



## STATEMENT OF QUALIFICATIONS

Environmental Services for  
Biological Resources



## TABLE OF CONTENTS

<b>Company Qualifications .....</b>	<b>1</b>
Core Business Is Environmental Consulting and Compliance Services .....	1
Our Project Team.....	1
Firm Stability and Strength   Credibility   More Than 30 years In Business.....	2
Business Certifications .....	2
Meeting Client Expectations.....	3
Hands-On Expertise with Regulatory Agencies .....	3
Understanding of Local Laws.....	3
<b>Company Capabilities – Overview .....</b>	<b>4</b>
Regulatory Understanding.....	4
Biological and Regulatory Capabilities .....	6
General Biological Services.....	6
Tree Survey and Botanical Services.....	6
Migratory Bird and other Wildlife Services .....	7
Construction Biological Services .....	8
Restoration and Revegetation Services.....	8
Biological Documentation .....	8
Jurisdictional Permitting Documentation .....	9
<b>Key Personnel .....</b>	<b>10</b>
<b>Other Technical Disciplines.....</b>	<b>14</b>
<b>Representative Project Experience.....</b>	<b>17</b>
Burrowing Owl Survey – Imperial Solar Energy Center South .....	17
Avian Surveys for Site Monitoring for the LA River Maintenance Project.....	17
Tree Inventory– San Timoteo Storm Drain.....	18
Jurisdictional Permitting - Seefried Industrial Properties Warehouse .....	19
Environmental monitoring and reporting - Boulder Avenue Improvements .....	19
Sunland Oilfield Biological Resources Pre-Construction Survey .....	20
Biological Resource Assessment & Bat Surveys Slauson Avenue Bridge Seismic Retrofit Project.....	20
Migratory Nesting Bird Surveys – Orangethorpe Grade Separation .....	21
Huntington Beach Bridge Rehabilitation Project .....	21
Biological Surveys and Monitoring – Alton Parkway Extension .....	22
US-395 High Desert Corridor Project.....	23
Glendale Narrows Los Angeles River.....	23
<b>Representative Clients.....</b>	<b>1</b>

## 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 and Grass Valley, 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 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 (EIRs), Environmental

### 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

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. Cities of Anaheim, Irvine, Covina, Pomona, Riverside, and Chino Hills
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. Nevada Department of Transportation (NDOT)
12. NAVFAC Southwest Division, San Diego
13. Office of Statewide Health, Planning and Development
14. School Districts: Irvine, Long Beach, Los Angeles, Los Alamitos, and Alhambra
15. Water Replenishment District (WRD)
16. 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 a **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 – OVERVIEW



UltraSystems understands that biological resource compliance is a critical aspect of successful project development and a key element of the planning process. Our biology group provides a wide array of resource-related consulting services throughout California, but primarily in Southern California. The UltraSystems' biology team has substantial experience in providing the following biological services:

- ❖ 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 (statistical sampling) monitoring,
- ❖ Preconstruction clearance surveys, and construction, biological and permit compliance monitoring.

## REGULATORY UNDERSTANDING

One of our main goals is to help our clients stay in compliance with environmental rules, laws and regulations and with license requirements and regulatory permits while also helping to protect the natural environment. Our biology and regulatory staff are experienced in following the requirements of federal, state and local laws, ordinances, statutes, guidelines and regulations, including:

- ❖ California Environmental Quality Act (CEQA),
- ❖ National Environmental Policy Act (NEPA),
- ❖ Federal Endangered Species Act (ESA),
- ❖ California Endangered Species Act (CESA),
- ❖ Migratory Bird Treaty Act (MBTA),
- ❖ Bald and Golden Eagle Protection Act (BGEPA),
- ❖ California Fish and Game Codes, State Health and Safety Codes,





- ❖ Public Resources Codes,
- ❖ Federal Clean Water Act (CWA),
- ❖ Porter-Cologne Water Quality Control Act.

Our understanding of the regulatory processes has helped create a good working relationship with the following federal, state, regional and local regulatory agencies:

- ❖ California Coastal Commission (Coastal Commission),
- ❖ California Department of Fish and Wildlife (CDFW),
- ❖ California Department of Transportation (Caltrans),
- ❖ California Environmental Protection Agency (Cal/EPA),
- ❖ Federal Energy Regulatory Commission (FERC),
- ❖ National Marine Fisheries Service (NMFS),
- ❖ Regional Water Quality Control Boards (RWQCBs),
- ❖ State Water Resources Control Board (SWRCB),
- ❖ United States Army Corps of Engineers (USACE),
- ❖ United States Bureau of Land Management (BLM),
- ❖ United States Fish and Wildlife Service (USFWS),
- ❖ United States Forest Service (USFS).

UltraSystems regularly interacts with these agencies and stays up-to-date on requirements, both as part of our environmental analyses under CEQA and NEPA, and in securing approval and permits for our clients. Our respected working relationships with these regulatory agencies are advantageous for our clients to swiftly obtain required permits and project approvals.



All of UltraSystems' biologists are available to advise the client throughout all stages of project development. Our team can advise our clients on appropriate responses if special-status species are encountered and/or observed at a project site. When a project is determined to have impacts on special-status species or sensitive habitats, we detail the necessary consultation and the prescribed mitigation measures typically required by state and federal agencies.

## BIOLOGICAL AND REGULATORY CAPABILITIES

UltraSystems employs a diverse team of highly talented and experienced biologists, regulatory specialists, GIS analysts and support staff. Our biologists are experienced in major field work throughout the many environments of Southern California, from urban areas to remote, isolated habitats. They have extensive experience and are thoroughly familiar with Southern California habitats, flora, fauna, restoration techniques, and survey methodologies and protocols, as well as special-status species' natural history and conservation issues as they relate to California. Our biologists hold federal and state permits and are qualified to conduct protocol surveys for a wide range of sensitive species. UltraSystems is available to supply small to large teams of field crews and to provide the biological services listed below.



*Amphibian Surveys*

## GENERAL BIOLOGICAL SERVICES

- ❖ Literature reviews,
- ❖ Reconnaissance-level biological surveys,
- ❖ General botanical surveys,
- ❖ General wildlife surveys,
- ❖ CRAM surveys,
- ❖ Wildlife movement evaluations,
- ❖ Habitat assessments and plant community mapping,
- ❖ Jurisdictional wetland and waters delineation surveys,
- ❖ Peer review of CEQA/NEPA documents and biological technical reports,
- ❖ Resource agency informal and formal coordination and consultation.



*Habitat Assessment*

## TREE SURVEY AND BOTANICAL SERVICES



UltraSystems has licensed arborists on staff to conduct tree surveys and prepare Arborist Reports. In accordance with accepted professional practices, each tree is plotted on a map of the project site, characterized as to species, photographed and assigned a numerical identifier. Measurements are taken of the trunk diameter at breast height and estimated for tree canopy. Finally, an assessment of the overall health and vigor of each tree surveyed is made. UltraSystems can provide the following range of botanical and tree monitoring and surveys:





- ❖ Plant community mapping,
- ❖ Focused botanical surveys,
- ❖ Reference site mapping,
- ❖ Plant salvage and relocation,
- ❖ Restoration monitoring,
- ❖ Tree inventory and health surveys,
- ❖ *Caulerpa taxifolia* monitoring,
- ❖ Eelgrass mapping and monitoring.



*Thread-Leaved Brodiaea*

## MIGRATORY BIRD AND OTHER WILDLIFE SERVICES



*Killdeer nest*

UltraSystems can provide inspection services and recommendations to be in compliance with existing environmental permits, conditions, and the Migratory Bird Treaty Act (MBTA), California Fish & Game Code (§ 3503 and § 3503.5), California Endangered Species Act (CESA), federal Endangered Species Act (ESA), the Bald and Golden Eagle Protection Act (BGEPA), and other applicable local ordinances, and to avoid any impacts or take of native breeding birds, their nests, young and eggs. Additionally, we provide the following wildlife services:

- ❖ Breeding bird and raptor surveys,
- ❖ Focused wildlife protocol surveys,
- ❖ Fish surveys and assessments,
- ❖ Arroyo toad,
- ❖ Spadefoot toad,
- ❖ California red-legged frog,
- ❖ Desert tortoise,
- ❖ Western pond turtle,
- ❖ Flat-tailed horned lizard,
- ❖ Burrowing owl,
- ❖ Southwestern willow flycatcher,
- ❖ Least Bell's vireo,
- ❖ Coastal California gnatcatcher,
- ❖ Bald and Golden Eagle,
- ❖ California condor,
- ❖ Brown-headed cowbird trapping,
- ❖ Mohave ground squirrel,
- ❖ Small mammal trapping,
- ❖ Bat habitat suitability assessments and focused surveys.



*Invertebrate Surveys*



## CONSTRUCTION BIOLOGICAL SERVICES

Our biological monitors have extensive experience with construction monitoring on small to large multi-phased projects.

- ❖ General and protocol preconstruction flora and fauna clearance surveys,
- ❖ Worker Environmental Awareness Programs (WEAPs),
- ❖ Construction, biological and license/regulatory permit compliance monitoring.

## RESTORATION AND REVEGETATION SERVICES



*Arundo Before Weed Abatement*



*Arundo After Weed Abatement*

Our biologists have knowledge and experience with conceptual and detailed restoration planning and design; habitat mitigation planning and associated resource agency coordination; non-native species management and control planning; restoration implementation planning and monitoring; and long-term restoration growth performance and maintenance monitoring. They conduct habitat mitigation performance monitoring in compliance with conditions and requirements set forth in project permits and authorizations, as well as in project mitigation plans and monitoring plans, and they are responsible for coordinating with restoration contractors and the resource agencies regarding site status, and for preparing annual site status documentation. Our biologists are responsible for directing restoration contractors and any resource specialists to ensure compliance with specified performance standards and the successful establishment of native species. Our restoration and revegetation services include:

- ❖ Mitigation site design,
- ❖ Coordination with landscape design and restoration maintenance contractors,
- ❖ Exotic vegetation removal and site enhancement monitoring,
- ❖ Mitigation installation monitoring,
- ❖ Mitigation site monitoring (qualitative and quantitative assessments),
- ❖ Resource agency coordination for mitigation site sign off.

## BIOLOGICAL DOCUMENTATION

UltraSystems' writing experience includes preparation of biological technical reports and permit applications associated with large and small projects for both standalone documents and for inclusion in more complex environmental compliance documents. Examples include the following:

- ❖ Individual reports and biological sections of CEQA and NEPA documents,
- ❖ Biological resources evaluation technical reports,
- ❖ Habitat assessments,
- ❖ Focused botanical species survey reports,
- ❖ Focused wildlife species survey reports,
- ❖ Compensatory Habitat Mitigation and Monitoring Plans (HMMPs),
- ❖ Restoration mitigation monitoring plans and annual reports,
- ❖ Regional Habitat Conservation Plan compliance reports,
- ❖ CRAM reports,
- ❖ Biological field survey work plans,
- ❖ Resource management plans,
- ❖ Resource mitigation plans,
- ❖ Due diligence analyses,
- ❖ Feasibility studies,
- ❖ Construction and post-construction mitigation compliance reports,
- ❖ Biological assessments in support of USFWS Section 7 and Section 10 consultations,
- ❖ USFWS Section 7 Incidental Take Permit and Biological Opinion agreement negotiations,
- ❖ USFWS Section 7 Concurrence Letter Requests,
- ❖ Fish and Game Code Section 2081(b) Incidental Take Permit (ITP) applications,
- ❖ CDFW Consistency Determination requests,
- ❖ Caltrans Natural Environment Study (NES), Biological Assessment (BA) and Natural Environment Study Minimal Impact (NESMI) reports,
- ❖ Field survey monitoring reports, letters and memoranda.



*Wetland Delineations and CRAM Surveys*

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' 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.

## JURISDICTIONAL PERMITTING DOCUMENTATION

- ❖ Jurisdictional wetland and waters delineation reports,
- ❖ Clean Water Act permit applications (Section 404 and 401),
- ❖ Fish and Game Code permit application (Section 1602),
- ❖ California coastal development permits.

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.

Depending on the project, additional studies and permits may occasionally be needed. A partial list of typical additional services provided by the UltraSystems team is provided in the table below.



### Typical Additional Services

Name	Activity
Natural Environmental Study	A Natural Environment Study (NES) describes the existing biological environment and how the project alternatives affect that environment. The NES summarizes technical documents (e.g., focused species studies, wetland assessments, biological assessments, etc.) related to effects on biological resources in the Biological Study Area (BSA) for use in the environmental document.
Wetland Delineation and Assessment	A Wetland Delineation and Assessment is a biological survey to: 1) identify wetland vegetation, 2) characterize wetland hydrology, 3) evaluate hydric and non-hydric soil conditions, 4) locate wetland boundaries, and 5) assess functions and values.
USACE Section 404 Permit	U.S. Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into WOUS, including streams, rivers, wetlands and non-wetland bodies of water as defined by the January 1987 USACE Wetlands Delineation Manual and the September 2008 Regional Supplement to the USACE Wetland Delineation Manual: Arid West Region (Version 2.0).
USACE Section 401 Water Quality Certification	Federal permit applicants that conduct activities that may result in a discharge into navigable Waters of the United States must obtain a State Water Quality Certification and comply with applicable effluent limitations to preserve California Water Quality Objectives contained in Water Quality Basin Plans prepared by California Regional Water Quality Control Boards (RWQCBs). Certifications are issued by RWQCBs and are typically included with U.S. Army Corps of Engineer (USACE) CWA Section 404 permits for dredge and fill discharges.
CDFW Sec. 1602 Streambed Alteration Agreement	Sections 1601-1603 of the Fish and Game Code (CFG) authorizes the California Department of Fish and Wildlife (CDFW) to enter into a "Lake or Streambed Alteration Agreement" with project proponents in order to minimize or avoid impacts to a river, stream, or lake where fish or wildlife resources may be adversely affected.

## 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.

*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.

*Allison Carver, BS, BA – Senior Biologist, Regulatory Specialist*

Ms. Carver has over **23 years** of experience as a field and consulting biologist working with private companies and public agencies in California. Her project experience includes working on general and challenging high-profile hydroelectric, solar energy, wind energy, tunnel, transmission line, and

construction, improvement, maintenance, housing, and restoration projects in California. She specializes in jurisdictional determination of waters of the U.S. and State, including regulatory framework and permitting; and project impact analyses for projects ranging in size from small school upgrade projects to major infrastructure projects. As a Senior Biologist for UltraSystems, she has conducted jurisdictional delineations and authored jurisdictional delineation reports, prepared Preconstruction Notifications required by Section 404 Clean Water Act, Water Quality Certification applications required by Section 401 Clean Water Act, and Lake or Streambed Alteration Notifications as required by Section 1602 of the California Fish & Game Code. She has also authored biology, hydrology and water quality, geology and soils, and Hazardous Materials impact analyses for a variety of technical documents, including CEQA and NEPA environmental documents. Ms. Carver has also analyzed project impacts and authored technical and environmental documents required by California state agencies such as Caltrans, the California Energy Commission, and the California Public Utilities Commission.

*Matthew Sutton, MS – Habitat Restoration Biologist*

Mr. Sutton specializes in habitat restoration management projects for various clientele, including municipal, private, and non-profit sectors. He has worked in the ecological restoration field for over **18 years**. He is currently a Staff Biologist at UltraSystems Environmental in Irvine, California. He oversees all phases of habitat restoration implementation including site preparation, plant and seed augmentation, weed abatement, maintenance, monitoring, report-writing and all other deliverables necessary to satisfy the client's success criteria. During the restoration project he supervises and trains contractors and restoration workers to ensure a high standard of performance. During both the planning and monitoring phases, he conducts field investigation and analysis of field data such as biological surveys, vegetation monitoring and rare plant surveys. Mr. Sutton directs the various phases of habitat restoration so that all elements including regulatory compliance, costs, deadlines and worker safety meet the project's contractual obligations. He manages the scope, schedule and budget of projects.

*Hugo Flores, BS – Field Biologist*

Mr. Flores has over **17 years** of experience and performs biological and construction monitoring, permit compliance, wetland delineations, CRAM assessments and technical writing for biological reports. He has conducted numerous botanical and wildlife surveys. Mr. Flores is very knowledgeable about environmental policy and planning practices (CEQA, NEPA) and is also experienced in the implementation of habitat mitigation and restoration.

*Charlene Burge, BS – Senior Biologist*

Ms. Burge has more than **16 years** of experience with biological and forestry work throughout the western United States. She has worked with public agencies, universities, and the private consulting sector on projects ranging from endangered species monitoring and natural resource assessments for utility construction to forest and fire ecology research and wildfire management. She is experienced with general and specialized biological equipment, technology and methodology, from GPS to digital cameras and night-vision scopes (Gen. 3) to mammalian and herpetofauna capture, trapping and handling. She has performed Burrowing Owl passive relocation, constructed Artificial Burrow Systems and monitored Burrowing Owls through the breeding season. She has performed stream rehabilitation, forest surveying, GIS mapping, reforestation, and helped develop specialized



forest research techniques and equipment. She is experienced in environmental compliance, permitting, and document preparation for the Federal Endangered Species Act, CEQA, and NEPA. She has worked for the National Park Service, U.S. Forest Service, and U.S. Geological Survey.

*Jim Castle, MS – Senior Biologist*

Mr. Sutton specializes in habitat restoration management projects for various clientele, including municipal, private, and non-profit sectors. He has worked in the ecological restoration field for over **15 years**. He is currently a Staff Biologist at UltraSystems Environmental in Irvine, California. He oversees all phases of habitat restoration implementation including site preparation, plant and seed augmentation, weed abatement, maintenance, monitoring, report-writing and all other deliverables necessary to satisfy the client's success criteria. During the restoration project he supervises and trains contractors and restoration workers to ensure a high standard of performance. During both the planning and monitoring phases, he conducts field investigation and analysis of field data such as biological surveys, vegetation monitoring and rare plant surveys. Mr. Sutton directs the various phases of habitat restoration so that all elements including regulatory compliance, costs, deadlines and worker safety meet the project's contractual obligations. He manages the scope, schedule and budget of projects.

*Joyce Mak, BA – Field Biologist*

Ms. Mak is a wildlife biologist with a particular interest and study in avian ecology. She is knowledgeable about native and non-native California plants and wildlife species, having worked in upland, riparian and desert habitats (Mojave Desert and Sonoran Desert) throughout Southern California, including Los Angeles, Orange, Riverside, San Diego, Imperial and San Bernardino Counties for over **15 years**. She has done protocol-level surveys and monitoring with California Department of Fish and Game (CDFG) and US Fish and Wildlife Services (USFWS) permitted Endangered/Threatened wildlife biologist for species such as coastal California gnatcatcher (CAGN) and least Bell's vireo (LBVI). Ms. Mak has conducted general habitat surveys, biological assessment reporting and monitoring for wildlife and construction projects on natural habitats; in particular for special-status bird species, including CAGN, LBVI, burrowing owl, California least terns, snowy plover and coastal cactus wren. She is a member of National Audubon Society and has completed several birding courses and workshops by the Sea and Sage Audubon. Joyce is also a very passionate avid birder in her free time.

*Zach Neider, BS – Senior Biologist*

Mr. Neider has over **7 years** of experience as a field and consulting biologist, working with private companies and public agencies throughout California. As a Senior Biologist with UltraSystems Environmental, Inc., his responsibilities include mentoring and guiding staff biologists, delegating work assignments, managing project schedules and budgets, maintaining client and agency relationships, conducting field studies, creating appropriate mitigation designs and measures, and preparing and conducting environmental awareness trainings. Mr. Neider's experience in the environmental consulting field, includes aquatic resource delineations, biological resources assessments, avian surveys, focused wildlife and plant surveys, focused rare plant surveys, arborist surveys, construction compliance monitoring, and familiarity with environmental legislation and permitting. Mr. Neider's industry experience includes large infrastructure projects, private housing

and apartment development, transportation projects, communications development, and mitigation and restoration projects.

*Shaun Thornton, MS, BS – Staff Biologist*

Shaun Thornton is a staff biologist with UltraSystems Environmental in Irvine, California. Shaun graduated from Cal Poly Humboldt with a Masters in Natural Resources, Wildlife. His focus was birds throughout his undergraduate and graduate research, researching and using predictive models to assess the habitat use of the once endangered Aleutian cackling goose during spring staging in Arcata, CA. Shaun also, has 3 years combined experience as a bird banding trainee at Humboldt Bay Bird Observatory and the Wright Refuge. In the Great Basin, Nevada, Shaun was an avian research assistant for UC Davis and conducted avian point counts and vegetation surveys as part of a long-term research project tracking the phenology of birds in riparian canyons. His position will include avian and botanical identification, field observations, wildlife and biological monitoring within the Biological Resources department.

*Scarlett Hensman, MS, BS – Staff Biologist*

Ms. Hensman is a staff biologist at UltraSystems. She holds a Masters in Oceanography from Scripps Institution of Oceanography at University of California San Diego. Before coming onboard UltraSystems, Scarlett contributed to responsible fisheries management by conducting field surveys with the National Oceanic and Atmospheric Administration, promoted public health through stormwater monitoring with Orange County Coastkeeper, and mentored undergraduate and graduate students in applying Geographic Information Systems (GIS) towards environmental and urban planning. With UltraSystems, Scarlett continues to bridge the gap between environmental protection and development by supporting compliance through field surveys, implementing mitigation strategies, and developing customized habitat evaluation surveys tailored to client's needs.

*Zach Jackson, BS – Staff Biologist*

Zach Jackson is a staff biologist with UltraSystems Environmental in Irvine, California joining the team after graduating from UC Santa Cruz (UCSC) with a B.S. in Plant Sciences. Zach is a keen botanist who gained experience volunteering at the UC Santa Cruz Arboretum in the California Natives Garden collection, as well as the affiliated seed bank. They participated in the UCSC Forest Ecology Research Plot (UCSC-FERP) internship, where they wrote their senior thesis and participated in managing forest research and growth. Their position will include plant identification, community and forest ecology, field observations, wildlife and biological monitoring, and inspection of native and invasive plant dynamics within the Biological Resources department.

## OTHER 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.



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.

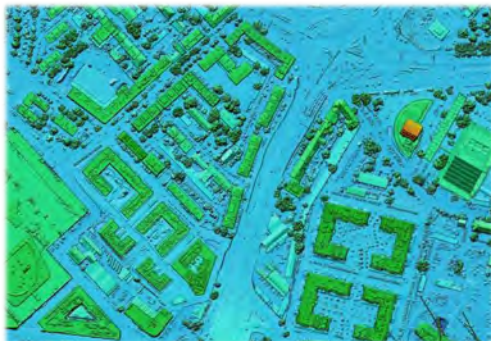


Additionally, UltraSystems employs a highly-qualified team of professionals who provide cultural resource compliance services to assist our clients in adhering to environmental and historic preservation laws, including NHPA, CEQA, NEPA and NAGPRA for public and private projects in California, Arizona 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.

## REPRESENTATIVE PROJECT EXPERIENCE

### BURROWING OWL SURVEY – IMPERIAL SOLAR ENERGY CENTER SOUTH

*Client: Tenaska, Inc.*



The Imperial Solar Energy Center (ISEC) South project included the construction of a 200 megawatt photovoltaic (PV) solar energy facility on 946.6-acres on private lands and federal lands maintained by the Bureau of Land Management (BLM). Four pre-construction burrowing owl surveys were performed over the course of two years on the solar energy facility, transmission line, and dirt road construction sites, and five burrowing owl shelters or burrows were identified. To proceed with construction, UltraSystems biologists constructed California Department of Fish and Wildlife (CDFW) - and Bureau of Land Management (BLM)-approved Artificial Burrow Systems (ABS), and removed active burrows from the Project site. UltraSystems completed annual relocation surveys and reporting in accordance with a BLM-approved Burrowing Owl Monitoring and Mitigation Plan. During the surveys, UltraSystems biologists resolved issues by modifying ABSs, when need, so that burrowing owls and breeding chicks would successfully propagate.

### AVIAN SURVEYS FOR SITE MONITORING FOR THE LA RIVER MAINTENANCE PROJECT

*Client: BJD Resourcing, LLC*



UltraSystems Environmental, Inc. (UltraSystems) participated (and participates, ongoing) in the Avian Surveys for Site Monitoring project (Project) located along Reaches 2-6 of the Glendale Narrows, a scenic 11-mile unpaved, “natural softbottom” section of the Los Angeles River, in the Northeast Los Angeles region of Los Angeles County, California. For the Project, BJD Resourcing, LLC (BJD) provided restoration crews for daily maintenance tasks for the removal of non-native vegetation as “weed abatement activities”. The weed abatement activities were performed using powered-equipment and hand tools with subsequent herbicide application. During the nesting and non-nesting season, qualified biologists from BJD and UltraSystems conducted daily avian counts (species abundance) prior to and after maintenance activities. Following surveys, the number of different taxa (species richness) were tallied and an

overall understanding of species diversity, number of species present relative to their evenness in relation to each other, within the Project was determined.

For all seasons, avian surveys consist of photographing, counting, and recording behaviors of all avian species detected. During the breeding season, nesting avian surveys were also conducted to avoid impacts to active nests during daily weed abatement activities. If active nests were observed a “no activity buffer” (500-foot buffer for active raptor nests, 100-foot buffer for all others active nests) was established so work crews would avoid the area until nesting is complete. Results were summarized in weekly tabular reports and within a comprehensive annual report submitted to the United States Army Corps of Engineers. This is an ongoing five-year contract.

### TREE INVENTORY– SAN TIMOTEO STORM DRAIN

*Client: City of Moreno Valley*



UltraSystems completed several technical documents to support a CEQA analysis for this project. Report prepared included a Phase I Environmental Site Assessment; Air Quality Study, Noise Impact Study, Biological Resources Evaluation, Burrowing Owl Surveys, Protected Tree Inventory, Rare Plant Survey, Jurisdictional Delineation, and a Determination of Biologically Equivalent or Superior Preservation, to support an Initial Study (IS) and a Mitigated Negative Declaration (MND) for an underground and surface water neighborhood storm drain system. Subsequent regulatory permitting completed in 2019.

The proposed storm drain system consists of reinforced concrete pipe (RCP) placed underground in existing roadways, with connector pipes and catch basins/inlet drains along a total length of approximately 3,650 feet. The project will occur in two Phases. Phase I will avoid impacts to the southern outfall within an unnamed natural drainage. Phase II will consist of an outfall upgrade at the southern outfall, with new connector pipe, headwall, rock slope protection, and velocity dissipators.

At the recommendation of UltraSystems, the least environmentally damaging rock slope protection and velocity dissipation structure would be placed at the existing outlet to reduce potential downstream erosion within the unnamed incised channel. UltraSystems identified mitigation measures to reduce potentially significant environmental impacts to less than significant levels, for air and noise, protected trees, and jurisdictional waters containing federal and state riparian habitats. UltraSystems participated in and will continue to participate in the Pre-DBESP meetings with the Regional Conservation Authority, during the final planning stages of the project.

The City design team revised the storm drain system plans to allow retention of minor surface flow into urban forested areas, while controlling flood waters underground through the San Timoteo Foothill Neighborhood, and eventually exiting as surface flow into a downstream jurisdictional riparian area.



Two pre-DBESP meetings were held to determine the extent of jurisdictional waters that were manipulated by City residents to prevent storm flows onto their properties, and adjust permitting requirements accordingly.

#### **JURISDICTIONAL PERMITTING - SEEFRIED INDUSTRIAL PROPERTIES WAREHOUSE**

*Client: FCS International, Inc. (dba FirstCarbon Solutions)*



UltraSystems Environmental, Inc. (UltraSystems) provided services to amend the existing permit applications (notifications), including the Lake and Streambed Alteration (LSA) to the California Department of Fish and Wildlife (CDFW) and the Waste Discharge Requirement (WDR) to the Regional Water Quality Control Board (RWQCB). Additionally, UltraSystems coordinated with the resource agencies and provide project management to support the development of the project.

UltraSystems provided the following consulting services to amend the regulatory permitting notifications:

- Revisions to the CDFW LSA Notification
- Revisions to the RWQCB WDR
- Review of the Incidental Take Permit under Section 2081 of the California Fish & Game Code
- Review of the Biological Resources Assessment to ensure consistency with the permit notifications
- Ongoing coordination with the resource agencies concerning regulatory permitting

#### **ENVIRONMENTAL MONITORING AND REPORTING - BOULDER AVENUE IMPROVEMENTS**

*Client: TKE Engineering*



UltraSystems Environmental, Inc. (UltraSystems) is providing Environmental Monitoring and Reporting to the City of Highland for their Boulder Avenue improvement project. The project sought to replace the existing curbs, gutters, concrete pavement and signage and replace it with newly constructed PCC curbs, ramps, driveways, median curb, landscape, street and trail lighting, decorative street signage and architectural treatment existing sound wall and cape seal located on Boulder Avenue from Greenspot Road to San Manuel Village Plaza (Highland Avenue). UltraSystems will evaluate the project site for

compliance, including regular inspections of silt fencing, soil piles, and staged materials such as PVC pipes that could pose hazards to the federally protected San Bernardino kangaroo rat (SBKR). Additionally, nesting bird monitoring surveys will be conducted during nesting season (February 15 to August 31 of any given year) and finally, UltraSystems will be responsible for the preparation of an Environmental Compliance Report, providing results and findings of monitoring surveys. This will include a fully completed biological portion of the Environmental Commitments Record and the MMRP Checklist.

### SUNLAND OILFIELD BIOLOGICAL RESOURCES PRE-CONSTRUCTION SURVEY

Client: Apex Companies, LLC



UltraSystems Environmental LLC (UltraSystems) performed a pre-construction survey for biological resources, with letter report of findings, at the Duke #1 and SMOOT #1 and #3 Sites, within the Bakersfield Commons Project, Kern County, California.

To comply with a request from the Department of Planning for the City of Bakersfield and in accordance with MM-1 through MM-3 of the Environmental Impact Report for the Bakersfield Commons Project (GPA/ZC# 06-1877, February 2010), preconstruction surveys for burrowing owl (*Athene cunicularia*), San Joaquin kit fox (*Vulpes macrotis mutica*), San Joaquin pocket mouse (*Perognathus inornatus*), and nesting birds, including the California horned lark (*Eremophila alpestris actia*), were required prior to construction activities.

This project was within the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) fee area and pre-construction surveys and payment into the HCP mitigation fund were required for this project.

### BIOLOGICAL RESOURCE ASSESSMENT & BAT SURVEYS SLAUSON AVENUE BRIDGE SEISMIC RETROFIT PROJECT

Client: Los Angeles County of Public Works



The project consisted of retrofitting the Slauson Avenue Bridge over San Gabriel River Bridge located in the Cities of Pico Rivera, Santa Fe Springs, and Unincorporated Los Angeles County. UltraSystems biologists conducted a literature review, wetland delineation peer review, and reconnaissance-level field survey, of the biological resources potentially associated with the project site and the surrounding areas. UltraSystems biologists visited the project site to conduct the following general biological surveys: habitat assessment and plant community mapping, general plant survey, general wildlife survey, and wildlife movement evaluation, and bat emergence surveys.

Subsequent to the initial visits, UltraSystems biologists, assisted LACDPW with a streambed alteration agreement revision (as issued by the California Department of Fish & Wildlife), bat exclusion and monitoring plan, bat and nesting bird preconstruction surveys, construction and post-construction mitigation monitoring, and overall project management for the project site and the surrounding areas.

### MIGRATORY NESTING BIRD SURVEYS – ORANGETHORPE GRADE SEPARATION

*Client: Orange County Transportation Authority c/o Stantec*



Orange County Transportation Authority (OCTA) added a bypass lane to Orangethorpe Avenue, re-align power lines, and added sewer lines in the City of Anaheim and Placentia to construct a bridge over the BNSF railway. Tree removal or crown reductions were required to repair sidewalks and driveways damaged by tree growth. Prior to repair activities, UltraSystems biologists surveyed the project site for the presence of active nests for avian species protect by the Migratory Bird Treaty Act (MBTA). Nesting bird activities were monitored and recorded on a weekly basis during nesting bird season throughout the duration of the project. The U.S. Fish and Wildlife Service was

consulted to negotiate a variance for work in proximity to active nests. UltraSystems coordinated with OCTA/Stantec staff to ensure that project activities would continue to protect nests with as few work stoppages as feasible. UltraSystems successfully protected seven active nests of MBTA protected species, including black-necked stilt, Brewer's blackbird, house finch, killdeer, and mourning dove without causing undo project delays. Migratory bird monitoring was completed on time and within budget.

### HUNTINGTON BEACH BRIDGE REHABILITATION PROJECT

*Client: Biggs Cardosa Associates, c/o City of Huntington Beach*



The New Biggs Cardosa Associates Huntington Beach Bridge Rehabilitation project (project) involves the repair and/or rehabilitation of Brookhurst Street Bridge, Magnolia Street Bridge, and Warner Avenue Bridge (bridges). The project is located within three ecological preserves of Bolsa Chica Channel in the City of Huntington Beach, Orange County.

The purpose of the proposed project is to enhance public safety and protect their channels by performing maintenance activities on the three existing bridges in order to restore the integrity of their original design. Parts of the bridges have deteriorated during the last five decades due to normal wear from vehicular traffic and tidal flux through the estuarine ecosystem setting. The concrete barriers of the three bridges are cracked and spalled, with exposed internal reinforcing that has noticeably corroded. Their columns and bent caps have unsound concrete. These aspects of the three bridges' deterioration will result in conditions which are potentially unsafe to the public, and conditions which could compromise water quality in their corresponding channels. Repair and rehabilitation of the bridges is proposed to address these existing conditions.

UltraSystems Environmental, Inc. (UltraSystems) provided a range of regulatory permitting (CEQA and NEPA) and environmental consultation services for the bridge rehabilitation and preventive maintenance projects. These projects are planned within habitats with potential to support listed species such as coastal California gnatcatcher (*Polioptila californica californica*), light-footed clapper rail (*Rallus longirostris levipes*), and California least tern (*Sterna antillarum browni*) and critical habitat. UltraSystems performed biological studies including habitat assessments and biological



resources surveys, wetland delineations, focused species surveys, agency consultations, essential fish habitat determinations, and eelgrass/Caulerpa surveys.

UltraSystems prepared the following documents for the project: Preliminary Environmental Study (PES), Natural Environment Study (NES), Essential Fish Habitat Assessment (EFH Assessment) with Eelgrass Visual Estimate Survey, Wetland Delineation (WetDel), and Initial Study/Mitigated Negative Declaration (IS/MND). The Warner Avenue Bridge project was first scheduled repair and UltraSystems was contracted to obtain the necessary Coastal Development Permit (CDP), USACE Dredge and Fill 404 permit, RWQCB 401 Water Quality Certification, Rivers and Harbors Act Sections 9 and 10 authorization, CDFW 1602 Streambed Alteration Agreement, USFWS Section 7 Consultation, CDFW 2081 Consultation, and preconstruction Caulerpa/Eelgrass Surveys. Finally, a Habitat Mitigation and Monitoring Plan (HMMP), Section 4(f) and 6(f) Programmatic Evaluation, Visual Impact Assessment, Air Quality Technical Study, and Initial Site Assessment Supplement, were completed, as required by Caltrans. UltraSystems served as liaison between the client and resource agencies and advised on avoidance and minimization measures for potential impacts to sensitive species. The Warner Avenue Bridge project is currently approved for construction. The Magnolia Street Bridge and Brookhurst Street Bridge are approved through CEQA and NEPA and are currently in the permitting phase.

### BIOLOGICAL SURVEYS AND MONITORING – ALTON PARKWAY EXTENSION

*Client: Orange County Public Works*

**Award Winning Project** – “Alton Parkway Extension” has been named the “2012 Project of the Year” by the Southern California Chapter of the American Public Works Association (APWA).



Orange County Public Works (OCPW) extended Alton Parkway through the construction of a six-lane divided roadway from Irvine Boulevard to Towne Centre Drive between the Cities of Irvine and Lake Forest. This extension alleviates traffic congestion and accommodates increased trips generated by planned development for the surrounding area. Further roadway improvements were made by constructing drainage facilities for flood control and a Class II bike lane. Prior to construction, a Worker’s Education and Awareness Program (WEAP) was prepared by UltraSystems to instruct construction personnel regarding identification of sensitive biological resources within or near the site and conservation measures. UltraSystems biologists conducted U.S. Fish and Wildlife Service (USFWS) protocol-level, pre-construction surveys and construction monitoring for the coastal California gnatcatcher, least Bell’s vireo, and other sensitive wildlife. Construction monitoring for sensitive biological resources was conducted over a 13-month period that included coordination with construction crews and OCPW to prevent construction stoppage and assist with regulatory compliance. UltraSystems biologists successfully protected five pairs of coastal California gnatcatchers and one pair of least Bell’s vireo nesting around the project site, and avoided construction delays.

### US-395 HIGH DESERT CORRIDOR PROJECT

*Client: Caltrans District 8, c/o AMEC*



As part of the AMEC team, UltraSystems was contracted to perform desert tortoise surveys for the US-395 improvement project. UltraSystems provided certified desert tortoise biologists to survey 30 miles of potential highway alignments for rare vegetation, burrowing owls and desert tortoise near Victorville and Adelanto, California. Survey staff conducted pedestrian presence / absence surveys utilizing gps systems to follow transects along the Project Footprint and Zone of Influence to search for and document tracks, sign, scat and classify burrows.

As recommended in the US Fish and Wildlife Service (USFWS) Survey Protocol for any Non-Federal Action that may occur within the Range of the Desert Tortoise, January 1992, UltraSystems conducted presence/absence surveys for the desert tortoise. Burrowing owls and their sign were identified and recorded.

### GLENDALE NARROWS LOS ANGELES RIVER

*Client: BJD Services, LLC/USACE*

The project area covered the Glendale Narrows Reaches 2A through 6C, within the Los Angeles River in the City of Los Angeles. That area is approximately 6.5 miles long and encompasses 128 acres, and includes concrete and water flow areas. The Glendale Narrows are banked by levies with toes extending into the river bed. The inward sides of the levies are primarily concrete. The sandbar islands, formed over time, have generated intense vegetative root systems from diverse flora.



UltraSystems prepared a National Environmental Policy Act (NEPA) Environmental Assessment meeting the Council on Environmental Quality (CEQ) Regulations for Implementing NEPA (40 CFR, Parts 1500-1508), and implementation procedures established by the Army Corps of Engineers. The draft EA included information and analysis to support the Agency's Finding of No Significant Effect (FONSI) and support findings that project would be consistent with pertinent resource regulations and executive orders. The project also involved protocol-level surveys for least Bell's vireo. Protocol-level surveys were conducted for the State and Federal Endangered least Bell's vireo (*Vireo bellii pusillus*, LBVI) within Reaches 2A, 3A, 4A, 4B, 4C, 4D, 5A, 5B, 5C, 6A, 6B and 6C of the Los Angeles River. These surveys were intended to provide a method of determining future environmental potential for the presence and/or absence of LBVI breeding pairs within these Reaches for the US Army Corps of Engineers (USACE).

## REPRESENTATIVE CLIENTS

The following is a list of UltraSystems' private and public agency clients over the years.

- AKM Consulting Engineers (AKM),
- Alhambra Unified School District (AUSD),
- Alternative Resources, Inc. (ARI),
- AMEC Earth & Environmental (AMEC),
- Antelope Valley Transit Authority (AVTA),
- Berg & Associates, Inc.,
- Biggs Cardosa Associates, Inc.,
- Black & Veatch,
- Bullfrog Energy, LLC,
- Burrtec Waste Industries, Inc.,
- Canyon Land Conservation Fund,
- CH2M (formerly CH2M Hill),
- City of Anaheim,
- City of Chino Hills,
- City of Covina,
- City of Dana Point,
- City of La Mirada,
- City of Los Angeles,
- City of Pico Rivera,
- City of Pomona,
- City of San Clemente,
- City of Chino Hills,
- City of Santa Clarita,
- CNC Engineering, Inc.,
- County of Imperial – Department of Planning and Development,
- County of Kern,
- County of Orange – Department of Public Works,
- County of Orange – Neighborhood Housing Services of Orange County,
- County of Orange –OCTA,
- County of Los Angeles –LACDPW,
- County of Los Angeles – Department of Regional Planning,
- County of Los Angeles –Metropolitan Transportation Authority (Metro),
- County of Riverside,
- County of San Bernardino – Department of Public Works (SBCDPW),
- Downey Unified School District (DUSD),
- EAH Housing,
- EcoTierra Consulting,
- Evergreen Solar Services,
- HDR Engineering, Inc.,
- Hernandez, Kroone & Associates, Inc.,
- Huitt-Zollars, Inc.,
- Imperial Asset Management, LLC,
- Imperial Irrigation District (IID),
- Imperial Valley Solar 1, LLC,
- Irvine Unified School District (IUSD),
- Katz Okitso Associates (KOA),
- Kiewit Pacific Construction, Inc.,
- KTG Group, Inc.,
- Laidlaw Energy Group, Inc.,
- Land Solutions Plus,
- Long Beach Unified School District (LBUSD),
- Los Alamitos Unified School District (LAUSD),
- Los Angeles Regional Interoperable Communications System (LA-RICS),
- MGE Engineering, Inc.,
- Meta Housing Corporation,
- North Orange County Community College District (NOCCCD),
- Oasis Growth Partners, LLC,
- PacRim Engineering, Inc.,
- Palace Plating, Inc.,
- Penco Engineering, Inc.,
- Quail Ridge Partners, LLC,
- Samitaur Constructs,
- SCS Engineers,
- SDG & Electric Company,
- Shaw Environmental, Inc.,
- Shimmick Construction Company, Inc.,
- Southern California Edison (SCE),
- Southstar Engineering & Consulting, Inc.,
- Sparano & Mooney Architecture, Inc.,
- Stantec,
- Stewart Filmscreen Corporation,
- Tenaska, Inc.,
- Tetra Tech, Inc.,
- United Inspection & Testing,
- U.S. Army Corps of Engineers (USACE),
- U.S. Department of Agriculture (USDA),
- U.S. Department of Navy – NAVFAC,
- Vanir Construction Management, Inc.,
- Willdan Engineering,





UltraSystems  
environmental • management • planning

16431 Scientific Way  
Irvine, CA 92618  
P: (949) 788-4900 | F (949) 788-4901  
[www.ultrasystems.com](http://www.ultrasystems.com)