



# Silicon Ranch Pre-Construction Land Management for Solar Farm Soil Health

Silicon Ranch begins its work to improve soil health and establish a functioning grassland ecosystem at our project sites in advance of construction whenever feasible. This provides multiple benefits that persist before, during, and after construction.

- **Soil Health:** Stabilized soil, reduced soil compaction and erosion, increased soil organic matter and diversity of soil microbiology
- **Water Management:** Decreased stormwater runoff due to increased water holding capacity of soil, filtering of water by biology above and below the soil surface, recharged aquifers and clearer streams
- **Biodiversity:** Habitats for plants, insects, birds, and other organisms, biological pest control, pollination, and increase in wildlife due to combination of shelter, habitat, and increased food availability and quality

## Thriving Grassland Ecosystem After Pre-Construction Intervention



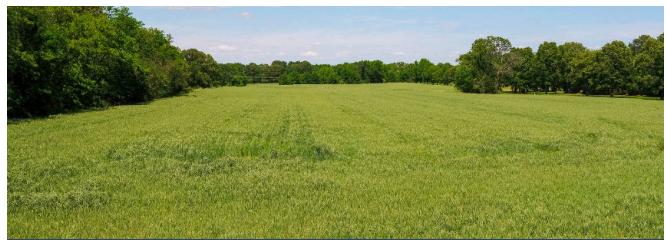
**Clay Solar Farm**



**Bluffton, Georgia**

150 MWdc | 1,700 Acres

No-Till Drill Seeding Intervention



**Milan Solar Farm**



**Milan, Tennessee**

3.85 MWdc | 70 Acres

Soil Sampling and Soil Health Assessment, Soil Amendments, and No-Till Drill Seeding Intervention

Recognizing that each solar project is unique, we custom design pre-construction land management plans to meet each project's specific ecological restoration needs. Often, the land we acquire has been used previously for timber or conventional row cropping that has left it degraded.

Our pre-construction and management plans can include the following components:

- Soil sampling and soil health assessment to understand how to improve soil biology and fertility
- Soil amendments to provide macronutrients and micronutrients necessary for healthy soil and vegetation
- No-till drill seeding of a diverse seed mix of perennial grasses, legumes, and forbs, plus annual cover crops

