

NATIVE GRASSES CASE STUDY

COMPARISON FOR RIGHT-OF-WAY RESTORATION,
TEXAN BY NATURE, TX

PROJECT SUMMARY

This report contained the EcoMetrics analysis of a pilot project to study the relative differences in outcomes and impacts associated with using native grasses vs non-native grasses for oil and gas right-of-way restoration in Texas. This project was conducted on behalf of EOG Resources and Texan by Nature (TxN) who are interested in promoting more use of native grasses based on the hypothesis that native grasses provide better ecosystem benefits and create more net value than non-native grasses.

The test plots were on right-of-way restoration acres in the Eagle Ford play producing area in South Texas. The area of the tests consists of privately held, active grazing rangelands and grasslands. In Texas, oil and gas companies are required to work with landowners to restore land disturbed by exploration and production activities. These areas include well pads and pipeline rights-of-way. Instead of native grasses, restoration can use non-native grasses, which cost less per acre in terms of seed and planting costs but end up providing less overall value long-term in terms of related co-benefits. The EcoMetrics analysis was to build on that biophysical analysis and determine and compare the value of the impacts associated with using one type of grass over the other.

PROJECT GOALS

This project was more a “Proof of Concept” than a full site application. The intent is to use the results to generally demonstrate the relative value of native grasses vs non-native grasses. ***The results of the EcoMetrics analysis showed that collectively, native grasses provide more benefits with greater aggregated value than non-native grasses.***

KEY FINDINGS

- **The findings revealed that overwhelmingly, the native grasses create a greater aggregated annual value per acre (\$1,224/acre) than non-native grasses (\$930/acre), for a net increase of \$304/acre.** The comparison is of the aggregated value created for all outcomes for both native and non-native grasses.
- **The results indicate that promoting native grasses for oil and gas right-of-way restoration will provide more value for more stakeholders, including the landowner, even if the seed, planting, and maintenance costs are greater.** For some outcomes, even where the values seem similar for native and non-native grasses, the true value is greater for native grasses.

THE STAKEHOLDERS

Environment is affected by project activities and can alter ecosystem services

Corporations who can benefit from opportunities to invest in sustainable efforts that create real value

Conservation Groups with missions to conserve, protect, and restore the environment and ecosystems

Local Government Agencies who strive to protect and conserve the environment and ecosystems

Education and Research by providing opportunities for learning and awareness

Funder who would realize a positive Return on Investment

Landowners who will realize increased property value and overall productivity of the land

COMPARATIVE ANNUAL PER ACRE VALUES OF OUTCOMES FOR NATIVE VS NON-NATIVE GRASSES

Stakeholders	Outcomes	Annual per Acre Non-Native (\$)	Annual Per Acre Native (\$)
Academia/ Research	Scientific Education	\$0	\$28
Environment	Total Soil Stabilization*	\$(-0.76)	\$(-0.27)
	Total Soil Formation	\$3	\$4
	Total Waste Treatment	\$43	\$118
	Total Water Filtration**	\$12	\$25
	Total Nutrient Cycling	\$8	\$12
	Total Biological Control	\$63	\$63
	Total Pollinator Population Support	\$6	\$25
	Total Habitat and Biodiversity**	\$19	\$40
	Total Water Regulation**	\$4	\$11
General Public	Total Cultural and Aesthetic Value	\$42	\$108
	Total Air Quality - Other GHG	\$115	\$115
	Total Carbon sequestration- social value	\$1	\$2
	Total Nitrogen Retention- social value**	\$30	\$76
	Total Phosphorus Retention- social value	\$424	\$424
	Total Land Management Incentives / Insurance	\$13	\$13
Local Economy	Total Wildfire Risk Reduction	\$53	\$53
	Total Value of Livestock Grazed**	\$44	\$18
Local Government	Water Supply/Quantity	\$34	\$64
Funders	Total Market value of potential tradeable Credits	\$17	\$25