

# Kokernot Park/Lodge/Poet's Grove Projects





# Background



- ▶ These projects were started ~20 years (on and off)
- ▶ Working with some of the initial partners
  - ▶ Rio Grande Joint Venture (RGJV), American Bird Conservancy (ABC Birds), SRSU Borderlands Research Institute (BRI), Big Bend Conservation Alliance (BBCA)
- ▶ 2019 – City of Alpine
  - ▶ Amended Master Park Plan - approved on August 6, 2019.
    - ▶ 10-year vision for Alpine Parks, Recreation, Open Space, and Trails
    - ▶ This plan was formulated to help the City of Alpine enrich the community by providing clear and concise ideas on how we can improve the city's Parks & Recreation endeavors.
- ▶ Interlocal Agreement with SRSU – Greenlight Feb. 5<sup>th</sup>, 2021
  - ▶ TPWD Grant – 30-year guarantee
    - ▶ Three application phases
  - ▶ TWDB – Submitted 2 Projects – State Water Plan



# Background

- ▶ Rain Gardens
  - ▶ Waste Water Treatment Plant (WWTP) Effluent Reuse
    - ▶ Kokernot Lodge Ponds Restoration (Pilot Project)
  - ▶ Grassland Restoration
  - ▶ Trail Extension
  - ▶ Creek Restoration
  - ▶ Bird Blind Installation
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# Timeline

Task #	Dec2020/Jan 2021	Feb-21	Mar-21	Apr-Jun 2021	July-Dec 2021	Jan-June 2022	July-Dec 2022	Jan-June 2023	July-Dec 2023			
1	MOU/ILA (Feb. 5th, 2021)											
2	TCEQ 30 TAC 210 Authorization											
3										Pilot Project(ASAP) - COA		
4	TPWD Grant App. Phase I due: Jan 2021		TWDB Grant App. Due Mar 2021									
5												
6			Grassland Restoration - Seeding (RGJV)									
7				TPWD Grant - Phase I						TPWD Grant App. Phase II due: Jan 2022		
8				Educational signage							TPWD Grant - Phase II	TPWD Grant App. Phase III due: Jan 2021
											Extension Trail system	
9							TPWD Grant - Phase III	Creek Restoration/Intallation Bird Blinds				

# Project Area

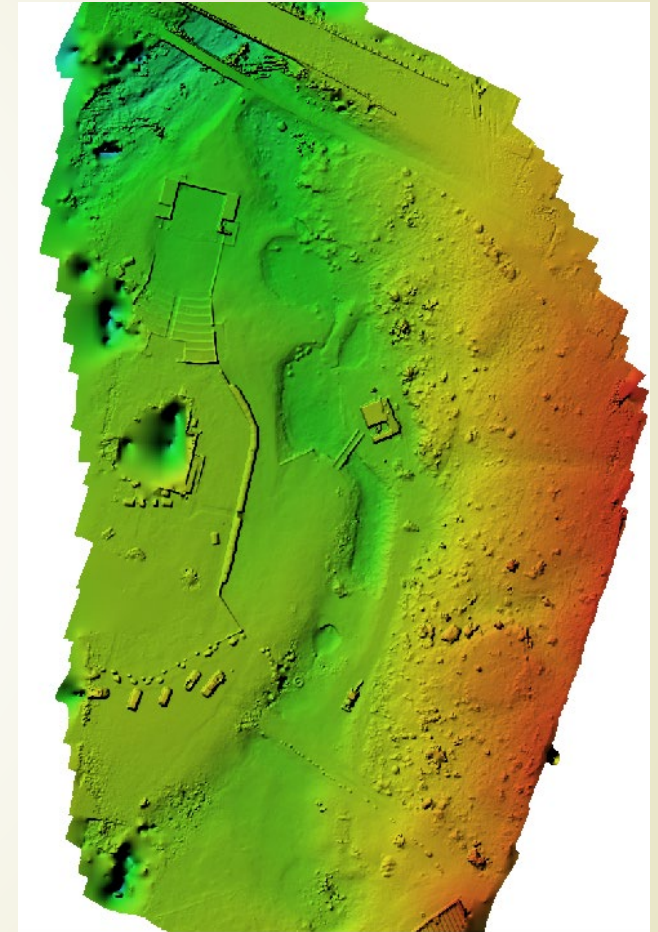


# Kokernot Lodge Ponds



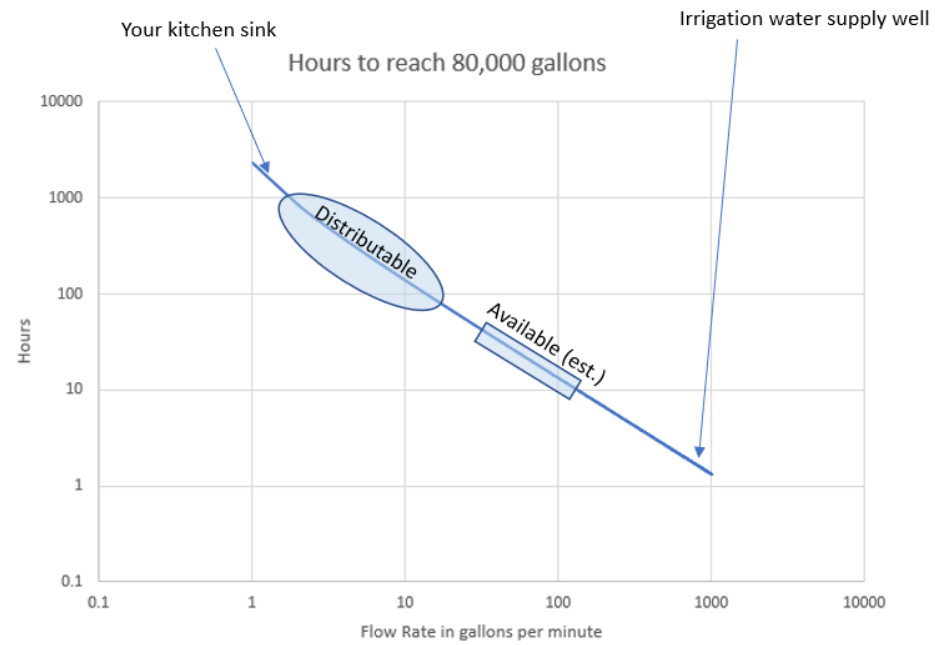


# Initial work






# Initial work



Includes estimate of 1156 mm/year for evapotranspiration (Scanlon and others, 2005)



# Pilot Project

- ▶ Install pipe from the effluent tank to ponds: May - June 2021
    - ▶ Begin once 30 TAC 210 Authorization has been approved from TCEQ
    - ▶ Installation/Funding by: City of Alpine – Public Utilities
  - ▶ Identify flow rate requirements
  - ▶ Test out ponds 90-180 days (Nov.-Dec. 2021)
  - ▶ Project is intended to observe how the existing ponds (Southeast of Kokernot Lodge) respond (as they are) to a constant water supply.
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# Pilot Project


## Results:

- ▶ Depending on the results, the following steps will be taken:
  - ▶ Modify the pond area as needed to fit restoration concept;
  - ▶ Continuous Surface Water Monitoring (Outdoor classroom)
  - ▶ Monitor potential Aquifer Storage and Recovery (ASR)



# Grassland Restoration

## **Project Stages:**

- ▶ Mesquite Grubbing (early June 2021)
  - ▶ Application for funding – Seeding (Mid June 2021)
  - ▶ Seeding (Late June 2021)
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Questions?