6.0 EIR PREPARERS & PERSONS CONSULTED

City of Irwindale

Gustavo Romo, Community Development Director

Paula Kelly, Senior Planner

William Kwok Tam, Director of Public Works / City Engineer

Aleshire & Wynder, LLP

John W. Fox, Attorney

Fred Galante, City Attorney

Kathryn C. Phelan, Attorney

United Rock Products

Russ Caruso, General Manager

Enviromine Inc.

Warren Coalson, President

Crystal Howard, Economist & Market Analyst

Harvey Meyerhoff Consulting Group, Inc.

Jeffrey G. Harvey, Ph.D., Principal
Project Director, Project Development, QA/QC, Traffic Generation &Circulation, Water Quality & Hydrology, Alternatives Analysis, Mitigation Monitoring and Reporting Program

Leslea Meyerhoff, AICP, Principal
Assistant Project Manager, Executive Summary, Alternatives Analysis, Mandatory CEQA Considerations, Responses to Comments, QA/QC

Elizabeth Meyerhoff, Senior Environmental Planner
Team Coordination, Introduction, Project Description, Effects Not Found To Be Significant, Aesthetics, Hazards & Hazardous Materials, Land Use & Planning, Mitigation Monitoring and Reporting Program

Dan Jones, RCH Group Inc., Environmental Services Associate
Air Quality/Greenhouse Gas Emissions/Odors/Health Risk Assessment, Alternatives and Noise Analysis

Mike Ratte, RCH Group Inc./KB Environmental Sciences, Senior Air Quality Specialist
Air Quality/Greenhouse Gas Emissions/Odors/Health Risk Assessment

Janette Cachola, Urban Crossroads, Senior Technician
Traffic Impact Analysis

Jennifer Reed, SecretaryZone, Virtual Assistant
Technical editing, word processing, document formatting and production

John Kain, AICP, Urban Crossroads, President
Traffic Impact Analysis

Karl L. Osmundson, Helix Environmental Planning, Inc., Biology Group Manager
Biological Resources

Kenneth Wilson, P.G, C.E.G, Wilson Geosciences, Principal Geologist
Geology, Soils and Mineral Resources

Marlie Whiteman, P.E., Urban Crossroads, Senior Associate
Traffic Impact Analysis

Paul Miller, RCH Group Inc., Principal of Environmental Services
Air Quality/Greenhouse Gas Emissions/Odors/Health Risk Assessment, Alternatives and Noise Analysis

The following are the key resumes of senior professional and technical staff who assisted in the preparation of the Draft EIR and the Final EIR.

Jeffrey G. Harvey, Ph.D.
Principal & Senior Scientist

Dr. Harvey has more than 25 years of experience as a consultant in project planning and professional reporting for local, state, and federal government agencies, and private resource developers. Dr. Harvey has organized and managed more than 300 projects, leading multi-disciplinary teams of scientists, engineers, lawyers, economists, and planners. As Senior Project Manager, he is responsible for client liaison, team coordination and task assignments, and for keeping projects on schedule and within budget. He also performs the primary quality assurance / quality control function for the team.

Dr. Harvey has worked on western mining, water, energy and related natural resources policy issues since 1983, including mining, power plant and hydroelectric power development, and water resources development and management. Special emphasis has been placed on client representation, active coordination with agency staff and government decision-makers, and effective presentations and public testimony. Dr. Harvey also specializes in development of public involvement programs and consensus building through education, information management, and negotiations. In managing resource planning and document preparation, Dr. Harvey has streamlined the reporting and regulatory process through development of detailed project objectives and focused identification of issues, effective consultation and liaison with regulatory agency staff, stakeholder groups, and the applicant's representatives, and preparation of concise, organized, and readable reports. He has developed cost-effective mitigation strategies to resolve regulatory issues without impairing project goals, and has prepared long term monitoring criteria to measure successful project implementation.

Education

- **Ph.D., Geography -** University of California, Los Angeles 1994; emphasis in Environmental Law and Policy, Hydrology and Water Resources, Natural Resources Management, and Impact Assessment.
- **M.A., Geography -** California State University, Chico 1983; emphasis in Environmental Planning, Water Resources Development, and Impact Analysis.
- **B.A., Geography -** California State University, Chico 1981; emphasis in Physical Geography; minor concentrations in Anthropology and Geology.

Representative Project Experience

- **Eagle Mountain Mine Pumped Storage Hydroelectric Project**
  Role: Project Director for environmental permitting of a pumped-storage hydroelectric project located within the historic Kaiser Corporation Eagle Mountain Mine near Desert Center, California.
  Description: The 1,300 megawatt project will reclaim a portion of the previous mine site by utilizing two inactive mining pits as reservoirs, connected by an underground tunnel system and powerhouse. Reclamation also includes reuse of fine tailings materials to line the reservoirs and control seepage losses. Major documentation has included the license application to the Federal Energy Regulatory Commission (FERC) that was used as the

basis for their NEPA EIS document, and preparation of the EIR for the State Water Resources Control Board (SWRCB). In addition to regulatory compliance actions, management tasks have included wide-ranging agency consultation and implementation of a comprehensive community and public outreach program. In addition to the SWRCB, consultation has included the U.S. Fish and Wildlife Service (USFWS), Bureau of Land Management (BLM), California Department of Fish and Wildlife (CDFW), National Park Service (NPS), State Historic Preservation Officer (SHPO), and the Air Quality Management District (SCAQMD).

- **City of Grass Valley, Idaho-Maryland Mine Project EIR**
  Role: Project Manager as a subconsultant to ESA Associates for preparation the Draft EIR for the proposed Idaho-Maryland Mine project in Grass Valley, California.
  Description: This multi-stage environmental review process included extensive community involvement and scoping for the proposed Idaho-Maryland Mine. The proposal included reopening the historic Idaho-Maryland Mine and to develop industrial and precious mineral deposits into gold and stone ceramic products. The project comprised three properties that encompassed a total of 138-acres of land within the City of Grass Valley and unincorporated Nevada County. Project actions included dewatering and rehabilitating the historic Idaho-Maryland Mine workings, conducting underground resource exploration and development, developing the industrial mineral and gold ore deposits, processing mineral deposits to produce gold and manufactured stone and ceramic building products, operation and maintenance of these facilities, and performing reclamation activities at the project sites at the conclusion of the project. Primary responsibilities included scoping, public involvement and agency coordination, technical analyses of geology, hydrogeology, and geochemistry, and QA/QC of draft document sections.

- **City of Irwindale, Mining Impact and Reclamation Study**
  Role: Project Manager for comprehensive analysis and planning of mining operations located within the jurisdiction of the City of Irwindale, California.
  Description: Analyses included existing mining operations for compliance with the state Surface Mining and Reclamation Act (SMARA), physical and environmental effects of mining within the City, and development of reclamation policies to guide long-term land use planning and economic development. The study covered 14 open-pit mines ranging from 80 to 500 acres in surface area, and minimum 100-feet to more than 200-feet deep. Of the 14 total sites, seven are active mines, four are implementing landfill reclamation, and three are inactive mines. Follow-up tasks have involved support in proceedings with the State Mining and Geology Board, technical review of reclamation plans and related environmental documents, and development of a revised financial assurances program for the City.

- **Vulcan Materials Company Mining and Reclamation Plan EIR**
  Role: Project Manager for preparation of an EIR for a quarry expansion and reclamation project that included deepening and extending the life of two (2) aggregate quarries along with concurrent reclamation.
  Description: The EIR included environmental review and analysis of an existing Class "U" Inert Debris Engineered Fill landfill; for both current operations and reclamation activities. The EIR assessed a programmatic evaluation of post-reclamation land uses for all three (3) project sites (Durbin Quarry, Reliance I Quarry, and Reliance II Landfill). Key issues for the project included fugitive dust, geotechnical and slope stability,

groundwater exposure, contamination and underwater dredge activities, traffic, circulation, and roadway impacts, and post-reclamation land use planning.

- **United Rock Products Quarry and Reclamation Plan EIR**
  Role: Project Manager for preparation of an EIR for a quarry expansion project that involved 3 quarry locations, reclamation activities and post-reclamation land development projects.
  Description: Key issues for the project included air quality related emissions of fugitive dust, geotechnical and slope concerns, groundwater exposure and contamination and underwater dredge activities. The impact analysis focused on current and future activities to the approximate horizon year of 2100 due to the protracted rate of quarry reclamation activities. This was a fast track project completed in five months after another consulting firm had failed to perform, leaving the City in a schedule bind and facing litigation. The EIR was successfully completed on the accelerated schedule, and litigation was avoided.

- **City of Azusa, Mining Assessment**
  Role: Project Manager for technical assessment of the existing Vulcan Materials mining operations to assist the City of Azusa, California, in determining the nature and extent of existing minerals resource extraction entitlements under CEQA and SMARA and to identify required additional entitlements necessary to allow for an expansion of operations to include an 80-acre parcel contiguous to the existing 270-acre mine.
  Description: Tasks included preparation of a market assessment of existing materials mined by Vulcan, a geologic assessment to determine future resource extraction value potential for the proposed new 80-acre mine and future reclamation options and an analysis of current measurement and reporting methodologies. A monitoring and reporting program was developed with a goal to improve reclamation implementation and to ensure compliance with SMARA and CEQA requirements.

- **City of Shasta Lake, Goat Ranch Quarry EIR Review**
  Role: Project Manager for the City of Shasta Lake, California, a Responsible Agency under CEQA, to conduct a comprehensive review of the adequacy of an EIR prepared for a proposed aggregate mine and asphalt production plant located in the unincorporated portion of Shasta County, California.
  Description: The proposed Goat Ranch Quarry project also included a Reclamation Plan proposed to be implemented after the useful life of the quarry was exhausted estimated to occur after a period of approximately 30 years. Key environmental issues for the project included land use incompatibility, roadway based truck traffic, onsite use of explosives and related noise and vibration impacts, fire hazard and emergency response plans and air quality impacts. Tasks included preparation of an extensive technical report to the City of Shasta Lake identifying fundamental shortcomings in the technical analysis and adequacy of supporting documentation on which project effects and impact conclusions were based. On the basis of this technical analysis, the County withdrew the EIR and the applicant selected another site for mine development.

Leslea Meyerhoff, M.A., AICP
Principal & Senior Project Manager

Ms. Meyerhoff has more than 20 years of experience as a CEQA and NEPA practitioner and an environmental planning and regulatory specialist. Ms. Meyerhoff has experience working with both public agencies and private clients, and has served as the Project Manager for numerous complex CEQA and NEPA projects. Primary responsibilities have also included obtaining federal, State, and local regulatory permits. She has spent the majority of her career as an environmental consultant and early on worked as a legislative aide for a state and a local official on land use and environmental policy matters. Ms. Meyerhoff has managed primary infrastructure projects including water supply and delivery projects, power stations, transmission facilities, roadway and transportation projects, solid waste facilities projects, shoreline protection and beach restoration projects, lagoon restoration efforts, and master planned and resort communities. Ms. Meyerhoff places special emphasis on a commitment to consistently providing the highest levels of client service and functioning as an extention of public agency staff.

Education

- Master of Arts, *Environmental Analysis & Policy*. UCLA,
- Bachelor of Arts, *Government and Environmental Studies*. CSU, Sacramento

Professional Experience

- Harvey Meyerhoff Consulting Group, Principal and Senior Environmental Planner
- Greystone Environmental Consultants, Southern California Regional Manager
- Hofman Planning Associates, Senior Project Manager
- Michael Brandman Associates, Project Manager
- Los Angeles City Councilmember Ruth Galanter - Legislative Aide
- California State Assemblymember Robert Campbell - Legislative Aide

Certifications and Professional Affiliations

- Director, American Shore & Beach Preservation Association (2010-2013)
- American Institute of Certified Planners - Member since 1993
- American Planning Association, San Diego Section Director Pro-Tem 2001-2003
- American Planning Association, San Diego Section Legislative Chair 2003-2005
- California Chapter American Planning Association, Legislative Review Team 2004-2006
- California Chapter American Planning Association, State Water Plan Review Team 2008

Project Experience

- Coastal & Environmental Program Manager, City of Solana Beach
- Carlsbad Seawater Desalination Project Environmental Compliance and Permitting
- Sunrise Powerlink EIR/EIS Deputy Project Manager, CA. Public Utilities Commission
- City of Vista, On-Call Environmental Review and Compliance Services Manager
- Regional Water Facilities Master Plan Program EIR, San Diego County Water Authority

John Kain, AICP

Senior Principal

Areas of Expertise
Trans. Planning & Problem Solving
Cooperative Study Management
Traffic Impact Analyses
Ped & Bicycle Circulation Systems
Travel Demand Modeling
Improvement Program Coordination
General Plan Circ. Elements
Neighborhood Traffic Control
Transit Service Plans
NEV Plans
Roundabout Design

Education
Cert./1981/Management of Trans. Programs/UC Irvine
Instructor Cred./1981/Public Srvcs. & Admin./Cal. Comm. Colleges
MS/1977/Administration (Trans.Sys. Mgmt.)/UC Irvine
BA/1975/Social Ecology/UC Irvine

Prof. Registration
AICP

Affiliations
American Planning Assoc. (APA)
Institute of Trans. Engineers (ITE)
Transportation Research Board (TRB)
Urban Land Institute (ULI)

Prof. Accomplishments
Orange County APA, Comprehensive Planning Award, Millennium Plan (1999)
CCAPA Merit Award, Large Jurisdiction Plan (1999)
Traffic Forecasting – ITE technical committee
Highway Access Control – ITE technical committee

Prof. History
Urban Crossroads, Inc.
President
2000 – Present

RKJK & Associates, Inc.
Principal
1990 – 2000

Kunzman Associates
Principal
1985 – 1990
Sr. Associate
1983-1985

Jack G. Raub Company
Mgr., Transportation/Traffic Eng.
1980 – 1983
Transportation Planner
1978-1980

Institute of Transportation Studies
Research Associate
1976 – 1977

John Kain, AICP has worked professionally in transportation planning and traffic engineering since 1975. His broad range of experience stretches through the spectrum of transportation domains. These include plans for new communities, General Plan circulation elements, management of the development and application of traffic models and GIS databases, traffic impact analyses for numerous types of land uses, transit-oriented community designs, non-motorized transportation plans, parking studies, and alternative intersection treatments such as roundabout designs.

Mr. Kain leads the corporate activities related to sustainability and “complete streets” transportation systems and standards. He has developed plans for pedestrians, bicycles, neighborhood electric vehicles (NEVs) and transit services that target the reduction of per capita Greenhouse Gas (GHG) emissions for established cities as well as new communities. His Southern California projects that have been implemented include Aliso Viejo, Rancho Santa Margarita, Foothill Ranch, Westpark Irvine, redevelopment of the San Juan Capistrano Metrolink station area, Sun City Palm Desert, Victoria Grove, Temecula Old Town, South Poway, and the Oxnard Town Center. His Colorado projects include Highlands Ranch and Edgemont Ranch.

Recent examples that are still in the planning stage include West Sacramento’s Liberty project, Corona’s Arantine Hills projects, Riverside County’s Travertine Point, and the Yorba Linda Town Center. Mr. Kain is also the lead transportation consultant for the Great Park Neighborhoods / Heritage Fields project in Irvine.

His General Plan experience includes a variety of cities which range from urban to resort and suburban settings. Apple Valley, Beaumont, Hemet, Hesperia, Lake Elsinore, La Quinta, Montclair, Norwalk, Palm Desert, Rancho Mirage, San Jacinto, and Solana Beach are a sampling of the circulation elements he has prepared.

Mr. Kain’s expertise in cooperative study management has proved invaluable in coordinating or providing technical support for area-wide funding programs and sub-regional transportation plans. These include the Western Riverside Non-Motorized Transportation Plan, WRCOG 4-City Neighborhood Electric Vehicle Plan, Coachella Valley I-10 Freeway interchange local funding programs, Scott Road and Clinton Keith Road Benefit Districts, and Van Buren Boulevard corridor improvements.

Mr. Kain’s work involving commercial, office/industrial, and educational facilities includes the Murrieta Springs Mall (I-15/I-215 Confluence), Rancho Mirage SR-111 Corridor, Desert Cities Auto Mall, several Irvine Business Complex (IBC) projects, Rialto Airport Specific Plan, Victorville Southdown Industrial Park, Borel Airpark Center, Cheyenne Airpark (Nevada), UCI Long Range Development Plan, the CSUSB Palm Desert campus, and expansion of California Baptist College.

Mr. Kain is a Fellow in the Institute of Transportation Engineers (ITE), and he serves on the Advisory Board for the UC Irvine Department of Planning, Policy and Design.

Elizabeth Meyerhoff , B.A.
Environmental Planner

Ms. Meyerhoff is a professional land use planner with more than eight years of experience, with specialty in regulatory permitting and environmental review pursuant to the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Elizabeth has prepared Staff Reports, Resolutions, Mitigation Plans, Initial Studies, Environmental Impact Reports, and Categorical Exemptions. Elizabeth has prepared numerous planning documents, regulatory permitting and environmental compliance efforts for numerous local, State and Federal government agencies, private developers, and non-profit entities. Ms. Meyerhoff has been involved in project management and environmental assessment for numerous primary infrastructure projects and land use planning projects; including mining and reclamation, waste recovery and transfer projects, hydroelectric pumped storage and power/transmission, as well as industrial, residential, and commercial development projects.

Elizabeth has the ability to manage several projects and oversee a team of colleges, while balancing project tasks and deliverables, and quality assurance/quality control standards. Public outreach efforts have included hosting open house meetings, preparing project postcards, surveys, and websites, and engaging in direct dialog with the public and stakeholders. Ms. Meyerhoff places special emphasis on providing consistent, professional planning functions for public and private projects while ensuring applicable regulatory requirements are met in a timely manner and under budget.

Education

- *Land Use and Environmental Planning Certificate*. University of California, Riverside
- *Bachelor of Arts, Sociology*. University of California, Riverside

Professional Experience

- Harvey-Meyerhoff Consulting Group, Environmental Planner
- Summit Environmental Group, Planner
- Greystone Consulting (now ARCADIS), Planning Assistant

Representative Project Experience

- Vulcan Materials Company Mining and Reclamation Project EIR & Addendums
- Eagle Mountain Mine Pumped Storage Hydroelectric Project EIS/EIR
- Plastic Bag Reduction Ordinance, Municipal Code Amendment, and Initial Study

Paul Miller

Principal, Environmental Services

Paul is an environmental professional with more than 25 years of experience in providing services and products to government agencies and private sector corporations. His technical areas of expertise include CEQA project management and technical analyses in the areas of air quality, greenhouse gas emissions, noise, integrated waste management, energy, and hazardous materials. With a broad range of environmental skills, he has applied his background since 1986 to CEQA and NEPA and has been integral in the preparation of over 500 CEQA/NEPA environmental documents, including project manager for more than 18 major EIRs. He has been the project manager or a key team leader for five state agencies (California Public Utilities Commission (CPUC), California Energy Commission (CEC), CalRecycle, the former California Integrated Waste Management Board, and the State Water Resources Board, Central Valley Region) on projects of statewide importance. He was the senior air quality reviewer for CEQA documents at ESA for almost 20 years.

CEQA Project Management / Senior Technical Analyst/Reviewer

- **Project Manager and Senior Air Quality Reviewer of Energy Projects for California Public Utilities Commission (CPUC) CEQA documents:** Pacific Gas and Electric Co. (PG&E) Divestiture EIR for Hydroelectric System Divestiture EIR; PG&E Divestiture EIRs to sell Morrow Bay, Moss Landing, Oakland, Potrero, Pittsburg, and Contra Costa Power Plants; San Diego Gas and Electric Company's (SDG&E's) Power Plant Divestiture Mitigated Negative Declaration; Mitigated Negative Dec (MND) to divest Southern California Edison Company's power plants.

- **Senior Air Quality and Greenhouse Gas Reviewer**: Honda Port of Entry EIR (Port of Richmond), Union Pacific Railroad Modernization EIR (Lathrop, CA), Eagle Mountain Pumped Storage Hydroelectric EIR and EIS (Mohave Desert), Oasis Shopping Center Master EIR (Redding, CA), San Rafael Rock Quarry EIRs, La Vista Quarry EIR (Alameda County), Stockton Delta Water Supply Project Feasibility Study EIR, Novato Sanitary District Master Plan EIR, SAFCA Mayhew Levee Replacement Project Peer Review.

- **Mining Projects (California)**: San Rafael Rock Quarry EIRs (Marin County), La Vista Quarry EIR and R&J Quarry Draft EIR (Alameda County). Canyon Rock Quarry Expansion EIR and Roblar Road Quarry EIR (Sonoma County), Baldwin Hallwood Mine Expansion EIR (east of Marysville in the Yuba Goldfields area), Idaho-Maryland Mine (Nevada County), and Chapin Quarry EIR (Merced County).

- **Conversion Technology CEQA documents:** Plasco Conversion System for the Salinas Valley Solid Waste Management Authority (SVSWA).

CEQA/NEPA Project Management / Senior Technical Analyst/Reviewer (Continued)

- **Material Recovery Facility CEQA documents:** South San Francisco Scavenger Company Materials Recovery Facility EIR; West Contra Costa County Integrated Resource Recovery Facility EIR; Sanitary Fill Solid Waste Transfer Station and Household Hazardous Waste Facility EIR; Yuba-Sutter Disposal Inc. Transfer Station and Compost MND; Stockton Scavenger Transfer Station Focused EIR; City of Fremont Transfer Station/MRF/Composting Facility EIR.

- **Landfill CEQA documents:** Austin Road Landfill Expansion EIR; Altamont Landfill and Resource Recovery Facility Expansion EIR; Time Extension of Importation of Contra Costa County Waste to the Altamont Landfill EIR; Altamont Landfill Reclassification (Class II) EIR; West Contra Costa Landfill Closure CEQA Technical Assistance; Ostrom Road Landfill Permit Modifications (Class II) EIR; Eureka County Nevada Solid Waste Management NEPA EAs; Bakersfield City Sanitary Landfill; Closure/Post-Closure Maintenance Plans EIR; San Leandro Landfill Gas Collection and Flaring System Mitigated Negative Declaration; New Jamestown Landfill EIR; Sutter County Ash Disposal Site EIR; Ukiah Landfill Permit Revision Supplemental EIR; Marsh Canyon Landfill EIR.

- **Residential/Commercial Developments CEQA documents:** Clarksburg Sugar Mill Specific Plan EIR; Elverta Specific Plan EIS; Redding Oasis Center Master EIR, NUMI Modernization EIR Addendum.

- **Compost Facility CEQA documents:** Sonoma County Compost Site Selection, Conceptual Design and EIR; Cold Creek Compost Facility EIR.

Education

1977 Master of Science (Zoology and Entomology)
Colorado State University – Fort Collins, Colorado

1974 BA Zoology, Miami University – Oxford, Ohio

Professional Affiliations

- Member, Association of Environmental Professionals (AEP)
- Board Member, Air and Waste Management Association, Mother Lode Chapter of Golden West Section

25+ Years Consulting Experience

- Environmental Science Associates (ESA)
- North State Resources
- Aspen Environmental Group
- EarthMetrics, Inc.
- Environmental Measurements, Inc.
- Ecology Consultants, Inc.
- Miller Environmental Consultants

Karl Osmundson

Group Manager / Principal Biologist

HELIX Environmental Planning

Summary of Qualifications

Mr. Osmundson serves as the Biology Group Manager at HELIX. He has been conducting research and working as a biologist in the environmental field for more than 13 years. His current responsibilities include managing environmental documentation, overseeing permitting and mitigation programs, and providing senior technical support in the biological resources area.

As a consulting biologist for projects requiring NEPA and CEQA compliance, he has conducted a variety of biological surveys and has prepared a wide range of biological analyses and reporting in support of IS/MNDs, EIRs, EAs and EISs. He also has prepared opportunity and constraints analyses, due diligence investigations, vegetation and GIS mapping, biological technical reports, Caltrans Natural Environmental Study (NES) reports, Natural Community Conservation Planning/Habitat Conservation Plan (NCCP/HCP) consistency analyses, functions and values assessments, equivalency analyses, wetland delineations, alternatives analyses, Clean Water Act 404/401 and California Fish & Game Code 1602 permitting, Local Coastal Program (LCP) consistency, Coastal Development Permit (CDP) coordination, endangered species protocol survey and sampling, Endangered Species Act (ESA) Section 7 and 10 compliance and permitting, California Endangered Species Act (CESA) Section 2080.1 and 2081 compliance and permitting, resource management plans, habitat mitigation and monitoring plans, and restoration plans.

Mr. Osmundson has provided support in the implementation of project mitigation and permit conditions, including pre-construction surveys and reporting, construction monitoring, mitigation banking coordination, and habitat creation/restoration planning and monitoring. He has directed and coordinated large teams during survey efforts, provided technical review and oversight in the preparation of environmental documentation, and represented project teams at public hearings and meetings.

Selected Project Experience

Whitewater River/Colorado River Aqueduct and Whitewater Mine Pit (2014 - Present). As Principal Biologist, assisted with Addendum to the Whitewater River/Colorado River Aqueduct (CRA) EIR, prepared updated jurisdictional delineation, and led permitting process with the USACE, RWQCB, and CDFW. HELIX will obtain regulatory permits for The Metropolitan Water District of Southern California to work on improvements to the CRA where it crosses under the Whitewater River in western Riverside County.

Garlock Mine Reclamation (2007). As Project Biologist, assisted with protocol-level surveys for the desert tortoise and with constraints analysis and planning for coordination with U.S. Fish and Wildlife Service and Bureau of Land Management.

Education

Bachelor of Science, Wildlife, Fish and Conservation Biology, University of California, Davis, 2003

Registrations/ Certifications

USFWS Federal, Permit #TE161620-0, vernal pool branchiopods, 10(a)(1)(A), DONE
CDFW State Scientific Collecting, Permit #801063-04
Certified USACE, Wetland Delineator, Arid West and Western Mtns, Valleys and Coast Regions,
County of San Diego, CEQA Approved Consultant,
County of San Bernardino, CEQA Approved Consultant,
AIA/CES, Trained Project Manager,

Professional Affiliations

Association of Environmental Planners
California Native Plant Society
American Fisheries Society

Project included the expansion of sand and gravel operation located in San Bernardino County within environmentally sensitive areas, including habitat for federally and state threatened desert tortoise.

Axon Capital Mine (2006). As Project Biologist, assisted with a baseline habitat assessment, jurisdictional assessment, and protocol-level surveys for the desert tortoise for a 565.6-acre sand and gravel mining site in the unincorporated community of Desert Center, Riverside County.

Torrance Regional Transit Center (2014 – Present). As Principal Biologist, conducted general biological surveys, jurisdictional delineation, and fairy shrimp surveys and prepared biological technical report for CEQA document. Coordinated with City of Torrance biologists regarding southern tarplant mitigation. The project is a transit center development in the City of Torrance.

Brasada Residential Project (2011). As Project Biologist, prepared biological resources section of EIR. Provided technical review, comments, and edits on biological technical report, impact analysis, and mitigation measures. Key biological issues included impacts to native coastal sage scrub habitat, wetlands, and endangered species. A number of discretionary and agency approvals for required for the project, including general plan amendments, specific plan amendments, tentative tract map, and development agreement in City of San Dimas.

Pepper Avenue Extension Project (2009 – 2012). As Project Biologist, led regulatory permitting with the USFWS, USACE, RWQCB, and CDFW. Coordinated with CDFW staff regarding impacts to Riversidean Alluvial Fan Sage Scrub (RAFSS) and state-listed Santa Ana River woolly-star and CESA 2081 permitting. Conducted rare plant surveys for the Santa Ana River woolly-star. Quantified impacts to potential jurisdictional areas and developed mitigation and permitting strategy for the project. Prepared conceptual monitoring plan and obtained Section 7 Biological Opinion, 404, 401, and 1602 permits. The City of Rialto proposed the extension of Pepper Avenue over the Frisbie Drainage, a tributary water to Lytle Creek.

Southern California Edison, East End Hydro Division Projects (2009 – 2012). As Project Biologist, responsible for serving as SCE's authorized representative for wetland delineations and regulatory permitting with USACE, RWQCB, and CDFW for hydropower projects in Los Angeles and San Bernardino Counties. Coordinated project review and permit processing. Conducted endangered species surveys, fisheries studies, biological studies, rare plant surveys, CEQA documentation, ESA Section 7 consultation, and mitigation implementation.

Palomar Community College District, San Marcos Campus Facilities Master Plan (2009 – 2012). As Project Biologist, prepared biological technical studies for the project's EIR. Led endangered species and wetlands permitting and consultation

process with the USFWS, USACE, RWQCB, and CDFW. Prepared the jurisdictional delineation report and conceptual wetlands mitigation plan. Provided assistance in planning, design, and preservation of a 0.30-acre campus wetlands mitigation site, and a 32.52-acre campus open space preserve. Prepared a resource management plan to address long-term management of campus preserve. The Master Plan proposed planning and development of 23 projects to encompass growth of the existing San Marcos campus from the present through 2022.

Santa Monica-Malibu Unified School District, Malibu Middle-High School Athletic Field Project (2011 – 2012). As Project Biologist, prepared and implemented a comprehensive monitoring plan for evaluating effects of night lighting on birds and other coastal resources. Coordinated plan approval with a City of Malibu biologist and the California Coastal Commission. Performed avian monitoring during fall and spring migration periods for birds migrating along Pacific Flyway. Project included improvements to the high school within the Coastal Zone in City of Malibu.

Agoura Hills General Plan Update (2009 – 2010). As Project Biologist, provided support for preparation of an update to the City of Agoura Hill's 1993 General Plan. Developed updated mapping of vegetation communities, wetlands/watercourses, wildlife corridors/linkages, and locations of sensitive biological resources within the City. Prepared biological resources section of EIR for the General Plan Update, including an analysis against the identified Goals and Policies for the Plan's Natural Resources Chapter for 12 separate study areas within the City of Agoura Hills.

Fire Station 71 Modernization/Expansion Project (2012). As Project Biologist, performed biological studies for CEQA review. The County of Los Angeles Department of Public Works proposed upgrades and expansion to the fire station in the City of Malibu.

Virginia Robinson Gardens Operational Changes (2012). As Project Biologist, performed biological studies for CEQA review. The Los Angeles County Parks and Recreation Department proposes changes to the operation and maintenance of the Virginia Gardens Park in the City of Beverly Hills.

San Pedro New Community Plan and Granada Hills–Knollwood/Sylmar Community Plans (2010 – 2012). As Project Biologist, assisted with preparation of biological studies and biological resources EIR sections. The project includes new community plans for San Pedro and Granado Hills-Knollwood/Sylmar in the City of Los Angeles.

Santa Monica Bergamot Transit Village Center (2011). As Project Biologist, prepared biological resources EIR section. The project is a new transit-oriented village center in the City of Santa Monica.

Michael Ratte

Senior Air Quality Scientist, Environmental Services

Michael Ratte is a Senior Air Quality Scientist at RCH Group. Mike has been a practicing meteorologist and air quality specialist within the consulting business for 25 years. Mike's technical expertise includes NEPA/CEQA environmental planning, air emissions inventories, ambient air monitoring, atmospheric dispersion modeling, air quality permitting, health risk assessments, and climate change analyses. He has worked extensively for local, state, and federal agencies, as well as a wide array of commercial businesses and industries. His recent projects involved transportation facilities (airports, roadways, and marine ports), land development (residential/commercial/institutional), landfills/composting, and mining/quarry operations. He is well versed in a wide array of air emission models including, EMFAC, OFFROAD, NONROAD, MOVES, CALEEMod, and AP-42; dispersion models such as AERMOD, EDMS, HARP, and CAL3QHC; with strong data management and ACCESS programming skills.

CEQA/NEPA Project Experience

- **Residential/Commercial Development CEQA documents:** 127 West Harris Marriot Hotel IS/MND, 2117 Carlmont Drive IS/MND, 418 Linden Ave IS/MND, 699 Ralston Avenue IS/MND, 830 Marina Way South IS/MND, Brisbane Baylands EIR, Broadway Plaza EIR, Crystal Springs Upland School IS/MND, Eagle Mountain Pumped Storage Hydroelectric Project EIR/EIS, Gimbals Candies Expansion IS/MND, Lafayette Town Center IS/MND, Life Sciences Campus IS/MND, Linden Commuter Bus Facility IS/MND, Nevin Avenue Apartments IS/MND, Park SFO IS/MND, Port of Richmond EIR, Treasure Island EIR, UCSF Long Term Development Plan EIR, Ukiah Walmart EIR, Westborough Shopping Center Redevelopment IS/MND

- **Restoration CEQA documents:** Lower Berryessa Creek, Lower Yolo Restoration, Alameda Creek North Levee Improvements

- **Quarrying/Mining CEQA documents:** Olive Pit Mine EIR, Permanente Quarry Reclamation Plan Amendment EIR, Pilarcitos Quarry Expansion EIR, Roblar Road Quarry EIR, San Rafael Rock Quarry EIR, Vernalis Quarry EIR

- **Material Recovery Facility/Transfer Station/Landfill CEQA documents:** Forward Landfill Expansion EIR, Irwindale Athens Services Materials Recovery Facility/Transfer Station EIR, Keller Canyon Landfill EIR, Sonoma Compost EIR

- **Airport CEQA/NEPA documents:** Baltimore International Airport Improvement Program EA, Baltimore International Airport Proposed Hotel EA, Burbank Airport Terminal Relocation EIR, Chicago O'Hare International Modernization Program EIS, East Hampton Airport Control Tower EA, Fresno Yosemite International Airport Runway Safety Area EA, Houston Hobby Airport International Service EA, LaGuardia International Airport Runway Safety Area EA, Louis Armstrong New Orleans International Airport Terminal Relocation EA, Manchester-Boston Regional Airport Emission Inventory, March Inland Port General Aviation Development EA/EIR, Minneapolis-St. Paul International Airport 2020 Improvements EA, Nut Tree Airport Master Plan EIR, Oakland International Airport Runway Safety Area EA, Palm Springs International Airport Master Plan Update EA, Philadelphia International Airport Capacity Enhancement Program General Conformity Determination, Philadelphia International Airport Capacity Enhancement Program EIS, Portland International Airport Runway Extension EA, Providence Airport Runway Extension EIS, Riverside Airport Master Plan EA, Sacramento International Airport Terminal Expansion EIR, San Diego International Airport Master Plan EIR, San Francisco International Airport Runway Safety Area EA, Santa Maria Airport Master Plan Update EA, Southern Nevada Supplemental Airport EIS

- **Airport Planning/Research:** Baltimore International Airport Air Quality Management Plan, Boston Logan International Airport Environmental Data Report, George Bush Intercontinental Airport State Implementation Plan Emissions Inventory, Los Angeles World Airports Air Quality Sources Apportionment Study, Los Angeles World Airports Extremely Low Emissions GSE Feasibility Study , Monterey Regional Airport Greenhouse Gas Emissions Inventory, Philadelphia International Airport Greenhouse Gas Emissions Inventory, San Diego International Airport VALE Application, Transportation Research Board Airport Cooperative Research Program ACRP 02-21: Evaluation of Airport Emissions within State Implementation Plans, San Diego International Airport Air Quality Management Plan, Santa Barbara Airport Greenhouse Gas Emissions Inventory, South Jersey Transportation Planning Organization Greenhouse Gas Emissions inventory, ACRP 02-23: Alternative Fuels as A Means to Reduce $PM_{2.5}$ Emissions at Airports, ACRP 02-43: Development of NO_x Chemistry Module for EDMS/AEDT to Predict NO_2 Concentrations, Federal Aviation Administration Air Quality Handbook

Education

1989 BS Meteorology, Lyndon State College – Lyndonville, Vermont

Professional Affiliations

- Member, Association of Environmental Professionals
- Member, Air and Waste Management Association

25 Years Consulting Experience

- TRC
- Radian/URS
- Environmental Science Associates
- KB Environmental Sciences

Marlie Whiteman, P. E.

Senior Associate

Areas of Expertise
Transportation Planning

Travel Demand Modeling

Traffic Impact Analyses

Education
BS/1996/Civil Engineering/UC Irvine

Prof. Registration
Professional Engineer, Traffic Engineering, CA #TR 2186

Affiliations
Institute of Transportation Engineers (ITE)

American Planning Association (APA)

Orange County Traffic Engineering Council (OCTEC)

Prof. Accomplishments
ASCE student chapter treasurer, vice president, & president, in succession

Prof. History
Urban Crossroads, Inc.
Senior Engineer
2000 – Present

RKJK & Associates, Inc.
Assistant Engineer
1997 – 2000

RKJK & Associates, Inc.
Engineering Technician
1995 – 1997

Marlie Whiteman, P.E. is the director of modeling at Urban Crossroads, having worked professionally in transportation planning and traffic engineering with an emphasis on travel forecasting since 1995. Ms. Whiteman received a Bachelor of Science degree in civil engineering from the University of California, Irvine.

Ms. Whiteman's experience in transportation planning includes model development, model validation, post-processing of future forecasts, and evaluation of vehicle occupancy, transit system usage, and vehicle miles travelled. Her experience also includes evaluation of transportation system user characteristics, roadway phasing requirements, and the effect of compact mixed-use development strategies (such as jobs-housing balance, trip balancing, multi-modal transportation planning, etc.). She has managed projects throughout southern California.

Ms. Whiteman has worked with a number of travel demand forecasting software packages, including TransCAD, TRANSIMS, CUBE, and various predecessors to the most current generation of travel demand modeling software packages.

Ms. Whiteman's work experience with the development of traffic models includes the Coachella Valley – Imperial County Traffic Model, Coachella Valley Sub Area Traffic Model, Western Riverside Sub Area Traffic model, Imperial County Traffic Model, the Palm Desert Model, the South Orange County Traffic Model, the Pass Area Model, the Tejon Mountain Village Traffic Model, the Irvine Traffic Analysis Model, and the Newport Beach Traffic Model.

Her experience working with existing traffic models includes the Orange County Transportation Analysis Model, Riverside County Transportation Analysis Model (RIVTAM), Chino Traffic Model, Moreno Valley Traffic Model, San Juan Capistrano model, and Ramona Expressway Corridor Study Model. She is also familiar with the SCAG RTP Model.

She has performed modeling and analysis activities for the I-405 Major Investment Study. Additional modeling support activities include Scholle Development TDR forecast preparation, on-call services for the Cities of Moreno Valley, Lake Elsinore, Irvine, and Newport Beach, and for the County of Orange (including staff training activities), and forecast preparation in support of numerous traffic studies.

General Plan traffic study preparation activities include the Cities of Rancho Santa Margarita, San Jacinto, Hemet, Moreno Valley, Beaumont, Indian Wells, Palm Desert, and Newport Beach.

She has performed general transportation planning and engineering projects on wide range of scales, from a small restaurant to a City General Plan Circulation Element. Recent Orange County work includes various efforts for the Great Park and Great Park Neighborhoods plans in Irvine, the 2013 proposed Land Use Element Update in Newport Beach, and modeling support for the Rancho Santa Margarita General Plan Circulation Element Update.

KENNETH WILSON

Principal Engineering Geologist

EDUCATION

University of California at Riverside, B.S. Geological Sciences, 1967
University of California at Riverside, M.S. Geological Sciences, 1972

PROFESSIONAL REGISTRATIONS

Professional Geologist, California, #3175 [Issued 1-08-1974; Expires 2-28-2015]
Certified Engineering Geologist, California, #928 [Issued 1-08-1974; Expires 2-28-2015]

PROFESSIONAL SUMMARY

Kenneth Wilson is responsible for management, technical supervision and performance of engineering geology, geotechnical, environmental impact, and environmental geology projects, and is a Registered Geologist (#3175) and Certified Engineering Geologist (#928) in California. He performs and supervises environmental assessments for commercial, industrial and government projects covering the disciplines of hydrogeology, engineering geology, geology, hydrology, seismicity, tectonics, faulting, mineral resources, and waste management. Geotechnical studies include fault evaluations, ground failure assessments, slope stability and foundation materials characterization, liquefaction potential, flooding hazards and site selection. The emphasis of his work is on defining geologic and geotechnical conditions, and hazards, which may affect the feasibility and design of any type of development project. Mr. Wilson has over 30 years of technical performance and project experience in critical facilities studies, radioactive/mixed/hazardous waste management, energy plant site licensing, impacts to surface and groundwater resources, waste disposal site development, dams and reservoirs and numerous other engineered structures. Specialized experience is in engineering geology in support of geotechnical studies, site selection/evaluation, seismic safety, integration of multidisciplinary technical teams, project management, and EIRs, EAs, and EISs.

PROFESSIONAL EXPERIENCE

Wilson Geosciences, Engineering and Environmental Geology [1989-Present]

Principal Engineering Geologist: Responsible for all management, technical and marketing activities for engineering geology, environmental impact, and environmental geology projects. Performs and supervises environmental assessments for commercial, industrial and government projects covering the disciplines of hydrogeology, engineering geology, geology, hydrology, seismicity, tectonics, faulting, mineral resources, and waste management. Geotechnical studies include fault evaluations, ground failure assessments, slope stability and foundation materials characterization, liquefaction potential, flooding hazards and site selection.

The Earth Technology Corporation [1974-1989]

Corporate Vice President: Mr. Wilson worked from late-1987 to mid-1989 for the Chairman/CEO and the President/COO performing the following tasks: assisting in evaluation of several potential acquisitions; management of pre-acquisition due diligence; evaluation of four new office geographic expansion options; managed preparation of corporate health and safety program and H/S technical procedures. In 1989 was principal-in-charge for start-up of environmental engineering and hydrogeology portion of Technical Assistance Contract with DOE/Nevada Operations, Environmental Safety and Health Branch.

Vice President; Director, Program Management: Mr. Wilson reported to the President of the Western Division (1985-1987) and was responsible for business development, project execution and strategic planning for market areas related to radioactive (high, mixed, and low-level) waste management programs, energy and mineral resources, geophysics and offshore technology. Emphasis was on geosciences, engineering, environmental, and program management disciplines for site selection, site evaluation/characterization, site remediation and specialized advanced technology considerations in hydrologic modeling, rock mechanics testing and geophysical exploration.

Vice President, Associate and Senior Manager: Mr. Wilson had numerous challenging technical and management responsibilities and assignments during the period 1974-1988. There was a wide range of projects for which he had a

technical role, either performance, supervisory, or management in scope. A substantial portion of the time he was Program Manager for the Missile-X (MX) ICBM, Siting and Characterization Studies in the Western and Midwestern United States: for United States Air Force, Ballistic Missile Office, and the Southern Region Geologic Project Manager (SRGPM) in Mississippi, Louisiana, Texas, Georgia, South Carolina, Virginia, Maryland for Office of Nuclear Waste Isolation (ONWI) and Office of Crystalline Repository Development (OCRD). These projects were national in scope and involved most geologic, geotechnical, geophysical, environmental, and hydrologic disciplines

Converse Consultants (formerly Converse, Davis and Associates) [1970-1974]

Staff and Project Geologist: Conducted and supervised investigations in southern, central, and northern California, southern Nevada, and eastern Washington. Groundwater and related studies included permeability, transmissibility, and storage coefficient studies at Searles Lake, California; earth dam projects at Yucaipa, Littlerock, and Anaheim, California; groundwater contamination (hydrocarbons) evaluation in the Glendale, California area; wastewater and water treatment facilities in Solvang, Lompoc, Victorville, Thousand Oaks, and Sylmar, California. Numerous earthquake and fault risk studies were performed for earth dams and reservoirs, high-and low-rise buildings, hospitals and schools, proposed nuclear power plant sites, water storage tanks, and large-diameter pipelines. Landslide and other slope failure studies were performed in rock and soil terrains. Offshore studies planned and conducted include coastal geophysical (seismic reflection, side scan sonar, fathometer), sampling and scuba investigations near Monterey and Dana Point, California.

PROFESSIONAL ORGANIZATIONS

Member Association of Engineering Geologists, National and Southern California Sections
American Geophysical Union

COURSES, SEMINARS, AND WORKSHOPS

- Seismic Interpretation for Geologists, by the Oil and Gas Consultants International, Inc., Intensive Short Course, Houston, Texas
- Engineering Geophysics Short Course, Colorado School of Mines, Office of Continuing Education, Golden, Colorado
- Fundamentals of Ground-Water Monitoring Well Design, Construction, and Development, Las Vegas, Nevada
- Field Practices for Collecting Representative Ground-Water Samples, Las Vegas, Nevada
- New Developments in Earthquake Ground Motion Estimation and Implications for Engineering Design Practice, Seminar organized by Applied Technology Council and funded by U.S. Geological Survey, Los Angeles, California
- Seismic Hazards Analysis, Course sponsored by Association of Engineering Geologists, Los Angeles, California

SELECT SAND AND GRAVEL MINE EXPERIENCE

Major Aggregate Mining Company Project Expansion and Site Closure, Irwindale, Los Angeles County, California

An aggregate mining and land management company sought approval of a Development Agreement and Conditional Use Permits in order to modify three existing operations located within the City of Irwindale. Their project objectives were to: 1) to allow for deeper mining at two quarries to provide for continuation of mining; 2) to permit fill operations (to create developable land) to occur concurrently with mining operations, within portions of these two quarries; 3) to accordingly modify the planned end use for the new fill areas within these reclaimed quarries; and, 4) to make minor modifications to the landfill methods used at a third quarry to provide for continuation of the operation and future land development. WGI prepared the Geology and Soils and Hydrology and Water Quality sections for the project EIR as a part of the environmental review for the Application under the California Environmental Quality Act (CEQA).

Geophysical Investigation and Preliminary Engineering Geology Evaluation for an Inactive Quarry, City of Irwindale, Los Angeles, California

Performed seismic reflection profiling and borehole velocity surveys to define subsurface properties within a actively reclaimed sand and gravel mine, and reviewed and evaluated existing reports for the quarry, which has been nearly completely filled with inert construction debris and controlled fill over the past several decades. The objective was to determine subsurface distribution of landfill units and their physical properties for future development decisions. WGI prepared a report providing the results, conclusions, and recommendations for possible future analysis.

Mining and Reclamation Impact Study, City of Irwindale, Los Angeles, California
WGI served as manager and technical lead for all geosciences and hydrosciences disciplines for the evaluation of seventeen (17) sand and gravel surface mines in the City of Irwindale. This included specific responsibility for porous media hydrogeology, seismic and earthquake engineering analysis, geotechnical analysis, and slope stability/engineering geology.

Surface Mine Analysis for the General Plan Update, City of Azusa, Los Angeles, California
WGI was the technical lead for geology and hydrogeology for the evaluation of two (2) sand and gravel surface mines in the City of Azusa. Included in the study were seismic and earthquake engineering analysis, geotechnical analysis, and slope stability/engineering geology.

Site Investigation, Preliminary Geotechnical, and Engineering Geology Evaluation for the Manning Quarry, City of Irwindale, Los Angeles, California
Reviewed and evaluated existing reports for the Manning Quarry, which has been partially filled with construction debris in the 1980's and early 1990's, to determine the nature of the fill (composition, lateral extent, thickness, contaminants) and natural geologic deposits (slope stability, bearing capability, groundwater levels, fault and earthquake hazards). Field work included excavation of 16 test pits to depths of 20 to 31 feet into the rubble debris fill and visual/laboratory classification of materials. Prepared a report providing recommendations for possible remediation of geotechnical and engineering geology issues, including possible dynamic compaction of debris fill.

Development Planning for the Manning Quarry, City of Irwindale, Los Angeles, California
Based on previous studies a quarry-wide development suitability map was prepared defining the most to least suitable areas for land development, specifically residential housing, within the quarry boundaries. Prepared a preliminary "tract development" map indicating possible areas for roadways, open space, and residential units. Discussed the results with City personnel and provided graphics for Planning Commission review.