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GEI Consultants Environmental Insights

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People Updates

GEI's Growing Environmental Practice Group



Summer Pardo is the latest edition to GEI's Environmental Practice Team. She joined GEI's Sacramento office as a Principal Biologist. Summer brings more than 20 years of experience conducting aquatic resources delineations and special-status species assessments and surveys and leading permitting and environmental compliance for large-scale projects. She says, "I'm excited for a fresh start with GEI's talented team of environmental professionals and to continue providing excellent service to my clients."



Leslie Parker, a Senior Ecologist, is the latest addition to GEI's Biological Resources Team. Leslie is a Professional Wetland Scientist with over 13 years of experience conducting habitat assessments, jurisdictional delineations, rare plant and special-status species surveys, and large-scale vegetation mapping and sampling, as well as developing impact analyses and mitigation plans, full suite regulatory permitting, and CEQA/NEPA biological resources section development. She has also been an International Society of Arboriculture (ISA) Certified Arborist for 8 years and holds a Tree Risk Assessment Qualification, providing another important environmental service for projects.



Kristin Smith is a Senior Biologist and Wetland Scientist, and is the latest addition to GEI's Permitting Team. She has over 12 years of experience in environmental permitting and compliance, focusing primarily on Clean Water Act Sections 401 and 404, including aquatic resources/wetland delineations, Porter-Cologne Water Quality Control Act, California's Lake and Streambed Alteration Agreements, state and federal Endangered Species Act consultations, and biological resources sections required under the California Environmental Quality Act.



Erick Cooke has joined GEI in Sacramento, CA, as a Senior CEQA/NEPA Project Manager. Erick brings more than 20 years of experience leading water resources planning, flood management, and habitat restoration projects. "His deep experience with NEPA and CEQA analysis and commitment to helping our clients achieve their goals make him a great fit for our team" says Drew Sutton, CEQA/NEPA Practice Leader at GEI. Erick has led water supply, flood risk reduction, water and wastewater infrastructure, and floodplain restoration projects for federal, state, and local water supply and flood management agencies in California.



Katelyn Matroni, an environmental planner who specializes in water infrastructure at both the project- and program-level, has joined GEI as a Senior CEQA/NEPA Project Manager. Katelyn brings over 7 years of experience preparing CEQA and NEPA documentation, and she specializes in management of both multi-level infrastructure and community development projects with both private and public clients. As she is based out of GEI's Carlsbad office, Drew Sutton (CEQA/NEPA Practice Leader) says that Katelyn's "CEQA/NEPA expertise and long experience with water projects is a great asset as we continue to grow our practice in Southern California."

People Updates (continued)

Staff Certifications



In March 2023, GEI wetland scientist **Kristin Smith** earned her USFWS Recovery Permit for federally listed large branchiopod wet season surveys in Oregon and California. While Kristin is a well-rounded wildlife biologist and wetland scientist, she especially enjoys conducting benthic macroinvertebrates studies sometimes required for water quality and/or stream health assessments.



GEI Senior Restoration Ecologist **Dr. Jennifer Burt** was recently designated as a Certified Ecological Restoration Practitioner (CERP) by the Society for Ecological Restoration (SER). This professional certification program is intended to encourage and guarantee that practitioners meet a high professional standard for on-the-ground experience and knowledge base in ecological restoration design, implementation, and monitoring. The CERP program additionally requires annual documentation of approved continuing education credits in ecological restoration to maintain CERP status.



People Updates (continued)

GEI Staff: Leaders in Our Practice

GEI Supports TechWomen Delegation Trip

In fall of 2022, GEI's Environmental Planner **Melinda Mohamed** participated in a U.S. State Department-sponsored program called TechWomen as a Professional Mentor to Claudette EL Hajj, an engineer and water quality specialist from Lebanon. However, as part of the full program, the State Department also sponsors two delegation trips to participating countries every year. Held for the first time since the onset of the COVID-19 pandemic, this year's delegation trips were Morocco and Kazakhstan. Melinda was honored to be chosen as a delegate for the 2023 cycle and journeyed to Morocco from February 24 to March 3, 2023.

As part of the program, Melinda participated in:

- A welcome and briefing on U.S./Morocco relations at the Moroccan U.S. Embassy.
- A celebration of 10 years of TechWomen in Morocco where U.S. Moroccan ambassador Puneet Talwar awarded the 2022 Moroccan TechWomen team for their winning project—a nationwide warning system for wildfires threatening the nation's argan oil orchards.
- Two pitching events for the Moroccan Center of Innovation and Social Entrepreneurship, as well as helping advise on a start-up strategy.
- The official launch of the Titrit app — a mentor/mentee connection platform aimed at including 50,000 Moroccan girls from the age of 8-18 in STEM — at the Islamic World Educational, Scientific and Cultural Organization.
- Speed mentoring to secondary-aged girls interested in STEM careers, hosted by Orange Business Services.
- A tour of the Mohammed VI Polytechnic University, including a tour of the state-of-the-art International Artificial Intelligence Center of Morocco and rapid-fire presentations from TechWomen U.S. delegates and University professors.

In addition, Melinda helped facilitate a talk and discussion on water quality with secondary-aged girls at Centre de Formations et des Rencontres Nationales, led a workshop with children on biodiversity for International Wildlife Day at the historic Takaddoum Primary School, and led a workshop on elevator pitching to university and recent graduates at the Institut Agronomique et Vétérinaire Hassan II.



Melinda Mohamed presenting at TechWomen



2023 TechWomen Participants in Morocco

People Updates (continued)

GEI Staff: Volunteering in Our Community Sacramento Office Sponsors Women Build 2023

Our teams in the Sacramento and Oakland offices know a thing or two about building projects. The Sacramento team sponsored Habitat for Humanity’s month-long Women Build 2023. This annual event brings together hundreds of women from all walks of life to address the housing and community crisis affecting families in Sacramento and Yolo Counties.

Women Build promotes empowerment, solidarity, learning, and pride in the community, and the event embraces GEI’s partnership model and our three cultural committees:

- DE+I – the event brings attention to the systematic barriers of affordable housing during Women’s History Month
- Sustainability – the homes are highly efficient and include green energy options and solar power/EV charging stations
- GEI Gives Back – GEI was an event sponsor, and volunteers donated their Saturday to work onsite helping to build the homes

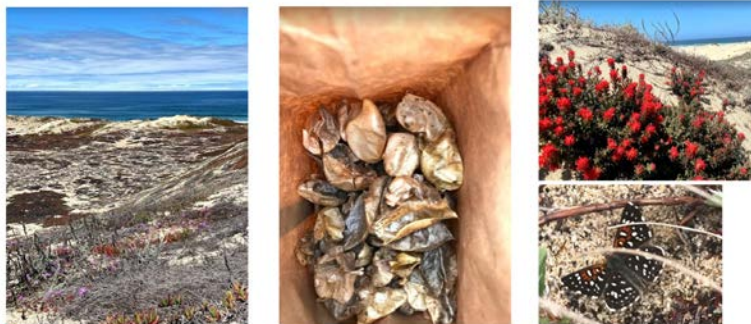
Volunteers worked in a collaborative atmosphere alongside future Habitat homeowners in Sacramento to make a difference in the vital issue of affordable housing and equity building.



GEI Staff Participate in Engineers and Scientists in Schools Week

In March, GEI wildlife biologist **Kelly Fitzgerald-Holland** and restoration ecologist **Carol Maxwell** participated in “Engineers and Scientists in Schools Week,” which is a collaboration between the Tuolumne County School District and the San Francisco Public Utilities Commission. The event aims to promote science, technology, engineering, and math (STEM) education and encourages students in grades K-12 to explore STEM fields. This year’s event brought together a team of volunteers from eight organizations, including GEI, to 32 classrooms of K-12 students throughout Tuolumne County. Kelly talked with 3 different classes (1st, 2nd, and 3rd grades) at Curtis Creek Elementary, discussing the ecology of a rainforest and exploring different techniques wildlife biologists use to survey for different animals. Carol talked with a 2nd grade class at Sonora Elementary and a 3rd grade class at Jamestown Elementary School, sharing what a restoration ecologist does, with a particular focus on the water cycle.

Seed collection and surveys



People Updates (continued)

Experts in Our Fields

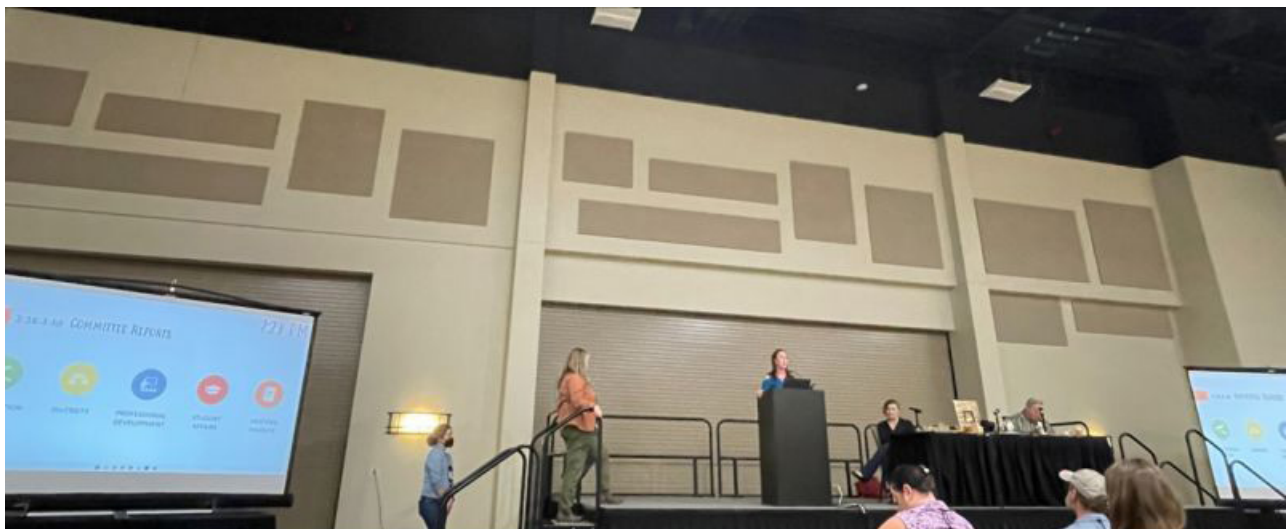
Leaders in the Wildlife Society

In early February, **Kelly Fitzgerald-Holland** and **Melinda Mohamed** attended the annual meeting for The Wildlife Society (TWS), Western Section, in Riverside, CA. The Western Section celebrated its 70th anniversary in part with a visit from TWS International CEO, Ed Arnett. This meeting is an occasion for wildlife and environmental professionals from California, Nevada, and Hawaii to meet annually and communicate research findings, concerns, and other issues in wildlife conservation and management.

As the Western Section representative on TWS' Certification Review Board, Kelly led workshops for aspiring wildlife biologists seeking to attain certification. And as the Section's Conservation Affairs Committee Chair, she led the committee's meeting, which included identifying policy priorities to focus on in 2023 – 2024, and outreaching to TWS members to encourage their participation in science policy. Melinda judged students' oral and poster presentations, as well as attended TWS Western Section's Diversity Committee meeting, helping to formulate the committee's goals for the year. Kelly and Melinda brought back highlights to share with the entire team of GEI environmental professionals, and we will use the knowledge gained from this year's annual meeting in work with our clients:

- A keynote presentation on free-roaming horse and burro management on federal land
- Research on western pond turtle (*Actinemys [or Emys] marmorata*; federal candidate; California species of special concern) upland habitat survey methodology in anticipation of the species potential listing on the Endangered Species Act
- An update on California's three gray wolf (*Canis lupus*; federal and California endangered) packs, including pack size estimates and estimates of the species' future
- Utilizing artificial intelligence for rapid wildlife species identification in mass camera-trapping surveys
- Restoration techniques for giant gartersnake (*Thamnophis gigas*; federal and California threatened)
- Using open-source ArcGIS Field Maps application to efficiently collect data on large-scale surveys

However, multiple presentations on functionally extinct and other rapidly declining species, as well as the capstone presentation by Joel Sartore — National Geographic Photographer and Explorer, perhaps most famous for his Photo Ark that documents species on the brink of extinction — highlighted that the most devastating impacts of climate change have already begun and heavily threatened taxa have already been lost. A sobering message for the end of the meeting, and a stark reminder that while to many, California's legal environmental protections may be logistically and financially cumbersome, they are aimed at preserving our most charismatic nonrenewable resources and are part of what makes our state truly unique on a global stage.



Kelly Holland providing an update on the Conservation Affairs Committee to the Section Member's Meeting

Practice Updates

GEI Receives Diversity, Equity, and Inclusion Award

GEI was honored to receive an award from the Environmental Business Journal in recognition of our environmental industry achievements in 2022 under the category of Diversity and Inclusion. GEI takes a broad view of diversity and inclusion and in 2022 added “Equity” to our Diversity, Equity + Inclusion Committee name and focus. GEI’s DE+I committee is focused on staff education and engagement and achieved a voluntary attendance reaching approximately 50% of the staff through at least one DE+I education/engagement event. In 2022, the committee has provided education and resources to staff members throughout the year and expanded on GEI’s partnership with the National Society of Black Engineers; established a new partnership with Thrive Scholars to help support the STEM student pipeline; and launched GEI’s first company-wide employee resource group: GEI X2 to support women staff. Our 2023 initiatives include expanding the diversity of our supply chain and developing a more diverse pool for recruitment of entry-level employees.



New Leadership in Our Ecological Restoration Practice



The Environmental Planning Group is excited to announce that **Lynn Hermansen** will be stepping into the role as Ecological Restoration Practice Leader. Lynn, a senior restoration ecologist and project manager with 25 years of field and consulting experience, joined GEI in 2015 as part of the 20+ environmental staff to help build up the now thriving environmental planning practice in GEI’s Sacramento office.

Her career has centered on work in the Bay Area and Sacramento Valley, and she has executed multi-benefit ecosystem planning ranging from complex high-level master plans for the Sacramento River watershed to project-specific mitigation design for public infrastructure projects. Her habitat design work has included re-establishment of floodplain habitat, wetland and riparian creation and enhancement, bioengineering and stream channel re-alignment, habitat creation and conservation for special-status species, invasive species management, and facilitating long-term preservation mechanisms for open space habitat on over 30 different projects in Northern California. She is excited to continue supporting our clients in the Central Valley at the California Department of Water Resources and local flood agencies on innovative projects and to continue expanding our restoration work in the Bay Area.

Practice Updates (continued)

GEI's Wildfire Risk Mitigation & Adaptation Services

GEI's ecologists, planners, and water resource experts have been helping our clients plan for, and recover from, major wildfires for years. From accurate wildfire risk assessments, to preventing post-fire landslides and water quality impacts, we have helped our clients protect their most valued resources before and after the worst hits.



Rebecca Verity, West Region Climate Program Manager, has been working at the intersection of California's ecological and infrastructure sectors for over 20 years. Rebecca's expertise ties together four key elements: state ecological resources, critical infrastructure, climate and wildfire adaptation, and public service. She has a particular interest in innovative climate solutions which incorporate social equity, nature-based and nonstructural solutions, and forward-facing risk management.

A new hire this year has added extra depth and experience to our wildfire risk reduction work.



Joshua Wilkins, Senior Wildfire Risk Manager, has over 27 years of firefighting experience. Joshua is a retired San Bernardino Fire Captain who provided command and control at over 40 of the 60 fire stations. He specializes in Wildland Urban Interface operations, mitigation, and prevention practices. He also curates innovative technologies that can help wildfire prevention and suppression using remote sensing and existing data assets. Josh's expertise in wildfire data, drones, and technology adds risk reduction skills such as: using drones for fuel and ignition source analyses in remote areas; deploying wildfire sensors in remote regions to speed ignition detection and get firefighters on site faster; and adding first responders' perspective to Asset Protection Plans and Emergency Plans, so out-of-area firefighters can find what they need and save what matters most.



GEI's California staff experience at each stage of the wildfire risk cycle

Practice Updates (continued)

Tracking Updates in Environmental Policy

Proposed Listing of California Spotted Owl. On February 22, 2023, the U.S. Fish and Wildlife Service (USFWS) published a proposed rule to list two distinct population segments (DPSs) of the California spotted owl (*Strix occidentalis occidentalis*). The Coastal-Southern California DPS is proposed to be listed as endangered because USFWS determined it does not have a strong ability to withstand normal variations in environmental conditions, persist through catastrophic events, or adapt to new environmental conditions throughout its range. The Sierra Nevada DPS is proposed to be listed as threatened because it has a reduced ability to adapt to changing environmental conditions due to habitat loss and fragmentation from wildfires. However, USFWS determined this DPS can still withstand normal variation in environmental conditions and some parts of the population remain in stable condition. Therefore, USFWS included a 4(d) rule for this DPS that exempts forest fuels management activities that reduce the risk of large-scale high-severity wildfire from the take prohibition. The public comment period for the proposed rule ended April 24, 2023.

Proposed Changes to ESA Section 10. On February 8, 2023, the Department of the Interior (DOI) announced that the USFWS is proposing a new rule to “strengthen voluntary conservation opportunities under the Endangered Species Act (ESA).” Proposed in part to signify the 50th anniversary of the ESA, the proposed rule would modify permitting under Section 10 of the ESA by encouraging conservation of species via “voluntary agreements” and making the Habitat Conservation Plan process “clearer, easier, and more efficient.” (Read the DOI statement in its entirety here and the proposed changes here. The proposed rule would also support the Biden administration’s “America the Beautiful” initiative by “potentially preventing listings and assisting with species recovery.”

Other Policy Items. In addition to these policy items, GEI’s environmental staff are tracking a number of other policy updates, including the proposed listing of longfin smelt (*Spirinchus thaleichthys*) and Governor Newsom’s recent Executive Order making it easier to capture floodwater to recharge groundwater, and a revised definition of Waters of the U.S.

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Project Updates

Monterey Sea Level Rise Project Wins Award

GEI's project focusing on adapting a threatened transportation network to sea level rise in Monterey, California, won an APWA Award of Merit for Planning Projects, February 2023.

GEI Contact



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GEI Providing Monitoring Support for Nacimiento Dam Spillway

GEI biologists provided rapid response assistance to the Monterey County Water Resources Agency for their Nacimiento Dam Spillway Storm Damage Repair Project. The project involved stabilizing and repairing the slopes around the plunge pool at the base of the Nacimiento Dam Spillway. Due to the storm season, Lake Nacimiento received a high volume of water in a short amount of time. This led to the need to release substantial flows down the spillway into the plunge pool. The volume of water released resulted in destabilization of the banks of the plunge pool and required emergency action. GEI biologists supported the agency with pre-construction surveys and construction monitoring to meet conditions of the permits, in particular the National Marine Fisheries Service's conditions for anadromous fish protection.

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