

# Supporting Tribes Through Infrastructure, Environment and Resilience

“

The Peacemaker taught us about the Seven Generations. He said, when you sit in council for the welfare of the people, you must not think of yourself or of your family, not even of your generation. He said, make your decisions on behalf of the seven generations coming, so that they may enjoy what you have today.”

*Elder Oren Lyons, faith keeper of the Turtle Clan for the Onondaga Nation and member of the Haudenosaunee Confederacy*

Operations in North America are modeled after the four principles of the medicine wheel

North | mental is **THINKING**  
East | spiritual is **SEEING**  
South | emotional is **FEELING**  
West | Physical is **DOING**



# Our Commitment to Tribal Engagement

AECOM's Office of Native Sovereign and Tribal Relations fosters positive relationships between our industry, public sector clients, and Indigenous representatives through meaningful engagement and communication. We build improved understanding of project needs, strengths, and weaknesses – so potential impacts can be mitigated collaboratively. We have delivered over one hundred projects involving Native American communities across North America, setting new standards for industry-wide best practices. We understand the needs of the communities we work with because the Office of Native Sovereign and Tribal Relations at AECOM is led by Indigenous people.





Purposeful Engagement



Clear Processes



Holistic View



Strategic Action



Self-Awareness

## AECOM's Office of Native Sovereign and Tribal Relations (ONSTR)

AECOM is one of the only major infrastructure and environmental companies to have a dedicated team of professionals that specialize in Tribal Relations.

ONSTR has developed specific policies and procedures to help others within our company and the subcontractors we employ to build skills, behaviors, and mindsets that maximize workplace contributions. We expect our personnel to adhere to the seven generations planning principle. One must consider how decisions today will impact the next seven generations. We instill in our staff an understanding of the dynamic nature of large-scale challenges related to environmental and historical injustices, prioritizing the need for integrating five key practices in our work. Benefits the ONSTR brings:

- Adherence to internal/client equity and diversity policies and cultural sensitivity issues through technical quality review
- Partnerships with Native-owned and Tribal businesses including SBA 8a certified subcontractors
- Embedded diversity/equity throughout contracting and project lifecycle, mitigating for impacts to Indigenous communities
- Recruiting opportunities for Native Americans, Hawaiians, and Alaskans



Learn more about our ONSTR services - [tribal.relations@aecom.com](mailto:tribal.relations@aecom.com)



# Community Resilience Through Effective Grants Management

As proven partners with federal, state, local, and tribal agencies, our experts can help navigate program administration and optimize funding.

## Proven Delivery

- Deliver equitable and fair service to communities regardless of geography or demography
- Protect the privacy and sensitive information of applicants
- Provide efficient program design for quality applicant experience while maintaining accountability
- Fully leverage community resources for cost/time savings through robust outreach plans
- Identify and reduce program risks
- Monitor contractual and programmatic compliance
- Optimize program resources and streamline program processes
- Develop and recommend innovative solutions to solve complex problems
- Proactively work to detect potential fraud, waste, and abuse in advance of funding or disbursements
- Reduce recapture of obligated funds

## FEMA HAZARD MITIGATION ASSISTANCE PROGRAMS NATIONWIDE

Full-time, on-site staff augmentation at FEMA headquarters, plus subject matter expert support for program strategy, guidance, and outreach. Facilitated the grants process from application through closeout of \$7 billion. Reviewed thousands of grants for states, local governments, and tribes. Within two weeks of coronavirus pandemic onset, led transition from a week-long, in-person national grant review panel process to a cost-effective, three-day virtual review for Flood Mitigation Assistance grants.

Accepting a grant means accepting its obligations, which can be extensive and time consuming. AECOM has experience in developing quarterly/annual reports, preparing for external audits, and serving as day-to-day liaisons between awarding agencies and awardees.



# Integrated Engagement Services

AECOM supports a full range of environmental and Tribal engagement services, including:

- Consultation, mediation, and conflict resolution
- Permitting support and agency coordination
- Cultural resource management
- Cultural awareness training
- Environmental assessment training and process advice
- Federal, state, provincial and territorial environmental assessments
- Treaty rights, Indian law, and governance advice support
- Indigenous-business partnerships
- Climate change resiliency
- Community capacity building
- Equity, diversity, and inclusion

## **Complementary Environmental and Engineering Services**

- Socio-economic impact assessment and alignment
- Environmental performance monitoring
- Site assessment/remediation/risk assessment
- Land use planning and infrastructure
- School/facility design and construction
- Water resources management
- Cumulative effects assessment
- Adaptive management plans for sensitive ecosystems
- Broadband internet infrastructure
- Renewable energy





# Small Business Program

AECOM's award-winning Small Business Program is integral to our program management approach.

- Complements our technical expertise with qualified resources from the small business community.
- Constantly cultivating relationships with new small and diverse firms to explore opportunities that better serve our clients.
- AECOM has service agreements with several Tribally-owned and SBA 8(a) certified businesses.
- We also participate in the SBA Mentor-Protégé program and have entered into many joint ventures over the years.



## Some of Our Small Business Relationships\*

### **FPM Remediations, Inc.**

An Alaskan Native Corporation owned Small Disadvantage, 8(a), HUBZone firm. AECOM has a Joint Venture established with FPM and are actively bidding work.

FPM and AECOM have nearly a 20 year history working together on projects from coast to coast, working primarily for DOD. New opportunities include DOD, EPA, and DOE.

### **Street Legal Industries**

An 8(a), HUBZone, Small Disadvantaged and Woman-Owned Small Business specializing in professional services for Federal agencies. AECOM and Street Legal have an SBA-approved Mentor-Protégé agreement in place and a joint venture that can be used for direct awards and competitive small-business set-aside procurements.

### **O'Brien Engineering, Inc.**

An SDVOSB Certified business, AECOM has an SBA Mentor-Protégé agreement and are negotiating a joint venture.

**FPM** Remediations, Inc.  
Environmental Remediation Services  
An **Olgoonik** Company

 **STREET LEGAL**

**OEI**  
O'BRIEN  
ENGINEERING, INC

*\* The three businesses shown have formal Mentor-Protégé agreements in place, but we work with hundreds of small businesses every year.*

# AECOM's Suitability for Action Viable Engagement (SAVE) Model

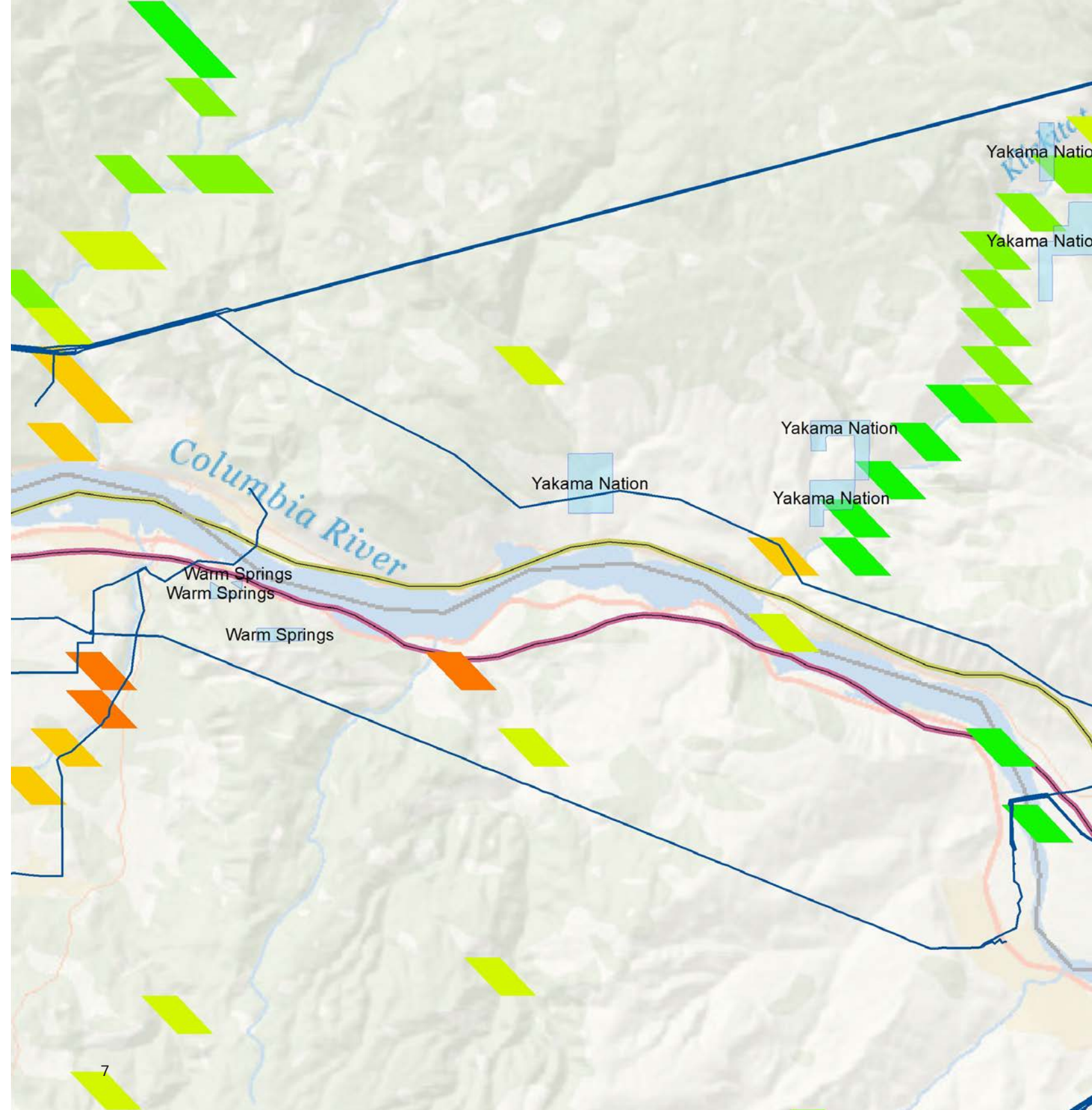
This GIS-based tool helps infrastructure planners navigate intricacies specific to working with or for Tribes, and on public or Tribal land.

The SAVE model includes:

- Historic land cession data
- Treaty information
- Contemporary boundaries of reserve land and trust land
- Additional vectors for tribally specific socio-economic, historical, and cultural concerns

AECOM's technical experts understand the nuances of negotiating current and evolving legal contexts and tribal issues — and have a long history of working with both project proponents and Native Americans.

Ongoing communication allows key information to be shared, which supports plan and project decisionmaking.





# Environmental Justice and Socio-economic Concerns

While specific instances of agency consultation might focus on particular resources or a single land management project, Tribal concerns often span programs simultaneously to include environmental justice and socio-economic concerns. Our personnel have documented experience facilitating discussion centered on social issues and financial matters.

Our experience includes:

- Proficiency in Tribal Employment Rights Ordinance compliance and Indian Law
- Strong business partnerships with dozens of Tribes and Tribal-owned firms
- Service agreements with several Tribally-owned and SBA 8(a) certified businesses
- Participation in the SBA Mentor-Protégé program and many joint ventures

## TRIBALNET 2020 GEOSPATIAL AWARD OF EXCELLENCE CORONAVIRUS RESPONSE, NAVAJO NATION

AECOM received this award for coronavirus response work with the Navajo Nation. The team developed a GIS-based portal with the Navajo Housing Authority to identify and deploy critical resources to help community members facing hardships. Visualizations communicate the disease's extent to help leaders better understand where these valuable resources need to go.





# Role of Infrastructure in Community Capacity Building and Inclusion

Through social license and community engagement, AECOM is advancing capacity building efforts with Tribal communities. Despite existing economic and regulatory barriers, AECOM has identified and implemented solutions to install broadband and produce renewable energy and/or microgrids on Tribal land or public land with Tribal trust obligations. Tribes, as well as companies in partnership with Tribes, use market mechanisms to incentivize development.

Our design and construction expertise can also help build schools and other community facilities. Our staff have grant-writing experience that can help fund crucial infrastructure projects that benefits Tribes.

Ways Infrastructure Promotes Capacity Building for Tribes:

- Bring opportunities for economic growth to an area
- Offer job and skill-building opportunities for tribe members
- Increases accessibility to online schooling and training through broadband installation

## Equinor Offshore Wind Development, Eastern United States

Served as the Tribal Liaison for seven Tribes:

- Delaware Nation
- Mashantucket Western
- Pequot Tribal Nation
- Mashpee Wampanoag Tribe
- Narragansett Tribe
- Wampanoag Tribe of Gay Head-Aquinnah
- Shinnecock Nation

Engaged with Tribes for Section 106 pre-survey and coordination for government-to-government discussion related to BOEM-regulated Lease Areas for off-shore wind energy development.





# Broadband Internet Services

AECOM provides the full life-cycle of broadband project implementation phases:

- Build and Investment Optimization
- Feasibility & Readiness
- GIS/Mapping
- Stakeholder Consulting
- Grant Consulting & Management
- Strategic Planning
- Project & Program Management
- Commercialization
- Network Architecture & Design (Wired and Wireless)
- Environmental and Right of Way Analysis and Permitting
- Construction Management, Quality Assurance & Quality Control
- Testing, Provisioning and Network Configuration
- Operations & Maintenance and Asset Management

## NTIA TRIBAL BROADBAND, PHASE 1 – ASSESSMENT & RANKING

### NAVAJO TECHNICAL UNIVERSITY (NTU)

AECOM is supporting the Navajo Nation Telecommunications Regulatory Commission (NNTRC) and program management professional services for the National Telecommunications and Information Administration (NTIA) Tribal Broadband Connectivity Program. The single Navajo Nation authorized proposal will request funding from NTIA to remediate Tribal broadband for unserved and underserved locations outlined in the NTIA's Notice of Funding Opportunity. AECOM conducted an independent review of Eligible Telecommunications Carriers' project proposals that will be part of the Navajo Nation's grant submission and used GIS to determine the unserved and underserved communities, ranking 81 potential broadband projects worth approximately \$49M to be part of the NNTRC's NTIA application. The second effort includes AECOM serving as the broadband program manager for NNTRC to oversee any broadband awarded funding and project delivery to deploy crucial broadband facilities to Navajo communities.





# Design/Construction for Schools/Facilities

Today, many institutions are challenged by aging facilities, economic pressures, and technology-driven big business.

Our commitment to institutions includes:

- Providing sustainable quality that stands the test of time
- Honoring the distinctive character of an institution
- Ensuring student and faculty safety on an active campus
- Creating award-winning facilities and campuses that inspire students' minds

We deliver critical infrastructure in the form of state-of-the-art interactive classrooms, iconic mixed-use student centers, enhanced high-tech libraries, the latest trends in student residence halls, and beloved sports venues, to critical infrastructure.

## FACILITY CONDITION ASSESSMENT SERVICES

### NAVAJO NATION

The main objective of this project was to assess housing units and office buildings to provide a recommendation to the NHA and prioritizing repairs to improve the standard of living of NHA tenants. AECOM collected asset management data in the field via hand-held mobile devices and integrated the data into the NHA's LIMS. A web dashboard was developed to enable NHA staff the ability to access the condition assessment data collected during the field evaluations, including reports, data, and photographs.





# Environmental Planning and Water

The environmental planning process not only requires a thorough understanding of methodologies and application of sound science, but also requires effective program control and stakeholder management. AECOM's focus is on:

- Pro-active strategies and proven management plans, assisting concerned parties in focusing on project objectives and goals.
- Developing environmentally sensitive designs by avoiding, minimizing, and mitigating impacts to the maximum extent practicable.
- Providing a full range of services and environmental analyses to support environmental compliance.
- Employing innovative solutions to meet site closure objectives.
- Integrating scientific and engineering knowledge with cost-effective project management, strong communication skills, and an understanding of regulatory strategies and challenges.





# Environmental Planning and Water Projects

## LAND INFORMATION MANAGEMENT SYSTEM

### NAVAJO NATION

AECOM designed, created, implemented, and maintained a geospatially enabled IT infrastructure and integrated GIS web-based system to provide a centralized, secure, and integrated digital repository of accurate NHA land information accessible by NHA users to streamline business processes.

## US ARMY CORPS OF ENGINEERS

### TRAVERSE CITY, MICHIGAN

AECOM was contracted by the USACE to develop feasibility and planning studies to lead the project management, client interaction, permitting, structural engineering and structure removal of a bridge and multiple dams along the Boardman River. The Grand Traverse Band of Ottawa and Chippewa Indians had a vested interest, as they retained their traditional rights to hunt and fish when they signed the 1836 Treaty that ceded much of the land that became Michigan. Dam removal is risky for local residents, and so stakeholder engagement was crucial to reach consensus on the disposition of the dams and the river restoration goals for the communities. Successful removal of the dams fulfilled the goals including full fish passage, in-stream and floodplain ecological restoration.

## IRRIGATION IMPROVEMENT SYSTEM

### HAWAII, UNITED STATES

The Ke'anae and Wailuanui project areas lie within a richly historic cultural landscape composed of a collection of historic properties documented as significant for their association with traditional Hawaiian agricultural activities. Over decades of traditional use, repairs had to be made to protect the integrity of design, materials, and workmanship at the small scale. The larger system as a whole appears to retain integrity, as well as important continuity of historic function, supporting the much larger historic landscape of kalo (vegetable) cultivation, of which it is part. AECOM sought input from the community about the project in several ways, with an emphasis on the kalo farmers and local native Hawaiian groups. Their mana'o (ideas) and comments emphasized the need to keep the 'auwai (irrigation channel) functioning to support the continuing use of these historically significant systems. Based on consultation, the traditional cultural users of the 'auwai are most interested in keeping the irrigation system functioning so the traditional activity of kalo cultivation can be perpetuated.

## KLAMATH RIVER DAM REMOVAL PROJECT

### WESTERN UNITED STATES

AECOM has been supporting cultural resources compliance efforts for the Klamath River Dam Removal project, the nation's largest dam removal undertaking. The removal of four dams spanning Oregon and California affects several tribes with ancestral and contemporary ties to this culturally significant landscape. In advance of the FERC process, AECOM engaged tribes ahead of the Section 106 process and hosted and moderated tribal caucuses. We provided regulatory expertise and early drafts of agreement documents while coordinating with recreation/restoration planners to deconflict cultural resources concerns with future recreational development and post-reservoir restoration. AECOM also assisted with negotiation of contracts with tribal partners to provide cultural resources monitoring and fieldwork during investigation and dam decommissioning, and will be assisting our client in providing for an endowment to support long-term tribal management of cultural resources.

## DAM SAFETY, SECURITY AND EMERGENCY MANAGEMENT

### NAVAJO NATION

This Bureau of Indian Affairs contract is a multi-disciplined A-E IDIQ contract supporting the BIA in ensuring that the approximately 140 high- and significant hazard potential dams received comprehensive reviews, emergency safety inspections, and security assessments.





# Climate Change Resiliency

Natural disasters have grown in intensity and frequency over the last decade. From prolonged drought and catastrophic flooding to superstorms, our population centers and infrastructure are at greater risk. With the tragic loss of life and significant economic losses resulting from natural disasters, solutions that protect people and places, anticipate eventualities and incorporate the ability to recover are of critical importance.

AECOM's adaptation solutions focus on innovative strategies, initiatives and measures aimed at reducing the vulnerability of human and natural systems to current and future impacts. Our team works with communities to mainstream and embed climate risk assessment and adaptation actions as part of established asset management planning, risk management and financial planning procedures.

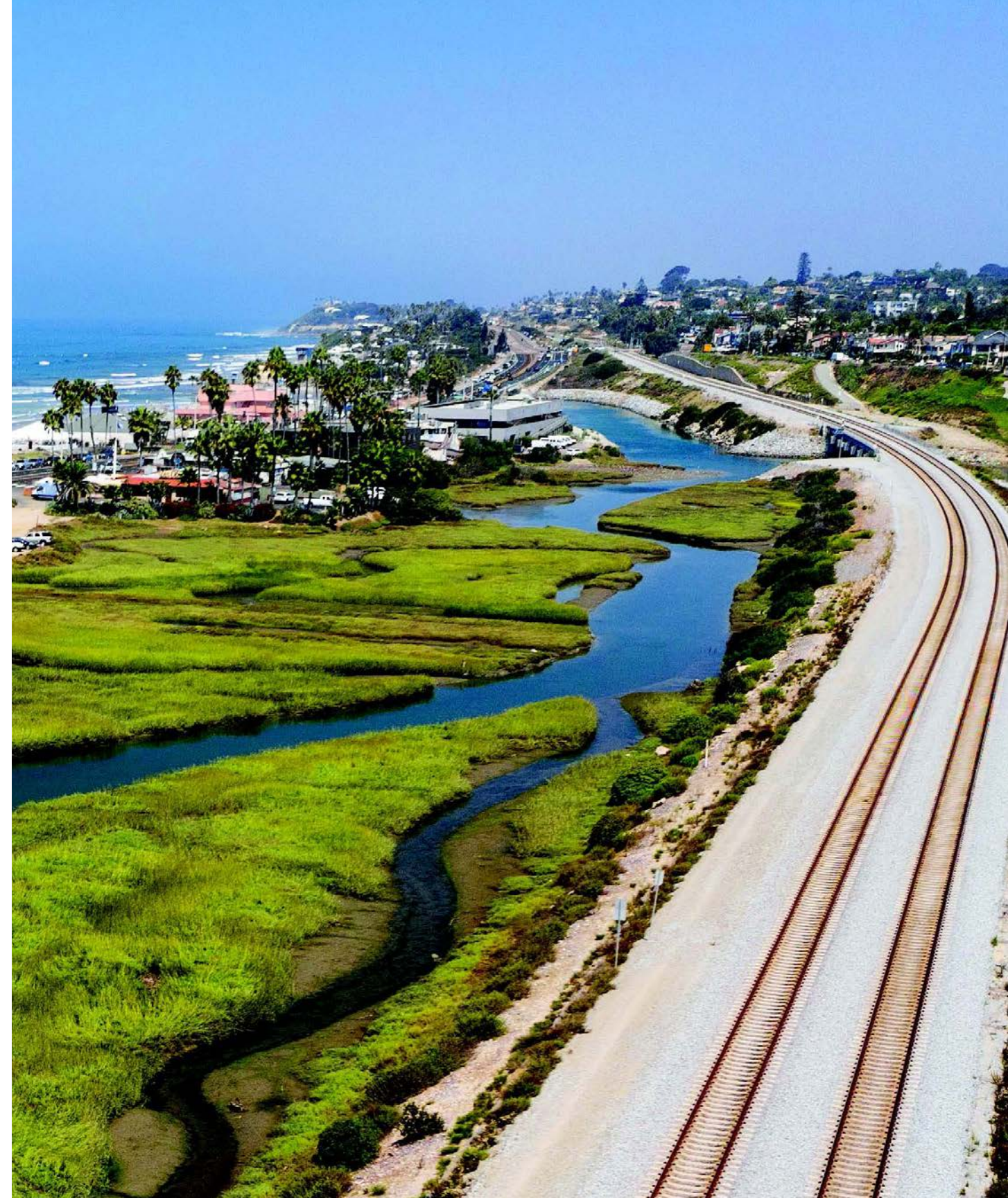
## Areas of Expertise

- Resiliency Planning
- Modeling and Risk Assessment
- Visualizations and Simulations
- Data Collection and Monitoring
- Nature Based Solutions
- Microgrids
- Design Solutions
- Lidar Data Capture and Analysis
- Cost Benefit Analysis
- Planning Tools and Processes
- Identification of Course(s) of Action

## CROWNPOINT FLOOD STUDY AND HAZARD MITIGATION ALTERNATIVES PROJECT

### NAVAJO NATION

Applying innovative technologies, we conducted a flood study and provided alternatives for remediating flood hazards over 7,000 miles. Our team utilized drone data technology and a complex two-dimensional engineering model to map the floodplain in unique project area topography to assess the flood risks. The results are a benchmark for innovation in data collection regarding flood hazard mitigation, and demonstrate the potential of drone technologies to address unique needs on tribal lands and other flood-prone areas. Our work supports the NHA's role in protecting life and property and its vision of housing the Navajo Nation of over 300,000 members by growing sustainable communities.





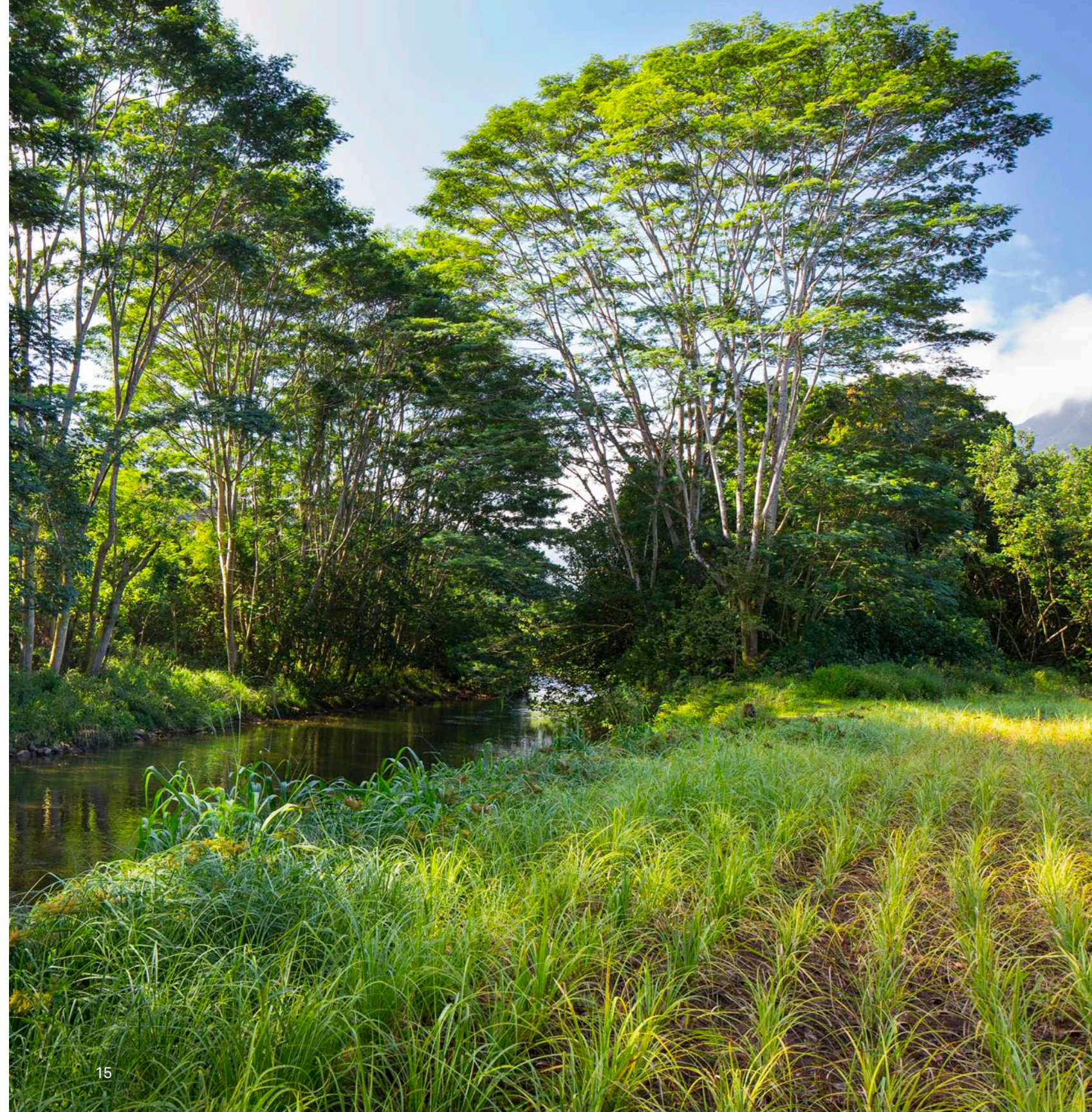
# Cultural Resources Management

Cultural resources are disappearing at an alarming rate. Most communities protect their heritage by requiring that items and areas of cultural patrimony be identified, evaluated, and, if possible, protected before they are affected adversely by proposed ground-disturbing activities.

Projects may be delayed if effects on cultural resources are not recognized and managed early on in project planning. Project proponents can acquire substantial good will and respect if they willingly and honestly address cultural resources/cultural heritage issues before projects begin and incorporate effective measures to minimize or mitigate potentially adverse project effects.

Our expertise includes:

- CRM Planning
- Agreement Documents
- Archaeological Excavations
- Native American Coordination
- Public Outreach





# Cultural Resources Management Projects

## I-95 DIGITAL AND SOCIAL COMMUNITY OUTREACH PROGRAM

PHILADELPHIA, PA

On this infrastructure project, our archaeology/cultural resources team discovered pre-contact Native American artifacts dating back to 3560 B.C. The team created a digital social and community outreach program that made the tremendous number of artifacts beneath a major highway truly come alive.

 Experience the artifacts on the [DiggingI95.com](https://DiggingI95.com) site

## CLEVELAND CLIFFS MINING OPERATIONS TRAINING UPPER MIDWEST, UNITED STATES

AECOM produced leadership values training and tribal relations best practices development for Hibbing and Minorca mining operations. Our work includes drafting a training manual and providing on-site and virtual training workshops.

## CULTURAL RESOURCES MANAGEMENT TRAINING CONFIDENTIAL OIL & GAS CLIENT

On behalf of an Oil & Gas client, AECOM conducted workshops for tribal citizens from Ojibwe Nations across Michigan, Wisconsin, and Minnesota. The training focused on various aspects of cultural

resources management, but specifically the kinds of archaeological materials encountered during survey conducted under Section 106 of the National Historic Preservation Act. One such workshop focused on the types of stone tools made and used by Pre-contact Native Americans, which are frequently identified during field surveys. AECOM's training is based on the principle that the best way to understand artifacts is to learn how to make and use them, a process known as experimental archaeology. The workshop provided a tangible connection to the traditional lifeways of the Native American participants and explored flintknapping, the methods and raw materials used in the manufacture of Pre-Contact tools, as well as how these objects are classified.







## Awards

**2022** ACEC Engineering Excellence Award, Santa Clara Pueblo Canyon Forest Resiliency

**2020** Tribal Net Geospatial Award of Excellence

**2019** URISA Exemplary Systems in Government Award, LIMS

**2018** ACEC Engineering Excellence Award, Detailed Flood Study Crownpoint, NM

**2017** Environmental Business International, Technology Merit Award, Detailed Flood Study Crownpoint, NM

**2016** NAFSMA Excellence in Communications Award, Flooding Awareness Campaign

**2015** Esri Special Achievements in GIS Award, LIMS

**2014** ACEC Engineering Excellence Award, Flood Hazard Identification and Mitigation Project



Learn more about AECOM's Indigenous  
engagement services globally.

<https://aecom.com/indigenous-engagement/>

FOR MORE INFORMATION: [Tribal.Relations@aecom.com](mailto:Tribal.Relations@aecom.com)