

Howard D. Hahn RLA, ASLA
Assistant Professor of Landscape Architecture

Education

Master of Landscape Architecture, Kansas State University, Manhattan, KS 1985
Bachelor of General Studies in Environmental Studies, University of Kansas, Lawrence, KS 1981
Associate of Arts, Engineering, Hutchinson Community College, Hutchinson, KS 1978

Professional Registration

State of Kansas, Registered Landscape Architect #463

Affiliations

American Society of Landscape Architects (ASLA), Member

ACADEMIC APPOINTMENT

Kansas State University, Department of Landscape Architecture/ Regional & Community Planning
Assistant Professor (2008-Present)

- » **Courses Taught:** Design Implementation 2 (LAR 439), Design Implementation 3 (LAR 647), Specialization Studio (LAR 648), and Seminar 3 (LAR 750).
- » **Courses Co-Taught:** Community Planning and Design (LAR 646), Landscape Architecture Seminar 2 (LAR 650), Tech Module 4 (LAR 540), and Tech Module 5 (LAR 550)

Teaching Recognition

- » Commerce Bank Outstanding Undergraduate Teaching Award. 2012. Kansas State University, Manhattan, Kansas.

Grants Received

- » Faculty Development Award (FDA). 2013. Office of Research and Sponsored Programs, Kansas State University, Manhattan, Kansas, \$500.
- » Faculty Development Award (FDA). 2012. Office of Research and Sponsored Programs, Kansas State University, Manhattan, Kansas, \$2,000.

Peer-Reviewed Journal Articles

- » Kingery-Page, Katie and Howard Hahn. 2012. "Aesthetic-Ethics of Landscape Representation: Digital Realism, Abstraction and Kitsch." *Journal of Landscape Architecture* (JoLA) Special Issue: Ethics + Aesthetics, fall/winter 7(2): 68-75.
- » Hahn, Howard. 2011. "The Planner's Puzzle: New Approach for Calculating Site Development Coverage." *Journal of Urban Planning and Development* 137(4): 355-364.

Peer-Reviewed Conference Proceedings with Oral Presentations

- » Hahn, Howard. 2013. "Photo-based Terrain Data Acquisition and 3D Modeling," In *Peer-Reviewed Proceedings of Digital Landscape Conference at Anhalt University of Applied Sciences*, 2013 (June 4-6, Bernburg), eds. Erich Buhmann, Stephen Ervin, and Mattias Pietsch, 32-39. Berlin: Wichmann Verlag Offenback.
- » Hahn, Howard. 2013. "Riding the Wave of Fourth Generation Landscape Visualization Software: Early Explorations with E-on Vue." In *Proceedings of Council of Educators in Landscape Architecture (CELA) Conference*, 2011 (March 30-April 2), ed. Los Angeles, CA [in publication]

- » Hahn, Howard. 2012. "Conservation Subdivision Development as a Means To Preserve and Promote the Powerful Flint Hills Aesthetic." In *Peer Reviewed Proceedings of European Council of Landscape Architecture Schools (ECLAS) Conference at Warsaw University of Life Sciences, 2012* (Sept. 19-22, Warsaw), eds. Izabela Dymitryszyn, Malgorzata Kaczynska, and Gabriela Maksymiuk, 315-319. Warsaw: SGGW.
- » Hahn, Howard. 2012. "Visualizing Wetland and Meadow Landscapes." In *Peer-Review Proceedings of Digital Landscape Conference at Anhalt University of Applied Sciences, 2011* (May 26-28, Dessau), eds. Erich Buhmann, Stephen Ervin, and Mattias Pietsch, 333-342. Berlin: Wichmann Verlag Offenback.

Peer-Reviewed Conference Proceedings

- » Brody, Jason, Blake Belanger, and Howard Hahn. 2013. "Critical Mapping: Teaching Diagramming to Beginning Design Students." In *Proceedings of National Conference on the Beginning Design Student at Temple University, 2013*, ed. Philadelphia, PA [in publication].
- » Kingery-Page, Katie, Howard Hahn, William Winslow, and Lee Skabelund. 2013. "Green Infrastructure Demonstration Site: A Shared Studio Sponsorship over Three Courses." In *Proceedings of Council of Educators in Landscape Architecture (CELA) Conference, 2011* (March 30-April 2), ed. Los Angeles, CA [in publication]

Peer Reviewed Abstracts with Oral Presentations

- » Hahn, Howard. 2011. "Reducing the Parking Footprint: A Tool for Calculating Site Coverage Pieces." Council of Educators in Landscape Architecture (CELA) Conference. Los Angeles, CA. March 30-April 2.
- » Kingery-Page, Katie and Howard Hahn. 2011. "Aesthetics of Landscape Representation: Simulation and Abstraction in Digital Landscape Representation." Presented at "Ethics/Aesthetics." 2011 European Council of Landscape Architecture Schools (ECLAS) Conference. University of Sheffield. Sheffield, England. September 7-10.

Professional Reports

- » Belanger, Blake and Howard Hahn eds. "Complex Catalysts." Studio Dissemination Book for LAR 646 Community Planning and Design. August 2013. Manhattan, KS: Kansas State University.
- » Belanger, Blake and Howard Hahn eds. "Retrofit 40: Research, Strategic Planning, and Design for Re-Envisioning the US 40 Corridor." Studio Dissemination Book for LAR 646 Community Planning and Design. August 2012. Manhattan, KS: Kansas State University.
- » Belanger, Blake, Jason Brody, and Howard Hahn eds. "City Ecologies." Studio Dissemination Book for LAR 646 Community Planning and Design. August 2011. Manhattan, KS: Kansas State University.

Service-Learning Projects (Funded)

- » Belanger, B. and Hahn, H., Complex Catalysts: Eastern Kansas City Metro (LAR 646 Community Planning and Design Studio), Manhattan, KS, June-July 2013, \$1,000.
- » Hahn, H., Reunion Ranch (LAR 648 LA Specialization Studio), Manhattan, KS, Aug.-Dec. 2012, \$500.
- » Belanger, B. and Hahn, H., Retrofit 40: Eastern Kansas City Metro (LAR 646 Community Planning and Design Studio), Manhattan, KS, May-July 2012, \$7,667.
- » Belanger, B., Brody, J., and Hahn, H., City Ecologies: Kansas City Downtown Greenspace (LAR 646 Community Planning and Design Studio), Manhattan, KS, June-July 2011, \$15,000.
- » Hahn, H., Stagg Hill Residential Project (LAR 647 Construction 3), Manhattan, KS, Fall 2010, \$1,000.
- » Kingery-Page, K., Hahn, H., Winslow, W., and Skabelund, L., Green Infrastructure Demonstration Site: Forbes Field, 190th Air Refueling Wing, Air National Guard, Topeka, KS, July 2009-August 2010, \$11,993.

Service-Learning Projects (Unfunded)

- » Hahn, H. Wildwood Conservation Development (LAR 648 Landscape Specialization Studio project used as input to owner/developer), Manhattan, KS, Fall 2011.
- » Hahn, H., Terrybrook Farms Residential Development (LAR 647 Construction 3 project used as input to project landscape architect/developer), Overland Park, KS, Fall 2009.
- » Hahn, H. (Project Manager), Rolley, S., Belanger, B., and Bernard, E., Design Week 2009: More Manhattan! with Design Workshop, Kansas State University, August 24-28, 2009.
- » Hahn, H., K-State Olathe Innovation Campus Master Plan (LAR 647 Construction 3 project used as input to project architect), Olathe, KS, Fall 2008.

Invited Critic

- » ENVD 201 Environmental Studio 1, Professor Hunt 2008, 2009, 2010.
- » ENVD 202 Environmental Studio 2, Professor Wigfall, 2009, 2010, 2011, 2012.
- » LAR 220 Site Design Studio 1, Professors Belanger and Klein 2009, Professor Kingery-Page 2010, Professors Belanger and Beamish (2012)
- » LAR 320 Landscape Architecture Design Studio II, Professor Canfield 2011, 2012.
- » LAR 410 Planting Design Studio, Professors Skabelund and Canfield 2010.
- » LAR 442 Site Planning and Design Studio, Professors Belanger and Hunt 2009, 2010, 2011.
- » LAR 646 Community Planning and Design, Professors Belanger and Brody 2009.
- » ARCH 403 Architectural Design Studio 3, Professor McGlynn 2012 (2).
- » ARCH 806 Architectural Design Studio 7, Professor Condia 2011.
- » ARCH 807 Architectural Design Studio 8, Professor Condia 2011, 2012(2).

Academic/Teaching Development: Conferences, Seminars, & Workshops (Attendance/Participation)

- » "Connectivity and Collaboration in Planning and Design." 2013 Digital Landscape Architecture Conference (DLA). Analt University of Applied Sciences. Bernburg, Germany. June 6-8, 2013.
- » "The Power of Landscape." 2012 European Council of Landscape Architecture Schools (ECLAS) Conference. Warsaw University of Life Sciences. Warsaw, Poland. September 19-22, 2012.
- » "Ethics/Aesthetics." 2011 European Council of Landscape Architecture Schools (ECLAS) Conference. University of Sheffield. Sheffield, England. September 7-10, 2011.
- » "Teaching Landscape Architecture." 2011 Digital Landscape Conference (DLA). Analt University of Applied Sciences. Dessau, Germany. May 26-28, 2011.
- » "Urban Nature." 2011 Council of Educators in Landscape Architecture (CELA) Conference. Los Angeles, CA. March 30 - April 2, 2011.
- » "Applying for Faculty Development Awards (FDA) and University Small Research Grants (USRG)." Office of Research and Sponsored Programs. Kansas State University. February 12, 2009 & February 8, 2012.
- » "Creating the Entrepreneurial Campus for the 21st Century." Presented by Dr. Donald F. Kuratko (Indiana University). Center for the Advancement of Entrepreneurship. Kansas State University. April 8, 2009.
- » "Teaching + Learning Landscape." 2008-09 Council of Educators in Landscape Architecture (CELA) Conference. Tucson, AZ. January 14-17, 2009.

Professional/Research Development: Conferences, Seminars, & Workshops (Attendance/Participation)

- » "GeoDesign Summit." Hosted by Environmental Systems Research Institute (ESRI). Redlands, CA. January 6-8, 2010; January 6-7, 2011; and January 24-25, 2013.
- » "RefWorks Basics." Presented by Sara Kearns (Hale Library). Kansas State University. Manhattan, KS. April 13, 2010.
- » "Reclamation and Conservation Landscapes: Independence Grove and Prairie Crossing." 2009 ASLA Conference Field Trip. Grayslake, IL. September 18, 2009.
- » "Beyond Sustainability: Regenerating Places and People." 2009 American Society of Landscape Architects (ASLA) Annual Conference. Chicago, IL. 17-21 September 17-21, 2009.
- » "Best Management Practices: Extended Wet/Dry Detention Basins, Detention Wetlands, and Rain Gardens" Workshops. Academy for Sustainable Communities Series hosted by the Mid-America Regional Council (MARC). Kansas City, MO. December 12, 2008; January 23 and February 20, 2009.
- » "Grant Writing 101." Office of Research and Sponsored Programs. Kansas State University. November 4, 2008.

Software Proficiencies (various levels)

ESRI ArcGIS/ArcInfo (including Spatial Analyst and 3D Analyst extensions), Autodesk AutoCAD/Civil 3D, Autodesk Max, Google Sketchup Pro, Adobe Creative Suite, Microsoft Office Suite, and Vue Infinite

Early Recognitions

- » ASLA Merit Student Award (Graduate, 1985)
- » Outstanding MLA Graduate Award, 1985
- » Phi Kappa Phi Academic Honor Society, KSU, 1984
- » Sigma Lambda Alpha LA Honor Society, KSU, 1984

PROFESSIONAL PRACTICE

Psomas, Costa Mesa, California (Sept. 1996 – July 2008)

Environmental Analyst: Provided expertise in the area of Visual Resources/Aesthetics for work conducted by the Natural Resources, Survey, Land Development, and Engineering groups at Psomas. Served as a Project Manager for visual resource assessments, visual simulation preparation, GIS mapping/analysis, and aesthetic guideline development for transportation projects.

» Psomas Chuck Geiger Award Finalist (2004)

Psomas company-wide award recognizing people who have exceeded client expectations, developed high quality relationships both inside and outside the firm, and have conducted themselves with honesty and integrity.

Dames & Moore, Santa Ana, California (Oct. 1990 - Oct. 1996)

Visual and Recreational Resources Analyst: Experience included preparing visual and recreational resource impact assessments (EIR/EIS) for numerous utility, transportation, and engineering projects. Developed landscape design guidelines and numerous simulation projects for the California Department of Transportation and the Orange County Transportation Authority.

Design Workshop, Inc., Denver, Colorado (Sept. 1985- Aug. 1990)

Landscape Architect and Computer Specialist: Landscape architecture experience included program planning, design development assistance for new community and ski resort projects, construction documentation (manual and CAD), and some project management for highway corridor and National Park Service projects. Extensive computer experience was gained in the areas of computer modeling (terrain & architectural), imaging, and animation.

Engineering/Land Planning Associates, Manhattan, Kansas (June - Aug. 1985)

Landscape Architect: Experience included subsurface utility design and construction documentation for a water treatment facility.

Kansas State University, Landscape Architecture Department, Manhattan, Kansas (1983-1985)

Graduate Teaching Assistant: Provided studio assistance and graded landscape construction drawings.

Landscape Architecture Professional Experience

New Community Planning

- » Estrella, Goodyear, AZ (Program development, master plan documents)
- » The Meadows, Castle Rock, CO (Program development)
- » Summerlin Village I, Las Vegas, NV (Parcel development criteria production)

Parks and National Monuments

- » Agate Fossil Beds National Monument, Sioux County, NE (Site design alternatives - 4)
- » Canyon Village, Yellowstone National Park., WY (Landscape construction details)
- » Centennial Park, Oberlin, KS (Site design, planting design, CDs)
- » Hills Park at Summerlin, Las Vegas, NV (Landscape construction documents)
- » Eskimo Hill Play Area, Lassen National Forest, CA (Conceptual site design)
- » Cypress Trailhead, Lassen National Forest, CA (Conceptual site design)
- » Hat Creek Rim Overlook, Lassen National Forest, CA (Conceptual site design)
- » Pacific Electric ROW Crossings - 12 sites, Orange County, CA (Hardscape design, construction documents, logo design, and interpretive plaque design)

- » South Los Angeles Wetlands Park, Los Angeles, CA (Conceptual site design, renderings)

Residential, Commercial, Hotels, Schools, and Churches

- » Bascom Residence, Keats, KS (Site planning, planting design)
- » McKay Residence, Oberlin, KS (Planting design)
- » Prairie Hills Condominiums, Hutchinson, KS (Planting design)
- » Malec Residence, Aspen, CO (Landscape construction details)
- » 700 South Galena Townhomes, Aspen, CO (Landscape construction details)
- » Silvertree Hotel, Snowmass, CO (Landscape construction details)
- » The Phoenician, Phoenix, AZ (Signage design)
- » Wichita Federal Land Bank, Wichita, KS (Planting design)
- » Hutchinson Federal Land Bank, Hutchinson, KS (Planting design)
- » Central Christian High School, Hutchinson, KS (Site planning)
- » Environmental Health & Safety Facility, University of California, Irvine (Site selection study, 3 site design alternatives)

Design Guidelines Development

- » Garden Grove Freeway (SR-22) HOV Lane Design-Build Project; Aesthetic Theme and Concepts, Orange County, CA
- » Pacific Electric Right-of-Way Aesthetics Study, Orange County Transportation Authority (OCTA), Orange County, CA
- » Orange County Transportation Corridors Aesthetics Master Plan, Orange County Transportation Authority (OCTA), Orange County, CA (County-wide aesthetics master plan)
- » Aesthetic and Landscape Design Guidelines for Interstate 70/Interstate 225 Interchange and East I-70 Corridor, Colorado Department of Highways, Denver, CO

Visual/Recreational Assessment Experience

Visual assessments generally followed the methods established by the United States Forest Service, Bureau of Land Management, and the Federal Highways Administration. Recreational assessments followed the Recreational Opportunity Spectrum (ROS) method developed by the United States Forest Service. Projects listed below are visual assessments unless otherwise noted. For most visual assessments, visual simulations were also prepared in support of the analysis.

Residential

- » Planning Area 27, Irvine Community Development Company, Irvine, CA
- » East Highlands Ranch PUD, Highlands, CA
- » East Campus Student Recreation Center EIR, University of California, Irvine, UC Board of Regents, CA

Transportation

- » Chino Hills State Park Entrance Road Alternatives Study, California Department of State Parks, Chino Hills, CA
- » State Route 79 Realignment, Riverside County, Riverside County Transportation Commission, Riverside County, CA

Hydroelectric, Power Generation, Power Transmission, and Wireless Facilities

- » San Gorgonio Hydroelectric Power Project Decommissioning, San Bernardino National Forest, Riverside County, CA (Visual and Recreational Assessments)
- » Satsop Cogeneration Facility EIS/EIR, Satsop, WA
- » Chehalis Cogeneration Facility EIS/EIR, Chehalis, WA
- » Meade-Adelanto Transmission Line, Meade, NV to Adelanto, CA
- » Black Mountain Transmission Line EA, Las Vegas, NV
- » Verizon Wireless Facility, San Luis Obispo County, CA
- » Clearwire Wireless Facility, Oceano, CA

Reservoirs, Water/Fuel Conveyance

- » Modjeska Canyon Reservoir Environmental Assessment/ Mitigated Negative Declaration, Santiago County Water District, Orange County, CA
- » Pacific Point Development Water Reservoir, Sun Cal Companies, San Juan Capistrano, CA
- » Westside Water Conveyance EIR, LA County Metropolitan Water District, San Fernando Valley, CA
- » Oso Creek Channelization Project, Laguna Niguel, CA
- » Logan Wash Diversion Project, Clark County Department of Public Works, Logandale, NV
- » Cross Cascade Pipeline, Olympic Pipeline Company, State of Washington

Landfills and Other

- » Elsmere Solid Waste Management Facility EIR/EIS, Angeles National Forest, Los Angeles County, CA (Visual and Recreational Assessments)
- » Simi Valley Landfill and Recycling Center Expansion, Waste Management Corporation, Simi Valley CA
- » Mission Trails Ordnance Removal EA, US Army Corps of Engineers, San Diego County, CA
- » Fuel Management Program EA, Angeles National Forest, CA

Visual Simulation Experience

For over twenty years, experience was gained in the area of three-dimensional computer modeling/animation and imaging. Visual simulations were typically prepared in support of visual assessment of land development, utility, transportation, wetlands, and environmental litigation projects. Since the mid-1980s, techniques have been employed to accurately register computer models with site photographs to ensure scale and perspective accuracy.

Development Projects

- » Planning Area 27, Irvine Company, Irvine, CA (Hillside residential development)
- » Tramonto Development, California Coastal Commission, Pacific Palisades, CA (Hillside townhome siting)
- » "Plantation" Office Park, Koll Company. City of Industry, CA (Office Park)
- » Arroyo Trabuco Golf Course, Rancho Mission Viejo Company, Rancho Mission Viejo, CA (Golf course grading, vegetation)

Transportation Projects

- » Campus Drive Parking Garage, University of California, Irvine. University of California, Irvine (Parking garages)

- » Southern Foothill Transportation Corridor, Transportation Corridor Authority (TCA), Orange & San Diego Counties, CA (Alignments, interchanges)
- » Interstate 5/Harbor Blvd. Bridge, Orange Co. Transportation Authority, Anaheim, CA (Bridge replacement)
- » Highway 154 Viaduct, Caltrans, District 5, Santa Barbara County, CA (Highway reconstruction)
- » Highway 1 Retaining Wall, Caltrans, District 5, San Luis Obispo County, CA (Retaining wall reconstruction)
- » SR 5 Toutle Park Road to SR 12 West, Washington DOT,, Thurston County, WA (Highway widening, overpasses)
- » Highway 1/Interstate 17, Caltrans, District 4, Santa Cruz, CA (Highway widening, soundwalls)
- » SR 125, Caltrans, District 11, San Diego, CA (Alignments, interchanges)
- » Chung Hsiao West Transit Station, Taipei, Taiwan (Commuter Rail Station)
- » Juneau Access Study, Alaska Dept. of Transportation, Juneau, AK (Alignments, hillside grading)
- » Interstate 80, Caltrans, District 4, Oakland, CA (Interstate widening/interchanges)
- » Route 17, Florida Dept of Transportation, Seminole County, FL (Highway widening)
- » State Route 22, Caltrans, Dist. 12, Orange County, CA (Structures, soundwalls)
- » Interstate 5 HOV Widening, Caltrans, Dist. 12, Santa Clarita, CA (Additional lanes, retaining walls)
- » Cathedral City Street Upgrades, City of Cathedral City, Cathedral City, CA (Street widening)

Streetscape Projects

- » Highway 50 Design Guidelines, Tahoe Regional Planning Agency, Meyers, CA (Streetscape redevelopment)
- » Streetscape Redevelopment, Missoula, MT (Facade treatments)

Hydro/Reservoir Projects

- » Pacific Point Development, Sun Cal Companies, San Juan Capistrano, CA (Tank reservoir)
- » Hydropits Visual Enhancements, Chevron Corporation, Richmond, CA (Hydropits)
- » Perris Dam Stabilization, Department of Water Resources, Perris, CA (Dam stabilization measures)
- » Crofton Hills Reservoir Expansion, Department of Water Resources, Yucaipa, CA (Reservoir grading)

Wetlands Projects

- » Los Angeles River Natural Park and Wetlands, Studio City, CA (Wetlands, trail, bridges)
- » South Los Angeles Wetland Park, City of Los Angeles, Los Angeles, CA (Wetlands, trail, bridges)

Landfill/Mining Projects

- » Celite Mine, California State Mining & Geology Board, Lompoc, CA (Mine restoration)
- » Kennecott Mine Restoration, Kennecott Mining, Magna, UT (Mine restoration)
- » Liberty Quarry, Granite Construction, Temecula, CA (Quarry)
- » Simi Valley Landfill, Waste Management of California, Simi Valley, CA (Landfill expansion)

Utility Projects

- » Black Mountain 69kV Transmission Line, USDI Bureau of Land Management, Las Vegas, NV (Transmission Line Structures)

- » Satsop Cogeneration Facility, Washington Public Power, Satsop, WA (Cogeneration facility)
- » Chehalis Cogeneration Facility, CRSS Capital Chehalis, WA (Cogeneration facility)
- » Maalaea-Lahaina Transmission Line, Maui Electric Company Maui, HI (Transmission line)
- » Cowlitz Cogeneration Facility, Weyerhaeuser, Longview, WA (Facility simulation)
- » Sithe Energies Cogeneration Facility, Sithe Energies Corporation, San Diego, CA (Facility simulation)
- » Grizzly Sulfur Pipeline, Westcoast Energy, British Columbia, Canada (Pipeline alignment)
- » Cross Cascade Pipeline, Olympic Pipeline Company, State of Washington (Pump Stations)
- » Verizon Telecommunications Facility, SLO County Department of Planning, San Luis Obispo County, CA (Telecommunications facility)

Geographic Information System (GIS) Mapping/3D Modeling Experience

Experience was gained using GIS for environmental resource mapping, watershed determination, landform modeling, slope/aspect mapping, watershed delineation, and 3D subsurface water modeling.

- » GIS Campus Planning/Emergency Routing GIS Mapping, University of California, Irvine, CA (Update to campus mapping and preparing geodatabase for buildings, fire appurtenance locations, and road segmentation for emergency response routing)
- » Long Range Development Plan (LRDP) Updates, University of California, Irvine, CA (Mapping of landuse parcels and Landscape Framework for LRDP)
- » State Responsibility Area (SRA) Determination, California Department of Forestry (GIS analysis of parcel database records of all 52 California counties to identify parcels falling under CDF firefighting responsibility for potential fee assessments)
- » Long Term Agreement for Bishop and Lundy Hydroelectric Projects, Southern California Edison, Inyo County, CA (Watershed determination and hydro-project mapping)
- » Riparian Habitat Monitoring, Southern California Edison, Eastern Sierra Mountains, CA (GIS mapping of stream riparian habitat transects)
- » Canyons Property, Unocal, Simi Valley, CA (Vegetation and biological resource mapping)
- » Southern Foothill Transportation Corridor GIS Mapping, Transportation Corridor Authority (TCA), Orange & San Diego Counties, CA (Mapping of biological, archaeological/cultural, and visual resources for 19 alignments)
- » Chino Hills State Park, California Department of State Parks, Riverside County, CA (Visibility mapping)
- » The Canyons Residential Project, Brea, CA (Visibility mapping, slope mapping, and earthwork analysis)
- » San Juan Basin, San Juan Basin Authority, Orange County, CA (Well locations and groundwater surfaces)
- » Subsurface Mapping, Shavers Valley, Riverside County, CA (Subsurface groundwater modeling)
- » Subsurface Structure of Shavers Valley, Riverside County, CA (Surface topography, bedrock, and water table surface generation)
- » Desert Hot Springs Water Recycling Appraisal Study, Mission Springs Water District, Desert Hot Springs, CA (topography modeling, well locations/data, fault planes, sub-basins, water table surfaces over multi-decade period, and water volume estimations.)
- » Chipman Properties, Valley Center, CA (Surface topography, well locations/data, bedrock, hydraulic conductivity, and estimated water table surface)

- » Alamitos Barrier Project, Water Replenishment District of Southern California, Alamitos, CA (Well locations, kriged surfaces of various aquifer zones, and profiles along different barrier alignment options)

Video Development Experience

- » "Crossing Point", Riverside County Transportation Commission, Environmental Mitigation and Enhancement Through Transportation Projects, Riverside County, CA (Video described a cooperative process by which various county agencies could coordinate and fund environmental mitigation and enhancement procedures that would be difficult to achieve by any single agency acting alone. Project involvement consisted of writing the draft script and preparing video graphics.
- » "Source Areas of Groundwater Contamination in the Vicinity of Stainless Steel Products", Burbank, CA: The intent of the video was to summarize groundwater modeling studies for litigation purposes to document sources of groundwater contamination among several adjacent industrial sites. Project involvement included storyboard development, interpretation of the technical report into graphic concepts, and preparation of video graphics and a computer animation sequence of groundwater/contaminant flow.
- » Business District Redevelopment, Lake Elsinore, CA : Project involved development of video simulations of proposed urban improvements of downtown streetscape and architectural facades for the central business district. Simulations were compiled into a video showing graphic maps, plans, and video footage of site and surrounding amenities for presentation to the City Council and at community hearings. Project received approval based on presentation of the video.

External Service Interests

Board of Directors, Baja Christian Ministries (1992 - 2009)

Developed strategic plan for operations to provide humanitarian relief to poor in Baja California, Mexico through house building and food distribution. During my involvement, groups built approximately 1,500 houses. Personally planned trips and led groups into Mexico for the completion of approximately 26 houses.