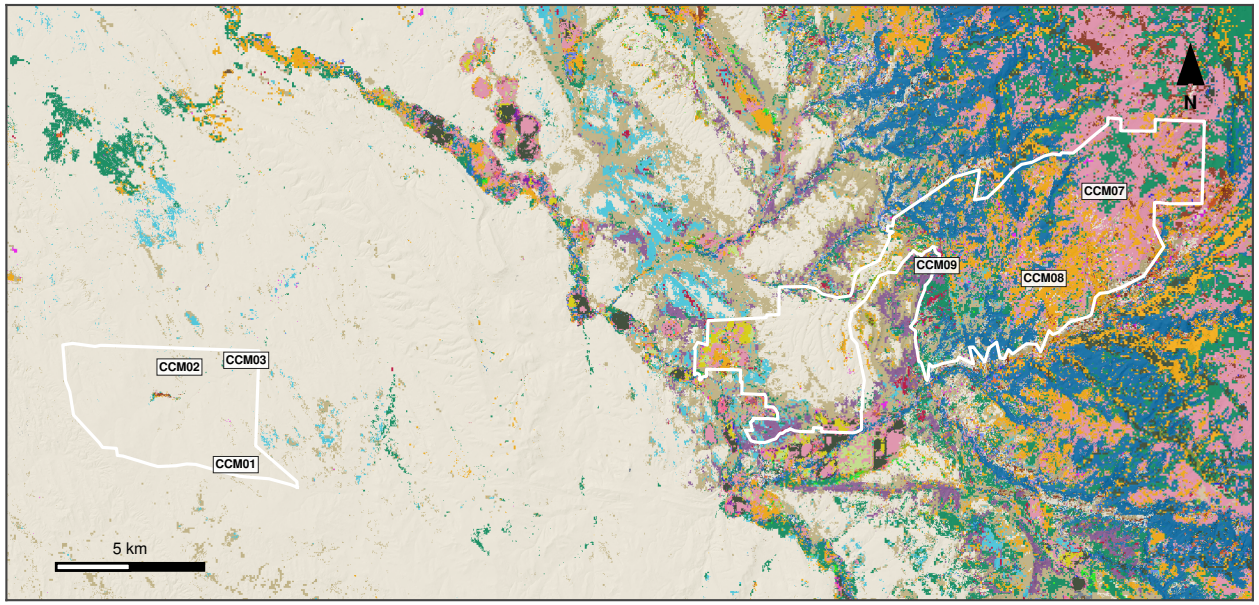
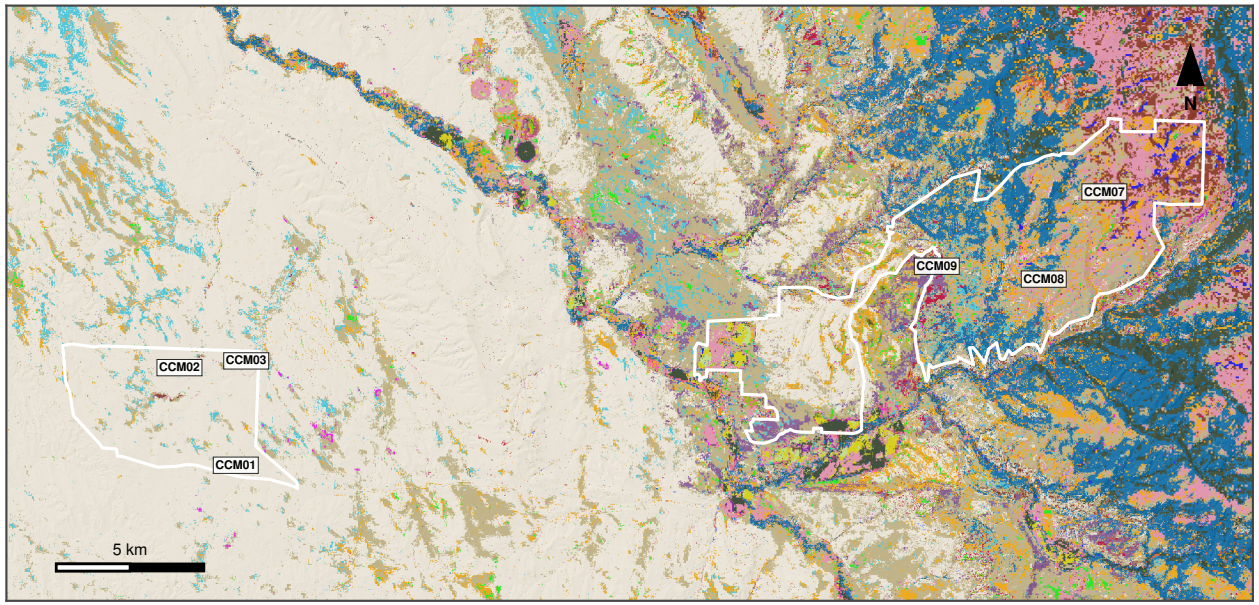
Species distribution — summer2026 (primary) and summer2025 (baseline)

Summer2026: 5 admitted scenes (2026-06-01, 2026-06-05, 2026-06-16, 2026-07-13, 2026-08-01) | summer2025: 2 admitted scenes (2025-06-19, 2025-08-04)

Summer2026



Summer2025



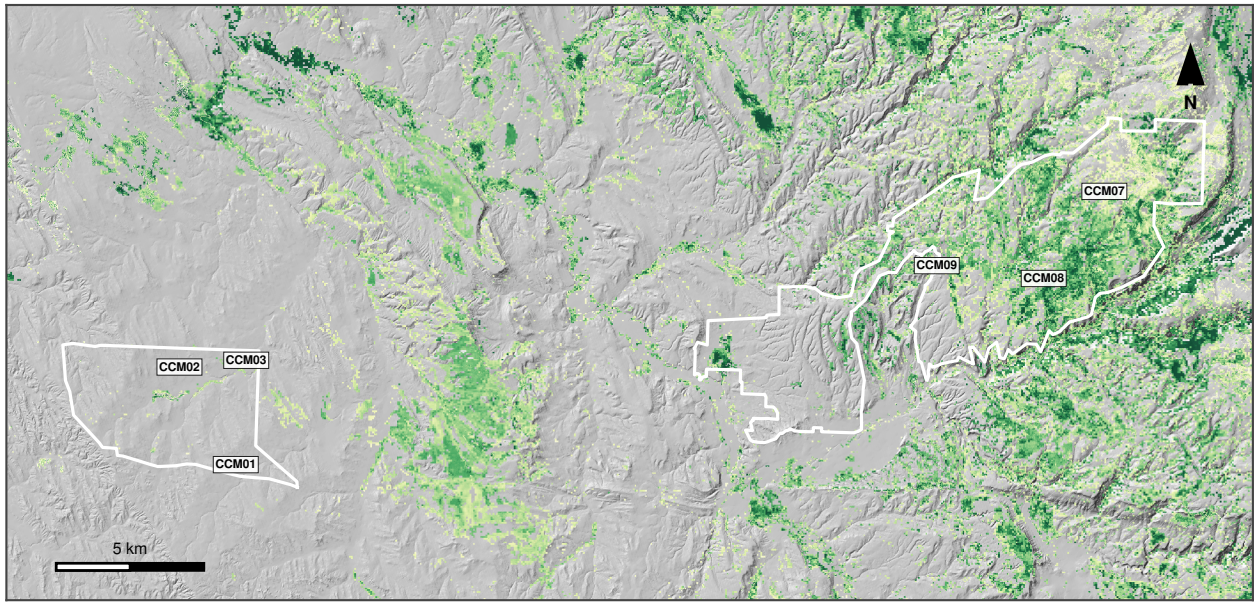
Species key — code · class — scientific (common) · share of labeled cells

- 22 · BARE — bare soil (exposed soil) 55.8%
- 17 · NPV_GRASS — standing dead and cured grass (grass litter) 9.4%
- 9 · PIED — Pinus ponderosa / P. flexilis (ponderosa and limber pine; library Pinus edulis rows) 7.1%
- 16 · NWFRB — native perennial forbs (wildflowers and perennial forbs) 7.0%
- 8 · PFG — perennial graminoids (perennial grasses, live share) 6.9%
- 1 · ARTR — Artemisia tridentata (big sagebrush) 5.3%
- 19 · NPV_LEAF — leaf litter (fallen leaves) 1.9%
- 15 · LICH — lichen and cyanobacteria (biological soil crust) 1.7%
- 11 · CONI — other conifers (mixed conifer) 1.5%
- 47 · SARVE — Sarcobatus vermiculatus (greasewood) 0.7%
- 3 · ATCA — Atriplex canescens (fourwing saltbush) 0.3%
- 2 · CHRY — Chrysothamnus viscidiflorus (green rabbitbrush) 0.3%
- 5 · CHE — Bromus tectorum (cheatgrass) 0.3%
- 40 · ALFALFA_SENESCENT — Medicago sativa (alfalfa, senescent) 0.3%
- 39 · ALFALFA_VEG — Medicago sativa (alfalfa, vegetative) 0.3%
- 21 · NPV_BRANCH — woody debris (branches and stems) 0.1%
- 20 · NPV_NEEDLE — needle litter (conifer needle litter) 0.1%
- 44 · SUGARBEET_VEG — Beta vulgaris (sugar beet, vegetative) 0.1%
- 10 · JUOS — Juniperus osteosperma / J. scopulorum (juniper) 0.1%
- 4 · SATR — Salsola tragus (Russian thistle) 0.1%
- 25 · ROCK_MET — metamorphic rock (exposed metamorphic rock) 0.1%
- 42 · BARLEY_VEG — Hordeum vulgare (barley, vegetative) 0.1%
- 7 · AFG_BD — annual bromes, Bromus spp. (Japanese brome and other annual bromes) 0.1%
- 14 · DECI — other deciduous broadleaf (deciduous shrubs and trees) 0.1%
- 38 · ALFALFA_EMERGENT — Medicago sativa (alfalfa, emergent) 0.1%
- 18 · NPV_BARK — bark (woody bark) 0.1%
- 41 · BARLEY_EMERGENT — Hordeum vulgare (barley, emergent) 0.0%
- 24 · ROCK_SED — sedimentary rock (exposed sandstone / shale) 0.0%
- 13 · SALI — Salix spp. (willow) 0.0%
- 43 · BARLEY_SENESCENT — Hordeum vulgare (barley, senescent) 0.0%
- 23 · ROCK_IG — igneous rock (exposed igneous rock) 0.0%
- 6 · AFG_AF — annual forbs, e.g. Bassia scoparia (kochia and other annual forbs) 0.0%
- 45 · WATER_CLEAR — open water (clear water) 0.0%
- 46 · URBAN_BUILT — built surfaces (roads, structures) 0.0%
- 48 · BURN — burned surface (char and ash) 0.0%
- 12 · POPU — Populus spp. (cottonwood and aspen) 0.0%

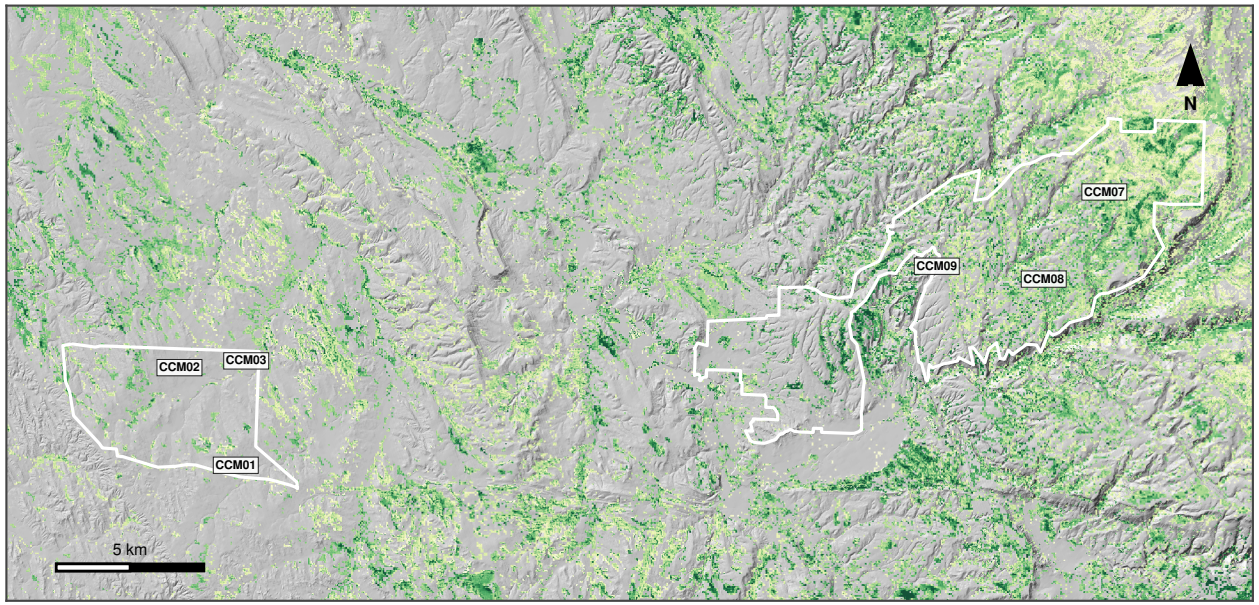
Cover: ARTR — Artemisia tridentata (big sagebrush)

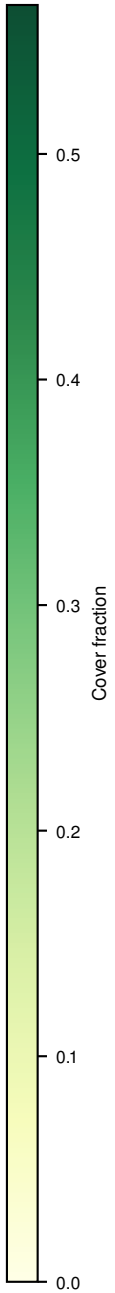
Summer2026: 5 admitted scenes (2026-06-01, 2026-06-05, 2026-06-16, 2026-07-13, 2026-08-01) | summer2025: 2 admitted scenes (2025-06-19, 2025-08-04)

Summer2026



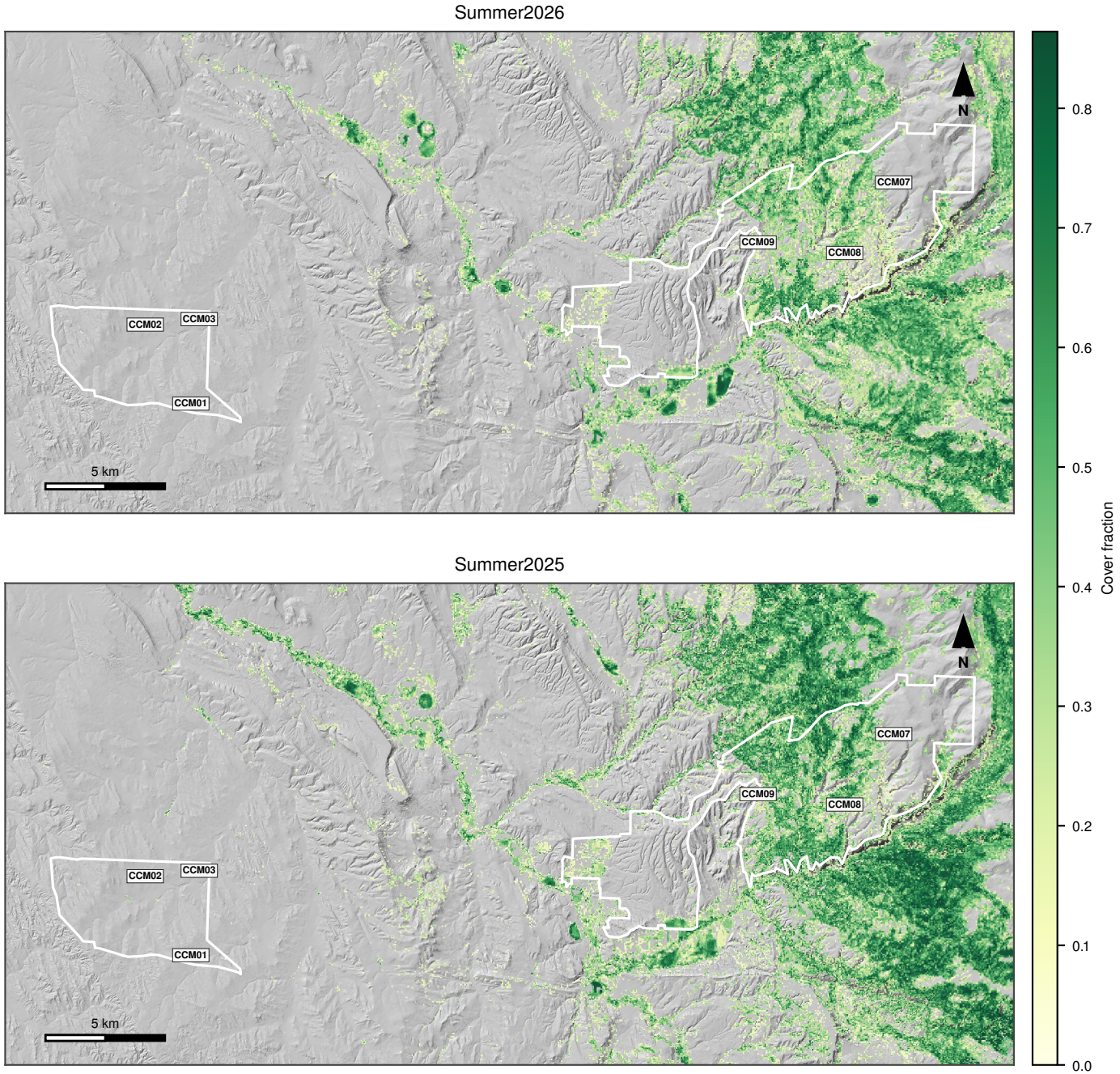
Summer2025





Cover: JUOS + PIED + CONI

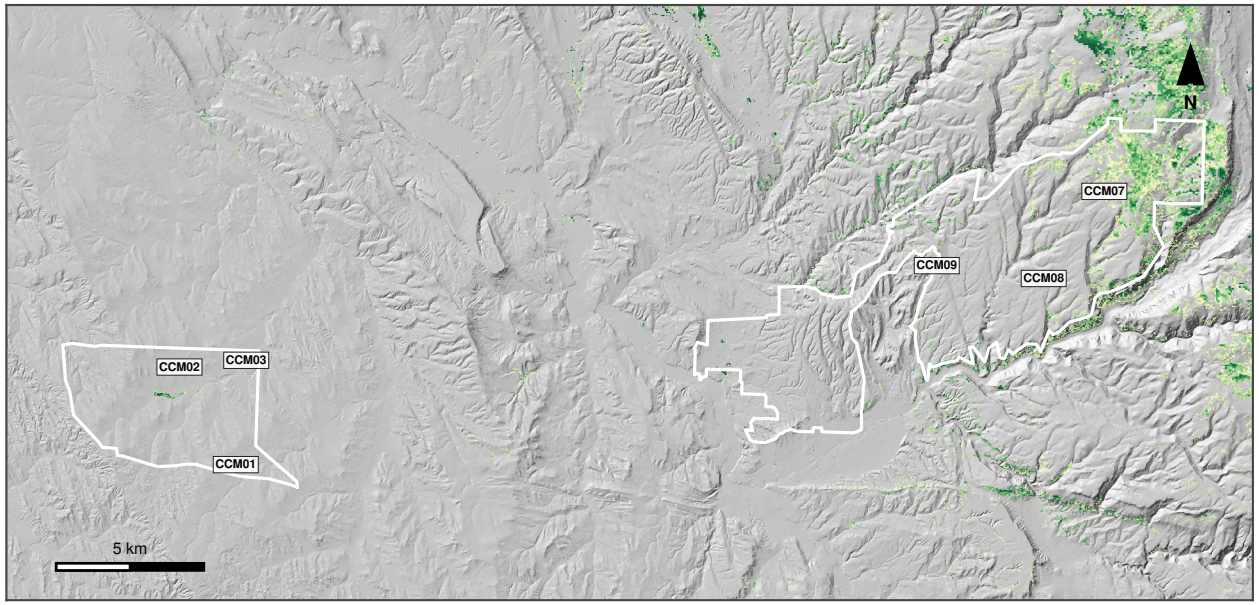
Summer2026: 5 admitted scenes (2026-06-01, 2026-06-05, 2026-06-16, 2026-07-13, 2026-08-01) | summer2025: 2 admitted scenes (2025-06-19, 2025-08-04)



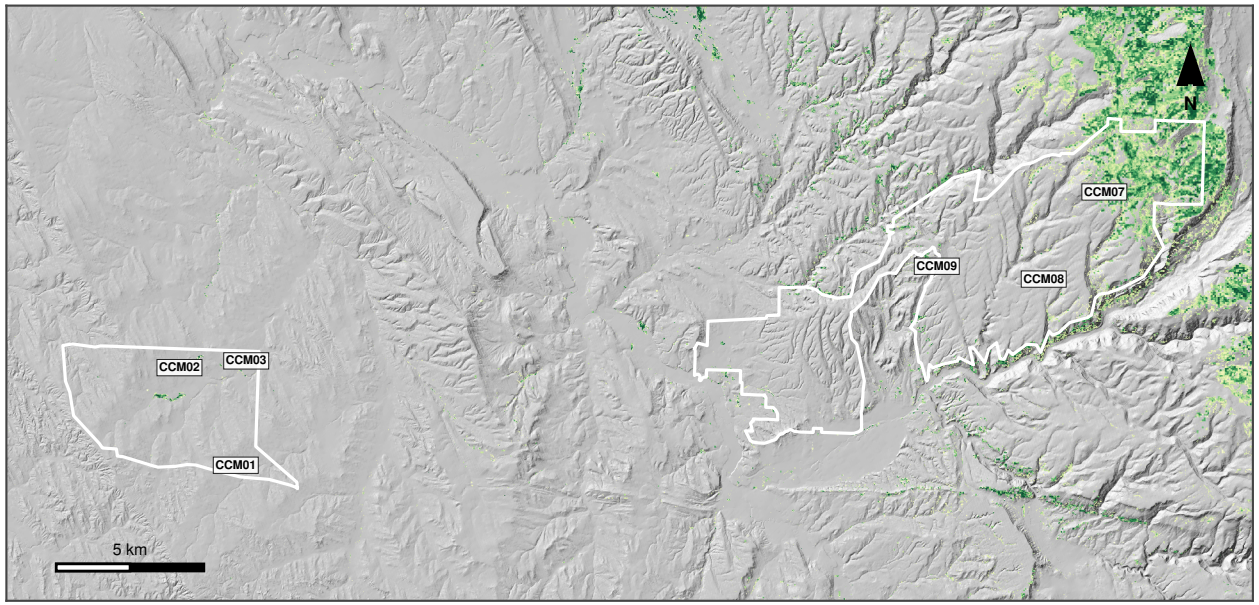
Cover: SARVE — Sarcobatus vermiculatus (greasewood)

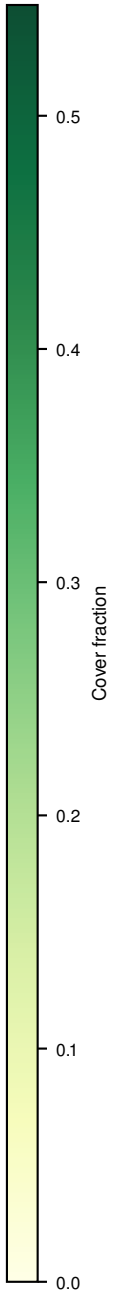
Summer2026: 5 admitted scenes (2026-06-01, 2026-06-05, 2026-06-16, 2026-07-13, 2026-08-01) | summer2025: 2 admitted scenes (2025-06-19, 2025-08-04)

Summer2026



Summer2025

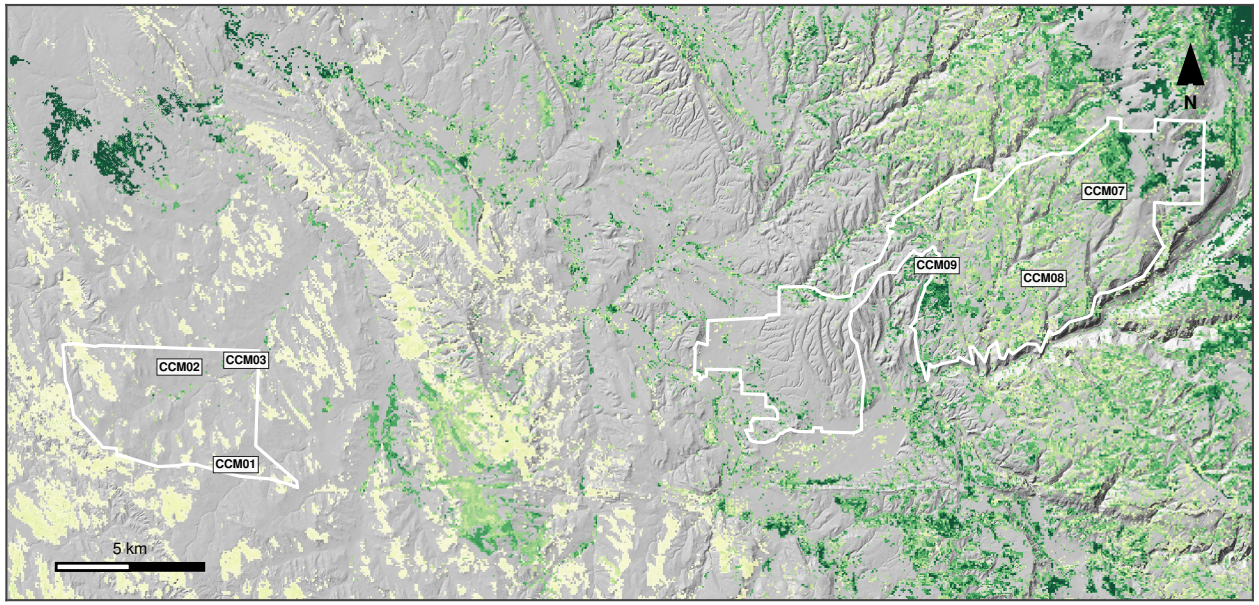




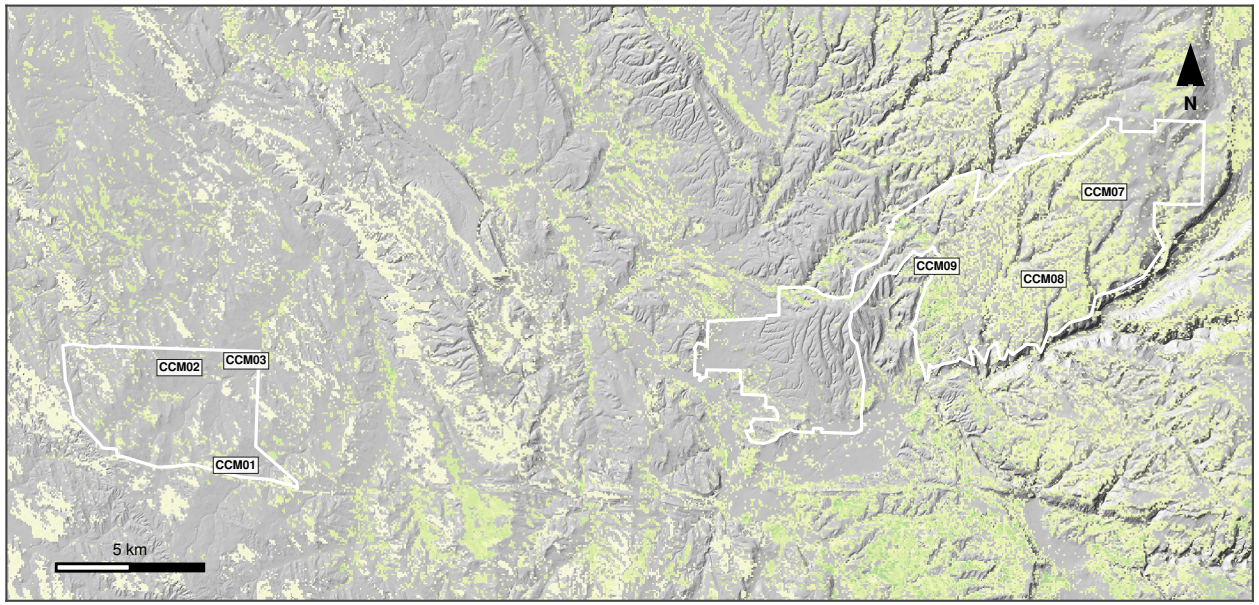
Cover: PFG — perennial graminoids (perennial grasses, live share)

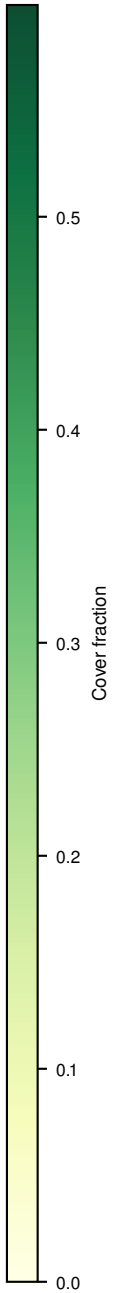
Summer2026: 5 admitted scenes (2026-06-01, 2026-06-05, 2026-06-16, 2026-07-13, 2026-08-01) | summer2025: 2 admitted scenes (2025-06-19, 2025-08-04)

Summer2026



Summer2025

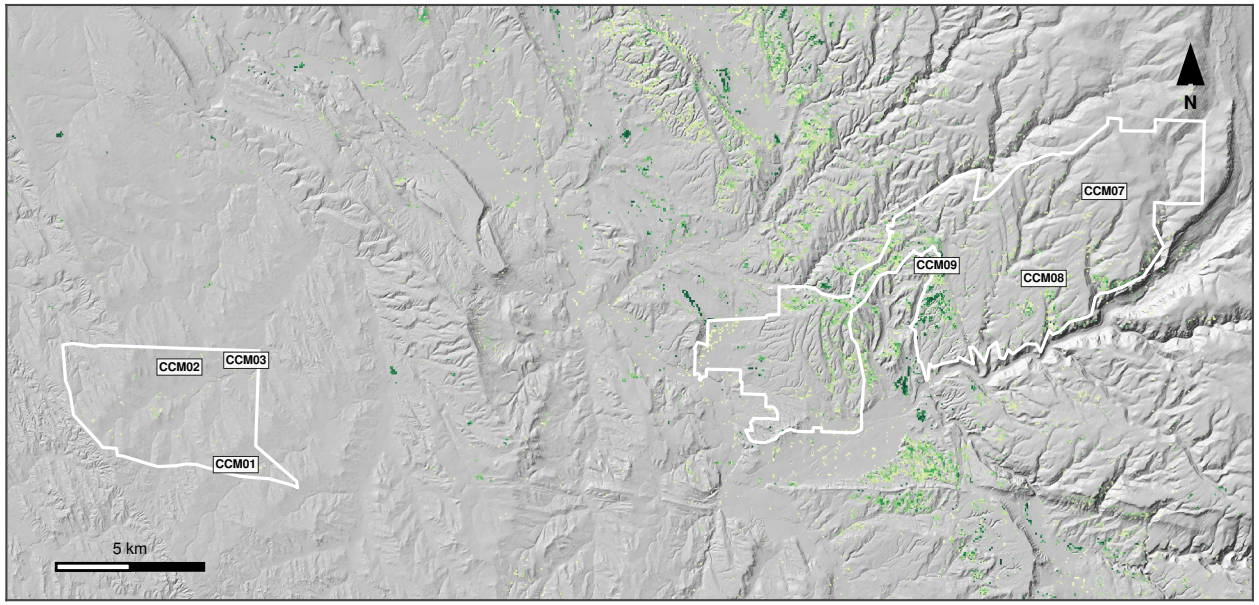




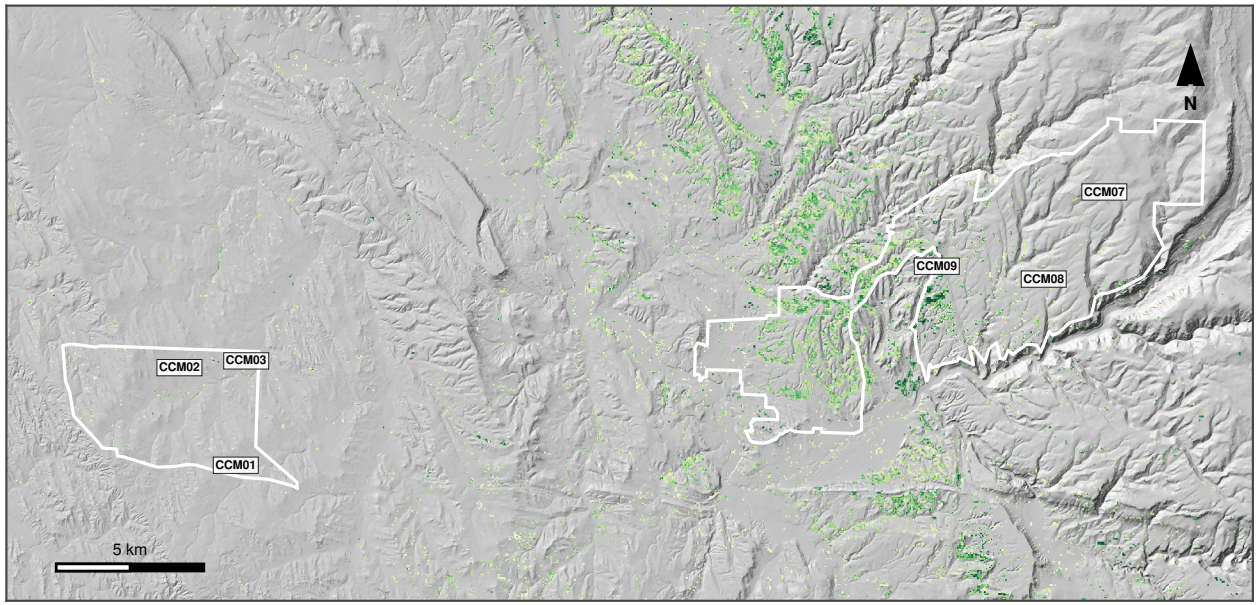
Cover: CHE — Bromus tectorum (cheatgrass)

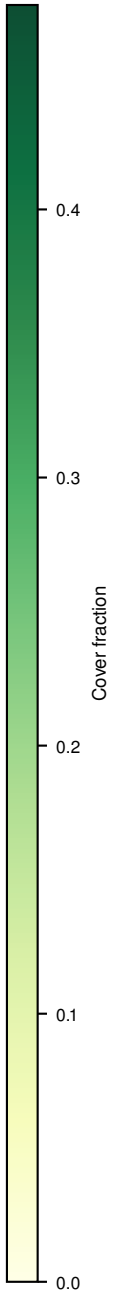
Summer2026: 5 admitted scenes (2026-06-01, 2026-06-05, 2026-06-16, 2026-07-13, 2026-08-01) | summer2025: 2 admitted scenes (2025-06-19, 2025-08-04)

Summer2026



Summer2025

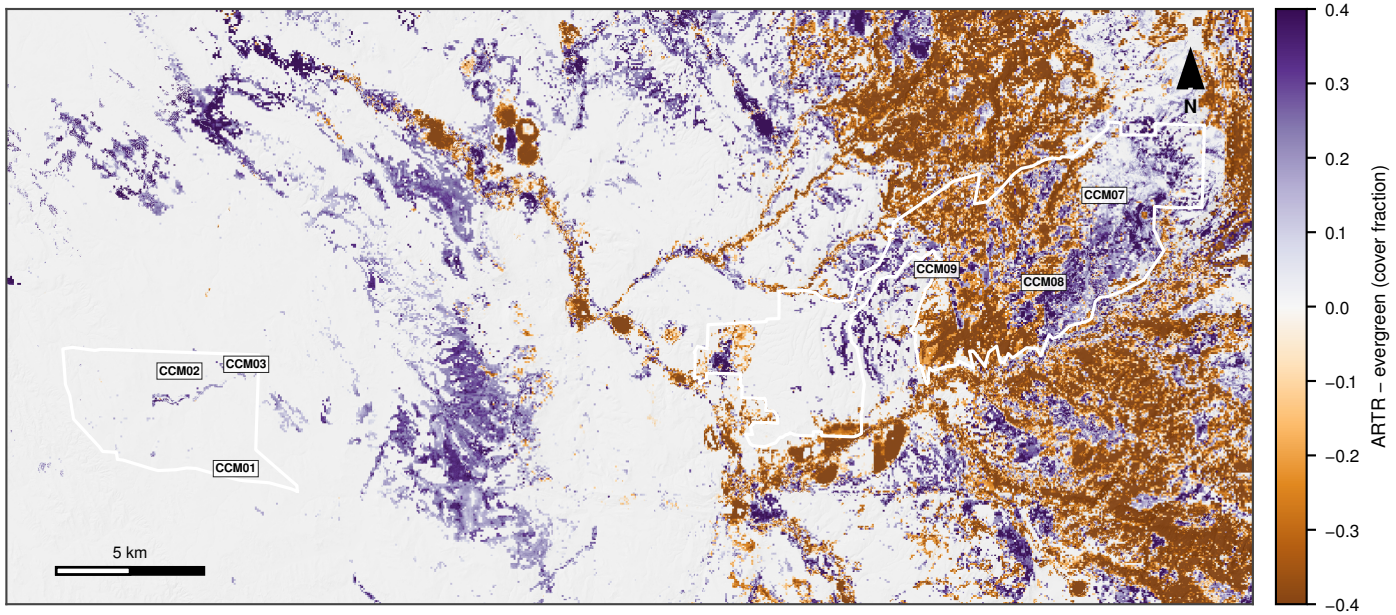




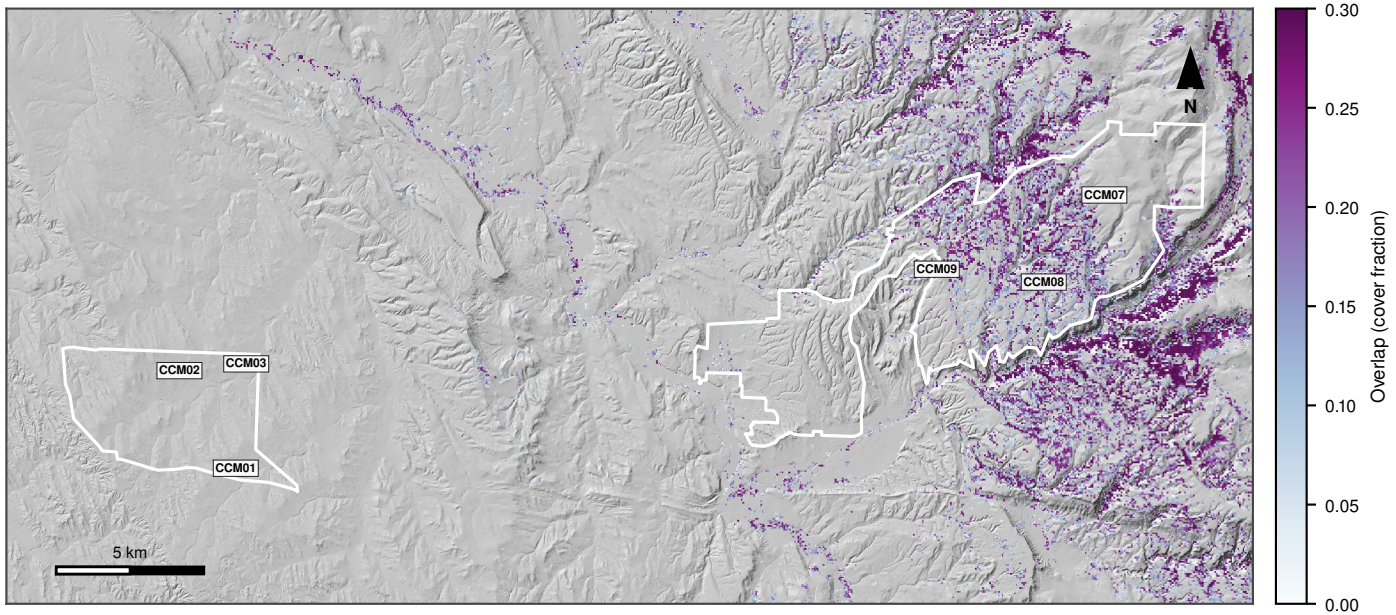
Sagebrush versus evergreen conifer — balance (ARTR − evergreen) and overlap, summer2026

Summer2026: 5 admitted scenes (2026-06-01, 2026-06-05, 2026-06-16, 2026-07-13, 2026-08-01)

Balance: purple = conifer-dominated, orange = sagebrush-dominated

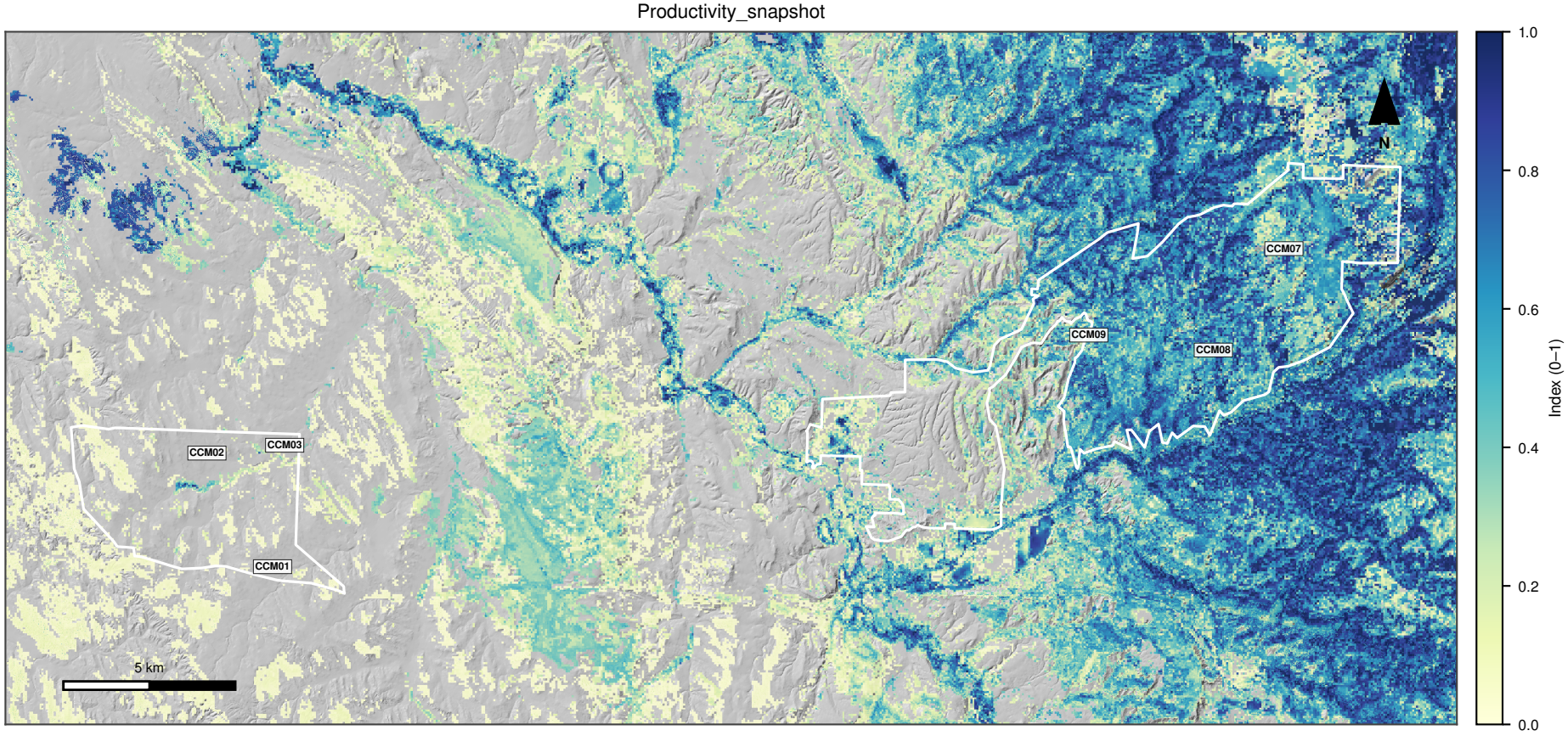


Overlap: cover where both are present (minimum of the two)



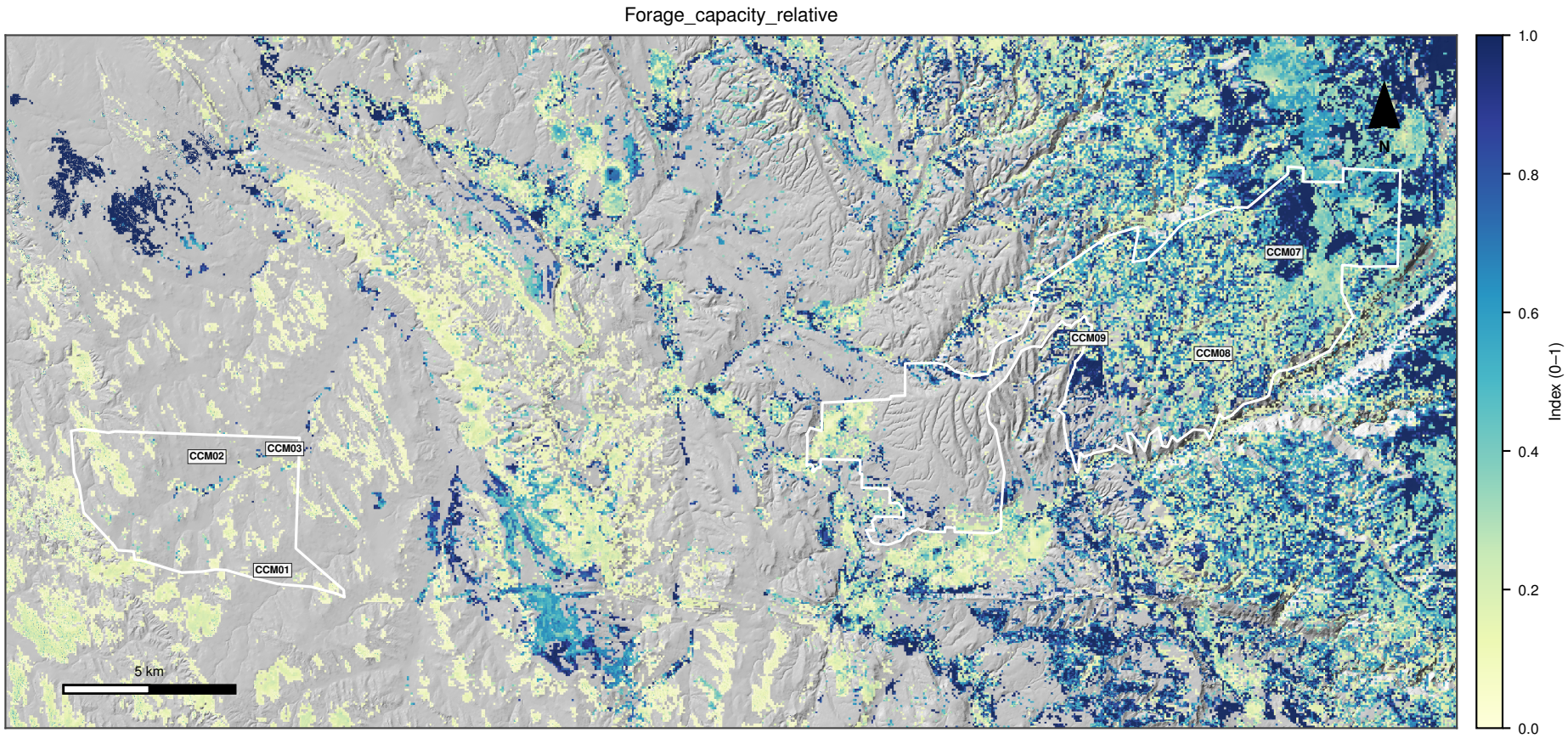
Decision layer — landscape productivity (vegetation cover × rangeland applicability)

Summer2026: 5 admitted scenes (2026-06-01, 2026-06-05, 2026-06-16, 2026-07-13, 2026-08-01)



Decision layer — forage capacity, relative (perennial grass + 0.5 annual brome + 0.3 forbs, scaled to the 95th percentile)

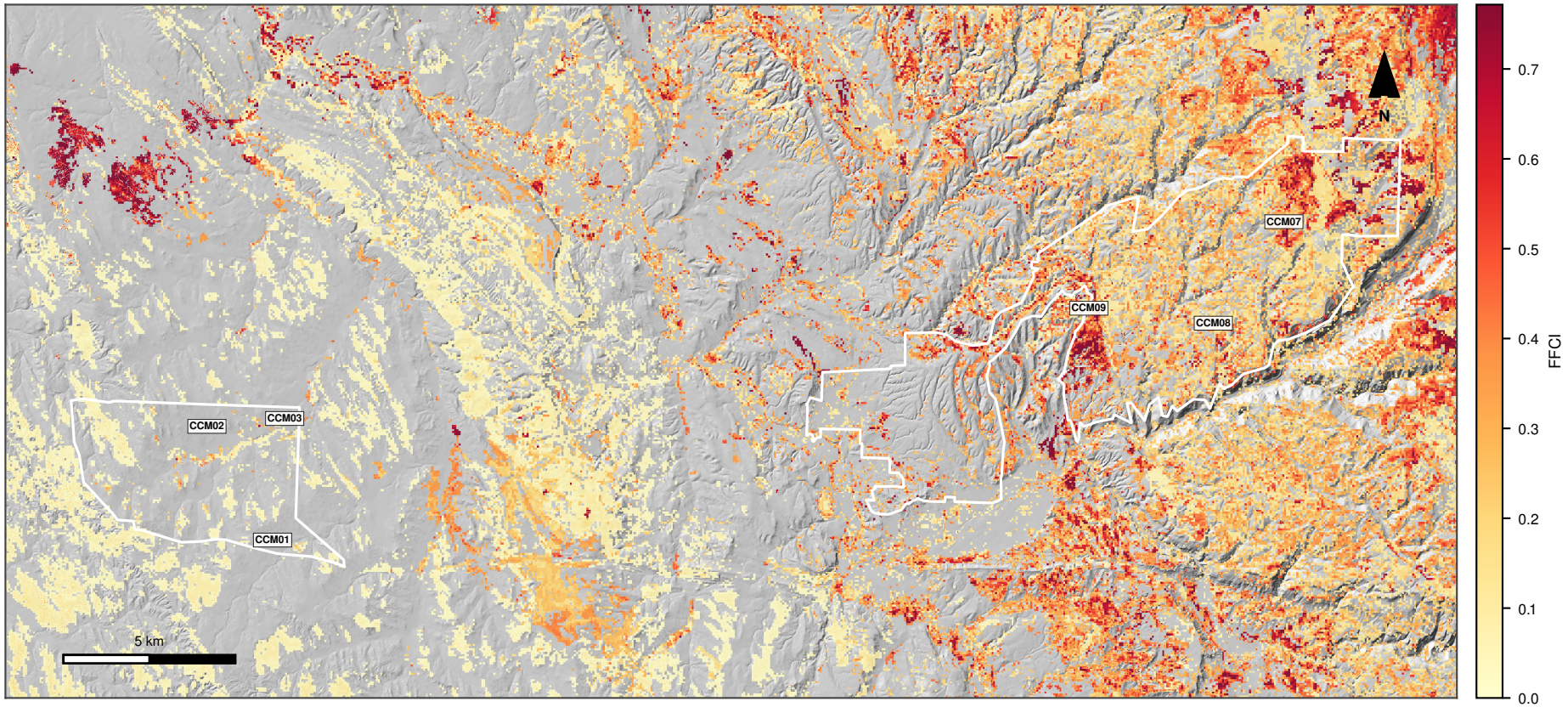
Summer2026: 5 admitted scenes (2026-06-01, 2026-06-05, 2026-06-16, 2026-07-13, 2026-08-01)



Rangeland health metric — FFCI

Fine-fuel continuity = herbaceous cover + cheatgrass: continuous fine fuel that carries fire | summer2026: 5 admitted scenes (2026-06-01, 2026-06-05, 2026-06-16, 2026-07-13, 2026-08-01)

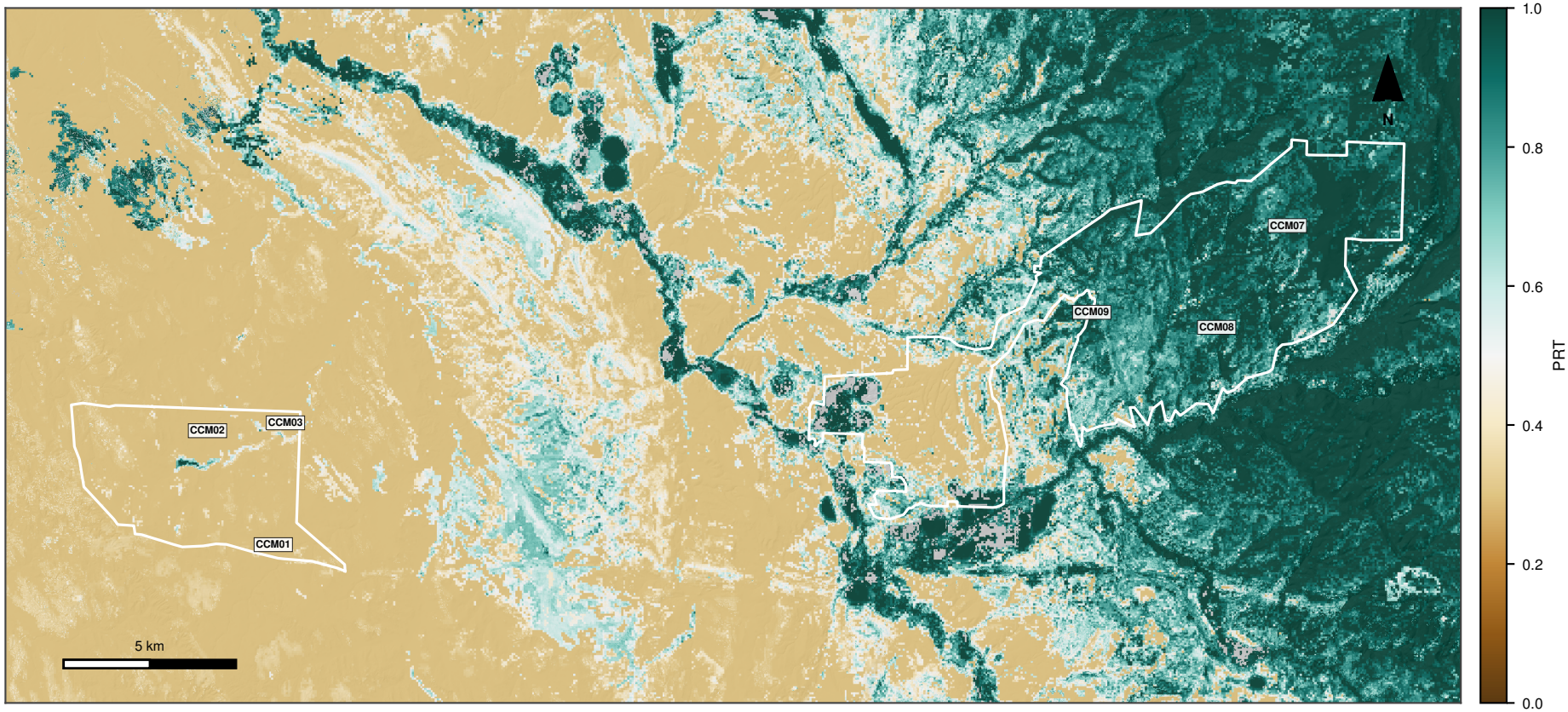
FFCI, masked to rangeland (applicability ≥ 0.5)



Rangeland health metric — PRT

Soil protection = 1 − 0.7·substrate + 0.3·shrub: erosion resistance | summer2026: 5 admitted scenes (2026-06-01, 2026-06-05, 2026-06-16, 2026-07-13, 2026-08-01)

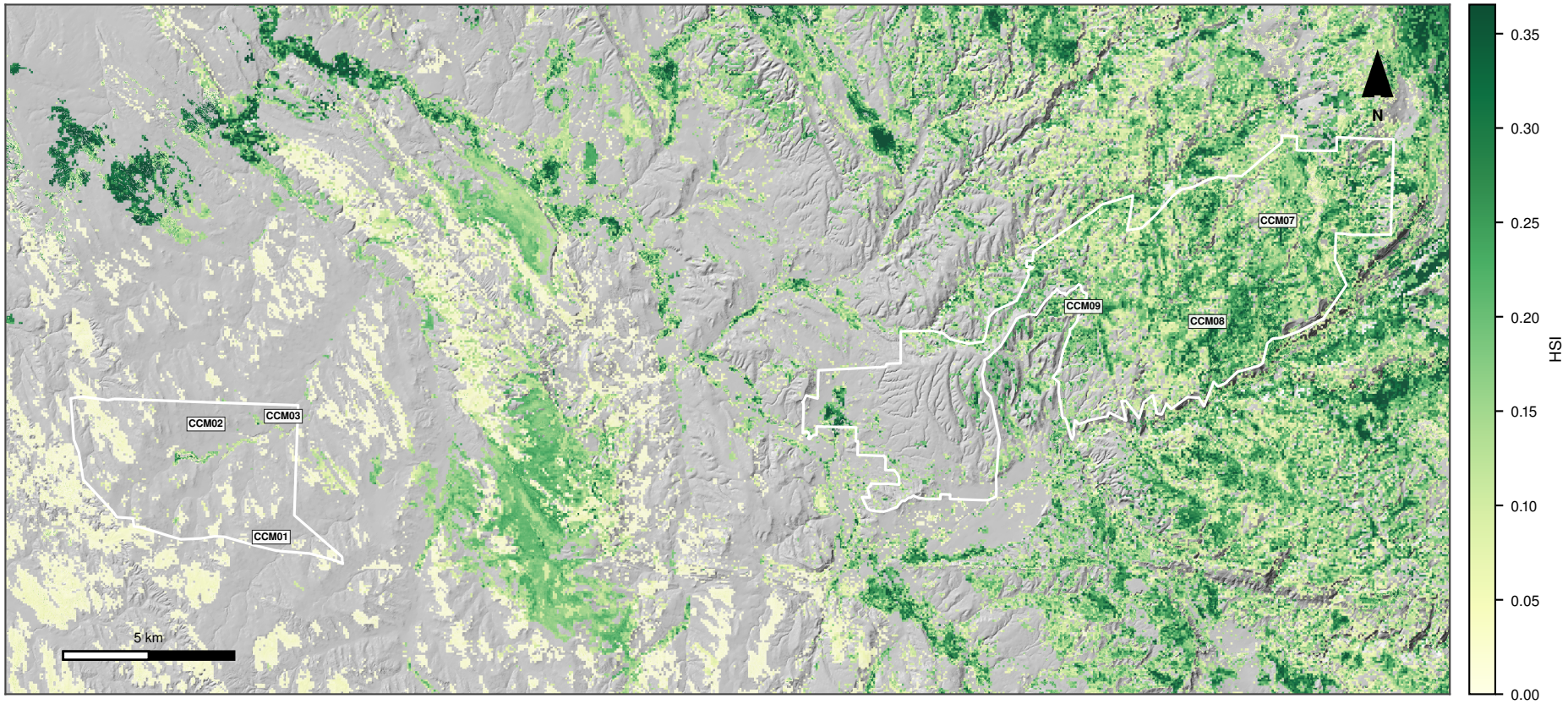
PRT, masked to rangeland (applicability ≥ 0.5)



Rangeland health metric — HSI

Sagebrush habitat suitability = 0.6·sagebrush + 0.4·perennial grass | summer2026: 5 admitted scenes (2026-06-01, 2026-06-05, 2026-06-16, 2026-07-13, 2026-08-01)

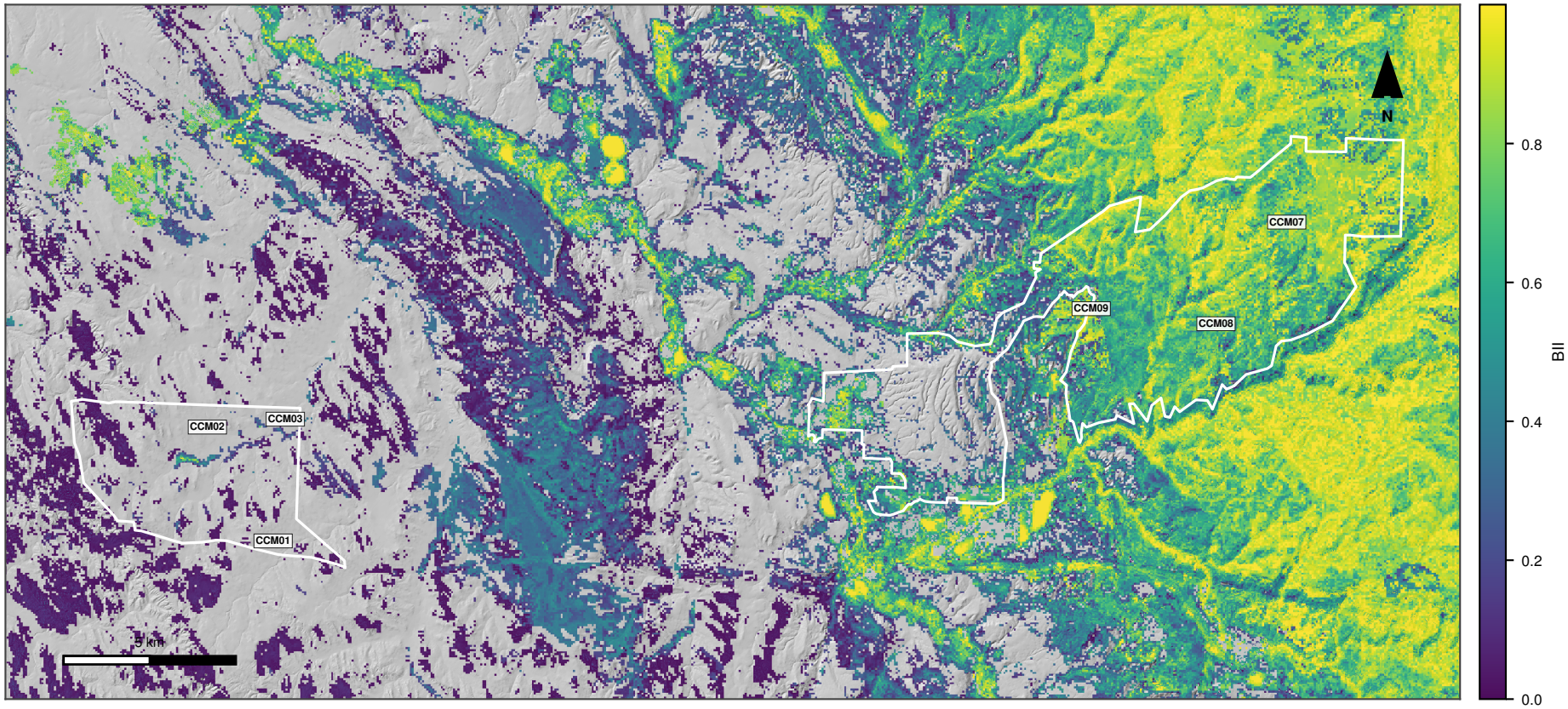
HSI, masked to rangeland (applicability ≥ 0.5)



Rangeland health metric — BII

Biotic integrity = perennial share × total cover − 0.5·cheatgrass | summer2026: 5 admitted scenes (2026-06-01, 2026-06-05, 2026-06-16, 2026-07-13, 2026-08-01)

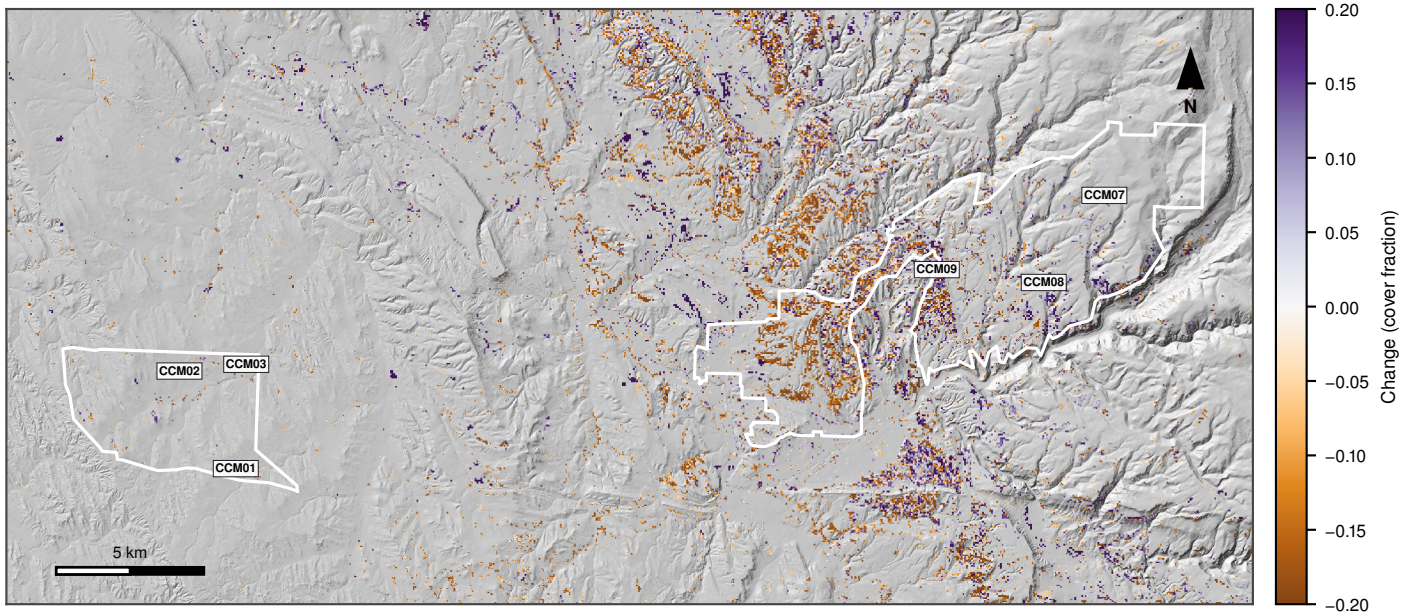
BII, masked to rangeland (applicability ≥ 0.5)



Cheatgrass front — change summer2025 to summer2026 (advancing where the gain exceeds 0.02 and 2026 cover ≥ 0.05)

Summer2025: 2 admitted scenes (2025-06-19, 2025-08-04) | summer2026: 5 admitted scenes (2026-06-01, 2026-06-05, 2026-06-16, 2026-07-13, 2026-08-01)

Change in cheatgrass cover



Advancing cells (2026 cover shown)

