The monsoons arrived on time in 2018, and Rio Mora National Wildlife Refuge received between 3-6 inches of rain from July 5-25. Some events were particularly flashy, but all the rock structures in the eastern fork of Falcon Canyon held and effectively trapped sediment. Some highlights:

A modified one rock dam functions as a check dam by pooling water, and facilitating subsurface flows towards the grassland meadow (center right). Because of the slope on the meadow, surface flows might lead to erosion, so subsurface inundation was preferable.

Some arroyos at Rio Mora have carved down to bedrock, so creating wildlife habitat sometimes means starting from scratch. A one rock dam slows channel flows and allows for deposition on the bedrock upstream from the structure. As the soils accumulate, moisture and water facilitate vegetative recovery, providing meaningful resources for native species.

Sedges have taken root upstream from this one rock dam, taking advantage of pooling water and moist soils. A diverse vegetative community increases biodiversity.

A floodplain slowly develops as sediment accumulates at this baffle, a structure that encourages channel sinuosity.  Sinuosity increases the length that water flows through the channel, maximizing areas of deposition, pooling and saturation.