

**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 November 8, 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. November 2019 Vegetation Monitoring Results**

<b>Transect</b>	<b>Azimuth</b>	<b>Vigor</b>	<b>Species Observed</b>
1 37.179990/-107.718436	173°	Grasses- Moderately stressed Forbs- Moderately stressed Shrubs- NA	Kochia ( <i>Bassia scoparia</i> ), prostrate knotweed ( <i>Polygonum aviculare</i> ), field bindweed ( <i>Convolvulus arvensis</i> ), western wheatgrass, narrowleaf plantain ( <i>Plantago lanceolate</i> ) and dandelion ( <i>Taraxacum officinale</i> ).
2 37.179613/-107.718525	210°	Grasses- Not stressed Forbs- Not stressed Shrubs- NA	Cattail, tumble mustard ( <i>Sisymbrium altissimum</i> ), kochia, prickly lettuce ( <i>Lactuca serriola</i> ), musk thistle ( <i>Carduus nutans</i> ), sunflower ( <i>Helianthus annuus</i> ), and an unknown forb.
3 37.179187/-107.718863	191°	Grasses- Not stressed Forbs- Not stressed Shrubs- NA	Cattail, Kentucky bluegrass ( <i>Poa pratensis</i> ), big sagebrush ( <i>Artemisia tridentate</i> ), prickly lettuce, yarrow ( <i>Achillea millefolium</i> ), Carruth's sagewort ( <i>Artemisia carruthii</i> ), narrowleaf plantain, western wheatgrass, 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, 11/8/19.

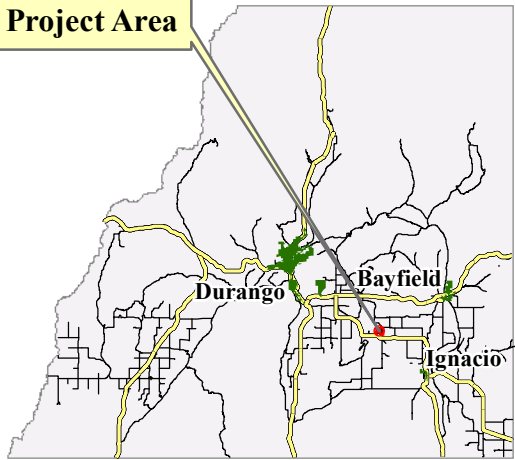


Photo 2. Transect 2 looking southwest, 11/8/19.



Photo 3. Transect 3 looking south-southwest, 11/8/19.

**Project Area**



**La Plata County, Colorado**

Point of Release

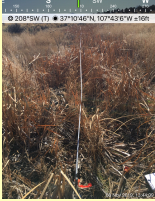
**Transect 1**



LEROY MCCAW B 1

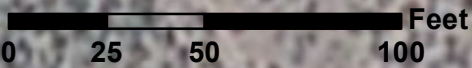
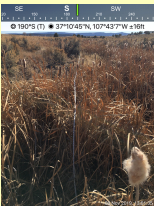


**Transect 2**







Sec 21 T34N R8W

**Transect 3**



**Legend**

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

Location: SWNE Sec 21 T34N R8W, NMPM



Mapping by: E. Millar, 11/12/19  
Coordinate System:  
NAD 1983 UTM Zone 13 N

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