

# ACROSS FENCE LINES

Connecting Corporate America to Communities  
through Urban and Community Forestry Programs



*Funded by the U.S. Forest Service*

## CASE STUDY

### Industrial Associations and Nascent Engagement in UCF

Phoenix, Arizona

#### Introduction

The Arizona Mining Association (AMA) and Arizona Rock Products Association (ARPA) each have extensive histories in advocacy, community outreach and engagement in projects both within and beyond regulatory requirements for biodiversity uplift. With corporate engagement in UCF currently minimal or limited in scope, these organizations supported research on corporate priorities and considerations that could increase local companies' engagement with UCF work. The development and distribution of a survey used to inform the *Across Fence Lines* initiative was followed by interviews with local corporate leaders. The outputs of this research have helped optimize the design of revegetation projects, slated for implementation in early 2022, which will engage industry in the Phoenix Valley.

#### The Business Drivers

**Business Driver 04 – Social License to Operate (SLO)** – Strict regulatory requirements govern the extractive industries, but misconceptions and outdated ideas about mining remain active in the public sphere. Environmental outreach beyond regulatory compliance secures company-level SLO while also shifting attitudes around the extractive industries at large.

**Business Driver 06 – Community Engagement** – Survey respondents and interviewees indicated that they were most interested in participating in forestry efforts that augment or support established community engagement initiatives.

#### Alignment with Ten-Year Urban Forestry Action Plan Goals

##### **Goal 1 – Integrate Urban and Community Forestry Into all Scales of Planning –**

Recruitment of thought partners for survey creation, dissemination and analysis produced alignments with the Maricopa County Parks and Recreation Master Plan, integrating UCF collaboration with established regional efforts.

**Goal 3 – Cultivate Diversity, Equity, and Leadership Within the Urban Forestry Community**

– While corporate entities in the area often participate in urban greening initiatives, they typically assume a limited role as funding partners. Wildlife Habitat Council outreach sought to engage companies as active stakeholders in the entire process, from design through implementation and monitoring, to broaden the scope of perspectives and ideas represented in the region’s urban forestry culture.

**Goal 4 – Strengthen Urban and Community Forest Health and Biodiversity for Long-Term Resilience** – Resilience to climate change, specifically to worsening urban heat island impacts, is a core component of site selection in urban forestry projects in the desert southwest.

**Goal 7 – Increase Public Awareness and Environmental Education to Promote Stewardship** – Companies in the Phoenix Valley have collaborated with regional knowledge partners to develop environmental education curricula to engage local students in existing revegetation efforts.

**The Community**

In 2021, Maricopa County reported 113 confirmed deaths that were either heat-related or directly caused by dangerously hot summer temperatures, more than double the reported heat-related deaths from the previous year. Phoenix is one of the largest growing cities in the U.S., and as a result the built environment is expanding, resulting in more widespread and more extreme urban heat island impacts. Phoenix’s low temperatures are 10-15 degrees higher in urban areas compared to rural, undeveloped areas nearby. To address these challenges, Phoenix aims to achieve 25% tree canopy coverage by 2030, a canopy increase which is projected to reduce temperatures by 8 degrees when compared with unforested areas.

**Challenges**

Forestry resources tend to focus on best practices for planting efforts in temperate climates. Many of these practices are not applicable to UCF projects in desert settings, which require close consideration of species selection, site selection, the timing of plantings and the need for drought-conscious maintenance. In community contexts, desert-specific best practices may conflict with local regulations, as many HOAs and municipal landscaping ordinances place constraints on species selection. Often, these ordinances dictate the planting of ecologically inappropriate species. Even locations without such constraints may heavily feature these species because of social mores that favor them. In these cases, UCF efforts may need to begin with the removal of competitive, invasive or water-intensive tree species to free up groundwater. Community members may find these removal activities counterintuitive to a forestry effort, necessitating educational outreach on appropriate species selection.

Many highly impacted communities in this region consist of immigrants who speak Spanish as a primary language. To build genuine trust between members of these communities, corporate-led UCF efforts must involve the transcreation of educational materials and pre-planting outreach.

## Data Collection & Conclusions

- Surveys showed high levels of engagement with existing environmental education efforts and strong interest in initiating new environmental education efforts. Businesses found UCF projects with an associated educational activation more appealing.
- While 57% of respondents indicated the highest level of employee interest in participating in a UCF effort (and no respondents indicated zero interest), 38% of all respondents expressed concern that employees' day-to-day responsibilities would limit or prevent field time. Production of accessible resources to facilitate UCF event planning, or participation in externally organized events designed with business needs and operations in mind, allows employees to translate their enthusiasm into action without burdening busy them with the complications of organizing a technically complex event.
- No respondents indicated knowledge of existing municipal or regional canopy goals. While corporate-facing projects can be designed to support and align with canopy goals, many companies may instead prioritize alignment with internal goals.
- When asked to consider what kind of support they'd be most interested in providing to a UCF effort, 78% of survey respondents indicated interest in either donating supplies for consumptive use (such as mulch) or lending equipment for time-limited use in planting events. Clearly defined and articulated options for engagement produced the highest likelihood of support.
- When asked what benefits they expected to see from engagement in UCF efforts, the top three benefits cited by respondents were:
  1. Community engagement
  2. Employee participation
  3. Positive media coverage

Deliberate inclusion of these considerations by nonprofit or community organizations seeking to engage corporate partners in a UCF effort may increase the likelihood of successful collaboration.

## Opportunities

**Translating Industrial Resources into UCF Action** — With experience in remediation and reclamation activities driven by regulatory pressure, mine employees already have the technical knowledge and skillsets needed to implement successful UCF efforts. Given their

access to machinery, rock material, employee volunteers and vegetation, there are many opportunities for mining operations to make in-kind contributions, leading to cost-effective project activations. Thought partner recruitment for survey design and dissemination poised this effort for easy replication within other, similarly resourced sectors such as ranching, auto manufacturing and the tech industry.

**Addressing Green Space Inequity** — Existing green spaces and public parks are situated primarily in the outskirts of Phoenix, rendering them inaccessible to many minority residents and those of a lower socioeconomic status, who often live in interior parts of the city and lack personal transportation. Companies in Phoenix have a prime opportunity to address this inequity, however, as large parcels of land are held by the private sector, and the extractive industry in particular, in areas with limited access to green space. By engaging with, and leveraging the support of, the private sector earlier in the UCF project design process, project teams can reimagine legacy industrial sites as remediated, community-oriented green space. Collaboration with Maricopa County Parks and Recreation as the department rewrote its ten-year master plan allowed for industrial engagement in the planning process.

**Promoting Place-Based Environmental Education** — Additional opportunities for education and stewardship development arose when multinational building materials company CEMEX sponsored creation of an outdoor learning space at Sonoran Sky Elementary School. The space included a small revegetation plot dedicated to teaching students about the value of maintaining pollinator habitat, presenting an opportunity for development of a state standard-compliant educational curriculum in partnership with Maricopa County Parks and Recreation’s pollinator education campaign. Connecting community forestry and revegetation sites with the curriculum to illustrate their benefits has created powerful opportunities for collaborative education.

## Partners

- Arizona Department of Environmental Quality, Air Division
- Arizona Mining Association
- Arizona Rock Products Association
- Arizona State University
- Bayer
- CEMEX
- City of Phoenix
- Corazón Latino
- Florence Copper
- Freeport McMoRan
- Maricopa County Parks and Recreation Department
- Magma
- Nina Mason Pulliam Rio Salado Audubon Center

- Rio Reimagined
- Stellantis
- Vulcan Materials

### **Key Takeaways**

- Access to UCF-specific resources and materials as part of normal business operations facilitates matching opportunities for key industries in the area.
- Approaching leading industry associations as an entry point for nonprofit engagement mitigates risks for individual companies — in such partnerships, no single company is required to lead the charge or experiment with UCF approaches, activities that can pose intense risks in heavily scrutinized industries such as mining.
- Employees in extractive industries generally have limited time to design and plan field efforts, but enthusiasm for participation often leads to high turnout for externally organized events. Even solicitation of thought partnership related to survey design, dissemination and analysis generated sufficient momentum for the planned pilot planting, with no cost incurred by any parties. The in-kind contributions made by the private sector will all be put toward a planting at a local park selected by municipal government officials.

*The WHC Across Fences Lines Initiative is made possible through a grant from the USDA Forest Service as part of its [2020 Urban and Community Forestry Challenge Cost Share Grant Program](#)*