Adapting to Arizona's Climate: Westbrook Village's Response to Drought and Rising Temperatures

Introduction

As Arizona continues to grapple with prolonged droughts and escalating temperatures, communities like Westbrook Village in Peoria are witnessing firsthand the challenges these environmental changes pose to local landscapes and greenery. Understanding these impacts is crucial for residents aiming to maintain the beauty and sustainability of their surroundings.

The Impact of Drought and Heat on Westbrook Village's Landscape

Arizona's arid climate has become increasingly unforgiving, with the City of Peoria initiating significant measures to combat water scarcity. In August 2022, Peoria activated a Stage One Drought Contingency Plan, leading to initiatives like the removal of 44 acres of grass from city parks, aiming to conserve an estimated 44 million gallons of water annually. This shift towards desert landscaping with native plants not only reduces water consumption but also lessens maintenance needs and mitigates the urban heat island effect.

Within Westbrook Village, similar adaptations are evident. The Westbrook Village Golf Club has proactively modified its courses to address water constraints. Over the past seven years, efforts have included installing a new irrigation system at the Lakes Course, allowing individual control of sprinkler heads, and extensive xeriscaping by replacing unnecessary turf with natural desert terrain. These measures not only conserve water but also ensure the longevity and aesthetic appeal of the community's green spaces.

The Specific Impact on Trees and Plants

Drought and rising temperatures affect more than lawns – they have a profound and lasting effect on the trees and plant life throughout Westbrook Village:

- Tree Stress and Decline
 - Prolonged water shortages weaken trees' natural defenses, causing visible symptoms like early leaf drop, brittle branches, or thinning canopies.
 - Deep-rooted trees suffer as subsoil moisture disappears, leading to slow die-back or sudden limb loss.
 - Non-native ornamental trees, commonly used in past landscaping plans, are struggling to adapt.

• Pest Infestation and Disease

- Stressed trees and magnets for pest like bark beetles, which have become increasingly active due to warmer, drier conditions.
- Weakened root systems make trees and shrubs more vulnerable to fungal infections and other diseases, especially during brief wet spells following droughts.

Community Initiatives and Resident Involvement

Recognizing the importance of sustainable water use, the Westbrook Village Golf Club initiated the Lakes Well Project in 2015. This project established a Water Rights Lease Program, reducing irrigation costs and ensuring a consistent water supply for the golf course. Residents are encouraged to support this initiative through annual donations, emphasizing the collective responsibility in preserving the community's oasis-like environment.

Practical Steps for Residents

To further support Westbrook Village's sustainability efforts, residents can:

- **Embrace Xeriscaping:** Transition to landscaping with drought-resistant native plants that thrive in Arizona's climate.
- **Optimize Irrigation:** Utilize efficient watering systems and schedule irrigation during cooler parts of the day to minimize evaporation.
- **Regular Landscape Maintenance:** Monitor plants and trees for signs of stress or pest infestations, addressing issues promptly to maintain plant health.
- **Stay Informed:** Engage with community resources and updates on landscaping tips and water conservation strategies.

Conclusion

The challenges posed by Arizona's changing climate are significant, but through collective action and proactive measures, Westbrook Village can continue to flourish. By embracing sustainable landscaping practices and supporting community initiatives, residents play a pivotal role in ensuring the resilience and beauty of their environment for years to come.

Resources:

- <u>https://www.azfamily.com/video/2024/08/20/peoria-removing-grass-city-parks-replacing-with-desert-landscapes/</u>
- <u>https://westbrookvillagegolf.com/article/2022/08/16/in-the-news-arizona-golf-water-usage-restrictions</u>
- <u>https://westbrookvillagegolf.com/well</u>
- <u>https://westbrookvillage.org/landscaping-tips-by-sdl/</u>