

**VEGETATION MONITORING
BP AMERICA PRODUCTION CO**

Monitoring Site: **Leroy McCaw B#1 Release**
Lat 37.179638 Long -107.719044
SWNE Sec 21 T34N R8W, NMPM, La Plata County, Colorado
Release Number: 325804

Vegetation monitoring was conducted on August 1, 2019, at the Leroy McCaw B#1 Release site.

Cottonwood staff biologists surveyed three 100-foot transects to assess species presence and general plant vigor. Dominant species in the plant community at this site include cattail (*Typha latifolia*) and smooth brome (*Bromus inermis*) as well as pinyon pine (*Pinus edulis*), Utah juniper (*Juniperus osteosperma*), big sagebrush (*Artemisia tridentata*), and western wheatgrass (*Pascopyrum smithii*) in adjacent areas. Transect locations, vigor, and species observed are provided in Table 1 and photographs of site location and transects are provided in the Photo Log.

Table 1. August 2019 Vegetation Monitoring Results

Transect	Azimuth	Vigor	Species Observed
1 37.179990/-107.718436	173°	Grasses- Moderately stressed Forbs- Moderately stressed Shrubs- NA	Kochia (<i>Bassia scoparia</i>), western wheatgrass, smooth brome, prostrate knotweed (<i>Polygonum aviculare</i>), red-stem stork's bill (<i>Erodium cicutarium</i>), field bindweed (<i>Convolvulus arvensis</i>), clasping pepperweed (<i>Lepidium perfoliatum</i>), and squirreltail (<i>Elymus elymoides</i>)
2 37.179613/-107.718525	210°	Grasses- Not stressed Forbs- Not stressed Shrubs- NA	Cattail, prickly lettuce (<i>Lactuca serriola</i>), narrowleaf plantain (<i>Plantago lanceolata</i>), kochia, clasping pepperweed, Canada thistle (<i>Cirsium arvense</i>), American sloughgrass (<i>Beckmannia syzigachne</i>), water speedwell (<i>Veronica anagallis-aquatica</i>), curly dock (<i>Rumex crispus</i>), and two unknown forbs
3 37.179187/-107.718863	191°	Grasses- Not stressed Forbs- Not stressed Shrubs- NA	Cattail, osha (<i>Ligusticum porteri</i>), sand dropseed (<i>Sporobolus cryptandrus</i>), yarrow (<i>Achillea millefolium</i>), squirreltail, Canada thistle, curly dock, sheep sorrel (<i>Rumex acetosella</i>), and an unknown forb

Results:

Species diversity and abundance were consistent with seasonal conditions. Moderately stressed vegetation was observed along the length of Transect 1 due to lack of water and possible mowing/grazing. Vegetation along Transect 1 appeared to be consistent with surroundings that were not impacted during the release. Transect 1 was located within a mowed/grazed pasture.

PHOTO LOG



Photo 1. Transect 1 looking south 8/1/19.

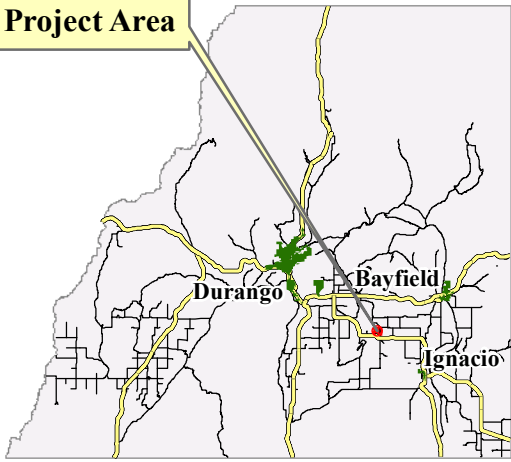


Photo 2. Transect 2 looking southwest 8/1/19.



Photo 3. Transect 3 looking south-southwest 8/1/19.

Project Area



La Plata County, Colorado

Point of Release

Transect 1



Transect 2



Transect 3







LEROY MCCA W B 1

Sec 21 T34N R8W



Legend

-  Point of Release
-  Vegetation Transects
-  Wet Area Mapped 4/2/19
-  Oil & Gas Well

Location: SWNE Sec 21 T34N R8W, NMPM



Mapping by: H. Ertl & A. Webb, 8/6/19
Coordinate System:
NAD 1983 UTM Zone 13 N

Leroy McCaw B #1
August 2019
Vegetation Monitoring Map
BP America
Production Company