

Field Number
or other
location
(Transition
Habitat/Goal
Habitat)

Acres

2024 History

2025 History

2026 Crop Plan

Species List

Equipment
Required

Adaptive
Management
Updates

1A (pollinator and wildlife crops)	2.85	Irrigation season delivered water to MMSU. Hand broadcasted pollinator seed with monsoons. Pollinator-forage support planting and seeding in March-May. Managed nonnative by hand. No heavy equipment within field. Extracted elms along east edge. Maintained hedgerow and wood chip supply.	Added seed and transplants to increase densities of species list pollinator plants; continued to manage nonnative species by hand and with targeted mowing and manual removal; continue monitoring wildlife drinker and camera.	Improve irrigation connection point and add gate for mini moist soil unit (MMSU); Continue transplanting native pollinator shrubs to increase densities of species list pollinator plants; continue seeding with species list pollinator plants; continue to manage nonnative species by hand and with targeted mowing; continue monitoring wildlife drinker and camera	Containerized plants: Rhus trilobata, Forestiera neomexicana, Ericameria nauseosa, Amorpha fruticosa, Chilopsis linearis, Solidago canadensis, Ribes aureum, Fallugia paradoxa, Celtis reticulata, Shepherdia argentea. Seed: Heterotheca villosa, Datura quercifolia, Datura wrightii, Erigeron divergens, Xanthisma spinulosum, Sphaeralcea spp., Ratibida tagetes, Senecio flaccidus, Dalea candida, Thelosperma megapotamicum, Glycyrrhiza lepidota, Linum lewisi, Helianthus annuus, Guara coccinea, Apocymun cannabinum, Metzelia multiflora, Anemopsis californica.	Truck and water trailer	Add wildlife corridor passage through fenceline to Duranes Lateral.
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1B (salt shrubland-SS)	5.51	Irrigate basins as needed, approx. 1/month. Install perches for insectivorous birds. Remove nonnative species and supplement wood chip mulch as it breaks down. Maintain middle grassland as native species continue to emerge and establish in wood chip patches. No equipment use in this zone, minimize all forms of disturbance.	Irrigated basins as needed, approx. 1/month. Installed perches for insectivorous birds. Removed nonnative species and supplement wood chip mulch as it breaks down. Planted and maintained middle grassland as native species continue to emerge and establish in wood chip patches. No equipment use in this zone, minimize all forms of disturbance. Diversified Chihuahuan Basins and zones between basins. Monitored Wildlife drinker and wildlife cameras.	Irrigate basins as needed, approx. 1/month. Maintain perches for insectivorous birds. Remove nonnative species and supplement wood chip mulch as it breaks down. Plant and maintain middle grassland as native species continue to emerge and establish in wood chip patches. No equipment use in this zone, minimize all forms of disturbance. Continue to diversify Chihuahuan Basins and zones between basins. Monitor wildlife drinker and wildlife cameras. Add habitat refuge piles.	Containerized plants: Ribes aureum, Sarcobatus vermiculatus, Isocoma pluriflora. Seed: Datura quercifolia, Helianthus ciliaris, Astragalus lentiginosus, Linum lewissi, Sphaeralcea angustifolia, Datura wrightii, Leptochloa fusca fascicularis, Distichlis spicata stricta, Sporobolus airoides, Pleuraphis jamesii, Sorghastrum nutans, Sporobolus wrightii, Scleropogon brevifolius, Isocoma pluriflora.	Truck and water trailer	Update habitat zones to include Chihuahuan Desert terrace on western portion and Dry Soil Grassland throughout.

1C (damp soil grassland-SG)			Habitat design approved. Construction in 2026 will begin in May, anticipate completion by July. Irrigation improvements include relocation and addition of gates and checks.	Containerized plants: <i>Asclepias</i> <i>subverticillata</i> , <i>Anemopsis</i> <i>californica</i> , <i>Apocynum</i> <i>cannabinum</i> , <i>Sporobolus</i> <i>wrightii</i> , <i>Lycium torryi</i> , <i>Lycium pallidum</i> , <i>Sarcobatus</i> <i>vermiculatus</i> , <i>Krascheninnikovia lanata</i> , <i>Atriplex canescens</i> . Seed: <i>Isocoma pluriflora</i> , <i>Grendelia</i> <i>squarrosa</i> , <i>Helianthus ciliaris</i> , <i>Linum lewisii</i> , <i>Leptochloa fusca</i> <i>fascicularis</i> , <i>Distichlis spicata</i> <i>stricta</i> , <i>Sporobolus airoides</i> , <i>Sporobolus wrightii</i> , <i>Sporobolus cryptandrus</i> , <i>Bouteloua gracilis</i> , <i>Bothriochloa laguroides</i> , <i>Pleuraphis jamesii</i> , <i>Panicum</i> <i>obtusum</i> .	Tractor, mower, plow, bulldozer, grader, loader, dump trailer, skidsteer, miniexcavat or, seed drill, water trailer, truck.	Read groundwater monitoring well and determine monitoring interval. Add wildlife corridor. Include damp soil wetland in SW corner.
	Conservation fallow. Mowed tumbleweeds before seed maturity. Bindweed problem has gotten worse 4.9 over time.	Fallowed awaiting construction.				

1D (dry soil grassland-BG)	9.13	Hand weeding and mowing to reduce abundance of invasive species and for light mulch cover. Maintain field borders (irrigation efficiency). Irrigate as needed and available. In September, southern half seeded with winter wildlife crop (wheat and rye) and native dry grassland species. Northern half not mowed or seeded because native cover is stronger.	Hand weeding and mowing to reduce abundance of invasive species and for light mulch cover. Maintain field borders (irrigation efficiency). Irrigate as needed and available. Prepare soil and plant for target species where non-native pressure allows.	Seeded in April with barley, wheat, millet, and teff as wildlife crop. Irrigate as water is needed and available. Monitor for non-native pressure, remove manually or mechanically. Summer: prepare soil for native species seeding. Install irrigation swale to deliver water to planned bosque plantings in west end. Inoculate elms with native fungus.	Seed: <i>Thelosperma</i> <i>megapotamicum</i> , <i>Grindelia</i> <i>squarrosa</i> , <i>Dimorphocarpa</i> <i>wislizeni</i> , <i>Cleome serrulata</i> , <i>Polanisia dodecandra</i> , <i>Guara</i> <i>parviflora</i> , <i>Ipomopsis</i> <i>longiflora</i> , <i>Datura quercifolia</i> , <i>Datura wrightii</i> , <i>Heterotheca</i> <i>villosa</i> , <i>Psilostrophe tagetina</i> , <i>Ratibida tagetes</i> , <i>Senecio</i> <i>flaccidus</i> , <i>Senecio riddellii</i> , <i>Xanthisma spinulosum</i> , <i>Astragalus lentiginosus</i> , <i>Dalea</i> <i>scariosa</i> , <i>Linum lewisii</i> , <i>Metzelia multiflora</i> , <i>Sphaeralcea</i> spp., <i>Guara</i> <i>coccinea</i> , <i>Oenothera</i> spp., <i>Sporobolus airoides</i> , <i>Sporobolus wrightii</i> , <i>Sporobolus cryptandrus</i> , <i>Bouteloua gracilis</i> , <i>Bothriochloa laguroides</i> , <i>Pleuraphis jamesii</i> , <i>Panicum</i> <i>obtusum</i> .	Tractor, flail mower, rototiller, seed drill; skidsteer	Decommission road created during wildlife viewing blind construction.
		Continued hand weeding (curly dock) and mowing to reduce abundance of invasive species. September seeded winter wildlife crop (wheat, barley, rye). Native hand seeding and plugs within standing crop; irrigate as required.	Continued hand weeding (curly dock) and mowed to reduce abundance of invasive species. Drilled wildlife crop in May (millet, oats, dryland corn) and August (barley, rye, wheat); irrigated as required. Made improvements to field borders as needed to increase irrigation efficiency.	Seeded in April with barley, wheat, millet, and teff as wildlife crop. Irrigate as water is needed and available. Monitor for non-native pressure, remove manually or mechanically. Late summer: prepare soil for cool season wildlife crop seeding, barley, wheat, rye. Install irrigation swale to deliver water to planned bosque plantings in west end.	Barley, wheat, rye, millet, teff. Sunflower.	Tractor, flail mower, rototiller, seed drill; skidsteer	Decommission road created during wildlife viewing blind construction.
1E (wildlife crops transition to SG)	8.17						

2A (arroyo margin AS transition to BG)	Seeds planted by hand, mulched, and irrigated. Johnson grass, sand burr, and goathead removed. Mowed twice. Rebuild field berm.		Maintain grassland cover. Irrigated April and continue to irrigate as needed and available. Design damp soil grassland subunits. Propose construction schedule in 2026.	Seed: Sporobolus spp., Bouteloua spp., Muhlenbergia spp., Pascopyrum smithii, Pleuraphis jamesii, Sorghastrum nutans, Setaria pumila , Thelesperma megapotamicum, Baileya multiradiata, Helianthus annuus, Dimorphocarpa wislizenii, Cleome serulata, Polanisia dodecandra, Nama hispidum, Guara parviflora, Ipomopsis longiflora, Datura spp., Heterotheca villosa, Psilostrophe tagetina, Ratibida spp., Senecio spp., Solidago altissima, Symphotrichum ericoides, Xanthisma spinulosum, Cucurbita foetidissima, Astragalus spp., Dalea spp., Metzelia multiflora, Guara coccinea, Oenothera spp., Erigeron devergens, Achnatherum hymenoides, Sporobolus spp., Bouteloua spp., Bothriochloa laguroides, Pleuraphis jamesii.	z-turn mower	Add damp soil grassland. Remove arroyo margin habitat.
	1.45	Hand seeding instead of drill for more seeds per square foot. Mow, irrigate, plant with species list as needed to increase drought resilience.				
2B (sandbar-SNB)	Conservation fallow; Sand bar construction completed in October and		Irrigation April and as needed and available through the season. Supplemental irrigation as required. Remove non-native species.	Containerized plants: Ericameria nauseosa, Artemisia fillifolia, Gutierrezia sarothrae, Atriplex canescens, Krascheninnikovia lanata, Psoralea scoparius, Yucca	Skidsteer, truck, z-turn mower, water trailer.	
	2.7	planting began. Maintain plantings through bucket direct irrigation until monsoon season, then use flood irrigation to allow saturation of the sand bar channel. Bucket water plantings in the upper habitat as needed, approx. monthly.				

2C (sandbar-SNB)	Conservation fallow; Sandbar construction completed in October and 2.7 planting began.	Maintain plantings through bucket direct irrigation until monsoon season, then use flood irrigation to allow saturation of the sand bar channel. Bucket water plantings in the upper habitat as needed, approx. monthly.	Irrigation April and as needed and available through the season. Supplemental irrigation as required. Remove non-native species.	<i>Desmodium illinoense</i>, <i>Thelesperma megapotamicum</i>, <i>Baileia multiradiata</i>, <i>Helianthus annuus</i>, <i>Dimorphocarpa wislizenii</i>, <i>Cleome serulata</i>, <i>Polanisia dodecandra</i>, <i>Nama hispidum</i>, <i>Guara parviflora</i>, <i>Ipomopsis longiflora</i>, <i>Datura</i> spp., <i>Heterotheca villosa</i>, <i>Psilostrophe tagetina</i>, <i>Ratibida</i> spp., <i>Senecio</i> spp., <i>Solidago altissima</i>, <i>Symphotrichum ericoides</i>, <i>Xanthisma spinulosum</i>, <i>Cucurbita foetidissima</i>, <i>Astragalus</i> spp., <i>Dalea</i> spp., <i>Metzelia multiflora</i>, <i>Guara coccinea</i>, <i>Oenothera</i> spp., <i>Erigeron divergens</i>, <i>Achnatherum hymenoides</i>, <i>Sporobolus</i> spp., <i>Bouteloua</i> spp., <i>Bothriochloa laguroides</i>, <i>Pleuraphis jamesii</i>. Containerized plants: <i>Ericameria nauseosa</i>, <i>Artemisia fillifolia</i>, <i>Gutierrezia sarothrae</i>, <i>Atriplex canescens</i>, <i>Krascheninnikovia lanata</i>, <i>Psoralea scoparius</i>, <i>Yucca</i>	Skidsteer, truck, z-turn mower, water trailer.
2D (ephemeral wetland EW, damp soil wetland WM, and SS)	Left in wildlife crop until September mowing in North and South. Center stand was left in sunflowers, barley and wheat. October seeding of wheat, barley, rye and 13.26 irrigated.	Drill to wildlife crop in April/May (millet, oats, dryland corn) and August/September (barley, rye, wheat), as irrigation allows. Emphasis is on creating dense standing grain ahead of winter.	Irrigation April and as needed and available through the season. Supplemental irrigation as required. Remove non-native species.	Teff, millet, wheat, radish. Sunflower.	Tractor, flail mower, rototiller, seed drill; skidsteer

	Seeds planted by hand, mulched, and irrigated. Johnson grass, sand burr, and goathead removed. Mowed twice. Rebuild field berm. Hand seeding instead of drill for more seeds per square foot.	Irrigate periodically to improve and maintain cover of native grasses. Remove Johnson grass and emergent sand burr and goathead in field and corresponding ditch	Irrigation April and as needed and available through the season. Supplemental irrigation as required. Remove non-native species.	Seed: Sporobolus spp., Bouteloua spp., Muhlenbergia spp., Pascopyrum smithii, Pleuraphis jamesii, Sorghastrum nutans.	Tractor, flail mower, rototiller, seed drill; skidsteer
3A (SS)	3.73				

				Teff, millet, wheat, radish. Sunflower. Seed: Thelosperma megapotamicum, Grindelia squarrosa, Dimorphocarpa wislizeni, Cleome serrulata, Polanisia dodecandra, Guara parviflora, Ipomopsis longiflora, Datura quercilfolia, Datura wrightii, Heterotheca villosa, Psilostrophe tagetina, Ratibida tagetes, Senecio flaccidus, Senecio riddellii, Xanthisma spinulosum, Astragalus lentiginosus, Dalca scariosa, Linum lewisii, Metzelia multiflora, Sphaeralcea spp., Guara coccinea, Oenothera spp., Sporobolus airoides, Sporobolus wrightii, Sporobolus cryptandrus, Bouteloua gracilis, Bothriochloa laguroides, Pleuraphis jamesii, Panicum obtusum.	
		Remove elms along north ditch bank. Remove annual non-native species by hand. Seed and mulch heavily for additional biomass and weed suppression. Irrigate as needed.	Irrigation April and as needed and available through the season. Supplemental irrigation as required. Remove non-native species.		
	Elms removed along entire western edge. Mowed with walk behind. No seeding in 2024.				Miniexcavator, truck, seed drill, tractor, skidsteer, z-turn mower.
3B (BG)	3.91				

3C (AS)	1.43	Non-native species removed by hand. Irrigated four times from May to October. Native grass plugs of five different species planted throughout in early Spring prior to irrigation	Remove non-native species by hand. Cut and remove larger elm and Russian olive. Plant New Mexico olive seedlings May-June.	Irrigation April and as needed and available through the season. Supplemental irrigation as required. Remove non-native species.	Seed: Sporobolus spp., Bouteloua spp., Muhlenbergia spp., Pascopyrum smithii, Pleuraphis jamesii, Sorghastrum nutans.	Skidsteer, auger, truck, water trailer.
		Created large habitat berm, planted and maintained 137 native habitat shrubs, planted coyote willow south of viewing platform. Mowed tumbleweed once prior to seed maturity and periodically removed tumbleweed in late Summer and mid-Fall				
4A East ½ (wildlife crops) Non-Irrigated	3	Rake, till, and seed in April (daikon/oats) Cleared field edges (Johnson grass) and mowed ditches. Multiple irrigation days. Mowed and drilled teff into oats in September and irrigated.	Continue bucket watering plantings along West habitat berm. Continue tumbleweed and other non-natives removal.	Irrigation April and as needed and available through the season. Supplemental irrigation as required. Remove non-native species.	Seed: Sporobolus spp., Bouteloua spp., Muhlenbergia spp., Pascopyrum smithii, Pleuraphis jamesii, Sorghastrum nutans.	Tractor, flail mower, rototiller, seed drill; skidsteer
			Mow, shallow till, and seed in April/May (teff with millet and daikon). Plant to winter wheat, barley, rye in late summer with goal to increase dense cover in winter as wildlife crop.			Decommission road created during wildlife viewing blind construction.
4A West ½ (wildlife crops) Irrigated	3.26			Irrigation April and as needed and available through the season. Supplemental irrigation as required. Remove non-native species.	Teff, millet, wheat, radish. Sunflower.	Tractor, flail mower, rototiller, seed drill; skidsteer
						Decommission road created during wildlife viewing blind construction.

4B (wildlife crops to SNB)	3.87	Cleared debris to improve irrigation. Removed Johnson grass, tumbleweed, and kochia from ditch bank. Mowed roadside. Multiple irrigation days. Millet and sunflowers maintained.	Mow, irrigate, shallow till to prepare for planting to teff, millet, and corn April-May. Remove Johnson grass by shallow till or by- hand.	Irrigation April and as needed and available through the season. Supplemental irrigation as required. Remove non-native species.	Teff, millet, wheat, radish. Sunflower.	Tractor, flail mower, rototiller, seed drill; skidsteer
4C (wildlife crops to SG)	3.27	Cut elms. Removed kochia and tumble weeds. Mowed western half of field to prevent seed maturity and reduce nonnative pressure. No irrigation to reduce Johnson grass vigor.	Mow, shallow till, and no-till drill sand dropseed and oats April- May. Remove Johnson grass by shallow till or by-hand. Begin irrigation in June.	Irrigation April and as needed and available through the season. Supplemental irrigation as required. Remove non-native species.	Teff, millet, wheat, radish. Sunflower.	Tractor, flail mower, rototiller, seed drill; skidsteer
4D (EW, WM, and SS)	5.3	Determined not to irrigate or seed to preserve existing cover and limit soil disturbance. Native species cover is increasing. Hand weeded nonnatives.	One irrigation to support existing native species.	Fallow for Los Poblanos OS water curtailment. Avoid ground disturbing activities.	Sunflower, barley, wheat, rye.	Tractor, flail mower, rototiller, seed drill; skidsteer

				Datura quercifolia, Senecio flaccidus, Heterotheca villosa, Sphaeralcea angustifolia, Erigeron divergens, E. flagellaris, Datura wrightii, Bouteloua gracilis, Bouteloua curtipendula, Muhlenbergia asperifolia, Pascopyrum smithii, Pleuraphis jamesii, Sorghastrum nutans, Sporobolus contractus, Sporobolus cryptandrus, Sporobolus airoides, Rhus microphylla, Rhus trilobata, Ericameria nauseosua, Baccharis salicina, Atriplex canescens, Ribes aureum, Forestiera pubescens, Fallugia paradoxa, Lycium pallidum, Lycium torreyi, Chilopsis linearis, Celtis reticulata, Prosopis pubescens, Robinia pseudoacacia, Populus deltoides wislizenii, Salix amygdaloides, Salix exigua, Salix gooddingii, Parthenocissus vitacea	
Hedgerows	All hedgerow plantings are maintained with regular watering and hand weeding. Siberian elms removed near 4A-4B and around the equipment yard. Bio Park utilizes small diameter Siberian elms from 4A-4B.	Auguring as needed for shrub planting preparation. In areas where Siberian elms have been removed, other multi-story canopy native replacement will occur with the correct timing.	Focus on addition of tree species. Consider elm fungal inoculation. Water and mulch individual plants as needed.		Skidsteer, auger, miniexcavator, truck, water totes.
Woodward House Nursery	Maintained tallpot shrubs; used modified system for grass and wetland plug care.	Ongoing: management of space with partners	Expand growing space to support relevant partner project restoration plant material production.	All species listed above	Skidsteer.