

Project Description: We have requested \$32,942 from the Post Oak Savannah Groundwater Conservation District to begin some preliminary research investigating the potential for increasing recharge into the Carrizo-Wilcox aquifer by restoring thicketized woodlands to more open savanna like landscapes. We plan to initiate this work in May of 2020. These preliminary studies will entail the installation of neutron probe access tubes for moisture readings. We will make moisture readings in a thicketized woodland and in an adjacent pasture area. The resources from the POSGCD will be used to employ one undergraduate student for 12 months and fund one graduate student during the summer of 2020. The primary tasks will be the installation of the neutron probe access tubes and taking the regularly scheduled readings. We will continue making these readings for at least a 12 month period. Our goal is to obtain additional funding to expand these studies and continue to make long term data collection. In addition, we will supplement the neutron probe readings, which must be done manually with a small network of instruments capable of continuous measurements of soil moisture.

Budget Justification

Personnel: We are budgeting a total of \$14,347 for undergraduate and graduate student labor.

Travel: We have budgeted \$3000 for travel expenses which also includes costs for vehicle maintenance.

Materials and supplies: We have budgeted in \$12,600 for materials and supplies. This will primarily go towards soil moisture instrumentation and a simple weather station.

Overhead: A 10% of total direct limited overhead by sponsor has been applied for a total of \$2,995

Total Requested Amount: \$32,942