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Food Desert to Food Oasis: An Engagement with the Community through Evidence-Based Methods

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FOOD DESERT TO FOOD OASIS

An Engagement with the Community through Evidence-Based Methods

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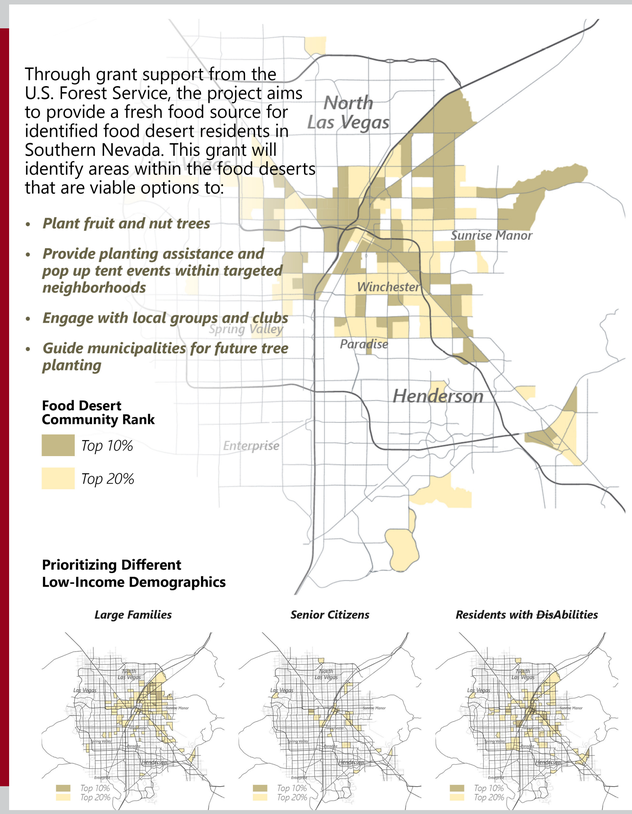
► **ALICIA ORTEGA, BLA**//LANDSCAPE ARCHITECTURE



Strategic mapping to guide community engagement and planting efforts with local community.

Photo credit: Alicia Ortega

► PROJECT DESCRIPTION

The state of Nevada has the 12th highest percentage (12.8%) of households living with food insecurity compared to the US average of 11.1% according to the U.S. Department of Agriculture (1). Economic and environmental benefits of urban forests have been well documented to address issues of climate change, urban heat islands, and fragmented ecologies, however, in a period of social inequities, urban forests can serve a vital role in providing environmental justice through agroforestry for communities identified within a food desert.

According to Kyle H. Clark & Kimberly A. Nicholas, "urban food forestry can be an efficient way to consistently provide free or low-cost nutrient-dense food to the people that need it" (2). Tree planting initiatives have been deployed to increase ecosystem services within cities and movements such as the "Incredible Edible" (3) have converted underutilized vacant lots into productive landscapes but these often occur within publicly owned land. In order to make a more significant impact with the environmental, social, and economic benefits of urban forestry, these actions need to extend into private residences. Not only will this provide direct benefits to the residents but also to the public by reducing urban heat island, filtering air pollutants, and increase the city tree canopy. Residents can be trained and provided with proper tools, education, and most importantly trees, as a community engagement approach to transform a food desert into a food oasis.

Funding from the USDA Forest Service assisted in the identification of communities in need within food deserts throughout Southern Nevada, providing education and training on proper planting techniques and harvesting, and delivered fruit and nut trees to the residents. The goals and missions of this project not only aligned with the State of Nevada's Climate Initiative of Climate Justice through urban forestry but also fulfil the United Nations (UN) Millennium Development Goal (4) and satisfy six of the UN's Sustainable Development Goals.

The objectives of this project was to provide a fresh food source for identified food desert residents in Southern Nevada. It also supported pop up tent events within targeted neighborhoods with Master Gardener assistance, and outreach driven by local groups and clubs, that include EcoMadres and Moms Clean Air Force, all of which were intimate with the areas intended for planting.

► ABOUT THE AUTHOR

Phillip Zawarus provides knowledge and expertise in the field of landscape architecture analysis, synthesis, and design through performative metrics and dynamic visualizations of qualitative and quantitative information. Zawarus uses advanced computational modeling and fabrication methods to evaluate and visualize desert ecosystem services for strategic development and communication of social and environmental design. He integrates research, design, and visual communication of complex ecological systems within the built environment to develop responsive approaches for sensitive arid conditions in the Mojave Desert.

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► REFERENCES & ACKNOWLEDGEMENTS

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