



In Partial Fulfillment of the Requirements for the Degree of

Master of Sustainability Solutions (MSUS)

Charles Darr

Will present his Master's Culminating Experience Project

A Case for Co-Ops

Abstract

The limiting factors to our successes in sustainable development, as Dr. Michael Crow has stated, "are the limits on our collective ability to acquire, integrate, and apply knowledge." ASU's School of Sustainability has fostered the generation of much knowledge when it comes to solving sustainability challenges. A Case for Co-Ops (AC4CO) is a media outreach project aimed at integrating and applying some of that knowledge as it pertains to local business. In effort to achieve this goal, AC4CO showcases the creation of an emerging, sustainable business model, by documenting the incubation of a local beverage business, carried out by fellow sustainability solutions graduate student, Nick Shivka, and his Culminating Experience project partners. AC4CO features exclusive one-on-one interviews with leading academic scholars, who share their expertise regarding the variety of considerations involved in the design of a sustainable business model. AC4CO is a video-based educational tool that features a website for an audience who would like to learn more about creating sustainable business models. This website hosts video, as well as extended edits of the interviews contained therein, and also includes concise written segments and links to external references and organizations.

Thursday, April 30, 2020

1:00 p.m.

Zoom Meeting (link will be provided to registrants)

Faculty, students, and the general public are invited.



In Partial Fulfillment of the Requirements for the Degree of

Master of Sustainability Solutions (MSUS)

Elizabeth Van Horn

Will present her Master's Culminating Experience Project

A Sustainability Analysis of Workforce Housing Solutions

Abstract

Arizona and the Phoenix metropolitan area are experiencing a housing crisis, both in terms of affordability and supply. While the number of affordable and available units has been shrinking, a separate trend has emerged that is also adding pressure to the housing market, particularly for renters—a demand for transit-oriented, walkable, sustainable communities. As governments invest in sustainability-oriented projects and infrastructure, environmental gentrification often occurs resulting in displacement of current residents. Without new, moderately priced housing being built, displaced residents remain housing cost burdened. Workforce housing, priced to serve middle-income residents, offers a release from the pressure on the housing market, but innovative models for workforce housing development are necessary to navigate the regulatory and financial barriers in place. This project identifies viable workforce housing solution options for the Valley, details how to address the key components for healthy and equitable housing, and assesses each solution using a simplified version of Gibson's (2006) sustainability criteria, combined into four dimensions—environment, social, economic, and holistic. Finally, the workforce housing solutions are prioritized for implementation based on the sustainability assessment. The final product, a white paper, will be delivered to Urban Land Institute (ULI) Arizona District Council Task Force for Health, Equity, and Housing Affordability, my client for this project.

Thursday, April 30, 2020

1:30 pm

Zoom Meeting (link will be provided to registrants)

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In Partial Fulfillment of the Requirements for the Degree of

Master of Sustainability Solutions (MSUS)
Ahmad Siyar Qasemi

Will present his Master's Culminating Experience Project

Sustainable Water Governance Facilitation Through an Online Platform

Abstract

Water is a fundamental requirement for all forms of life. Kabul city residents are having severe challenges in having access to adequate fresh water. The consequences of water scarcity and pollution in Kabul city has put many lives in jeopardy in the form of serious illnesses, inability to provide water for daily usage, migrations, and environmental degradation. Having groundwater as the only source of water, intense pressure from the population boom and improved lifestyle has created difficulties in its management and service provision governance. The available literature on the issue points to sustainable water governance as the necessary action that must be undertaken by the responsible organizations before reaching an irreversible stage. Based on the available literature, poor coordination strategies, lack of collaboration among stakeholders, poor public knowledge about water systems and its conservation, lack of public engagement, and lack of transparency in the management process are the main challenges in adopting sustainable water governance in Kabul. To improve the process, this project presents a web structure and wireframe for a website with tools and features that are the foundation as a full-functioning website later to facilitate, accelerate, and simplify Kabul's water governance by eliminating the five challenges mentioned above.

Thursday, April 30, 2020
2:10pm

Zoom Meeting (link will be provided to registrants)

Faculty, students, and the general public are invited.



In Partial Fulfillment of the Requirements for the Degree of

Master of Sustainability Solutions (MSUS) **Lupemaria Beal Velderrain**

Will present her Master's Culminating Experience Project

Parks Vision 2030: Sustainable Trails

Abstract

Maricopa County (MC) is located in the Sonoran Desert. It is also the fourth largest county in the country and for the third year in a row, the fastest growing. The MC Regional Park System consists of 13 parks strategically distributed for access that offer visitors an opportunity to reconnect with nature. The parks' most popular attraction is their variety of trails, designed for different levels of difficulty, distances, and terrain. Also, the Maricopa Trail, a 1,521 miles loop designed around the metro area, connects several of the Regional Parks. As the county grows, the parks must contend with the inevitable pressure of additional visitors and urbanization. The demands of a growing population can manifest in the parks as crowding, increased traffic, damage to the ecosystem, conflicts with wildlife, increased maintenance needs, and illegal access and use of the parks to cite a few examples. This paper offers a set of recommendations to the Maricopa County Parks and Recreation Department (MCPRD) in the context of the 2019-2020 Strategic Planning: Parks Vision 2030. Recommendations are based on the analysis of visitor data, as well as literature and case study reviews. The objective is to have the tools and foresight to deliver a resilient trail system that, even under the anticipated population pressure of the next 10-20 years, can provide an exceptional visitor experience while minimizing ecological damage.

Thursday, April 30, 2020

2:30 pm

Zoom Meeting (link will be provided to registrants)

Faculty, students, and the general public are invited.