



**U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE**

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 9/23/2020

ORM Number: NAE-2018-02889

Associated JDs: N/A

Review Area Location¹: State/Territory: Vermont City: Williston County/Parish/Borough: Chittenden

Center Coordinates of Review Area: Latitude 44.450524 N Longitude -73.084586 W

II. FINDINGS

A. Summary: Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.

- ☐ The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A or describe rationale.
- ☐ There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- ☒ There are "waters of the United States" within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- ☒ There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)²

§ 10 Name	§ 10 Size	§ 10 Criteria	Rationale for § 10 Determination
N/A.	N/A.	N/A.	N/A.

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters): ³				
(a)(1) Name	(a)(1) Size	(a)(1) Criteria	Rationale for (a)(1) Determination	
N/A.	N/A.	N/A.	N/A.	

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size	(a)(2) Criteria	Rationale for (a)(2) Determination	
Unnamed Seasonal Stream	1,200 linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	Unnamed Seasonal Stream is a naturally occurring perennial surface water channel that flows south off the site into an unnamed perennial tributary of Allen Brook. Allen Brook is a perennial stream that drains directly into the Winooski River, a Traditional Navigable Water (TNW). See attached Figures: 2-4 and 6.	

¹ Map(s)/figure(s) are attached to the AJD provided to the requestor.

² If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

³ A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.



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Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):				
(a)(3) Name	(a)(3) Size		(a)(3) Criteria	Rationale for (a)(3) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size		(a)(4) Criteria	Rationale for (a)(4) Determination
Wetland A	0.3	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Wetland A directly abuts the ordinary high water mark of an (a)(2) water outside of the Review Area . This unnamed perennial stream flows into Allen Brook then into the Winooski River, a TNW.
Wetland B	13.5	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	Wetland B directly abuts the ordinary high water mark of the Unnamed Seasonal Stream, an (a)(2) water within the Review Area on the eastern side of the parcel.

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)): ⁴				
Exclusion Name	Exclusion Size		Exclusion ⁵	Rationale for Exclusion Determination
Wetland C(0.19 ac) Wetland D(0.02 ac) Wetland E(0.05 ac) Wetland F(0.12 ac)	0.39	acre(s)	(b)(1) Non-adjacent wetland.	The four isolated features at the site consist of convex shaped scrub-shrub and forested wetlands that don not have defined inlets or outlets. The mapped soil units are non-hydric and consist of Peru fine sandy loam and Munson and Raynham silt loams (Figure 5). Wetland hydrology is likely a result of surrounding runoff and rainfall. There are no naturally occurring surface water channels that contribute surface water into or out of these wetlands. Based on a site visit there are no hydrological connections from these wetlands to the Unnamed Seasonal Stream, the (a)(2) water located within the Review Area or to any tributary on adjacent properties. These wetlands do not directly abut an (a)(1), (2), or (3) water, there is no evidence that the wetlands are inundated by flooding from an (a)(1), (2), or (3) water in a typical year. The wetlands are not physically separated from jurisdictional waters by natural or artificial features, such as a berm, bank, dune, dike or barrier. Review of historic aerial photography does not reveal any past hydrologic connection to an (a)(1), (2) or (3) water. These features do not meet the definition of an (a)(4) water and are (b)(1) excluded features.

⁴ Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

⁵ Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



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III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

☒ Information submitted by, or on behalf of, the applicant/consultant: [Existing condition site plan titled "EXISTING CONDITIONS WETLANDS", dated "8-14-2020"; Wetland Determination Data Forms prepared by Errol Briggs \(Gilman & Briggs Environmental\), dated "24 AUG 16"; KMZ files.](#)

This information is sufficient for purposes of this AJD.

Rationale: [Based on a 21 July 2020 site visit and review of the information submitted by the applicants agent the wetlands on the site were delineated using the methodology in the 1987 "Corps of Engineers Wetlands Delineation Manual" and Northcentral and Northeast Regional Supplement. The limits of the wetlands shown on the plans were consistent with conditions in the field and the wetland boundary is acceptable and sufficient for preparation of an AJD.](#)

- ☐ Data sheets prepared by the Corps: [N/A](#)
- ☒ Photographs: [Aerial and Other: See attached Figures](#)
- ☒ Corps site visit(s) conducted on: [21 July 2020](#)
- ☐ Previous Jurisdictional Determinations (AJDs or PJDs): [N/A](#)
- ☒ Antecedent Precipitation Tool: [provide detailed discussion in Section III.B.](#)
- ☒ USDA NRCS Soil Survey: [Accessed 14 August 2020](#)
- ☐ USFWS NWI maps: [N/A](#)
- ☒ USGS topographic maps: [1987 Essex Junction 7.5 minute QUAD, 1:24,000, "Northridge Subdivision" \(dated "7-21-2020"\)](#)

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	1987 Essex Junction, VT topographical map
USDA Sources	USDA NRCS Web Soil Survey, Chittenden County, Vermont
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	Vermont Interactive Map Viewer reviewed 14 August 2020
Other Sources	Google Earth Photos

B. Typical year assessment(s): On 21 July 2020 the Corps conducted a field visit to review the wetland delineations and to discuss the proposed project. The APT report for 21 July 2020 concludes that at the time of the field visit drier than normal and mild drought conditions exist. During the field visit flowing water was observed within the Unnamed Seasonal Stream onsite. In a telephone conversation with the agent, he indicated that the stream on the parcel has perennial flow. Based on observing flowing water in the stream during the 21 July 2020 site visit, it is reasonable to conclude that the stream has flow in it during a typical year and is a perennial tributary. The Unnamed Seasonal Stream flows into another unnamed perennial tributary of Allen Brook. Allen Brook is a perennial stream that drains into the Winooski River, a TNW.Tributary ((a)(2) water). The Unnamed Seasonal Stream is an (a)(2) water.

C. Additional comments to support AJD: This AJD is based on a 21 July 2020 site visit, review of information available on public, state, and federal web sites and information provided by the applicant. The feature labeled Unnamed Seasonal Stream is clearly identified in a 1999 and a 2018 Google Earth aerial photographs (Figure 3), USDA NRCS Stream Stats (Figure 4), and the



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Vermont Interactive Map Viewer (Figure 6). There are no breaks in surface flow from this stream to another unnamed perennial stream which drains into Allen Brook, then into the Winooski River, a TNW. Based on information from the applicant's wetland consultant and a site visit, the stream meets the definition of an (a)(2) tributary. Wetland B directly abuts the ordinary high water mark of this stream and is therefore an (a)(4) adjacent wetland. This palustrine emergent wetland is 13.5 acres in size.

Within the Review Area Wetland A is a palustrine emergent and forested wetland about 0.3 acre in size. The wetland continues off site and directly abuts an unnamed perennial stream. This perennial stream is a tributary of Allen Brook. Allen Brook is a perennial stream that flows into the Winooski River, a TNW. This wetland is an (a)(4) adjacent wetland.

Wetlands C, D, E, and F are similar in character and size (Figure 7a). The palustrine forested wetlands total about 0.39 acre. These wetlands are located in shallow natural depressions within the landscape and hydrology is likely from rainfall and runoff from the surrounding upland. There are no naturally occurring surface water channels into or out of these wetlands. These wetlands are not hydrologically connected to the Unnamed Seasonal Stream, the only jurisdictional (a)(2) tributary within the Review Area. Out of Wetlands C, D, E and F, Wetland F is closest to the Unnamed Seasonal Stream, which is about 100' away and vertically about 12' lower. No sign of flowing water was observed within this wetland, nor does it appear to receive flow in a typical year from the Unnamed Seasonal Stream. There are no hydrological connections between Wetlands C, D, E and F to the on-site (a)(2) water, or to the Winooski River. The Winooski River is the closest TNW and is about 1.5 miles away "as the crow flies". The wetlands are clearly non-navigable, isolated and intrastate. Wetland C, D, E and F are not jurisdictional waters of the U.S.



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Michael S. Adams
Project Manager

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IMON.1228763116

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Paul Minkin
NWPR AJD Team

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229481556

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Frank J. DelGiudice
Branch Chief

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J.1228916567

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Robert J. DeSista
PATs Chief

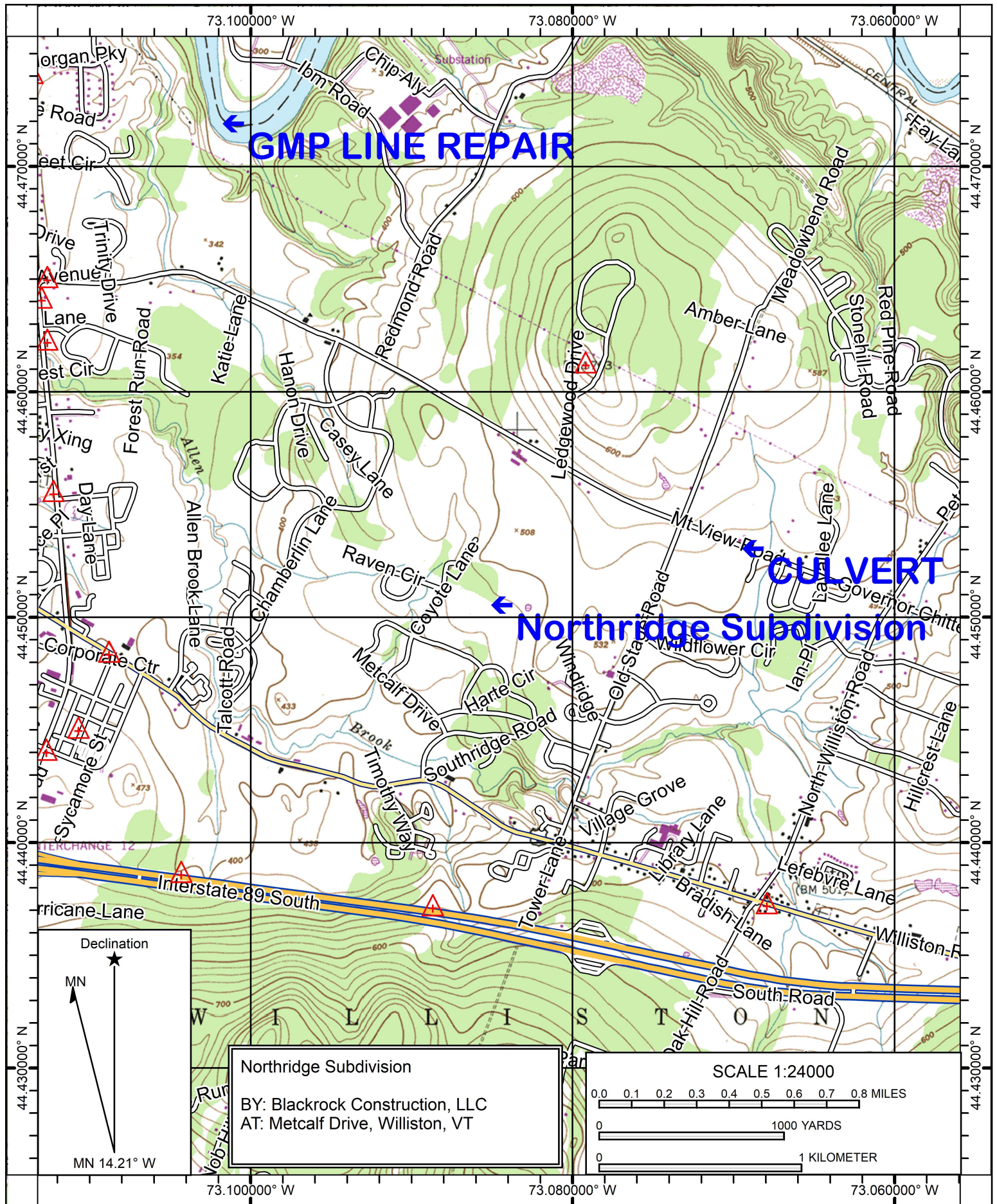
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Tammy R. Turley
Chief Regulatory Division

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R.1229735124

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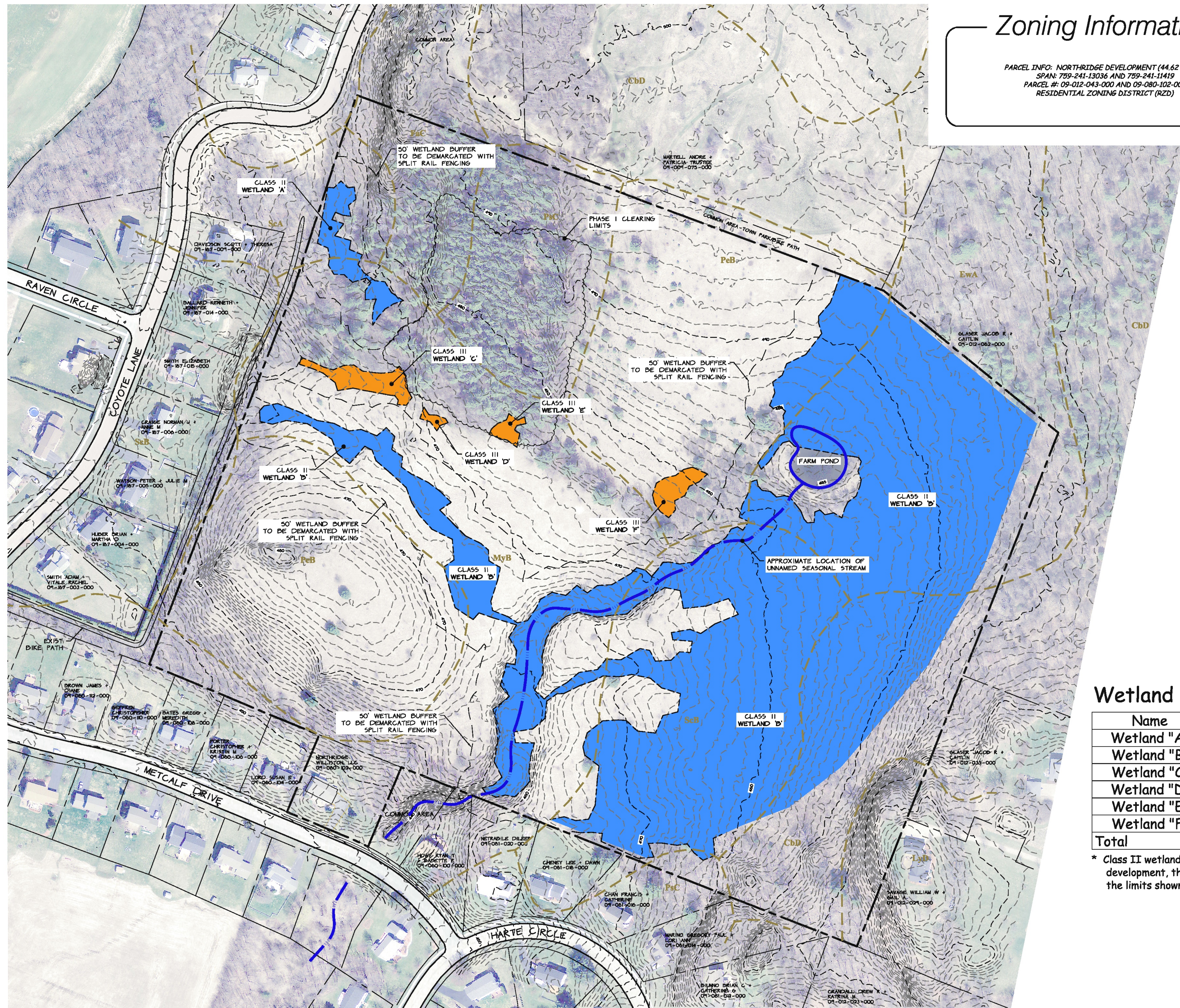


Name: ESSEX JUNCTION
Site Visit: 7-21-2020
Scale: 1 inch = 2,000 ft.

Location: 44.450524° N, 73.084586° W
FILE NUMBER: NAE-2018-02889

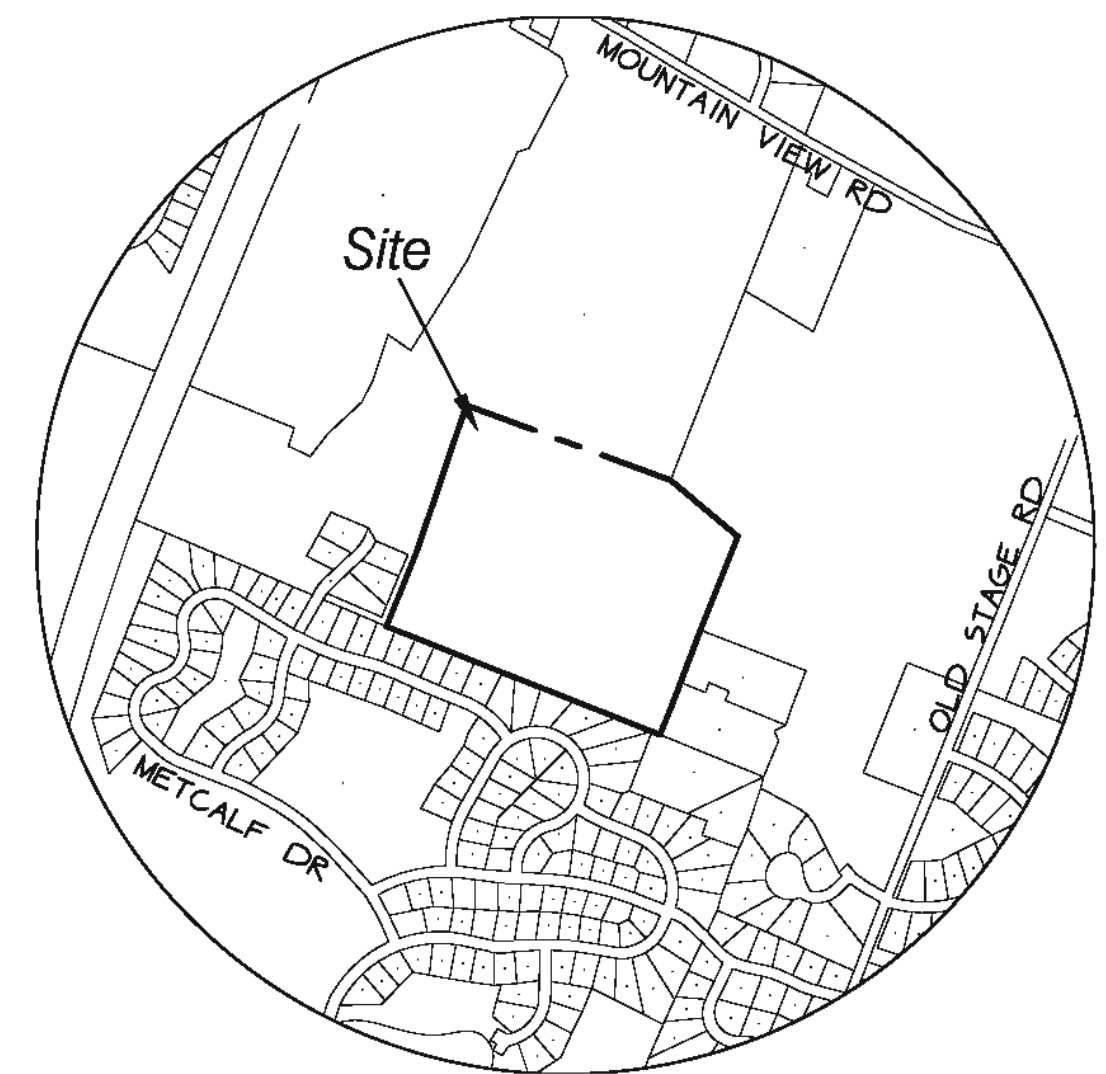
Datum: NAD27

Copyright (C) 2009 MyTopo



Zoning Information

PARCEL INFO: NORTHDRIDGE DEVELOPMENT (44.62 ACRES)
SPAN: 759-241-13036 AND 759-241-11419
PARCEL #: 09-012-043-000 AND 09-080-102-000
RESIDENTIAL ZONING DISTRICT (RZD)



Location Map
Scale: 1" = 1000'

Legend

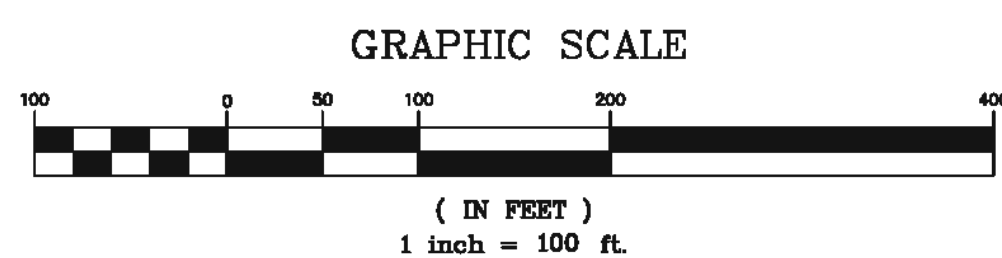
- PROJECT BOUNDARY
- CONTOUR LINE
- CLEARING LIMITS
- SOIL BOUNDARY
- CLASS III WETLAND
- CLASS II WETLAND
- 50' CLASS II WETLAND BUFFER

Wetland Information

Name	Class	Wetland Area (SF)	Wetland Impact (SF)
Wetland "A"	Class II	13,005 SF*	0 SF
Wetland "B"	Class II	586,755 SF*	4,331 SF
Wetland "C"	Class III	8,264 SF	8,264 SF
Wetland "D"	Class III	1,011 SF	1,011 SF
Wetland "E"	Class III	2,359 SF	2,359 SF
Wetland "F"	Class III	5,227 SF	5,227 SF
Total		616,621 SF	21,192 SF

* Class II wetlands have only been delineated to the property line and adjacent to the NorthRidge development, therefore wetland areas are only approximate and may include further wetlands outside the limits shown.

NOTE: Ortho photo taken from 2013 Vermont Center for Geographical Information (VCGI) database



Owner/Applicant

BLACKROCK CONSTRUCTION, LLC
68 Randall street
south burlington, vt 05403

DATE	REVISION	BY
SURVEY	CBCA	DATE 8-14-2020
DESIGN	CBCA	JOB# 2015-88
DRAWN	BWC	FILE# 2015-88-S04
CHECKED	PJO	PLAN SHEET #
SCALE	1"=100'	W2

☐ RECORD DRAWING

☐ FINAL

☐ DISCRETIONARY

☐ SKETCH/CONCEPT

O'LEARY-BURKE

CIVIL ASSOCIATES, PLC

13 CORPORATE DRIVE
ESSEX JCT., VT
PHONE: 878-9880
FAX: 878-9880
E-MAIL: obca@olearyburke.com

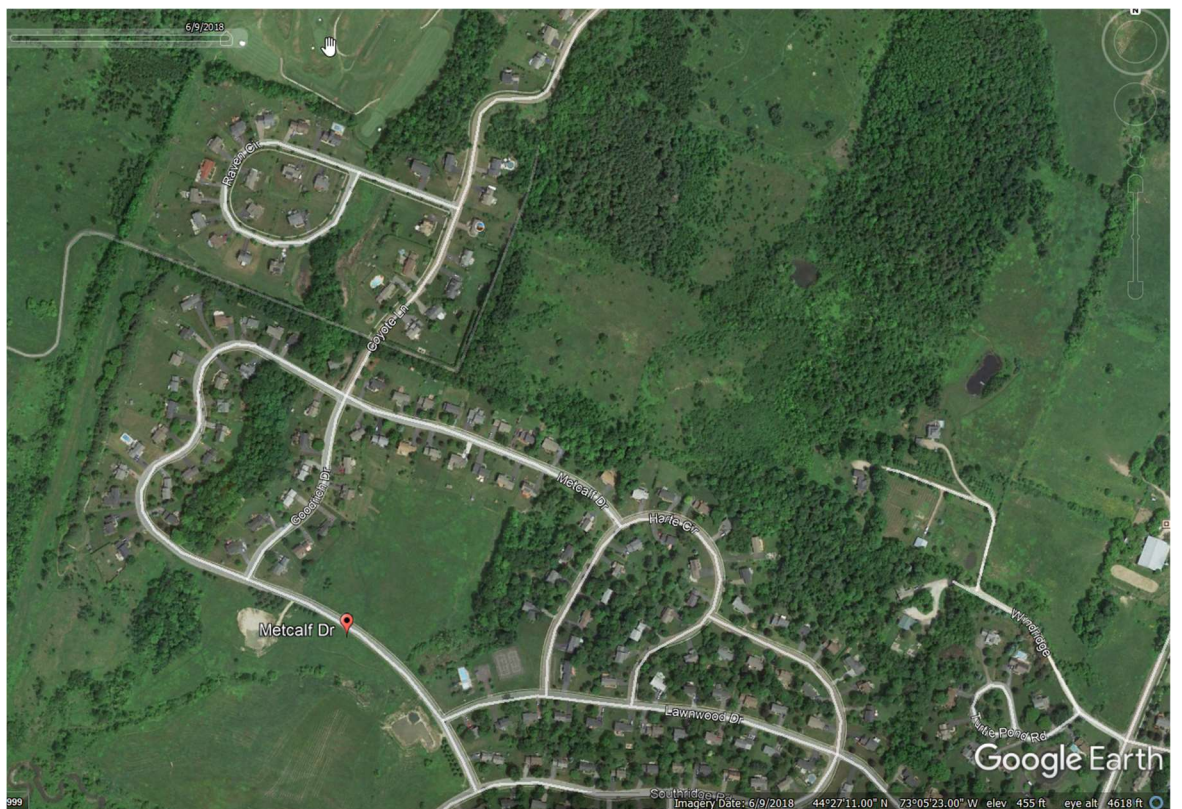
Northridge Subdivision

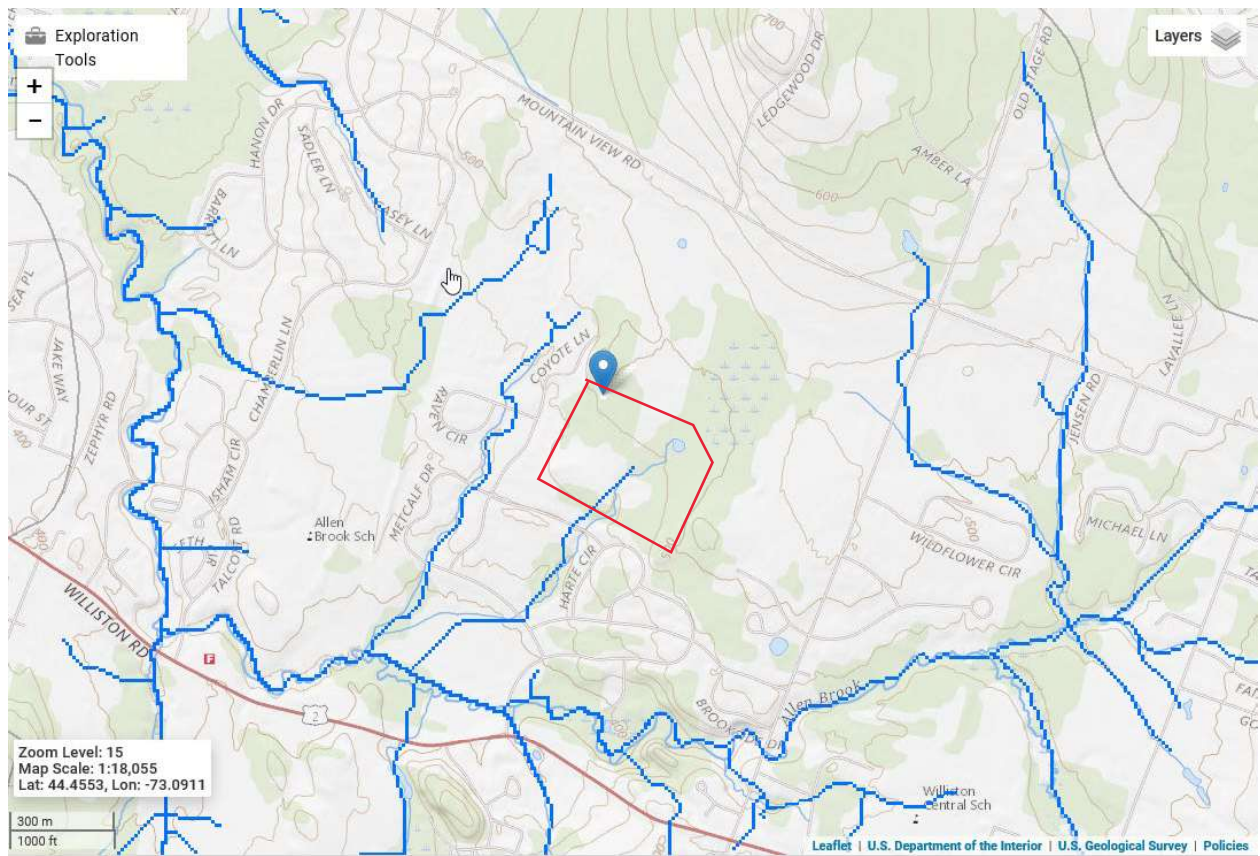
Williamston

VERMONT

EXISTING CONDITIONS

WETLANDS





USDA NRCS Stream Stats

Soil Map—Chittenden County, Vermont



**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

8/14/2020
Page 1 of 3


MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Chittenden County, Vermont

Survey Area Data: Version 23, Jun 4, 2020

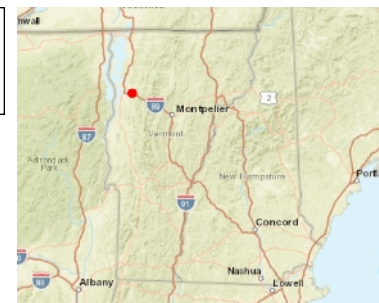
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 28, 2010—Oct 8, 2011














The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2trr1	Peru fine sandy loam, 5 to 12 percent slopes	15.6	14.0%
2trr3	Peru fine sandy loam, 0 to 20 percent slopes, very stony	7.3	6.6%
2trrs	Lyman-Marlow complex, 5 to 30 percent slopes, very rocky	3.0	2.7%
2ty50	Cabot silt loam, 3 to 15 percent slopes	0.9	0.9%
2ty53	Cabot silt loam, 3 to 25 percent slopes, very stony	22.9	20.6%
9g3p	Enosburg and Whately soils, 0 to 3 percent slopes	12.6	11.3%
9g3r	Farmington extremely rocky loam, 5 to 20 percent slopes	4.6	4.1%
9g4p	Livingston clay	1.0	0.9%
9g56	Munson and Raynham silt loams, 2 to 6 percent slopes	25.5	22.9%
9g5p	Scantic silt loam, 0 to 2 percent slopes	8.4	7.5%
9g5q	Scantic silt loam, 2 to 6 percent slopes	9.5	8.6%
Totals for Area of Interest		111.3	100.0%



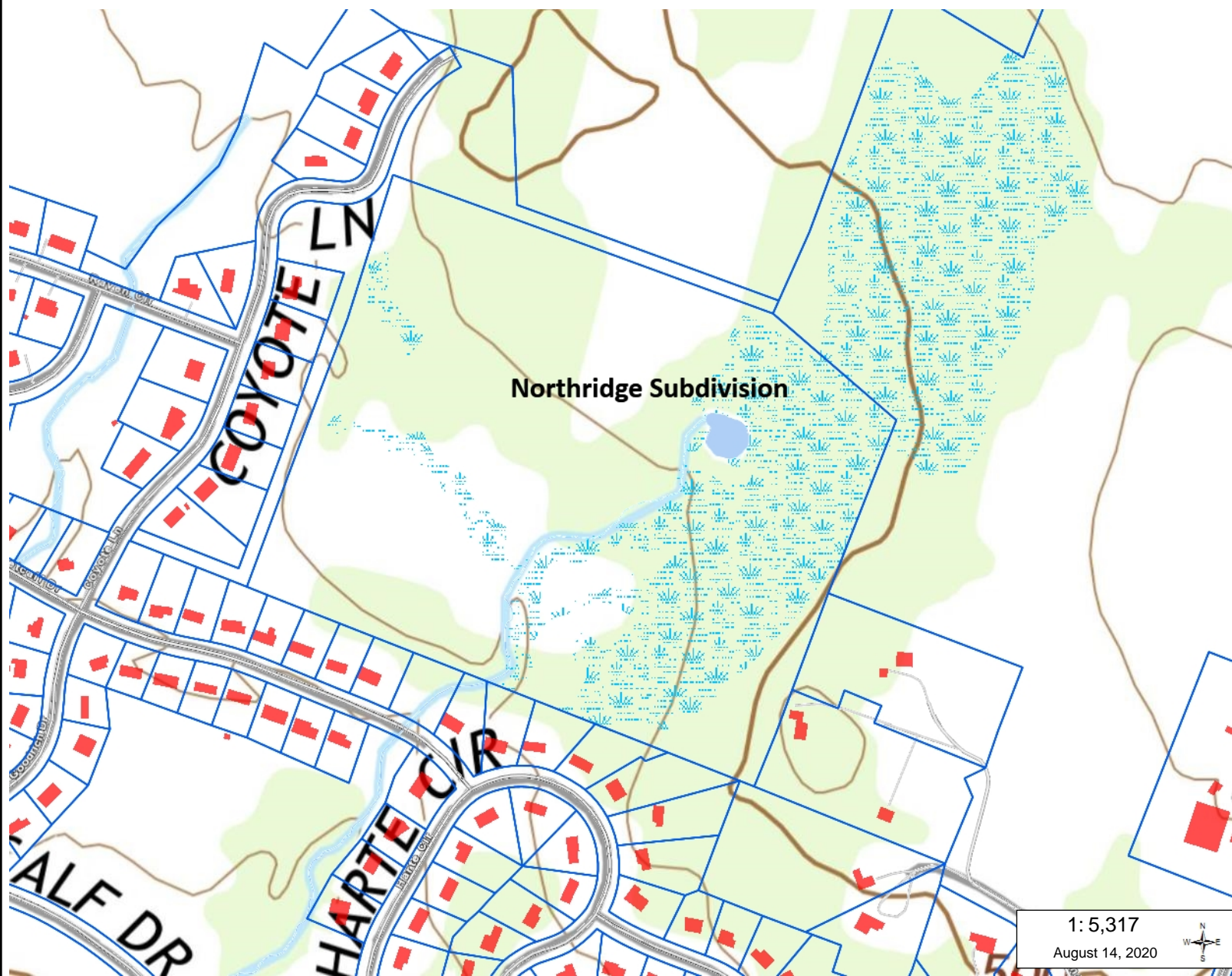
LEGEND

-  Parcel polygons
-  Inactive parcels
-  Parcels (non-standardized)
-  Airports
-  Rail Lines
-  Town Boundaries
-  County Boundaries
-  Buildings
-  Village Boundaries
-  VT Significant Wetlands Invent
-  National Wetlands Inventory
-  Buildings footprints
-  VT State Boundary



NOTES

This map was created with the VT Interactive Map Viewer.



1:5,317

August 14, 2020



0.17 0 0.08 0.17 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere
© Vermont Center For Geographic Information

THIS MAP IS NOT TO BE USED FOR NAVIGATION

DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. VCGI and the State of Vermont make no representations of any kind, including but not limited to, the warranties of merchantability, or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.



Photo taken 21 July 2020. View of Wetland E.



Photo taken 21 July 2020. View of Wetland F.

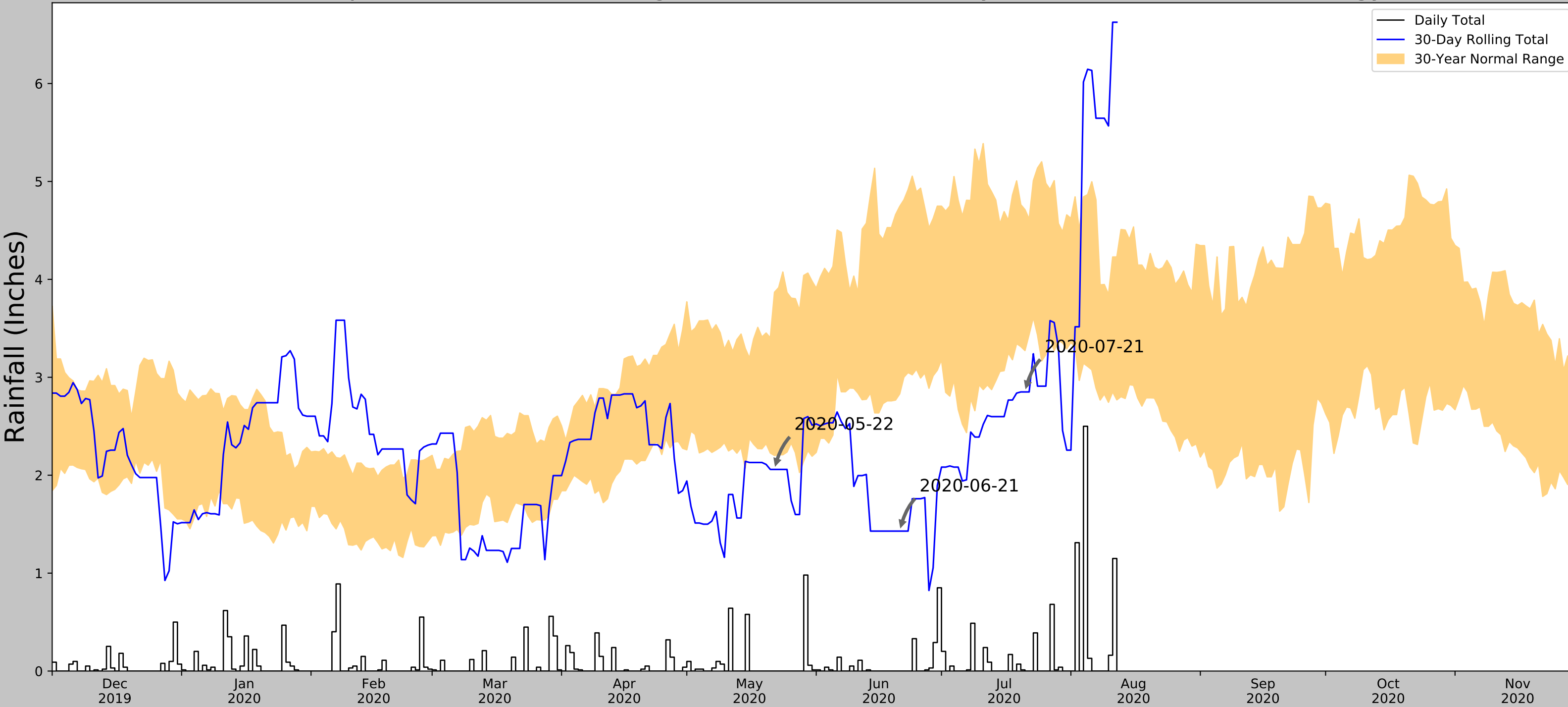


Photo taken 21 July 2020. View of Wetland B facing south.



Photo taken 21 July 2020. Facing upstream towards Unnamed Seasonal Stream from Metcalf Drive.

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	44.45210, -73.08604
Observation Date	2020-07-21
Elevation (ft)	468.41
Drought Index (PDSI)	Mild drought
WebWIMP H ₂ O Balance	Dry Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2020-07-21	3.272835	4.712205	2.850394	Dry	1	3	3
2020-06-21	2.830709	4.745669	1.429134	Dry	1	2	2
2020-05-22	2.201575	3.868504	2.059055	Dry	1	1	1
Result							Drier than Normal - 6




Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days (Normal)	Days (Antecedent)
BURLINGTON INTL AP	44.4683, -73.15	330.053	3.347	138.357	1.969	11352	90