



Memo

To: Atwater Bayfield, Colorado, LLC
TRACTOR SUPPLY COMPANY WEST, LLC
TRACTOR SUPPLY COMPANY, A DELEWARE CORPORATION

From: Sara Brandenburg and Sean Moore (SME Environmental, Inc.)

Date: February 26, 2024

Re: Mapping of Aquatic Resources on the future Bayfield Tractor Supply property

At your request, this memorandum addresses aquatic resources that were mapped on the above-referenced property on October 2, 2023. This work was completed by SME Environmental, Inc. (SME) on behalf of the entities listed above as related to the design process in order to minimize or eliminate aquatic resource impacts due to the construction of a new Tractor Supply Company retail location in the Town of Bayfield, Colorado.

Aquatic Resources Mapping

SME conducted a site visit of the referenced project on October 2, 2023 to map the presence/absence of aquatic resources (wetlands and other Waters of the U.S. [WOUS]) on the subject property (Parcel 567711105025). The project location is depicted on the Road Vicinity Map (Figure 1). The property is approximately 7.5 acres in size and can be found on the Bayfield, Colo., 7.5' USGS quadrangle in Section 11 of Range 7 West, Township 34 North, New Mexico Principal Meridian (Figure 2).

Methods

SME staff conducted an aquatic resources assessment in the survey area on October 2, 2023 using the methodology defined in the Routine Determination procedure set forth in the *1987 U.S. Army Corps of Engineers Wetlands Delineation Manual* (USACE 1987), the *Regional Supplement to the USACE Wetland Delineation Manual: Arid West Region* (USACE 2008), *Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008), and *Regulatory Guidance Letter No. 05-05 Guidance on Ordinary High Water Mark Identification* (USACE 2005). Wetland boundaries were defined based on presence of hydrophytic vegetation, hydric soils, and hydrologic indicators that under normal conditions would indicate wetland conditions. In the absence of wetland conditions, the extent of aquatic resources was determined based on the lateral extent of the OHWM.

Prior to conducting the field survey, SME conducted a desktop survey of available publications covering the survey area including U.S. Geological Survey (USGS) 7.5' topographic quadrangles, U.S. Fish and Wildlife (USFWS) National Wetlands Inventory (NWI) data, U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soils data, and USDA FSA NAIP and Google Earth aerial imagery. The approximate boundaries of aquatic resources were survey-located using Trimble R1 GNSS Receiver (real-time sub-meter accuracy).

Soils

Soil data for the survey area was obtained from the USDA NRCS. A soil map is included as Figure 3. The survey area is fully within one map unit; a description of the unit is derived from the USDA NRCS Soil Reports and is provided below.

Minor map unit components are excluded from this report.

La Plata County Area, Colorado

Map Unit: 22—Corta loam, 1 to 3 percent slopes

Component: Corta (75%)

The Corta component makes up 75 percent of the map unit. Slopes are 1 to 3 percent. This component is on old pediments, tops mesas, tops ridges. The parent material consists of fine-textured alluvium derived from shale and/or loess. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is high. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the F048AY925CO Ponderosa Pine Forest ecological site. Nonirrigated land capability classification is 3c. Irrigated land capability classification is 3e. This soil does not meet hydric criteria.

Component: Falfa (20%)

Generated brief soil descriptions are created for major soil components. The Falfa soil is a minor component.

Component: Plome (5%)

Generated brief soil descriptions are created for major soil components. The Plome soil is a minor component.

The Corta Loam soil unit is not listed on the State Soil Data Access (SDA) Hydric Soils List (NRCS, 2023).

Results

The freshwater pond shown on the National Wetlands Inventory map (Figure 4) in the northwestern corner of the property does not or no longer exists, as confirmed by field surveys. Aquatic resources on the property were conservatively mapped to ensure project design would fully avoid or minimize wetland impacts. Based on field surveys, the majority of the western third of the property consists of a palustrine emergent marsh (PEM) wetland complex. No other aquatic resources were mapped within the survey area. The approximate boundaries of aquatic resources in relation to the proposed project design are shown in Figure 5.

Wetlands in the survey area were dominated by reed canary grass (*Phalaris arundinacea*) and Northwest Territory sedge (*Carex utriculate*). Upland areas surveyed consisted of a variety of

herb and graminoid species including smooth brome (*Bromus inermis*), alfalfa (*Medicago sativa*), and field pennycress (*Thlaspi arvense*). The delineation line to determine upland/wetland boundary was informed by the vegetation transitioning from dominance by smooth brome (upland area), to Northwest Territory sedge and reed canary grass (wetland area). Western wheat grass (*Pascopyrum smithii*) was present both in the wetland and upland areas in the transition zone between the upland and wetland areas mapped on the property. A full list of plant species observed during the site survey is provided as Attachment 2 and photographs of the vegetation zones observed on the site are included in Attachment 3.

There were also typical differences in both hydrologic and soil conditions observed on either side of the wetland/upland boundary. Soils within the wetland area were generally in the 10YR 3/2 Munsell color range with lighter redoximorphic features and were saturated at or near the surface. Soils within the upland area were generally in the 10YR 4/4 Munsell color range and were dry.

SME has delineated wetlands and assessed wetland hydrology in the vicinity of the subject property dating back to 2013 when the firm analyzed the influence of irrigation water on wetland hydrology at the Bayfield High School site that is located at the northern end of the basin in which the subject property is located. It is very apparent that there is groundwater charge that influences the presence of wetlands on the subject property further east from the bottom of the basin than would likely be there were it not for that sub-surface charge.

The subsurface charge likely emanates from leakage from the Schroeder Ditch to the northeast of the subject property. Regardless, under this effort, SME did not attempt to delineate a “natural hydrology versus irrigation hydrology” line on the subject property in an effort to lessen the area of USACE jurisdiction on the subject property. The wetland boundary depicted in Figure 5 includes both “natural” and “irrigated wetlands” and Table 1 does not differentiate between these types of wetlands.

Table 1. Cowardin Classification (Cowardin, 1979) Acreage, and Linear Footage of Aquatic Resources within the Survey Area.

| Waters of the U.S. | Square Feet | Acres | Linear Feet |
|-----------------------------------|---------------|-------------|-------------|
| Palustrine Emergent (PEM) Wetland | 98,779 | 2.06 | N/A |
| TOTAL | 98,779 | 2.06 | |

Wetland Avoidance

The final Bayfield Tractor Supply site plan (Figure 6) avoids all wetland areas delineated by SME on the property. A previous iteration of the site plan would have incurred a small impact to the wetland complex due to the parking lot west of the proposed retail building overlapping with the eastern side of the wetland complex. In the end, the project design team decided to include a retaining wall in the final site plan along the edge of the parking lot to avoid any wetland impact in this location.

Summary

Per your request, all wetlands on and within the Bayfield Tractor Supply Company property were mapped by SME in October of 2023. Based on SME’s field observations and the provided project design, it is SME’s opinion that that no impacts to aquatic resources will occur as a result of the development of the site plan depicted in Figure 6. Therefore, no 404 Permit will be necessary for the proposed project.

Limitations

Field indicators can change with variations in hydrology and other factors. This report assesses the potential for wetlands at the site at the time of our review and does not address conditions at a given time in the future. Accordingly, on behalf of our client, SME reserves the right to revisit the jurisdictional status of boundaries of aquatic resources as presented herein, should any of this information warrant modifications. SME makes no other warranties, either expressed or implied, and our report is not a recommendation to buy, sell or develop the property.

This report does not constitute a Jurisdictional Determination of WOUS, since such determinations must be verified by the USACE or the Natural Resources Conservation Service (NRCS) (as applicable) and are subject to review by the U.S. Environmental Protection Agency (USEPA).

All wetland data was collected using Trimble GPS units and were located during SME's site visit and are subject to the limitations of SME GPS equipment (sub-meter accuracy) and USDA FSA NAIP Imagery which is used as the base for Figure 5.

References

- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classifications of Wetlands and Deepwater Habitats of the United States*. (FWS/OBS-79/31) U.S. Fish and Wildlife Service. Washington D.C.
- USACE. 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*. U.S. Army Engineer Research and Development Center. Vicksburg, MS.
- USACE. 2008. *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual*. U.S. Army Engineer Research and Development Center Cold Regions Research and Engineering Laboratory. Hanover, NH.
- USACE. December 2005. *Regulatory Guidance Letter No. 05-05. Guidance on Ordinary High Water Mark Identification*.
- USACE. 1987. *Corps of Engineers Wetland Delineation Manual*. Technical Report Y-87-1, Environmental Laboratory, U.S. Army Corps of Engineer Waterways Experiment Station. Vicksburg, MS.
- USDA NRCS. 2023. Web Soil Survey. Available at: <http://websoilsurvey.nrcs.usda.gov/>.

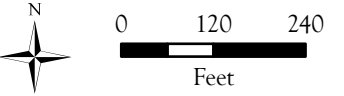
Attachment 1
Figures



 Survey Area



ENVIRONMENTAL CONSULTANTS
 679 East 2nd Ave. Unit E2, Durango, Colorado 81301
 www.sme-env.com (970) 259-9595

| | | |
|---|-------------|--------------|
| Drawn by: | Rvwd. by: | Project No.: |
| SB | SM | 230052 |
| Date: | Rvsd. Date: | Scale: |
| 12/6/2023 | NA | 1:3,000 |
|  <p>0 120 240 Feet</p> | | |

ROAD VICINITY MAP

AQUATIC RESOURCES
 BAYFIELD TRACTOR SUPPLY
 LA PLATA COUNTY, CO

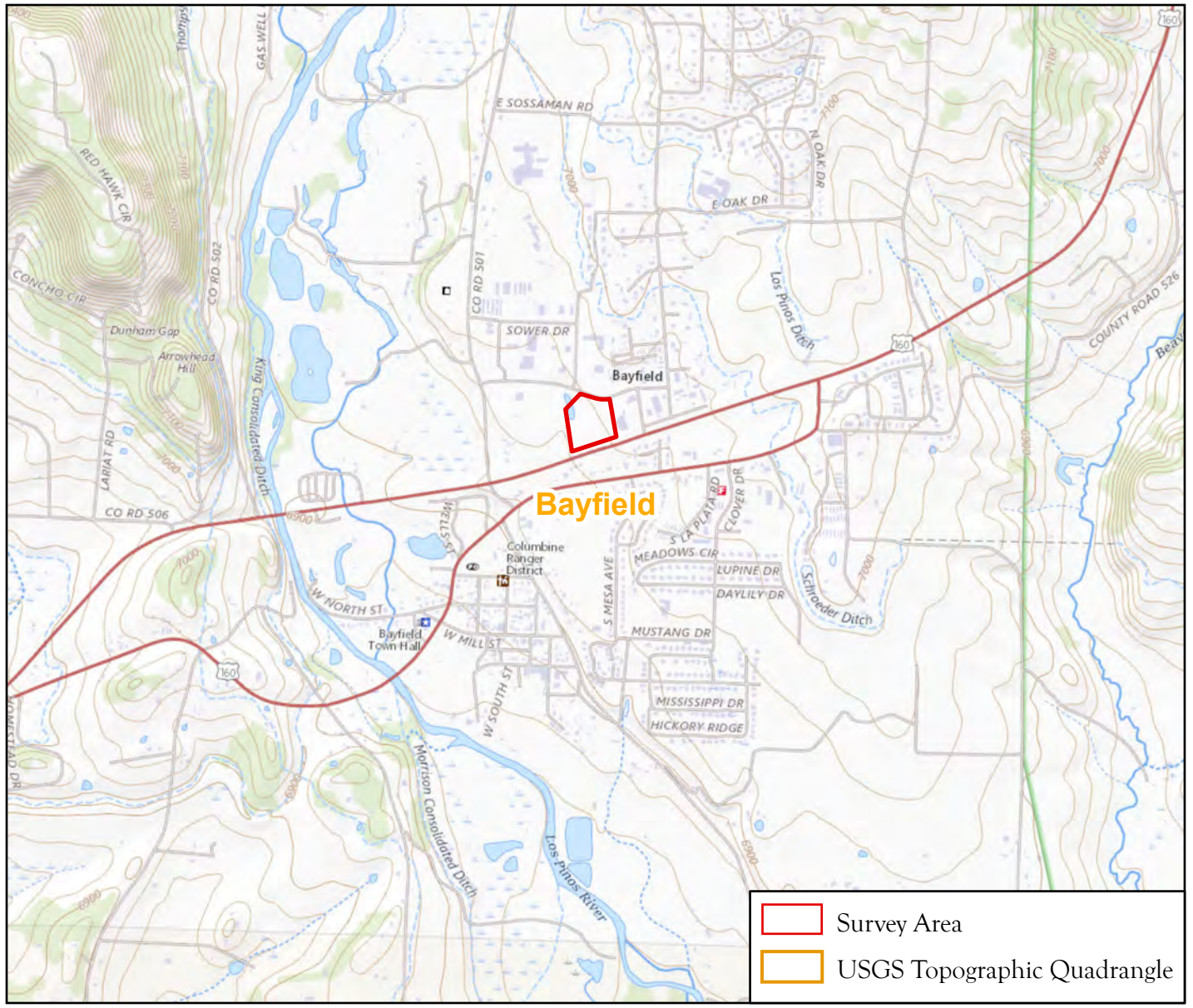
**FIGURE
1**

SURVEY LOCATION:

Township 34 North, Range 7 West A, NENE, SENE of
Section 11;
New Mexico Principal Meridian
La Plata County, Colorado.

SURVEY AREA CENTROID (NAD83):

Latitude: 37.23269°
Longitude: -107.59715°



Survey Area
 USGS Topographic Quadrangle

SME
ENVIRONMENTAL CONSULTANTS
679 East 2nd Ave. Unit E2, Durango, Colorado 81301
www.sme-env.com (970) 259-9595

| | | |
|-----------|-------------|--------------|
| Drawn by: | Rvwd. by: | Project No.: |
| SB | SM | 230052 |
| Date: | Rvsd. Date: | Scale: |
| 12/6/2023 | NA | 1:24,000 |
| | | |

TOPOGRAPHIC LOCATION MAP

AQUATIC RESOURCES
BAYFIELD TRACTOR SUPPLY
LA PLATA COUNTY, CO

FIGURE
2



NRCS SOIL MAP UNITS WITHIN SURVEY AREA:


| Symbol | Name |
|--------|-----------------------------------|
| 22 | Corta loam, 1 to 3 percent slopes |

- NRCS Soils Map Units
- Survey Area



ENVIRONMENTAL CONSULTANTS
 679 East 2nd Ave. Unit E2, Durango, Colorado 81301
 www.sme-env.com (970) 259-9595

| | | |
|-----------|-------------|--------------|
| Drawn by: | Rvwd. by: | Project No.: |
| SB | SM | 230052 |
| Date: | Rvwd. Date: | Scale: |
| 12/6/2023 | NA | 1:3,000 |


0 125 250
Feet

SOILS MAP

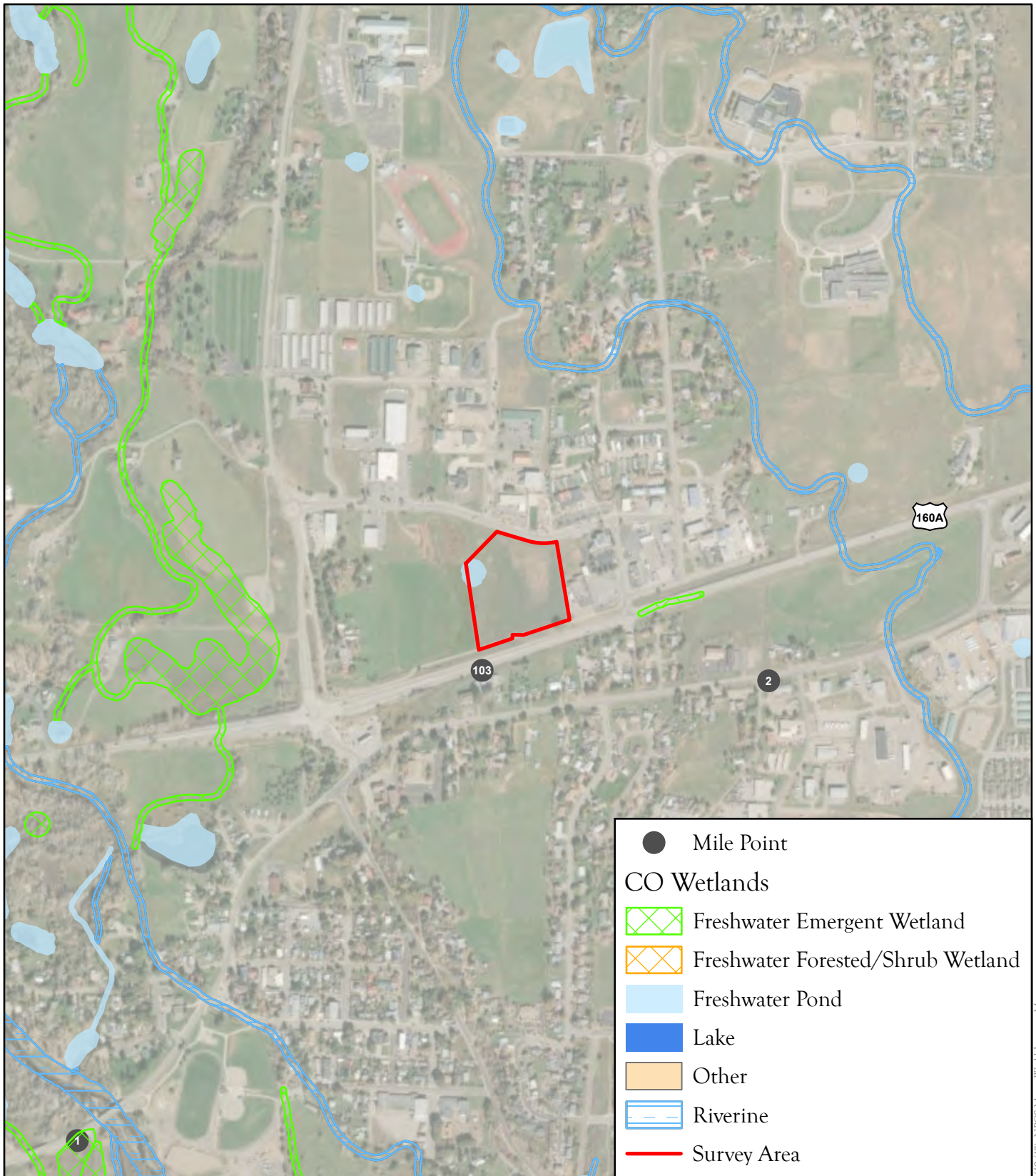
AQUATIC RESOURCES
 BAYFIELD TRACTOR SUPPLY
 LA PLATA COUNTY, CO

FIGURE

3

Document Path: S:\Projects\230052 Bayfield Tractor Supply\GIS\Bayfield Tractor Supply ArcPro\Bayfield Tractor Supply ArcPro.aprx; Coordinate System: NAD 1983 StatePlane Colorado South FIPS 0503 Feet

Sources: DigitalGlobe Aerial Imagery acquired 9/19/17; NRCS; Maxar, Microsoft, World Imagery; Maxar, Microsoft



● Mile Point
CO Wetlands
 Freshwater Emergent Wetland
 Freshwater Forested/Shrub Wetland
 Freshwater Pond
 Lake
 Other
 Riverine
 Survey Area

| | | | | |
|---|--|---|-------------------------------|--|
| SME ENVIRONMENTAL CONSULTANTS 679 East 2nd Ave. Unit E2, Durango, Colorado 81301 www.sme-env.com (970) 259-9595 | Drawn by: SB Rvwd. by: SM Project No.: 230052 | NWI MAP | | |
| | Date: 12/6/2023 Rvwd. Date: NA Scale: 1:10,000 | AQUATIC RESOURCES BAYFIELD TRACTOR SUPPLY LA PLATA COUNTY, CO | | |
| | 0 420 840 Feet | | FIGURE 4 | |
| | | | | |

Document Path: S:\Projects\230052 Bayfield Tractor Supply\GIS\Bayfield Tractor Supply ArcPro\Bayfield Tractor Supply ArcPro.aprx; Coordinate System: NAD 1983 StatePlane Colorado South FIPS 0503 Feet

Sources: DigitalGlobe Aerial Imagery acquired 9/19/17; NRCS; Maxar; World Imagery; Maxar

GENERAL NOTES

1. Survey area boundary created by SME, based on La Plata County parcel data.
 2. SME Environmental, Inc. (SME) staff visited the site on October, 2 2023 to assess and delineate the boundaries of wetlands and other Waters of the U.S. (WOUS) in the area of interest using the methodology defined in the Routine Determination procedure set forth in the U.S. Army Corps of Engineers Wetlands Delineation Manual (USACE 1987), the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains Region (USACE 2010), A Guide to Ordinary High Water Mark (OHWM) Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States (USACE 2014), the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2010) and the Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008).
 3. Wetland boundaries were defined based on presence of hydrophytic vegetation, hydric soils, and hydrologic indicators that under normal conditions would indicate wetland conditions. Where wetland conditions did not occur adjacent to surface water, the jurisdictional boundary was identified based on evidence of the OHWM.
 4. The boundaries of WOUS were survey-located using a Trimble R1 GNSS Receiver (real-time sub-meter accuracy).
 5. Areas which likely satisfy the USACE criteria as WOUS are labeled. Note that WOUS continue beyond the survey area boundary.
 6. All WOUS boundaries, depicted hereon, are subject to modification until jurisdictional verification has been completed the USACE.
 7. Please be aware that impacts to WOUS may require authorization from Local, State and/or Federal regulatory agencies.
 8. Aquatic resources delineation table represents acreages, linear footage, square footage and centroid locations.

| AQUATIC RESOURCES DELINEATION TABLE | | | | |
|-------------------------------------|-------|------------|------------|------------|
| Area | Acres | Square Ft. | Centroid Y | Centroid X |
| PEM Wetland | 2.080 | 90,592 | -107.59781 | 37.23257 |



SME
ENVIRONMENTAL CONSULTANTS
 679 East 2nd Ave. Unit E2
 Durango, Colorado 81301
 www.sme-env.com
 (970) 259-9595

| | | |
|-----------|-------------|------------|
| Drawn By: | Rvwd. By: | Proj. No.: |
| SB | SM | 230052 |
| Date: | Rvsd. Date: | Scale: |
| 2/26/2024 | NA | 1:850 |

N
 0 50 100
 Feet

AQUATIC RESOURCES DELINEATION MAP

AQUATIC RESOURCES
 BAYFIELD TRACTOR SUPPLY
 LA PLATA COUNTY, CO

FIGURE
5



CAD Data provided by Michal Valencia, Site Development Solutions, LLC

SME
ENVIRONMENTAL CONSULTANTS
 679 East 2nd Ave. Unit E2
 Durango, Colorado 81301
 www.sme-env.com
 (970) 259-9595

| | | |
|-----------|-------------|------------|
| Drawn By: | Rvwd. By: | Proj. No.: |
| SB | SM | 230052 |
| Date: | Rvwd. Date: | Scale: |
| 2/26/2024 | NA | 1:850 |



| | |
|---|-------------------------------|
| SITE PLAN | |
| AQUATIC RESOURCES BAYFIELD TRACTOR SUPPLY LA PLATA COUNTY, CO | FIGURE 6 |

Attachment 2
Plant List

List of Plant Species Observed within the Survey Area

| Scientific Name* | Common Name | Wetland Indicator Status** |
|-------------------------------|---------------------------|----------------------------|
| HERBS | | |
| <i>Alyssum simplex</i> | Alyssum | NL |
| <i>Cirsium vulgare</i> | Bull Thistle | FACU |
| <i>Mellilotus officinalis</i> | Yellow Sweet-Clover | FACU |
| <i>Rumex crispus</i> | Curly Dock | FAC |
| <i>Thlaspi arvense</i> | Field Pennycress | UPL |
| <i>Tragopogon dubius</i> | Yellow Salsify | NL |
| GRAMINOIDS | | |
| <i>Bromus inermis</i> | Smooth Brome | FACU |
| <i>Carex utriculate</i> | Northwest Territory Sedge | OBL |
| <i>Elymus repens</i> | Creeping Wild Rye | FAC |
| <i>Pascopyrum smithii</i> | Western Wheat Grass | FAC |
| <i>Phalaris arundinacea</i> | Reed Canary Grass | FACW |
| <i>Phleum pratense</i> | Common Timothy | FACU |
| <i>Medicago sativa</i> | Alfalfa | UPL |

• OBL: Almost always is a hydrophyte, rarely in uplands

• FAC: Commonly occurs as either a hydrophyte or non-hydrophyte

• NL (Not Listed): Generally indicates upland species

* Scientific names according to Synonymized Checklist of the Vascular Flora of the United States, Canada, and Greenland (Kartesz 2009) and National Wetland Plant List (NWPL).

** 2016 NWPL is regionalized along the 10 wetland delineation supplement regions. Wetland indicator status based on Arid West Region.

• FACW: Usually is a hydrophyte but occasionally found in uplands

• FACU: Occasionally is a hydrophyte but usually occurs in uplands

• N/A: Unable to identify to species due to time of year

Attachment 3
Site Photographs

Site Photographs



Photograph 1. Upland area - dominated by smooth brome.



**Photograph 2. Transition area
– with western wheat grass
shown.**



Photograph 3. Wetland area – dominated by reed canary grass with sedge in the background.