

Estimation of Future Native Seed Demand for Trans-Pecos Restoration Projects

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Native seed supply is needed to restore vegetation to native habitats affected by development of energy-related infrastructure such as oil and gas pads and pipelines. In the Trans-Pecos ecoregion of Texas, substantial future impacts are projected because of increases in oil and gas production. Knowing the amount of native seed needed for restoration efforts and the economic potential of its production would be useful to oil and gas operators, seed producers, and conservation planners. We used available information to estimate the future potential impact of projected oil and gas production in the Trans-Pecos under low, medium, and high-intensity development scenarios through 2050.

- By 2050, 0.4 to 2.2% of the land area of the Trans-Pecos could be affected by oil and gas pad or pipeline development, such that restoration could be required.
- To conduct seed-based restoration activities on this scale of disturbance, cumulative native seed supply of 247,264 to 1,330,614 lbs of pure live seed (PLS) of native grasses will be needed over the next 30 years.
- Economic value of this amount of seed, based on current retail prices could range from \$10 to 57 million, if seed was applied to all impacted sites.
- These estimates provide targets for efforts to increase seed source capacity.
- This also shows that cost-savings to energy producers can occur if surface impacts can be minimized.

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