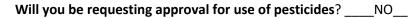
OPEN SPACE- FARMER CROP/RESTORATION PLAN 2023

Location: Candelaria Nature Preserve, North Tract

Farmer: Ciudad SWCD

Date: 2/15/2023





Please log the following information prior to the growing season with an estimate of what you will be doing.

| Field Number or other location | Farmer/Company name | Field Prep estimate- Date and Method | Method of Activity: (no till drill, spread with broadcast spreader) | Other Activities – Date, type |
|--------------------------------|----------------------------|--|--|--|
| 1A | CSWCD/Rio Grande Return | Jan – May: Sheet mulch and installation of woody features, irrigation into moist soil unit north side of field Ongoing: Invasive species control with hand labor within mulched area, mowing outside mulched area | Auger/plant dormant Salix spp. in Mini-damp soil unit Broadcast dryland native grass/forb mix around large woody features Additional seeding planting N/A in 2023 Auger/plant containerized material Chilopsis and Solidago along southern understory/plateau. Transplant plugs of Disticlis spicata and Sporobolus spp. In Mini-damp soil unit | Pollinator-forage support planting and seeding to begin in late 2023 and early 2024 Spread and secure Cottonwood leaves as mulch and to encourage soil ecology for infiltration |
| 1B | CSWCD/Rio Grande Return | N/A – management of existing planted basins; | Alkali sacaton and sunflower re-seeding via hand broadcast and light wood | Installation of perches in center of field, additional |

| | | Irrigation as needed to around 1x per month | chip layer in center of field, hand labor with machinery support for moving materials | native planting will occur late summer – fall 2023 |
|----|----------------------------|---|--|---|
| | | Mowing/hand labor to reduce abundance of invasive species | support for moving materials | |
| 1C | CSWCD/Rio Grande Return | No field prep or irrigation; Conservation fallow due to weed pressure in 2023 | Conservation fallow | Design and restoration planning through 2023 |
| 1E | CSWCD/Rio Grande Return | No soil prep. needed, Spring -Fall spot mowing and reduction in invasive species, hand removal on W. ½ for kochia, tumbleweed seedlings | Seed diversity increase via hand seeding within standing crop; irrigate as required. Management of invasive species ongoing throughout season | Expand/enhance hedgerow habitat with native species |
| 1D | CSWCD/Rio Grande Return | No soil prep. needed, Spring -Fall spot mowing and reduction in invasive species, hand removal on west ½ for kochia, tumbleweed seedlings | Seed diversity increase via hand seeding within standing crop, irrigate as required. Management of invasive species ongoing throughout season | Expand/enhance hedgerow habitat with native species |
| 2A | CSWCD/Rio Grande Return | No soil prep. needed | Management of invasive species ongoing | Design and restoration planning through 2023 |
| 2B | CSWCD/Rio Grande Return | No soil prep. Needed; Soil assessments to aid design | Management of invasive species ongoing | Design and restoration planning through 2023 |
| 2C | CSWCD/Rio Grande Return | No soil prep. needed, Soil assessments to aid design | Management of invasive species ongoing | Design and restoration planning through 2023 |
| 2D | CSWCD/Rio Grande Return | Irrigate, maintain existing cover crop (barley, wheat and oats) and reseed | Drill seed with cover crop mix (red clover, oats, buckwheat, cowpeas) | Monitor for added seed |

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|-----------|---------------|-------------------------------|-------------------------------|-------------------------------|
| 3A | CSWCD/Rio | No soil prep. needed | Management of invasive | Design and restoration |
| | Grande Return | | species ongoing | planning through 2023 |
| 3B | CSWCD/Rio | Minimal soil prep, use of | Spread straw, crimp into soil | Expand and enhance |
| | Grande Return | seed drill to introduce | simultaneous to seed mix in | hedgerow along edges (west, |
| | | native, drought-tolerant | spring, irrigate as needed | north) |
| | | seed mix (teff, millet, grama | Monitor and manage invasive | |
| | | grass-dominant) | - | |
| | | | species | |
| 4A East ½ | CSWCD/Rio | No field-wide soil prep | Late summer/fall 2023 – | Maintain reduced invasive |
| | Grande Return | needed | native shrubs plant out | species, mowing/raking |
| 4A West ½ | CSWCD/Rio | Level/Disc and plant | Drill seed and irrigate to | Raking/mowing as needed to |
| | Grande Return | May/June | germination/ maintain. | reduce invasive species cover |
| | | Irrigate | Dryland mix – (teff, millet, | |
| | | irrigate | blue gramma, alkali sacaton, | |
| | | | sand dropseed, sunflower) | |
| 4B | CSWCD/Rio | No soil prep. needed | Hand broadcast as needed to | Remove elm seedlings along |
| | Grande Return | | increase diversity | south and west of field |
| | | | Manage invasive species as | |
| | | | needed by hand, mow | |
| 4C | CSWCD/Rio | No soil prep. needed | Hand broadcast as needed to | Expand and enhance |
| 10 | Grande Return | No son prep. needed | increase diversity | hedgerow along edge (south) |
| | Granae Retain | | , | meager on arong eage (seattr) |
| | | | Manage invasive species as | |
| | | | needed by hand, mow | |
| 4D | CSWCD/Rio | Irrigate and maintain with | Broadcast seed, sunflowers | Mowing of invasive species, |
| | Grande Return | reseeding, no soil | with cover crop mix (red | hand labor to pull annuals |
| | | disturbance or soil prep. | clover, oats, buckwheat, | |
| | | required | cowpeas) | |
| Hedgerows | CSWCD/Rio | Auguring as needed for | Plant native species, mulch | Wood chips for mulch, weed |
| | Grande Return | planting prep., install | and irrigation as needed | suppression |
| | | | | |

| | | temporary drip irrigation systems | | |
|---------------|----------------------------|--|---|-----|
| WWH – nursery | CSWCD/Rio Grande Return | Ongoing: management of space with partners | Install additional nursery tables, irrigation, planting up seedlings to tall pots | N/A |

Crop Plan Narrative:

Management and restoration activities during the 2023 season at CNP North Tract are focused on maintenance of established mixed native and agronomic ground cover in wildlife farming fields, aftercare for native salt-shrubland species planted in fields 1B and along understory hedgerow enhancement. Simultaneous management measures to decrease invasive and exotic species coverage and abundance on the North Tract will continue improvement gained from prior management years (2021-22) through monitoring plant populations, targeted mowing and hand pulling, mulch applications and shallow tillage as necessary.

Restoration work will progress in 2023 towards enhancement of plantings in select fields and hedgerows towards greater species diversity and abundance while working diligently to adapt planting plans and designs to address ongoing aridification and surface water shortages.

This crop plan addresses the objective of developing a western boundary managed in the short term for habitat continuity and connection, soil cover and open field conditions benefitting migratory birds. This approach allows for increase in structural diversity and ability for soils to rebound from agricultural disturbance prior to implementing restoration activities in subsequent years.

SIGNATURE:

Sean Ludden, Ciudad SWCD Conservation Programs Manager