

C. EUGENE FRANZOY, P.E.
Principal

PRESENT POSITION: Principal

EDUCATION/CREDENTIALS: M.S., Agricultural Engineering, 1965,
University of Arizona
B.S., Agricultural Engineering, 1963,
New Mexico State University

REGISTRATION: Civil Engineering
Arizona/#9362/1974
New Mexico/#8865/1984
Agricultural Engineering
Arizona/#7058/1969

YEARS OF EXPERIENCE: 48 Years

**PROFESSIONAL
BACKGROUND:**

Mr. Franzoy is President and managing principal of Franzoy Consulting, Inc. and has 48 years of experience in all phases of water resources including the design, construction, and administration of water projects, irrigation project operation and maintenance, water rights litigation and negotiation, expert witness testimony and environmental studies.

Mr. Franzoy has extensive experience with state, Federal and local governments and is familiar with government requirements for documentation of activities to meet applicable rules and regulations. He has considerable experience in the preparation of planning documents including environmental studies requiring extensive documentation for remedial action. He has prepared technical material used in public meetings to determine the nature and extent of required remedial action. Mr. Franzoy has also developed questionnaires used to gather input from persons affected by project development and incorporate their input into the planning process.

Mr. Franzoy has supervised the planning and design of projects totaling over \$200 million in construction costs and has provided state, federal, and local agencies with expert testimony for water claims. He combines his administrative and management responsibilities with technical expertise and is involved with clients on a day-to-day basis. Mr. Franzoy specializes in technical support for the determination of water rights in litigation and by negotiation, water measurement procedures, water supply analysis, determination of crop evapotranspiration, expert witness testimony, applications for funding, and the planning and design of water projects.

As managing principal, Mr. Franzoy has full authority to take necessary actions to implement management decisions and assure clients of high quality professional engineering services.

**RELEVANT
EXPERIENCE**

The following experience includes selected projects which Mr. Franzoy has served as Principal-in Charge, Senior Technical Reviewer or Project Manager.

- M **Gila River Indian Community, Water Settlement Negotiations, Sacaton, Arizona** - Mr. Franzoy prepared engineering studies that were used as the basis for negotiations for settlement of water rights claims of the Gila River Indian Community. Mr. Franzoy provided technical support, assisted in the development of negotiation strategies and participated with other negotiation team members in negotiating sessions. Entities involved in the negotiations included, the United States, the State of Arizona and local cities and irrigation districts and the State of New Mexico. The water settlement agreement has been signed by the key parties to the agreement and authorizing legislation was introduced in the Congress of the United States. Hearings on the bill were held in both Houses of Congress in September 2004 and passed in the House in October 2004 and the Senate in November 2004 and signed into law by President Bush on December 10, 2004 as Public Law 108-451. Mr. Franzoy is currently providing technical support in the implementation of the provisions of P. L. 108-451 and the settlement agreement.
- M **Walker River Paiute Tribe, Schurz, Nevada** – Mr. Franzoy is currently providing technical services to the Walker River Paiute Tribe (“Tribe”) on a variety of issues related to (1) settlement of the Tribe’s water rights claims; (2) negotiation of an agreement for the National Fish and Wildlife Foundation (“NFWF”) to convey Walker River water across the Walker River Indian Reservation (“Reservation”) to Walker Lake; (3) improvement of the Reservation irrigation system; and (4) evaluation of the water and wastewater systems that serve the Reservation residents. He is assisting counsel for the Tribe in negotiations to resolve water rights disputes with surrounding entities and the United States and in the negotiation of the NFWF conveyance agreement.
- M **Pechanga Band of Luiseño Indians, Temecula, California** – Mr. Franzoy is currently providing technical services to the Pechanga Band of Luiseño Indians (“Pechanga”) on issues related to settlement of Pechanga’s reserved water rights claims and the procurement of water supplies to meet current and projected needs. He participated in the development of a groundwater model used to estimate the safe yield of the aquifer underlying the Pechanga Indian Reservation (“Reservation”). Mr. Franzoy also developed a procedure for Pechanga to use for the measurement and accounting of its current water uses, development of annual water use projections for up to fifty years. He is assisting counsel for Pechanga in negotiations to resolve water rights disputes with surrounding entities and the United States and in the development of procedures to protect the quality of the groundwater underlying the Reservation.
- M **Las Vegas Paiute Tribe, Las Vegas, Nevada** – Mr. Franzoy provided technical services to the Las Vegas Paiute Tribe (“Tribe”) on water supply issues. He assisted counsel for the Tribe in the negotiation of a water supply and cost sharing agreement that included quantity, cost and delivery point to provide a stable water supply for the Tribe’s existing

golf course resort and planned development. Mr. Franzoy prepared alternative alignments and sizing for the supply pipeline for approval by the Tribal Council, assisted in the selection of a design firm for the design and construction of the pipeline. He will provide technical services during construction to ensure the project meets the Tribe's needs.

M Ak-Chin Indian Community, Ak-Chin Water Settlement Bill, Maricopa, Arizona - Mr. Franzoy prepared engineering studies and provided technical support for the passage of PL 95-328 for the Ak-Chin Indian Community. This bill was conceived to provide a solution to the declining groundwater supply under the reservation and settle potential litigation against local non-Indian landowners. Mr. Franzoy worked directly with various federal agencies on the review of available water sources, development of alternatives for delivery to the reservation and preparation of cost estimates. He assisted in the preparation of the legislation introduced on behalf of Ak-Chin. Mr. Franzoy assisted in testimony at Congressional sub-committee and Committee hearings prior to passage of Public Law 95-328 and assisted in negotiations to implement the mandates to the Act.

M Fort McDowell Yavapai Nation, Fort McDowell Water Settlement Bill, Fort McDowell, Arizona - Mr. Franzoy prepared engineering studies and provided technical support for the negotiation of water rights claims of the Fort McDowell Yavapai Nation (formerly Fort McDowell Indian Community). Mr. Franzoy reviewed existing water supplies and potential uses to assist the negotiating team on the development of strategies. He prepared briefing material for team meetings and assisted in review of counter proposals from opposing parties. Mr. Franzoy also assisted in the drafting of legislation which became Public Law 101-628, the Fort McDowell Indian Community Water Rights Settlement Act of 1990.

M Gila River Indian Community, Master Plan, Sacaton, Arizona - The Project Team prepared a comprehensive plan of the land uses desired by the landowners and enrolled residents of each district on the Reservation that was used as the basis for establishing the water budget for the negotiation of a settlement of the Community's water rights claims. A determination was made of the amount of water required for those land uses and the type of water delivery system needed for those proposed land uses. Priorities for these land uses and associated water requirements were developed through public meetings with landowners, enrolled residents of each District, Tribal Council and the Tribal Administration. The Master Plan included evaluation of 372,000 acres and potential land use for agriculture, municipal, industrial, recreational, and governmental development. The Master Plan also included preservation of those lands considered sacred or that were desired not to be disturbed.

M Fort McDowell Yavapai Nation, Master Land Use Plan, Fort McDowell, Arizona - The Project Team prepared a Master Land Use Plan for present and projected land uses. The Master Plan included a history of the Fort McDowell Indian Reservation, existing conditions on the Reservation and within the community including population statistics, Tribal government, educational facilities and arrangements, housing/churches, employment, on-reservation industry, utilities, roads, climate, resources, topography,

soils characteristics, water supply and quality, cultural resources and biological resources. Land use considerations included agriculture, commercial, heavy industrial, light industrial, open space - wilderness, recreational, residential, resort and special use.

M **Gila River Indian Community Pima-Maricopa Irrigation Project** – Mr. Franzoy provided technical assistance to the director and staff of the Pima-Maricopa Irrigation Project. His responsibilities included the development of planning documents, serving as a senior staff member in the review of plans and specifications submitted by engineering consultants to the project and providing guidance to staff members in the administration of design and construction contracts. Mr. Franzoy assisted in the preparation of a Programmatic Environmental Impact Statement and participated in public meetings on the Gila River Indian Reservation and in the surrounding area as part of the Bureau of Reclamation approval process for the project.

Mr. Franzoy conducted an evaluation of the project that included the then current status, funds expended and work completed as of the date of the report and funding available to complete remaining work.

M **Gila River Farms, Agricultural Development Project, Sacaton, Arizona** - Mr. Franzoy prepared a loan application for funding through the Bureau of Reclamation PL 84-984 loan program. The project included lining over 17 miles of concrete canal, 66 miles of concrete-lined laterals, rehabilitation of 197 irrigation structures, 5,224 acres of land leveling and an operation and maintenance facility.

M **Ak-Chin Indian Community, Ak-Chin Water Supply Project, Maricopa, Arizona** - The Project Team prepared feasibility level engineering studies, an environmental assessment and performed investigations to determine the feasibility of constructing 30 wells, designing a 25.4 mile pipeline conveyance system to deliver 30,000 to 85,000 acre-feet to the Reservation and designing; and constructing a soil cement-lined reservoir, a nine mile inverted siphon and a nine mile lined canal delivery system to serve 16,725 acres. Mr. Franzoy coordinated the project with several federal and state agencies to meet a rigid time frame mandated by the Ak-Chin Water Settlement Act. These agencies included the U.S. Geological Survey, Bureau of Indian Affairs, Bureau of Reclamation, Bureau of Land Management, U.S. Fish and Wildlife Service, and Arizona State Department of Game and Fish.

M **Ak-Chin Farms, Agricultural Development Project, Maricopa, Arizona** - Mr. Franzoy prepared two loan application reports under the PL 84-984 loan program. The project included the design and construction of irrigation facilities to deliver water and level lands for 16,725 acres including an operation and maintenance facility.

M **Tohono O'Odham Nation, Papago Farms Development Project, Sells, Arizona** - Mr. Franzoy was responsible for writing, implementing and administering a PL 93-638 contract for the funding of the project. The project included preparing detailed planning and feasibility studies, accomplishing pre-design investigations and designing, and

constructing several irrigation wells, a concrete-lined distribution system, farm ditches and land leveling.

M **Salt River Pima Maricopa Indian Community, Irrigation Project Feasibility Study, Scottsdale, Arizona** - This project consisted of a feasibility level study and development of a rehabilitation program for existing irrigation delivery facilities to serve 13,850 acres. A field review and evaluation of existing open-ditch and pipeline laterals was conducted to determine the nature and extent of rehabilitation and new construction required to bring the system to an acceptable condition for efficient, cost-effective operation.

M **Cocopah Indian Tribe, Land Use Planning Study, Somerton, Arizona** - The Project Team completed a land use planning study of the three reservations, East, North and West. The planning report evaluated land uses including agricultural, commercial, recreational and industrial. Land uses were also correlated with water supplies from the Colorado River and groundwater. The final report included economic feasibility for each alternative land use and environmental consequences. An environmental assessment report was prepared to support a finding of No Significant Impact and the project is currently under design.

M **Colorado River Indian Tribes, Irrigation Delivery System Evaluation, Parker, Arizona** - This project consisted of field inventory and engineering evaluation of the components of the Colorado River Irrigation Project delivery system. The system consists of approximately 210 miles of canal and laterals, 100 miles of drains, and 1,448 associated canal and drain structures, river diversion dams, lift pumps and wells for approximately 80,000 cultivated acres. Also included in the evaluation was the effect of on-farm irrigation practices throughout the system.

As a part of this project, aerial photogrammetry of all irrigated agriculture and the irrigation delivery system was completed with mapping and data entry to a Geographical Information System (GIS) that will be utilized throughout the design and construction phases.

M **Fort McDowell Mohave Apache Indian Community, Intake and Delivery System, Fort McDowell, Arizona** - Mr. Franzoy supervised the design and construction of a torpid intake bay and turnout and approximately 11 miles of concrete-lined delivery system and appurtenant water control structures.

M **Environmental Studies**- Mr. Franzoy has provided technical input and review on several environmental studies conducted as part of 13 projects completed under his direct supervision. These studies, both Environmental Assessments and Environmental Impact Studies, have included consideration of cultural resources, endangered species (plant and animal), air and water quality, socio-economics. Mr. Franzoy has assisted in Section 7 consultations and participated in public meetings and hearings. He has prepared supporting documentation for 401 and 404 permits submitted to the U.S. Army Corps of Engineers as required by the Environmental Protection Agency.

- M **United States Department of Justice, Pueblo of Isleta Claims** - Mr. Franzoy is working with the United States Department of Justice on *Pueblo of Islets v. The United States* in the United States Court of Federal Claims. He has evaluated historical flows of the Rio Grande River from the Colorado state line to the Isleta Pueblo, reviewed water logging claims and irrigation and drainage system designs and costs developed by the Plaintiff, and assisted counsel for the Department of Justice in the preparation for depositions of Plaintiff's experts. The case is currently on hold pending the outcome of on-going negotiations.
- M **Attorney General for the State of New Mexico** - Mr. Franzoy is currently researching and analyzing historical annual water supply and crop acreage data for the Rio Grande Project in southern New Mexico. The work consists of compiling and analyzing releases from Elephant Butte Reservoir, Caballo Reservoir, canal diversions, farm headgate deliveries, irrigated acreage, crop acreage and crop water demand. Mr. Franzoy prepared a report on water use efficiencies in the Elephant Butte Irrigation District for use in a flow model being developed by others as part of the work.
- M **City of Pocatello, Idaho** – Mr. Franzoy provided technical assistance to the City of Pocatello in an action before a hearing officer from the Idaho Department of Water Resources regarding a dispute between surface water users and groundwater users in areas of the Eastern Snake Plain Aquifer. Mr. Franzoy responsibilities included an assessment of water use efficiencies within irrigation districts and canal companies in the study area for use in a conjunctive use model being developed by others to determine the impacts of groundwater pumping on availability of surface water. He has also assisted counsel for the City of Pocatello in the preparation of deposition questions and has reviewed the preliminary results of the conjunctive use model. Mr. Franzoy prepared an expert report that was submitted to the hearing officer on December 30, 2005.
- M **State of Kansas, Arkansas River Compact Claims** - Mr. Franzoy provided technical support and expert witness testimony for the State of Kansas in *Kansas v. Colorado* an Original Action in the U. S. Supreme Court. Mr. Franzoy prepared reports on estimates of crop evapotranspiration, on-farm efficiency, crop yield response to water, and the use of power coefficients to estimate pumpage. Mr. Franzoy provided technical assistance to counsel for the State of Kansas in preparation for and conduct of depositions and in trial preparation. The final phase of the case was argued before the U. S. Supreme Court on October 4, 2004.
- M **State of Nebraska, Nebraska v. Wyoming** - Mr. Franzoy was retained by the State of Nebraska in the case of *Nebraska v. Wyoming* in the U. S. Supreme Court. His responsibilities included the evaluation of changes in the consumptive irrigation requirement of crops grown in the North Platte River Basin in Wyoming, review of irrigation district operations in western Nebraska, and review of reports prepared by experts for the State of Wyoming. Mr. Franzoy prepared a report of his findings relative to the changes in consumptive irrigation requirement in Wyoming, which was submitted to the Court. The case was settled prior to trial.

- M **The City of Las Cruces, New Mexico** - Mr. Franzoy researched and analyzed Rio Grande Project (Elephant Butte Irrigation District) historical annual water supply data for the City of Las Cruces. The work consisted of compiling and analyzing releases from Elephant Butte Reservoir, Caballo Reservoir, canal diversions, farm headgate deliveries, irrigated acreage, crop acreage and crop water demand.
- M **State of New Mexico, Nambe Reservation PIA Claims** - This project consisted of the evaluation of claims to water by the Nambe Reservation in *State of New Mexico, ex rel. State Engineer v. R. Lee Aamodt, et al.* in the United States District Court for the District of New Mexico. Mr. Franzoy was responsible for the review and evaluation of the existing water supply and the project proposed by the United States on behalf of the Reservation. Mr. Franzoy conducted an analysis of the consumptive use requirements, the proposed field and orchard layouts, and cost associated with the irrigation system construction and project development. He prepared and submitted an expert report of findings relative to reports prepared by experts for the United States and testified on his work at trial. Negotiations to settle the case are on-going.
- M **State of New Mexico, Taos Pueblo Project** - This project consisted of evaluation of claims to water by the Taos Pueblo and proposed agricultural projects in *State of New Mexico, ex rel. State Engineer, v. Eduardo Abeyta, et al.* in the United States District Court for the District of New Mexico. Mr. Franzoy was responsible for review of reports, documents and data submitted by the United States on behalf of the Tribe.
- M **State of New Mexico, Mescalero Project** - Mr. Franzoy evaluated claims to water by the Mescalero Apache Indian Tribe near Ruidoso, New Mexico. Mr. Franzoy's responsibilities included review and evaluation of water supply and agricultural development projects proposed by the United States on behalf of the Tribe. Mr. Franzoy provided technical assistance to counsel for the State of New Mexico in preparation of and response to interrogatories; preparation for and conduct of depositions; and pretrial preparation. In addition, he assisted counsel during conduct of the trial and provided expert witness testimony on behalf of the State of New Mexico in *State of New Mexico ex. rel. Reynolds v. Lewis et al.* in the State District Court, 5th Judicial District, State of New Mexico.
- M **State of New Mexico, Jemez Basin** - This project consisted of the evaluation of claims to water by the Jemez, Zia and Santa Ana Pueblos near Jemez, New Mexico. Mr. Franzoy's responsibilities included review and evaluation of agricultural development and water supply projects proposed by the United States on behalf of the Pueblos. He supervised and conducted analysis of data required to determine the accuracy and adequacy of the soils, conveyance system, irrigation systems, and drainage system documentation prepared by the United States expert witnesses.
- M **State of New Mexico, Pecos River Water Compact Claims** - Mr. Franzoy served as project engineer with a team of technical experts to evaluate claims of damage to the State of Texas. The damages were alleged to have been the result of increased salinity and shortages of water in the Pecos River caused by the State of New Mexico. Mr.

Franzoy's project responsibilities included review of historical crop production and yield data, determination of salinity impacts on crops and soils, field trips to the affected lands, evaluation of irrigation management in the districts and preparation of a report detailing results of the study. Conclusions of the study were to be presented as expert witness testimony in *Texas v. New Mexico*, however, the case was settled by negotiation during the trial.

M **State of New Mexico, Water Quality Control Commission/Compass Insurance Company, Acoma Project** - Mr. Franzoy evaluated claims for damage by Acoma Pueblo arising from the use of treated wastewater from the Grants, New Mexico wastewater treatment plant. Mr. Franzoy's responsibilities included the review and evaluation of crop history, yield data, water quality data, water supply data, and soils information included in reports and documents supplied by Acoma Pueblo in support of its damage claims. Mr. Franzoy provided technical assistance to counsel for the Water Quality Control Commission in the preparation of and response to interrogatories and preparation for and conduct of depositions. The case was settled prior to trial.

M **Salt River Project, Phoenix, Arizona** - Mr. Franzoy was employed by Salt River Project as a senior engineer responsible for water conservation program in both rural and urban areas of the project. Mr. Franzoy's responsibilities included development of irrigation management programs based on crop water requirements determined by the Jensen-Haise Method and Blaney-Criddle Method. He was served as a liaison between the Construction and Maintenance Department and water users to determine the basis for and resolution of water delivery problems and establishing customer service for improving water use efficiencies for both agricultural and urban water users.

M **Tohono O'Odham Nation, Papago Water Settlement Bill, Sells, Arizona** - Mr. Franzoy analyzed potential water sources and water rights and provided engineering data, input and coordination for the Tribe to settle water claims through passage of PL 97-293. Mr. Franzoy reviewed potential development areas, developed preliminary data on project costs and assisted in the preparation of language for the legislation.

M **Ute Mountain Ute Indian Tribe, Ute Mountain Ute Water Settlement Project, Towaoc, Colorado** - The Project Team prepared engineering studies and provided technical assistance to the Ute Mountain Ute Indian Tribe in the settlement of the Tribe's water claims. Mr. Franzoy supervised the preparation of plans for the development of farm land on the reservation including the evaluation of alternative cropping patterns and irrigation systems and economic data including development and production costs and projected income. The Dolores and Animas - La Plata projects and the Mancos and San Juan rivers were evaluated for their potential contributions to water settlement supplies. Mr. Franzoy assisted in the development of strategies for negotiations in preparation for a settlement of water claims in the Dolores, Mancos and Animas-La Plata river basins.

M **City and County of San Francisco, Federal Energy Regulatory Commission Hearing, San Francisco, California** - Mr. Franzoy studied the Modesto Irrigation District and Turlock Irrigation District to determine the effects of changes in the systems

on operation of the districts as well as shifts in water use within the two districts on diversions from the Tuolumne River. Mr. Franzoy directed the study, participated in the data gathering and report preparation and presented the findings to the Federal Energy Regulatory Commission.

M **Expert Witness Testimony, Various Clients** - Mr. Franzoy has provided expert witness testimony and technical assistance to attorneys on several lawsuits. The lawsuits have included crop damage claims, claims for relief from misrepresentations on water availability, product liability claims and water rights claims. He has assisted client's counsel in the preparation of cases of a highly technical nature.

M **Ak-Chin Indian Community, Vekol Floodway Project, Maricopa, Arizona** - Mr. Franzoy served as Project Principal for the project, which consisted of rainfall/runoff computations, generating unit and flood hydrographs for various frequencies, analyzing floodway design options to control super critical flows with heavy sediment inflow/transport capabilities, estimating construction costs and assisting in preparation of the summary report. The project included hydrologic analysis of the Vekol Basin comprised of 270 square miles which drains through an area of the Ak-Chin Indian Reservation to be developed for agriculture.

M **Ak-Chin Indian Community, Technical Writing Services, Maricopa, Arizona** - Mr. Franzoy performed a variety of technical writing services for the Ak-Chin Indian Community. He prepared grant applications which were submitted to the Bureau of Indian Affairs, Administration for Native Americans and Department of Commerce. Mr. Franzoy also prepared an Overall Economic Development Plan for the Community.

M **Harquahala Valley Irrigation Project, Harquahala Valley, Arizona** - Mr. Franzoy prepared feasibility and loan application reports under the PL 84-984 Loan Program. Design and construction services were provided for irrigation facilities to serve 33,000 acres of farm land within the Harquahala Valley Irrigation. He supervised the preparation of the development plan and prepared for and participated in public meetings on environmental and economic issues associated with the project.

M **HoHoKam Irrigation Project, Coolidge, Arizona** - Mr. Franzoy prepared feasibility and loan application reports under the PL 84-984 Loan Program for approximately 29,000 acres of farm land within the HoHoKam Irrigation Project. He supervised the preparation of the development plan and prepared for and participated in public meetings on environmental and economic issues associated with the project.

M **Tonopah Irrigation Project, Tonopah, Arizona** - Mr. Franzoy prepared feasibility and loan application reports for funding of construction of irrigation facilities serving 3,000 acres within the Tonopah Irrigation Project. He supervised the preparation of the development plan and prepared for and participated in public meetings on environmental and economic issues associated with the project.

- M **Goodyear/Westinghouse Water Master Plan, Goodyear, Arizona** - Mr. Franzoy served as Project Principal on the project, which consisted of the development of water master plan for a planned residential community. Included in the plan was a dual water supply system delivering potable and non-potable water, incorporation of landscape features into the water treatment and fire protection systems and use of low water use landscaping.

AFFILIATIONS:

American Society of Agricultural Engineers
Former Pacific Region Chairman
National Society of Professional Engineers
Colorado River Water Users Association

COMMUNICATIONS:

Franzoy, C.E., "Practical On-Farm Irrigation and Soil Problem Solving", Proceedings, Western Cotton Production Conference, El Paso, Texas, March 1967.

Franzoy, G. and Tankersley, E.L., "Predicting Irrigations from Climatic Data and Soil Parameters", American Society of Agricultural Engineers, December 1969.

Jensen, M.E., D.C.N. Robb, and C.E. Franzoy, "Scheduling Irrigations Using Climate-Crop-Soil Data", presented at the National Conference on Water Resources Engineering of the American Society of Civil Engineers, New Orleans, Louisiana, February 1969.

Franzoy, G. and Tankersley, E.L., "Use of Computers in Scheduling Irrigations", United States Committee on Irrigation and Drainage, October 1970.