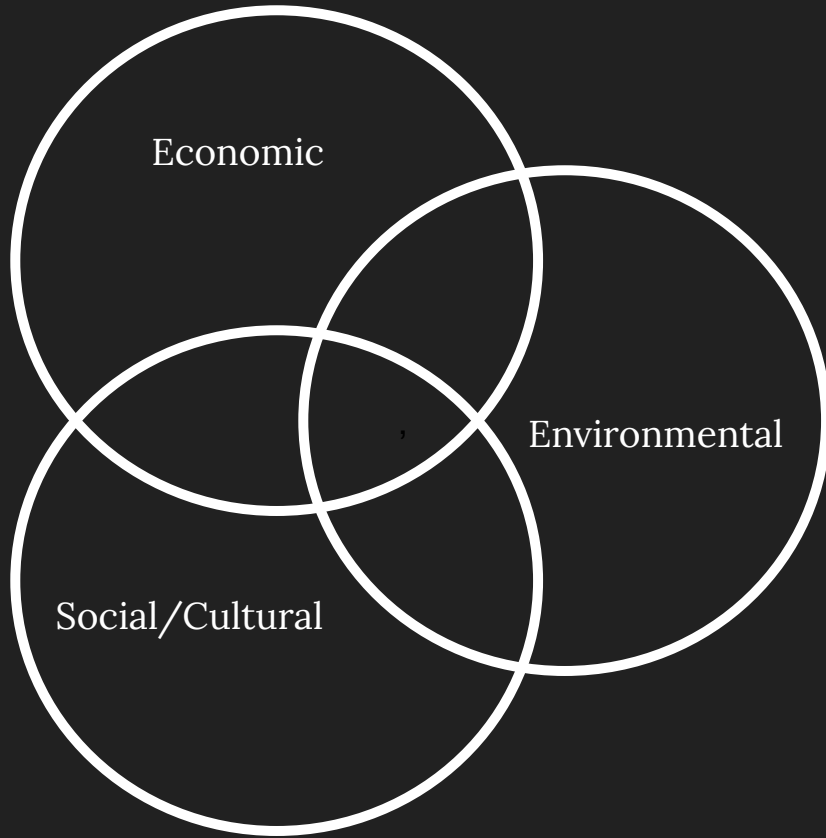


# Sustainable Landscapes and Water-wise Landscaping Strategies

Aligning our principles with our processes



# Sustainability

- Applying the Venn diagram of Sustainability to landscape systems
- Which circle is your priority?
  - Economic
  - Environmental
  - Sociocultural
- Priorities should steer a need analysis before any work is actually done

# Landscape Sustainability Scale

	Environmental	Economic	Cultural
Low Score 1	<ul style="list-style-type: none"> <li>- High water needs</li> <li>- High fertilizer needs</li> <li>- Unique soil conditions</li> <li>- High carbon output mechanical needs</li> </ul>	<ul style="list-style-type: none"> <li>- Large container size</li> <li>- Use of specialized plant varieties</li> <li>- High planting density</li> <li>- Specialized maintenance</li> </ul>	<ul style="list-style-type: none"> <li>- Special care required to ensure landscape survives usage</li> <li>- Low plant resilience</li> <li>- Four season use</li> </ul>
Moderate Score 2	<ul style="list-style-type: none"> <li>- Average water needs</li> <li>- Occasion fertilization</li> <li>- Adaptable to existing soil types</li> </ul>	<ul style="list-style-type: none"> <li>- Mixture of container sizes</li> <li>- Use of available plant varieties and cultivars</li> <li>- General maintenance required</li> </ul>	<ul style="list-style-type: none"> <li>- Landscape will generally tolerate constituent usage</li> <li>- Occasional special plant maintenance required</li> </ul>
High Score 3	<ul style="list-style-type: none"> <li>- Low water needs</li> <li>- Low or no extra fertilization</li> <li>- Waterwise plant usage</li> <li>- Low carbon mechanical needs</li> </ul>	<ul style="list-style-type: none"> <li>- Small container sizes</li> <li>- Naturalizing plants</li> <li>- Low maintenance requirements</li> </ul>	<ul style="list-style-type: none"> <li>- Landscape tolerates all forms of usage without deterioration</li> <li>- High natural resilience</li> <li>- Single season emphasis</li> </ul>

1    2    3

1    2    3

1    2    3

Score Total \_\_\_\_\_

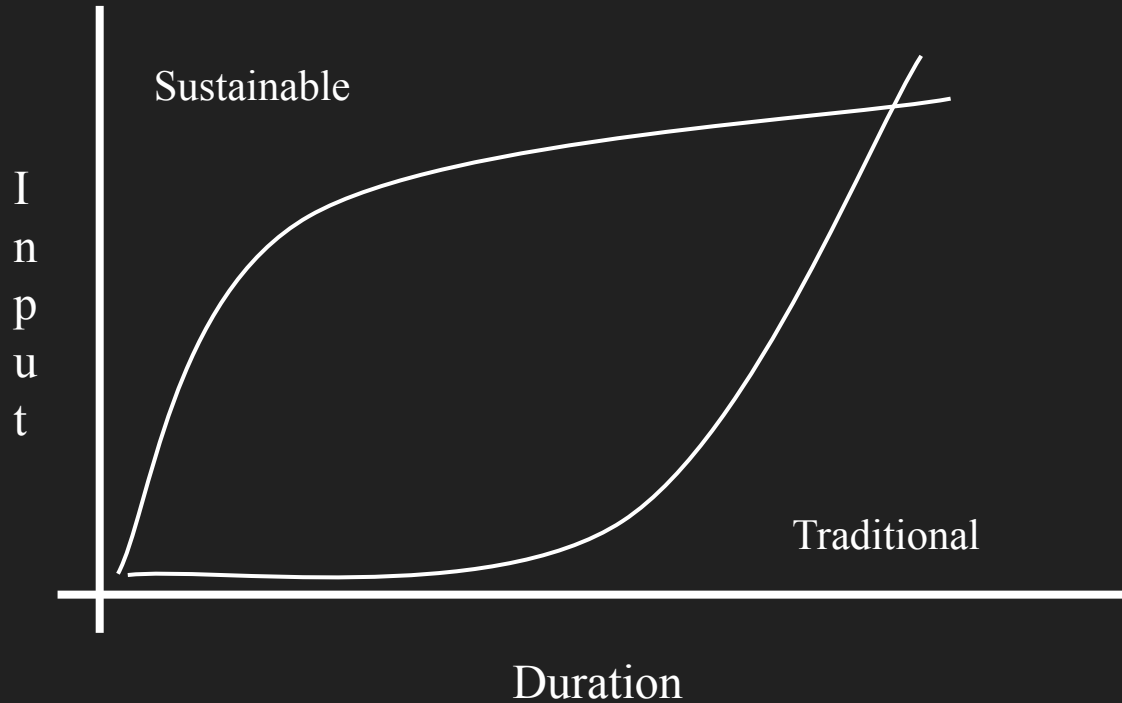
Low Sustainability **3**



High Sustainability **9**

# Landscape Maintenance Illustration

- Traditional versus Sustainable







## Needs Analysis

- Understand precisely what your values or those of your client are as they relate to the overall landscape and its use
- Strip away initial assumptions
- Plan based on known post-installation management strategies



## Accurate Forecasting - From installation to maturity

- Understand the developmental stages of a maturing landscape
  - What inputs are required at specific times in order to achieve the desired outcomes
- Narrow any possible outcome variability thresholds in order to make confident predictions
  - E.g. Native plants vs. Exotics
  - E.g. waterwise vs. water loving





## Principles of Environmental Sustainability

- Appropriate water usage
- Carbon emissions reduction
- Carbon Sequestration
- Petro-chemical usage reduction
- Loosening our grip on the landscape
  - Being part of the process, not THE process
  - Using species naturalization to our advantage



## Water-wise Landscaping

- Principle Components
  - Plant Selection
  - Arrangement
  - Maintenance
  - Water Delivery
  - Utilizing Naturalization
  - Patience and Perseverance





## Naturalization

- Relinquishing control while increasing the probability of a predictable outcome
- Survival mechanism
- Resilience
- Understanding the effects of irrigation
  - Amount of water and mode of delivery
- Varying performance through differing horticultural techniques



































































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