



Rocky Flats Site, Colorado, Report Summary

Second Quarter 2023

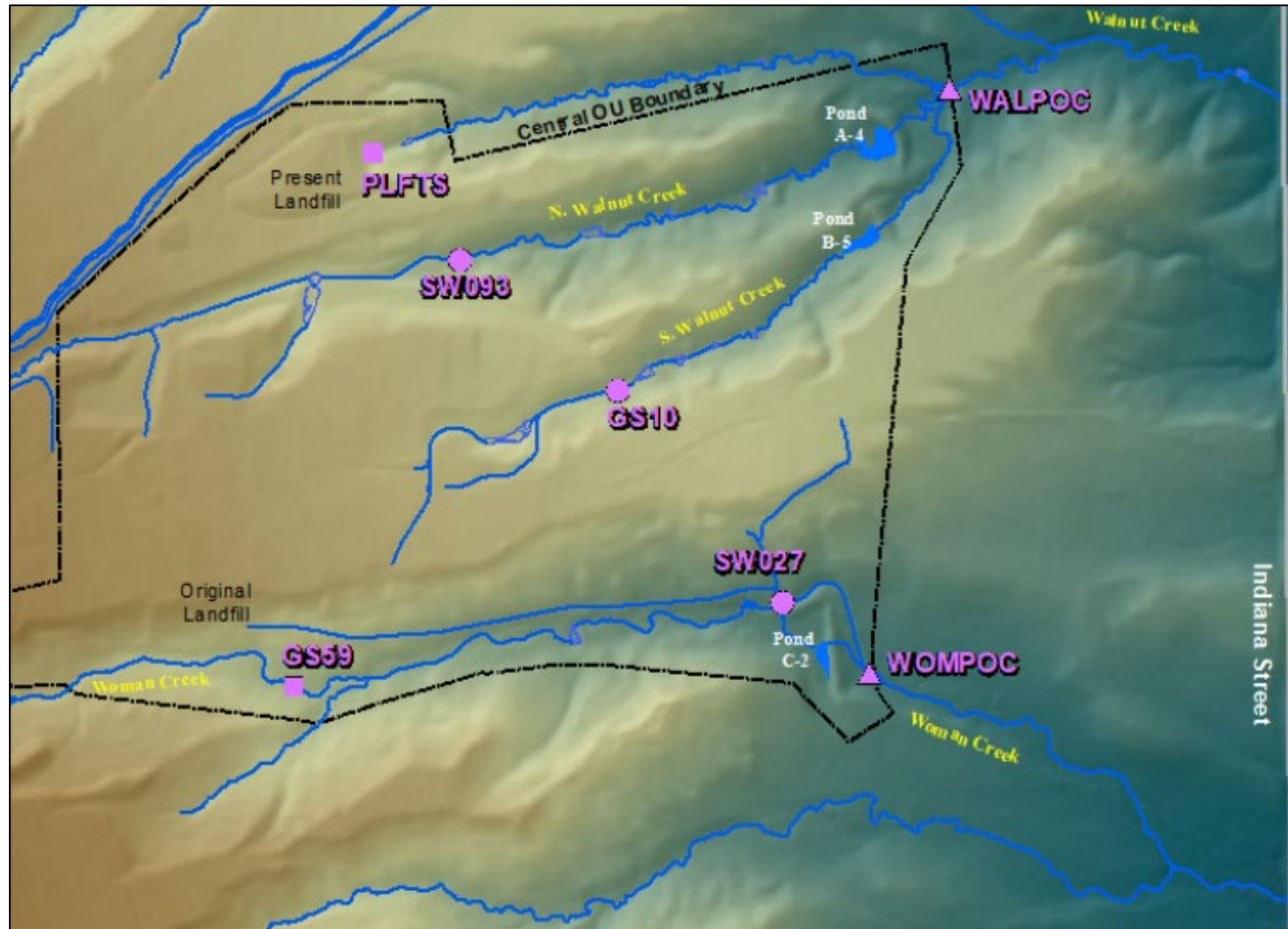


Surface Water Monitoring



Walnut Creek Point of Compliance

Selected Rocky Flats Legacy Management Agreement Surface Water Monitoring Locations



Landfill Performance Monitoring

- Original Landfill — Woman Creek, location GS59
 - All quarterly concentrations were below applicable RFLMA standards during the second quarter of 2023
- Present Landfill — location PLFSYSEFF (system effluent)
 - Although the Present Landfill Treatment System is not intended to treat metals, boron at the system effluent regularly exceeds the RFLMA Table 1 standard. The RFLMA parties are conducting an ongoing evaluation to determine an appropriate path forward. Details regarding RFLMA consultations related to PLFTS boron can be found in CR 2006-02 and CR 2022-02
 - Quarterly concentrations for all other analytes were below applicable RFLMA standards during the second quarter of 2023



Point of Evaluation Monitoring

- No RFLMA POE analyte concentrations were reportable during the second quarter of 2023



POE GS10



Point of Compliance Monitoring

- No RFLMA POC analyte concentrations were reportable during the second quarter of 2023



Woman Creek Point of Compliance



Groundwater Monitoring and Operations



Constructing replacement
discharge gallery at
Solar Ponds Plume
Treatment System

RFLMA Groundwater Monitoring Network Overview

- No changes to the monitoring network
- 10 Resource Conservation and Recovery Act wells (quarterly)
 - Evaluate potential impacts from OLF and PLF
- 9 Area of Concern wells and one Surface Water Support location (semiannually)
 - Located in drainages downstream of contaminant plumes
 - Evaluate for plumes discharging to surface water
- 27 Sentinel wells (semiannually)
 - Downgradient of treatment systems, near plume edges, and in drainages
 - Monitor for plumes migrating to surface water and treatment systems
- 42 Evaluation wells (biennially)
 - Within plumes, near source areas, and interior of Central Operable Unit
 - Evaluate whether monitoring of an area or plume can cease
- 9 treatment system locations (seven semiannually, two quarterly)

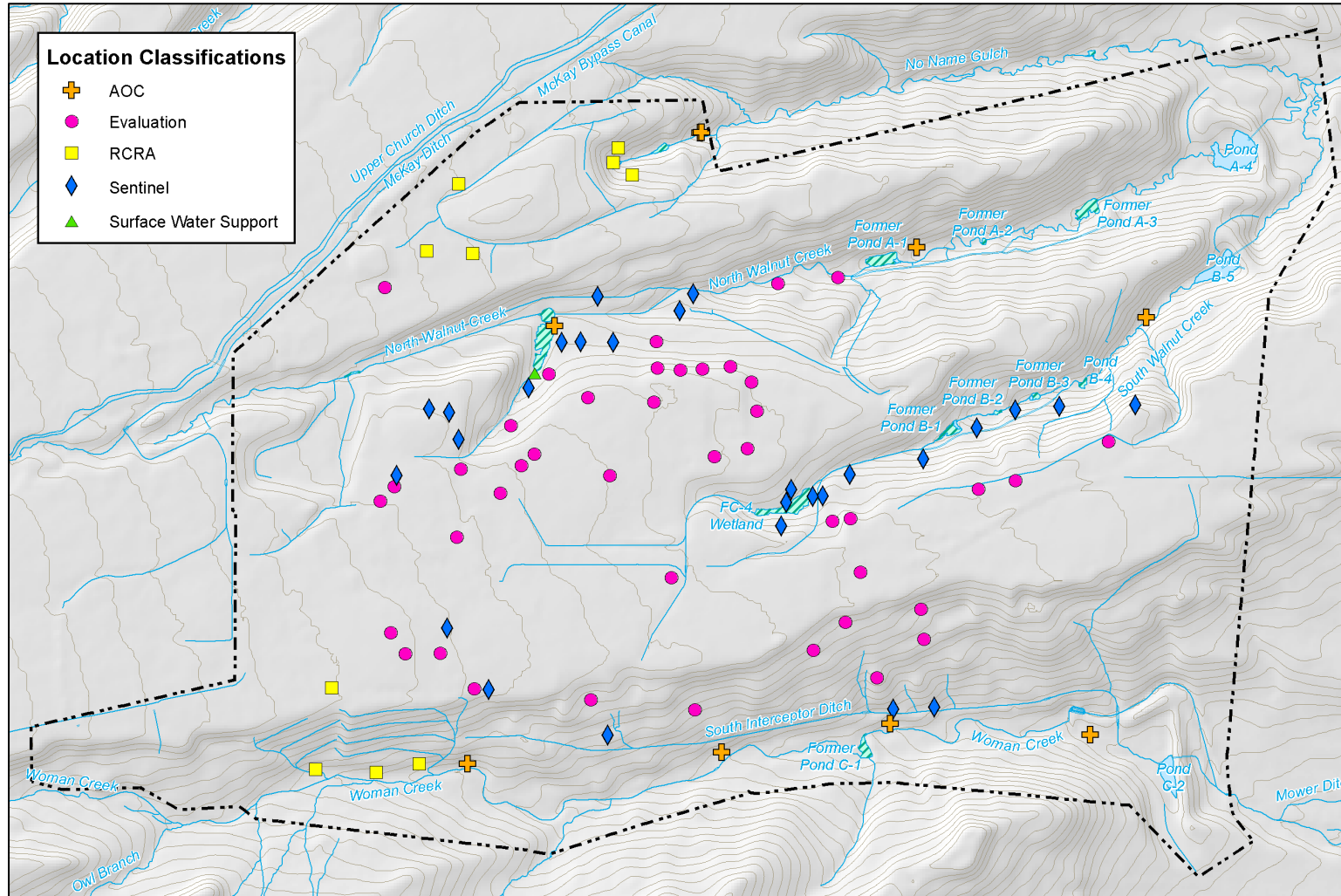


RFLMA Monitoring in Second Quarter 2023

- All RFLMA locations except Evaluation wells were scheduled for monitoring
 - Evaluation wells are scheduled for second quarter of even-numbered years
- Results were generally consistent with previous data
 - Data will be evaluated and discussed in the annual report for 2023
- CDPHE observed monitoring activities at several PLF RCRA wells
 - U.S. Environmental Protection Agency representative was also present
 - Observation is routine and periodic — last observation was in 2021



RFLMA Groundwater Monitoring Network



Groundwater treatment system locations omitted for clarity



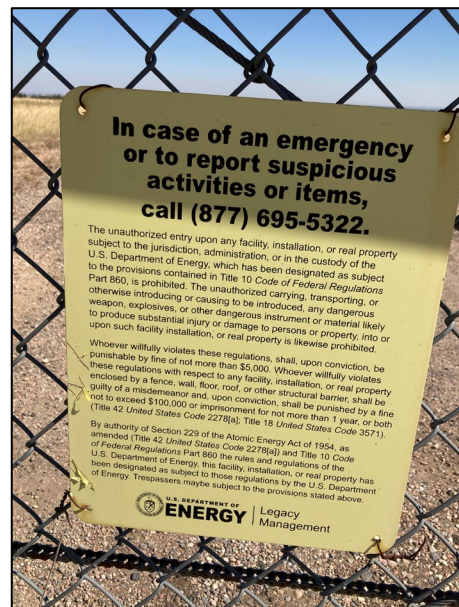
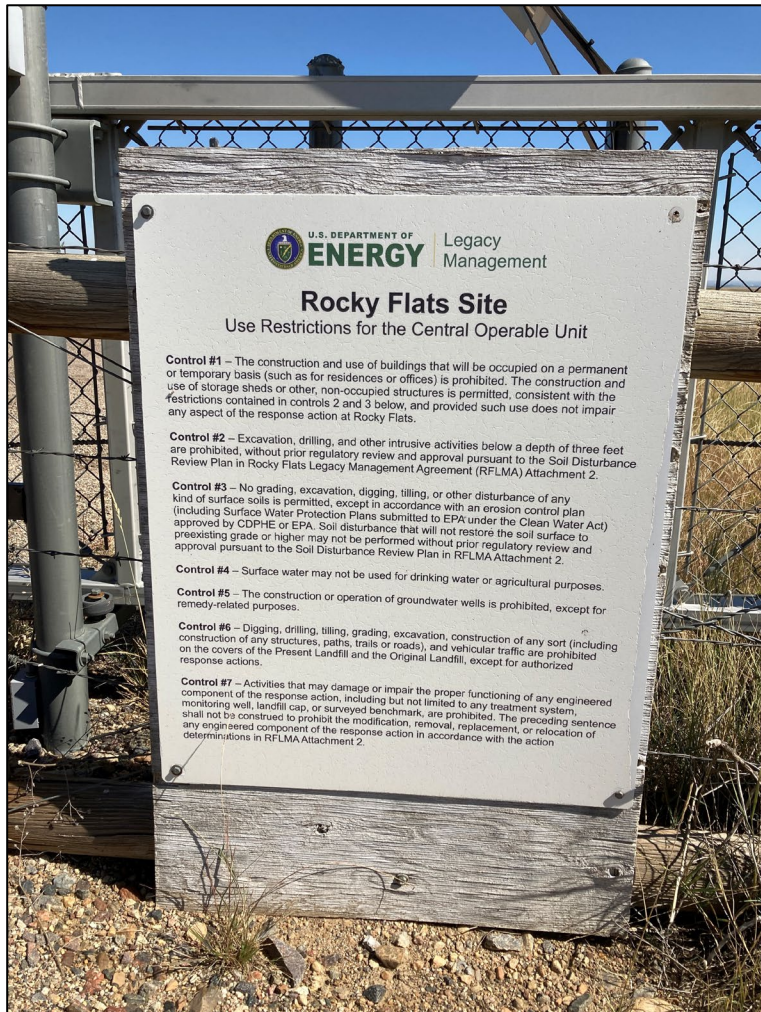
Other Activities in Second Quarter 2023

- Solar Ponds Plume Treatment System
 - Completed uranium treatment testing May 9, removed testing facility
 - Replaced subsurface effluent discharge gallery (see CR 2022-05)



SPPTS discharge gallery





Site Operations



Quarterly Sign Inspections

- RFLMA physical control
- Signs inspected quarterly
 - Signs reattached or replaced as needed

Additional Inspections

- Inspected former building areas (B371, B771, B881, and B991) as a best management practice
 - Conducted quarterly and as a response to a significant precipitation event
 - No issues identified during inspections



Other Site Activities

- Completed the 2023 Roads Maintenance Project in June
- Regraded site roads
- Added road base as needed
- Refurbished rock crossings
- Added dust suppressant



Site Operations: Present Landfill

- Performed quarterly inspection on May 16, 2023, combined with weather-related inspection
- Additional weather-related inspections performed April 27 and May 12, 2023
- Landfill is in good condition
 - No issues identified during inspection



Aerial image of the PLF



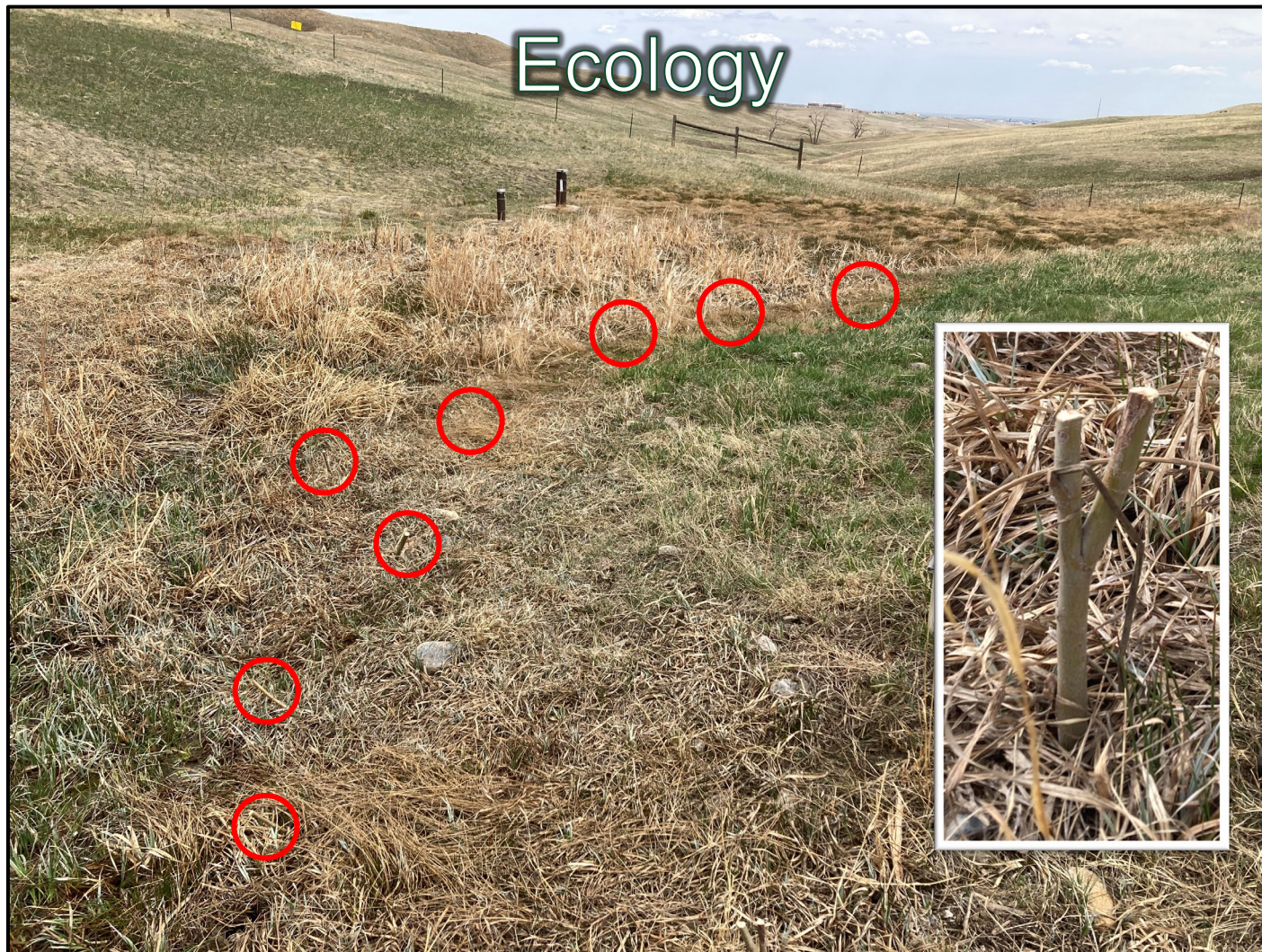
Site Operations: Original Landfill

- Monthly inspections performed on April 19, May 23, and June 23, 2023
- Additional inspections in response to significant precipitation events performed April 27, May 12, and May 16, 2023
- In addition, OLF is walked down weekly as a best management practice
- Routine maintenance performed on berms, channels, and erosion controls
- Landfill in good condition
 - No slumping observed
- Settlement monuments surveyed quarterly
 - Vertical settling at each monument was within design limits



OLF





Habitat enhancement using willow stakes

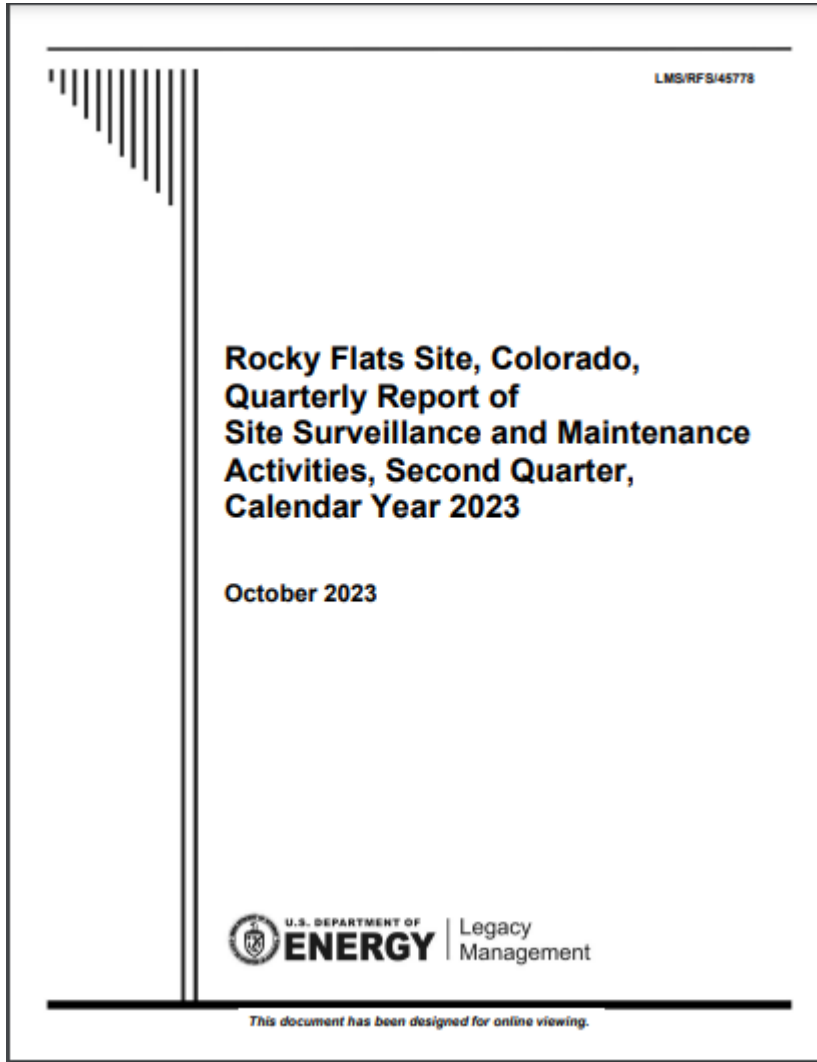
Ecological Management and Monitoring



Tree swallow using nest box

- Wildlife monitoring
 - Nest box surveys
 - Predisturbance bird nest surveys
 - Prairie dog surveys (no active towns in COU)
- Vegetation monitoring
 - Weed mapping
 - Wetland surveys (water levels, weeds)
- Vegetation management
 - SPPTS discharge gallery revegetation
 - Willow stake planting
 - Interseeding
 - Weed control





For more information, visit:
<https://www.energy.gov/lm/rocky-flats-site-colorado>

**For additional details on any items
noted here, please view the
Rocky Flats second quarter 2023
report at:**
https://lmpublicsearch.lm.doe.gov/lmsites/45778_rfs_2q23.pdf

