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July 1, 2026

Certified Mail # 70221670000184298829

Mr. Jonas Armstrong, Director
New Mexico Environmental Department
Water Protection Division
P.O. Box 5469
Santa Fe, New Mexico 87502

Dear Mr. Armstrong:

**Re: Hanover Whitewater Creek Investigation Unit (HWCIU) – Chino AOC
Vegetation Monitoring Report, Bayard Canyon Interim Removal Area**

Freeport-McMoRan Chino Mines Company (Chino) submits under separate cover the 5-year *Vegetation Monitoring Report* for the Bayard Canyon Interim Removal Area (IRA), Hanover Whitewater Creek Investigation Unit (HWCIU) under the Chino Administrative Order on Consent (AOC). This report was submitted today to Mr. David Mercer, AOC Project Manager for the New Mexico Environment Department (NMED).

Please contact Ms. Pam Pinson at (575) 912-5213 if you have any questions regarding this quantitative vegetation survey report.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Sherry Burt-Kested', written in a cursive style.

Sherry Burt-Kested, Manager
NMO Environmental Services

SBK:wk
Enclosures
20260626-001

cc: David Mercer, NMED
Joseph Fox, NMED
Michael Boulay, NMED
Erica Almance, US EPA
Mike Steward, FCX
Pamela Pinson, Chino



REPORT

2025 Quantitative Vegetation Monitoring

Bayard Canyon Interim Removal Area (IRA)

Submitted to:

Freeport-McMoRan Chino Mines Company

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Submitted by:

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June 15, 2026



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1.0 INTRODUCTION

Freeport-McMoRan Chino Mines Company (Chino) conducted an interim removal action (IRA) in 2021 at Bayard Canyon within the Hanover-Whitewater Creek Investigation Unit (HWCIU) under the Administrative Order on Consent (AOC). Chino entered into the AOC voluntary agreement with the New Mexico Environment Department (NMED) in 1994. The HWCIU is one of several investigation units established under the AOC to address environmental risks associated with historical mining activities. The Bayard Canyon IRA site is located south of the Chino Mine's main gate along the Lake One Haul Road, south of the Groundhog Mine IRA, and northwest of the Town of Bayard, New Mexico (Figure 1).

Historical mining activities adjacent to and associated with the Groundhog Mine left numerous small-scale prospect pits and mine openings, resulting in localized areas of mine-impacted surface soils and legacy stockpiles within Bayard Canyon. During early planning and subsequent investigations conducted under the HWCIU, Bayard Canyon was identified as an area where residual mine-impacted materials could contribute metals to surface soils, sediments, and stormwater runoff, with potential transport to downstream receptors. These investigations confirmed that focused remedial action was warranted under the Chino AOC.

Chino initiated the Bayard Canyon IRA in 2021 to partially fulfill the mitigation requirements established for the HWCIU. The IRA included targeted the removal of legacy stockpile materials associated with historical mine workings and prospect pits, followed by backfilling, grading, and site restoration to reestablish stable drainage conditions and reduce erosion potential. The scope of work, construction activities, post-removal sampling, and restoration measures associated with the Bayard Canyon IRA are documented in the Bayard Canyon Supplemental Interim Removal Action Completion Report (Completion Report, Arcadis 2022).

To fulfill the vegetation monitoring requirements described in the Completion Report, Chino retained WSP USA Inc. (WSP) to conduct a quantitative vegetation survey of the Bayard Canyon IRA to document the status of the revegetated area five years after seeding. The primary objective for revegetation of the Bayard Canyon site is to limit erosion and provide the re-establishment of a native plant community. A secondary benefit of the reclamation is to re-establish grazing and wildlife habitat. This report conveys the results of the vegetation survey of the Bayard Canyon IRA conducted in September 2025.

1.1 Background

Bayard Canyon is a northeast-southwest trending canyon located east of Hanover-Whitewater Creek and south of the Santa Rita Mine approximately 1½ miles northeast of the town of Bayard (Figure 1). Elevated lead concentrations identified in the HWCIU Remedial Investigation (Golder 2000) in Bayard Canyon and downstream in Whitewater Creek were originally thought to be attributable to the exposed Groundhog Fault jasperoid vein in Bayard Canyon. Following the completion of the HWCIU IRA (Arcadis 2018), the elevated lead concentrations were attributed to legacy waste rock stockpiles extracted from the vein located in the vicinity of the old mine workings and prospect pits. Due to the mineralized nature of jasperoid, both its outcrops and stockpile material are a similar source of metal sulfides to the soils and sediments of the area.

The Bayard Canyon IRA was implemented under the HWCIU IRA Work Plan (Arcadis 2018) with NMED approval. The remedial action focused on the visual identification and removal of legacy mine-impacted materials associated with historical mine workings, shafts, adits, and prospect pits. Excavated areas were backfilled with clean fill to reestablish surface grades and promote stormwater runoff. The IRA construction activities occurred between April 2021 and June 2021 on approximately 4 acres.

Construction activities resulted in the removal of approximately 12,000 cubic yards of stockpile material with metal sulfide mineralization. Excavated materials were transported to the Chino Mine West Stockpile for disposal in accordance with NMED approvals. Following removal, excavated areas were backfilled using locally sourced material to reestablish pre-existing grades, maintain drainage continuity, and reduce erosion potential. Reclamation activities included grading of disturbed areas, installation of erosion and sediment control measures, and revegetation using an approved native seed mix consistent with Chino's Closure/Closeout Plan. Post-construction quarterly inspections were performed by Chino for 4 years following seeding and mulching. The inspections confirmed that vegetation was sufficiently established for erosion control.

1.2 Objectives

The primary objective for revegetation of the Bayard Canyon IRA is to limit erosion and provide dust control for remediated areas through the re-establishment of a native plant community. A secondary benefit of the reclamation is to establish grazing and wildlife habitat.

Per the Completion Report (Arcadis 2022), Chino is required to conduct a quantitative survey of revegetated areas and submit a report evaluating the site relative to Chino's Vegetation Success Standards (Appendix C, Mining and Minerals Division's [MMD] Revision 01-1 to Permit GR009RE). The post-mining land use (PMLU) for Chino Mine is wildlife habitat. Additionally, under the AOC, livestock grazing habitat is also the objective since HWWCIU remediated sites can be located in grazing pastures that surround Chino operations. Under MMD's guidance for a wildlife PMLU, total canopy cover, shrub density, and plant diversity are evaluated to determine vegetation success (Section 2).

Consistent with the AOC/IRA monitoring objective, the purpose of this survey is to document revegetation progress and to evaluate whether vegetation is sufficiently established to support erosion control and long-term site stability. This document details the methods and results of the 2025 quantitative vegetation monitoring at the Bayard Canyon site, five growing seasons since the completion of the IRA.

2.0 SUCCESS CRITERIA

Revegetation of the Bayard Canyon was intended primarily to limit erosion and provide dust control for disturbed areas through re-establishment of a native plant community (Arcadis 2021). Reclamation success at AOC sites at Chino is evaluated by a reference area approach as described in the *Interim Technical Standards* (ITS, DBS&A 1999) and the *Closure/Closeout Plan* (CCP, Chino 2007). The reclamation success criteria were developed for reclaimed tailing areas and are based on analysis of vegetation data collected in the Tailing Reference Area (Figure 1). Vegetation monitoring and data analysis procedures are described in Section 3.0.

Revegetation efforts are considered successful when total canopy cover on the reclaimed facility is at least 70% of the reference area's total canopy cover. Shrub density is considered adequate if it is at least 60% of the reference area. Diversity is evaluated by the numerical diversity guidelines for different structural components of the plant community (Table 1) as well as by evidence of colonization of the reclaimed site by native species. In summary, the diversity guideline would be met if there are at least three warm season grasses and two shrubs, each having a minimum cover of 1%. In addition, two non-weedy forb species with minimum of 0.1% absolute cover is required to meet the diversity guideline.

Under the reference area approach, revegetation success criteria are established for the reclamation in proportion to a mature, native reference area. Reclaimed areas over mine waste are typically eligible for bond release 12 years after seeding. In such cases, both the reclaimed and reference areas are monitored to allow formal

hypotheses testing to determine whether the success standards are met. The Bayard Canyon IRA site technically is not a formal reclamation site as only disturbed native ground was revegetated, nor is the revegetation expected to fully progress in five years to reclamation standards, although erosion objectives are being met as well as establishment of a natural habitat.

3.0 VEGETATION MONITORING METHODS

Vegetation attributes at the Bayard Canyon IRA were quantified using the same methods on the reclaimed lands and the Chino tailing reference area. Fieldwork was conducted at the end of the growing season, but prior to the first killing frost, on September 18, 2025. The vegetation monitoring methods described below are consistent with those applied at other Chino AOC/IRA sites and are intended to document revegetation conditions and progress following reclamation activities.

3.1 Sampling Design

Vegetation attributes were quantified using sampling methods approved by the MMD. A systematic random sampling procedure employing a transect/quadrat system was used to select sample sites within the reference and reclaimed areas. A 50-square foot grid was imposed over the sampling areas to delineate vegetation sample plots, and random coordinates were used to select plots for vegetation sampling. Transects originated from the southeastern corner of the selected vegetation plot placed along the perimeter and measured 30 meters (m) long in a dog leg pattern (Figure 3). Four 1 m² quadrats were located at pre-determined intervals along the transect for quantitative vegetation measurements. Shrub density was determined from a 2-meter wide belt transect situated along the perimeter of the dog-legged transect (Figure 3). To reduce the variability commonly associated with shrub belt transect data, additional randomly located belt transects were surveyed. The locations of the randomly selected vegetation plots are shown in Figure 4. For sampling in conjunction with the drone-based surveys, the reference area was masked to exclude the areas with trees and transects that intersected the mask were removed. As a result, the 2025 reference area sampling reflects the masked (non-treed) portion of the reference area shown on Figure 4

In September 2025, 6 belt transects and 20 quadrats were sampled at Bayard Canyon and 20 belt transects and 40 quads were sampled in the reference area. Some quadrats along the transect at Bayard Canyon were deemed outside of the removal area and therefore was not sampled. For each quadrat, ocular estimates were made of total canopy, species canopy cover, basal cover, surface litter, surface rock fragments, and bare soil. Not all plant species are expected to occur in the sampling quadrats. Prior to and during formal sampling, each site was traversed on foot to inventory plant species growing within the plots and across the sampling area.

3.1.1 Vegetation and Ground Cover

Field scientists determined species canopy cover, total canopy cover, surface litter, surface rock fragments, and bare soil in each quadrat. Plant frequency was determined on a species-basis by counting the number of individual plants rooted in each quadrat. Percent area cards with a minimum resolution of 0.05 percent were used to increase accuracy and consistency of measurements. Cover estimates less than 0.05 percent were entered as trace amounts.

Canopy cover is the percentage of quadrat area included in the vertical projection of the canopy (Daubenmire 1968). Canopy cover estimates made on the species basis may exceed 100 percent in individual quadrats where the vegetation overlaps (multi-layered canopies). In contrast, the sum of total canopy cover, surface litter, rock fragments, and bare soil does not exceed 100 percent. Relative canopy cover is presented to assess

contributions of individual plant species cover and is calculated by dividing the percent canopy cover of a plant species by the mean total species canopy cover of the sampling unit.

Basal cover is the proportion of ground occupied by the crowns of grasses and rooting stems of forbs and shrubs. Like the total cover estimates, basal cover estimates do not exceed 100 percent. Basal cover is measured to understand decadal trends in plant community development but not used in the evaluation of reclamation success. Photographs of each transect and quadrat were taken to preserve a record of the conditions at the time of sampling.

3.1.2 Shrub Density

Shrub density was also determined using a belt transect method (Bonham 1989). Shrub density was determined from a 2-meter wide, 30-meter-long belt transect situated along the perimeter of the dog-legged transect (Figure 4). Shrub density was calculated from the belt transect data by dividing the total number of individual plants rooted in the belt transect area (60 m²).

3.1.3 Plant Diversity

Plant diversity is assessed by comparing the number and occurrence of perennial species by life form found in the remediated sites to the technical standard developed for Chino (Section 2). The number of perennial grass (warm and cool seasons), perennial forb, and shrub species observed within the quadrats and their associated cover levels were compared to the technical standard (Table 3).

3.1.4 Data Analysis and Sample Adequacy

Formal statistical hypothesis testing is typically not required for an evaluation of recently seeded area because reclaimed, semi-arid plant communities may take 8 to 10 years before they are well established. At this early stage, our analysis is limited to a comparison of means and 90% confidence intervals (CI) to evaluate overall performance of the IRA vegetation relative to the reference area performance standards. More robust statistical analyses are reserved in vegetation studies to determine revegetation success for financial assurance release in 2 of the last 4 years of the 12-year liability period after seeding per MMD's guidance (MMD 1999).

The number of samples required to characterize a particular vegetation attribute depends on the uniformity of the vegetation and the desired degree of certainty required for the analysis. Sample adequacy is the minimum number of samples required to estimate a parameter within a given level of precision (Cochran 1977) and must be met for classical null hypothesis testing for bond release comparisons (MMD 1999). Often it is impractical to achieve sample adequacy in vegetation monitoring studies, particularly in semi-arid ecosystems, and since formal hypotheses testing is not used in our analysis, a minimum sample number approach is taken to reduce the variance around the mean.

In the context of this study, the number of samples necessary to meet sample adequacy (N_{min}) was calculated assuming the data were normally distributed using Snedecor and Cochran (1967).

$$N_{min} = \frac{t^2 s^2}{(\bar{x}D)^2}$$

Where N_{min} is the minimum number of samples required for there to be 90% confidence that the sample mean is within 10% of the population mean, t is the two-tailed t-distribution value based on a 90% level of confidence with $n-1$ degrees of freedom, s is the standard deviation of the sample data, $\bar{x}$ is the mean, and D is the desired level of accuracy, which is 10 percent of the mean.

Again, the vegetation monitoring at this early phase of the Bayard Canyon site does not require nor did not attempt to meet sample adequacy but the number of samples necessary to meet sample adequacy is reported. This information provides a general indication as to the uniformity and character of the sample data relative to the overall population.

4.0 RESULTS

This section provides a summary of the precipitation regime since the Bayard Canyon IRA site was seeded and the results of the 2025 monitoring event. The field data for canopy and basal cover, frequency, and shrub density by the belt transect are included in Appendix A and photographs of the quadrats are included in Appendix B.

4.1 Precipitation

Bayard Canyon is located in a semi-arid region of southwestern New Mexico where the amount and distribution of precipitation are important determinants for the progression of vegetation particularly during the establishment phases of reclamation. Once established, the precipitation dynamics affect the vegetation cover levels on a year-to-year basis, with grasses and forbs showing the most immediate effects. Precipitation records from Fort Bayard, New Mexico (1897 to 2006) provide an average long-term precipitation for the Chino area (WRCC 2025). Comparing annual and growing season precipitation patterns at Chino to long-term normals at Fort Bayard provides context and understanding to the establishment and progression of vegetation in reclaimed areas.

Precipitation has been monitored at Dam 17 since 2020 and Whitewater Creek since 2023 (Table 1). The prevailing precipitation regime during this period can be described as dry with annual precipitation only 75% of regional norms. Annual precipitation for 2024 and 2025 was especially low at 64% of the long-term regional average of 15.80 inches.

The regional normal growing-season precipitation (May through September) at Fort Bayard is 9.97 inches. Since 2020, Bayard Canyon experienced near or above normal growing-season precipitation in 2021 through 2023 with especially wet Augusts in 2021 and 2022 (Table 1). However, the growing season precipitation over the past two years at Dam 17 and Whitewater Creek has been droughty, about 35% below the long-term regional average (Table 1, Figure 2).

4.2 Canopy Cover

Mean total canopy cover for the Bayard Canyon reclamation was 56.0% ($\pm 10.8\%$, 90% confidence interval) compared to the Chino reference area that was 25.2% $\pm 4.9\%$. Canopy cover for the reclamation in 2025 is well above the performance standard at about 220% of the cover at the reference area for 2025 (Table 3, Figure 5a). The minimum sample size required to meet $N_{\min}$ for canopy cover was 79 samples. Representative photographs of the reference area and the reclaimed vegetation is shown in Figures 6 and 7 respectively.

Plant cover by species at the Bayard Canyon site is provided in Table 4. Grasses dominated the canopy at the Bayard Canyon, representing 46.8% of the total relative cover. All grass cover was provided by warm-season grasses with blue grama (*Bouteloua gracilis*) dominant with big sacaton (*Sporobolus wrightii*), plains lovegrass (*Eragrostis intermedia*), and James' galleta (*Pleuraphis jamesii*) providing additional cover. Forbs comprised 42.9% of the relative cover with Rose's ticktrefoil (*Desmodium rosei*) providing a majority of the relative cover. Other important forbs in the reclamation include slimleaf bean (*Phaseolus angustissimus*), Fort Bowie prairie clover (*Dalea brachystachya*), Trans-Pecos morning-glory (*Ipomoea cristulata*), and oak-leaved thornapple (*Datura quercifolia*). Shrubs' relative cover comprising 9.5% with honey mesquite (*Prosopis glandulosa*)

comprising the highest cover and a few other species providing limited cover. An unknown moss species was also observed, providing a small fraction of cover.

4.3 Shrub Density

The shrub density at Bayard Canyon was lower compared to the reference area by belt transect measurements (Table 3, Figure 5b). Shrub density on the Bayard Canyon reclamation was 382 stems/acre and is 15% of the reference area shrub density. Despite having a lower density, it is considered satisfactory for the small, interspersed site and the early stage of the reclamation. Four shrub species were encountered in the belt transects with honey mesquite and Chihuahuan brickellbush (*Brickellia floribunda*) being the most frequently measured species (Appendix A, Table A-4). The minimum sample size needed to meet $N_{\min}$ for shrub density is 66 samples.

4.4 Diversity

The vegetation on Bayard Canyon met the diversity requirements for forbs and warm-season grasses but not shrubs (Table 4). Five warm-season perennial grasses meet the 1.0% cover diversity standard, including blue grama (11.1%), big sacaton (4.8%), plains lovegrass (3.3%), James' galleta (3.3%) and green sprangletop (1.0%, *Leptochloa dubia*). Only one shrub met the 1.0% cover diversity standard: honey mesquite (5.8%). Twenty forbs met the 0.1% canopy cover diversity standard. Important perennial forbs meeting the canopy threshold include Rose's tickfoil (15.2%) slimleaf bean (2.3%), Fort Bowie prairie clover (1.2%), oak-leaved thornapple (0.8%), Trans-Pecos morning-glory (0.5%), and scarlet globemallow (*Sphaeralcea coccinea*, 0.3%) (Table 4). Additionally, the short-lived forb carelessweed (*Amaranthus palmeri*), contributed 4.3% canopy cover in 2025. Notably, the reference area also did not meet the diversity standards for both shrubs (only winterfat met the requirement) and warm-season grasses with only black grama and tabosagrass above the threshold cover value of 1% (Table 5).

A total of 45 species have been identified on the Bayard Canyon reclamation of which 39 species were not in the reclamation seed mix and were recruited from native sources indicating that plant diversity is increasing in response to colonization (Table 4). Additionally, no noxious weeds were observed on the reclamation during the 2025 monitoring program.

5.0 SUMMARY

The primary objective for revegetation of the Bayard Canyon IRA site is to limit wind and water erosion for remediated areas through the re-establishment of a native plant community, leading to the final objective of grazing and wildlife habitat. WSP conducted a quantitative vegetation survey of the site to document the progress of revegetation five years after completion of the IRA. Canopy cover, shrub density and diversity were measured and compared to the tailing reference area for Chino South Mine. This guidance is typically applied in 2 of the last 4 years of the 12-year liability period after seeding as part of demonstrating reclamation success.

The revegetation efforts associated with the IRA at the Bayard Canyon site are considered successful. An early-seral stage mixed grama-shrub community is well established across the remediation. Based on the 2025 sampling, mean total canopy cover in the fifth growing season is 56.0%, which is 220% of the canopy cover measured at the reference area. Shrub density was considered satisfactory at about 382 stems/acre as measured by the belt transect method but was lower than the average shrub density for the Reference Area.

The reclamation meets the diversity standards for grasses and forbs but only meets the shrub standard for one species. Thirty-nine plant species that were not included in the reclamation seed mix were identified at the Bayard Canyon site. Recruitment of native plant species into the reclaimed plant community demonstrates the process of

ecological succession and the gradual establishment of self-sustaining ecosystem. Vegetation on the remediated site meets the diversity requirements for forbs and grasses but not shrubs.

No significant erosion issues were documented during the 5-year monitoring period, and the currently established plant community meets the overall objective as a best management practice for erosion control. The reclaimed plant community provides significant canopy cover, while also providing both ecological and rangeland values to the area.

Results from the 2025 vegetation survey of the Bayard Canyon IRA indicate that revegetation efforts were successful, and the remediated area can support a self-sustaining ecosystem. The survey data demonstrate that the vegetation on the reclaimed site is performing well for this early stage of the reclamation. The site supports a viable self-sustaining vegetated cover that exceeds Chino's vegetation success standards for total canopy cover and diversity and progressing toward the IRA objective of returning the area to a grazing and wildlife PMLU. Vegetation performance suggests that the plant community established at the site are adapting to regional climatic conditions and are capable of continuing to develop without intervention. No additional vegetation monitoring is recommended as the Bayard Canyon IRA site will remain under the oversight of the Chino AOC and will be addressed and released under the STSIU's Record of Decision.

6.0 REFERENCES

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Tables

Table 1: Dam 17 and Whitewater Creek Monthly and Annual Precipitation, 2020-2025

Station	Year	Precipitation (inches)													
		January	February	March	April	May	June	July	August	September	October	November	December	Annual Total	Growing Season Total
Dam 17	2020	0.47	1.84	1.94	0.00	0.08	0.52	2.90	0.63	0.89	0.59	0.37	0.56	10.79	5.02
	2021	ND	ND	0.27*	0.18	0.00	1.17	3.92	4.54	2.10	0.45	0.01	0.40	13.04	12.00
	2022	1.10	0.06	0.25	0.00	0.00	1.77	1.63	8.31	0.90	0.08*	ND	ND	14.10	12.69
	2023	1.00	0.56	0.17	0.00	1.51	0.00	2.25	2.14	3.63	0.54	0.30	1.09	13.19	9.53
	2024	1.52	1.73	0.39	0.19	0.00	3.20	1.33	0.14	0.01	0.04	0.42	0.01	8.98	4.68
	2025	0.09	0.19	0.07	0.02	0.01	1.49	2.75	1.50	2.86	0.92	1.29	0.16	11.35	8.61
Whitewater Creek	2023	0.91	0.42	0.21	0.00	1.40	0.00	2.49	1.65	3.20	0.67	0.29	1.16	12.40	8.74
	2024	1.13	1.43	0.52	0.24	0.00	2.21	2.03	1.33	0.02	0.08	0.74	0.00	9.73	5.59
	2025	0.11	0.31	0.28	0.00	0.00	0.00	2.15	1.45	3.26	0.83	1.21	0.10	9.70	6.86
Fort Bayard**	Historic	0.88	0.85	0.68	0.38	0.47	0.82	3.32	3.30	2.06	1.24	0.75	1.05	15.80	9.97

Notes:

* Partial data for month

** Long-term average (WRCC 2025)

Growing season precipitation is between May and September

Table 2: Revegetation Success Standards for the Chino Mine

Vegetative Parameter	Success Standard
Total Canopy Cover (%)	≥ 70% of the Reference Area
Shrub Density (stems/ac)	≥ 60% of the Reference Area
Diversity	2 shrub or subshrub species with a mimium of 1% canopy cover
	3 perennial warm-season grasses with a mimiumum of 1% canopy cover
	2 non-weedy forb species with a mimimum of 0.1% canopy cover

Notes:

stems/ac = stems per acre

Indicates success standard was met in 2025 at the Bayard Canyon IRA site

Table 3: Summary Statistics, Bayard Canyon Reclamation and Reference Area 2025

Vegetation Metric	2025	
	Bayard Canyon	Reference Area
Total Canopy (%)		
Mean	56.0	25.2
Standard Deviation	28.6	18.7
90% Confidence Interval	10.8	4.9
Nmin ¹	79	157
Shrub Density from Belt Transect (stems/ac)		
Mean (stems/ac)	382	2,555
Standard Deviation	176	1065
90% Confidence Interval	75	267
Nmin ¹	66	49

Notes:

¹ Minimum number of samples required to obtain 90% probability that the sample mean is within 10 percent of the population² See species code in Table 7

Indicates success standard was met in 2025 at the Bayard Canyon IRA site

Table 4: Plant Canopy and Density for Bayard Canyon, 2025

Scientific Name	Common Name	Code	Mean Canopy Cover (%)	Mean Basal Cover (%)	Relative Cover (%) ^a	Mean Density (#/m ²)
Grasses (8)						
Warm-Season Annuals (3)						
<i>Aristida adscensionis</i>	Sixweeks threeawn	ARAD	0.5	<0.1	0.8	0.2
<i>Bouteloua barbata</i>	Sixweeks grama	BOBA2	0.2	<0.1	0.3	0.4
<i>Setaria viridis</i>	Green bristlegrass	SEVI4	3.5	0.8	5.5	1.3
Warm-Season Perennials (9)						
<i>Aristida purpurea</i>	Purple threeawn	ARPU9	0.1	<0.01	0.2	0.3
<i>Bouteloua curtipendula</i> *	Sideoats grama	BOCU	0.6	0.2	0.9	0.2
<i>Bouteloua gracilis</i> *	Blue grama	BOGR2	11.7	3.6	18.6	5.6
<i>Chloris virgata</i>	Feather fingergrass	CHVI4	<0.1	<0.1	<0.01	0.1
<i>Eragrostis intermedia</i>	Plains lovegrass	ERIN	3.3	0.3	5.3	3.1
<i>Leptochloa dubia</i> *	Green sprangletop	LEDU	1.0	0.4	1.5	0.4
<i>Pleuraphis jamesii</i> *	James' galleta	PLJA	3.3	0.6	5.1	0.6
<i>Sporobolus contractus</i>	Spike dropseed	SPCO4	0.6	0.1	1.0	0.4
<i>Sporobolus wrightii</i>	Big sacaton	SPWR2	4.8	0.5	7.6	0.3
Forbs (26)						
<i>Amaranthus palmeri</i>	Carelessweed	AMPA	4.3	0.0	6.8	4.9
<i>Chamaesyce prostrata</i>	Prostrate sandmat	CHPR6	0.1	<0.1	0.1	0.5
<i>Chamaesyce serpyllifolia</i>	Thymeleaf sandmat	CHSE6	0.1	<0.1	0.2	0.4
<i>Dalea albiflora</i>	Whiteflower prairie clover	DAAL	<0.1	<0.1	<0.01	0.1
<i>Dalea brachystachya</i>	Fort Bowie prairie clover	DABR	1.2	0.1	1.9	7.5
<i>Dalea leporina</i>	Foxtail prairie clover	DALE3	0.3	<0.1	0.4	0.6
<i>Datura quercifolia</i>	Oak-leaved thornapple	DAQU	0.8	<0.1	1.2	0.4
<i>Desmodium rosei</i>	Rose's ticktrefoil	DERO2	15.2	0.4	24.1	31.2
<i>Dyssodia papposa</i>	Fetid marigold	DYPA	0.2	<0.1	0.2	0.7
<i>Eriogonum wrightii</i>	Bastardsage	ERWR	0.1	<0.1	0.1	0.1
<i>Evolvulus sericeus</i>	Silver dwarf morning-glory	EVSE	0.2	<0.1	0.2	0.1
<i>Froelichia gracilis</i>	Slender snakecotton	FRGR3	<0.1	<0.1	<0.01	0.2
<i>Heliomeris longifolia</i>	Longleaf false goldeneye	HELO6	0.1	<0.1	0.2	0.3
<i>Ipomoea costellata</i>	Crestrub morning-glory	IPCO2	<0.1	<0.1	<0.01	0.1
<i>Ipomoea cristulata</i>	Trans-Pecos morning-glory	IPCR	0.5	<0.1	0.9	0.8
<i>Ipomoea tenuiloba</i>	Spiderleaf	IPTE	0.1	<0.1	0.1	0.4
<i>Kallstroemia parviflora</i>	Warty caltrop	KAPA	0.8	<0.1	1.3	0.4
<i>Mollugo verticillata</i>	Green Carpetweed	MOVE	<0.1	<0.1	<0.01	0.3
<i>Phaseolus angustissimus</i>	Slimleaf bean	PHAN3	2.3	<0.1	3.6	1.1
<i>Phemeranthus aurantiacus</i>	Orange fameflower	PHAU13	0.1	<0.1	0.1	0.1
<i>Portulaca oleracea</i>	Little hogweed	POOL	0.1	<0.1	0.1	0.1
<i>Portulaca pilosa</i>	Kiss me quick	POPI3	<0.1	<0.1	<0.01	0.3
<i>Sanvitalia abertii</i>	Abert's creeping zinnia	SAAB	0.1	<0.1	0.1	0.3
<i>Solanum elaeagnifolium</i>	Silverleaf nightshade	SOEL	0.4	<0.1	0.7	0.4
<i>Sphaeralcea coccinea</i>	Scarlet globemallow	SPCO	0.3	<0.1	0.4	0.1
<i>Xanthium strumarium</i>	Rough cocklebur	XAST	<0.1	<0.1	<0.01	0.1
Mosses (1)						
MOSS	Unknown Moss Species	MOSS	0.1	0.1	0.1	0.2
Unknown (2)						
Brassicaceae sp.	Unknown brassica	BRASSI	0.0	T	<0.01	0.2
Unknown Plant	Unknown Plant	UNK	0.5	<0.1	0.7	1.0
Shrubs, Trees, and Cacti (4)						
<i>Atriplex canescens</i> *	Fourwing saltbush	ATCA2	0.1	T	0.1	0.1
<i>Brickellia floribunda</i>	Chihuahuan brickellbush	BRFL	0.1	T	0.1	0.1
<i>Desmanthus cooleyi</i>	Cooley's bundleflower	DECO2	0.1	T	0.2	0.4
<i>Prosopis glandulosa</i>	Honey mesquite	PRGL2	5.8	0.4	9.1	0.2

Notes:

^a = relative cover is the average percent cover of each species divided by the total average cover in the area#/m² = number of plants per square meter

Indicates success standard was met in 2025 at the Bayard Canyon IRA site

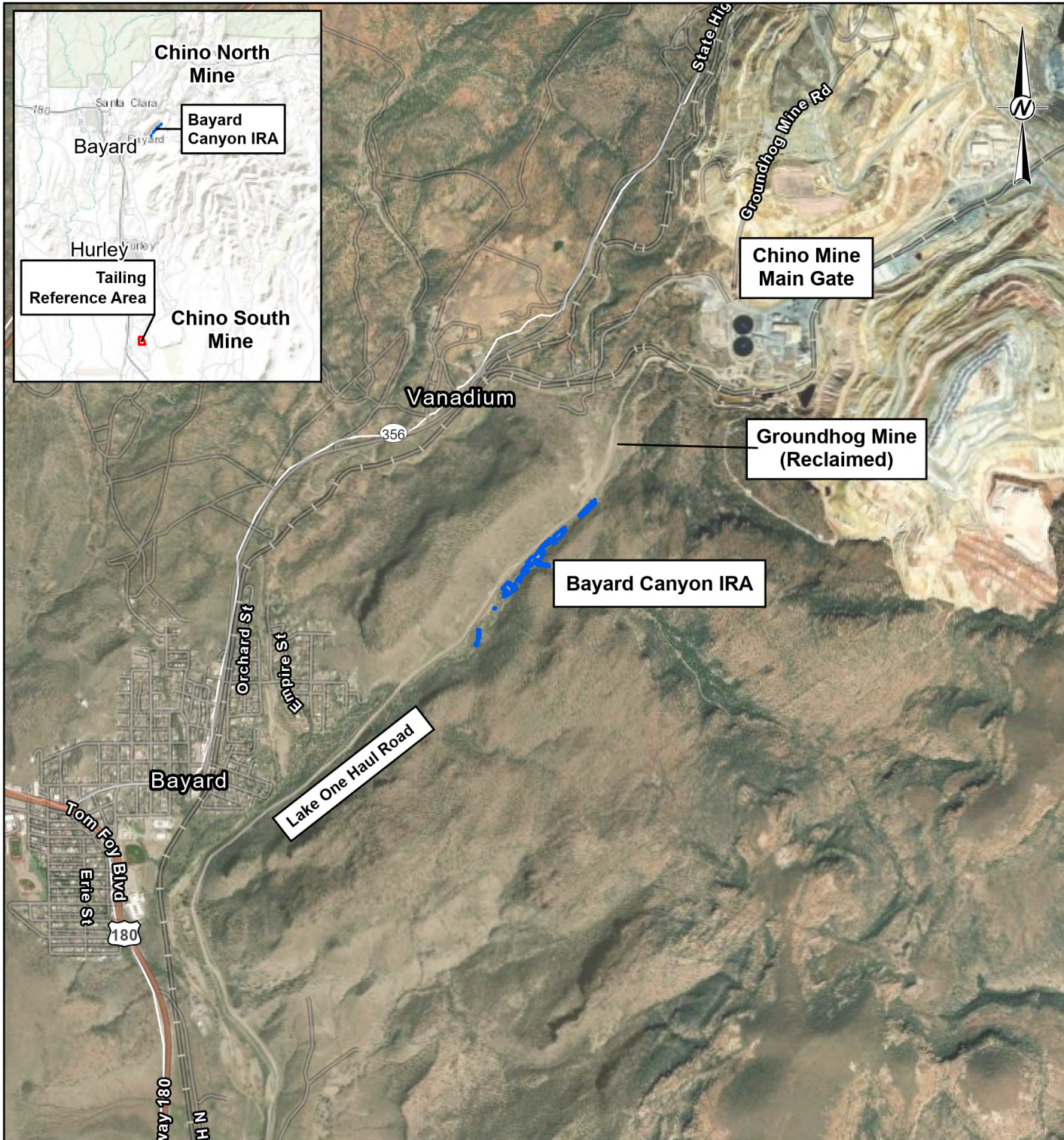
Table 5: Plant Cover and Density for the Chino Reference Area, 2025

Scientific Name	Common Name	Code	Mean Canopy Cover (%)	Mean Basal Cover (%)	Relative Cover ^a	Mean Density (#/m ²)
Grasses (11)						
Cool-Season Perennials (1)						
<i>Elymus elymoides</i>	Bottlebrush squirreltail	ELEL5	0.2	0.1	0.9	0.1
Warm-Season Annuals (1)						
<i>Bouteloua aristoides</i>	Needle grama	BOAR	0.7	0.4	2.6	0.4
Warm-Season Perennials (9)						
<i>Aristida purpurea</i>	Purple threeawn	ARPU9	0.1	<0.1	0.3	0.1
<i>Bouteloua curtipendula</i>	Sideoats grama	BOCU	0.4	0.2	1.4	0.3
<i>Bouteloua eriopoda</i>	Black grama	BOER4	4.5	2.3	17.7	2.8
<i>Bouteloua gracilis</i>	Blue grama	BOGR2	0.4	0.2	1.5	0.2
<i>Muhlenbergia porteri</i>	Bush muhly	MUPO2	0.3	0.1	1.3	0.5
<i>Panicum hallii</i>	Hall's panicgrass	PAHA	0.1	<0.1	0.5	0.1
<i>Pleuraphis mutica</i>	Tabosagrass	PLMU3	2.3	1.1	9.2	0.3
<i>Scleropogon brevifolius</i>	Burrograss	SCBR2	0.7	0.4	2.8	0.8
<i>Sporobolus contractus</i>	Spike dropseed	SPCO4	0.1	0.1	0.5	0.1
Forbs (15)						
<i>Bahia absinthoides</i>	Hairyseed bahia	BAAB	0.1	<0.1	0.2	<0.1
<i>Chaetopappa ericoides</i>	Rose heath	CHER2	<0.1	T	0.0	0.1
<i>Chamaesaracha sordida</i>	Hairy five eyes	CHSO	<0.1	0.0	0.1	0.1
<i>Chamaesyce prostrata</i>	Prostrate sandmat	CHPR6	0.4	0.0	1.6	1.0
<i>Chamaesyce serpyllifolia</i>	Thymeleaf sandmat	CHSE6	0.4	0.1	1.5	0.9
<i>Dalea brachystachya</i>	Fort Bowie prairie clover	DABR	0.2	0.1	1.0	1.2
<i>Dalea sp.</i>	Prairie clover	DALEA	<0.1	<0.1	0.1	1.0
<i>Dyssodia papposa</i>	Fetid marigold	DYPA	0.1	<0.1	0.2	0.1
<i>Euphorbia exstipulata</i>	Squareseed spurge	EUEX4	2.0	0.2	7.7	4.7
<i>Euphorbia dentata</i>	Toothed spurge	EUDE4	2.3	0.1	9.2	13.9
<i>Kallstroemia parviflora</i>	Warty caltrop	KAPA	0.8	0.2	3.3	0.9
<i>Salvia reflexa</i>	Lanceleaf sage	SARE3	0.2	0.1	0.9	0.4
<i>Sanvitalia abertii</i>	Abert's creeping zinnia	SAAB	2.2	0.2	8.7	7.7
<i>Solanum elaeagnifolium</i>	Silverleaf nightshade	SOEL	0.1	<0.1	0.4	0.2
<i>Sphaeralcea leptophylla</i>	Scaly globemallow	SPLE	<0.1	<0.1	<0.1	<0.1
Shrubs, Trees, and Cacti (3)						
<i>Calliandra humilis</i>	Dwarf stickpea	CAHU	0.1	0.1	0.5	0.2
<i>Krascheninnikovia lanata</i>	Winterfat	KRLA2	6.5	1.1	25.9	1.0
<i>Zinnia grandiflora</i>	Rocky Mountain zinnia	ZIGR	<0.1	<0.1	<0.1	<0.1

Notes:

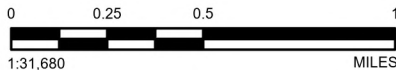
^a relative cover is the average percent cover of each species divided by the total average cover in the area#/m² = number of plants per square meter

Figures



LEGEND

- BAYARD CANYON IRA
- TAILING REFERENCE AREA



REFERENCE(S)

BASE MAP: BUREAU OF LAND MANAGEMENT, ESRI, HERE, GARMIN, USGS, NGA, EPA, USDA, NPS, VANTOR, SOURCES: ESRI, TOMTOM, GARMIN, FAO, NOAA, USGS, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW MEXICO WEST FIPS 3003 FEET

CLIENT
FREEPORT-MCMORAN CHINO MINES COMPANY
GRANT COUNTY, NEW MEXICO

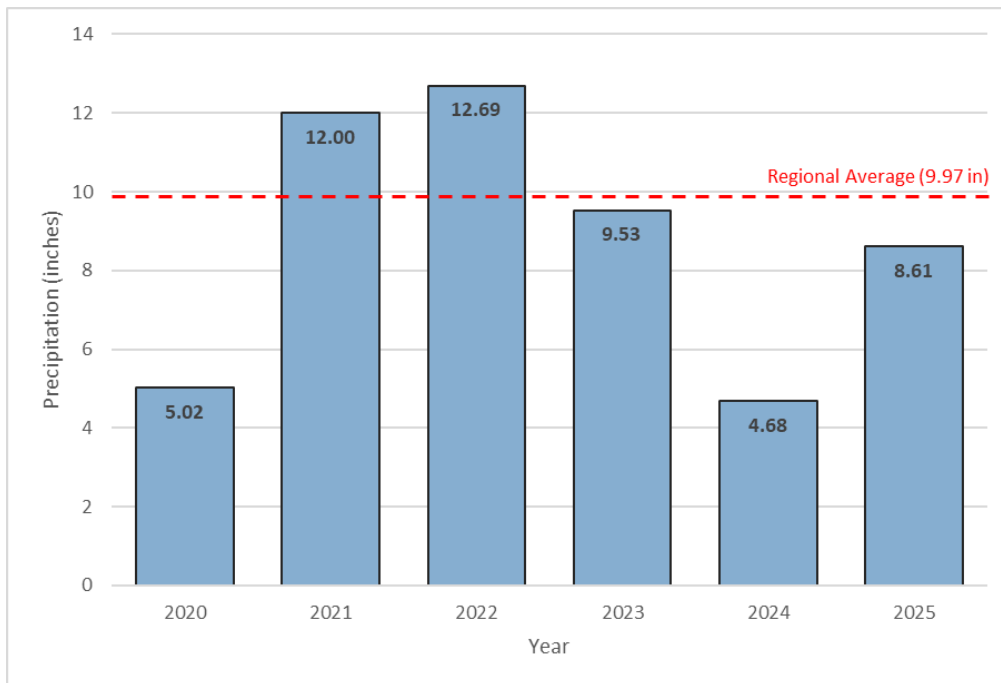
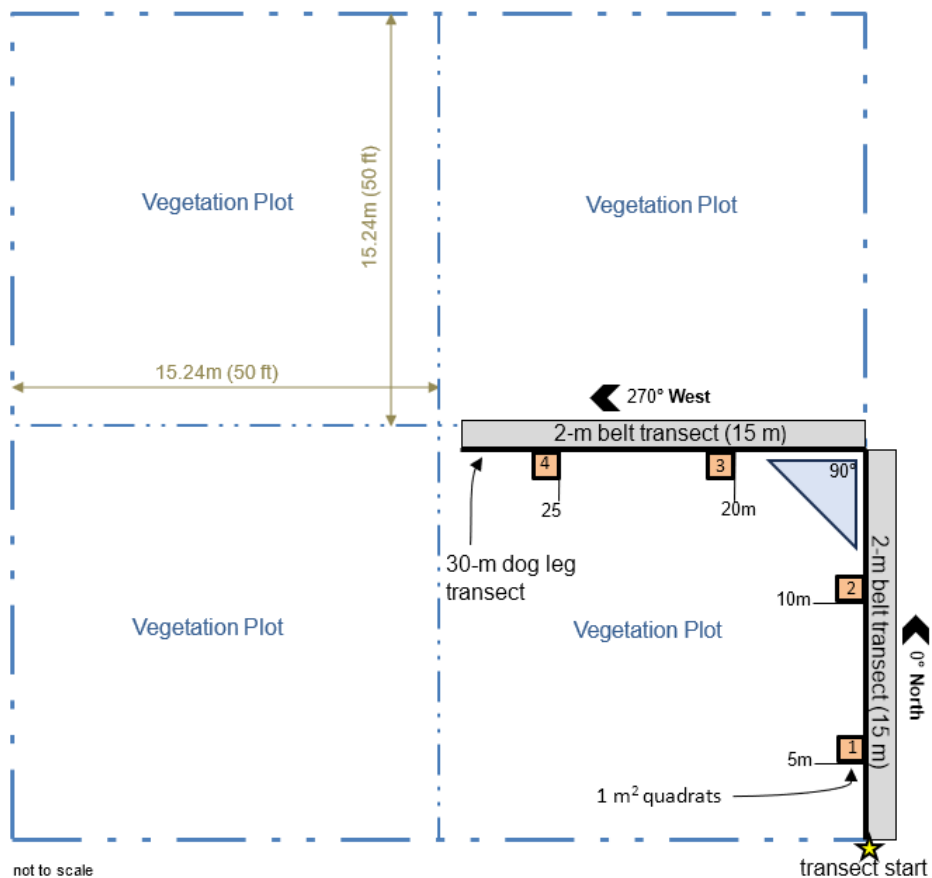
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CHINO MINE 2025 AOC VEGETATION MONITORING

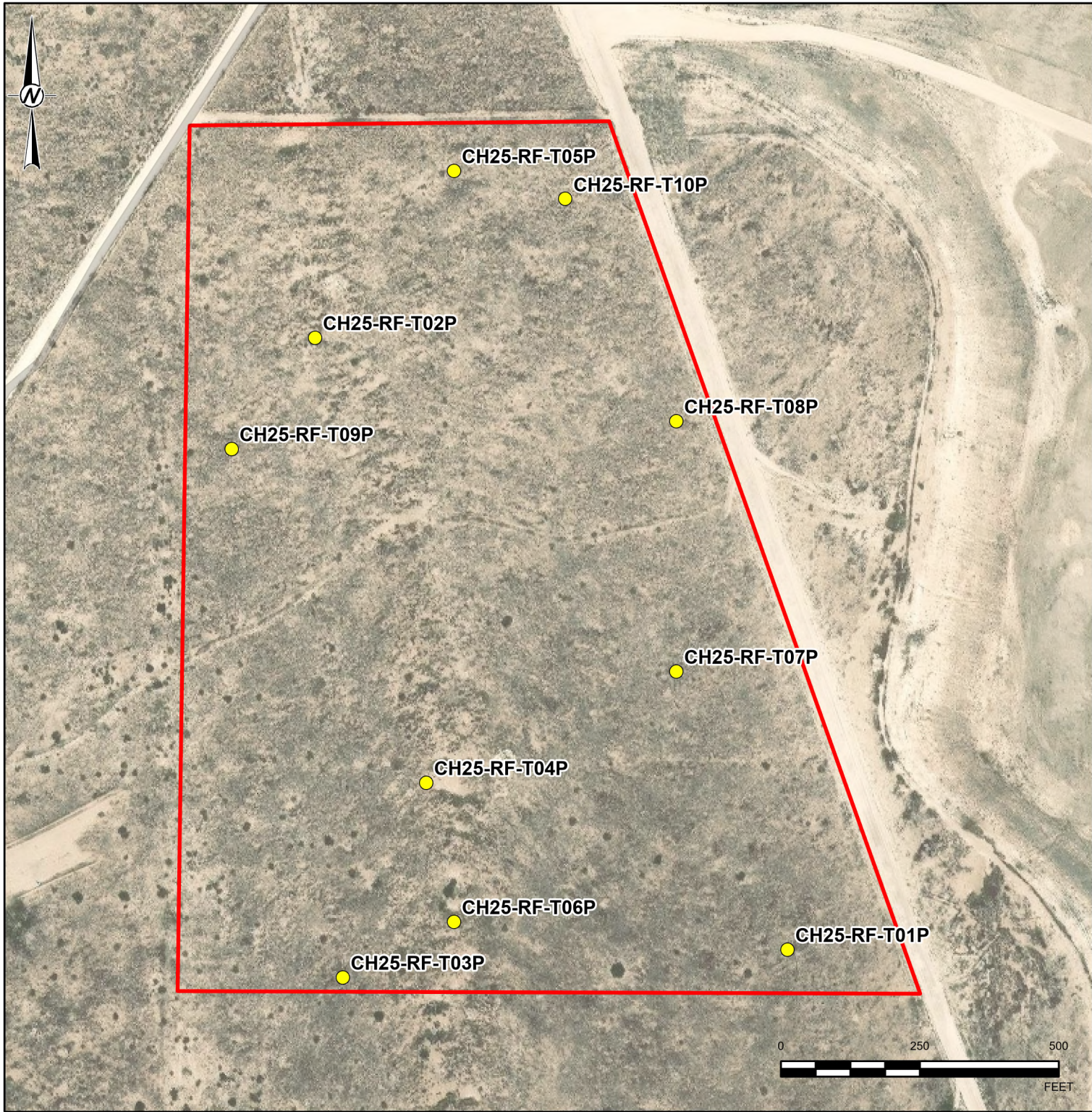
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	PREPARED	GFD
	REVIEWED	MT
	APPROVED	DR

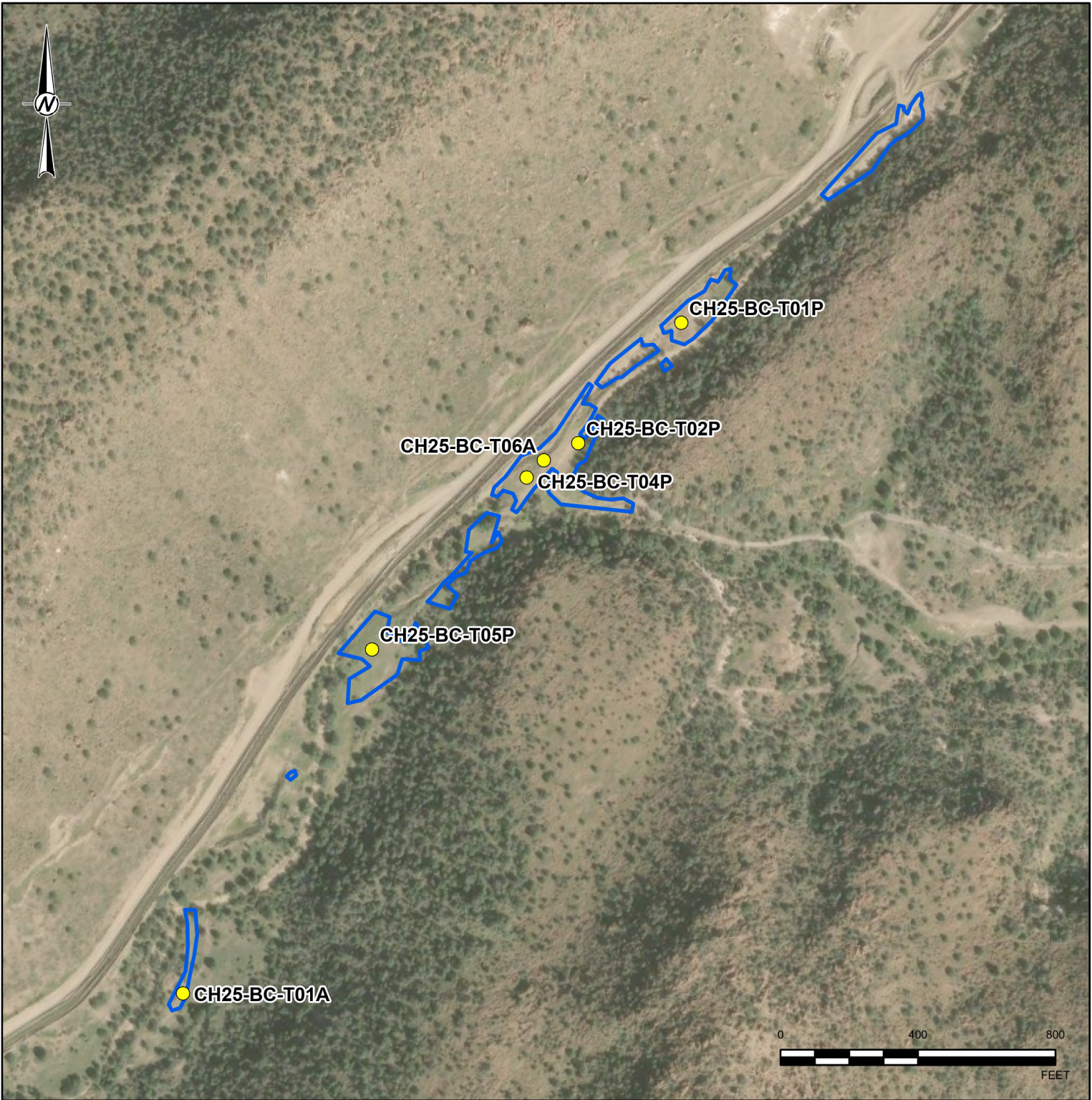
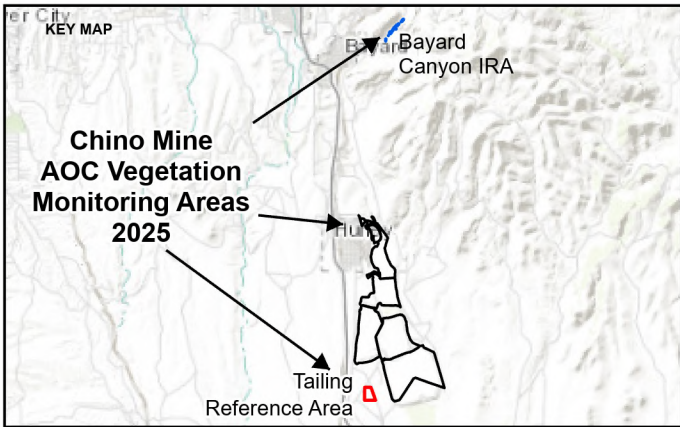


PROJECT NO.	CONTROL	REV.	FIGURE
US-WSP-31406439.1045	A003	0	1

Figure 2: Growing Season Precipitation at the Dam 17 Station, 2020-2025**Figure 3: Vegetation Plot, Transect, and Quadrat Layout**



- LEGEND**
- 2025 Sampled Vegetation Monitoring Transects
 - ▭ Bayard Canyon IRA
 - ▭ Tailing Reference Area



REFERENCE(S)
1. SERVICE LAYER CREDITS: WORLD IMAGERY: VANTOR
WORLD TOPOGRAPHIC MAP: BUREAU OF LAND MANAGEMENT, ESRI, HERE, GARMIN, USGS, NGA, EPA, USDA, NPS
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HYBRID REFERENCE LAYER: SOURCES: ESRI, TOMTOM, GARMIN, FAO, NOAA, USGS, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW MEXICO WEST FIPS 3003 FEET
PROJECTION: TRANSVERSE MERCATOR
DATUM: NORTH AMERICAN 1983

CLIENT
FREEPORT-MCMORAN CHINO MINES COMPANY
GRANT COUNTY, NEW MEXICO

CONSULTANT
wsp

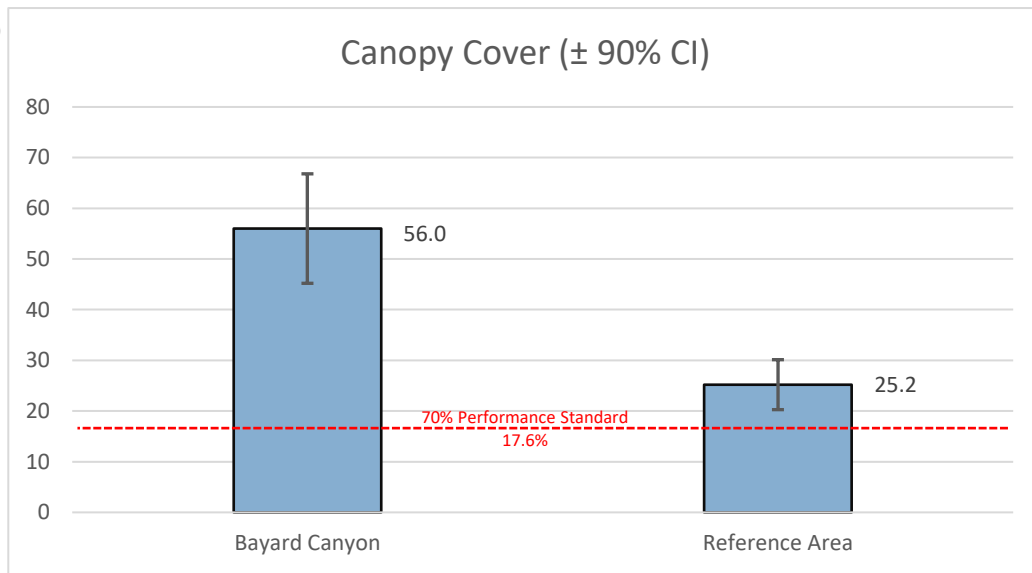
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PREPARED	GFD
REVIEWED	YC
APPROVED	DR

PROJECT
CHINO MINE 2025 AOC VEGETATION MONITORING

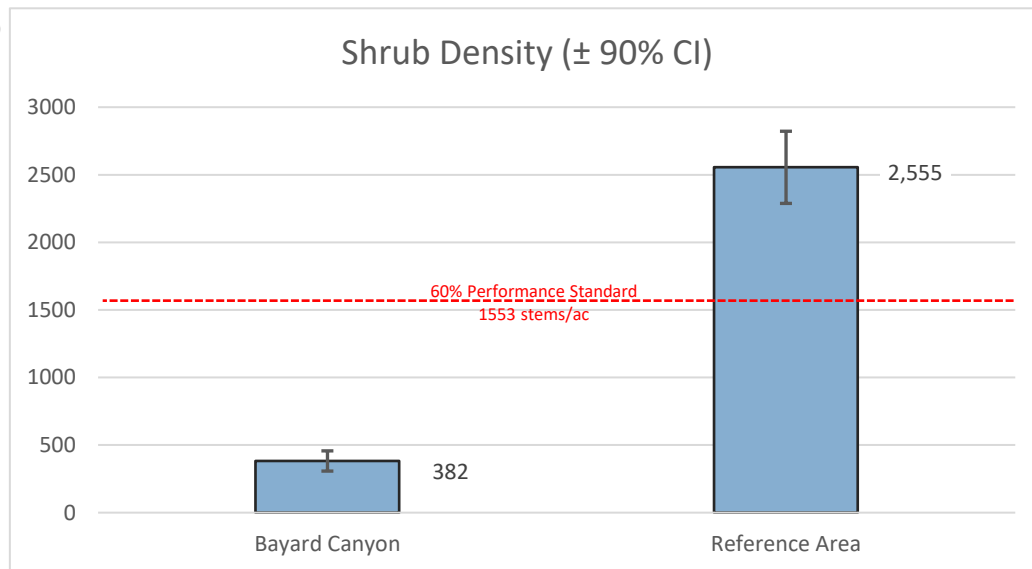
TITLE
**BAYARD CANYON IRA AND TAILING REFERENCE AREA
SAMPLED VEGETATION TRANSECT LOCATIONS, 2025**

PROJECT NO.	CONTROL	REV.	FIGURE
US-WSP-31406439.1045	A004	0	4

5a)



5b)



Bayard Canyon IRA Canopy Cover and Shrub Density Data Evaluation

Project Name
Chino Mine 2025 AOC Vegetation Monitoring

Project No.
31406439.1045

Client Name
Chino Mines Company

Date
6/11/2026

**FIGURE
5**

Figure 6: Typical Grass-Shrubland Vegetation at the Chino Reference Area, September 2025



Figure 7: Typical Reclaimed Vegetation at Bayard Canyon, September 2025



APPENDIX A

Vegetation Data Summaries

Table A-1: Bayard Canyon Canopy Cover (%), 2025

Species Code	Transect/Quadrat																			
	T01A				T01P				T02P			T04P			T05P				T06A	
	1	2	3	4	1	2	3	4	1	2	3	1	2	3	1	2	3	4	3	4
Grasses																				
ARAD	0.01	--	--	--	--	--	--	10	--	--	--	--	--	--	--	--	--	--	--	--
ARPU9	--	--	--	--	1.75	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--	--
BOBA2	--	--	3.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BOCU	--	4.5	--	--	--	--	--	--	--	--	--	7	--	--	--	--	--	--	--	--
BOGR2	8	9.5	20	25	--	12	--	--	--	52	--	48	26	6	20	8	--	--	--	--
CHVI4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--	--
ERLE	--	--	0.5	0.05	--	--	--	--	--	--	--	--	1.2	20	6	3	--	30	--	6
LEDU	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	17	--	--	--	--
PLJA	--	--	--	--	--	--	--	--	35	--	--	29	--	--	1	--	--	--	--	--
SEVI4	--	--	--	--	--	--	--	30	--	--	--	--	--	30	--	--	--	--	8	2
SPCO4	--	--	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPWR2	--	--	--	--	--	--	--	--	60	--	0.5	--	--	--	--	--	35	--	--	--
Forbs																				
AMPA	--	--	0.5	0.1	3	--	--	--	--	--	--	0.06	4.2	30	--	--	--	0.75	35	12
BRASSI	--	--	--	--	--	--	--	--	0.05	--	--	--	--	--	--	--	--	--	--	--
CHPR6	--	--	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHSE6	--	0.005	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DAAL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5	--	--	--	--	--
DABR	3	6.5	5.75	0.1	0.25	0.01	--	--	0.1	5	--	--	0.01	--	1.75	1.1	--	--	--	--
DALE3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	0.8	0.3	--	--	--
DAQU	--	--	--	--	--	--	--	--	--	--	--	--	--	0.75	--	--	--	--	15	--
DERO	--	--	--	--	--	--	--	--	--	--	1.25	--	--	--	--	--	--	--	--	--
DERO2	7	2.5	50	1	25	1.5	--	5	1	8	4	17	4.5	3	35	35	100	1	--	4
DYPA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--
ERWR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.5
EVSE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3
FRGR3	--	--	--	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HELO6	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	1.25	--	--
IPCO2	--	--	--	--	--	--	--	--	--	--	--	--	--	0.25	--	--	--	--	--	--
IPCR	--	--	--	--	--	--	--	6	--	--	--	--	1.5	--	--	--	--	--	0.25	3
IPTE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.2	--	--	--	--
KAPA	--	--	--	0.1	--	0.9	--	15	--	--	--	--	--	--	0.5	--	--	--	--	--
MOVE	--	--	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PHAN3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.5	40	--	--
PHAU13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.5
PHSUN	--	--	--	--	--	--	--	--	--	--	--	--	--	5	--	--	--	--	--	2.5
POOL	--	--	1.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POPI3	--	--	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAAB	--	--	--	0.25	--	--	--	--	--	--	--	--	--	0.75	--	--	--	--	--	--
SOEL	0.05	--	--	--	--	2	--	1	--	--	1.85	--	--	--	--	3	0.75	--	--	--
SPCO	--	--	--	--	--	--	--	5	--	--	--	--	--	--	--	--	--	--	--	--
UNKF	--	--	--	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--	0.25	--	--
XAST	--	--	--	--	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mosses																				
MOSS	--	--	--	0.1	--	--	--	--	--	--	--	--	1.5	--	--	--	--	--	--	--
Shrubs, Trees, and Cacti																				
ATCA2	--	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BRFL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
DECO2	--	--	2	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PRGL2	--	--	--	--	--	--	--	--	--	--	--	--	35	--	--	--	--	--	80	--
Totals																				
Vegetation	18.0	21.0	75.0	26.4	32.0	16.0	0.0	65.0	78.0	58.0	7.5	94.0	78.0	76.0	68.0	65.0	95.0	65.0	90.0	35.5
Rock	2.5	55.0	5.0	1.5	1.0	20.0	0.0	3.0	17.0	12.0	47.0	4.0	0.0	0.0	24.0	12.0	0.0	12.8	0.0	25.0
Litter	6.0	12.0	0.5	3.5	0.5	7.0	0.0	3.0	2.0	15.0	4.0	2.0	11.0	24.0	2.0	18.0	5.0	22.0	10.0	15.0
Bare Soil	73.5	12.0	19.5	68.6	66.5	57.0	100.0	29.0	3.0	15.0	41.5	0.0	11.0	0.0	6.0	5.0	0.0	0.3	0.0	24.5

Notes:

Species codes defined in Table 4

Table A-2: Bayard Canyon Basal Cover (%), 2025

Species Code	Transect/Quadrat																			
	T01A				T01P				T02P			T04P			T05P				T06A	
	1	2	3	4	1	2	3	4	1	2	3	1	2	3	1	2	3	4	3	4
Grasses																				
ARAD	0.003	--	--	--	--	--	--	0.003	--	--	--	--	--	--	--	--	--	--	--	--
ARPU9	--	--	--	--	0.1	--	--	--	--	--	--	--	--	--	--	--	0.05	--	--	--
BOBA2	--	--	0.025	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BOCU	--	0.75	--	--	--	--	--	--	--	--	--	--	2.5	--	--	--	--	--	--	--
BOGR2	1.5	6	2	2.5	--	7	--	--	--	20	--	7	18	0.75	4	4	--	--	--	--
CHV14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	--	--	--
ERLE	--	--	0.05	0.003	--	--	--	--	--	--	--	--	0.008	1.05	2	1.5	--	0.6	--	1
LEDU	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	8	--	--	--	--
PLJA	--	--	--	--	--	--	--	--	7	--	--	5	--	--	0.5	--	--	--	--	--
SEVI4	--	--	--	--	--	--	--	10	--	--	--	--	--	5	--	--	--	--	0.85	0.75
SPCO4	--	--	2.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPWR2	--	--	--	--	--	--	--	--	4	--	0.05	--	--	--	--	--	6	--	--	--
Forbs																				
AMPA	--	--	0.003	0.05	0.01	--	--	--	--	--	0.003	0.01	0.3	--	--	--	--	0.005	0.2	0.003
BRASSI	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--
CHPR6	--	--	0.003	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHSE6	--	0.003	0.003	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DAAL	--	--	--	--	--	--	--	--	--	--	--	--	--	0.003	--	--	--	--	--	--
DABR	0.05	0.009	0.003	0.003	0.001	0.005	--	--	0.003	1.5	--	--	0.005	--	0.003	0.008	--	--	--	--
DALE3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	0.005	0.003	--	--	--
DAQU	--	--	--	--	--	--	--	--	--	--	--	--	--	0.025	--	--	--	--	0.05	--
DERO	--	--	--	--	--	--	--	--	--	--	0.003	--	--	--	--	--	--	--	--	--
DERO2	0.05	0.006	0.005	0.005	0.1	0.075	--	0.003	0.005	2.5	0.003	0.05	0.01	0.003	0.01	5	0.175	0.025	--	0.003
DYPA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.003	--	--	--
ERWR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05
EVSE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.003
FRGR3	--	--	--	0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HELO6	--	--	--	--	--	--	--	--	--	--	--	--	--	0.003	--	--	--	0.005	--	--
IPCO2	--	--	--	--	--	--	--	--	--	--	--	--	--	0.003	--	--	--	--	--	--
IPCR	--	--	--	--	--	--	--	0.003	--	--	--	--	0.005	--	--	--	--	--	0.01	0.003
IPTE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.005	--	--	--	--
KAPA	--	--	--	0.003	--	0.005	--	0.003	--	--	--	--	--	--	0.005	--	--	--	--	--
MOVE	--	--	0.003	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PHAN3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.005	0.05	--	--
PHAU13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.003
PHSUN	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	--	--	--	--	--	0.003
POOL	--	--	0.003	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POPI3	--	--	0.003	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAAB	--	--	--	0.003	--	--	--	--	--	--	--	--	--	0.005	--	--	--	--	--	--
SOEL	0.003	--	--	--	--	0.01	--	0.003	--	--	0.025	--	--	--	--	0.01	0.003	--	--	--
SPCO	--	--	--	--	--	--	--	0.003	--	--	--	--	--	--	--	--	--	--	--	--
UNKF	--	--	--	0.003	--	--	--	--	--	--	--	--	--	--	--	--	--	0.003	--	--
XAST	--	--	--	--	0.003	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mosses																				
MOSS	--	--	--	0.1	--	--	--	--	--	--	--	--	--	1.5	--	--	--	--	--	--
Shrubs, Trees, and Cacti																				
ATCA2	--	0.004	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BRFL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	--
DECO2	--	--	0.003	0.003	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PRGL2	--	--	--	--	--	--	--	--	--	--	--	--	0.1	--	--	--	--	--	7	--
Totals																				
Vegetation	1.6	6.8	4.6	2.7	0.2	7.1	--	10.0	11.0	24.0	0.1	12.1	22.1	7.2	6.6	18.5	6.3	0.7	8.2	1.8
Rock	2.5	56.0	20.0	1.5	0.8	20.0	0.0	5.0	17.0	15.0	58.0	27.5	0.0	27.8	26.0	23.0	45.0	77.1	3.0	26.0
Litter	9.0	18.0	6.0	4.0	1.5	7.0	0.0	50.0	15.0	23.0	5.0	60.0	11.0	65.0	58.4	33.0	35.0	22.0	87.0	40.0
Bare Soil	86.9	18.0	69.4	91.8	97.5	65.9	0.0	35.0	57.0	38.0	36.9	0.5	2.0	0.0	9.0	25.5	13.7	0.3	1.8	32.2

Notes:

Species codes defined in Table 4

Table A-3: Bayard Canyon Plant Frequency (#/m2), 2025

Species Code	Transect/Quadrat																			
	T01A				T01P				T02P			T04P			T05P				T06A	
	1	2	3	4	1	2	3	4	1	2	3	1	2	3	1	2	3	4	3	4
Grasses																				
ARAD	1	--	--	--	--	--	--	3	--	--	--	--	--	--	--	--	--	--	--	--
ARPU9	--	--	--	--	3	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--
BOBA2	--	--	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BOCU	--	2	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--
BOGR2	11	8	16	20	--	6	--	--	--	17	--	10	9	8	5	2	--	--	--	--
CHVI4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
ERLE	--	--	4	5	--	--	--	--	--	--	--	--	9	32	3	1	--	4	--	3
LEDU	--	--	--	--	5	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--
PLJA	--	--	--	--	--	--	--	--	5	--	--	6	--	--	1	--	--	--	--	--
SEVI4	--	--	--	--	--	--	--	5	--	--	--	--	--	12	--	--	--	--	7	1
SPCO4	--	--	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SPWR2	--	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	3	--	--	--
Forbs																				
AMPA	--	--	1	2	7	--	--	--	--	--	--	2	39	22	--	--	--	1	19	5
BRASSI	--	--	--	--	--	--	--	--	--	3	--	--	--	--	--	--	--	--	--	--
CHPR6	--	--	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHSE6	--	5	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DAAL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--
DABR	25	39	29	1	2	2	--	--	3	31	--	--	1	--	12	5	--	--	--	--
DALE3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7	2	3	--	--	--
DAQU	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	7	--
DERO	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--
DERO2	30	21	24	13	44	23	--	2	17	35	25	60	21	4	38	171	76	17	--	2
DYPA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	--	--	--
ERWR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
EVSE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
FRGR3	--	--	--	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HELO6	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	5	--	--
IPCO2	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--
IPCR	--	--	--	--	--	--	--	1	--	--	--	--	4	--	--	--	--	--	1	9
IPTE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7	--	--	--	--	--
KAPA	--	--	--	1	--	3	--	2	--	--	--	--	--	--	1	--	--	--	--	--
MOVE	--	--	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PHAN3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8	13	--	--
PHAU13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2
PHSUN	--	--	--	--	--	--	--	--	--	--	--	--	--	15	--	--	--	--	--	2
POOL	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POPI3	--	--	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SAAB	--	--	--	1	--	--	--	--	--	--	--	--	4	--	--	--	--	--	--	--
SOEL	1	--	--	--	--	1	--	1	--	--	2	--	--	--	--	1	1	--	--	--
SPCO	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--
UNKF	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
XAST	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mosses																				
MOSS	--	--	--	3	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--
Shrubs, Trees, and Cacti																				
ATCA2	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BRFL	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
DECO2	--	--	6	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PRGL2	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	3	--

Notes:

Species codes defined in Table 4

Table A-4: Bayard Canyon Shrub Belt Transect

Species Code	Transect					
	T01A	T01P	T02P	T04P	T05P	T06A
Shrubs, Trees, and Cacti						
BRCA3	--	3	--	1	--	--
BRFL	1	4	--	--	1	1
PRGL2	1	1	--	1	--	5
QUEM	1	--	1	--	--	--

Note:

Species codes defined in Table 4

Table A-5: Reference Area Canopy Cover (%), 2025

Species Code	Transect/Quadrat																																							
	CH25-RF-T01P				CH25-RF-T02P				CH25-RF-T03P				CH25-RF-T04P				CH25-RF-T05P				CH25-RF-T06P				CH25-RF-T07P				CH25-RF-T08P				CH25-RF-T09P				CH25-RF-T10P			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Grasses																																								
ARPU9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.75	--	--	--	--	--	--	--		
ARPUP6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BOAR	5.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.00	--	--	--	--	--	--	--	--	--	3.00	--	3.00	--	--	--	--	--	--	--	10.00	--	--
BOCU	--	--	--	--	--	--	--	--	--	--	--	5.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.50	--	--	--	--	--	8.00	--	--	--	--	--	--	
BOER4	--	3.00	21.00	15.00	--	--	0.10	10.00	5.00	2.75	6.50	--	--	--	--	3.50	1.00	--	10.25	--	--	--	--	4.00	15.00	5.50	--	24.00	--	5.00	11.00	20.00	--	3.50	5.00	2.00	--	3.50	2.00	
BOGR2	--	--	3.00	--	6.00	6.00	--	--	--	--	--	--	--	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
ELEL5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.00	--	--	--	--	--	--	--		
MUPO2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.90	--	--	--	--	10.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.00	--	0.01	--	
PAHA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.00	--	--	--	--		
PLMU3	--	--	--	--	--	--	--	--	50.00	--	--	13.00	--	--	--	--	--	--	--	--	--	--	30.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SCBR2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	--	3.00	8.00	3.25	10.00	--	--	1.75	--	--	--	2.00	--	--	--	--	--	--	--	--	--	--	0.02	--	
SPCO4	--	--	--	--	--	--	--	5.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Forbs																																								
CHER2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
CHPR6	2.00	4.00	7.25	2.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.75	--	--	--	--	--	--		
CHSE6	--	--	--	0.10	--	--	--	0.02	--	0.01	0.10	--	--	--	--	--	--	4.00	0.25	0.50	--	--	--	--	--	--	1.50	1.00	0.75	1.25	3.00	--	0.10	1.50	1.00	--	0.03	0.50		
CHSO	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.00	--	--	--	--	--	--			
DABR	2.00	0.05	--	0.01	0.00	--	--	0.02	--	--	0.25	--	--	--	0.10	0.75	--	--	--	--	--	--	--	0.25	--	--	2.00	0.05	1.00	0.05	0.05	--	--	0.10	--	0.05	3.00	--	0.01	
DALEA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
DYPA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
EUDE4	--	--	12.50	8.00	--	--	--	2.00	--	1.75	13.00	--	--	--	0.10	5.25	--	--	1.00	3.00	5.00	--	--	--	13.00	--	3.75	--	--	--	3.00	4.25	--	--	2.00	6.00	--	--	7.75	1.50
EUEX	3.00	6.00	--	--	6.05	5.00	--	--	--	--	--	4.00	--	--	--	--	6.00	4.00	--	--	--	--	--	16.00	--	--	8.00	2.00	--	--	10.00	2.00	--	--	3.00	3.00	--	--		
KAPA	--	--	--	--	--	2.00	--	1.75	--	--	--	--	--	12.00	6.50	1.60	--	--	--	--	10.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
SAAB	--	--	--	--	15.00	1.00	--	1.50	--	--	--	--	--	3.00	--	57.00	--	--	--	--	10.00	--	--	--	--	--	--	--	--	--	--	1.00	--	--	--	--	--	--		
SARE3	--	--	--	--	--	--	--	--	--	--	--	--	--	0.75	--	--	--	--	--	8.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
SOEL	--	--	--	--	--	--	0.10	--	--	--	--	1.00	--	0.20	--	1.75	--	1.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	
SPLE	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Shrubs, Trees, and Cacti																																								
ARLU	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
CAHU	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
KRLA2	4.00	--	--	--	6.00	10.00	--	3.00	8.00	0.80	24.00	--	4.00	45.00	5.00	--	19.00	6.00	10.00	20.00	35.00	--	--	--	--	0.05	35.00	6.00	--	--	--	--	--	5.00	10.50	0.50	--	5.00	--	--
ZIGR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	
Totals																																								
Vegetation	20.00	13.00	41.75	25.00	33.00	20.00	0.20	23.00	60.00	5.20	38.00	21.00	4.00	60.00	11.70	64.00	29.00	29.00	24.00	35.00	89.00	0.00	1.75	30.00	17.25	31.00	39.00	15.00	33.00	7.00	9.00	25.10	33.00	16.00	15.90	11.00	13.00	23.00	11.30	4.50
Rock	15.00	40.00	52.50	15.00	0.00	8.00	7.00	2.00	10.00	45.00	6.50	9.00	1.00	10.00	9.00	7.00	30.00	15.00	36.00	4.00	1.00	50.00	11.00	0.50	19.75	30.00	6.00	25.00	8.00	12.00	12.00	9.00	6.00	20.00	8.00	50.00	5.00	8.00	18.00	5.00
Litter	7.00	10.00	1.50	49.00	40.00	8.00	7.50	6.00	20.00	12.00	3.00	20.00	6.00	10.00	8.00	11.00	30.00	10.00	8.00	1.00	5.00	0.05	12.00	30.00	52.00	30.00	36.00	15.00	15.00	20.00	6.00	11.00	40.00	8.00	7.00	0.50	30.00	10.00	12.00	1.00
Bare Soil	58.00	37.00	4.25	11.00	27.00	64.00	85.30	69.00	10.00	37.80	52.50	50.00	89.00	20.00	71.30	18.00	11.00	46.00	32.00	60.00	5.00	49.95	75.25	39.50	11.00	9.00	19.00	45.00	44.00	61.00	73.00	54.90	21.00	56.00	69.10	38.50	52.00	59.00	58.70	89.50

Notes:
Species codes defined in Table 5

Table A-6: Reference Area Basal Cover (%), 2025

Species Code	Transect/Quadrat																																							
	CH25-RF-T01P				CH25-RF-T02P				CH25-RF-T03P				CH25-RF-T04P				CH25-RF-T05P				CH25-RF-T06P				CH25-RF-T07P				CH25-RF-T08P				CH25-RF-T09P				CH25-RF-T10P			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Grasses																																								
ARPU9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
ARPUP6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
BOAR	3.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.00	--	--	--	--	--	--	--	--	--	2.00	--	2.00	--	--	--	--	--	6.00	--	--		
BOCU	--	--	--	--	--	--	--	--	--	--	--	3.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10	--	--	--	--	4.00	--	--	--	--	--			
BOER4	--	2.00	6.00	5.00	--	--	0.00	4.00	3.00	2.00	0.25	--	--	--	--	1.75	0.05	--	8.50	--	--	--	--	0.05	8.00	2.50	--	20.00	--	2.00	2.00	15.00	--	2.25	3.00	0.05	--	2.00	1.00	
BOGR2	--	--	2.00	--	2.00	4.00	--	--	--	--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
ELEL5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.50	--	--	--	--	--	--	--		
MUPO2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	--	--	--	--	2.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.05	--	0.00	--	
PAHA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.00	--	--	--		
PLMU3	--	--	--	--	--	--	--	--	20.00	--	--	8.00	--	--	--	--	--	--	--	--	--	--	--	15.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SCBR2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	1.00	4.00	0.75	8.00	--	--	1.00	--	--	--	2.00	--	--	--	--	--	--	--	--	--	--	0.01	--	
SPCO4	--	--	--	--	--	--	--	2.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Forbs																																								
CHER2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
CHPR6	1.00	0.00	0.10	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	--	--	--	
CHSE6	--	--	--	0.00	--	--	--	0.01	--	0.00	0.00	--	--	--	--	--	--	3.00	0.00	0.00	--	--	--	--	--	--	--	0.00	0.50	0.01	0.00	0.00	--	0.00	0.01	0.00	--	0.00	0.00	
CHSO	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	--	--	--	--	--	--		
DABR	1.00	0.00	--	0.00	0.00	--	--	0.01	--	--	0.00	--	--	--	0.00	0.01	--	--	--	--	--	--	--	--	0.00	--	--	0.50	0.00	0.50	0.01	0.00	--	--	0.00	--	0.00	1.50	--	0.00
DALEA	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
DYPA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EUDE4	--	--	0.50	0.01	--	--	--	0.01	--	0.01	1.00	--	--	--	0.00	0.02	--	--	0.01	0.01	1.00	--	--	--	0.05	--	0.10	--	--	--	0.01	0.00	--	--	0.00	0.05	--	--	0.01	0.01
EUEX	1.00	0.00	--	--	0.01	2.00	--	--	--	--	--	1.00	--	--	--	0.00	2.00	--	--	--	--	--	--	--	0.00	--	--	0.00	0.50	--	--	0.00	0.50	--	--	0.00	1.00	--	--	
KAPA	--	--	--	--	--	1.00	--	0.01	--	--	--	--	--	0.05	3.00	0.01	--	--	--	--	2.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SAAB	--	--	--	--	0.00	0.50	--	0.00	--	--	--	--	--	0.00	--	2.00	--	--	--	--	5.00	--	--	--	--	--	--	--	--	--	--	--	0.50	--	--	--	--	--	--	
SARE3	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	--	--	3.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SOEL	--	--	--	--	--	--	0.00	--	--	--	--	0.50	--	0.00	--	0.01	--	0.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.01	
SPLE	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Shrubs, Trees, and Cacti																																								
ARLU	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
CAHU	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
KRLA2	3.00	--	--	--	0.05	5.00	--	1.00	0.00	0.01	7.00	--	1.00	0.05	2.00	--	2.00	3.00	0.50	3.00	5.00	--	--	--	--	0.00	0.50	4.00	--	--	--	--	3.00	2.25	0.10	--	2.00	--	--	
ZIGR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	
Totals																																								
Vegetation	9.00	2.01	8.60	5.03	2.06	12.50	0.01	7.03	23.00	2.02	8.26	12.50	1.00	0.12	5.01	4.29	3.05	15.50	9.77	11.51	22.00	0.00	1.00	15.00	0.10	8.01	3.20	8.50	20.01	3.50	2.07	5.51	15.01	8.50	4.51	3.16	1.11	10.50	2.03	1.02
Rock	16.00	40.00	51.00	16.00	0.00	9.00	7.70	2.00	10.00	46.00	8.50	10.00	1.00	10.00	9.00	11.00	30.00	16.00	39.00	4.00	5.00	50.00	12.00	0.50	19.75	30.00	6.00	27.00	8.00	1.00	13.00	9.50	6.00	21.00	9.00	54.34	7.00	9.00	19.00	5.50
Litter	9.00	15.00	31.00	65.97	50.00	9.00	7.50	12.00	57.00	13.00	17.00	21.00	6.50	50.00	11.00	14.00	45.00	11.00	20.00	4.00	6.00	0.05	12.00	45.00	68.50	50.00	71.80	16.00	25.00	2.00	8.00	22.00	50.00	9.00	11.50	4.00	40.00	13.00	16.00	2.00
Bare Soil	66.00	42.99	9.40	13.00	47.94	69.50	84.79	78.97	10.00	38.98	66.24	56.50	91.50	39.89	74.99	70.71	21.95	57.50	31.23	80.49	67.00	49.95	75.00	39.50	11.65	11.99	19.00	48.50	46.99	93.50	76.94	62.99	28.99	61.50	74.99	38.50	51.89	67.50	62.97	91.48

Species codes defined in Table 5

Table A-7: Reference Area Plant Frequency (#/m²), 2025

Species Code	Transect/Quadrat																																										
	CH25-RF-T01P				CH25-RF-T02P				CH25-RF-T03P				CH25-RF-T04P				CH25-RF-T05P				CH25-RF-T06P				CH25-RF-T07P				CH25-RF-T08P				CH25-RF-T09P				CH25-RF-T10P						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
Grasses																																											
ARPU9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--		
ARPUP6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
BOAR	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--	5	--	--	--	--	--	--	--	--	3	--	--	--		
BOCU	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8	--	--	--	--	--	3	--	--	--	--	--	--	--	--		
BOER4	--	2	6	10	--	--	1	3	2	3	8	--	--	--	--	11	2	--	3	--	--	--	--	--	10	6	8	--	9	--	3	4	4	--	3	3	2	--	3	4	--		
BOGR2	--	--	1	--	2	2	--	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
ELEL5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--		
MUPO2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	--	4	--	--		
PAHA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--			
PLMU3	--	--	--	--	--	--	--	--	4	--	--	2	--	--	--	--	--	--	--	--	--	--	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
SCBR2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	2	5	7	12	--	--	2	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	
SPCO4	--	--	--	--	--	--	--	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Forbs																																											
CHER2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
CHPR6	2	3	13	22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	
CHSE6	--	--	--	1	--	--	--	1	--	1	1	--	--	--	--	--	--	1	1	1	--	--	--	--	--	--	--	4	2	2	3	2	--	5	6	1	--	1	--	1	--		
CHSO	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	
DABR	1	1	--	1	1	--	--	1	--	--	4	--	--	--	1	8	--	--	--	--	--	--	--	2	--	--	13	1	5	1	1	--	--	2	--	3	2	--	1	--	1	--	
DALEA	--	--	--	--	--	--	--	--	--	--	--	--	--	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
DYPA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EUDE4	--	--	52	59	--	--	--	9	--	16	50	--	--	--	1	23	--	--	9	14	9	--	--	--	40	--	62	--	--	--	19	23	--	--	16	32	--	--	113	7	--	--	
EUEX	9	13	--	--	9	10	--	--	--	--	--	9	--	--	--	--	3	15	--	--	--	--	--	20	--	--	--	15	22	--	--	30	4	--	--	16	12	--	--	--	--		
KAPA	--	--	--	--	--	1	--	2	--	--	--	--	--	2	18	2	--	--	--	--	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SAAB	--	--	--	--	21	1	--	1	--	--	--	--	--	23	--	235	--	--	--	--	24	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	
SARE3	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
SOEL	--	--	--	--	--	--	3	--	--	--	--	1	--	1	--	2	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--
SPLE	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Shrubs, Trees, and Cacti																																											
ARLU	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
CAHU	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
KRLA2	1	--	--	--	2	1	--	1	1	1	3	--	2	1	3	--	3	2	2	3	5	--	--	--	--	1	1	1	--	--	--	--	--	1	4	1	--	1	--	--	--	--	
ZIGR	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Table A-8: Reference Area Shrub Belt Transect (#), 2025

Species Code	Transect																			
	T01B	T01P	T02B	T02P	T03B	T03P	T04B	T04P	T05B	T05P	T06B	T06P	T07B	T07P	T08B	T08P	T09B	T09P	T10B	T10P
Shrubs, Trees, and Cacti																				
ATCA2	--	--	--	2	--	--	--	--	--	2	--	1	--	--	--	--	--	--	--	2
KRLA2	45	6	44	35	56	14	30	45	14	42	10	32	67	11	42	20	22	43	84	39
PRGL2	--	--	--	--	--	--	1	--	5	--	--	3	--	--	--	--	--	--	--	--
ESVI2	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ECFE	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
DEIL	--	--	--	--	--	--	16	--	--	--	--	--	--	--	--	--	--	--	--	--
CAHU	--	--	--	--	--	--	--	1	--	--	--	11	--	--	--	--	--	--	--	--
OPPO	--	--	--	--	--	--	--	--	--	1	1	--	--	--	1	--	--	1	--	--
ZIGR	--	--	--	--	--	--	--	--	--	--	3	--	--	--	--	1	1	--	--	--
OPMA2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--
OPPH	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--
ARDR4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--

Notes:

The shrub belt transect is 60m² (see Figure 3); shrubs rooted in the belt transect counted on an individual basis

Species codes defined in Table 5

APPENDIX B

Quadrat Photos

CH25-BC-T01A



Q1



Q2



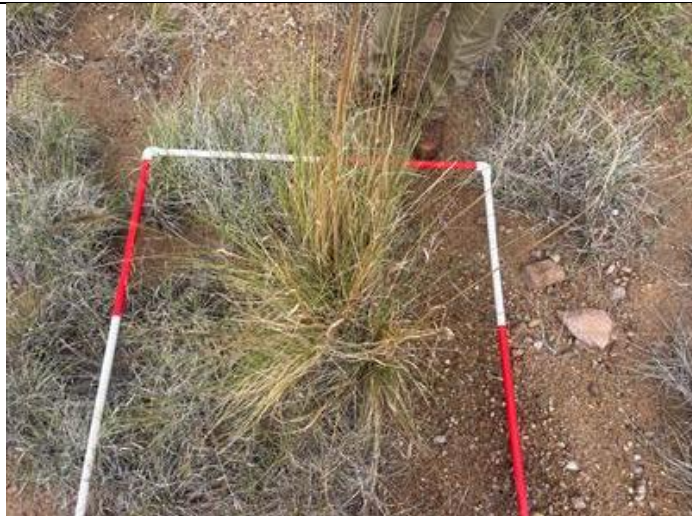
Q3



Q4

CH25-BC-T01P			
			
Q1		Q2	
Survey Not Completed Quadrat Not In Reclaimed Area			
Q3		Q4	

CH25-BC-T02P



Q1



Q2



Q3

Survey Not Completed
Quadrat Not In Reclaimed Area

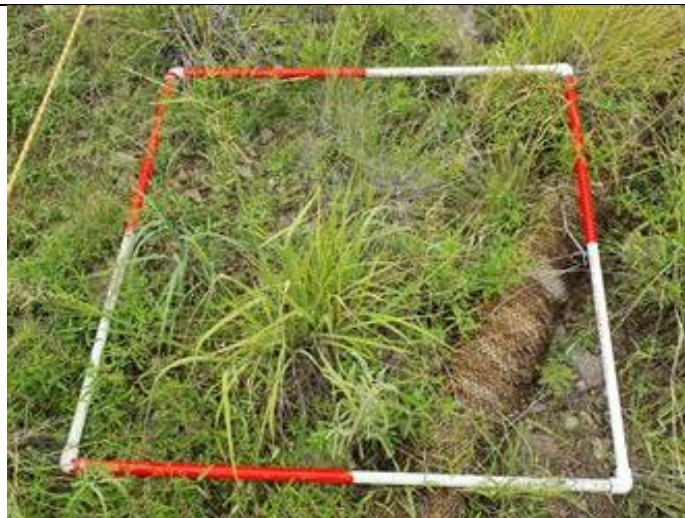
Q4

CH25-BC-T04P			
			
Q1			Q2
		Survey Not Completed Quadrat Not In Reclaimed Area	
Q3		Q4	

CH25-BC-T05P



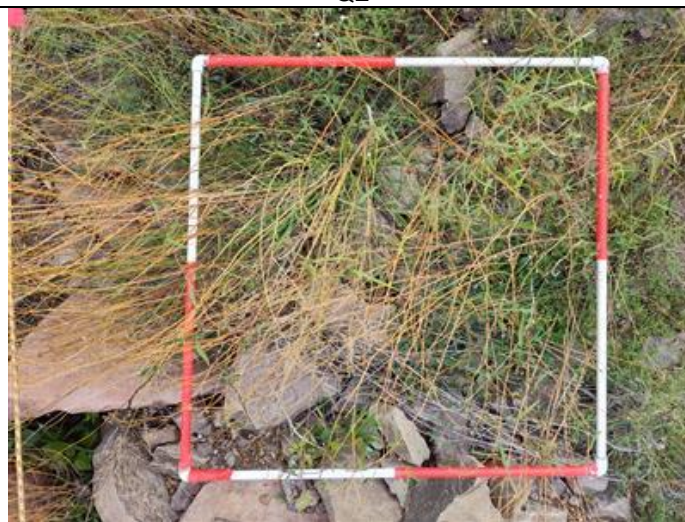
Q1



Q2



Q3



Q4

CH25-BC-T06A	
Survey Not Completed Quadrat Not In Reclaimed Area	Survey Not Completed Quadrat Not In Reclaimed Area
Q1	Q2
Photo Corrupted	
Q3	Q4

CH25-BC-T06A



Q1



Q2



Q3



Q4

Belt Transect Photos

Q1



Q2



Q3



Q4

Belt Transect Photos

CH25-BC-T01A



CH25-BC-T01P



CH25-BC-T02P



CH25-BC-T04P

Belt Transect Photos

CH25-BC-T06A



CH25-BC-T06A

CH25-RF-T01P



Q1



Q2



Q3



Q4

CH25-RF-T02P



Q1



Q2



Q3



Q4

CH25-RF-T03P



Q1



Q2



Q3



Q4

CH25-RF-T04P



Q1



Q2



Q3



Q4

CH25-RF-T05P



Q1



Q2



Q3



Q4

CH25-RF-T06P



Q1



Q2



Q3



Q4

CH25-RF-T07P



Q1



Q2



Q3



Q4

CH25-RF-T08P



Q1



Q2



Q3



Q4

CH25-RF-T09P



Q1



Q2



Q3



Q4

CH25-RF-T10P



Q1



Q2



Q3



Q4

Belt Transect Photos			
			
CH25-RF-T01B			CH25-RF-T01P
			
CH25-RF-T02B			CH25-RF-T02P

Belt Transect Photos			
			
CH25-RF-T03B			CH25-RF-T03P
			
CH25-RF-T04B			CH25-RF-T04P

Belt Transect Photos

CH25-RF-T05B



CH25-RF-T05P



CH25-RF-T06B



CH25-RF-T06P

Belt Transect Photos

CH25-RF-T07B



CH25-RF-T07P



CH25-RF-T08B



CH25-RF-T08P

Belt Transect Photos			
			
CH25-RF-T09B			CH25-RF-T09P
			
CH25-RF-T10B			CH25-RF-T10P

