SITE-TO-SOURCE / SAMPLE CONSULTATION

A working ranch restoration strategy

Pecos County, West Texas

$7,450 Illustrative Professional Scope • Five provisional ranch landscape settings

Illustrative report for a fictional client and site; no real property inspection or purchase. Sample edition: 7 Nov 2026 | PHY-SAMPLE-007_Trans_Pecos_Ranch

Your recommended direction

Protect surviving native grasses and address grazing pressure before broadly reseeding. Test a fenced 10–20-acre pilot in a field-verified unit; do not apply one uniform seed mix across all ranch settings.

The client behind the question

Fictional client: Rip Wheeler, fictional ranch manager

"We've still got good native cover in places, but the ground around our tanks and ranch roads is getting bare and dusty. Some flats take the cattle well enough, while the rocky ground and the clay drainages are completely different. I don't want a truckload of expensive seed that fails after one dry summer, and I don't want anything that could make cattle or horses sick. Tell us where to protect what's still growing, where a trial makes sense, and what we need to measure before we spend real money."

Illustrative mock submission, not an actual customer testimonial. Adapted from the fictional intake originally prepared for this example.

Selected answers from the client intake

Intake question	Client's answer
Main objective	Recover native perennial forage/ground cover while retaining a working cattle operation and wildlife habitat.
Landscape represented	Fictional 1,240-acre ranch southwest of Fort Stockton; 160-acre priority desk-review focus.
Observed variation	Rocky uplands, degraded loamy flats, clay runoff swales and disturbed watering/road corridors.
Major hazards	Severe drought, concentrated grazing, possible salinity, erosion, seed costs and livestock exposure.
Must avoid	Livestock-toxic species, aggressive introductions, thorny corral planting and costly irrigation assumptions.
Budget and timing	Separate speculative $25,000-$40,000 phased fieldwork budget; a conditional 2027 moisture window, not a construction quote.

How we answered the client's questions

Client asked	How this report responds
Do all pastures need a new seed mix?	No. First protect surviving native patches and adjust grazing/use near water, then evaluate the sites that still need help.
Which grasses belong where?	Black grama is associated with suitable rocky, coarse sites; tobosa with suitable clay-run-on areas; each selection requires ecological-site verification.
How do we avoid wasting seed?	Use a 10-20-acre test plot only after field review, documented local seed origin, pure-live-seed calculations and moisture/timing checks.
Will you tell us what is safe for cattle and horses?	The report screens livestock-related concerns but cannot replace forage, veterinary, grazing-capacity or toxicology assessment for actual exposure.

What we clarified in the simulated consultation

Follow-up question	Client reply and resulting decision
Can you protect a small trial rather than fencing the whole ranch?	Client: Yes, temporary fences and altered water access are possible on a limited patch. Report decision: Use a protected test area with repeat photographs and grazing notes.
Do you have soil salinity and forage measurements?	Client: No; I only see a few pale crusted spots and have not calculated biomass. Report decision: Hold saline-swale decisions for EC/SAR and qualified grazing/soil assessment.

How the project developed through feedback

Point in the example	What changed in the recommendations
The manager's overriding concern	Do not buy seed across hundreds of acres before confirming the causes of bare ground.
Simulated manager discussion	Cattle and occasional horses use different sites; a small trial can be protected, but soil and stocking data are absent.
Revised implementation priority	Protect natural regeneration, verify ecological sites and livestock risks, then test a small monitored restoration pilot.

The plant recommendations and next steps that follow show the result of these client-specific choices. Site observations remain fictional, and conditions must be confirmed before real installation.

How we interpreted this project

A fictional 1,240-acre working ranch near Fort Stockton, spanning rocky uplands, former grazing flats, runoff swales, infrastructure edges and shrub/wash refuges. Its ecological sites and stocking are unverified.

This custom professional example adds a defined project scope, staged decisions, sourcing considerations and specialist referral points. Its illustrative fee is not a fixed published price or an installation budget.

Three decisions that matter most

01 Use field ecological-site identification to distinguish gravelly uplands, loamy flats and clay-rich drainage features.

02 Screen every proposed species or handling-area planting for livestock exposure and physical hazards.

03 Use local-appropriate seed lots with documented pure live seed, source and viability, then monitor establishment.

How to read a professional strategy

The plants and phases below are an evidence-based starting framework. Areas, hazards, permissions and management arrangements must be established with the appropriate local professionals before installing at scale. This illustrative professional fee covers consulting, not construction or implementation.

Project roadmap and decision gates

Stage	What we evaluate	Decision or deliverable
Field ecological sites	Map gravelly uplands, loamy degraded flats, swales, roads and livestock-concentration points with an appropriately qualified field specialist.	Unit-level diagnostic framework, not an assumed whole-ranch soil map.
Management before seed	Protect existing native cover, document stocking and rest patterns, and evaluate erosion and invasive competition.	Prioritized non-planting interventions and pilot selection criteria.
Pilot and procurement	Establish an appropriate 10–20-acre controlled pilot only after field checks; document seed-lot origin, purity, viable seed and livestock exposure.	Testable native recovery strategy rather than one ranch-wide blend.
Adaptive monitoring	Compare pilot and reference sites with photos, ground cover, erosion signs, establishment, weeds and grazing management over several seasons.	Evidence for modifying management before scale-up.

Plant recommendations

30 screened plant choices are presented below. They are alternatives organized by planting environment and use—not a shopping list you must buy in full. Mature dimensions and growing conditions remain approximate; confirm the supplied plant form, actual site light and water before purchase.

Shallow rocky uplands

These are conditional site-unit options, not an instruction to purchase or sow every species.

Plant / selection status	How it may work and what to check
Black grama *Bouteloua eriopoda* Core	Valuable palatable grass and cover. Conserve survivors; rest plants before expensive seeded trial **Best fit:** Dry gravelly upland and gentle slope; not clay swale **Check:** Palatability makes recovery very vulnerable to repeated grazing.
Hairy grama *Bouteloua hirsuta* Conditional	Compact warm-season grass; drought persistence. Use as minor component if ecological-site ID supports it **Best fit:** Rocky hills; well-drained drought-prone ground **Check:** No categorical cattle/horse/sheep safety certification; verify field ID and diet exposures.
Blue grama *Bouteloua gracilis* Core	Shortgrass forage where soils support establishment. Protect existing; trial after reliable moisture window **Best fit:** Open well-drained plains/hills with summer moisture **Check:** Production falls in arid drought; avoid overstating forage yield.
Tanglehead *Heteropogon contortus* Conditional	Upland seedbank and grazeable forage where already present. Retention first; avoid near handling facilities **Best fit:** Rocky ridge and better-preserved dry outcrops **Check:** Long sharp-pointed awns may create contact concerns after seed maturation.
Bush muhly *Muhlenbergia porteri* Core	Small but valuable palatable grass refuge. Protect shrub-associated grass from concentrated grazing **Best fit:** Protected beneath shrubs, rocky slopes **Check:** Decreases under heavy grazing; not practical mass-seeding assumption.
Hairy tridens *Erioneuron pilosum* Conditional	Natural cover in hard sites; not target forage. Recognize/retain as stabilization not primary livestock improvement **Best fit:** Shallow caliche/gravel, disturbed hills **Check:** Poor forage; do not use as primary forage restoration target.
Purple threeawn *Aristida purpurea* Conditional	Colonizer that helps hold exposed ground. Retain when useful; deprioritize seed purchases **Best fit:** Shallow hills/sandy degraded soil **Check:** Long awns can irritate livestock; poor forage and not a primary seeding choice.

Degraded loamy grazing flats

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Plant / selection status	How it may work and what to check
Sideoats grama *Bouteloua curtipendula* Core	High-value perennial forage and seed habitat. Candidate pilot foundation after site verification **Best fit:** Moderately drained loam/rocky mix, matched to ecotype **Check:** No categorical cattle/horse/sheep safety certification; verify field ID and diet exposures.

Plant / selection status	How it may work and what to check
Arizona / california cottontop *Digitaria californica* Core	Palatable pasture grass, wildlife function. Seed in better loams after grazing rest **Best fit:** Dry, well-drained open loam **Check:** No categorical cattle/horse/sheep safety certification; verify field ID and diet exposures.
Plains bristlegrass *Setaria leucopila* Core	Forage and seed for birds. Candidate mix grass; not a sole species solution **Best fit:** Open dry soil and shrub openings **Check:** No categorical cattle/horse/sheep safety certification; verify field ID and diet exposures.
Green sprangletop *Disakisperma dubium* Core	Palatable grass for targeted restoration. Pilot only with correct seed taxon name and seed source **Best fit:** Rocky loam or canyon-adjacent disturbed range **Check:** No categorical cattle/horse/sheep safety certification; verify field ID and diet exposures.
Galleta *Pleuraphis jamesii* Conditional	Rhizomatous grass with green-season forage. Use only on coarse low-storage soils, not wet clay **Best fit:** Dry coarse sandy loams and gravelly flats **Check:** No categorical cattle/horse/sheep safety certification; verify field ID and diet exposures.
Sand dropseed *Sporobolus cryptandrus* Conditional	Drought tolerant cover on exposed granular soil. Secondary erosion-cover option with low forage expectation **Best fit:** Sandy disturbed patches with adequate seedbed **Check:** Fair/poor grazing; do not count as high-performance pasture grass.
Buffalograss *Bouteloua dactyloides* Conditional	Low grass structure for suitable flats. Limit to proven soils; not an automatic lawn replacement **Best fit:** Open, well-drained loam/clay; avoid sand lenses **Check:** No categorical cattle/horse/sheep safety certification; verify field ID and diet exposures.
Curly mesquite *Hilaria belangeri* Conditional	Low forage cover/patch connectivity. Favor natural spread; do not assume drought-season production **Best fit:** Dry rocky plains; spreading stolon grass **Check:** Source notes severe drought dormancy despite survival.

Clay run-on / saline pockets

These are conditional site-unit options, not an instruction to purchase or sow every species.

Plant / selection status	How it may work and what to check
Tobosa *Pleuraphis mutica* Core	Rhizomatous local native with grazing value when young. Retain existing; trial only after run-on landform confirmed **Best fit:** Clay-rich run-on flat/swale **Check:** Mature stands coarse/unpalatable; not a cure-all forage species.

Plant / selection status	How it may work and what to check
Alkali sacaton *Sporobolus airoides* Conditional	Perennial tuft cover for salt-affected ground. Texas native per Kew/USDA, but conditional on field-verified saline ecological site and suitable seed origin **Best fit:** Verified saline-alkaline transition and suitable water regime **Check:** A salt-affected pocket cannot be diagnosed from a reported white crust. Texas state-level nativity is supported by Kew and the USDA Forest Service; Pecos County occurrence and seed provenance were not individually established.
Fourwing saltbush *Atriplex canescens* Conditional	Native shrub browsing and wildlife shelter. Small isolated trials; protect establishment **Best fit:** Dry well-drained and some salt-affected margins **Check:** Browse is attractive to livestock; avoid over-reliance; check diet and plant access.
Inland saltgrass *Distichlis spicata* Conditional	Ground cover at genuine salty seep margins. Do not use until actual soil water/salt tests **Best fit:** Moist, saline/alkaline niche only **Check:** No categorical cattle/horse/sheep safety certification; verify field ID and diet exposures.
Vine mesquite *Panicum obtusum* Conditional	Stolon-forming good forage where more moisture persists. Protect existing patches and verify identity before procurement **Best fit:** Swales or loamy run-on below slopes **Check:** Not suited to dry slopes or areas that merely look low on a map.

Disturbed ranch-lane margins

These are conditional site-unit options, not an instruction to purchase or sow every species.

Plant / selection status	How it may work and what to check
Indian blanket *Gaillardia pulchella* Conditional	Colorful early succession flowering cover. Use only as minor test component away from regular grazing **Best fit:** Fenced, drained sunny test patch **Check:** TxDOT roadside list is not a livestock toxicity or forage assessment.
Lemon beebalm *Monarda citriodora* Conditional	Insect floral resource in episodic wet years. Small patch; do not turn into livestock forage mixture **Best fit:** Dry sunny fenced habitat strip **Check:** No categorical grazing-safety finding in reviewed material.
Mexican hat *Ratibida columnifera* Conditional	Long-season wildflower and seed resources. Only if desirable based on local flora and maintenance **Best fit:** Sunny drained fenced/reclaimed roadside edge **Check:** Not an approved cattle forage choice; grazing exposure requires review.
Prairie verbena *Glandularia bipinnatifida* Conditional	Short-lived seasonal flower near ranch headquarters. Trial for habitat; verify botanically accepted name on seed invoice **Best fit:** Well-drained fenced open patch **Check:** No categorical cattle/horse/sheep safety certification; verify field ID and diet exposures.

Plant / selection status	How it may work and what to check
Plains coreopsis *Coreopsis tinctoria* Conditional	Fast color in temporary habitat strips. Small supplementary option, not core range seed **Best fit:** Disturbed sunny non-grazed edge with episodic moisture **Check:** No livestock-safety assurance from roadside planting guidance.

Native shrub islands / washes

These are conditional site-unit options, not an instruction to purchase or sow every species.

Plant / selection status	How it may work and what to check
Honey mesquite *Prosopis glandulosa* Conditional	Shade and wildlife cover when retained strategically. Retain selectively; avoid wholesale brush removal or planting **Best fit:** Established dry-range shrub/woody patch **Check:** Mesquite pods in a high proportion of cattle diet can cause serious nutritional problems.
Sand sagebrush *Artemisia filifolia* Conditional	Shrub cover for exposed sandy sites. Retain where soil match confirmed; avoid intentional spread onto grass flats **Best fit:** Deep sand lens only; not caliche flats **Check:** Low forage value and dense stands may suppress desirable grasses.
Desert willow *Chilopsis linearis* Conditional	Woody habitat and flowers along appropriate drainage. Retain/consider only after drainage and grazing access review **Best fit:** Dry wash margin with periodic runoff **Check:** Not a justification for grading channels or establishing trees on dry ridges.
Netleaf hackberry *Celtis reticulata* Conditional	Fruit and shade for wildlife where moisture supports it. Preserve naturally present trees; no blanket planting **Best fit:** Limestone draw, wash, lower slope **Check:** No categorical cattle/horse/sheep safety certification; verify field ID and diet exposures.
Whitethorn acacia *Vachellia constricta* Conditional	Wildlife shrub refuge and structure. Retain outside roads/water points; avoid planting near livestock handling **Best fit:** Dry rocky wash/slope, away from handling areas **Check:** Large sharp spines; low direct livestock forage value.

How to put the recommendations to work

01 Map grazing concentration and inspect existing native survivors with a local range specialist.

02 Set up a controlled pilot with grazing exclusion and baseline photos.

03 Monitor cover, erosion, invasive regrowth and management outcomes over multiple growing seasons.

Important site and safety considerations

- Species used in drier gravelly soils cannot be assumed suitable for seasonally wet clay swales.
- This is a remote decision framework; it is not a stocking-rate prescription, veterinary opinion, engineering or field restoration contract.

A few things we would hold back

Gutierrezia sarothrae | broom snakeweed: Livestock poisoning hazard, especially under forage scarcity; survey and identify rather than plant.

Isocoma pluriflora | rayless goldenrod: Toxic to livestock and documented concern in Pecos Valley; do not recommend for stock-access areas.

Senecio riddellii | Riddell groundsel: Pyrrolizidine alkaloids and chronic livestock liver toxicity.

Plant sourcing and expectations

Ask growers for the exact scientific name (including any trade synonym), the plant or seed format, the propagation source and whether stock is suitable for the local climate. A nursery listing is a lead for shopping, not proof of current inventory, correct provenance, or guaranteed establishment.

Examples of places to inquire

Texas Native Seeds / Caesar Kleberg Wildlife Research Institute. regional seed recommendation tool

Bamert Seed. named release and species catalog

Native American Seed. regional mixture and species listings

For ranch-scale seed orders, document seed-origin zone, purity, germination, weed-seed content, pure live seed and individual lot numbers. Confirm every proposed planting against field ecological-site identification and livestock exposure with qualified local support.

Sources consulted

The references below support the regional botanical, gardening, or regulatory decisions in this illustration. Published range, nursery listings and generalized soils information do not prove parcel-scale conditions, county indigeneity or seed-lot origin. Check dated rules and availability before making real purchases.

Reclamation Seeding Guide: released seed catalog

Trans Pecos regional wildflower seed list

Trans-Pecos native plants by ecoregion

Trans-Pecos wildlife habitat management

Seeding Rangeland - Texas Ranchers Reference

Black grama range plant

Sideoats grama range plant

Tobosa range plant

Galleta range plant

Blue grama range plant

California / Arizona cottontop range plant

Four-wing saltbush range plant

Alkali sacaton range plant

USDA Forest Service: Alkali sacaton species review