Residential Landscaping Decisions and Water Usage in the City of Phoenix

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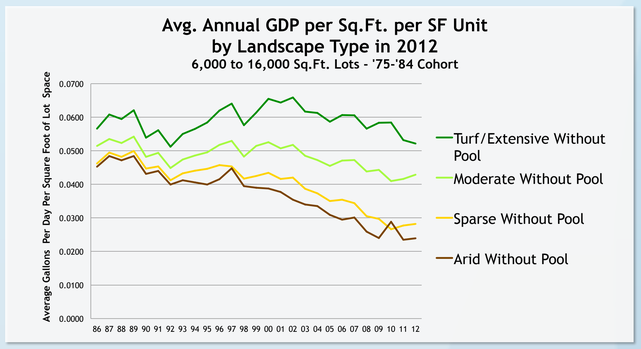
Transitioning Water Demands and Residential Landscaping

- The City of Phoenix once thought that strong population and economic growth would lead to consistently increasing residential water use and increasing demands for water.
- In practice, however, the city has experienced a stable production of water over the past decade, even as the population continues to grow.
- The city is now interested in understanding this recent transition in water use and water demand.
- Water use in individual homes falls dramatically with the switch to drier landscapes.



How has landscaping in single-family residential areas changed over the past thirty years, and what drives these changes?

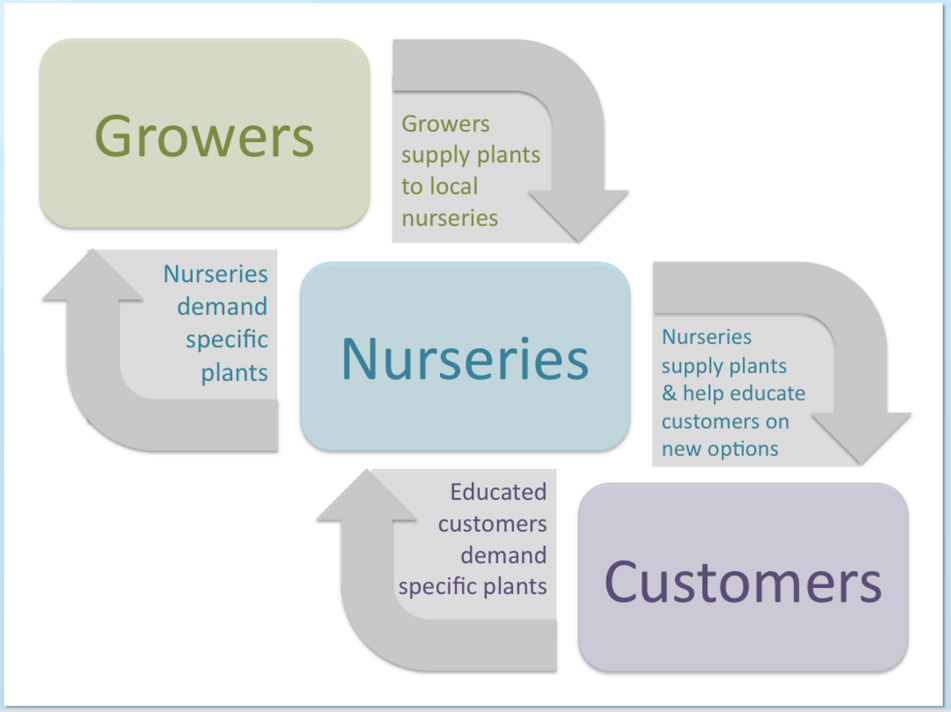
Interviews with Local Nurseries

Local nurseries have a direct interaction with people from single-family residential areas and can consequentially provide insight on people's landscaping habits.

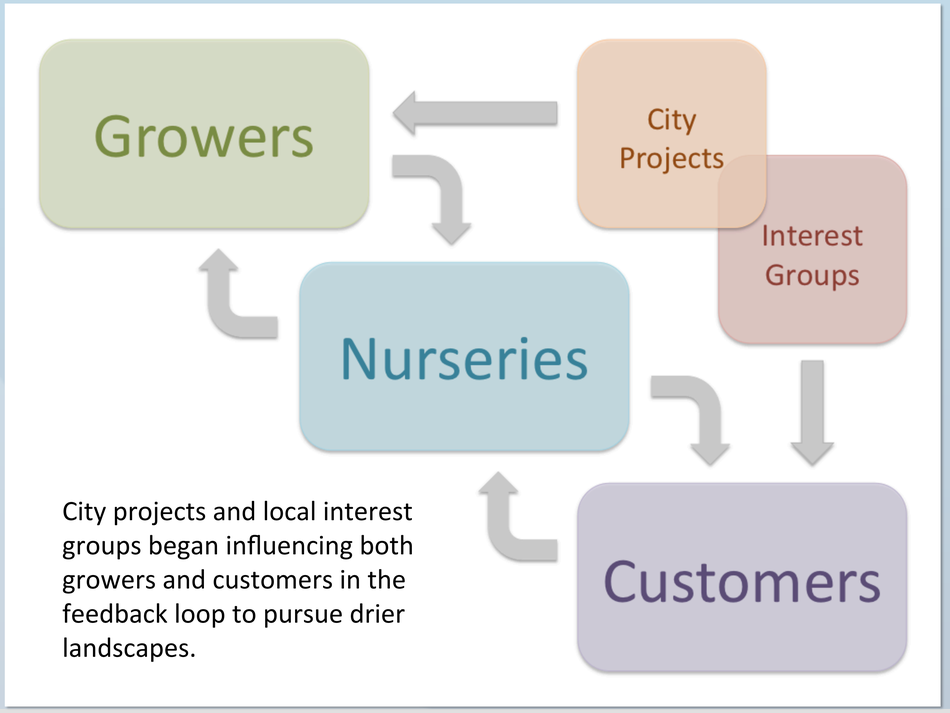
<u>Methods for conducting the interviews:</u>

1. Ran a basic internet search for nurseries with a Phoenix address.
2. Identified nurseries with 30+ years of business in the City of Phoenix.
3. Conducted interviews with staff members who had 30+ years of experience in the nursery industry. Staff members were generally the nursery's purchasers, owners, or landscape architects.

The 1980's Shift to Desert Landscaping and the Role of Local Nurseries



How nurseries typically influence the purchasing habits of customers from single-family residential areas



City projects and local interest groups began to influence the feedback loop in the 1980's

Key Findings

- The average customer from a single-family residential area has a **limited understanding of plants and landscaping.**
- Since customers have a limited understanding of landscaping, they rely heavily on the knowledge of local nurseries.
- In the 1980's, the City of Phoenix and water interest groups, such as the Arizona Municipal Water Users Association (AMWUA), **began publishing information on desert resilient landscaping options.**
- Nurseries supplied their customers with these information pamphlets, which educated their customers on drier landscaping options.
- City projects created a demand for desert resilient and native plants, which caused growers to create a local supply.
- **Customers in the 1980's began demanding more desert resilient plants.**
- Over time, however, some customers grew tired of desert landscaping and began demanding less resilient plants again in the 1990's.

Since the 1980's, landscaping preferences in single-family residential areas have moved toward drier landscaping options, though this preference seems to fluctuate.

Future Research Suggestions

- Conducting interviews with the nurseries' growers and their specific contacts from the City of Phoenix and the identified local interest groups can provide a deeper understanding of the feedback loop.
- Surveying a sample of customers in one area of the city could strengthen the understanding of the city's recent transitions in water use and water demand.

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