UltraSystems

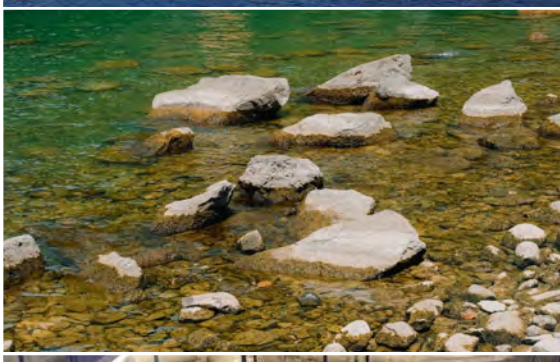
environmental • management • planning

Statement of Qualifications

For

Environmental Services for

Water Resources



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COMPANY QUALIFICATIONS

UltraSystems Environmental Inc. (UltraSystems) is a full-service, interdisciplinary environmental and engineering consulting firm located at 16431 Scientific Way in Irvine, California. Founded in 1994, UltraSystems is headquartered in Irvine, and maintains offices in El Centro, Grass Valley and Sacramento, California.

CORE BUSINESS IS ENVIRONMENTAL CONSULTING AND COMPLIANCE SERVICES

UltraSystems was established as a consulting practice to assist private industry and governmental agencies navigate environmental regulations. The firm specializes in the National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA), Clean Air Act (CAA), Clean Water Act (CWA), Coastal Zone Management Act (CZMA), Endangered Species Act (ESA), California Endangered Species Act (CESA), Migratory Bird Treaty Act (MBTA), National Historic Preservation Act (NHPA), Archaeological Resource Protection Act (ARPA), and the Native American Graves Protection and Repatriation Act (NAGPRA), among others.

Our Mission: To ensure that our clients meet their goals by adding value through technical excellence, efficient organization and personal services.

OUR PROJECT TEAM

UltraSystems employs a diverse, multidisciplinary team of 42 talented and experienced engineers, urban and regional planners, scientists, archaeologists, biologists, ecologists, geologists, hydrologists, economists, GIS specialists, architects, and support staff to achieve our corporate mission.

UltraSystems has a long and successful history of providing environmental consulting and compliance services to both public and private sector clients in the western United States. The firm's reputation as a problem-solver comes from our commitment to pragmatism, technical excellence and meticulous communication in servicing our clients. UltraSystems is committed to successful project management, time management and project delivery in every project that we undertake. Our firm conducts a substantial amount of work in California, including the preparation and review of CEQA/NEPA compliant documents and supporting technical studies (e.g., air quality and GHG, biological, cultural, land use, socioeconomic, hydrology, water supply and aesthetics). Significant projects have included the preparation of Environmental Impact Reports

SERVICES AND AREAS OF EXPERTISE

Technical Studies
- ✓ Aesthetics
- ✓ Air Quality
- ✓ Greenhouse Gas Studies
- ✓ Noise Evaluations & Analysis
- ✓ Biological Resources & Compliance
- ✓ Health Risk Assessments
- ✓ Historical Resources
- ✓ Socioeconomics
- ✓ Archaeological Resources
- ✓ Geotechnical/ Geologic/ Hydrology
- ✓ Infrastructure Capacity Analysis
- ✓ Water Pollution Evaluation
- ✓ Utility Studies

CEQA/NEPA Compliance
- ✓ EIR and EIS Documentation
- ✓ Mitigation Monitoring
- ✓ Citizen Participation
- ✓ Permits and Entitlements
- ✓ Regulatory Compliance

Planning Services
- ✓ Zoning and Special Purpose Legislation
- ✓ Opportunities and Constraints Analysis
- ✓ Urban Land Use Studies
- ✓ Graphics/ Visual Impacts and Studies
- ✓ Conditional Use Permit Drafting

Construction Environmental Management
- ✓ Stormwater Pollution Prevention Planning
- ✓ Hazardous Building Materials
- ✓ Grading/ Trenching Monitoring

Hazardous Waste
- ✓ Phase I, Phase II ESAs
- ✓ Remedial Action Plans
- ✓ Brownfields Redevelopment

Geographic Information System
- ✓ Customized Mapping
- ✓ Demographic and Economic Data Analysis
- ✓ Spatial Data Analyses
- ✓ GPS Surveying
- ✓ Data Conversion
- ✓ Database Management

(EIRs), Environmental Impact Statements (EISs), as well as Mitigated Negative Declarations (MNDs) for lesser projects. Additionally, we have processed and delivered the necessary entitlements and project permits so that project development is not impeded.

UltraSystems believes that it is our responsibility as the environmental consultant to develop a legally-defensible environmental document, and to communicate our technical knowledge in a clear and concise manner to ensure readability for the client. UltraSystems is committed to providing well-structured documents that will serve our clients for years to come.

UltraSystems has provided environmental consulting services, regulatory permitting and environmental compliance services to various large-scale public agencies within Southern California. All of these agencies have contracts with UltraSystems that are task-order based. These clients include:

1. City, County, Port of San Diego
2. City of Riverside, Parks and Recreation
3. Numerous Cities
4. City of Los Angeles, Department of Planning
5. County of Orange Public Works
6. County of Los Angeles, Department of Regional Planning
7. County of San Bernardino
8. County of Kern
9. Los Angeles County, Department of Public Works
10. METRO
11. NAVFAC Southwest Division, San Diego
12. Office of Statewide Health, Planning and Development
13. Numerous School Districts
14. Water Replenishment District (WRD)
15. US Army Corp of Engineers (Los Angeles District)

FIRM STABILITY AND STRENGTH | CREDIBILITY | MORE THAN 30 YEARS IN BUSINESS

UltraSystems has been providing consulting services to public and private sector clients throughout California since the founding of the firm in 1994. During those 30 years, the firm has prepared over **7,000** environmental reports, engineering studies or technical studies for clients. UltraSystems continues to specialize in providing comprehensive services, emphasizing quality and client-oriented service.

UltraSystems' team of working professionals offers the highest level of experience, knowledge and commitment in providing environmental and engineering services. Our purpose is to manage each project we undertake efficiently, with respect to the project's work scope, budget and schedule; ultimately producing and delivering quality work product for that project.

BUSINESS CERTIFICATIONS

UltraSystems is certified with various federal, state and local agencies. Currently, the firm holds certification as a federal Disadvantaged Business Enterprise (**DBE**), Small Business Enterprise (**SBE**),

Woman-owned Business Enterprise (**WBE**) and federal Woman-owned Small Business (**WOSB**). We also maintain certification through the Supplier Clearinghouse (or CPUC) for utility clients.

MEETING CLIENT EXPECTATIONS

UltraSystems has a long history of providing technological innovation and creative approaches to solving challenging issues for clients. Public agencies and private businesses in California have relied on UltraSystems to keep them in compliance with federal, state and local environmental laws, regulations and guidelines since 1994. The majority of our work stems from repeat customers who trust us to deliver scientific objectivity, environmental expertise and legally-defensible technical documents, required to meet stringent agency regulations.

UltraSystems' CEQA/NEPA documents have never been challenged in a court of law. This is a direct result of our proven expertise interpreting and advising our clients on complex environmental legislation and regulations. Additionally, our respected working relationships with regulatory agencies are advantageous for our clients to swiftly obtain required permits and project approvals.

HANDS-ON EXPERTISE WITH REGULATORY AGENCIES

UltraSystems staff regularly interacts with federal, state, regional and local regulatory agencies, both as part of our environmental analyses under CEQA/NEPA, and in securing permits for our clients. We keep up to date on the requirements of the U.S. Fish and Wildlife Service (USFWS), U.S. Bureau of Land Management (BLM), the California Department of Fish and Wildlife (CDFW), the U.S. Army Corps of Engineers (USACE), the California Coastal Commission (CCC), California Department of Transportation (Caltrans), the California Environmental Protection Agency (Cal/EPA), Department of Toxic Substances Control (DTSC), State Water Resources Control Board (SWRCB), Regional Water Quality Control Boards (RWQCBs), South Coast Air Quality Management District (SCAQMD), California Air Resources Board (ARB), Imperial County Air Pollution Control District, the California Integrated Waste Management Board (CIWMB) and various other agencies to ensure that our regulatory knowledge is current. UltraSystems has also been responsible for compliance documents, management plans and associated permits. Our firm has also conducted interagency coordination at varying levels of detail and complexity on behalf of clients.

UNDERSTANDING OF LOCAL LAWS

Staff who would be assigned to your projects would be familiar with the county, resource agencies and environmental issues of the surrounding area. Additionally, our staff is experienced in surveying, identifying and mapping native and invasive species and critical habitats throughout Southern California. Key members who would play a major role on your project have developed a vast understanding of California ecosystems garnered from years of experience working on projects and residing in California. Additionally, all of UltraSystems team members have project and/or research experience in California, and have considerable experience working with the sensitive species and habitats of the state. These successful professionals and their associated experience provide a project team very capable of responding to any task request, and are seasoned enough to handle changing situations that your project may encounter during its construction.

COMPANY CAPABILITIES

TECHNICAL DISCIPLINES

UltraSystems' **Air Quality** experts have prepared hundreds of air quality management plans and performed onsite compliance monitoring for major construction projects. They have prepared air quality analyses for multiple industrial, transportation, infrastructure, commercial and residential development projects. UltraSystems provides baseline assessments of existing conditions; estimates construction and operational emissions; and prepares health risk assessments. UltraSystems' staff are experts in using emissions models such as CalEEMod, EMFAC2011 and CT-EMFAC; and dispersion models such as ISCST3, AERMOD, EDMS and ALOHA. We develop successful mitigation strategies, offering fresh and creative solutions, and have negotiated agency approvals to expedite projects. UltraSystems also helps clients comply with air quality regulations through obtaining permits to construct and operate, preparing annual emissions reports and quadrennial air toxics emission inventories, and responding to notices of violation.

UltraSystems' **Noise** group has prepared noise control and noise monitoring plans for complex construction projects, and has audited compliance with field sampling requirements. The Noise group supports CEQA and NEPA documentation by preparing stand-alone technical studies and report sections. It conducts ambient noise monitoring to establish background exposures. Using its extensive library of construction equipment noise data, UltraSystems calculates noise exposures during construction and recommend mitigation measures to satisfy local criteria. UltraSystems models traffic noise with TNM 2.5; it also uses the program for preliminary design of soundwalls. Train noise is another one of UltraSystems' specialties. It has in-house software to conduct train noise analyses per Federal Transit Administration (FTA) guidelines.

UltraSystems' Air Quality experts also have the knowledge and experience to assist clients in meeting the **Greenhouse Gas Emission** reductions required by AB 32, the Global Warming Solutions Act of 2006. We have performed inventories for the U.S. Environmental Protection Agency, the California Air Resources board, the South Coast Air Quality Management District, the Ports of Los Angeles and Long Beach, and numerous industrial firms and residential and commercial developers. UltraSystems can estimate GHG emissions for specific projects, and for a client's day-to-day operations. Project-related emissions include those from offroad construction equipment, transportation of building materials and construction waste, including short- and long-term traffic generated by a project. GHG emissions from day-to-day operations include direct emission from water and space heating, onsite electrical generation and co-generation; from use of fossil fuel-powered landscaping equipment and other combustion processes; from use of company motor vehicles; and from fugitive sources (such as refrigerant leaks). Indirect emissions normally include those associated with purchased electricity, but can also include such uses as employee business travel, waste disposal and subcontracted services. A GHG analysis can sometimes include the carbon footprint of building materials, appliances and other supplies purchased from others.

In the field of **Biology**, our biologists provide a wide array of services, including field surveys, vegetation mapping, habitat evaluations, threatened and endangered species surveys, jurisdictional delineations and permitting. We maintain valuable ongoing relationships with the reviewing agencies for large construction projects, including the California Department of Fish and Wildlife, the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, U.S. Bureau of Land Management and U.S. Forest Service.

UltraSystems' biologists are experienced in major field work in Southern California, using small to large teams of field crews. They offer a broad array of knowledge and are thoroughly familiar with California flora and fauna as well as special-status species' natural history and conservation issues. Biological staff field experience includes reconnaissance-level to focused-level biological field surveys of onsite resources; habitat assessments and plant community mapping; riparian/ riverine/ vernal pool and fairy shrimp habitat assessments; general botanical and wildlife surveys; protocol surveys that focus on individual plant or wildlife species and conform to agency survey protocols for those species; breeding bird surveys; California Rapid Assessment Method (CRAM) analyses; jurisdictional wetland delineations; wildlife movement evaluations; habitat restoration and site qualitative/quantitative monitoring; preconstruction clearance surveys; and construction biological and permit compliance monitoring. UltraSystems biologists hold federal and state permits, and are qualified to conduct protocol surveys for a wide range of sensitive species.

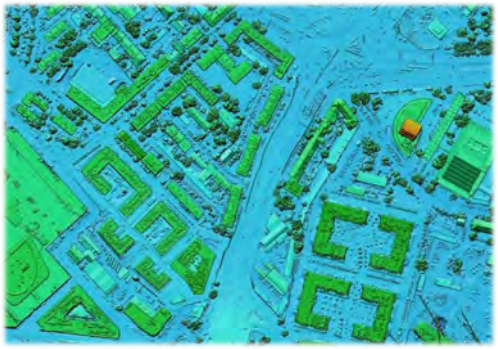
Our **Cultural** resources staff are recognized as qualified historians, archaeologists and paleontologists by the federal government, state agencies and all local jurisdictions to which applications have been made. We have experience in all facets of cultural resources projects, including surveys, site testing and evaluation, Native American consultation, historic site recordation and research, mitigation programs, construction monitoring, cultural evaluations of geophysical data, evaluations for National Register eligibility and paleontological studies.

Additionally, UltraSystems employs a highly-qualified team of professionals who provide cultural resource compliance services to assist our clients in adhering to environmental and historic preservation laws, including NHPA, CEQA, NEPA and NAGPRA for public and private projects in California, Arizona and Nevada. Our team includes professionals with advanced degrees in Archaeology, Anthropology, History and Paleontology, as well as Licensed Historic Architects and Registered Professional Archaeologists (RPAs). Members of our team meet the U.S. Secretary of the Interior's (SOI) Professional Qualification Standards for History, Archaeology, Architectural History and Historic Architecture (36CFR61), as well as various county, municipal and state standards and requirements necessary to conduct cultural resources studies. As a result of the quality of their work, our staff has established strong relationships with representatives of key reviewing agencies, such as the State Historic Preservation Office (SHPO).

In the fields of **Geology** and **Seismicity**, our experts have a successful track record in obtaining approvals from the Division of Safety of Dams and the California Department of Water Resources, and have experience in researching and interpreting local seismic ordinances, incorporating existing background information contained in reports, memorandums of understanding (MOU) and other publicly-held documents from cities, counties and regional agencies, and combining this information to craft legally-defensible environmental documents and technical studies.

UltraSystems provides consulting services relating to the identification of **Hazardous Materials**, including Phase I Environmental Due-Diligence, Phase II Site Characterization Studies and Phase III Remediation Plans. Some of these assessments are included as part of the CEQA process, and many are performed for on-going businesses or property ownership transfers.

UltraSystems develops general construction **Stormwater Pollution Prevention Plans** (SWPPP) to assist clients in complying with Section 402 of the Federal Clean Water Act NPDES regulations. Every construction site that disturbs one acre or more, or is less than one acre but part of a larger common plan that would disturb one acre or more, must comply with the State of California's General Permit for Stormwater Discharges Associated with Construction Activities. The SWPPP must outline the Best Management Practices (BMP) planned for use on the site to prevent pollutants from leaving the project site. The submission of a SWPPP is required prior to the issuance of an Improvement Plan, Grading Permit or Encroachment Permit.



UltraSystems' **Geographic Information Systems** (GIS) staff is critical to our success, interpreting and presenting complex information in visually appealing presentations. UltraSystems utilizes spatial analysis and mapping techniques to record significant features of a project study area, such as biological resources, land use coverage, topography and hydrology, geology and artifact densities. Our GIS capabilities enable us to locate, record, analyze and present significant amounts of project data and perform sophisticated modeling and spatial analysis to guide decision-making in site development. High quality cartographic materials and well-defined analyses are standard products for our GIS services. Accurate and clear mapping, visual simulations, shade/ shadow analyses and photography are essential components of our presentation of environmental analyses and planning projects.

The UltraSystems **Planning** group has recognized experts in the fields of federal and state environmental laws (NEPA/CEQA), planning and zoning laws, social sciences, environmental justice and demographic analysis. Our staff has managed the environmental review for general plan updates and amendments, specific plans and zone changes. We also work with clients to conduct pre-project constraints analysis, feasibility studies and land use compatibility analysis. Our planning group is well versed in coordinating with affected state, federal and local agencies, and we have developed successful working relationships with a number of responsible agencies in Southern California.

KEY PERSONNEL

Betsy A. Lindsay, MURP – Founder/CEO

Ms. Lindsay is the founder of UltraSystems Environmental. She has led the firm's growth by focusing on quality and a service-driven approach for its clients. Ms. Lindsay brings over **35 years** of experience managing or providing principal oversight of environmental documents for various types of projects. Her primary responsibilities in-house include business and project management, contract administration, resource allocation and quality control. She also manages all corporate endeavors and assists with the QA/QC process of many environmental documents. Ms. Lindsay has managed and prepared more than 400 environmental documents, and provided entitlement obligations for large-scale public and private infrastructure projects.

Dr. Robert Manford, DPPD – President

Dr. Manford has been an Urban Planner for over **30** years working on diverse projects of local, regional, and international significance for both private and public sector organizations in California and across the world. He has held executive management, staff, technical and subject matter expert positions as a public agency employee and consultant. Prior to joining UltraSystems, Dr. Manford was the Deputy Director of Planning for the City of San Jose, where he had oversight responsibilities for Environmental Review, Development Review, Permitting, and Urban Design and Historic Preservation within the City of San Jose's Department of Planning, Building and Code Enforcement. Prior to that position, he managed Environmental Land Use and Planning Divisions/Teams at the Community Redevelopment Agency of the City of Los Angeles, Los Angeles Community Development Department, and the Los Angeles Housing and Community Investment Department.

Michael Lindsay, BS – Operations Director

In this role, Mike Lindsay will be responsible for the QA-QC program for this contract. Mr. Lindsay has over **29 years** of relevant experience providing these services. As part of the delivery process, he will participate in key brainstorming and trouble-shooting meetings, and provide ongoing consultation to the project team. The core concept of UltraSystems' QA/QC plan is that independent peer review will also be conducted for all reports, work products and deliverables prior to their submittal to the City. Our goals are to ensure: (1) a high level of accuracy of the evidence that supports our findings; (2) quality of work products; (3) comparability; and (4) completeness of the work product so that the pre-defined goals of each project are met. Mr. Lindsay will ensure that all UltraSystems procedures are adhered to prior to any submittals being delivered to the City. Mr. Lindsay also provides technical assistance to Dr. Rogozen for air quality, GHG and noise studies, when needed.

Hina Gupta, MPl, LEED AP – Vice President, Senior Project Manager

Ms. Gupta is an urban planner with over **17 years** of experience in environmental planning and regulatory permitting for a variety of projects including infrastructure, transportation, renewable energy, commercial, residential, mixed use and master planned development, and educational

facilities. Her areas of expertise include: Sustainable Land use, Aesthetics and Visual Analysis, Socioeconomics and Community Impact Assessment, and Green Building Design. Ms. Gupta is a LEED Accredited Professional and has experience working with public agency staff at various city and county departments within southern California.

Billye J. Breckenridge, BA, – Project Manager

Ms. Breckenridge is a Senior Environmental Professional with over **26 years** of comprehensive and diverse experience in environmental consulting. She specializes in regulatory permitting and compliance, CEQA/NEPA document management, preparation, and process, project management, public involvement, jurisdictional and biological resources, and business development. She has managed large NEPA and CEQA projects, 404 permitting projects, and multi-disciplinary teams of technical staff and subconsultants. She is proficient at identifying project permitting needs and negotiating and working with federal, state, and local resource agencies to obtain permits and approvals. She has coordinated and led large biological field surveys and analysis for federal and state protected species, and jurisdictional determinations/ wetlands delineations. She has directed and prepared numerous environmental analysis reports and permitting packages required pursuant CEQA, NEPA, Clean Water Act, Threatened and Endangered Species Act, MSHCPs, and others. She has planned, participated in, and conducted public scoping and other public meetings required under NEPA and CEQA, 404 permitting, and transmission line routing. Her extensive project experience consists of public and private projects including residential/commercial development, transportation, renewable energy/power plants, flood control, gas pipeline, transmission lines, mining, large utility/water lines, wastewater treatment, schools, and ports.

Michael Milroy, MS – Project Manager

Mr. Milroy is a planner with over **18 years** of experience in community and environmental planning. Mr. Milroy is trained in a variety of project types including residential, commercial, industrial, mixed-use, and specific plan projects. Mr. Milroy's expertise includes California Environmental Quality Act (CEQA) document preparation, project management, and review of supporting technical studies; including, but not limited to, Environmental Impact Reports (EIRs), Initial Studies, Mitigated Negative Declarations, and federally funded National Environmental Policy Act (NEPA) documents.

Michael Rogozen D.ENV – Senior Principal Engineer

Dr. Rogozen heads UltraSystems' air and noise practice. He has over **49 years** of experience in project management, health risk assessment, air and industrial wastewater permitting in California, greenhouse gas emission inventories and carbon footprint studies, ambient air and noise monitoring, dispersion modeling, pollution control technology assessment, economic analysis of air pollution control alternatives, air toxics emission inventory development, offsite consequence analysis, environmental database design, survey design and management, source test design and analysis, subsurface methane investigations, regulatory analysis, and technical writing and editing.

Dr. Rogozen is responsible for consulting, technical project management and business development. He has assisted industrial and governmental clients in complying with federal and local air quality regulations. His work has included managing air compliance audits, preparing applications for permits to construct and operate (including Title V permits), annual emissions reports and responses

to notices to comply and notices of violation. He has also conducted many health risk assessments under AB2588, Proposition 65, and SCAQMD Rule 1401. Dr. Rogozen serves as a quality assurance officer for UltraSystems' technical documents and proposals.

Michelle Tollett, BA, ISA – Biological Resources Manager, Senior Biologist

Ms. Tollett has over **25 years** of experience as a field and consulting biologist working with private companies and public agencies throughout California and the Rocky Mountains. She is the chief Sr. Biologist and Project Manager at UltraSystems Environmental in Irvine, California. Her responsibilities include managing the Biological Resources Team; supervising and mentoring staff biologists; delegating work assignments; approving timesheets, expense reports, and overtime requests; overseeing projects from start to finish or managing aspects of projects, managing budgets and project schedules; interacting with client and resource agency representatives; coordinating biological studies and assisting in managing biologists on project sites; coordinating with resource agencies and clients to develop mitigation site design; coordinating with landscape design and maintenance contractors on mitigation sites; preparing and conducting environmental awareness training.

Stephen O'Neil, MA, RPA – Archaeologist/ Anthropologist – Cultural Resource Manager

Mr. O'Neil is a Cultural Resource Manager with over **46 years** of experience. Mr. O'Neil's responsibilities include management of cultural resources tasks for multiple projects, writing and QA/QC of technical documents, coordinating field surveys and construction monitoring, and leading field efforts for historic and prehistoric site excavations and analysis. Mr. O'Neil has a broad scope of environmental consulting responsibilities and experiences ranging from general project management and technical writing to prehistoric site excavation and construction monitoring. He has worked on projects with clients in both the public and private sectors—including alternative energy, energy transmission, U.S. Forest Service, parks, public works and water resources. He has authored and coauthored numerous technical reports and conducted surveys and monitoring in compliance with NEPA, CEQA, and other federal, state, regional and local laws and regulations. Mr. O'Neil is an active member in the field of cultural resources—he is a board member of the Pacific Coast Archaeological Society and the Orange County Natural History Museum Foundation. He is also a member of the Society for California Archaeology.

REPRESENTATIVE PROJECT EXPERIENCE

LOS ANGELES DEPARTMENT OF PUBLIC WORKS – AS-NEEDED ENVIRONMENTAL SERVICES

Client: County of Los Angeles Department of Public Works

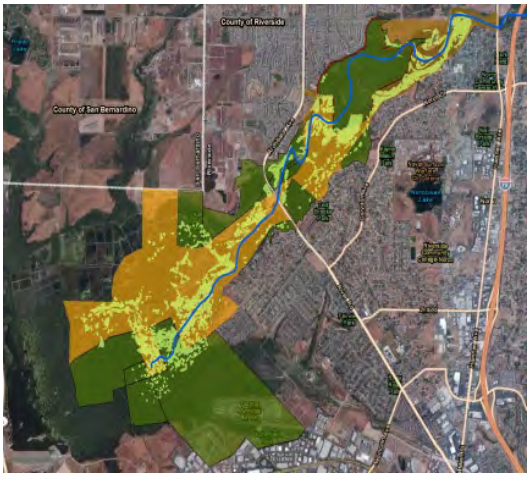
Work Scope: UltraSystems is currently contracted by the County of Los Angeles Department of Public Works (LACDPW) to provide as-needed environmental services for various public projects throughout the County. Some of the specific project task orders that have been issued by the County are noted below. Additionally, all services were performed in compliance with Public Works' policies, procedures and standards, as well as accordance with the scope of services defined in the original RFP documents. Since 1994, UltraSystems has managed over **400 projects** for LACDPW.

- Sierra Highway Bridge Replacement and Rehabilitation over the Southern California Regional Rail Authority (SCRRA) Tracks Project – IS/MND
- Antelope Valley – Waterworks District No. 40 – EIR
- Ladera Heights Civic Association – Noise Study
- Whiteman Airport – IS/MND
- San Fernando Valley Teen Health Center – IS/MND
- County of Los Angeles Bridge Projects – Bird and Bat Exclusion Monitoring
- Seismic Retrofit of the Foothill Boulevard Bridge over the San Gabriel River – Biological Assessment
- Wilmington Drain – Revegetation Plan and Restoration Planting
- Brandon Street, Green Street & Sierra Madre Avenue – Oak Tree Survey
- Big Tujunga Canyon Road – Biological and Cultural Resource Surveys
- Mulholland Highway at CM 15.47 – Oak Tree Survey
- Big Dalton Dam – Sedimentation Removal Project – Biological Mitigation Monitoring
- Chiquito Canyon Road Bridge over San Martinez Creek – Bat Survey
- Canyon View Trail, Topanga, CA – Biological and Cultural Resources Surveys
- Biological Survey Report – Debris Removal/ Access Road
- San Gabriel Bicycle Trail – Archaeological Survey Report
- Foothill Boulevard over San Gabriel River – Biological Survey Report
- Stunt Road at Culvert Marker1.00, et al. – Oak Tree and Biological Survey
- Project 558 Drop Structure Project within the City of Palos Verdes Estate – Revegetation Plan and Restoration
- Old Topanga Canyon Road – CM 6.12 – Biological Monitoring
- Aliso Canyon Road Bridge over Gleason Canyon Creek – Biological and Archaeological Surveys
- Stokes Canyon Drop Structures – Oak Tree Survey and Report
- Stokes Canyon Drop Structures – Biological Report and Focused Field Surveys
- Bull Creek Underground Storm Drain Repair Project – Biological Assessment
- Biological Survey – Arroyo Toad and Red Legged Frog Surveys

SANTA ANA RIVER MAINSTEM HABITAT MITIGATION AND RESTORATION PROJECT

Client: US Army Corps of Engineers

UltraSystems is completing riparian and floodplain restoration within the Santa Ana River (SAR) floodplain from the Norco Bluffs area downstream to an area near the Corona Airport in Riverside County, California. Up to 215 acres (Target Areas) of riparian and floodplain restoration is required to compensate for anticipated temporary and permanent impacts caused by the U.S. Army Corps of Engineers (USACE) SAR Mainstem Flood Control Project (SARMP). Portions of the SAR Watershed upstream of Interstate I-15 have been restored over the past two decades, and approximately 250 acres (Norco Site) downstream of I-15 are currently undergoing restoration by the USACE. UltraSystems will continue riparian and floodplain restoration within the Norco Site for one year (2015) in addition to initiating a five-year restoration effort beginning in 2014 within other areas.



An estimated 356 total acres are targeted for non-native vegetation removal and habitat restoration. Within this area, UltraSystems plans to remove up to 215 acres of non-native vegetation in areas that (1) are not part of other mitigation or non-native vegetation removal programs, and (2) contain approximately 60 percent of non-native vegetation cover. The tasks to be completed on an annual basis to implement and monitor riparian and floodplain restoration within Target Areas, include: Project Administration, Access and Public Outreach, California Rapid Assessment Method Surveys, Vegetation Sampling, Avian Surveys, Focused Federally Listed Avian Surveys, Cowbird Trapping, Non-native Vegetation Removal, Habitat Restoration, Norco Site Maintenance and Monitoring for one year, Geographic Information System (GIS) Database Management and Preparation of Annual Reports.

Habitat restoration requires removal of non-native vegetation which typically include arundo (*Arundo dona*), salt cedar (*Tamarix ramosissima*), castor bean (*Ricinus communis*), broadleaved pepperweed (*Lepidium latifolium*) and tree tobacco (*Nicotiana glauca*) within four selected Target Areas, and application of a minimum of herbicide in compliance with applicable state and federal standards and criteria. Areas selected for non-native vegetation were delineated in the field using a Trimble Global Positioning System (GPS) to quantify the total acreage of non-native vegetation removed within each Target Area.

The Field Quality Control Manager coordinates with field staff to ensure that special status species are not impacted during non-native vegetation removal and/or herbicide treatments. As part of the quality control program, field personnel participate in daily tailgate briefings to identify safety requirements to protect field personnel and measures to protect special status species.

PRESTRESSED CONCRETE CYLINDER PIPE (PCCP) EXPLORATORY TESTING AND PLANNING

Client: Black & Veatch, MWD

UltraSystems assisted Black and Veatch with multiple task orders on behalf of MWD. Most recently we helped prepare a draft "Environmental Exploration and Testing Plan" for MWD's PCCP Program. One project, included the preparation of providing traffic control plans during exploratory borings, marking boring locations, and obtained encroachment permits for these exploratory borings.

AVENIDA COLUMBO STORM DRAIN EXTENSION PROJECT – CEQA COMPLIANCE

Client: City of San Clemente

The City of San Clemente proposed to extend a storm drain at the end of the Avenida Columbo cul-de-sac approximately 175 feet to the bottom of a local canyon to mitigate potential erosion and to disperse storm water flow through a dissipater before entering the natural drainage. Technical Studies were completed by UltraSystems to address air quality, greenhouse gas emission, and noise impacts during construction. A Biological Assessment (BA) and Jurisdictional Delineation (JD) were completed by UltraSystems because storm drain construction would potentially impact special status species within the County of Orange Multiple Species Habitat Conservation Plan (MSHCP). Subsequently, UltraSystems prepared an IS/MND to satisfy CEQA requirements, and incorporated mitigation measures to reduce potential impacts on biological and cultural resources to a less than significant level. These measures were adopted in the MMRP by the City of San Clemente.

OWENS LAKE DUST MITIGATION PROJECT

Client: KDG Engineering on behalf of LADPW

UltraSystems Environmental provided construction management services for Phase 7 of the Owens Lake Dust Abatement Project, a long-term program conducted by the Los Angeles Department of Water and Power (LADWP) to mitigate the effects of extreme dust pollution blowing across the Owens Lake bed and the surrounding region, through the use of Dust Control Measures (DCMs). Phase 7 construction was located around the southwestern and southern edges of the lake; 20 sites were constructed with a combination of shallow ponds and moat-and-row involving 15.1 square miles (9,664 acres). The entire lake area covers approximately 110 square miles, or 70,000 acres. The area is home to prehistoric cultural resource sites along the edges of the lake and several historic mining-related sites

along the edges and out into the old lake bed that required mitigation. A cultural resources survey prior to the start of Phase 7 recorded 15 sites and 223 isolated artifacts within its scope.
UltraSystems archaeological monitoring included:

- Being present on Owens Lake in support of grading and trenching construction work to ensure compliance
- Conducting surveys of areas prior to ground-disturbing activities
- Monitoring of subsurface grading and trenching of native soil; observing evidence of prehistoric activities as possible sites to be recorded, tested and evaluated prior to possible disturbance
- Recording and collecting historic and prehistoric artifacts likely to be destroyed by the construction activities
- Providing daily reports to KDG and to UltraSystems of their observations

The primary role of UltraSystems' monitors was to document that cultural resource monitoring was taking place and to consult on the disposition of any prehistoric findings. UltraSystems was on-call to provide:

- Project coordination
- Project scheduling
- Training on safety, budgeting, environmental protection
- Recording project progress and preparing progress reports for LADPW
- Describing the work and percentage

HAYWARD RANCH WATER EXTRACTION AND DELIVERY SYSTEM, INYO COUNTY, CA

Client: Coso Operating Company LLC

The Coso Operating Company LLC (COC) submitted a plan of operations for the Hayward Ranch Water Extraction and Delivery System project, which would construct a ground water extraction and pipeline delivery system from the Coso Hayward Ranch to the water distribution station and injection system located at the Coso Geothermal Field in Inyo County. NEPA requires that the Bureau of Land Management (BLM) consider and document environmental impacts prior to making certain decisions. BLM must review the application and decide whether to grant approval to the applicant, which was subject to stringent NEPA review. The Environmental Assessment ("EA") satisfied the review requirements. The Coso geothermal resource was identified as a viable and sustainable energy resource. This project was deemed necessary to provide the Coso Geothermal Facilities with a supplemental water supply to replace geothermal fluids lost through evaporation. The project proponent proposes to replace the lost geothermal fluids using make-up water extracted from injection systems at the Coso Hayward Ranch. A project feasibility study was completed and concluded the following:

The Hay Ranch injection systems can yield sufficient and sustained volumes of make-up water to meet the project requirements:

- Water quality is acceptable for the proposed use;
- Make-up water from the Hay Ranch is expected to have negligible to no impact on current ground water users in Rose Valley; and

- The project will provide additional water for injection into the geothermal reservoir, thus extending its life.

The proposed project was located within BLM's no action area map zone of the *West Mojave Plan* area. Both this and the *Environmental Impact Statement/Environmental Impact Report* (EIS/EIR) prepared for the *West Mojave Plan* were utilized as the guiding documents for the conformance review. UltraSystems prepared the EIR/EIS, which documented and analyzed the environmental impacts and mitigation measures associated with the proposed project. It also determined whether significant impacts would result if the proposed action or alternatives were implemented. Environmental review of each phase of the development for the Coso project was very extensive. The NEPA/CEQA documents prepared by UltraSystems for the project focused on cumulative impacts throughout the Coso KGRA, as well as project-specific impacts. The mitigation measures required under existing documents were implemented by the Coso Operator facility-wide. The incorporation of the Hay Ranch Water Extraction and Delivery System into the existing May Plan of Operation amendment to the Plan of Utilization, Development and Disposal will allow greater latitude in development of the geothermal resource, while resulting in no additional impacts other than those addressed in previous environmental documents.

ROBERT A. SKINNER TREATMENT PLANT – PROGRAM ENVIRONMENTAL IMPACT REPORT (EIR)

Client: MWD

UltraSystems produced technical studies for the preparation of a Program EIR that evaluated Metropolitan's expansion and upgrade of treatment systems at the Robert A. Skinner Treatment Plant, one of the nation's largest filtration plants and the primary source of drinking water for the San Diego region. The EIR analyzed the two primary components of Metropolitan's expansion and upgrade: a new 110-million gallon per day (mgd) treatment module and a 630-mgd oxidation retrofit program to increase disinfection capabilities, including treatment of coagulation, flocculation, sedimentation, and granular media filtration.

CITY OF CANYON LAKE – INITIAL STUDY/MND – RAILROAD CANYON DAM MODIFICATIONS

Client: EVMWD

UltraSystems prepared an Expanded Initial Study/Negative Declaration for an 11,900-acre-foot reservoir within Canyon Lake. In response to service demand, the District proposed to construct and operate a new one million-gallon potable water storage reservoir upon a 15± acre site within an unincorporated County area, including real property acquisition by the District of a 1±-acre site in an unincorporated area of the County. Subsequent to site acquisition, the District would construct, maintain and operate a circular 1± million-gallon above-grade potable water reservoir directly southeast of the existing on-site facility. Additional on-site grading was required to create a second 1± acre pad suitable for tank use.

NEENACH PUMPING STATION, NOISE STUDY

Client: LADWP

UltraSystems conducted a study to identify and assess potential noise impacts from construction, operation, and maintenance of the new Neenach Pumping Station turnout facility located near the intersection of Three Points Road and State Route (SR) 138 within the right-of-way of the California

Aqueduct, and consisting of a pumping station and pipelines to draw water from the California Aqueduct and transfer it to the FLAA. Other elements included a vacuum pump system in the pipe connecting the California Aqueduct to the Pumping Station. This vacuum pump system will remove any entrained air within the pipes. Removal of entrained air is essential for the maintenance of proper vacuum suction in these pipes.

JOY STREET WELL PROJECT, INITIAL STUDY AND NEGATIVE DECLARATION

Client: EVMWD

UltraSystems prepared an Initial Study and Negative Declaration for the proposed Joy Street Well project. The project was developed to extract water from a groundwater basin. It would also provide an additional water supply that would eventually flow into the overall water distribution network established by EVMWD. The proposed well project included the construction, operation, and maintenance of a motorized 1,500- to 2,500-gallon per minute (gpm) serial well, associated electrical improvements, and the installation of an underground pipeline connecting the well site and extending along Joy Street to Riverside Drive in the Lake Elsinore. The well site would encompass two of the five parcels acquired by the District. UltraSystems prepared one technical report and a Phase I Environmental Site Assessment to address the project site.

SANTA ANITA DAM RISER MODIFICATION & RESERVOIR SEDIMENT REMOVAL – BIOLOGICAL SURVEYS

Client: LACDPW

The County of Los Angeles, Department of Public Works proposed a project that consisted of modifying dam inlet/outlet works, draining the Santa Anita Reservoir, removing sediment and debris (approximately 12 acres of native vegetation) from the reservoir by dry excavation, transporting the sediment from the reservoir (via conveyor belt and truck), and placing it in the Proposed Sediment Placement Site (SPS). UltraSystems performed numerous biological surveys for the Santa Anita Reservoir Sediment Removal project on behalf of the Los Angeles County Department of Public Works, and conducted within habitats identified on-site as riparian scrub, coastal sage scrub, chaparral, and ruderal/disturbed.

CANYON LAKE, 16-INCH AND 20-INCH WATER LINES PROJECT, CATEGORICAL EXEMPTION

Client: EVMWD

UltraSystems prepared a Categorical Exemption for the EVMWD's Waterlines project, which was developed within existing paved public and private vehicular rights-of-way. The purpose of the Waterline project was to replace existing potable waterlines with new facilities, thereby meeting the District's design standards, including fire flow. Project construction and all associated excavation activities required for the pipeline installation included the plugging and abandonment of existing facilities or segments.

ALAMEDA STREET PHASE III STORM DRAIN PROJECT, ARCHAEOLOGICAL MONITORING
Client: LACDPW

UltraSystems provided archaeological monitoring during all construction-related activities for this project. Located within Compton and unincorporated Los Angeles, the project's improvements consisted of 1.74 miles of construction of a continuous six-lane highway between Del Amo Boulevard and the Route 91 Freeway on Alameda Street. The project included a grade separation on Alameda Street construction of retaining walls and a bridge for the railroad tracks over Alameda Street at the grade separation, and installation of streetlights. Drainage improvements involved construction of approximately 11,000 feet of 30- to 72-inch diameter reinforced concrete pipe and two pump stations.

LANCASTER WATER TREATMENT PLANT, BIOLOGICAL RESOURCE SURVEYS
Client: Sanitation Districts of Los Angeles County

UltraSystems was contracted to prepare a biological survey for the proposed expansion of the Lancaster Water Treatment Plant (WRP). The Los Angeles County Sanitation District (LACSD) No. 14 proposed to construct a new primary, secondary, tertiary, solids management, and disinfection facility to replace its existing oxidation ponds at the Lancaster WRP. Prior to the commencement of the geotechnical field exploration program biological site surveys by UltraSystems were required due to the potential for special status plant and animal species to be present within the soil boring and CPT locations and project study areas. Twenty-four stations (exploration locations A through W, and GG) were surveyed by UltraSystems biologists, and the results of the survey were included in the overall project development report.

GRIFFITH STREET DRAIN, INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION
Client: LACDWP

Under contract to the Los Angeles Department of Public Works (LACDPW), UltraSystems prepared an Initial Study (IS) and Mitigated Negative Declaration (MND) for the Griffith Street Drain project. The proposed project was located within a 2,520 foot long north-south alignment in the City of Carson and follows within the right-of-way of Main Street, Griffith Street, and Broadway. Project improvements consisted of replacing an existing reinforced concrete pipe (RCP) storm drain (RDD 353) with a new 72-inch diameter RCP drain in order to accommodate 50-year drainage flows. The capacity of the storm drain would be narrowed to a 48-inch diameter drain on Griffith Street in the vicinity of Main Street in order to connect with existing RDD 353. Catch basins would also be constructed to alleviate ponding that occurred adjacent to Griffith Street and Broadway.

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS, STOKES CANYON DROP STRUCTURES - FOCUSED BIOLOGICAL ASSESSMENT
Client: LACDWP

UltraSystems, under contract to Los Angeles Department of Public Works (LACDPW) prepared a focused biological assessment for two drop structures, general grading, and the replacement of approximately 600 linear-feet of double-pipe and wire revetment. The focused biological survey was

conducted to determine whether four species would be present on the project site (Southwestern Pond Turtle, San Diego Horned Lizard, Mountain King Snake, and Lyon's Pentachaeta).

TERMINO AVENUE DRAIN PROJECT, IS/MND

Client: LACDWP

UltraSystems prepared an Initial Study (IS) and Mitigated Negative (MND) for this project to serve a 596-acre area in south Long Beach that has a long history of flooding problems, including street flows up to five feet deep causing extensive property damage. With construction of the project, a majority of the watershed would have protection from a 50-year frequency flood, while the remainder could be protected by lateral drains, connected to the major backbone drain. The Initial Study supported a conclusion that the project would not have a substantial adverse impact on the environment.

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