provides for the WRWC to appoint to the NNWPC, a member of the public at large to represent environmental, biological, conservation or public concerns, and a member to represent owners of domestic wells. Section 36 also requires that any vacancy on the NNWPC must be filled for the unexpired term by the appointing entity.

Section 38 of the Act provides that members of the NNWPC may not hold any elective governmental office, but may be engaged or employed in private enterprise or be employees of state or local government, and each member must be qualified pursuant to at least one of the following subsections:

1. A professional engineer licensed pursuant to the provisions of chapter 625 of NRS;
2. Experienced in comprehensive planning, natural resources or environmental protection;
3. A specialist in hydrologic science;
4. Experienced in law, management or planning related to water;
5. Experienced in municipal finance or resource economics;
6. Experienced in construction, planning or operation of facilities or systems for supplying or treating water, for collecting or treating sewage, for drainage of storm water or for control of floods; or
7. Knowledgeable in the areas of water conservation, biology, natural systems, water quality and water management.

FISCAL IMPACT

None

RECOMMENDATION

Staff recommends that the NNWPC review the letters and resumes from the six applicants and recommend one applicant for the public at large position and one applicant for the domestic well position to the WRWC for appointment to the two vacant positions or provide other appropriate direction to staff.

JS:jp

RÉSUMÉ

ARTHUR C. O'CONNOR, P.E., P.L.S.

POSITION: Project Engineer and Chief of Surveying Parties

EDUCATION:

University of Nevada, Reno - B.S.C.E., 1976

University of Nevada, Reno - Graduate work in Civil Engineering and Hydrology, 36 credits

N. A. L. S. Continuing Education Courses in G. P. S. and State Plane Coordinates

Various G. I. S., Autodesk Civil 3D and AutoCAD Seminars

FEMA P154, E-74, 395 and E-909 ATC-20 certification courses

EXPERIENCE:

Mr. O'Connor's engineering experience began in 1967 with five years of service with the Engineering branch of the U.S. Navy. Since graduating from the University of Nevada at Reno, he has worked for private consulting firms in the Reno-Sparks area and in California. His main areas of specialization have in the Land Planning and Land Development. Mr. O'Connor was a member of the Southwest Truckee Meadows Citizens Advisory Board for Washoe County, Nevada from 1991 to 1995 and served as Secretary for the Board.

Mr. O'Connor is currently involved in all phases of a typical civil engineering project from the initial planning to the end of construction. As a Professional Land Surveyor licensed to practice in Nevada and California, he has maintained his field expertise with the latest surveying equipment. As a designer, he is proficient in Computer Aided Design with Autodesk's Civil 3D software.

Since 1982, Mr. O'Connor has operated his own engineering firm, O C Engineering.

STORMWATER COLLECTION AND FLOOD ROUTING:

Donner Springs/El Rancho Buena Vista Area, Reno, Nevada
Gardnerville Ranchos Area, Douglas County, Nevada
Washoe County 208 Plan, Washoe County, Nevada
Winnemucca Drainage Study, Humboldt County, Nevada
Toll Road Drainage Report, Washoe County, Nevada
Palomino Valley housing development grading plans, Washoe County, Nevada
Palomino Valley FEMA Flood Certifications, Washoe County, Nevada
Palomino Valley FEMA LOMAR feasibility study, Washoe County, Nevada
Albamarle Silver Peak Lithium Facility Dams Safety Study, Esmerelda County,
Nevada

PROFESSIONAL REGISTRATIONS AND QUALIFICATIONS:

Nevada Registered Professional Engineer No. 5650
Nevada Registered Professional Land Surveyor No. 5650
California Registered Civil Engineer No. C32013

Jeanne M. Ruefer
3095 Lakeshore Drive
Washoe Valley, Nevada 89704
Cell Phone 775 722-7395
Email jeanneruefer@gmail.com

PROFESSIONAL OBJECTIVE

- Member of the Northern Nevada Regional Water Planning Commission
- Water Resource, Mitigation and Resilience Planning

SUMMARY OF QUALIFICATIONS

- Ten years as the Program Management Lead for Risk MAP in FEMA Region IX, with a focus on planning and managing a \$30M portfolio of flood hazard mapping production work.
- Eight years as the Planning Manager for the Water Planning Division of Washoe County Department of Water Resources, supervising up to 15 professional staff, managing four programs including the Regional Water Planning Commission, the Central Truckee Meadows Remediation District, Water Quality Management, and Hydrographic Basins Investigations.
- Three years as the State Floodplain Manager and National Flood Insurance Program Coordinator for Nevada.
- Fourteen years of professional experience as a hydrogeologist and water resource scientist.

WORK EXPERIENCE

Regional Program Management Lead

Risk MAP Program

Accenture (2009 – 2013), Tetra Tech, Inc. (2013 – 2018), and HWC Inc. (2018 – Present)

Oakland, California

2009 - Present – Program Management Lead for the Risk Mapping Assessment and Planning (MAP) Program in FEMA Region IX. Responsible for managing and controlling the scope, schedule and budget for the Regional portfolio of flood hazard map production projects, including those of the Production and Technical Services team, and Cooperating Technical Partners. Key focus is on implementing flood hazard mapping policies, regulations and guidance while maintaining a high level of engagement with local stakeholders and FEMA headquarters. Participate in planning and sequencing flood risk analysis projects according to funding and acquisition guidance provided by FEMA HQ, and meeting Regional deployment, engineering and action metrics.

Water Resources Planning Manager

Washoe County Department of Water Resources

Reno, Nevada

2001 – 2009 – Manager of the Water Resources Planning Division, in the Department of Water Resources. Responsible for supervising 15 professional and technical staff and administering four programs, including Hydrographic Basin Studies, Water Quality

Management, Central Truckee Meadows Remediation District, and the Regional Water Planning Commission. Conducted extensive coordination with local land use planners, engineers, elected officials of Washoe County, Tribal Nations and other local jurisdictions to implement joint programs and projects. Represented Washoe County on the Nevada All Hazard Mitigation Planning Committee, evaluating local and state hazard mitigation plans. Represented the Department at the County Emergency Operations Center during disasters. Participated in the development of the County All Hazard Mitigation Plan.

Nevada State Floodplain Manager & NFIP Coordinator
Department of Conservation and Natural Resources
Division of Water Resources
State of Nevada
Carson City, Nevada

1998 - 2001 - Assisted 35 communities in Nevada apply for and maintain participation in the NFIP, reviewed and updated local floodplain management ordinances, provided basic floodplain management training to local officials. Coordinated with FEMA engineers to review and deliver flood hazard map products to local communities. Conducted Community Assistance Visits to assess community compliance with the NFIP and managed the Community Assistance Program and Floodplain Management Assistance grants for Nevada. Supervised the development of the "Floodplain Management Model Ordinance" and manual for Nevada. Participated in the development of the State of Nevada Hazard Mitigation Plan. Responded to local/state disasters, participated in one Disaster declaration (Las Vegas, NV), and participated in preparation of Interagency Hazard Mitigation Team reports as needed.

EDUCATIONAL BACKGROUND

University of California
Santa Cruz, California
1982-1984
B.S. Earth Science

University of Nevada Reno
Reno, Nevada
1986-1988
M.S. Hydrology-Hydrogeology

PROFESSIONAL CERTIFICATIONS AND ACTIVITIES

Certified Project Management Professional (PMP)
Certified Floodplain Manager (CFM)
Chapter Director on the Association of State Floodplain Managers Board
Co-Chair of the Arid Regions policy committee of the Association of State Floodplain Managers

Contact

matt@plot.ly

www.linkedin.com/in/matt-sundquist-75280030 (LinkedIn)
www.matthewsundquist.com/ (Personal)

Top Skills

Research

Data Analysis

Leadership

Languages

English (Native or Bilingual)

Spanish (Native or Bilingual)

Certifications

High School English Teacher

Honors-Awards

Silver Gavel Award

40 under 40 for data

Silver Optimas Award for Recruiting

Publications

Argentina's Long-Suffering Universities

Protecting privacy, the social contract, and the rule of law in the Virtual World

Learned in Litigation: Former Solicitors General in the Supreme Court Bar

Worcester v. Georgia: A Breakdown in the Separation of Powers

Pursuing Peace: American Nobel Peace Prize Laureates from Roosevelt to Obama

Matt Sundquist

GM of Fly Ranch
San Francisco Bay Area

Experience

Burning Man Project

General Manager of Fly Ranch

April 2017 - Present

In 2016, Burning Man bought Fly Ranch, a 3,800 acre property in Nevada. The ranch is home to dozens of types of plants, hot and cold pools, antelope, horses, eagles, falcons, 800 acres of marsh, and three geysers, including Fly Geyser.

San Francisco Zen Center

Farm & Garden Apprentice

October 2017 - November 2017 (2 months)

Green Gulch Zen Center

Alteryx

Consultant

August 2017 - October 2017 (3 months)

Product management and data science consulting for new visualization and statistics features.

Water.org

Product Manager

December 2016 - October 2017 (11 months)

Kansas City, Missouri Area

Worked as the product manager for an open source microfinance platform Water.org launched for funding toilets and clean water in developing regions.

Change.org

Product Manager

November 2015 - September 2016 (11 months)

San Francisco Bay Area

Our product teams at Change.org (Growth, Starters) shipped tags, endorsements, locations, profiles, embeddable petitions, photos and videos in petition responses, and decision-maker search. Worked with executives, engineers, and designers to ship products for 150M users. Highlight: shipped

public movements, a feature used by Nobel Peace Prize winner Malala Yousafzai and Mexico City for crowdsourcing a constitution.

Plotly

COO, Co-founder

September 2013 - November 2015 (2 years 3 months)

Montreal, Quebec

Plotly is an open source data science platform used by Google, Tesla, NASA, and millions of users. Plotly has raised \$15M and has been named one of the top four tools in visualization, a market expected to reach \$8.5B by 2018. Now an advisor.

General Assembly

Data Science Instructor

2013 - February 2015 (2 years)

I have taught data science, visualization, and analysis to students at various levels at GA, Galvanize, Coursera, and Udacity.

Harvard Law School

Student Fellow

March 2012 - March 2014 (2 years 1 month)

Cambridge, MA

As a Student Fellow at the Harvard Law School Program on the Legal Profession, I was funded to research the influence that businesses and former members of the Office of the Solicitor General have on the Supreme Court. I published an article that has been cited by the NYT, Stanford Law Review, and Yale Law Journal.

Facebook

Privacy Program Manager

December 2012 - September 2013 (10 months)

Menlo Park, CA

Coordinated 5-10 privacy and settings releases a week. PM for internal tools, settings, and download tool (see: facebook.com/dyi). Worked on growth, feed, pages, and data science.

Inflection

Privacy Manager & Product Manager

March 2011 - November 2012 (1 year 9 months)

U.S. Department of State
Fulbright Scholar
March 2010 - November 2010 (9 months)
San Juan, Argentina

SCOTUSblog
Reporter
December 2009 - May 2010 (6 months)
Covered Supreme Court arguments, cases, trends, and events.

Community Charter School of Cambridge
Teacher
June 2008 - August 2009 (1 year 3 months)
History and English teacher

Harvard University
Dorm Crew Captain
August 2005 - June 2009 (3 years 11 months)
Cambridge, Mass

I oversaw large-scale sanitation engineering projects in college dorms. I accumulated over 2,500 hours of cleaning experience and expertise.

Harvard Undergraduate Council
President
January 2008 - February 2009 (1 year 2 months)

YMCA Youth and Government
Youth Governor of Virginia
April 2004 - April 2005 (1 year 1 month)
Richmond, Virginia Area

Education

Harvard University
Undergraduate, Philosophy · (2005 - 2009)

Harvard University Graduate School of Education
Undergraduate Teacher Education Program, High School History and English
· (2008 - 2009)

Brief history

In high school I worked as a clown, on six Virginia political campaigns, and on a farm. My [brother](#) wrote a [bestselling book](#) about homeschooling and our family. I was the 2005 [youth governor](#) of Virginia and [Senator Mark Obenshain's](#) Legislative Aide.

I studied philosophy at Harvard. [Tommie Shelby](#) advised my honors thesis on Tupac Shakur. I led crews cleaning bathrooms for ~2,000 hours, co-organized Harvard's first day of service, and was [student body VP and president](#).

I earned a high school history and English teaching degree at the Harvard Graduate School of Education and taught at a charter school in 2009.

I wrote [for SCOTUSblog.com in 2010](#) and was a co-recipient of the American Bar's Silver Gavel Award for reporting. I was a Fulbright Scholar in Argentina in 2011, then worked for the director of Pascua-Lama, a mine in the Andes.

In 2012 I managed a [hiring program](#) for a public records startup that received a [Silver Optimas Award](#).

As a Harvard Law School Student Fellow in 2012, I used R, Python, and statistics to study how corporations influence the Supreme Court.

My peer-reviewed journal [articles](#) have been cited in the [Senate Judiciary Committee](#), [Senate Committee on Commerce, Science, and Transportation](#), [New York Times](#), [Stanford Law Review](#), and [Yale Law Journal](#). My [h-index](#)—a metric for scholarly impact and production—is 3. The average law professor's h-index is 2.8.

In 2012-13, I worked on the Facebook Privacy Team. I used Python to build a data application and managed a few features on [Facebook.com/dyi](#). I served on the [California Vital Statistics Advisory Committee](#) for two years.

From 2013-15 I was [Plotly's](#) co-founder and COO. Plotly is used by Google, NASA, and millions of data scientists. Plotly is one of the [top three data visualization tools](#) in a market estimated at \$8.5B in 2018. We've [raised \\$14M](#) and have a [\\$57M estimated value](#). I was named to the [40 under 40 for data](#). I wrote this [Jupyter Notebook](#) and am an adviser now.

In 2016 I was a farm and garden apprentice at [Green Gulch Zen Center](#), a model for [Betabrand](#), and a product manager at [Change.org](#). Our team shipped public movements, [a feature](#) Nobel Peace

Prize winner Malala Yousafzai used for advocacy and Mexico City used for crowdsourcing a constitution.

In 2017 I consulted on a visualization tool for Alteryx. I consulted for Water.org on WaterEquity, an open source microfinance platform to fund toilets and clean water. I am now the general manager of Fly Ranch, Burning Man's 3,800 acre ranch.

I've taught data science at General Assembly and citizenship for middle schoolers in East Palo Alto. I've given talks at the CIA, National Institute of Standards and Technology, Harvard, and Stanford.

I spent two years on the California Vital Statistics Advisory Committee.

I like nature and these books. I officiated a wedding in 2015. I've visited 27 countries. I eat the same thing everyday: Matt's Plate is now on the menu at Java Supreme.

Let me know if you'd like to work on a project. You can email me at matt@mattsundquist.com

MICHAEL J. DeMARTINI, P.E.
PRINCIPAL ENGINEER AND PRESIDENT
Page 1 of 4 - July 1, 2010, Rev: June 11, 2019 ©

EDUCATION

- Bachelor of Science. - 1971 - Civil Engineering - University of Nevada, Reno
- Associate of Arts. - 1969 - Mechanical Engineering - Sierra College, California
- Post-graduate study in Reinforced Concrete Design
- Ongoing Continuing Education as Required to Present

REGISTRATION/CERTIFICATIONS

- Registered Professional Civil Engineer - Nevada RE 4092, 1975 to present
- Registered Professional Civil Engineer - California RCE 24650, 1975 to present
- Registered Professional Geotechnical Engineer - California, GE 263, 1987 to present
- Certified Grade 4 Water Distribution Operator – Nevada, D-821, prior 2000 to present
- Certified Grade 3 Wastewater Treatment Plant Operator – Nevada, NV-476, prior 2000 to present
- State of Nevada Water Rights Surveyor, Cert No. 1053 prior 2000 to present

EXPERIENCE

2008 - Present: Commissioner of the Northern Nevada Water Planning Commission

- Mr. DeMartini, as a water planning commissioner, is one of twelve voting commissioners on the Northern Nevada Water Planning Commission. The Western Regional Water Commission appointed Mr. DeMartini in 2008 and again in 2010 to provide **representation for approximately 9,000 domestic well owners**. The commission is involved in planning for water supply/distribution, wastewater collection/treatment/disposal and storm drainage/flood protection in Washoe County.

1995 - 2008: Commissioner of the Regional Water Planning Commission of Washoe County

- Mr. DeMartini, as a water planning commissioner, is one of nine voting commissioners on the Regional Water Planning Commission of Washoe County appointed by Washoe County Commissioners to provide **representation for domestic well owners**. The commission is involved in planning for water supply/distribution, wastewater collection/treatment/disposal and storm drainage/flood protection.

1995 - Present: Meridian Company, Principal Engineer and President

- Mr. DeMartini established the Meridian Company which specializes in Civil Engineering, Invention, Research and Development with particular expertise in Land Development Engineering, Water, and Wastewater System design, construction and operation.

1997 - Present: American Environmental Resources, Inc., President and Director

Mr. DeMartini established this company as a Nevada based corporation for the purpose of manufacturing the SRBR® wastewater treatment system and other environmental related products. Additionally, the corporation has provided the operation and maintenance of systems locally and in southern Nevada. The SRBR® wastewater treatment system has received approval by the Nevada Health Department, Nevada Department of Environmental Protection, Southern Nevada Health Authority and Washoe County Health Department. Approval was predicated on producing treated water from raw sewage to a clear liquid effluent having a total nitrogen content of less than 10mg/l (the drinking water standard for nitrate nitrogen).

MICHAEL J. DeMARTINI, P.E.
PRINCIPAL ENGINEER AND PRESIDENT
Page 2 of 4 - July 1, 2010, Rev: June 11, 2019 ©

1970 - 1995: SEA, Incorporated, Principal Engineer and Project Manager

- Since 1970, Mr. DeMartini has served as Staff Engineer in the early 1970's, a Registered Engineer in California and Nevada in 1975, Department Manager and Project Senior Engineer/Project Manager in the early 1980's and Principal Engineer/Project Manager in 1986 through mid 1995.

- During this period, Mr. DeMartini was involved in the planning, design, construction administration, and construction review of grading, drainage, storm drain, sanitary sewer, water supply and systems, streets, utilities and engineering associated with apartment, condominium, subdivision, airport, commercial and industrial projects. Special emphasis has been in the economical evaluation and interaction of the water, drainage, flood, sewer lines, onsite wastewater treatment, grading, utilities and roadways.

- Specific water experience includes evaluation of water rights, water supply wells, water demand and patterns, groundwater, water storage, water distribution, water quantity and quality, water rates, and water company administration. Special studies involved the economic and engineering feasibility of a pumped, drought reserve, and energy peaking reservoir for the Truckee Meadows, a Solar Salt Gradient Pond System for Heating and Providing Energy for Single Family Homes, and Ground Water Protection, Analysis and Reuse.

- Specific overall development experience includes having the responsible position of Principal Engineer/Project Manager for the development of the following major projects involving civil engineering design, surveying, construction administration, inspection and testing:

- >Donner Springs and El Rancho Buena Vista Residential Communities (4,000+ units)
- >Reno Freeport Aircenter/Dermody Aircenter (water, wastewater, grading, roads utilities) (160 ac industrial park)
- >Cold Springs Valley and Lemmon Valley, Residential, Commercial and Industrial Developments 1970 to 1995.
- >Porsche Cars North American Distribution Center (grading, drainage, utilities and airport) (project included the construction of a reinforced concrete 747 cargo plane taxiway from Reno International Airport to the distribution center building all within a foreign trade zone so that Porsche cars could be transported via plane directly from Germany to Reno without going through customs. The entire project had to be completed within 5 months from the date of submittal to planning to occupancy permit for the distribution warehouse. The project was completed on time.)
- >Willow Creek Subdivisions (water distribution, wastewater, grading, roads and utilities) (1,000 lots)
- >Silver Lake Business Center (water distribution, wastewater, drainage, flood protection, grading, wetlands, roads and utilities) (500 acs)
(The site was found to contain a 10,000+ ton buried hazardous waste dump that had to be cleaned up)
- >Michelin Tire Warehouse infrastructure and site development (water, grading, drainage, rail) (800,000 sf building)
- >Hidden Valley Ranch Facility, Reno, Nevada, infrastructure engineering (water, grading, drainage, flood, railroad and wetland environmental mitigation) (105,000 sf, 54 acre salad dressing factory) (the grading plan required that 250,000 cubic yards of soil be moved and compacted in 14 calendar days)
- >Reno Park Boulevard. Approx. 2 mile 4 lane public road arterial. Civil Engineering project manager for preliminary design, right of way acquisition, engineering design and construction administration.

MICHAEL J. DeMARTINI, P.E.
PRINCIPAL ENGINEER AND PRESIDENT
Page 3 of 4 - July 1, 2010, Rev: June 11, 2019 ©

>Miscellaneous Subdivision Project Management - land mapping boundaries/title, preliminary design, soils, hydrology, drainage, engineering design of infrastructure, final subdivision mapping, construction observation/administration and related activities for an approximate total 13,000 lots.

1977 - 2018: CALIFORNIA PROJECTS, Principle Engineer Project Manager:

- >Coan Ranch, Nevada City, CA Horizontal and vertical control survey for 100 acre engineering accuracy topographic map, and quiet title expert witness Nevada County Superior Ct.
- >Empress Meadows Ranch, Nevada City, CA Horizontal and vertical control survey for 200 acre engineering accuracy topographic map. 1977-78
- >Empress Meadows Ranch, tentative development for 180 acre I6 lot subdivision. 1977-78
- >Site surveying, engineering and construction administration for California AAA office, Dorsey Drive, Grass Valley, CA. 1982-83
- >Public road surveying, engineering and construction administration for Dorsey Drive, Grass Valley, CA 1982-83
- >Loma Rica Industrial Park, 12731 Loma Rica Dr., Nevada County, CA, 12,000 sf industrial building project. surveying, engineering and construction administration 1977-78
- >Loma Rica Air Park Phase I, 12759 Loma Rica Dr., Nevada County, CA, 6,000 sf industrial building project. surveying, engineering and construction administration 1988.
- >Loma Rica Air Park Phase II, 12757 and 61 Loma Rica Dr., Nevada County, CA, 7,200 sf industrial building project. surveying, engineering and construction administration 1998.
- >Newtown Mine cave-in 1982. Nevada City, CA, Analysis and design of concrete cap assembly to close open sink hole to 1,000 ft. deep shaft.
- >Dorsey Drive, Grass Valley, CA Proposed Road Widening. Discussion with City Engineering and Caltrans officials. Review draft design plans and recommend adjustment to mitigate impacts to adjacent properties. 2009-10
- > Empress Ranch, Nevada City, CA, Review and analysis of property boundaries, constraints and master planning 2009+

AREAS OF KNOWLEDGE AND EXPERTISE

- City Regulations/Codes/Applicable Laws
- Principles and Practices of Municipal Public Works administration, inclusive of, but not limited to: Civil Engineering, Geotechnical Engineering, Traffic Engineering, Sewage Collection, Drainage and Water Facilities.
- Multi-Project Management
- **Planning, Design, Construction, Administration and Construction Review of the following:**
 - > Soils/Grading/Drainage > Hydrology, Storm Drainage
 - > Wastewater Systems > Water Supply and Distribution
 - > Utilities/Airports/Railroads/Buildings and Streets
 - > Environmental Mitigation of Wetlands and Hazardous waste dump Reno-Stead, NV
- Civil Engineering associated with Apartment, Condominium, Subdivision, Airports, Commercial and Industrial Projects
- **Economical Evaluation, Interaction, and Optimization**
- **Evaluation of Water** Rights; Supply Wells, Demand & Patterns, Storage, Distribution, Quality, Rates and Water Company Operations
- HEC 1, HEC 2 and HEC HMS modeling in Lemmon Valley and particularly in Cold Springs Valley where a HEC-HMS model was developed for the entire hydrographic basin to model, estimate and predict the response of White Lake to long term and multiple year hydrological events with regard to flooding and water accumulations. To accomplish the calibration stream and flood

MICHAEL J. DeMARTINI, P.E.
PRINCIPAL ENGINEER AND PRESIDENT
Page 4 of 4 - July 1, 2010, Rev: June 11, 2019 ©

flows coming into the lake along with continuous monitoring of the lake levels has been accomplished for extended periods of time. The results from the Cold Springs model has been used to estimate and compare with responses of the Lemmon Valley hydrographic basins to similar events.

- Economic and Engineering Feasibility of pumped, drought reserve and energy peaking reservoir in regards to the Truckee Meadows area.
- Hydrology, Flood Routing, Protection, and Coordination
- Plan Checking > Quantity/Cost Estimates
- Material testing > Property Surveying (Calif)
- Economical Design > Computer Literate
- Inspection > Budget Development
- Master planning > Client Contact
- Job Budget Control > Supervision of Staff

EXPERT WITNESS (Last 10 Years)

Superior Court Marin County, CA 2011
Superior Court Nevada County, CA 2013
American Arbitration Association, San Francisco, CA, 2014
United States District Court, Eastern District of California, 2018

AFFILIATIONS (during tenure)

- Member American Water Works Association
- Member American Public Works Association
- Member American Society of Civil Engineers
- Member National Society of Professional Engineers
Reno Chapter President in 1981-82, Nevada State President in 1990-91
- Washoe Council of Governments Flood Control/Flood Plain Management Technical Advisory Committee - 1980 through 1982.
- A.S.C.E Hydrology and Drainage Technical Advisory Subcommittee 1995-1997
- Voting Member, Washoe Water Protection Association, WWPA, 1995-1997
- Voting Member Alternate, Regional Water Planning Commission of Washoe County, 1995-2001
- Commissioner, Regional Water Planning Commission of Washoe County, 2001- 2008, Chairmen 2004.
- Commissioner, Northern Nevada Water Planning Commission 2008 to 2019, Vice Chairman 2017-18 and Chairman 2018-2019.

Senior Hydrogeologist
PO Box 1022, Verdi, Nevada 89439
(775) 741-3709
Michael.HydroGeo@gmail.com

Summary of Qualifications

Thirty-seven years of professional experience in ground water exploration and development including water well construction (contracting, drilling operations, well design and testing), determination of aquifer properties, surface and groundwater resource analysis, numerical modeling of aquifers, geophysical processing and interpretations, water right appraisal, hydrogeologic investigations in support of water rights and Nevada Expert Witness testimony.

Professional Experience

Field Geologist, Bethlehem Copper, Vancouver B.C., Canada, 1979-1980
Field Geologist, Texas Gulf, Reno, Nevada, 1981
Intern/Hydrologist/Senior Hydrogeologist, Washoe County, 1982-2011
Hydrogeologist, Lumos & Assoc., 2011-2018
Owner, Senior Hydrogeologist, Hydro-Geo Consulting Services, 2012-present

Professional Affiliations

Nevada Water Resources Association, Board of Directors 2006-2013, President 2010-2012

Education

B.Sc., Geology, University of Washington, Seattle, 1980
Graduate Studies, University of Nevada, Reno, 1982-1983, 1996-2005

PROJECT MANAGER EXPERIENCE

Water Wells: contracting, construction, design and testing of numerous exploratory and municipal water wells. Water well performance testing, maintenance and rehabilitation.

Groundwater modeling: construction and interpretation of both steady state and transient models for water resource investigations and long-range resource management.

Geophysics: design, coordination, processing and interpretation of various land and airborne geophysical surveys, including satellite radar, used to define geologic structure and aquifer delineation for ground water resource investigations and for groundwater modeling input.

Groundwater resource investigations: Use of various methods and techniques for analysis of water resources including surface and airborne geophysics, isotope and geochemistry analysis, aquifer hydraulic analysis, field mapping and extensive exploratory drilling and testing.

Construction of Truckee Meadows Early Warning Flood ALERT System: Network of 26 meteorological remote stations used in monitoring real time weather and stream data for flood forecasting and precipitation recording.

Surface water evaluations: construction and maintenance of stream diversion and gauging structures, surface water resource evaluation, and synthetic record generation.

Watershed assessment: Conduct watershed assessment surveys, make recommendations on management and protection.

Expert Witness: Qualified Expert Witness for Washoe County in State of Nevada Water Right Hearings.

PUBLICATIONS

- Taylor, K., **Widmer, M.**, and Chesley, M. 1992. *Use of transient electromagnetics to define local hydrogeology in an arid alluvial environment*. Geophysics Vol. 57, No. 2, Feb. 1992.
- Widmer, Michael** and McKay, Alan., 1994. *Ground Water Contamination from Septic Tank Effluent in a Closed Basin, Washoe County, Nevada*. Washoe County Department of Public Works, Reno, Nevada.
- Widmer, Michael C.**, 1997. *Steady-State and Transient Ground-Water Modeling of Washoe Valley, Washoe County, Nevada*. Washoe County Department of Water Resources, Reno, Nevada.
- Skalbeck, J., **Widmer, M.**, Karlin, R., 1998. *The application of potential fields and electromagnetic methods to delineate the hydrogeologic heterogeneity in the Steamboat Hills area, Reno, Nevada*. EOS Tans., American Geophysical Union, vol. 79, No.45, p243.
- Widmer, Michael C.**, 2000. *Statistical Generation and Analysis of Streamflow Data for Galena, Whites, Thomas and Hunter Creeks, Truckee Meadows, Washoe County, Nevada*. Washoe County Department of Water Resources, Reno, Nevada.
- Widmer, Michael C.**, 2000. *Geophysical Analysis of Cold Springs and Lemmon Valleys, Washoe County, Nevada*. Washoe County Department of Water Resources, Reno, Nevada.
- Widmer, Michael C.**, 2001. *A gravity and magnetic fields derived bedrock elevation model for the Fernley/Wadsworth basin, Washoe and Lyon Counties, Nevada*. Washoe County Department of Water Resources, Reno, Nevada.
- Skalbeck, J., Shevenell, L., **Widmer, M.**, 2002. *Mixing of thermal and non-thermal waters in the Steamboat Hills area, Nevada, USA*. Geothermics, Vol. 31 (2002).
- Widmer, M.**, Jesch, J., 2001. *Watershed Assessment for Tributaries to the Truckee River*, Washoe County Department of Water Resources, Reno, Nevada.
- Oppliger, G., Goudy, C., **Widmer, M.**, 2005. *A Comparison of Seasonal Patterns in ERS 1 / 2 Differential InSAR, Groundwater Level Data, and Groundwater Production Data in Reno, Nevada, USA*. AGU Fall Meeting, Session H11C, Poster 1281
- Widmer, M.**, Cashman, P., Trexler, J., Benedict, C. 2007. *Neogene through Quaternary Stratigraphy and Structure in a Portion of the Truckee Meadows Basin: a Record of Recent Tectonic History*. 2008 Cordillera Section Meeting, GSA Abstracts vol. 39. no. 4
- Widmer, Michael C.**, 2008. *Geophysical Interpretation of the Verdi/Mogul Basin Geology, Washoe County*. Washoe County Department of Water Resources.
- Widmer, Michael C.**, 2018. *Geophysical Interpretation of the So. Truckee Meadows Geology, Washoe County*. (in progress).

Technical Reports

Numerous reports or titles available upon request.

Software: Microsoft Office, Geosoft Oasis Montaj, ArcMap, GMS/MODFLOW, AQTESOLV, SURFER, Adobe Illustrator.