



# The Edwards Aquifer Contributing Zone

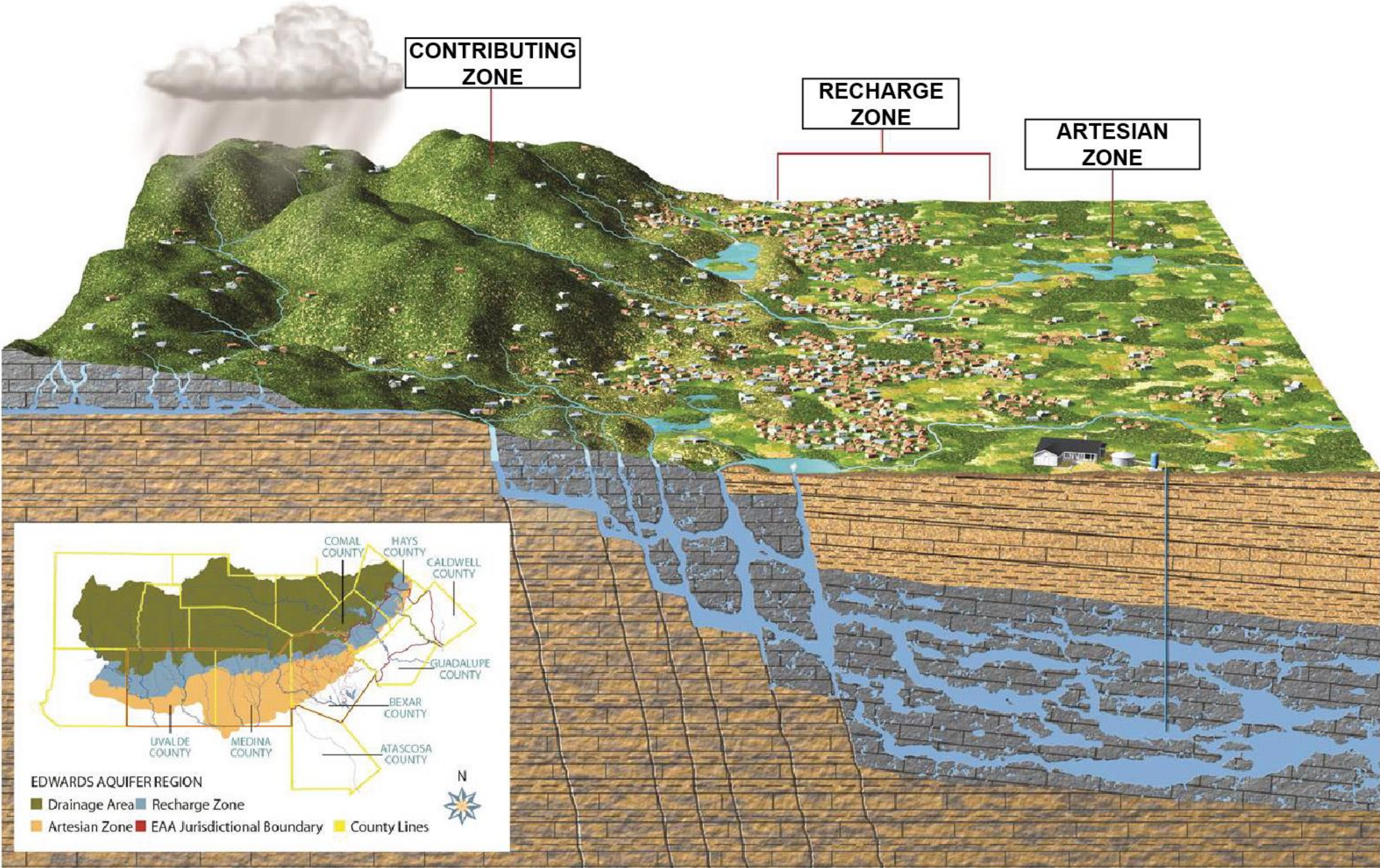
Presented to the:  
Conservation Advisory Board

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Mark Hamilton, P.G.  
Edwards Aquifer Authority  
Executive Director, AMS



THE EDWARDS AQUIFER SYSTEM





## Aquifer Statistics:

- Contributing Zone = 3.5 Million Acres (62%)
- Recharge Zone = 780,000 Acres (14%)
- Artesian Zone = 1.3 Million Acres (24%)
- The Contributing Zone is about 4.5 times larger than the Recharge Zone
- Average Annual Recharge (1934-2018) = 709,000 Acre-feet



# Role of the Contributing Zone

## Recharge pathways are complex

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- Discreet Recharge – Loss of water from flowing streams over the Recharge Zone
- Diffuse Recharge – Direct infiltration of rainfall over the land surface between streams
- Interformational Recharge – Water transfer from the Trinity Aquifer to the Edwards Aquifer







# Role of the Contributing Zone

## **Factors that influence Recharge**

Variability of rainfall across the region

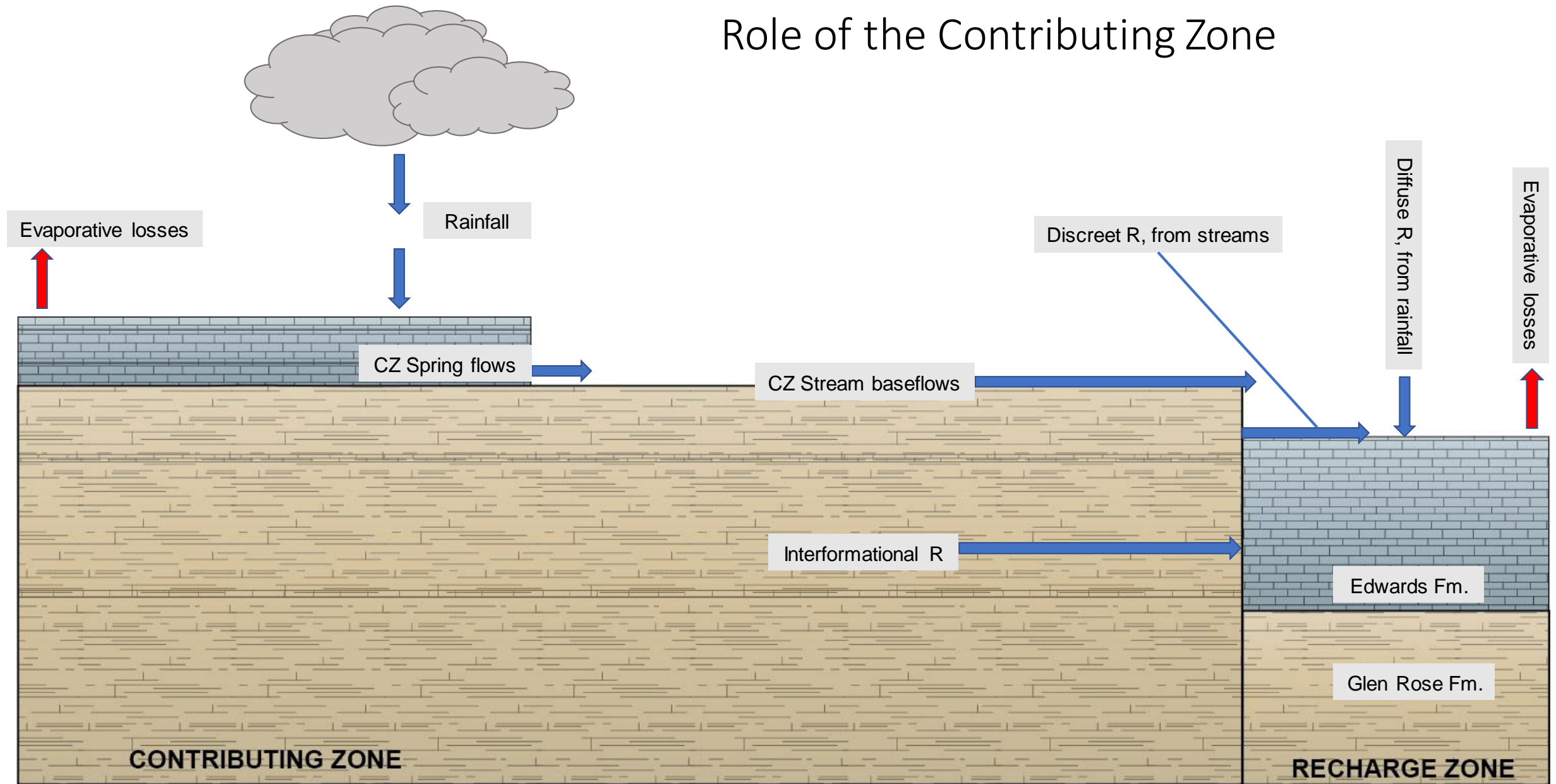
Baseflow of streams and factors that contribute to baseflow -  
springs, gravels, healthy soils

Variations in hydrologic conditions (dry years vs wet years)

Evaporative losses

Modifications to the natural system

# Role of the Contributing Zone





# Summary

- Recharge to the Edwards Aquifer is complex, and dependent upon many variables
- Encompassing 4.5 times the area of the RZ, the CZ provides the catchment area for the majority of rainfall that is funneled to the RZ
- The CZ acts as both a catchment area and buffer, supplying baseflows to streams that cross the RZ
- In terms of the EAPP, criteria for evaluating CZ properties should be further refined

