

January 29, 2015

Ref: 57276.03

Ms. Martha Abair Senior Project Manager USACE / Regulatory Branch / Vermont Project Office 11 Lincoln Street, Room 210 Essex Junction, VT 05452

Re: Jay Peak Resort - Jay, Vermont

Permit Number: NAE-2008-1314

Golf Course Wetland and Stream Mitigation Fourth Annual (2014) Monitoring Report

Dear Marty:

On behalf of Jay Peak Resort ("JPR"), VHB has prepared the enclosed report and supporting documentation to summarize the results of the fourth year of monitoring of the wetland and stream features which were restored or created as part of mitigation for the golf course, which was constructed without U.S. Army Corps of Engineer ("USACE") authorization. This monitoring was completed in accordance with Special Condition #4 of the Section 404 Individual Permit ("IP") (Permit Number NAE-2008-1314), which was issued after-the-fact.

As described in the IP application narrative and subsequently approved, the monitoring methods used for this site were developed to determine if the mitigation goals were being met. The goals are described in Special Condition #2 of the IP, and include:

- The restoration of natural vegetation communities in the restored/created wetlands and streams;
- The replacement of the functions and values provided by the impacted wetlands and streams.

Please find enclosed one hardcopy of the complete Jay Peak Resort, Golf Course Wetland and Stream Mitigation, Fourth Annual (2014) Mitigation Report and Appendix with supporting documentation, as well as a complete electronic copy on compact disc.

On behalf of JPR, VHB would like to thank you for your continued collaboration with JPR and VHB regarding the ongoing golf course monitoring efforts, and for reviewing this monitoring report. Please do not hesitate to contact me if you have any questions or comments.

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Ms. Martha Abair Ref: 57276.03 Page 2 of 2 January 29, 2015



Sincerely,

Patti B. Kallfelz-Werts Environmental Scientist

PBW/jkw

cc: Denise Leonard, U. S. Environmental Protection Agency (one hardcopy)

Policy Analyst/ Technical Support Branch ("PATS"), USACE (one hardcopy)

Walter Elander, JPR (electronic copy only)

Enclosure:

• Jay Peak Resort – Golf Course Wetland and Stream Mitigation – Fourth Annual (2014) Mitigation Monitoring Report (one hardcopy and one electronic copy)

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Fourth Annual (2014) Mitigation Monitoring Report

JAY PEAK RESORT GOLF COURSE WETLAND AND STREAM MITIGATION Jay, Vermont

Prepared for: Jay Peak Resort

Jay, Vermont

Prepared by: 788

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Appendix:

- Jay Peak Resort Golf Course Site Location Map
- Jay Peak Wetland and Stream Mitigation, 2014 Monitoring Maps (Index and Maps 1 through 7)
- Herbaceous Species and Cover Summary Data from Permanent 1m² Plots and Wetland Data Plots
- Woody Stem Survival Assessment Based on 0.02-acre (5-meter Radius) Permanent Vegetation
 Monitoring Plots and Wetland Data Plots
- Wetland Determination Data Sheets
- Jay Peak Resort Golf Course Mitigation Monitoring Year 4 Photographs
- Mitigation Report Transmittal and Self-Certification



10.0 References

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- New England Environmental, Inc. (NEE). 2010. Post Construction Report Wetland/Stream Restoration Jay Peak Golf Course. NEE File #: 10-3758.
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 Northcentral and Northeast Region (Version 2.0), ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-09-19. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- USACE. 1999. U.S. Army Corps of Engineers New England District. 1999. *The Highway Methodology Workbook: Supplement: Wetland Functions and Values A Descriptive Approach*. NAEEP-360-1-30a.
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 Mitigation Monitoring Report.



1.0 Introduction

On behalf of Jay Peak Resort ("JPR"), VHB has prepared this report to present the findings of the fourth year of post-construction monitoring of the restoration work conducted by JPR to mitigate for impacts which resulted from the construction of an 18-hole golf course at the resort between 2004 and 2006 (see JPR Golf Course Site Location Map in the Appendix, page 1). This mitigation was necessary for JPR to qualify for an after-the-fact Individual Permit ("IP") under Section 404 of the Clean Water Act, for dredge and fill work conducted in jurisdictional waters of the U.S., including wetlands ("Waters"). The IP (Permit Number: NAE-2008-1314), was issued June 23, 2011, and required JPR to monitor the restoration and creation areas within the golf course for a period of five years, and included reference to the criteria and success standards which were used to conduct these monitoring activities and evaluate performance (USACE 2011). The purpose of the annual monitoring and reporting is to measure the progress of the mitigation areas relative to the success standards and to offer recommendations to ultimately achieve site success standards.

The mitigation activities, which were completed during the 2009 and 2010 construction seasons (VHBP 2010 and VHB 2010), included the restoration of 19 stream segments, and 0.58 acres of wetland, in addition to the creation of 1.86 acres of wetland (VHB 2010). Three years of annual monitoring conducted by VHB in July 2011 and 2012, as well as August 2013, indicate that all performance standards were being met in 2011 and most of the performance standards were being met in 2012 and 2013 (see Table 1 below). The results of the Year Four (2014) monitoring indicate that all but two of the performance standards are being met at this time. The performance standard that involves the survival rate of planted, native wetland shrubs was determined to be partially met during 2014. An additional performance standard which is not currently being met involves the presence of vernal pool indicator amphibian species within a select number of restored or created wetlands. The absence of the vernal pool species does not indicate an oversight on the part of JPR or failure to comply with the conditions of the IP since JPR has not undertaken any changes to these features that would affect their ability to support vernal pool, or any, biota. Field activities for the Year Four (2014) monitoring took place on August 4 and 5, 2014, and were conducted by VHB Environmental Scientists. A summary description of each standard and Year Four (2014) monitoring results are provided in Table 1, with greater detail provided in Section 2.0.



Performance Standard	Success Criteria	Monitoring Method	Performance Standard Met (?) Year 1 (2011)	Performance Standard Met (?) Year 2 (2012)	Performance Standard Met (?) Year 3 (2013)	Performance Standard Met (?) Year 4 (2014)
	Herbaceous vegetation coverage of a minimum 80% of native, wetland plants within the restored and created wetland areas	Monitor herbaceous vegetation from permanent 1 square meter herbaceous vegetation monitoring plots [established in Year One (2011)] within the restored and created wetlands and adjacent to large stream restorations	Yes; based on extrapolation of 1 square meter plots, average coverage within the wetland mitigation areas is 100%	Yes; based on extrapolation of 1 square meter plots, average coverage within the wetland mitigation areas is over 100%	Yes; based on extrapolation of 1 square meter plots, average coverage within the wetland mitigation areas is over 100%	Yes; based on extrapolation of 1 square meter plots, average coverage within the wetland mitigation areas is over 100%
1. Re-establish (or establish in created wetlands) a natural wetland vegetation community in restored wetland areas	Survival rate of 80% of the planted native, wetland shrubs	Establish permanent 0.02-acre (5m radius) monitoring plots within the restored and created wetlands	Yes; based on extrapolation of 0.02-acre (5m radius) plots, shrub stem survival within the mitigation wetlands is 93%	Yes; based on extrapolation of 0.02-acre (5m radius) plots, shrub stem survival within the mitigation wetlands is 84%	Yes; based on extrapolation of 0.02-acre (5m radius) plots, shrub stem survival within the mitigation wetlands is 80%	Partial; based on extrapolation of 0.02-acre (5m radius) plots, shrub stem survival within the mitigation wetlands is 79%; average shrub survival for restored stream floodplains is 81%; total average shrub survival rate for all plantings is 80%
	Wetlands develop a natural community, which blends into the adjacent, undisturbed features	Establish at least one permanent photograph monitoring station within each restored or created wetland which shows the adjacent undisturbed feature	Yes; permanent photograph stations were established in each wetland feature which shows the restored or created feature, and the adjacent undisturbed features	Yes; photographs recorded from permanent photograph stations (established in 2011); photos illustrate the restored or created feature, & the adjacent undisturbed features	Yes; photographs recorded from permanent photograph stations (established in 2011); photos illustrate the restored/ created features & the adjacent undisturbed features	Yes; photographs recorded from permanent photograph stations (established in 2011); photos illustrate the restored/ created features & the adjacent undisturbed features



		Table 1: Performance	Standard Outline	and Success Measu	re	
Performance Standard	Success Criteria	Monitoring Method	Performance Standard Met (?) Year 1 (2011)	Performance Standard Met (?) Year 2 (2012)	Performance Standard Met (?) Year 3 (2013)	Performance Standard Met (?) Year 4 (2014)
2. Re-establish (or establish in the created wetlands) wetland hydrology	Clear evidence of hydrology based on the criteria in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Regional Supplement) (USACE 2012)	Visual assessment of restored or created wetlands for evidence hydrology indicators	Yes; all but one feature (H15-WT1) of the restored/ created wetlands show evidence of persistent wetland hydrology	Yes; despite the below average precipitation during July & August 2012, all mitigation wetlands show evidence of persistent wetland hydrology	Yes; all restored and created wetlands show evidence of persistent wetland hydrology	Yes; all restored and created wetlands show evidence of persistent wetland hydrology
3. Re-establish (or establish in the created wetlands) the functions and	Clear evidence of the functions and values are being performed by the restored and created wetlands (previously identified as Groundwater Recharge/ Discharge and Wildlife Habitat)	Assess each wetland using methods in the Highway Methodology (USACE 1999)	Yes; all but one (H15-WT1) of the restored wetlands are showing evidence of performing the function of groundwater recharge; some of the restored/created wetlands are functioning as wildlife habitat	Yes; all of the restored wetlands are showing evidence of performing the function of groundwater recharge; some of the restored/created wetlands are functioning as wildlife habitat	Yes; all of the restored wetlands are showing evidence of performing the function of groundwater recharge; some of the restored/created wetlands are functioning as wildlife habitat	Yes; all of the restored wetlands are showing evidence of performing the function of groundwater recharge; some of the restored/created wetlands are functioning as floodflow alteration and as wildlife habitat
values provided by the wetlands within and adjacent to the golf course.	Evidence of breeding use by vernal pool indicator species	Investigate the selected restored wetlands (WH-WT1, H13-WT2, & H14-WT1) at the appropriate time of year for signs of breeding use by vernal pool indicator species	Yes; all of the selected wetlands showed evidence of breeding use by vernal pool indicator species	No; none of the previously identified wetlands contained evidence of breeding use by vernal pool indicator species (H13-WT2 did contain other breeding amphibians)	No; none of the wetlands identified in 2011 as potential vernal pools contained evidence of breeding use by vernal pool indicator species during a site visit conducted in June 2013 (H13-WT2 did contain other breeding amphibians)	No; based on the results of 2012 and 2013 vernal pool surveys for the wetlands identified in 2011, no vernal pool survey was conducted in 2014



		Table 1: Performance	e Standard Outline	and Success Measu	re	
Performance Standard	Success Criteria	Monitoring Method	Performance Standard Met (?) Year 1 (2011)	Performance Standard Met (?) Year 2 (2012)	Performance Standard Met (?) Year 3 (2013)	Performance Standard Met (?) Year 4 (2014)
4. Visually assess each restored stream segment for evidence of natural channel development	Restored stream segments show signs of naturalization, and minimal evidence of erosion	Visually assess each restored stream segment for signs of natural stream development; permanent photograph stations established to record progress throughout the monitoring period	Yes; the restored stream segments showed signs of ongoing substrate sorting, minimal erosion or undercutting of banks, and use of created floodplains (where applicable)	Yes; the restored streams continue to show evidence of naturalization. New areas of erosion in 2 restored streams (P2-TB1 & H16-SC1) have been repaired in 2012, or will be early in 2013.	Yes; the restored streams continue to show evidence of naturalization & have stabilized. Streams repaired in 2012 & 2013 remained stable in late 2013.	Yes; the restored streams continue to show evidence of naturalization & have stabilized. Streams repaired in 2012 & 2013 have remained stable through 2014. Bank sloughing repair was performed on a segment of Stream P2-TB1, during 2014, and bank stability will be monitored during 2015
and stability	Vegetation communities in the adjacent re- created floodplain areas are developing with native, wetland vegetation	Same as with restored/ created wetlands (1 square meter and 0.02-acre (5m radius) plots)	Yes; average herbaceous vegetation cover is 95%; average planted shrub survival is 91%	Yes; TOTAL average herbaceous vegetation cover is over 100%; average planted shrub survival is 84%	Yes; TOTAL average herbaceous vegetation cover is over 100%; average planted shrub survival is 82% in the restored floodplains	Yes; TOTAL average herbaceous vegetation cover is over 100%; average planted shrub survival is 82% in the restored floodplains

2.0 Summary and Monitoring Methodologies

The mitigation features are, in general, performing consistent with expectations. The wetland vegetation communities continue to develop (including new species observed to be colonizing from adjacent previously undisturbed wetlands), all of the mitigation wetland features show evidence of wetland hydrology and all of the wetland features demonstrate the groundwater recharge/ discharge function; at the time of the Year Four monitoring data collection, the restored streams are stable and developing natural stream channel characteristics.



The following sections detail the mitigation goals and the methods used to assess adherence to the success criteria.

1. Re-establish a native wetland vegetation community within the restored wetlands and adjacent to restored stream segments; establish a native wetland vegetation community within created wetlands.

In order to ensure a consistent data collection approach which could be compared throughout the 5-year monitoring period, VHB conducted the Year Four monitoring in approximately the same locations (using the same data plot designations) and using the same methodologies that were established in Year One. As stated above, the Year Four monitoring data collection was completed in early August, at the height of the growing season, which is consistent with procedures outlined in the Mitigation Plan, and with the first three years of monitoring. A full description of data collection methodologies is included in the *Jay Peak Resort – Golf Course Wetland and Stream Mitigation – First Annual (2011) Mitigation Monitoring Report* ("Year One Report") (VHB 2012). Data collection to determine overall herbaceous coverage was conducted using one-meter square plots or wetland determination data plots, established during the Year One monitoring (see Mitigation Monitoring Map Set on pages 2 through 9 of the Appendix for plot locations). Data collection for Year Four monitoring was repeated at approximately the same points as in Year One.

VHB also completed USACE Wetland Determination Data Forms for a selection of restored or created wetland features (see pages 13 through 28 of the Appendix). Those wetlands which were determined to need full wetland data collection to monitor the development of the three wetland criteria, prior to the Year One monitoring (2011), were again the subject of full wetland data collection during 2014. These features include: H11-Create, H11-WT6, H13-WT1/1a/1b, H15-WT1, H16-Create, H5-Create, H6-WT1, and H8-Create.

The one square meter herbaceous vegetation monitoring plots also served as the centers for the 0.02 acre (five-meter radius) shrub survival monitoring plots. The number of surviving planted shrub stems were counted within the 0.02-acre plots; this number was then extrapolated from the 0.02-acre monitoring plot (or plots) to the size of the restored or created feature and compared to the total number of stems planted within each feature (NEE 2010), to determine the overall



survival rate of survival of the planted shrubs. All planted shrubs within a feature were counted if that feature was similar in size or smaller than the 0.02-acre monitoring plots used. Natural recruits are included in the shrub tally as they become established.

Photographs were also recorded from the permanent photograph locations, established in 2011, in order to continue to provide visual documentation of the restored and created wetlands, as well as the restored stream channels (see Jay Peak Resort Golf Course Year 4 (2014) Monitoring Photographs on pages 29 through 50 of the Appendix) to ensure the restored and created features are developing naturally and blending with the adjacent, undisturbed features.

2. Re-establish (or establish in created wetlands) wetland hydrology (and hydrologic connections) through earthwork within restored and created wetlands to connect to existing Waters.

The purpose of establishing wetland hydrology and hydrologic connections was not only to ensure the development of functioning wetlands, but to ensure that the restored and created features meet USACE jurisdictional parameters. Evidence of hydrology was assessed within each restored/created wetland during the visual assessment conducted within each feature, and the wetland determination data collection was conducted in a selection of features, based on guidance found from Regional Supplement indicators, and is summarized in Table 2, in Section 4.0 below.

3. Re-establish (or establish in created wetlands) the wetland functions and values within restored and created wetlands previously provided by the wetlands within and adjacent to the golf course.

Using the methods described in the USACE's Highway Methodology, VHB assessed each restored and created wetland during the monitoring activities. VHB previously identified the functions and values of Groundwater Recharge/ Discharge and Wildlife Habitat as the target functions to be restored. The results of this assessment are provided in Table 2 in Section 4.0.

Because no evidence of use by vernal pool indicator species was found during the Year Two monitoring in wetlands WH-WT1, H13-WT2, and H14-WT1, no formal vernal pool survey was



conducted at during 2013, however, during the June 2013 site visit, the three target wetlands were observed for the presence of vernal pool species, but none were found. VHB did not conduct a formal vernal pool assessment for any of the restored or created wetlands during the Year Four monitoring.

4. Visually assess each restored stream segment for evidence of natural channel development and stability.

During the monitoring activities, VHB walked the length of each stream channel to observe the development of the stream channel naturalization, and to look for potential problems to be addressed, such as bank erosion, grade control structure instability, disturbance by golfers, course maintenance operations, etc. Signs of channel naturalization included stream bed material sorting, natural sediment deposition, floodplain use, and the development of in-stream habitats (i.e., riffles, and step/pools). Streams that were repaired in 2012 and 2013, as discussed in the Jay Peak Resort – Golf Course Wetland and Stream Mitigation - Third Annual (2013) Mitigation Monitoring Report ("Year Three Report") (VHB 2014) were observed to be stable during the fourth year of monitoring. During 2014, minor bank sloughing was repaired on a stream segment of Stream P2-TB1, located between Jay Peak Road and Condo Road. Monitoring during 2015 will include bank stability observations at this stream segment, as well as other previously repaired stream segments.

3.0 Vegetation Data Results

3.1 Herbaceous

Monitoring efforts during 2014 found that the total average relative herbaceous cover within the wetlands and within the floodplains of the restored streams is over 100 percent, and is approximately 119 percent overall (see Herbaceous Species and Cover Summary Data from 1m² Plots and Wetland Data Plots table on pages 10 and 11 of the Appendix), exceeding the performance standards of 80 percent coverage by non-invasive wetland herbaceous species. It is noteworthy that additional, native wetland species were recorded during the monitoring, which were not part of the wetland seed mix applied to the mitigation areas; this suggests the



surrounding, undisturbed features are contributing seed, and therefore increased species richness and diversity to the vegetation communities.

3.2 Shrub Species

Four shrub species were planted within the restored and created wetlands and adjacent to the large stream restoration segments after the completion of restoration activities in 2010; the species include:

- Winterberry Holly (Ilex verticillata),
- Elderberry (Sambucus canadensis),
- American cranberrybush (Viburnum trilobum)¹, and
- Red-osier dogwood (Cornus sericea).

Willow (*Salix* spp.) and dogwood (*Cornus* sp.) tubelings were planted at the same time as the shrubs, adjacent to all restored stream segments in order to increase bank stability. Since these tubelings were planted for the purposes of enhancing stream bank stability and not as vegetation community enhancement, they were not included in the shrub survival assessments.

Based on the data obtained from the permanent vegetation monitoring plots during 2014, the average shrub survival rate within the restored and created wetlands is 79 percent, and the average shrub survival rate for the larger stream segment restorations is approximately 82 percent, resulting in an overall average survival rate of all planted shrubs of 80 percent. The performance standards of 80 percent survival rate of planted shrubs has been met in 2014 (see Woody Stem Survival Assessment Based on 0.02-acre Permanent Vegetation Monitoring Plots and Wetland Data Plots summary table on page 12 of the Appendix). Although this performance standard was just met in 2014, it is noteworthy that none of the restored or created feature were proposed to have a shrub cover type. The planted shrubs were included to prove a minimum of structural diversity, and to provide a natural barrier to incursions by golfers.

¹ The accepted scientific name for American cranberry bush was *Viburnum trilobum* at the time of the restoration activities; the currently accepted name for this species is *V. opulus var. americanum* (USDA 2014).



3.3 Natural Woody Recruitment

Based on observations made in the field, natural woody recruitment within the restored and created wetlands and adjacent to restored stream segments has increased compared to conditions in 2012. It is anticipated that additional species will continue to "volunteer" from the surrounding, undisturbed woodlands. During 2014, VHB noted such volunteer species as yellow birch (*Betula alleghaniensis*), pin cherry (*Prunus pensylvanica*), choke cherry (*Prunus virginiana*), red maple (*Acer rubrum*), balsam fir (*Abies balsamea*), steeplebush (*Spiraea tomentosa*), and Bebb willow (*Salix bebbiana*), within a number of the restored and created wetlands, including Wetlands H4-WT3, H11-Create, H11-WT6, H11-WT2/3, H13-WT3, H15-WT1, as well as stream segment H12-TB1u. It is expected that these and other volunteer species will continue to naturally propagate and may be represented within the permanent vegetations monitoring plots during future monitoring efforts.

4.0 Hydrology

Based on the results summarized in Table 2 below, all of the restored and created wetlands show evidence of at least one primary, principal hydrology indicator, which would indicate hydrology is present within all of these features, and therefore that this success criterion is being met. The results of the assessment of hydrology within each restored or created wetland are detailed in Table 2.

Feature	Hole #	VHB Map #	Evidence of Hydrology ²	Principal Functions and Values ³
H5-Create	5	1	B9 (Water-stained leaves); C3 (Oxidized Rhizospheres on Living Roots); B10 (Drainage Patterns)	Groundwater recharge/ discharge and Floodflow alteration (evidence of water retention and adjacent to perennial stream); Wildlife habitat (pickerel frogs (<i>Rana palustris</i>)) and various songbirds observed

² Alpha-numeric codes representing Evidence of Hydrology are from Regional Supplement (Section 4). "A" indicators represent direct observations of surface or groundwater; "B" indicators represent evidence an area is subject to regular ponding or flooding; "C" indicators include other evidence and area is normally saturated; and "D" indicators include other landscape/soil/vegetation features that indicate contemporary (not historic) wet conditions.



³ Principal Functions and Values are from the USACE Highway Methodology (1999).

Table 2: Summary of Hydrology Indicators and Functions and Values in the Restored and Created Wetlands

Feature	Hole #	VHB Map #	Evidence of Hydrology ²	Principal Functions and Values ³
H6-WT1	6	1	A2 (High Water Table); A3 (Saturation)	Groundwater recharge/ discharge (evidence of water retention)
WH-WT1	6	1	A1 (Surface water); A2 (High water table); A3 (Saturation); B13 (Aquatic fauna)	Groundwater recharge/ discharge (standing water at time of monitoring); Wildlife habitat (pickerel frogs)
WH-WT2	6	1	A2 (High water table); A3 (Saturation);B1 (Water marks); B4 (Algal mat or crust); B10 (Drainage patterns)	Groundwater recharge/ discharge (evidence of water retention and ground water discharge)
H4-WT1/2	4	2	A1 (Surface water); A2 (High water table); A3 (Saturation); B10 (Drainage patterns)	Groundwater recharge/ discharge and Floodflow alteration (groundwater discharge present; adjacent to small perennial stream with very dense vegetation)
H4-WT3	4	2	A2 (High Water Table); A3 (Saturation); B9 (Water-stained leaves); B10 (Drainage patterns)	Groundwater recharge/ discharge (groundwater discharge present, evidence of standing water)
H8-Create	8	3	A2 (High Water Table); A3 (Saturation); B9 (Water-Stained Leaves); B10 (Drainage Patterns)	Groundwater recharge/ discharge and Floodflow alteration (adjacent to intermittent stream with dense vegetation)
H1-WT1	1	4	A3 (Saturation); B9 (Water-stained leaves); B10 (Drainage patterns)	Groundwater recharge/ discharge and Floodflow alteration (adjacent to two perennial streams with little capacity up-gradient)
H11-WT2/3	11	6	A2 (High Water Table); A3 (Saturation); B10 (Drainage patterns)	Groundwater recharge/ discharge and Floodflow Alteration (adjacent to small perennial stream)
H11-Create	11	6	A2 (High Water Table); A3 (Saturation); B9 (Water-Stained Leaves)	Groundwater recharge/ discharge (evidence of water retention)
H11-WT6	11	6	A2 (High Water Table); A3 (Saturation); B9 (Water-Stained Leaves)	Groundwater recharge/ discharge (evidence of water retention and ground water discharge)
H16-WT1/ H11-WT1	16	6	A2 (High Water Table); A3 (Saturation);); B9 (Water-stained leaves); B10 (Drainage patterns)	Groundwater recharge/ discharge and Floodflow alteration (evidence of water retention; adjacent to small perennial stream with limited capacity up-gradient)
H16-Create	16	6	A2 (High Water Table); A3 (Saturation); B9 (Water Stained Leaves); B10 (Drainage Patterns)	Groundwater recharge/ discharge and Floodflow alteration (evidence of water retention and groundwater discharge; large wetland adjacent to perennial stream)
H13- WT1/1a/1b	13	7	A2 (High Water Table); A3 (Saturation); B9 (Water-Stained Leaves); B10 (Drainage Patterns)	Groundwater recharge/ discharge and Floodflow alteration (groundwater discharge points found; adjacent to small perennial stream with little capacity up-gradient)



Table 2: Summary of Hydrology Indicators and Functions and Values in the Restored and Created Wetlands

Feature	Hole #	VHB Map #	Evidence of Hydrology ²	Principal Functions and Values ³
H13-WT2	13	7	A1 (Surface water); A2 (High water table); A3 (Saturation); B1 (Water marks); B9 (Water-stained leaves); B13 (Aquatic fauna)	Groundwater recharge/ discharge, Floodflow Alteration (outlets to small perennial stream) and Wildlife habitat (groundwater discharge points observed; pickerel frog and green frog (Lithobates clamitans) tadpoles observed
H13-WT3	13	7	A2 (High water table); A3 (Saturation); B9 (Water-stained leaves); B10 (Drainage patterns)	Groundwater recharge/ discharge
H14-WT2/3	14	7	A3 (Saturation); B4 (Algal mat or crust); B9 (Water-stained leaves); B10 (Drainage patterns)	Groundwater recharge/ discharge and Floodflow Alteration (evidence of water retention and adjacent to small perennial stream)
H14-WT1	14	7	A1 (Surface water); A2 (High water table); A3 (Saturation); B2 (Sediment deposits); B9 (Water-stained leaves); B10 (Drainage patterns)	Groundwater recharge/ discharge (groundwater discharge points observed)
H15-WT1	15	7	B9 (Water stained leaves); C3 (Oxidized Rhizospheres on Living Roots)	Groundwater recharge/ discharge

5.0 Functions and Values Assessment

VHB conducted an assessment of wetland functions and values during the Year Four monitoring efforts, using the methods outlined in the Highway Methodology, in order to ensure that the wetland functions and values impacted by golf course construction were restored. It was determined during the mitigation planning process that the principal functions and values provided by the impacted wetlands were groundwater recharge/discharge and wildlife habitat. Each wetland feature was visually assessed during the monitoring efforts to determine if these previously identified functions and values (or any additional functions) were being provided. Based on this assessment, VHB determined that as of 2014, all of the restored and created wetlands are providing the function of Groundwater Recharge/Discharge; in addition, several of the restored or created wetlands showed evidence of functioning as Floodflow Alteration and/or Wildlife Habitat. The results of this assessment are listed, by feature, above in Table 2.



5.1 Vernal Pool Biology Assessment

In Year One (2011), use of three wetlands (WH-WT1, H13-WT2, and H14-WT1) by vernal pool indicator species for breeding was observed during the appropriate season. These wetlands were identified as potential breeding habitat for vernal pool species prior to the start of mitigation monitoring in 2011. Based on the negative results of a vernal pool assessment for biological indicator species conducted in Year Two, VHB did not conduct a similar assessment in Years Three or Four. During Years Two and Three, there had been evidence of use by other amphibian species in two wetlands (H5-Create and H13-WT2). VHB does not recommend continuing to conduct separate surveys for vernal pool species during the remaining monitoring efforts, however, observations made during the typical late spring field visits should show if any of the target wetlands are used by vernal pool indicator species.

6.0 Stream Assessments

In addition to the assessment of the herbaceous and shrub vegetation communities within the restored floodplains of the larger stream restoration sites, VHB conducted a visual assessment of the stream conditions within the restored stream segments. In order to assess stream condition, VHB observed and noted such characteristics as signs of erosion and evidence of channel development (including substrate sorting, occupation of the floodplain, and sediment deposition). Overall, the restored streams continue to develop and naturalize in a stable manner. Several streams show evidence of accessing the created floodplains during high precipitation events, with minimal erosion occurring; signs include sediment deposits in the floodplain and continued healthy vegetation (herbaceous and woody) growth after the high precipitation events. Evidence was observed that significant substrate sorting has taken place in all of the restored streams. Additionally, streams repaired during 2012 and 2013 were observed to be stable during 2014.

During 2014, bank sloughing was repaired on a segment of Stream P2-TB-1 between Jay Peak Road and Condo Road. The repair will be monitored for bank stability and naturalization during the 2015 monitoring. As part of the normal photograph collection for monitoring, each restored stream was photographed to show representative conditions (see Golf Course Mitigation Monitoring – Year Four Photographs on pages 29 through 50 of the Appendix).



7.0 Invasive Plant Species

During prior monitoring years, VHB observed a small population (approximately 10 feet by 10 feet) of common reed (*Phragmites australis*) within Wetland H4-WT1/2. This population has previously been hand cut and treated with herbicide at various times during the growing seasons of 2009 through 2013, prior to which time it is was approximately the same dimensions. During the Year Four monitoring, this population of common reed was not observed, indicating that the prior cutting and targeted treatment with herbicide is having an effect. Monitoring for common reed should continue and be treated as necessary to ensure that it does not spread to other restored or created features.

During the 2013 monitoring, VHB observed a small population of reed canary grass (*Phalaris arundinacea*) in Wetland H13-WT3. This population was approximately two feet by two feet in size and was hand removed for disposal off-site. During the 2014 monitoring, this population of reed canary grass was not observed. A very small population of reed canary grass was observed at Wetland H11-WT2/3, during the 2014 monitoring effort. This population was hand removed and disposed of off-site. Monitoring and treatment for reed canary grass should continue to ensure that spread to other restored or created features does not occur.

8.0 Remedial Actions

Remedial actions taken during 2014 include bank slough repair to a segment of Stream P2-TB1 located between Jay Peak Road and Condo Road. As discussed in the Jay Peak Resort – Golf Course Wetland and Stream Mitigation - Third Annual (2013) Mitigation Monitoring Report ("Year Three Report") (VHB 2014), JPR performed minor repairs in summer 2013, in Stream P2-TB1, which had sustained three areas of bank failure in 2012. This area was monitored by VHB during 2014 and the repairs were observed to be stable. Remedial actions taken during 2014, in addition to remedial actions taken in years prior, will be monitored during 2015.



9.0 Conclusions/Recommendations

Overall, the JPR golf course mitigation areas are meeting or exceeding performance standards. Field monitoring efforts identified average, overall herbaceous vegetation cover of over 100 percent; and overall shrub survival rates of approximately 80 percent. Both of these results meet or exceed the 80 percent herbaceous cover and the 80 percent shrub survival rate performance standards which were set in the Mitigation Plan.

Based on the 2014 results, VHB anticipates that both the herbaceous cover and shrub survival rates within the various restoration and creation areas should continue to meet or surpass the performance criteria. Although the overall shrub survival rate was found to be at the lower end of the acceptable 80 percent survival performance standard in 2014, this should not be a significant concern, since the shrubs were planted to provide minimal structural diversity in the vegetation community and soil stability, and not to develop into shrub wetlands. Additionally, since the shrubs that have survived into 2014 have been observed to be thriving and natural recruits have begun to emerge in a portion of the features, the overall goal of shrubs providing structure to the vegetation communities, including a minimum of areal coverage and prevention of soil erosion, would be met should the survival rate fall below the performance standard.

Finally, the signed *Mitigation Report Transmittal and Self-Certification* form as provided by the USACE's 7-20-10 New England District Compensatory Mitigation Guidance is provided on page 51 of the Appendix.



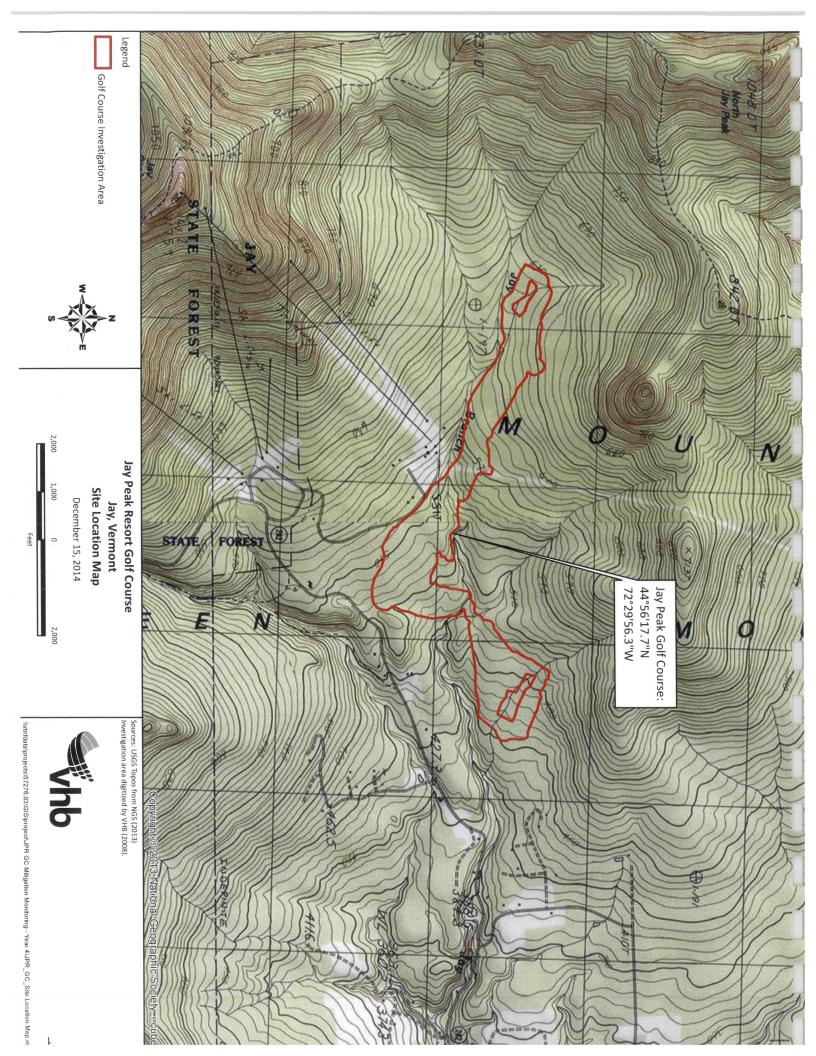
10.0 References

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- VHB. 2010. 2010 Golf Course Restoration Monitoring Report Jay Peak Resort.
- VHB. 2012. Jay Peak Resort Golf Course Wetland and Stream Mitigation First Annual (2011) Mitigation Monitoring Report.
- VHB. 2013. Jay Peak Resort Golf Course Wetland and Stream Mitigation Second Annual (2012) Mitigation Monitoring Report.
- VHB. 2014. Jay Peak Resort Golf Course Wetland and Stream Mitigation Third Annual (2013) Mitigation Monitoring Report.



APPENDIX





200

Approximate Golf Course Investigation Area

l egend

Jay Peak Resort Golf Course Jay, Vermont Golf Course Mitigation Monitoring Index Map

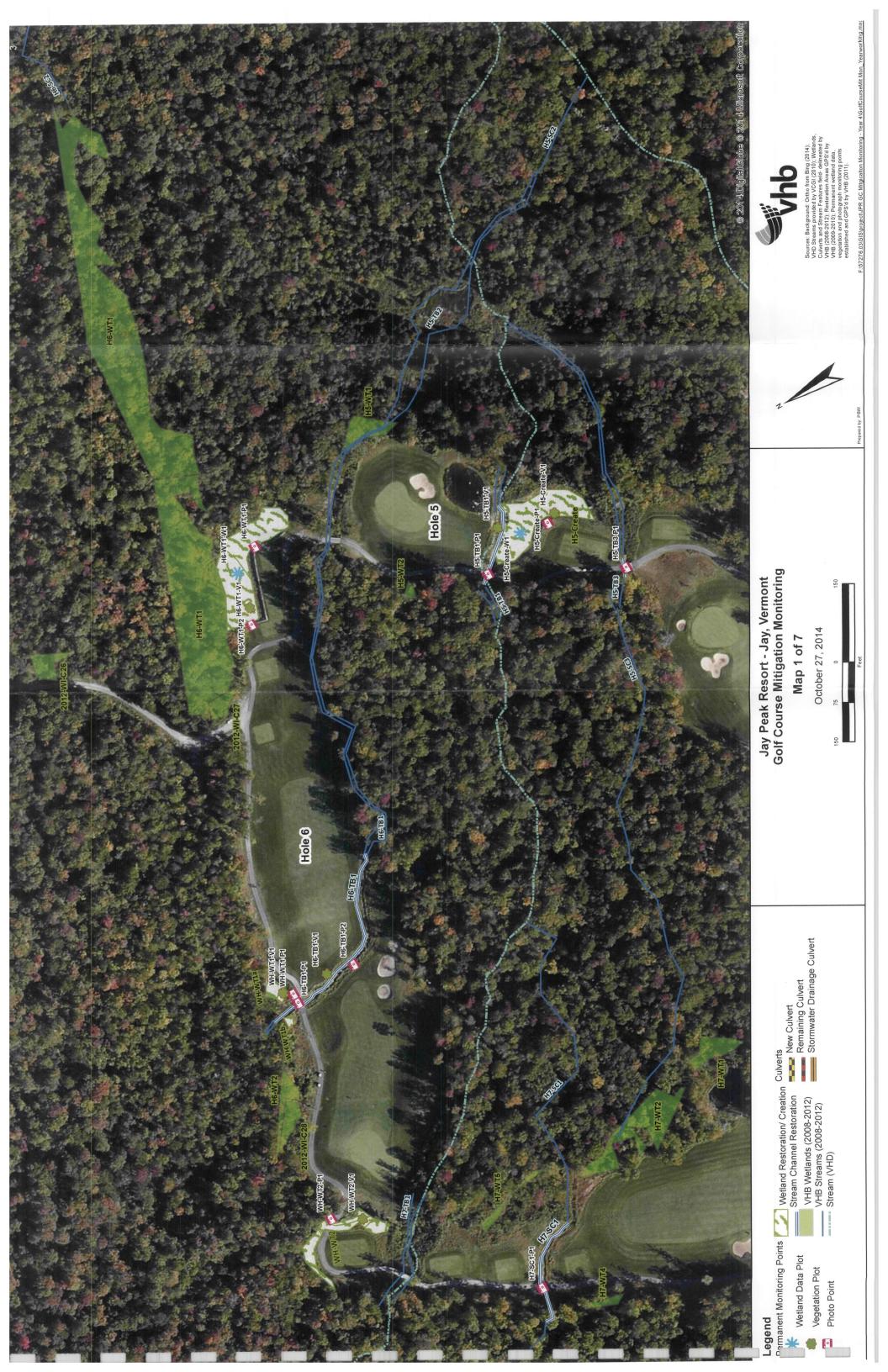
October 27, 2014

Sources: Ortho from Bing (2014); Roads from VTrans (2011); Sheet Index of VHB Maps and VHB Investigation Area (2010).

Prepared by: PBW

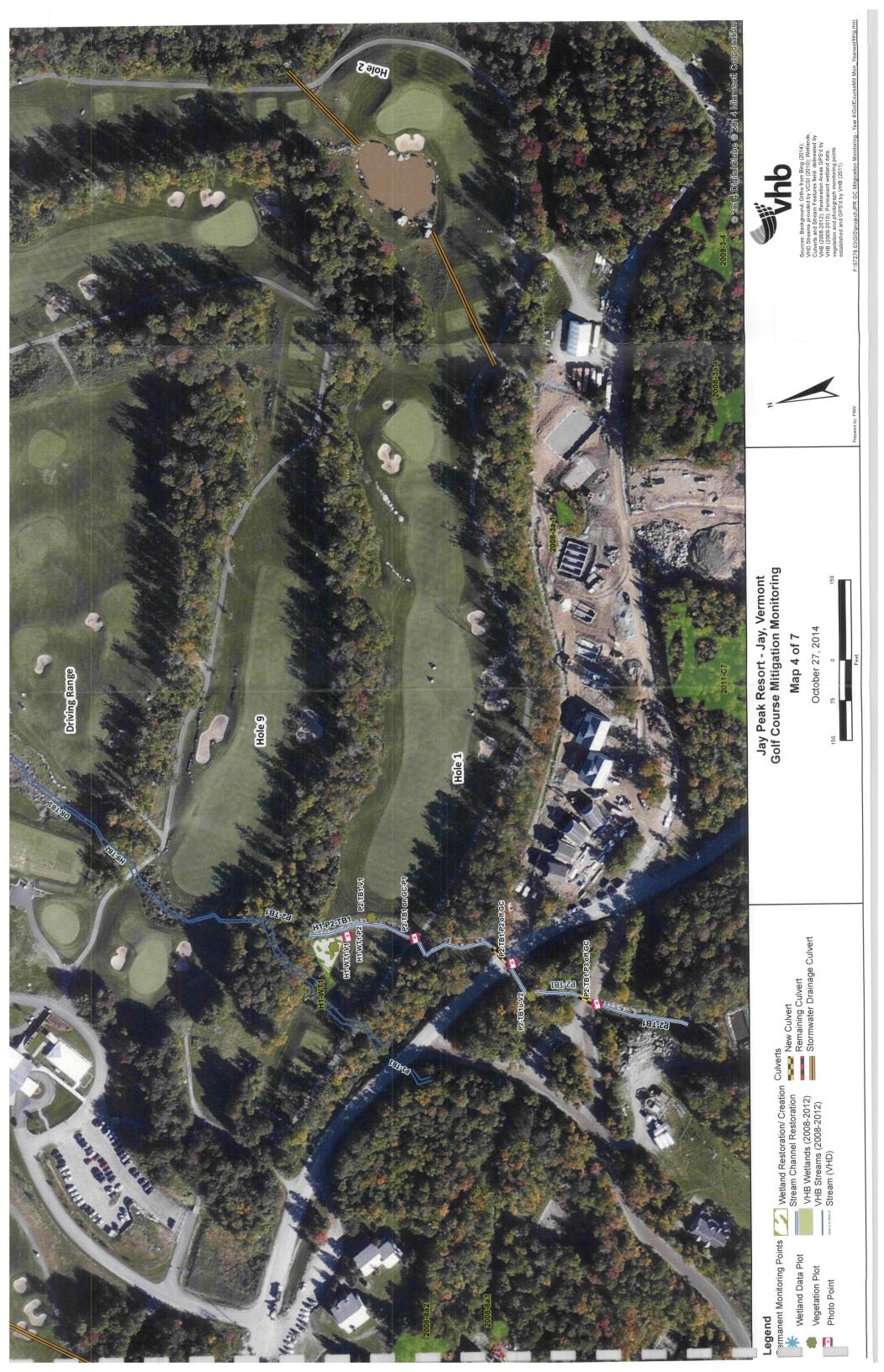


Sheet Index
--- Road (VTrans)















Jay Peak Resort Golf Course Mitigation	Year Four (2014) Mitigation Monitoring Report	Herbaceous Species and Cover Summary Data from 1m ² Plots and Wetland Data Plots	December 15, 2014

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				VHB	Vitigation	Monitori	VHB Mitigation Monitoring Map 1 of	of 7 ⁵		Ĭ	Map 2 of 7	Map 3		Map 4 of 7	of 7	7				2	Map 6 of 7						-		Map 7 of 7		-	
		<u> </u>	H5-TB1	H5-Create	at .	H6-WT1		WH-WT1 H6-	H6-TB1 WH-WT2	WT2 H4-WT1	T1 H4-WT3	T3 H8-	H1-WT1	P2-T81	H11- WT2/3	.1- 2/3		H11-Create	H11	H11-WT6	H12- TB1u	H16- WT1/ H11-WT1	H16-(H16-Create	H16-SC1	H13- C1 WT1/1a/ 1b		H13-WT2	H13-WT3	H14- WT2/3	H14-WT1 H15	H15-WT1
Scientific Name**	Common Name		E -\-	Wetland HS-Create HS-Create-		Wetland H6-WT1- H6-	·VT1-	Wetland Stre WH-WT1- H6-	Stream Wetland H6-TB1- WH-WT2- V1 V1	land Wetland WT2- H4- 1 WT1/2-V1	md Wetland H4-WT3-	nd Wetland F3- H8-Create	Wetlan H1-WT	Stream P2-TB1 (in Off GC)-GC)-V1	2-TB1 H11- H GC)- WT2/3-V1	land Stream 11- H11-TB2- 3-V1 V1	m We B2- H11- Create-	Wetland 1- H11- te- Create-V1		Wetland H11-WT6- H11-WT6-	Stream +12-TB1u-	1 1	H16- H1 Create- Creal	Wetland H16- Create-V1 Create-V2	Stream H16-SC1-	n wetland 11- H13- h-W1	H13-V	and H13-WT2- V2	Wetland V H13-WT3-	Wetland W H14- WT2/3- W1	Wetland We H14- H15	Wetland H15-WT1- W1
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Alisma subcordatum Raf.	American water plantain	OBL																						_				1				
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Leucanthemum vulgare Lam.	oxeye daisy	FACU	m	1																					-			_				
Lotus corniculatus L.	Bird's-foot trefoil	FACU												ю	15	1	15 1!	15						}								
Lycopus americanus Muhl. ex W.	American water horehound	OBL															-					}	3		ж	m	ю	15				
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Phalaris arundinacea L.	reed canarygrass	FACW													-	1			<u>'</u>							$\frac{1}{1}$		_		+		
Poa compressa L	Canada bluegrass	FACU																	38													
Polygonum sagittatum L	arrowleaf tearthumb	OBL						3	\dashv			\blacksquare				4	-	m		_			г			\dashv	3	_				





Herbaceous Species and Cover Summary Data from 1m² Plots and Wetland Data Plots December 15, 2014	•																														
				VHB	Aitigation Me	VHB Mitigation Monitoring Map 1 of 7 ⁵	3p 1 of 7 ⁵			Map 2 of 7	7 Map 3	m.	Map 4 of 7		Map 5 of 7				Мар	Map 6 of 7							Map 7	Map 7 of 7			
7.	N		H5-TB1	H5-Create		H6-WT1	WH-WT1	Н6-ТВ1	WH-WT2 H4-	H4-WT1 H4-V	H4-WT3 Create	H1-WT1	1 P2-T81		H11- WT2/3		H11-Create	H11-WT6	-	H12- WT1/ TB1u H11-WT	H16- WT1/ H11-WT1	H16-Create	ي	H16-SC1	H13- WT1/1a/ 1b	H13-WT2	H13-WT3	MT3 WT2/3	H14-WT1	H15-WT1	
Scientific Name		Status ³	Stream	Wetland	Ţ.	Wetland	Wetland	Stream	Wetland	Wetland	Wetland Wetland	nd Wetland	d Stream		Wetland Stream	<u> </u>	Wetland	Wetland		Stream Wet	Wetland	Wetland		Stream	Wetland	Wetland	Wetland	1	Wetland	Wettand	
		1 [±]	31-V1 ⁶	H5-Create H5-Create- V1 W1 ⁶		H6-WT1- H6-WT1- V1 W1		н6-ТВ1- V1	+			H1-WT	1- P2-TB1 (in GC) -V1	P2-T81 + (off GC)- WT	H11- H11-TI WT2/3-V1 V1	H11-TB2- H11- V1 Create-	1- H11- te- Create-V1	H11-WT6-H11-WT6-H12-TB1u-	11-WT6-H12	≥	H16- H16- T1/ H11 Create- VT1 W1		H16- H16- Create-V1 Create-V2		H13- WT1/1a/1 b-W1	H13-WT2- H13-WT2- V1 V2		MT3- WT2/3- W W12/3-	H14- WT1d-V1		
									-				APPROXIMAT	E COVERAGE	WITHIN VE	SETATION N	MONITORING	APPROXIMATE COVERAGE WITHIN VEGETATION MONITORING AND WETLAND DATA PLOTS	D DATA PLO		┧┟										
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Ranunculus acris L.	tall buttercup	FAC												3		3															
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Solidago rugosa P. Mill.	wrinkleleaf goldenrod	FAC								m	m							15	15	15					15	15					_
Symphyotrichum novae-angliae	New England aster	FACW	15		3 1	15	m			3 1	15	1			m	3		ю	3	15			т					_			_
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Thelypteris palustris Schott	eastern marsh fern	FACW				15				ю					<u> </u>		_	15													
Trifolium pratense L.	red clover	FACU												15		m															_
Trifolium repens L.	white clover	FACU												3																	_
Typha angustifolia L.	narrowleaf cattail	OBL																													_
Typha latifolia L	broadleaf cattail	OBL		15		3	15			38							-									15	e e	3			
Verbena hastata L.	swamp verbena	FACW	3	m	3	1	3	3	3	1	15	3	3		15	1	15 3		т	15	3	m	15	8			15	m		3	
Vicia sativa L.	garden vetch	FACU											3				_										m)	3			
	% Cover/	% Cover/Sampling Plot ⁴	104	100	114	133 172	96 7	103	119	141 1	108 157	57 116	5 92	78	79	78 14	149 143	181	127	163	95 115	5 142	125	102	119	108	132 99	9 134	82	8	
	Average %	Average % Cover/ Feature	104	107	7	153	96	103	119	141 1	108 157	57 116		82	179	78	146	154		163	95	127		102	119	120	-	99 134	82	2	
Total	Total Average % Cover for All Mitigation Wetlands:	tion Wetlands:	123	3																											
Total Aver	Total Average % Cover for Restored Stream Floodplains:	ım Floodplains:	106	9																											
	TOTAL Average % Herbaceous Cover:	baceous Cover:	119	6																											

Notes:

Species nomendature follows the USDA Plants Database (USDA - NRCS 2014)

Species identification follows the USDA Plants Database (USDA - NRCS 2014)

Species identification follows the USDA Plants Database (USDA - NRCS 2014)

Species identification follows Haines, Arthur. 2011. Flora Novae Angliace. A Manual for the Identification of Native and Naturalized Higher Vascular Plants of New England. New England Wildflower Society.

Indicator status follows. 2014 National Wetland Plant List (Lickwat. R.W., M. Bu/ffewick, N.C. Melvin, and WN. Kirchner. 2014. The National Wetland Plant List. 2014 Update of Wetland Ratings. Phytoneuron 2014-41: 1-42.

A Cover class percentages from visual assessment of 1m² quadrats (including those within wetland date December 17, 2013)

Mapping refers to Jay Peak Resort Golf Course Mitigation monitoring Set prepared by VHB, and dated December 17, 2013

Plants including "V" refer to 1m2 plots used to assess herbaccous vegetation only, plot names including "V" refer to data plots.

Takics indicate invasive species per the Vermont Class A or B Noxious Weed list (Quarantine #3-Noxious Weeds):



Jay Peak Resort Golf Course Mitigation
Year Four (2014) Mitigation Monitoring Report
Woody Stem Survival Assessment Based on 0.02-acre (5-meter radius) Permanent Vegetation Monitoring Plots and Wetland Data Plots
December 15, 2014

Mitigation Feature	Feature Type	Mitigation Feature Size (acres)	Mitigation Feature Plot	Planted Shrubs within 0.02-acre (5m-radius) Plots	Total Found Planted Shrubs Within Feature	Total Shrubs Planted ¹	Approximate Survival Rate of Shrubs/ Feature (%)
H6-WT1		0.31	H6-WT1-V1	7	108	150	72%
LIQ-AA I T		0.51	H6-WT1-W1	7	108	130	7278
WH-WT2		0.10	WH-WT2-V1	4	20	20	98%
WH-WT1		0.03	WH-WT1-V1	15	24	35	69%
H5-Create		0.24	H5-Create-V1	10	116	152	76%
ns-create		0.24	H5-Create-W1	9	1,10	132	7076
H14-WT2/3		0.05	H14-WT2/4-W1	12	32	46	69%
H14-WT1	1	0.07	H14-WT1-V1	2	7	8	93%
	1		H16-WT1/H11-WT1-V1	4			
H16-WT1/Create/ H11-		0.55	H16-Create-W1	3	107	150	71%
WT1 ²		0.66	H16-Create-V1	4	107	150	/1/6
	S		H16-Create-V2	2			
H1-WT1	WETLANDS	0.06	H1-WT1-V1	9	25	37	69%
1144 1155	1 🖹	0.00	H11-WT6-V1	7	20	44	74%
H11-WT6	>	0.09	H11-WT6-W1	7	30	41	7476
H11-WT2/3	1	0.03	H11-WT2/3-V1	13	17	25	68%
	1	0.36	H11-Create-W1	7	135	185	73%
H11-Create		0.36	H11-Create-V1	8	135	192	/376
H4-WT1/2]	0.02	H4-WT1/2-V1	8	8	10	75%
H4-WT3	1	0.04	H4-WT3-V1	5	9	10	89%
H8-Create	1	0.13	H8-Create-W1	4	26	30	85%
H13-WT1/1a/1b	1	0.06	H13-WT1/1a/1b-W1	5	14	16	87%
1142 1472	1	0.40	H13-WT2-V1	3	31	45	69%
H13-WT2		0.18	H13-WT2-V2	4	31	45	09%
H13-WT3	1	0.01	H13-WT3-V1	12	15	16	94%
H15-WT1	1	0.03	H15-WT1-W1	11	23	25	92%
H6-TB1		0.26	H6-TB1-V1	5	65	75	86%
H5-TB1	7	0.17	H5-TB1-V1	9	75	81	92%
H16-SC1	AS	0.18	H16-SC1-V1	4	35	55	64%
H11-TB2	STREAMS	0.19	H11-TB2-V1	6	56	80	70%
H12-TB1u] F	0.15	H12-TB1u-V1	6	44	45	97%
D2 T04		0.35	P2-TB1-V1	4	43	E4	80%
P2-TB1		0.25	P2-TB1-V2	3	43	54	80%
				AVERAGE SURVIV	AL RATE OF PLANTED SH	RUBS WITHIN WETLANDS	: 79%
			AVERAGE SUR	VIVAL RATE OF PLANTED S	SHRUBS WITHIN RESTORE	d stream floodplains	: 82%
			<u></u>	TOTA	L AVERAGE SURVIVAL RA	TE OF PLANTED SHRUBS	80%

¹Total plantings as reported in the *Post Construction Report - Wetland/Stream Restoration - Jay Peak Golf Course*, by New England Environmental, Inc. (NEE), dated August 23, 2010; this assessment of planted shrub survival includes those shrubs planted for wetland and stream enhancement (winterberry holly (lex verticillata), elderbery (Sambucus canadensis), American cranberry (Viburnum trilobum), and red-osier dogwood (Cornus sericea)), but does not include the additional Salix sp. and Cornus sp. tublelings planted as part of the streambank stabilization plan.

² The shrub planting summary provided by NEE combined the wetlands areas H16-WT1/H11-WT1 and H16-Create, although for permitting purposes these were considered separate features.

WE.

TLAND DETERMINATION DATA FORM - Northcentral and Northeast Region	H5-Create
•	

	Project Site: Applicant/Owner:	JPR Golf C	ourse Wetland	Mitigation	City/County: _		ins VERMONT	Sampling Point	Samp. Date: 8/	/5/2014 H5-Create
Secondary Indicators (Infimultum of two required) Secondary Indicators (Infimultum of two required)					Section					oreate
Description (IRR or MIA): IRR	- · ·						_		Slope (%):	
oil Map Unit. Cabet ce climatic/Mydogic conditions on the site sypical for this time of year? VES (If no, explain in Remarks.) Normal Circumstances? VES (If no, explain in Remarks.) Normal Circumstances? VES (If need, explain in Remarks.) Normal Circumstances? VES VES VES VES VES VES VES VE				Lat:					_ ' ' -	NAD 83
re Cemarkolyndrodegic conditions on the site Lypical for this time of year? We Speciation, Soil, or Hydrology significantly disturbed? NO (If needed, replain any answers in Remarks.) WUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc. VES Is This Sample Area Within a Westland? VES VES Is This Sample Area Within a Westland? VES VES VES Is This Sample Area Within a Westland? VES VES VES VES VES VES Is This Sample Area Within a Westland? VES VES VES VES VES VES VES VE	- '	-			44 50 52.052			72 23 0.223 11		
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### APPOINT OF APPOINT OF THE PROPRIES OF THE	•					1	is inis s	sampie Area with	in a wetland?	YES
APDROLOGY		Present?		YES						
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Surface Water (A1) X Water-Stained Leaves (B9) X Drainage Patterns (B10)			_						<u> </u>	wo required)
High Water Table (A2)	Primary Indicators ((minimum o	f one is require	d; check all that apply)				Surface Soil	Cracks (B6)	· · · · · · · · · · · · · · · · · · ·
Saluration (A3) Mort Deposits (B13) Phytogens Suffice Odor (C1) Cryylin Burrow (CR)	Surface Wate	r (A1)		X Water-Stained Leave	es (B9)			X Drainage Pa	itterns (B10)	
Saturation (A3) Meri Deposits (B13) Phytrogen Sulfide Odor (C1) Cryfyfikh prices (C2) Cryfyfikh prices (C3) Saturation Visible on Aerial (S2) Presence of Reduction (C4) Saturation Visible on Aerial (S2) Presence of Reduction in Tilled Soils (C6) Geomorphic Position (D2) Sometime Microscopia (PS) Thin Muck Surface (C7) Shallow Auritard (D3) Internation Visible on Aerial (S2) Other (Explain in Remarks) Microscopia phic Relief (D4) Sparrage (PS) Presence (P	High Water Ta	able (A2)		Aquatic Fauna (B13)				Moss Trim I	ines (B16)	
Water Marks (81)	Saturation (A:	3)		Marl Deposits (B13)						
Sediment Deposits (32) X oxidized Rhisospheres on Living Roots (33) Saturation Visible on Aerial (29) Depth (Inches): Stunder Or Stressee Plants (101) Geomorphic Position (102) Stunder Or Stressee Plants (101) Geomorphic Position (102) Shallow Audited (103) Intended Surface Intended Surface (103) Intended Surface In	··············				lor (C1)					
Drift Depoists (83)						ots (C3)				
Agal Mat or Crust (84) Recent from Reduction in Titled Solis (CS) Geomorphic Position (D2)) (C5)			•	
Iron Depoits (BS)						(C6)				
Introdation Visible on Aerial (B7)						(CO)				
Sparsely Vegetated Concave Surface (B8)	· ·				•				. ,	
Field Observations: Depth (inches): Wetland Hydrology Present? YES Wetland Hydrology Present? YES			• •	Other (Explain in Rei	marks)					
Sortace Water Present? Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 1.29" in the last 5 days at Jay Peak (NOAA) Remarks: SOUL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Redox Fe	Sparsely Vege	etated Conca	ve Surface (B8)					FAC-Neutra	l Test (D5)	
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Nater Table Present? Depth (inches): Saturation Present? Depth (inches): Depth				Depth (inches):						
Depth (inches): Depth (inches): Depth (inches): Depth (inches): Profile Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 1.29" in the last 5 days at Jay Peak (NOAA) Remarks: SOUL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features (in) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks 1.0-10 10YR 4/2 97 7.5YR 5/6 3 C M SILT LOAM 1.0-14 2.5Y 5/2 98 7.5YR 5/6 2 C M SILT LOAM 1.0-14 2.5Y 5/2 98 7.5YR 5/6 2 C M SILT LOAM Type: C-Concentration, D-Depletion, RM-Reduced Matrix, MS-Masked Sand Grains. Type: C-Concentration, D-Depletion, RM-Reduced Matrix, MS-Masked Sand Grains. Histosol (A1) Polyvalue Below Surface (S8) (I.RR R, L) Histosol (A1) Polyvalue Below Surface (S8) (I.RR R, L) Black Histoc (A2) MIRA 1498) Coast Prairie Redox (A16) (I.RR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (I.RR K, L) Depleted Below Dark Surface (S9) (I.RR K, L) Depleted Below Dark Surface (S9) (I.RR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Followed Surface (S9) (I.RR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Followed Surface (S9) (I.RR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Followed Surface (S9) (I.RR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Followed Surface (S9) (I.RR K, L) Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Followed Surface (S9) (I.RR K, L) Sandy Redox (S5) Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MIRA 1449) Red Parent Material (F21) Very Shallow Dark Surface (F712) Dark Surface (S7) (I.RR R, MIRA 1498) Wetland hydrology must be present, unless disturbed or problematic. Type: Depth (inches): Hydric Soil Present? VES							Wetland	Hydrology Present	+2	VEC
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 1.29" in the last 5 days at Jay Peak (NOAA) Remarks: SOIL							**Ctiant	a riyarology r reseri	_	163
Agemarks: SOIL								*****		
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Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Project C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Project C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Indicators for Problematic Hydric Soils³: Indicators for Problematic Hydric Soils F19 (MIRA 149B) Indicators for Problematic Hydric Soil Present? Indicators for Problematic Hydric Soils F19 (MIRA 144A, 145, 149B) Indicators for Problematic Hydric Soil Present? Indicators for Problematic Hydric Soils F19 (MIRA 144A, 145, 149B) Indicators for Hydric Soil Present? Indicators for Problematic Hydric Soils F19 (MIRA 144A, 145, 149B) Indicators for Hydric Soil Present? Indicators for Hydric Soil F19 (MIRA 144A, 145, 149B) Indicators for Hydric Soils Hydric Soils Hydric Hydric Soils Hydric So	0-10 10Y	R 4/2	97	7.5YR 5/6	3	<u> </u>	M	SILT LOAM		
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Hydric Soil Indicators: Histosol (A1)				· ·						
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Hydric Soil Indicators: Histosol (A1)								,		•
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Sandy Redox (S5) Stripped Matrix (S6) Park Surface (S7) (LRR R, MLRA 149B) Restrictive Layer (if observed): Type: Depth (inches): Red Parent Material (F21) Very Shallow Dark Surface (FF12) Other (Explain in Remarks) Other (Explain in Remarks) Hydric Soil Present? YES	Sandy Mucky	y Mineral (S1)	Depleted Da	rk Surface (F7)			Piedmont F	loodplain Soils (F19)	(MLRA 149B)
Sandy Redox (S5) Stripped Matrix (S6) Park Surface (S7) (LRR R, MLRA 149B) Restrictive Layer (if observed): Type: Depth (inches): Red Parent Material (F21) Very Shallow Dark Surface (FF12) Other (Explain in Remarks) Other (Explain in Remarks) Hydric Soil Present? YES	Sandy Gleyed	d Matrix (S4)		Redox Depre	essions (F8)			Mesic Spod	lic (TA6) (MLRA 1444	A, 145, 149B)
Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Restrictive Layer (if observed): Type: Depth (inches): Stripped Matrix (S6) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? YES YES										
Dark Surface (S7) (LRR R, MLRA 149B) wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Other (Explain in Remarks) Hydric Soil Present? YES				3 _{Inc}	dicators of hydr	ophytic ve	etation and			2)
disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): disturbed or problematic. Hydric Soil Present? YES YES			MLRA 149R\				-			•
Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? YES YES	- Saik Suriace	(a) / (citit it)		wett		-			am m nemarkaj	
Type: Hydric Soil Present? YES Depth (inches):	Postrictive Laure /	f aban = : : : 1\			ais	rurned or l	n obiematić.	 		
Depth (inches):		-								
								Hyd	iric Soil Present?_	YES
Remarks:):	<u> </u>							
	Remarks:									

Sampling Point:

H5-Create

	Absolute	Dom.	Indicator	
Tree Stratum (Plot size:)	% Cover	Sp?	Status	Dominance Test Worksheet:
	70 COVCI			
1				# Dominants OBL, FACW, FAC: 6 (A)
2			!	
2				# Dominants across all strata: 6 (B)
				W DOMINIANTS across an strata.
4				
5				% Dominants OBL, FACW, FAC: 100% (A/B)
6				
7				Prevalence Index Worksheet:
		= Total	l Cover	Total % Cover of: Multiply By:
Sapling Stratum (Plot size:)		•		OBL 74 x1= 74
<u> </u>				
1.				FACW 39 x 2 = 78
2.				FAC 4 x3 = 12
3				FACU x 4 =
		. ——		
4				UPL x5 =
5.				Sum: 117 (A) 164 (B)
C				
7.				Prevalence Index = B/A = 1.40
		- Tat-	l Cover	Hudrophytic Vogatation Indicates:
		. = Tota	Lover	Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size: 15'RAD)				X Dominance Test is > 50%
1. Viburnum opulus	3	х	FACW	X Prevalence Index is <= 3.0
<u> </u>		· -		
2.				Problematic Hydrophytic Vegetation ¹ (explain)
3				Rapid Test for Hydrophytic Vegetation
				Morphological Adaptations
				(Morphological Adaptations
5		. ——		¹ Indicators of hydric soil and wetland hydrology must be present, unless
6.				disturbed or problematic.
7.				Definitions of Vegetation Strata:
·			.——	Definitions of Vegetation Strata.
	3	= Tota	l Cover	!
Herb Stratum (Plot size: 5' RAD)				Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or
·	38	v	OBL	more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).
1. Juncus effusus		_ <u>x</u>	OBL	
2. Carex vulpinoidea	15	Х	OBL	
3. Carex scoparia	15		FACW	
				Carlina w I I I I I I I I I I I I I I I I I I
4. Eupatorium perfoliatum	15	_ <u>X</u>	FACW	Sapling - Woody plants, excluding woody vines, approximately 20ft (6m)
5. Mimulus ringens	15	Х	OBL	or more in height and less than 3in (7.6cm) DBH.
6. Eutrochium maculatum	3		OBL	
		-		
7. Verbena hastata	3		FACW	
8. Juncus tenuis	3		FAC	Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1
9. Carex comosa			OBL	to 6m) in height.
			· ———	
10. Symphyotrichum novae-angliae	3		FACW	
11. Euthamia graminifolia	1		FAC	Herb - All herbaceous (non-woody) plants, including herbaceous vines,
				regardless of size. Includes woody plants, except woody vines, less than
12.				approximately 3ft (1m) in height.
	114	= Tota	ıl Cover	, , , , , , , , , , , , , , , , , , , ,
Woody Vines (Plot size:)		_		
1.				
2.				Woody vine - All woody vines, regardless of height.
3.				1
				N. I. I
4			·	Hydrophytic
5.			_	Vegetation
		= Tota	l Cover	Present? YES
		- 1018	ii covel	Present: 1E3
Remarks: (If observed, list morphological adaptations below).				
The man (in a page to any material page and a data to a second).				

ral and Northeast Region

Vhb	WETLAND DETERMINATION DATA FORM - Northcentra

roject Site:	JPR Golf C	ourse Wetland Mitigation		City/County: Jay/Orle	ans		Samp. Date: 8/5,	/2014
pplicant/Owner:	Jay Peak R	esort		State:	VERMONT	Sampling Point:	Н	6-WT1
vestigator(s):	P. Werts-k	allfelz		Section, Towns	nip, Range:			
andform (hillslope, te	errace, etc.):	Terrace		Local relief (concave, o	onvex, none):	Concave	Slope (%):	,
ubregion (LRR or	MLRA):	LRR	Lat:	44°56'40.729"N	Long:	72°29'7.534"W	Datum:	NAD 83
oil Map Unit:	Cabot		_				NWI Class:	PEM
re climatic/hydrolo	gic condition	ons on the site typical for this tir	ne of year	? YES	(If no, e	xplain in Remarks.)	<u></u>	
re Vegetation, Soil	, or Hydrolo	gy significantly disturbed?	NO		_	Normal Ci	rcumstances?	YES
re Vegetation, Soil	, or Hydrolo	gy naturally problematic?	NO			(If needed, e	xplain any answers	in Remarks.)

SUMMARY OF FINDINGS -	Attach site ma	n showing sample	le point locations	. transects, im	portant features	etc
JOIVING OF THE PROPERTY	Attach site ma	P SHOWING SUIND	ic point locations	, truitscots, m	ipoi tuite icutui co,	,

SOMMON THE STATE OF THE STATE O	in site in ab site wing sample	porteriorations, transactor, important reactines, etc.
Hydrophytic Vegetation Present?	YES	
Hydric Soil Present?	YES	Is This Sample Area Within a Wetland? YES
Wetland Hydrology Present?	YES	
Remarks:	·	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required;	check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
X High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
X Saturation (A3)	Marl Deposits (B13)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial (Barnall pockets	of st: Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	_	FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present?	Depth (inches):	
Water Table Present? X Saturation Present? X	Depth (inches): Surface Depth (inches): Surface	Wetland Hydrology Present? YES
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous inspections), if	available:
1.29" in the last 5 days at Jay Peak (NO	AA)	
Remarks:	•	

epth	Matrix		Red	ox Features					
in)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
)-8	10YR 3/2	98	7.5YR 3/4	2	C	M	SILT LOAM		
14+	2.5Y 5/1	95	7.5YR 4/6	5	<u> </u>	М	LOAMY SAND		
_									
e: C	=Concentration, D=Depletion, F	M=Reduced Matr	ix, MS=Masked Sand Grains.				² Location: PL=Pore Lining, M=N	latrix.	
dric	Soil Indicators:						Indicators for Problematic	: Hydric Soils ³ :	
	Histosol (A1)		Polyvalue Bel	ow Surface (68) (LRR R,		2 cm Muck (A10) (LF	R K, L, MLRA 149B)	
	Histic Epipedon (A2)		MLRA 1498	3)	,,		Coast Prairie Redox (A16) (LRR K, L, R)		
	Black Histic (A3)		Thin Dark Sur	face (S9) (LR	R R, MLRA 14	9B)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
	Hydrogen Sulfide (A4)		Loamy Mucky	Mineral (F1) (LRR K, L)		Dark Surface (S9) (LRR K, L, M)		
	Stratified Layers (A5)		Loamy Gleye	d Matrix (F2)			Polyvalue Below Surface (S8) (LRR K, L)		
	Depleted Below Dark Surface	e (A11)	X Depleted Ma	trix (F3)			Thin Dark Surface (S	9) (LRR K, L)	
	Thick Dark Surface (A12)		Redox Dark S	urface (F6)			iron-Manganese Masses (F12) (LRR K, L, R)		
	Sandy Mucky Mineral (S1)		Depleted Dar	k Surface (F7)		Piedmont Floodplain Soils (F19) (MLRA 149B)		
	Sandy Gleyed Matrix (S4)		Redox Depre	ssions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
	Sandy Redox (S5)						Red Parent Material	(F21)	
	Stripped Matrix (S6) 3 Indicators of hydrophytic vegetation and			d Very Shallow Dark Surface (TF12)					
	Dark Surface (S7) (LRR R, MLRA 149B) wetland hydrology must be present, unless			sent, unless	Other (Explain in Remarks)				
				·	isturbed or p	roblematic.			
stric	tive Layer (if observed):								
	Type:						Hydric Soil F	Present? YES	
De	epth (inches):								

Sampling Point:	H6-WT1
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	Absolute	Dom.	Indicator		
Tree Stratum (Plot size:)	% Cover	Sp?	Status	Dominance Test Worksheet:	
1.				# Dominants OBL, FACW, FAC:	3 (A)
2				-	
				# Dani- and a second 10 starts	2 (0)
3.				# Dominants across all strata:	3 (B)
4					
5				% Dominants OBL, FACW, FAC:	100% (A/B)
6.					
7.				Prevalence Index Worksheet:	
		= Total	Cover	Total % Cover of:	Multiply By:
Sapling Stratum (Plot size:)				OBL 62 x1=	62
				FACW 69 x 2 =	138
					
2.					123
3				FACU x 4 =	
4.				UPL x5 = _	
5.				Sum:172(A)	323 (B)
6.					
7.				Prevalence Index = B/A =	1.88
				-	
		= Total	Cover	Hydrophytic Vegetation Indicators	
Charle Charles (Dist 1EIRAN		. – IULAI	COVE		•
Shrub Stratum (Plot size: 15'RAD)				X Dominance Test is > 50%	
1.				X Prevalence Index is <= 3.0	
2.				Problematic Hydrophytic Ve	egetation (explain)
3				Rapid Test for Hydrophytic	Vegetation
4.				Morphological Adaptations	
6				¹ Indicators of hydric soil and wetland hydr disturbed or problematic.	ology must be present, unless
7		 .		Definitions of Vegetation Strata:	
		= Total	Cover		
Herb Stratum (Plot size: 5' RAD)				Tree - Woody plants, excluding woody vir	
1. Eupatorium perfoliatum	38	Х	FACW	more in height and 3in (7.6cm) or larger in	diameter at breast height (DBH).
2. Juncus effusus	38	X	OBL		
3. Equisetum arvense	38	X	FAC		
4. Carex comosa	15		OBL	Sapling - Woody plants, excluding wood	v vines approximately 20ft (6m)
				or more in height and less than 3in (7.6cm	
5. Thelypteris palustris			FACW	or more in neight and less than sin (7.5em)	, 5511.
6. Carex scoparia	15		FACW		
7. Euthamia graminifolia	3		FAC		
8. Typha latifolia	3		OBL	Shrub - Woody plants, excluding woody	vines, approximately 3 to 20ft (1
9. Carex crinita			OBL	to 6m) in height.	
10. Scirpus cyperinus	3		OBL		
11. Verbena hastata	$-\frac{3}{1}$		FACW	Horb - All harbaceaus (non woods) plants	is including hadbassaus vines
	_ <u> </u>			Herb - All herbaceous (non-woody) plant regardless of size. Includes woody plants,	
12.				approximately 3ft (1m) in height.	sacpt woody vines, less than
	172	= Total	Cover		
Woody Vines (Plot size:)					
1					
2.				Woody vine - All woody vines, regardle	ss of height.
3.					
4,		· ——		Hydrophytic	
				Hydrophytic	
5				Vegetation	
		= Total	Cover	Present?	YES
Remarks: (If observed, list morphological adaptations below).					
					İ
					j
					1
					1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Н	8-	Cr	ea	te
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roject Site: pplicant/O)wner: Jay Peak	Resort		Sta	ate: VERMONT	Sampling Point:	н	8-Create
vestigator	_ 				wnship, Range:	 Jav		
	nillslope, terrace, etc.):	Terrace			ave, convex, none):		Slope (%):	
bregion ((LRR or MLRA):	LRR	Lat:	44°56'21.345"N		72°29'37.266"W	Datum:	NAD 83
il Map Un	nit: Dixfield						NWI Class:	PEM
e climatic	/hydrologic condit	ions on the site t	ypical for this time of year?	? Y	ES (If no, e	xplain in Remarks.)		
e Vegetat	tion, Soil, or Hydrol	ogy significantly	disturbed? NO			Normal Ci	rcumstances?	YES
re Vegetat	tion, Soil, or Hydrol	ogy naturally pro	oblematic? NO			(If needed, e	xplain any answer	s in Remarks.)
13848486	DV OE EINDING	C Attach cit	e map showing sam	nla naint laca	tions transo	— sts. important foa	turos oto	
	c Vegetation Prese		YES	pie point ioca	illons, transe	cts, important rea	tures, etc.	
lydric Soil f	Present?		YES		Is This	Sample Area Within	a Wetland?	YES
vetland Hy	drology Present?		YES				<u></u>	
emarks:								
IYDROL								
	drology Indicators					Secondary Indicator		o required)
<u> </u>		ot one is require	d; check all that apply)			Surface Soil Cr		_
	ace Water (A1)		X Water-Stained Leaves	s (B9)		X Drainage Patt		
	Water Table (A2)		Aquatic Fauna (B13)			Moss Trim Lin		
	ration (A3)		Marl Deposits (B13)	()			ater Table (C2)	
	er Marks (B1)		Hydrogen Sulfide Odd			Crayfish Burro		
	ment Deposits (B2)		Oxidized Rhizosphere		E3)		ible on Aerial (C9)	
	Deposits (B3)		Presence of Reduced				essed Plants (D1)	
	I Mat or Crust (B4)		Recent Iron Reductio		1	Geomorphic F		
	Deposits (B5)	:-1 (07)	Thin Muck Surface (C	•		Shallow Aquit		
	idation Visible on Aer sely Vegetated Conc		Other (Explain in Ren	iiai K5/		FAC-Neutral T	phic Relief (D4)	
		ave surface (B8)				FAC-NEUTIAI I	est (D3)	
ield Obser			Double (inches).					
Curtaca M/a	stor Drocont3							
	ater Present?		Depth (inches):	Confess	Watle	ad Hudrolomi Danoont?		VEC
Water Tabl	le Present?	<u> </u>	Depth (inches):	Surface	Wetlar	nd Hydrology Present?	_	YES
Water Table Saturation Describe Re 0.89	le Present? Present?	X am gauge, monit	Depth (inches): Depth (inches): oring well, aerial photos, p	Surface		nd Hydrology Present?		YES
Vater Table aturation Describe Re 0.88 Remarks:	le Present? Present? ecorded Data (stre 9" in the last 5 day	X am gauge, monit s at Jay Peak (No	Depth (inches): Depth (inches): oring well, aerial photos, pi DAA)	Surface revious inspection	ns), if available:			YES
Vater Table aturation Describe Re 0.89 Describe Re 0.89 Describe Re 0.89 Describe Describe Re	le Present? Present? ecorded Data (stre 9" in the last 5 day	X am gauge, monit is at Jay Peak (No to the depth nee	Depth (inches): Depth (inches): oring well, aerial photos, pi DAA)	Surface revious inspection	ns), if available:			YES
Vater Table Saturation Describe Re 0.84 Remarks: SOIL Profile Desc Depth	le Present? Present? ecorded Data (stre: 9" in the last 5 day cription: (Describe	X am gauge, monit is at Jay Peak (No to the depth nee	Depth (inches): Depth (inches): oring well, aerial photos, pi OAA) eded to document the indicates the control of the control	Surface revious inspection attack cator or confirm the	ns), if available:			YES Remarks
Vater Table aturation Describe Re 0.85 Remarks:	le Present? Present? ecorded Data (stre: 9" in the last 5 day ccription: (Describe	X am gauge, monit is at Jay Peak (No to the depth nee	Depth (inches): Depth (inches): oring well, aerial photos, pi DAA)	Surface revious inspection attack cator or confirm the	ns), if available:	icators.)		
Vater Table Saturation Describe Re 0.89 Remarks: SOIL Profile Describe (in)	le Present? Present? ecorded Data (stre: 9" in the last 5 day cription: (Describe Matrix Color (moist)	X am gauge, monit is at Jay Peak (No	Depth (inches): Depth (inches): Oring well, aerial photos, pi DAA) eded to document the indic Rec Color (moist)	Surface revious inspection attention of the second of the	ns), if available: ne absence of ind	icators.) Texture		
Vater Table laturation Describe Re 0.89 Remarks: SOIL Profile Describe (in)	le Present? Present? ecorded Data (stre: 9" in the last 5 day cription: (Describe Matrix Color (moist)	X am gauge, monit is at Jay Peak (No	Depth (inches): Depth (inches): Oring well, aerial photos, pi DAA) eded to document the indic Rec Color (moist)	Surface revious inspection attention of the second of the	ns), if available: ne absence of ind	icators.) Texture		
Vater Table aturation Describe Re 0.89 (emarks:	le Present? Present? ecorded Data (stre: 9" in the last 5 day cription: (Describe Matrix Color (moist)	X am gauge, monit is at Jay Peak (No	Depth (inches): Depth (inches): Oring well, aerial photos, pi DAA) eded to document the indic Rec Color (moist)	Surface revious inspection attention of the second of the	ns), if available: ne absence of ind	icators.) Texture		
Vater Tablaturation lescribe Re 0.89 emarks: GOIL rofile Descepth (in)	le Present? Present? ecorded Data (stre: 9" in the last 5 day cription: (Describe Matrix Color (moist)	X am gauge, monit is at Jay Peak (No	Depth (inches): Depth (inches): Oring well, aerial photos, pi DAA) eded to document the indic Rec Color (moist)	Surface revious inspection attention of the second of the	ns), if available: ne absence of ind	icators.) Texture		
vater Tablaturation lescribe Re 0.89 emarks:	le Present? Present? ecorded Data (stre: 9" in the last 5 day ecription: (Describe Matrix Color (moist) 2.5Y 3/1	X am gauge, monit is at Jay Peak (No	Depth (inches): Depth (inches): Oring well, aerial photos, pi DAA) eded to document the indic Rec Color (moist)	Surface revious inspection attention of the second of the	ns), if available: ne absence of ind	icators.) Texture		
Vater Table aturation Describe Re	le Present? Present? ecorded Data (stre: 9" in the last 5 day ecription: (Describe Matrix Color (moist) 2.5Y 3/1	X am gauge, monit is at Jay Peak (No	Depth (inches): Depth (inches): Oring well, aerial photos, property of the pro	Surface revious inspection attention of the second of the	ns), if available: ne absence of ind	icators.) Texture SILT LOAM ² Location: PL=Pore Linin	g, M=Matrix.	Remarks
Vater Table aturation Describe Re 0.89 Remarks: SOIL Profile Desc Depth (in) 0-6 Type: C=Con-	le Present? Present? ecorded Data (stre. 9" in the last 5 day ccription: (Describe	X am gauge, monit is at Jay Peak (No	Depth (inches): Depth (inches): Depth (inches): Oring well, aerial photos, properties of the propertie	Surface revious inspection cator or confirm the dox Features Y 2	ne absence of ind	icators.) Texture SILT LOAM 2Location: PL=Pore Linin Indicators for Probl	g, M=Matrix. ematic Hydric Soil	Remarks
Vater Table Saturation Describe Re 0.89 Remarks: SOIL Profile Desc Depth (in) 0-6 Type: C=Cone Hydric Soil Histo	le Present? Present? Present? ecorded Data (stre. 9" in the last 5 day ccription: (Describe Matrix Color (moist) 2.5Y 3/1 ccentration, D=Depletio Indicators: cosol (A1)	X am gauge, monit is at Jay Peak (No	Depth (inches): Depth (inches): Depth (inches): Oring well, aerial photos, properties of the content of the con	Surface revious inspection cator or confirm the dox Features Y 2	ne absence of ind	icators.) Texture SILT LOAM	g, M=Matrix. ematic Hydric Soil 10) (LRR K, L, MLRA	Remarks s ³ : 149B)
Vater Table aturation Describe Re 0.89 Remarks: SOIL Profile Desc Depth (in) 0-6 Type: C=Cone Hydric Soil Histo Histo	le Present? Present? Present? ecorded Data (stre. 9" in the last 5 day ccription: (Describe Matrix Color (moist) 2.5Y 3/1 ccentration, D=Depletio Indicators: cosol (A1) cic Epipedon (A2)	X am gauge, monit is at Jay Peak (No	Depth (inches): Depth (inches): Depth (inches): Oring well, aerial photos, properties of the propertie	Surface revious inspection cator or confirm the dox Features % Ty 2 low Surface (S8) (LFB)	ns), if available: ne absence of ind /pe¹ Loc² C M	icators.) Texture SILT LOAM *Location: PL=Pore Linin Indicators for Probl 2 cm Muck (A Coast Prairie f	g, M=Matrix. ematic Hydric Soil 10) (LRR K, L, MLRA Redox (A16) (LRR K,	Remarks s ³ : 149B) L, R)
Vater Table aturation Describe Re 0.89 D	le Present? Present? Present? ecorded Data (stre. 9" in the last 5 day ecription: (Describe Matrix Color (moist) 2.5Y 3/1 ecentration, D=Depletio Indicators: ecosol (A1) eic Epipedon (A2) ek Histic (A3)	X am gauge, monit is at Jay Peak (No	Depth (inches): Depth (inches): Depth (inches): Oring well, aerial photos, properties of the propertie	Surface revious inspection cator or confirm the dox Features 7 7 2 low Surface (S8) (LFB) rface (S9) (LRR R, M	ns), if available: ne absence of ind /pe¹ Loc² C M RR R,	icators.) Texture SILT LOAM Location: PL=Pore Linin Indicators for Proble 2 cm Muck (A Coast Prairie I	g, M=Matrix. ematic Hydric Soil 10) (LRR K, L, MLRA Redox (A16) (LRR K, leat or Peat (S3) (LR	Remarks s ³ : 149B) L, R)
Vater Table laturation Describe Re	le Present? Present? Present? ecorded Data (stre. 9" in the last 5 day ecription: (Describe Matrix Color (moist) 2.5Y 3/1 eccentration, D=Depletion Indicators: ecosol (A1) eic Epipedon (A2) ek Histic (A3) Irogen Sulfide (A4)	X am gauge, monit is at Jay Peak (No	Depth (inches): Depth (inches): Depth (inches): Oring well, aerial photos, properties of the propertie	Surface revious inspection revious inspection rator or confirm the dox Features 7 2 Row Surface (S8) (LFB) rface (S9) (LRR R, M y Mineral (F1) (LRR	ns), if available: ne absence of ind /pe¹ Loc² C M RR R,	icators.) Texture SILT LOAM	g, M=Matrix. ematic Hydric Soil 10) (LRR K, L, MLRA Redox (A16) (LRR K, leat or Peat (S3) (LR (S9) (LRR K, L, M)	Remarks 5 ³ : .149B) L, R) R K, L, R)
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Water Table Saturation Describe Re 0.89 Remarks: SOIL Profile Describe United Soil History Hydric Soil History History Sand Sand Sand Sand Strip	le Present? Present? Present? ecorded Data (stre. 9" in the last 5 day ccription: (Describe	X am gauge, monit is at Jay Peak (No to the depth nee (Depth (inches): Red Color (moist) 7.5YR 4/4 Polyvalue Be MLRA 149 Thin Dark Su Loamy Muck Loamy Gleye X Depleted Ma Redox Dark S Depleted Dai Redox Depre	Surface revious inspection cator or confirm the confirmation for the con	ne absence of ind /pe¹ Loc² C M RR R, ILRA 149B) K, L)	icators.) Texture SILT LOAM	g, M=Matrix. ematic Hydric Soil 10) (LRR K, L, MLRA Redox (A16) (LRR K, leat or Peat (S3) (LR (S9) (LRR K, L, M) ow Surface (S8) (LR face (S9) (LRR K, L) lesse Masses (F12) (LP odplain Soils (F19) ((TA6) (MLRA 144A, aterial (F21) Dark Surface (TF12)	Remarks s ³ : .149B) .L, R) R K, L, R) R K, L, R) MLRA 149B) 145, 149B)
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Sampling Point:

H8-Create

	Absolute	Dom.	Indicator		
Tree Stratum (Plot size:)	% Cover	Sp?	Status	Dominance Test Worksheet:	
4				# Dominants OBL, FACW, FAC:	8 (A)
2				" " " " " " " " " " " " " " " " " " "	(^)
2.					
3				# Dominants across all strata:	8 (B)
4					
5.				% Dominants OBL, FACW, FAC:	100% (A/B)
				70 DOMINIANCE ODE, 1 ACTV, 1 AC.	(A) b)
6.					
7				Prevalence Index Worksheet:	
		= Total	Cover	Total % Cover of:	Multiply By:
Sapling Stratum (Plot size:)		•		OBL 71 x 1 =	71
1.				FACW 98 x 2 =	196
2				FAC 3 x3 =	9
3.				FACU x 4 =	
4.		. ——		UPL x5=	-
5				Sum:(A)	(B)
6					
7.				Prevalence Index = B/A =	1.60
·· -				Trevalence maex = b/A =	
		= Total	Cover	Hydrophytic Vegetation Indicator:	s:
Shrub Stratum (Plot size: 15'RAD)	-			X Dominance Test is > 50%	
1. Cornus alba	15	х	FACW	X Prevalence Index is <= 3.0	
				l ———	1
2.				Problematic Hydrophytic V	_
3.				Rapid Test for Hydrophytic	: Vegetation
4				Morphological Adaptation	S
				I 	
5		- ——		¹ Indicators of hydric soil and wetland hyd	frology must be present, unless
6				disturbed or problematic.	_
7.				Definitions of Vegetation Strata:	
	15	= Tota	Cover		
ALLON OF THE PARTY		- 1018	COVE	1	
Herb Stratum (Plot size: 5' RAD)				Tree - Woody plants, excluding woody v	
1. Juncus effusus	38	Х	OBL	more in height and 3in (7.6cm) or larger i	in diameter at breast height (DBH)
2. Impatiens capensis	38	X	FACW		
2. Impatiens capensis	38	- X	FACW		
3. Carex comosa	15	X	OBL		
		- —		Sapling - Woody plants, excluding wood	
3. Carex comosa	15	X	OBL	Sapling - Woody plants, excluding woo or more in height and less than 3in (7.6cr	
3. Carex comosa4. Verbena hastata5. Scirpus hattorianus	15 15 15	X	OBL FACW OBL	1	
 3. Carex comosa 4. Verbena hastata 5. Scirpus hattorianus 6. Carex scoparia 	15 15 15 15	X X X	OBL FACW OBL FACW	1	
 Carex comosa Verbena hastata Scirpus hattorianus Carex scoparia Solidago gigantea 	15 15 15 15 15	X	OBL FACW OBL FACW FACW	1	
 3. Carex comosa 4. Verbena hastata 5. Scirpus hattorianus 6. Carex scoparia 	15 15 15 15	X X X	OBL FACW OBL FACW	1	m) DBH.
 Carex comosa Verbena hastata Scirpus hattorianus Carex scoparia Solidago gigantea Carex vulpinoidea 	15 15 15 15 15	X X X	OBL FACW OBL FACW OBL	or more in height and less than 3in (7.6cr	m) DBH.
 Carex comosa Verbena hastata Scirpus hattorianus Carex scoparia Solidago gigantea Carex vulpinoidea Solidago rugosa 	15 15 15 15 15 15 3	X X X	OBL FACW OBL FACW FACW	or more in height and less than 3in (7.6cd	m) DBH.
 Carex comosa Verbena hastata Scirpus hattorianus Carex scoparia Solidago gigantea Carex vulpinoidea Solidago rugosa 	15 15 15 15 15 15 3	X X X	OBL FACW OBL FACW OBL	or more in height and less than 3in (7.6cd Shrub - Woody plants, excluding woody to 6m) in height.	m) DBH. y vines, approximately 3 to 20ft (1
 Carex comosa Verbena hastata Scirpus hattorianus Carex scoparia Solidago gigantea Carex vulpinoidea Solidago rugosa 	15 15 15 15 15 15 3	X X X	OBL FACW OBL FACW OBL	or more in height and less than 3in (7.6cd Shrub - Woody plants, excluding woody to 6m) in height. Herb - All herbaceous (non-woody) plan	m) DBH. y vines, approximately 3 to 20ft (1
 Carex comosa Verbena hastata Scirpus hattorianus Carex scoparia Solidago gigantea Carex vulpinoidea Solidago rugosa 	15 15 15 15 15 15 3	X X X	OBL FACW OBL FACW OBL	or more in height and less than 3in (7.6cd Shrub - Woody plants, excluding woody to 6m) in height. Herb - All herbaceous (non-woody) plar regardless of size. Includes woody plants	m) DBH. y vines, approximately 3 to 20ft (1
 Carex comosa Verbena hastata Scirpus hattorianus Carex scoparia Solidago gigantea Carex vulpinoidea Solidago rugosa 	15 15 15 15 15 15 3 3	X	OBL FACW OBL FACW OBL FAC	or more in height and less than 3in (7.6cd Shrub - Woody plants, excluding woody to 6m) in height. Herb - All herbaceous (non-woody) plan	m) DBH. y vines, approximately 3 to 20ft (1
3. Carex comosa 4. Verbena hastata 5. Scirpus hattorianus 6. Carex scoparia 7. Solidago gigantea 8. Carex vulpinoidea 9. Solidago rugosa 10. 11.	15 15 15 15 15 15 3	X X X	OBL FACW OBL FACW OBL FAC	or more in height and less than 3in (7.6cd Shrub - Woody plants, excluding woody to 6m) in height. Herb - All herbaceous (non-woody) plar regardless of size. Includes woody plants	m) DBH. y vines, approximately 3 to 20ft (1
 Carex comosa Verbena hastata Scirpus hattorianus Carex scoparia Solidago gigantea Carex vulpinoidea Solidago rugosa 	15 15 15 15 15 15 3 3	X	OBL FACW OBL FACW OBL FAC	or more in height and less than 3in (7.6cd Shrub - Woody plants, excluding woody to 6m) in height. Herb - All herbaceous (non-woody) plar regardless of size. Includes woody plants	m) DBH. y vines, approximately 3 to 20ft (1
 Carex comosa Verbena hastata Scirpus hattorianus Carex scoparia Solidago gigantea Carex vulpinoidea Solidago rugosa 10. 11. 12. 	15 15 15 15 15 15 3 3	X	OBL FACW OBL FACW OBL FAC	or more in height and less than 3in (7.6cd Shrub - Woody plants, excluding woody to 6m) in height. Herb - All herbaceous (non-woody) plar regardless of size. Includes woody plants	m) DBH. y vines, approximately 3 to 20ft (1
3. Carex comosa 4. Verbena hastata 5. Scirpus hattorianus 6. Carex scoparia 7. Solidago gigantea 8. Carex vulpinoidea 9. Solidago rugosa 10. 11. 12. Woody Vines (Plot size:)	15 15 15 15 15 15 3 3	X	OBL FACW OBL FACW OBL FAC	or more in height and less than 3in (7.6cd Shrub - Woody plants, excluding woody to 6m) in height. Herb - All herbaceous (non-woody) plar regardless of size. Includes woody plants	m) DBH. y vines, approximately 3 to 20ft (1 nts, including herbaceous vines, , except woody vines, less than
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3. Carex comosa 4. Verbena hastata 5. Scirpus hattorianus 6. Carex scoparia 7. Solidago gigantea 8. Carex vulpinoidea 9. Solidago rugosa 10. 11. 12. Woody Vines (Plot size:) 1. 2. 3.	15 15 15 15 15 15 3 3	X	OBL FACW OBL FACW OBL FAC	or more in height and less than 3in (7.6cd or more in height and less than 3in (7.6cd or more in height. Herb - All herbaceous (non-woody) plar regardless of size. Includes woody plants approximately 3ft (1m) in height. Woody vine - All woody vines, regardless of size or more plants.	m) DBH. y vines, approximately 3 to 20ft (1 nts, including herbaceous vines, , except woody vines, less than
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3. Carex comosa 4. Verbena hastata 5. Scirpus hattorianus 6. Carex scoparia 7. Solidago gigantea 8. Carex vulpinoidea 9. Solidago rugosa 10. 11. 12. Woody Vines (Plot size:) 1. 2. 3.	15 15 15 15 15 15 3 3	X	OBL FACW OBL FACW OBL FAC	or more in height and less than 3in (7.6cc) Shrub - Woody plants, excluding woody to 6m) in height. Herb - All herbaceous (non-woody) plar regardless of size. Includes woody plants approximately 3ft (1m) in height. Woody vine - All woody vines, regardless of the size	m) DBH. y vines, approximately 3 to 20ft (1 nts, including herbaceous vines, , except woody vines, less than
3. Carex comosa 4. Verbena hastata 5. Scirpus hattorianus 6. Carex scoparia 7. Solidago gigantea 8. Carex vulpinoidea 9. Solidago rugosa 10. 11. 12. Woody Vines (Plot size:) 1. 2. 3. 4.	15 15 15 15 15 15 3 3	X X X X X	OBL FACW OBL FACW OBL FAC	or more in height and less than 3in (7.6cc) Shrub - Woody plants, excluding woody to 6m) in height. Herb - All herbaceous (non-woody) plar regardless of size. Includes woody plants approximately 3ft (1m) in height. Woody vine - All woody vines, regardless the state of the st	m) DBH. y vines, approximately 3 to 20ft (1 nts, including herbaceous vines, , except woody vines, less than less of height.
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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

H1	1-Create	9
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Project Site:			Mitigation		_	<u> </u>	ns	<u> </u>	Samp. Date: <u>8</u>	
	Jay Peak R				Costion	State: _ V n, Townshi	ERMONT	Sampling Point:		H11-Create
nvestigator(s): .andform (hillslope, tei	P. Werts-K	Terrace			Local relief			Concave	Slope (%):	
Subregion (LRR or 1		LRR		Lat:	44°56'29.84		Long:	72°30'25.141"W	. Slope (78) Datum:	NAD 83
Soil Map Unit:		LKK		Lat	44 30 23.04	19 N	LUNG.	72 30 23.141 W	. NWI Class:	PEM
Are climatic/hydrolo	Cabot	ons on the site t	unical for this	time of year	,	YES	(If no o	xplain in Remarks.)	· 14 441 Class	PEIVI
	-		• •	•		163	(II IIO, e		ircumstances?	YES
Are Vegetation, Soil,				NO				_	_	
Are Vegetation, Soil,	, or Hydroid	gy naturally pro	Julematics	NO					xpiain any answ	vers in Remarks.)
SUMMARY OF F	FINDINGS	5 - Attach sit	te map sho	wing sam	ple point l	ocations	, transed	cts, important fea	atures, etc.	
Hydrophytic Vegetal		t?	YES				L. This	Committee America Addaloi		VEC
Hydric Soil Present?			YES				is This	Sample Area Withir	n a Wetland? _	YES
Wetland Hydrology	Present?		YES			<u> </u>				
Remarks:										
HYDROLOGY										
Wetland Hydrology								Secondary Indicato		two required)
Primary Indicators (minimum o	f one is require	d; check all tha	at apply)				Surface Soil C	racks (B6)	
Surface Water	r (A1)		X Water-S	Stained Leaves	s (B9)			Drainage Pati	terns (B10)	
X High Water Ta	able (A2)		Aquatic	: Fauna (B13)				Moss Trim Li	nes (B16)	
X Saturation (A3	3)		Mari De	eposits (B13)				Dry-Season V	Vater Table (C2)	
Water Marks ((B1)		Hydrog	en Sulfide Odo	or (C1)			Crayfish Burr	ows (C8)	
Sediment Dep					es on Living Ro	ots (C3)		Saturation Vi	sible on Aerial (CS	9)
Drift Deposits	(B3)		Present	ce of Reduced	Iron (C4)			Stunted or St	ressed Plants (D1)
Algal Mat or C	Crust (B4)		Recent	Iron Reductio	n in Tilled Soils	s (C6)		Geomorphic	Position (D2)	
Iron Deposits	(B5)		Thin M	uck Surface (C	:7)			Shallow Aqui	tard (D3)	
Inundation Vis	sible on Aeria	al (B7)	Other (Explain in Ren	narks)			Microtopogra	aphic Relief (D4)	
Sparsely Vege	tated Conca	ve Surface (B8)						FAC-Neutral	Test (D5)	
Field Observations:										
			Der	oth (inches):						
Surface Water Prese										
Surface Water Prese			-	th (inches)	Surface	·	Wetlar	d Hydrology Present?)	VFC
Surface Water Prese Water Table Presen Saturation Present?	nt?	X	Dep	oth (inches): oth (inches):	Surface	.	Wetlar	id Hydrology Present?	-	YES
Water Table Presen Saturation Present?	nt? ?	X	Dep Dep	oth (inches):	Surface	ections), if a		d Hydrology Present?	-	YES
Water Table Presen Saturation Present? Describe Recorded	nt? ? Data (strea	X m gauge, monit	Dep Dep toring well, aer	oth (inches):	Surface	ections), if a		d Hydrology Present?	-	YES
Water Table Presen Saturation Present? Describe Recorded 0.89" in the	nt? ? Data (strea	X	Dep Dep toring well, aer	oth (inches):	Surface	ections), if a		d Hydrology Present?	-	YES
Water Table Presen Saturation Present? Describe Recorded	nt? ? Data (strea	X m gauge, monit	Dep Dep toring well, aer	oth (inches):	Surface	ections), if a		d Hydrology Present?	-	YES
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Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks:	nt? ? Data (strear e last 5 days	X m gauge, monit at Jay Peak (N	Dep Dep toring well, aer OAA)	oth (inches): rial photos, pi	Surface revious inspe		vailable:			YES
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description:	nt? ? Data (strea e last 5 days	X m gauge, monit at Jay Peak (N	Dep Dep toring well, aer OAA)	oth (inches): rial photos, pi	Surface revious inspe		vailable:			YES
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth	nt? ? Data (strea e last 5 days • (Describe t Matrix	X m gauge, monit a at Jay Peak (No	Dep Dep toring well, aer OAA) eded to docum	oth (inches): rial photos, pi nent the indic Red	Surface revious inspe cator or confir dox Features	rm the abse	vailable:	icators.)		
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color	nt? Pata (strea e last 5 days (Describe t Matrix (moist)	X m gauge, monit at Jay Peak (No	Dep Dep toring well, aer OAA)	oth (inches): rial photos, pi nent the indic Red	Surface revious inspe		vailable:	icators.)		YES Remarks
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 SY	Data (streamer last 5 days (Describe to Matrix (moist)	X m gauge, monit at Jay Peak (No	Dep Dep toring well, aer OAA) eded to docum	oth (inches): rial photos, pi nent the indic Red	Surface revious inspe cator or confir dox Features	rm the abse	vailable:	icators.) Texture #N/A		
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 SY	nt? Pata (strea e last 5 days (Describe t Matrix (moist)	X m gauge, monit at Jay Peak (No	Dep Dep toring well, aer OAA) eded to docum	oth (inches): rial photos, pi nent the indic Red	Surface revious inspe cator or confir dox Features	rm the abse	vailable:	icators.)		
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Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 5Y 4-12 2.51	Data (streamer last 5 days (Describe to Matrix (moist) (3/2	X m gauge, monit a at Jay Peak (No	Dep	nent the indic moist)	Surface revious inspe cator or confir dox Features	rm the abse	vailable:	Texture #N/A SAND		
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 5Y 4-12 2.51	Data (streamer last 5 days (Describe to Matrix (moist) (3/2 Y 5/2	X m gauge, monit a at Jay Peak (No	Dep	nent the indic moist)	Surface revious inspe cator or confir dox Features	rm the abse	vailable:	Texture #N/A SAND **Location: PL=Pore Lini**	ng, M=Matrix.	Remarks
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 5Y 4-12 2.51	Data (streamer last 5 days (Describe to Matrix (moist) (3/2 Y 5/2	X m gauge, monit a at Jay Peak (No	Dep	nent the indic moist)	Surface revious inspe cator or confir dox Features	rm the abse	vailable:	Texture #N/A SAND	ng, M=Matrix.	Remarks
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 5Y 4-12 2.5\	Data (streamer last 5 days (Describe to Matrix (moist) 73/2 75/2 A, D=Depletion pors:	X m gauge, monit a at Jay Peak (No	Dep	nent the indic Red moist)	Surface revious inspe cator or confir dox Features	Type ¹	vailable:	Texture #N/A SAND 2Location: PL=Pore Lini Indicators for Prob	ng, M=Matrix.	Remarks Soils ³ :
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 5Y 4-12 2.5\	Data (streamer last 5 days (Describe to Matrix (moist) (T3/2 Y5/2 Data (streamer) (Describe to Matrix (moist) (T3/2 T3/2 T5/2	X m gauge, monit a at Jay Peak (No	Dep	nent the indic Red moist)	surface revious inspe cator or confir dox Features %	Type ¹	vailable:	Texture #N/A SAND	ng, M=Matrix.	Remarks Soils ³ : RA 149B)
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 5Y 4-12 2.5\	Data (streamer last 5 days (Describe to Matrix (moist)	X m gauge, monit a at Jay Peak (No	Dep	pent the indic Red moist) Sand Grains. Polyvalue Be MLRA 149	surface revious inspe cator or confir dox Features %	Type ¹	vailable: ence of ind Loc ²	Texture #N/A SAND	ng, M=Matrix. Iematic Hydric S	Remarks Soils ³ : .RA 149B) 8. K. L. R.)
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 5Y 4-12 2.5\	Data (streame last 5 days (Describe t Matrix (moist) 3/2 Y 5/2 n, D=Depletion ors: on (A2) A3)	X m gauge, monit a at Jay Peak (No	Dep	pent the indic Rec moist) Sand Grains. Polyvalue Be MLRA 149l Thin Dark Su	surface revious inspe cator or confii dox Features %	Type ¹ 8) (LRR R,	vailable: ence of ind Loc ²	Texture #N/A SAND	ng, M=Matrix. lematic Hydric S 410) (LRR K, L, ML Redox (A16) (LRR	Remarks Soils ³ : .RA 149B) 8 K, L, R) (LRR K, L, R)
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 5Y 4-12 2.5\frac{1}{2} Type: C=Concentration Hydric Soil Indicato Histosol (A1) Histic Epipede Black Histic (A	nt? Pata (streame last 5 days (Describe to Matrix (moist) 3/2 Y 5/2 n, D=Depletion prs: on (A2) A3) Iffide (A4)	X m gauge, monit a at Jay Peak (No	Dep	pent the indic Red moist) Sand Grains. Polyvalue Be MLRA 149I Loamy Muck	surface revious inspe cator or confii dox Features % clow Surface (SI B) rface (S9) (LRR	Type ¹ 8) (LRR R,	vailable: ence of ind Loc ²	Texture #N/A SAND 2Location: PL=Pore Lini Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface	ng, M=Matrix. lematic Hydric S 410) (LRR K, L, ML Redox (A16) (LRR Peat or Peat (S3)	Remarks Soils ³ : .RA 149B) 8. K, L, R) (LRR K, L, R)
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 5Y 4-12 2.5\(^1\) \[^1\text{Type: C=Concentration}\] Hydric Soil Indicato Histosol (A1) Histic Epipede Black Histic (A Hydrogen Sul	Data (streame last 5 days last 6 days last	X m gauge, monit a at Jay Peak (No o the depth nee % 100 100 , RM=Reduced Mat	Dep	pent the indic Red moist) Sand Grains. Polyvalue Be MLRA 149i Thin Dark Su Loamy Muck Loamy Gleye	surface revious inspe revious inspe reator or confii dox Features %	Type ¹ 8) (LRR R,	vailable: ence of ind Loc ²	Texture #N/A SAND 2Location: PL=Pore Lini Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be	ng, M=Matrix. lematic Hydric S A10) (LRR K, L, ML Redox (A16) (LRR Peat or Peat (S3) (S9) (LRR K, L, M)	Remarks Soils ³ : .RA 149B) 1. K, L, R) (LRR K, L, R)
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 4-12 2.51	Data (streame last 5 days I (Describe to Matrix (moist) 3/2 Y 5/2 In, D=Depletion Drs: on (A2) A3) Iffide (A4) Vers (A5) ow Dark Surf	X m gauge, monit a at Jay Peak (No o the depth nee % 100 100 , RM=Reduced Mat	Dep	pent the indices moist) Polyvalue Be MLRA 149 Loamy Mck Loamy Gleye Depleted Ma	surface revious inspe revious inspe reator or confii dox Features %	Type ¹ 8) (LRR R,	vailable: ence of ind Loc ²	Texture #N/A SAND 2Location: PL=Pore Lini Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su	ng, M=Matrix. lematic Hydric S A10) (LRR K, L, ML Redox (A16) (LRR Peat or Peat (S3) (S9) (LRR K, L, M) low Surface (S8) (rface (S9) (LRR K,	Remarks Soils ³ : .RA 149B) 1.K, L, R) (LRR K, L, R)
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 5Y 4-12 2.51	Data (streamed last 5 days last 6 days las	X m gauge, monit at Jay Peak (No to the depth nee % 100 100 , RM=Reduced Materials	Dep	pent the indic Red moist) Sand Grains. Polyvalue Be MLRA 149 Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma Redox Dark S	surface revious inspe cator or conflictox Features % clow Surface (SI B) rface (S9) (LRR ry Mineral (F1) rd Matrix (F2) atrix (F3) Surface (F6)	Type ¹ Type ¹ 8) (LRR R,	vailable: ence of ind Loc ²	Texture #N/A SAND **Indicators for Prob 2 cm Muck (A Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su	ng, M=Matrix. lematic Hydric S A10) (LRR K, L, ML Redox (A16) (LRR Peat or Peat (S3) (S9) (LRR K, L, M) low Surface (S8) (rface (S9) (LRR K, lese Masses (F12)	Remarks Soils ³ : .RA 149B) ! K, L, R) ! (LRR K, L, R) LRR K, L) !) (LRR K, L, R)
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 5Y 4-12 2.5\(^1\) \[\begin{array}{cccccccccccccccccccccccccccccccccccc	Data (streamed last 5 days last 6 days las	X m gauge, monit at Jay Peak (No to the depth nee % 100 100 , RM=Reduced Materials	Dep	pent the indic Red moist) Sand Grains. Polyvalue Be MLRA 149 Thin Dark Su Loamy Gleye Loamy Gleye Depleted Ma Redox Dark S Depleted Dal	surface revious inspe cator or confir dox Features % clow Surface (Si B) rface (S9) (LRR ry Mineral (F1) rd Matrix (F2) atrix (F3) Surface (F6) rk Surface (F7)	Type ¹ Type ¹ 8) (LRR R,	vailable: ence of ind Loc ²	icators.) Texture #N/A SAND **Location: PL=Pore Lini Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangar Piedmont Flo	ng, M=Matrix. lematic Hydric S 410) (LRR K, L, ML Peat or Peat (S3) (S9) (LRR K, L, M) low Surface (S8) (rface (S9) (LRR K, L, M) podplain Soils (F12)	Remarks Soils ³ : .RA 149B) t K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R)
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 5Y 4-12 2.5\(^1\)	Data (streamed last 5 days I (Describe to Matrix (moist) I (Mois	X m gauge, monit at Jay Peak (No to the depth nee % 100 100 , RM=Reduced Materials	Dep	pent the indic Red moist) Sand Grains. Polyvalue Be MLRA 149 Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma Redox Dark S	surface revious inspe cator or confir dox Features % clow Surface (Si B) rface (S9) (LRR ry Mineral (F1) rd Matrix (F2) atrix (F3) Surface (F6) rk Surface (F7)	Type ¹ Type ¹ 8) (LRR R,	vailable: ence of ind Loc ²	icators.) Texture #N/A SAND **Location: PL=Pore Lini Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangar Piedmont Flo	ng, M=Matrix. lematic Hydric S A10) (LRR K, L, M, Redox (A16) (LRR Peat or Peat (S3) (S9) (LRR K, L, M) low Surface (S8) (rface (S9) (LRR K, nese Masses (F12) codplain Soils (F13) c (TA6) (MLRA 144	Remarks Soils ³ : .RA 149B) t K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R)
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 5Y 4-12 2.5\	Data (streame last 5 days I (Describe to Matrix (moist) I (Matrix (moist) I (Moist)	X m gauge, monit at Jay Peak (No to the depth nee % 100 100 , RM=Reduced Materials	Dep	ment the indic Red moist) Sand Grains. Polyvalue Be MLRA 149 Loamy Muck Loamy Muck Loamy Muck Loamy Mick Depleted Ma Redox Dark S Depleted Dar Redox Depre	surface revious inspe cator or confit dox Features % clow Surface (Si By frace (S9) (LRR ry Minerali (F1) dd Matrix (F2) dtrix (F3) Surface (F6) rk Surface (F7) essions (F8)	Type ¹ 8) (LRR R,	vailable: ence of ind Loc²	Texture #N/A SAND **Indication: PL=Pore Lini Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangar Piedmont Flo Mesic Spodio Red Parent N	ng, M=Matrix. lematic Hydric S A10) (LRR K, L, ML Redox (A16) (LRR Peat or Peat (S3) (S9) (LRR K, L, M) low Surface (S8) (rface (S9) (LRR K, lese Masses (F12) codplain Soils (F19) c (TA6) (MLRA 144 Material (F21)	Remarks Soils ³ : .RA 149B) t. K. L., R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) 1A, 145, 149B)
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 5Y 4-12 2.5\	Data (streame last 5 days (Describe to Matrix (moist) (Ta) X m gauge, monit at Jay Peak (No to the depth nec % 100 100 , RM=Reduced Mat	Dep	ment the indic Red moist) Sand Grains. Polyvalue Be MLRA 149! Thin Dark Sul Loamy Muck Loamy Muck Depleted Ma Redox Dark S Depleted Dai Redox Depre	surface revious inspe cator or confir dox Features % clow Surface (Si B) rface (S9) (LRR ry Mineral (F1) dix (F3) Surface (F6) rk Surface (F7) essions (F8) dicators of hydi	Type ¹ 8) (LRR R, R, MLRA 14 (LRR K, L)	vailable: ence of ind Loc² 9B)	Texture #N/A SAND 2-Location: PL=Pore Lini Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangar Piedmont Flo Mesic Spodio Red Parent N Very Shallow	ng, M=Matrix. Iematic Hydric S A10) (LRR K, L, MI Redox (A16) (LRR K, L, M) (S9) (LRR K, L, M) (orface (S9) (LRR K, Lese Masses (F12) codplain Soils (F19) (c) (MLRA 144 Material (F21)	Remarks Soils ³ : .RA 149B) t. K. L., R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) 1A, 145, 149B)	
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 5Y 4-12 2.5\	Data (streame last 5 days (Describe to Matrix (moist) (Ta) X m gauge, monit at Jay Peak (No to the depth nec % 100 100 , RM=Reduced Mat	Dep	ment the indic Red moist) Sand Grains. Polyvalue Be MLRA 149! Thin Dark Sul Loamy Muck Loamy Muck Depleted Ma Redox Dark S Depleted Dai Redox Depre	surface revious inspe cator or confir dox Features % clow Surface (Si B) rface (S9) (LRR ryd Maeria (F1) surface (F6) rk Surface (F7) essions (F8) dicators of hydr and hydrology	Type ¹ 8) (LRR R, R, MLRA 14 (LRR K, L)	ence of ind Loc ² 9B)	Texture #N/A SAND 2-Location: PL=Pore Lini Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangar Piedmont Flo Mesic Spodio Red Parent N Very Shallow	ng, M=Matrix. lematic Hydric S A10) (LRR K, L, ML Redox (A16) (LRR Peat or Peat (S3) (S9) (LRR K, L, M) low Surface (S8) (rface (S9) (LRR K, lese Masses (F12) codplain Soils (F19) c (TA6) (MLRA 144 Material (F21)	Remarks Soils ³ : .RA 149B) t. K. L., R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) 1A, 145, 149B)	
Water Table Presen Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 5Y 4-12 2.5\	nt? Data (stream le last 5 days (Describe t	X m gauge, monit a at Jay Peak (No to the depth nee % 100 100 , RM=Reduced Mat	Dep	ment the indic Red moist) Sand Grains. Polyvalue Be MLRA 149! Thin Dark Sul Loamy Muck Loamy Muck Depleted Ma Redox Dark S Depleted Dai Redox Depre	surface revious inspe cator or confir dox Features % clow Surface (Si B) rface (S9) (LRR ryd Maeria (F1) surface (F6) rk Surface (F7) essions (F8) dicators of hydr and hydrology	Type ¹ 8) (LRR R, R, MLRA 14 (LRR K, L)	ence of ind Loc ² 9B)	Texture #N/A SAND 2-Location: PL=Pore Lini Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangar Piedmont Flo Mesic Spodio Red Parent N Very Shallow	ng, M=Matrix. Iematic Hydric S A10) (LRR K, L, MI Redox (A16) (LRR K, L, M) (S9) (LRR K, L, M) (orface (S9) (LRR K, Lese Masses (F12) codplain Soils (F19) (c) (MLRA 144 Material (F21)	Remarks Soils ³ : .RA 149B) t. K. L., R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) 1A, 145, 149B)
Water Table Present Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 5Y 4-12 2.5\(\) Type: C=Concentration Hydric Soil Indicato Histosol (A1) Histic Epipede Belor Hydrogen Sul Stratified Layl Depleted Belor Thick Dark Su Sandy Mucky Sandy Mucky Sandy Gleyed Sandy Redox Stripped Mat Dark Surface	Data (streame last 5 days (Describe to Matrix (moist) (Matrix (moist) (M	X m gauge, monit a at Jay Peak (No to the depth nee % 100 100 , RM=Reduced Mat	Dep	ment the indic Red moist) Sand Grains. Polyvalue Be MLRA 149! Thin Dark Sul Loamy Muck Loamy Muck Depleted Ma Redox Dark S Depleted Dai Redox Depre	surface revious inspe cator or confir dox Features % clow Surface (Si B) rface (S9) (LRR ryd Maeria (F1) surface (F6) rk Surface (F7) essions (F8) dicators of hydr and hydrology	Type ¹ 8) (LRR R, R, MLRA 14 (LRR K, L)	ence of ind Loc ² 9B)	Texture #N/A SAND *Location: PL=Pore Lini Indicators for Prob 2 cm Mucky Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangar Piedmont Flo Mesic Spodio Red Parent N Very Shallow Other (Expla	ng, M=Matrix. Iematic Hydric S A10) (LRR K, L, MI Redox (A16) (LRR K, L, M) (S9) (LRR K, L, M) (orface (S9) (LRR K, Lese Masses (F12) codplain Soils (F19) (c) (MLRA 144 Material (F21)	Remarks Soils ³ : .RA 149B) t. K. L., R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) 1A, 145, 149B)
Water Table Present Saturation Present? Describe Recorded 0.89" in the Remarks: SOIL Profile Description: Depth (in) Color 0-4 5Y 4-12 2.5\(\) Type: C=Concentration Hydric Soil Indicato Histosol (A1) Histic Epipede Bele Hydrogen Sul Stratified Laye Depleted Bele Thick Dark Su Sandy Mucky Sandy Gleyed Sandy Redox Stripped Mat Dark Surface Restrictive Layer (if	Data (streame last 5 days (Describe t Matrix (moist) 3/2 Y 5/2 n, D=Depletion prs: on (A2) A3) Iffide (A4) pers (A5) ow Dark Surf auface (A12) y Mineral (S1) d Matrix (S4) (S5) trix (S6) (S7) (LRR R, I	X m gauge, monit a at Jay Peak (No to the depth nee % 100 100 , RM=Reduced Mat	Dep	ment the indic Red moist) Sand Grains. Polyvalue Be MLRA 149! Thin Dark Sul Loamy Muck Loamy Muck Depleted Ma Redox Dark S Depleted Dai Redox Depre	surface revious inspe cator or confir dox Features % clow Surface (Si B) rface (S9) (LRR ryd Maeria (F1) surface (F6) rk Surface (F7) essions (F8) dicators of hydr and hydrology	Type ¹ 8) (LRR R, R, MLRA 14 (LRR K, L)	ence of ind Loc ² 9B)	Texture #N/A SAND *Location: PL=Pore Lini Indicators for Prob 2 cm Mucky Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangar Piedmont Flo Mesic Spodio Red Parent N Very Shallow Other (Expla	ng, M=Matrix. lematic Hydric S A10) (LRR K, L, ML Redox (A16) (LRR Peat or Peat (S3) (S9) (LRR K, L, M) low Surface (S9) (LRR K, riece (S9) (LRR K, riece (S9) (MRA 144 Material (F21) Dark Surface (TF in in Remarks)	Remarks Soils ³ : RA 149B) E. K. L., R) [LRR K. L., R) LRR K., L, R) J. (LRR K., L, R) 3) (MLRA 149B) 14A, 145, 149B)

Sampling Point: **H11-Create**

	Absolute	Dom.	Indicator	
Tree Stratum (Plot size:)	% Cover	Sp?	Status	Dominance Test Worksheet:
1		 -		# Dominants OBL, FACW, FAC: 8 (A)
า				(',
3.				# Dominants across all strata: 9 (B)
				# DOMINIANTS ACTOSS AN STRATA.
4				
5		 .		% Dominants OBL, FACW, FAC: 89% (A/B)
6				
7				Prevalence Index Worksheet:
		= Total	Cover	Total % Cover of: Multiply By:
Sapling Stratum (Plot size:)		'		OBL 68 x 1 = 68
				FACW 66 x 2 = 132
2				FAC 15 x3 = 45
				
3.				FACU 15 x 4 = 60
4.				UPL x 5 =
5				Sum: <u>164</u> (A) <u>305</u> (B)
6				
7.				Prevalence Index = B/A = 1.86
		= Total	Cover	Hydrophytic Vegetation Indicators:
Cl. I Cl. I (District 1FIRAD		TOTA	COVE	
Shrub Stratum (Plot size: 15'RAD)	4-		£ 4 € 11 1	X Dominance Test is > 50%
1. Cornus alba	15	X	FACW	X Prevalence Index is <= 3.0
2				Problematic Hydrophytic Vegetation ¹ (explain)
3.				Rapid Test for Hydrophytic Vegetation
4.				Morphological Adaptations
ė.				
				¹ Indicators of hydric soil and wetland hydrology must be present, unless
				disturbed or problematic.
7.				Definitions of Vegetation Strata:
	15	= Total	Cover	
Herb Stratum (Plot size: 5' RAD)				Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or more
1. Carex vulpinoidea	38	Х	OBL	in height and 3in (7.6cm) or larger in diameter at breast height (DBH).
2. Verbena hastata	15	X	FACW	
3. Eupatorium perfoliatum	15	x	FACW	
4. Juncus effusus	15	X	OBL	Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or
		- X	FAC	more in height and less than 3in (7.6cm) DBH.
				, , , , , , , , , , , , , , , , , , , ,
6. Mimulus ringens	15	_ <u>X</u>	OBL	!
7. Carex scoparia	15	X	FACW	
8. Lotus corniculatus	15	X	FACU	Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to
9. Symphyotrichum novae-angliae	3		FACW	6m) in height.
10. Solidago gigantea			FACW	
11				Herb - All herbaceous (non-woody) plants, including herbaceous vines,
				regardless of size. Includes woody plants, except woody vines, less than
12.		- —		approximately 3ft (1m) in height.
	149	= Total	Cover	
Woody Vines (Plot size:)				
1				_[
2.				Woody vine - All woody vines, regardless of height.
2				1
1				Hydrophytic
5.				Vegetation
J				
		= Tota	Cover	Present? YES
Remarks: (If observed, list morphological adaptations below).				
1				

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

roject Site: يار	PR Golf Course Wetland	Mitigation	City/County:	Jay/Orleans			Samp. Date: 8/	
	ay Peak Resort			State: VERN		Sampling Point		H11-WT6
T	P. Werts-Kallfelz	<u>-</u>		n, Township, Ra				
ndform (hillslope, terra				(concave, convex, i		oncave	Slope (%):	
bregion (LRR or M	· —		Lat: 44°56'37.81	5"N 1	Long:	2°30'40.383"W	_ Datum:	NAD 83
	Cabot ic conditions on the site 1	unical for this time o	of year?	YES (I	fno evn	lain in Remarks.)	_ NWI Class:	PEM
	or Hydrology significantly	• •	NO	165 (1	riio, exp	•	ircumstances?	YES
	or Hydrology naturally pro		NO				explain any answe	
-		•		· · · · · · · · · · · · · · · · · · ·			. ,	,
UMMARY OF FI	NDINGS - Attach si	te map showing	sample point l	ocations, tra	ansects	s, important fe	atures, etc.	
drophytic Vegetatio	on Present?	YES			-			
ydric Soil Present?		YES		Is	This Sa	imple Area Withi	n a Wetland?	YES
etland Hydrology Pr	resent?	YES						
emarks:								
YDROLOGY								
etland Hydrology In						Secondary Indicate	•	wo required)
	inimum of one is require		''			Surface Soil (, ,	
Surface Water (A	•	X Water-Stained	• •			Drainage Pat		
X High Water Tabl	le (A2)	Aquatic Fauna				Moss Trim Li		
X Saturation (A3)	1)	Marl Deposits					Water Table (C2)	
Water Marks (B3 Sediment Depos	•		fide Odor (C1) ospheres on Living Ro	ote (C2)		Crayfish Buri	ows (C8) isible on Aerial (C9)	
Drift Deposits (B			educed Iron (C4)	ots (C3)			tressed Plants (D1)	
Algai Mat or Cru	•		eduction in Tilled Soils	s (C6)	•		Position (D2)	
Iron Deposits (B		Thin Muck Su		(20)		Shallow Aqu		
	ole on Aerial (B7)	Other (Explain			•		aphic Relief (D4)	
Sparsely Vegeta	ited Concave Surface (B8)					FAC-Neutral	Test (D5)	
ield Observations:								
Surface Water Presen	nt?	Depth (in	ches):					
	· · · · · · · · · · · · · · · · · · ·	Depth (inc Depth (inc	·		Vetland	Hydrology Present	?	YES
Nater Table Present? Saturation Present?	<u>х</u>	Depth (in Depth (in	ches): 10 ches): 10	·		Hydrology Present	?	YES
Water Table Present? iaturation Present? Describe Recorded Da	X X ata (stream gauge, monit	Depth (inc Depth (inc oring well, aerial pho	ches): 10 ches): 10	·		Hydrology Present	?	YES
Water Table Present? laturation Present? Describe Recorded Da 0.89" in the la	<u>х</u>	Depth (inc Depth (inc oring well, aerial pho	ches): 10 ches): 10	·		Hydrology Present	?	YES
Water Table Present? laturation Present? Describe Recorded Da 0.89" in the la	X X ata (stream gauge, monit	Depth (inc Depth (inc oring well, aerial pho	ches): 10 ches): 10	·		Hydrology Present		YES
Vater Table Present? aturation Present? Describe Recorded Da 0.89" in the la	X X ata (stream gauge, monit	Depth (inc Depth (inc oring well, aerial pho	ches): 10 ches): 10	·		Hydrology Present	?	YES
Water Table Present? laturation Present? Describe Recorded Da 0.89" in the la	X X ata (stream gauge, monit	Depth (inc Depth (inc oring well, aerial pho	ches): 10 ches): 10	·		Hydrology Present	?	YES
Vater Table Present? aturation Present? Describe Recorded Da 0.89" in the la demarks:	X X ata (stream gauge, monit	Depth (inc Depth (inc oring well, aerial pho	ches): 10 ches): 10	·		Hydrology Present	?	YES
Vater Table Present? aturation Present? escribe Recorded Da 0.89" in the la emarks:	X X ata (stream gauge, monit	Depth (inc Depth (inc oring well, aerial pho	ches): 10 ches): 10	·		Hydrology Present	?	YES
Vater Table Present? aturation Present? lescribe Recorded Da	X X ata (stream gauge, monit ast 5 days at Jay Peak (N	Depth (in Depth (in coring well, aerial pho	ches): 10 ches): 10 otos, previous inspe	ctions), if availa	ble:		?	YES
Vater Table Present? aturation Present? lescribe Recorded Da	X X X ata (stream gauge, monit ast 5 days at Jay Peak (N Describe to the depth nec	Depth (in Depth (in coring well, aerial pho	ches): 10 ches): 10 otos, previous inspe	ctions), if availa	of indica	itors.)	-	YES
Vater Table Present? aturation Present? lescribe Recorded Da	X X ata (stream gauge, monit ast 5 days at Jay Peak (N Describe to the depth nec Matrix noist) %	Depth (in Depth (in coring well, aerial pho	ches): 10 ches): 10 otos, previous inspe	ctions), if availa	ble:	itors.)	-	YES Remarks
Vater Table Present? aturation Present? escribe Recorded Da 0.89" in the la emarks: GOIL rrofile Description: (E Depth (in) Color (m 0-10 2.57 4	X X X ata (stream gauge, monit ast 5 days at Jay Peak (N Describe to the depth nec Matrix noist) % 4/2 100	Depth (in Depth (in Coring well, aerial pho OAA) eded to document th	ches): 10 ches): 10 otos, previous inspe	ctions), if availa	of indica	itors.) Texture SANDY LOAM	-	
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Vater Table Present? aturation Present? lescribe Recorded Da 0.89" in the la lemarks: GOIL brofile Description: (E) lepth (in) Color (m 0-10 2.57 4 0-15+ 57 4)	X X X ata (stream gauge, monit ast 5 days at Jay Peak (N Describe to the depth nec Matrix noist) % 4/2 100	Depth (incoring well, aerial photon of the coring well, are correctly at the coring well aerial photon of the coring well, are correctly aerial photon of the coring well aerial photon of the coring well are correctly aerial photon of the correctly aerial photon	ches): 10 ches): 10 otos, previous inspe ne indicator or confir Redox Features % 3	ctions), if availa	of indica	itors.) Texture SANDY LOAM		
Vater Table Present? aturation Present? lescribe Recorded Da	X X X ata (stream gauge, monit ast 5 days at Jay Peak (N Describe to the depth new Matrix noist) 4/2 100 /1 97 DeDepletion, RM=Reduced Ma	Depth (incoring well, aerial photon of the coring well, are correctly at the coring well aerial photon of the coring well, are correctly aerial photon of the coring well aerial photon of the coring well are correctly aerial photon of the correctly aerial photon	ches): 10 ches): 10 otos, previous inspe ne indicator or confir Redox Features % 3	ctions), if availa	of indica	Texture SANDY LOAM SANDY LOAM	ing, M=Matrix.	Remarks
Vater Table Present? aturation Present? describe Recorded Da 0.89" in the la demarks: SOIL Profile Description: (E) Depth (in) Color (m) 0-10 2.5Y 4 0-15+ 5Y 4 Type: C=Concentration, D dydric Soil Indicators.	X X X ata (stream gauge, monit ast 5 days at Jay Peak (N Describe to the depth new Matrix noist) 4/2 100 /1 97 DeDepletion, RM=Reduced Ma	Depth (in Depth	ches): 10 ches): 10 otos, previous inspe	rm the absence	of indica	Texture SANDY LOAM SANDY LOAM **Location: PL=Pore Lin Indicators for Prob	ing, M=Matrix. olematic Hydric So	Remarks
Vater Table Present? aturation Present? describe Recorded Da 0.89" in the la demarks: GOIL Profile Description: (E depth (in) Color (m 0-10 2.5Y 4 0-15+ 5Y 4 Type: C=Concentration, D dydric Soil Indicators: Histosol (A1)	Example 2 X X X X X X X X X X X X X X X X X X	Depth (inc. Depth	ches): 10 ches): 10 otos, previous inspe ne indicator or confir Redox Features % 3 ains.	rm the absence	of indica	Texture SANDY LOAM SANDY LOAM 2 Location: PL=Pore Lin Indicators for Prob	ing, M=Matrix. olematic Hydric So A10} {LRR K, L, MLR	Remarks sils ³ : A 149B)
Jater Table Present? aturation Present? escribe Recorded Da 0.89" in the la emarks: GOIL rofile Description: (E lepth (in) Color (m 0-10 2.5Y 4) Type: C=Concentration, D lydric Soil Indicators: Histosol (A1) Histic Epipedon	X X X ata (stream gauge, monit ast 5 days at Jay Peak (N Describe to the depth new Matrix noist) % 4/2 100 /1 97 DeDepletion, RM=Reduced Matrix Describe to the depth new Matrix	Depth (inc. Depth	ches): 10 ches): 10 otos, previous inspe me indicator or confir Redox Features % 3 ains. alue Below Surface (SERA 149B)	rm the absence Type¹ Lo	of indica	Texture SANDY LOAM SANDY LOAM 2Location: PL=Pore Lin Indicators for Prob 2 cm Muck (Coast Prairie	ing, M=Matrix. Dlematic Hydric So A10) (LRR K, L, MLR Redox (A16) (LRR K	Remarks sils ³ : A 149B) C, L, R)
Vater Table Present? aturation Present? lescribe Recorded Da	Example 1	Depth (inc. Depth	ches): 10 ches): 10 ches): 10 otos, previous inspe ine indicator or confir Redox Features % 3 ains. alue Below Surface (SP) CARA 149B) Dark Surface (S9) (LRR	ctions), if availa rm the absence Type¹ Lo C	of indica	Texture SANDY LOAM SANDY LOAM 2Location: PL=Pore Lin Indicators for Prot 2 cm Muck (Coast Prairie 5 cm Mucky	ing, M=Matrix. Dlematic Hydric So A10) (LRR K, L, MLR Redox (A16) (LRR k Peat or Peat (S3) (L	Remarks sils ³ : A 149B) C, L, R)
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Vater Table Present? aturation Present? lescribe Recorded Da	Example 2 X X X X X X X X X X X X X X X X X X	Depth (incoring well, aerial photographic (incoring well, aerial p	ches): 10 ches):	ctions), if availa rm the absence Type¹ Lo C	of indica	Texture SANDY LOAM SANDY LOAM *Location: PL=Pore Lin Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangai Piedmont Fl	ing, M=Matrix. Dlematic Hydric So A10) (LRR K, L, MLR Peat or Peat (S3) (L (S9) (LRR K, L, M) Plow Surface (S8) (Li pricace (S9) (LRR K, L) prese Masses (F12) (loodplain Soils (F19)	Remarks bils ³ : A 149B) (, L, R) RR K, L, R) LRR K, L, R) (MLRA 149B)
Vater Table Present? Jaturation Present? Describe Recorded Da 0.89" in the la Remarks: SOIL Profile Description: (E Depth (in) Color (m 0-10 2.59 4 0-15+ 59 4) Type: C=Concentration, D Hydric Soil Indicators: Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky M	Example 2 X X X X X X X X X X X X X X X X X X	Depth (incoring well, aerial photographic (incoring well, aerial p	ches): 10 ches):	ctions), if availa rm the absence Type¹ Lo C	of indica	Texture SANDY LOAM SANDY LOAM *Location: PL=Pore Lin Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangai Piedmont Fl Mesic Spodi	ing, M=Matrix. Dlematic Hydric So A10) (LRR K, L, MLR Pedox (A16) (LRR K Peat or Peat (S3) (L (S9) (LRR K, L, M) Plow Surface (S8) (LI Irface (S9) (LRR K, L) Inese Masses (F12) (I	Remarks bils ³ : A 149B) (, L, R) RR K, L, R) LRR K, L, R) (MLRA 149B)
Vater Table Present? Saturation Present? Describe Recorded Da 0.89" in the la Remarks: SOIL Profile Description: (E Depth (in) Color (m 0-10 2.5Y 4 0-15+ 5Y 4 Type: C=Concentration, D Hydric Soil Indicators: Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid Stratified Layers Depleted Below Thick Dark Surfa Sandy Mucky M Sandy Gleyed N	Example 2 X X X X X X X X X X X X X X X X X X	Depth (incoring well, aerial photographic (incoring well, aerial p	ches): 10 ches):	ctions), if availa rm the absence Type¹ Lo C	of indica	Texture SANDY LOAM SANDY LOAM Location: PL=Pore Lin Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangal Piedmont Fl Mesic Spodi Red Parent I	ing, M=Matrix. blematic Hydric So A10) (LRR K, L, MLR Redox (A16) (LRR K) Peat or Peat (S3) (LE (S9) (LRR K, L, M) Pelow Surface (S8) (LF Inface (S9) (LRR K, L) Dese Masses (F12) (I Dodplain Soils (F19) C (TA6) (MLRA 144A	Remarks bils ³ : A 149B) (, L, R) RR K, L, R) LRR K, L, R) (MLRA 149B) (, MLRA 149B)
Vater Table Present? Saturation Present? Describe Recorded Da 0.89" in the la Remarks: SOIL Profile Description: (E Depth (in) Color (m 0-10 2.5Y 4 0-15+ 5Y 4) Type: C=Concentration, D Hydric Soil Indicators: Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfidi Stratified Layers Depleted Below Thick Dark Surfa; Sandy Mucky M Sandy Gleyed M Sandy Gleyed M Sandy Redox (S) Stripped Matrix	Example 2 X X X X X X X X X X X X X X X X X X	Depth (incoring well, aerial photogram) eded to document the Color (moist) 10YR 5/6 trix, MS=Masked Sand Gr Polyv ML Thin Loam Loam X Deple Redo: Deple	ches): 10 ches):	ctions), if availa rm the absence Type¹ Lo C	of indica	Texture SANDY LOAM SANDY LOAM SANDY LOAM Coast Prairie S cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangal Piedmont Fle Mesic Spodi Red Parent I Very Shallow	ing, M=Matrix. Dlematic Hydric So A10) (LRR K, L, MLR Redox (A16) (LRR K) Peat or Peat (S3) (LE (S9) (LRR K, L, M) Pelow Surface (S8) (LF) Irface (S9) (LRR K, L) Dese Masses (F12) (ID Dodplain Soils (F19) C (TA6) (MLRA 144A Material (F21)	Remarks bils ³ : A 149B) (, L, R) RR K, L, R) LRR K, L, R) (MLRA 149B) (, MLRA 149B)
Water Table Present? Saturation Present? Describe Recorded Da 0.89" in the la Remarks: SOIL Profile Description: (E Depth (in) Color (m 0-10 2.5Y 4 10-15+ SY 4/ Type: C=Concentration, D Hydric Soil Indicators: Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid Stratified Layers Depleted Below Thick Dark Surfe Sandy Mucky M Sandy Gleyed M Sandy Gleyed M Sandy Redox (S) Stripped Matrix	Example 2 X X X X X X X X X X X X X X X X X X	Depth (incoring well, aerial photogram) eded to document the Color (moist) 10YR 5/6 trix, MS=Masked Sand Gr Polyv ML Thin Loam Loam X Deple Redo: Deple	ches): 10 ches):	ctions), if availa rm the absence Type¹ Lo C	of indica	Texture SANDY LOAM SANDY LOAM SANDY LOAM Coast Prairie S cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangal Piedmont Fle Mesic Spodi Red Parent I Very Shallow	ing, M=Matrix. Dlematic Hydric So A10) (LRR K, L, MLR Redox (A16) (LRR K, Peat or Peat (S3) (Le (S9) (LRR K, L, M) elow Surface (S8) (LRR K, L) inface (S9) (LRR K, L) inese Masses (F12) (it podplain Soils (F19) c (TA6) (MLRA 144A Material (F21) v Dark Surface (TF12	Remarks bils ³ : A 149B) (, L, R) RR K, L, R) LRR K, L, R) (MLRA 149B) (, MLRA 149B)
Nater Table Present? Saturation Present? Describe Recorded Da 0.89" in the la Remarks: SOIL Profile Description: (C Depth (in) Color (m 0-10 2.5Y 4) Type: C=Concentration, D Hydric Soil Indicators: Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid Stratified Layers Depleted Below Thick Dark Surfac Sandy Mucky M Sandy Gleyed M Sandy Gleyed M Sandy Redox (S! Stripped Matrix Dark Surface (S: Restrictive Layer (if o)	Example 2 X X X X X X X X X X X X X X X X X X	Depth (incoring well, aerial photogram) eded to document the Color (moist) 10YR 5/6 trix, MS=Masked Sand Gr Polyv ML Thin Loam Loam X Deple Redo: Deple	ches): 10 ches):	ctions), if availa rm the absence Type¹ Lo C	of indica	Texture SANDY LOAM SANDY LOAM **Location: PL=Pore Lin Indicators for Protect 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangai Piedmont Fle Mesic Spodi Red Parent i Very Shallow Other (Explain	ing, M=Matrix. Dlematic Hydric So A10) (LRR K, L, MLR Redox (A16) (LRR K, E) Peat or Peat (S3) (LE (S9) (LRR K, L) Perface (S9) (LRR K, L) Frace (S9) (LR	Remarks bils ³ : A 149B) (, L, R) RR K, L, R) LRR K, L, R) (MLRA 149B) (, 145, 149B)
Vater Table Present? Paturation Present? Pescribe Recorded Da 0.89" in the la Remarks: SOIL Profile Description: (E Depth (in) Color (m 0-10 2.5Y 4) Type: C=Concentration, D Hydric Soil Indicators: Histosol (A1) Histic Epipedon Black Histic (A3) Hydrogen Sulfid Stratified Layers Depleted Below Thick Dark Surfac Sandy Mucky M Sandy Gleyed M Sandy Gleyed M Sandy Redox (S: Stripped Matrix Dark Surface (S:	Example 2 X X X X X X X X X X X X X X X X X X	Depth (incoring well, aerial photogram) eded to document the Color (moist) 10YR 5/6 trix, MS=Masked Sand Gr Polyv ML Thin Loam Loam X Deple Redo: Deple	ches): 10 ches):	ctions), if availa rm the absence Type¹ Lo C	of indica	Texture SANDY LOAM SANDY LOAM **Location: PL=Pore Lin Indicators for Protect 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangai Piedmont Fle Mesic Spodi Red Parent i Very Shallow Other (Explain	ing, M=Matrix. Dlematic Hydric So A10) (LRR K, L, MLR Redox (A16) (LRR K, Peat or Peat (S3) (Le (S9) (LRR K, L, M) elow Surface (S8) (LRR K, L) inface (S9) (LRR K, L) inese Masses (F12) (it podplain Soils (F19) c (TA6) (MLRA 144A Material (F21) v Dark Surface (TF12	Remarks bils ³ : A 149B) (, L, R) RR K, L, R) LRR K, L, R) (MLRA 149B) (, 145, 149B)

Sampling Point:

H11-WT6

	Absolute	Dom.	Indicator	
Tree Stratum (Plot size:)	% Cover	Sp?	Status	Dominance Test Worksheet:
1.				# Dominants OBL, FACW, FAC: 8 (A)
2				
				# Dominants across all strata: 9 (B)
				# Dominiants across an strata.
4.				200 (100)
5				% Dominants OBL, FACW, FAC: 89% (A/B)
6.				
7				Prevalence Index Worksheet:
		= Total	Cover	Total % Cover of: Multiply By:
Sapling Stratum (Plot size:)				OBL 59 x 1 = 59
1.				FACW 66 x 2 = 132
2.				FAC 18 x3 = 54
				FACU 38 x 4 = 152
1				UPL x5 =
5.				Sum:(A)(B)
6.				
7	_			Prevalence Index = B/A = 2.19
		= Tota	Cover	Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size: 15'RAD)				X Dominance Test is > 50%
1. Spiraea tomentosa	3	X	FACW	X Prevalence Index is <= 3.0
2.				Problematic Hydrophytic Vegetation ¹ (explain)
		. —		Rapid Test for Hydrophytic Vegetation
		. ——		
4.				Morphological Adaptations
5.				¹ Indicators of hydric soil and wetland hydrology must be present, unless
6.				disturbed or problematic.
7				Definitions of Vegetation Strata:
	3	= Tota	l Cover	
Herb Stratum (Plot size: 5' RAD)				Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or
1. Carex comosa	38	Х	OBL	more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).
2. Poa compressa	38	x	FACU	
3. Eupatorium perfoliatum	15	X	FACW	
		- - X	FACW	Sanling - Woody plants evoluting woody vines approximately 20th (5m) as
4. Solidago gigantea				Sapling - Woody plants, excluding woody vines, approximately 20ft (6m) or more in height and less than 3in (7.6cm) DBH.
5. Carex scoparia	15	X	FACW	more in reight and less than sin (7.0em) port.
6. Solidago rugosa	15	_ <u> </u>	FAC	
7. Carex vulpinoidea	15	X	OBL	
8. Thelypteris palustris	15	Х	FACW	Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1 to
9. Symphyotrichum novae-angliae	3		FACW	6m) in height.
10. Juncus effusus	3		OBL	
11. Euthamia graminifolia			FAC	Herb - All herbaceous (non-woody) plants, including herbaceous vines,
12. Carex crinita			OBL	regardless of size. Includes woody plants, except woody vines, less than
12. Carex Crimica				approximately 3ft (1m) in height.
Mandy Vines (Diet size)	178	- 10ta	l Cover	
Woody Vines (Plot size:)				
1.		- ——		
2.				Woody vine - All woody vines, regardless of height.
3.				
4				Hydrophytic
5.				Vegetation
		= Tota	l Cover	Present? YES
		-		
Remarks: (If observed, list morphological adaptations below).				
nemarks. (If observed, list morphological adaptations below).				



WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project Site: Applicant/Owner:	JPR Golf C	Course Wetland	Mitigation	City/County:		ns ERMONT	Sampling Point:	Samp. Date: 8/	/5/2014 H16-Create
nvestigator(s):	P. Werts-I			Section	n, Township				1110-Create
andform (hillslope, te		Terrace		Local relief			Concave	Slope (%):	
Subregion (LRR or I		LRR	Lat:	44°56'32.12		_	72°30'40.583"W	Datum:	NAD 83
Soil Map Unit:	Cabot			44 30 32.1E.			72 30 40.303 17	NWI Class:	PEM
•		ons on the site t	ypical for this time of year	r?	YES	(If no ex	(plain in Remarks.)		1 CIVI
Are Vegetation, Soil,	_		• • • • • • • • • • • • • • • • • • • •	. •	11.5	(11 110, 6)	•	ircumstances?	YES
Are Vegetation, Soil,							_	explain any answe	
							_	, ,	ers in Nemarks.
SUMMARY OF F			te map showing sam	iple point l	ocations T	, transec	ts, important fe	atures, etc.	
Hydric Soil Present?		•	YES			Is This	Sample Area Withii	n a Wetland?	YES
Wetland Hydrology		•	YES			15 11115	Sample Area Within		160
Remarks:					!				
HYDROLOGY									
Wetland Hydrology							Secondary Indicato	ors (minimum of t	wo required)
Primary Indicators ((minimum c	f one is required	d; check all that apply)				Surface Soil C	Cracks (B6)	
Surface Water	r (A1)		Water-Stained Leave	es (B9)			X Drainage Pat	terns (B10)	
X High Water Ta	able (A2)		Aquatic Fauna (B13))			Moss Trim Li	nes (B16)	
X Saturation (A3	3)		Marl Deposits (B13)				Dry-Season V	Vater Table (C2)	
Water Marks ((B1)		Hydrogen Sulfide Od	dor (C1)			Crayfish Burr	ows (C8)	
Sediment Dep	posits (B2)		Oxidized Rhizospher	res on Living Ro	ots (C3)		Saturation Vi	isible on Aerial (C9)	
Drift Deposits	s (B3)		Presence of Reduced	d Iron (C4)			Stunted or St	tressed Plants (D1)	
Algal Mat or C	Crust (B4)		Recent Iron Reduction	on in Tilled Soils	s (C6)		Geomorphic	Position (D2)	
Iron Deposits	(B5)		Thin Muck Surface (,C7)			Shallow Aqui	itard (D3)	
Inundation Vis	isible on Aeri	al (B7)	Other (Explain in Re	:marks)			Microtopogr	aphic Relief (D4)	
Sparsely Vege	etated Conca	ve Surface (B8)					FAC-Neutral	Test (D5)	
Field Observations:									
Surface Water Prese			Depth (inches):						
					.				VEC
Water Table Presen	27.7	Y		Surface		Wetlan	d Hydrology Present	,	
Water Table Presen Saturation Present?		<u> </u>	Depth (inches): Depth (inches):			Wetlan	d Hydrology Present?	· _	YES
Saturation Present?	?	X	Depth (inches):	Surface	ctions), if a		d Hydrology Present		YES
Saturation Present? Describe Recorded	? Data (strea	X m gauge, monit	Depth (inches): oring well, aerial photos, p	Surface	ctions), if a		d Hydrology Present:		YES
Saturation Present? Describe Recorded 1.29" in the	? Data (strea	X	Depth (inches): oring well, aerial photos, p	Surface	ctions), if a		d Hydrology Presents		YES
Saturation Present? Describe Recorded	? Data (strea	X m gauge, monit	Depth (inches): oring well, aerial photos, p	Surface	ctions), if a		d Hydrology Present:		YES
Saturation Present? Describe Recorded 1.29" in the	? Data (strea	X m gauge, monit	Depth (inches): oring well, aerial photos, p	Surface	ctions), if a		d Hydrology Present:		YES
Saturation Present? Describe Recorded 1.29" in the	? Data (strea	X m gauge, monit	Depth (inches): oring well, aerial photos, p	Surface	ctions), if a		d Hydrology Present:		YES
Saturation Present? Describe Recorded 1.29" in the	? Data (strea	X m gauge, monit	Depth (inches): oring well, aerial photos, p	Surface	ctions), if a		d Hydrology Present:	-	YES
Saturation Present? Describe Recorded 1.29" in the	? Data (strea	X m gauge, monit	Depth (inches): oring well, aerial photos, p	Surface	ctions), if a		d Hydrology Present:	-	YES
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL	? Data (strea e last 5 days	X m gauge, monit s at Jay Peak (No	Depth (inches): oring well, aerial photos, p	Surface previous inspe		vailable:			YES
Saturation Present? Describe Recorded i 1.29" in the Remarks: SOIL	? Data (strea e last 5 days	X m gauge, monits s at Jay Peak (No	Depth (inches): oring well, aerial photos, p OAA) eded to document the indi	Surface previous inspe		vailable:			YES
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth	? Data (strea e last 5 days	X m gauge, monits s at Jay Peak (No	Depth (inches): oring well, aerial photos, p OAA) eded to document the indi	Surface previous inspe		vailable:			Remarks
Saturation Present? Describe Recorded in 1.29" in the Remarks: SOIL Profile Description: Depth Color	Pata (strea e last 5 days : (Describe t Matrix (moist)	X m gauge, monits s at Jay Peak (No	Depth (inches): oring well, aerial photos, p OAA) eded to document the indi Re	Surface previous inspe icator or confiredox Features	rm the abse	vailable:	cators.)		
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 0-3 10Yi	? Data (strea e last 5 days : (Describe t Matrix	X m gauge, monits s at Jay Peak (No	Depth (inches): oring well, aerial photos, p OAA) eded to document the indi Re	Surface previous inspe icator or confiredox Features	rm the abse	vailable:	cators.) Texture		
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 0-3 10Yi	? Data (strea e last 5 days : (Describe t	X m gauge, monits s at Jay Peak (No	Depth (inches): oring well, aerial photos, p OAA) eded to document the indi Re Color (moist)	Surface previous inspe icator or confiredox Features	rm the abse	vailable:	cators.) Texture SANDY LOAM		
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 0-3 10Yi	? Data (strea e last 5 days : (Describe t	X m gauge, monits s at Jay Peak (No	Depth (inches): oring well, aerial photos, p OAA) eded to document the indi Re Color (moist)	Surface previous inspe icator or confiredox Features	rm the abse	vailable:	cators.) Texture SANDY LOAM		
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 0-3 10Yi	? Data (strea e last 5 days : (Describe t	X m gauge, monits s at Jay Peak (No	Depth (inches): oring well, aerial photos, p OAA) eded to document the indi Re Color (moist)	Surface previous inspe icator or confiredox Features	rm the abse	vailable:	cators.) Texture SANDY LOAM		
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 0-3 10Yi	? Data (strea e last 5 days : (Describe t	X m gauge, monits s at Jay Peak (No	Depth (inches): oring well, aerial photos, p OAA) eded to document the indi Re Color (moist)	Surface previous inspe icator or confiredox Features	rm the abse	vailable:	cators.) Texture SANDY LOAM		
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 0-3 10Yi 3-10 2.55	Pata (strea e last 5 days : (Describe t Matrix (moist) (R 3/2 Y 4/2	X m gauge, monits s at Jay Peak (No	Depth (inches): oring well, aerial photos, p OAA) eded to document the indi Re Color (moist)	Surface previous inspe icator or confiredox Features	rm the abse	vailable:	cators.) Texture SANDY LOAM		
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 0.3 10Y(3-10) 2.5\(100) 1.5\(1	Pata (strea e last 5 days : (Describe t Matrix (moist) (R 3/2 Y 4/2	X m gauge, monits s at Jay Peak (No	Depth (inches): oring well, aerial photos, p OAA) eded to document the indi Re Color (moist) 2.5Y 5/6	Surface previous inspe icator or confiredox Features	rm the abse	vailable:	Texture SANDY LOAM SANDY LOAM SANDY LOAM	ing, M=Matrix.	Remarks
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 0-3 10Yi 3-10 2.5\	Pata (strea e last 5 days : (Describe t Matrix (moist) // R 3/2 Y 4/2 n, D=Depletion Drs:	X m gauge, monits s at Jay Peak (No	Depth (inches): oring well, aerial photos, p OAA) eded to document the indi Re Color (moist) 2.5Y 5/6 trix, MS=Masked Sand Grains.	icator or confiredox Features % 2	Type ¹	vailable:	Texture SANDY LOAM SANDY LOAM ² Location: PL=Pore Lini Indicators for Prob	ing, M=Matrix.	Remarks
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 0-3 10YI 3-10 2.5Y	? Data (strea e last 5 days : (Describe t	X m gauge, monits s at Jay Peak (No	Depth (inches): Oring well, aerial photos, p OAA) eded to document the indi Re Color (moist) 2.5Y 5/6 trix, MS=Masked Sand Grains. Polyvalue Be	icator or confired ox Features % 2	Type ¹	vailable:	Texture SANDY LOAM SANDY LOAM 2 Location: PL=Pore Lini Indicators for Prob	ing, M=Matrix. Diematic Hydric Sc A10) (LRR K, L, MLR	Remarks pills ³ : tA 149B)
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 0.3 10Yl 3-10 2.5Y	Pata (strea e last 5 days : (Describe t Matrix : (moist) : (R 3/2 Y 4/2 n, D=Depletion ors:	X m gauge, monits s at Jay Peak (No	Depth (inches): Oring well, aerial photos, p OAA) Eded to document the indi Re Color (moist) 2.5Y 5/6 Etrix, MS=Masked Sand Grains. Polyvalue Be MLRA 14S	icator or confired ox Features % 2 lelow Surface (St	Type ¹ C	ence of indi	Texture SANDY LOAM SANDY LOAM 2Location: PL=Pore Lini Indicators for Prob 2 cm Muck (ing, M=Matrix. Dlematic Hydric Sc A10) (LRR K, L, MLR Redox (A16) (LRR I	Remarks pils ³ : A 149B) K, L, R)
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 0-3 10Y 3-10 2.51 Type: C=Concentration Hydric Soil Indicato Histosol (A1) Histic Epipedo Black Histic (A	? Data (strea e last 5 days : (Describe t	X m gauge, monits s at Jay Peak (No	Depth (inches): Oring well, aerial photos, p OAA) eded to document the indi Re Color (moist) 2.5Y 5/6 trix, MS=Masked Sand Grains. Polyvalue Be MLRA 14S Thin Dark St	icator or confired ox Features % 2 elow Surface (Si 9B) urface (S9) (LRR	Type ¹ C 8) (LRR R,	ence of indi	Texture SANDY LOAM SANDY LOAM 2 Location: PL=Pore Lini Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky	ing, M=Matrix. Diematic Hydric Sc A10) (LRR K, L, MLR Redox (A16) (LRR I Peat or Peat (S3) (L	Remarks pils ³ : A 149B) K, L, R)
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth Color 0.3 10Y(3-10) 2.5\(\) Type: C=Concentration Hydric Soil Indicato Histosol (A1) Histic Epipede Black Histic (A Hydrogen Sul	? Data (strea e last 5 days : (Describe t	X m gauge, monits s at Jay Peak (No	Depth (inches): Oring well, aerial photos, p OAA) eded to document the indi Re Color (moist) 2.5Y 5/6 trix, MS=Masked Sand Grains. Polyvalue Be MLRA 14S Thin Dark St Loamy Mucl	icator or confinedox Features % 2 delow Surface (SI 9B) urface (S9) (LRR cky Mineral (F1)	Type ¹ C 8) (LRR R,	ence of indi	Texture SANDY LOAM SANDY LOAM **Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface	ing, M=Matrix. Diematic Hydric Sc A10) (LRR K, L, MLR Redox (A16) (LRR I Peat or Peat (S3) (L	Remarks bils ³ : A 149B) K, L, R) RR K, L, R)
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 0.3 10Y(3-10) Type: C=Concentration Hydric Soil Indicato Histosol (A1) Histic Epipede Black Histic (A	? Data (strea e last 5 days : (Describe t	X m gauge, monits s at Jay Peak (No	Depth (inches): Oring well, aerial photos, p OAA) eded to document the indi Re Color (moist) 2.5Y 5/6 trix, MS=Masked Sand Grains. Polyvalue Be MLRA 14S Thin Dark St Loamy Mucl	icator or confired ox Features % 2 elow Surface (Si 9B) urface (S9) (LRR	Type ¹ C 8) (LRR R,	ence of indi	Texture SANDY LOAM SANDY LOAM **Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface	ing, M=Matrix. Diematic Hydric Sc A10) (LRR K, L, MLR Redox (A16) (LRR I Peat or Peat (S3) (L	Remarks bils ³ : A 149B) K, L, R) RR K, L, R)
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth Color 0.3 10Y(3-10) 2.5\(\) Type: C=Concentration Hydric Soil Indicato Histosol (A1) Histic Epipede Black Histic (A Hydrogen Sul	Pata (strea e last 5 days : (Describe t Matrix (moist) (R 3/2 Y 4/2 In, D=Depletion Drs: Ion (A2) A3) Iffide (A4) Vers (A5)	x m gauge, monits s at Jay Peak (No to the depth nee % 100 98	Depth (inches): Oring well, aerial photos, p OAA) eded to document the indi Re Color (moist) 2.5Y 5/6 trix, MS=Masked Sand Grains. Polyvalue Be MLRA 14S Thin Dark St Loamy Mucl	icator or confinedox Features % 2 delow Surface (St 9B) urface (S9) (LRR cky Mineral (F1) red Matrix (F2)	Type ¹ C 8) (LRR R,	ence of indi	Texture SANDY LOAM SANDY LOAM **Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be	ing, M=Matrix. Diematic Hydric Sc A10) (LRR K, L, MLR Redox (A16) (LRR I Peat or Peat (S3) (L	Remarks bils ³ : tA 149B) K, L, R) .RR K, L, R)
Saturation Present? Describe Recorded 1.29" in the 1.29"	Pata (strea e last 5 days : (Describe t Matrix : (moist) (R 3/2 Y 4/2 In, D=Depletion Ors: Ion (A2) A3) Iffide (A4) Vers (A5) Iow Dark Surf	x m gauge, monits s at Jay Peak (No to the depth nee % 100 98	Depth (inches): Oring well, aerial photos, p OAA) eded to document the indi Re Color (moist) 2.5Y 5/6 trix, MS=Masked Sand Grains. Polyvalue Be MLRA 145 Thin Dark Su Loamy Mucl Loamy Gleye X Depleted M	icator or confinedox Features % 2 delow Surface (St 9B) urface (S9) (LRR cky Mineral (F1) red Matrix (F2)	Type ¹ C 8) (LRR R,	ence of indi	Texture SANDY LOAM SANDY LOAM **Location: PL=Pore Lini Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su	ing, M=Matrix. Diematic Hydric Sc A10) (LRR K, L, MLR Redox (A16) (LRR I Peat or Peat (S3) (L (S9) (LRR K, L, M)	Remarks pils ³ : tA 149B) K, L, R) RR K, L, R)
Saturation Present? Describe Recorded 1.29" in the 1.29"	Pata (strea e last 5 days : (Describe t Matrix (moist) //R 3/2 Y 4/2 In, D=Depletion Drs: Ion (A2) A3) Ilfide (A4) //ers (A5) Iow Dark Surfurface (A12)	m gauge, monits s at Jay Peak (No to the depth nee % 100 98	Depth (inches): Oring well, aerial photos, popular photos, po	icator or confinedox Features % 2 delow Surface (St 9B) urface (S9) (LRR cky Mineral (F1) yed Matrix (F2) latrix (F3)	Type ¹ C 8) (LRR R, R, MLRA 14	ence of indi	Texture SANDY LOAM SANDY LOAM **Location: PL=Pore Lini Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangar	ing, M=Matrix. Diematic Hydric Sc. A10) (LRR K, L, MLR. Redox (A16) (LRR I) Peat or Peat (S3) (L. (S9) (LRR K, L, M) Elow Surface (S8) (L.	Remarks bils ³ : tA 149B) K, L, R) RR K, L, R) RR K, L, R)
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 0-3 10YI 3-10 2.5\(1) Type: C=Concentration Hydric Soil Indicato Histosol (A1) Histic Epipedo Black Histic (A1) Hydrogen Sul Stratified Layu Depleted Belo Thick Dark Su	Pata (strea e last 5 days : (Describe 1 Matrix (moist) // R 3/2 Y 4/2 In, D=Depletion Drs: Idon (A2) A3) Ilfide (A4) // yers (A5) Ilow Dark Surl urface (A12) y Mineral (S1	m gauge, monits at Jay Peak (No. 100 98 98 98 99 99 99 99 99 99 99 99 99 99	Depth (inches): Oring well, aerial photos, popular photos, po	icator or confiredox Features % 2 elow Surface (Stage) urface (Sp) (LRR kky Mineral (F1) red Matrix (F2) latrix (F3) strace (F6)	Type ¹ C 8) (LRR R, R, MLRA 14	ence of indi	Texture SANDY LOAM SANDY LOAM **Location: PL=Pore Lini Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangar Piedmont Flo	Ing, M=Matrix. Dlematic Hydric Sc. A10) (LRR K, L, MLR Redox (A16) (LRR I) Peat or Peat (S3) (L (S9) (LRR K, L, M) Elow Surface (S8) (L Irface (S9) (LRR K, L) nese Masses (F12) (Remarks Dils ³ : IA 149B) K, L, R) RR K, L, R) RR K, L, R) LRR K, L, R) (MLRA 149B)
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 0-3 10Yi 3-10 2.5\(1) Type: C=Concentration Hydric Soil Indicato Histosol (A1) Histic Epipedo Black Histic (A Hydrogen Sul Stratified Layı Depleted Belc Thick Dark Su Sandy Mucky	Pata (strea e last 5 days Compared to the la	m gauge, monits at Jay Peak (No. 100 98 98 98 99 99 99 99 99 99 99 99 99 99	Depth (inches): Oring well, aerial photos, popular photos, po	icator or confiredox Features % 2 ielow Surface (Stage) urface (Sp) (LRR kky Mineral (F1) ked Matrix (F2) latrix (F3) Surface (F6) ark Surface (F7)	Type ¹ C 8) (LRR R, R, MLRA 14	ence of indi	Texture SANDY LOAM SANDY LOAM 3 Location: PL=Pore Lini Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangar Piedmont Fle Mesic Spodie	ing, M=Matrix. Diematic Hydric Sc A10) (LRR K, L, MLR Peat or Peat (S3) (L S9) (LRR K, L, M) Elow Surface (S8) (L Irface (S9) (LRR K, L nese Masses (F12) (podplain Soils (F19)	Remarks Dils ³ : IA 149B) K, L, R) RR K, L, R) RR K, L, R) LRR K, L, R) (MLRA 149B)
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 0-3 10Yi 3-10 2.5\ Type: C=Concentration Hydric Soil Indicato Histosol (A1) Histic Epipede Black Histic (A Hydrogen Sul Stratified Laye Depleted Belc Thick Dark Su Sandy Mucky Sandy Gleyed Sandy Redox	Pata (strea e last 5 days Compared to the la	m gauge, monits at Jay Peak (No. 100 98 98 98 99 99 99 99 99 99 99 99 99 99	Depth (inches): Oring well, aerial photos, popular photos, po	icator or confiredox Features % 2 delow Surface (St 9B) urface (S9) (LRR key Mineral (F1) red Matrix (F3) surface (F6) ark Surface (F7) ressions (F8)	Type ¹ C 8) (LRR R, R, MLRA 14 (LRR K, L)	ence of indi Loc² M	Texture SANDY LOAM SANDY LOAM SANDY LOAM	ong, M=Matrix. Diematic Hydric Sc A10) (LRR K, L, MLR Peat or Peat (S3) (L S9) (LRR K, L, M) Slow Surface (S8) (L Irface (S9) (LRR K, L Lese Masses (F12) (Dodplain Soils (F19) c (TA6) (MLRA 1444 Material (F21)	Remarks bils ³ : tA 149B) K, L, R) .RR K, L, R) LRR K, L, R) LRR K, L, R) LRR K, L, B) (MLRA 149B) A, 145, 149B)
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 0-3 10Yi 3-10 2.5\ Type: C=Concentration Hydric Soil Indicato Histosol (A1) Histic Epipede Black Histic (A Hydrogen Sul Stratified Laye Depleted Beld Thick Dark Su Sandy Mucky Sandy Gleyed	Pata (strea e last 5 days Compared to the com	m gauge, monits at Jay Peak (No. 100 98 100 98 100 100 100 100 100 100 100 100 100 10	Depth (inches): Oring well, aerial photos, popular properties of the popular photos of the po	icator or confired ox Features % 2 selow Surface (Signal) urface (S9) (LRR ky Mineral (F1) yed Matrix (F3) atrix (F3) atrix (F3) atrix (F3) atrix (F8) microsof hydrology (F8)	Type ¹ C 8) (LRR R, R, MLRA 14 (LRR K, L)	ence of indi Loc² M 9B)	Texture SANDY LOAM SANDY LOAM	ng, M=Matrix. Diematic Hydric Sc A10) (LRR K, L, MLR Redox (A16) (LRR I) Peat or Peat (S3) (Le 159) (LRR K, L, M) Elow Surface (S8) (L Irface (S9) (LRR K, L nese Masses (F12) (Dodplain Soils (F19) c (TA6) (MLRA 1444	Remarks bils ³ : tA 149B) K, L, R) .RR K, L, R) LRR K, L, R) LRR K, L, R) LRR K, L, B) (MLRA 149B) A, 145, 149B)
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 0-3 10Y1 3-10 2.51 Type: C=Concentration Hydric Soil Indicato Histosol (A1) Histic Epipede Black Histic (A Hydrogen Sul Stratified Laye Depleted Belo Thick Dark Su Sandy Mucky Sandy Gleyed Sandy Redox Stripped Mat	Pata (strea e last 5 days Compared to the stream of the s	m gauge, monits at Jay Peak (No. 100 98 100 98 100 100 100 100 100 100 100 100 100 10	Depth (inches): Oring well, aerial photos, popular properties of the popular photos of the po	icator or confired ox Features % 2 selow Surface (Signal) urface (S9) (LRR ky Mineral (F1) yed Matrix (F3) atrix (F3) atrix (F3) atrix (F3) atrix (F8) microsof hydrology (F8)	Type ¹ C 8) (LRR R, R, MLRA 14 (LRR K, L)	ence of indi Loc² M 9B)	Texture SANDY LOAM SANDY LOAM	ing, M=Matrix. Diematic Hydric Sc A10) (LRR K, L, MLR Redox (A16) (LRR I) Peat or Peat (S3) (L 199) (LRR K, L, M) Elow Surface (S9) (LRR K, L) rese Masses (F12) (Dodplain Soils (F19) C (TA6) (MLRA 1444 Material (F21) V Dark Surface (TF1)	Remarks bils ³ : tA 149B) K, L, R) .RR K, L, R) LRR K, L, R) LRR K, L, R) LRR K, L, B) (MLRA 149B) A, 145, 149B)
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 2.5%	Pata (strea e last 5 days Compared to the stream of the s	m gauge, monits at Jay Peak (No. 100 98 100 98 100 100 100 100 100 100 100 100 100 10	Depth (inches): Oring well, aerial photos, popular properties of the popular photos of the po	icator or confired ox Features % 2 selow Surface (Signal) urface (S9) (LRR ky Mineral (F1) yed Matrix (F3) atrix (F3) atrix (F3) atrix (F3) atrix (F8) microsof hydrology (F8)	Type ¹ C 8) (LRR R, R, MLRA 14 (LRR K, L)	ence of indi Loc² M 9B)	Texture SANDY LOAM SANDY LOAM SANDY LOAM 2 Location: PL=Pore Lini Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangar Piedmont Flo Mesic Spodio Red Parent N Very Shallow Other (Expla	ing, M=Matrix. Diematic Hydric Sc A10) (LRR K, L, MLR Redox (A16) (LRR I) Peat or Peat (S3) (L 199) (LRR K, L, M) Elow Surface (S9) (LRR K, L) rese Masses (F12) (Dodplain Soils (F19) C (TA6) (MLRA 1444 Material (F21) V Dark Surface (TF1)	Remarks bils ³ : tA 149B) K, L, R) .RR K, L, R) LRR K, L, R) LRR K, L, R) LRR K, L, B) (MLRA 149B) A, 145, 149B)
Saturation Present? Describe Recorded 1.29" in the Remarks: SOIL Profile Description: Depth (in) Color 2.5%	Pata (strea e last 5 days : (Describe to Matrix (moist) (R 3/2 Y 4/2 In, D=Depletion Drs: Ion (A2) A3) Ilfide (A4) Iyers (A5) Iow Dark Surfurface (A12) y Mineral (S1 d Matrix (S4) to (S5) trix (S6) e (S7) (LRR R, f observed) e: Bedrock	m gauge, monits at Jay Peak (No. 100 98 100 98 100 100 100 100 100 100 100 100 100 10	Depth (inches): Oring well, aerial photos, popular properties of the popular photos of the po	icator or confired ox Features % 2 selow Surface (Signal) urface (S9) (LRR ky Mineral (F1) yed Matrix (F3) atrix (F3) atrix (F3) atrix (F3) atrix (F8) microsof hydrology (F8)	Type ¹ C 8) (LRR R, R, MLRA 14 (LRR K, L)	ence of indi Loc² M 9B)	Texture SANDY LOAM SANDY LOAM SANDY LOAM 2 Location: PL=Pore Lini Indicators for Prob 2 cm Muck (Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangar Piedmont Flo Mesic Spodio Red Parent N Very Shallow Other (Expla	ing, M=Matrix. Diematic Hydric Sc A10) (LRR K, L, MLR Redox (A16) (LRR I Peat or Peat (S3) (L (S9) (LRR K, L, M) elow Surface (S8) (L rrface (S9) (LRR K, L) oodplain Soils (F12) (oodplain Soils (F19) c (TA6) (MLRA 1444 Material (F21) v Dark Surface (TF1: in in Remarks)	Remarks pils ³ : tA 149B) K, L, R) RR K, L, R) LRR K, L, R) LRR K, L, R) (MLRA 149B) A, 145, 149B)

Sampling Point: **H16-Create**

		Absolute	Dom.	Indicator	
Tree Stratum (Plot	t size:)	% Cover	Sp?	Status	Dominance Test Worksheet:
,					
1					# Dominants OBL, FACW, FAC: 5 (A)
3					# Dominants across all strata: 6 (B)
4					
-					% Dominants OBL, FACW, FAC: 83% (A/B)
_					
_					Prevalence Index Worksheet:
7.					
			= Total	Cover	Total % Cover of: Multiply By:
Sapling Stratum (Plot	t size:)				OBL 44 x 1 = 44
1.					FACW 71 x 2 = 142
•					FAC x3=
2					FACU x 4 =
					UPL 15 x 5 = 75
					Sum: 130 (A) 261 (B)
6.					†
7.					Prevalence Index = B/A = 2.01
			= Total	Cover	Hydrophytic Vegetation Indicators:
Shrub Stratum (Plo	ot size: 15'RAD)				X Dominance Test is > 50%
•	·	15	x	FACW	X Prevalence Index is <= 3.0
1. Salix discolor				PACVV	l ——— .
					Problematic Hydrophytic Vegetation ¹ (explain)
3.					Rapid Test for Hydrophytic Vegetation
4					Morphological Adaptations
5.					¹ Indicators of hydric soil and wetland hydrology must be present, unless
_					disturbed or problematic.
7.					Definitions of Vegetation Strata:
· · · · · · · · · · · · · · · · · · ·	12	15	= Total	Cover	Seminor regulation strata.
Marila Characteristic (DI-	ot size: 5' RAD)		10181	COVE	Troe Washington and the second of the 200 (C.)
·					Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or n in height and 3in (7.6cm) or larger in diameter at breast height (DBH).
1. Carex scoparia		38	X	FACW	in height and sin (7.56m) of larger in diameter at bleast height (55m).
2. Eupatorium pe	erfoliatum	15	X	FACW	
Juncus effusus	;	15	X	OBL	
4. Hypericum per	rforatum	15		UPL	Sapling - Woody plants, excluding woody vines, approximately 20ft (6m)
5. Carex vulpinoi	idea	15	X	OBL	more in height and less than 3in (7.6cm) DBH.
6. Eutrochium m				OBL	
7. Impatiens cap				FACW	
8. <u>Lycopus ameri</u>	icanus	3		OBL	Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1
9. Scirpus cyperii	nus	3		OBL	6m) in height.
10. Mimulus ringe	ens	3		OBL	
11. Persicaria sagi	ittata	1		OBL	Herb - All herbaceous (non-woody) plants, including herbaceous vines,
12. Galium palusti		1		OBL	regardless of size. Includes woody plants, except woody vines, less than
		115	= Tota		approximately 3ft (1m) in height.
\\\\d\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	A -1		- 1018	COVE	
	ot size:)				
1					
2.					Woody vine - All woody vines, regardless of height.
3.					
1 4					Hydrophytic
5.					Vegetation
		· · · · · · · · · · · · · · · · · · ·	= Tota	Cover	Present? YES
			- 10ta	COVE	riesent: <u>TES</u>
Remarks: (If observed, li	ist morphological adaptations below).				
İ					

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

H13-	
WT1/a	/

pplicant/Owner:	Jay Peak R	esort		-	State: V	ns ERMONT	Sampling Point:	H	113-WT1/a/k)
vestigator(s):	P. Werts-K	·-···		Section	, Township	o, Range:	Jav			
ndform (hillslope, te		Terrace		Local relief		_	Concave	Slope (%):		
bregion (LRR or		LRR	Lat:	44°56'40.28	3"N	_	72°30'51.467"W	Datum:	NA	D 83
il Map Unit:	Cabot					Ŭ -		NWI Class:		EM
•		ons on the site tv	pical for this time of year	?	YES	(If no. e	kplain in Remarks.)			
e Vegetation, Soil	_		•			(,		rcumstances?	٧	'ES
re Vegetation, Soil							_	xplain any answ		
re vegetation, son	i, oi riyarolo	gy naturany prob	iematic: NO					Apiain any answ	reis in Neilla	113.7
			map showing sam	ple point l	ocations,	, transec	ts, important fea	itures, etc.		
ydrophytic Vegeta		t?	YES						VEC	
lydric Soil Present?		_	YES			Is This	Sample Area Withir	i a Wetland?_	YES	_
Vetland Hydrology Lemarks:	Present?		YES		<u> </u>					
	10.187									
HYDROLOGY										
Vetland Hydrology		.	alarah albahasa arada				Secondary Indicato		two required	<u>d)</u>
		f one is required;	check all that apply)				Surface Soil C			
Surface Wate	er (A1)	_	X Water-Stained Leave	s (B9)			Drainage Patt	erns (B10)		
X High Water T	able (A2)		Aquatic Fauna (B13)				Moss Trim Lir	ies (B16)		
X Saturation (A	3)		Marl Deposits (B13)				Dry-Season W	ater Table (C2)		
Water Marks	(B1)	_	Hydrogen Sulfide Od	or (C1)			Crayfish Burro	ows (C8)		
Sediment De		_	Oxidized Rhizosphere		ots (C3)			sible on Aerial (CS	9)	
Drift Deposits		_	Presence of Reduced	_				ressed Plants (D1	•	
Algal Mat or		_	Recent Iron Reductio	, ,	s (C6)		Geomorphic			
Iron Deposits		-	Thin Muck Surface (C		, (00)		Shallow Aquit			
·		al (87)								
Inundation V		· · · -	Other (Explain in Rer	narks)			FAC-Neutral 1	phic Relief (D4)		
		ve Surface (B8)					FAC-Neutran	est (D3)		
Field Observations:			Donth (inches).		1					
			Depth (inches):			141-11-				
Water Table Prese	nt?	X	Depth (inches): Depth (inches): Depth (inches):	10 10	.	Wetlan	d Hydrology Present?	-	YES	_
Water Table Present laturation Present Describe Recorded 0.89" in the	nt? ? Data (strea	X	Depth (inches): Depth (inches): ring well, aerial photos, p	10	ctions), if a		d Hydrology Present?	-	YES	
Water Table Present Saturation Present Describe Recorded 0.89" in the	nt? ? Data (strea	X m gauge, monito	Depth (inches): Depth (inches): ring well, aerial photos, p	10	ctions), if a		d Hydrology Present?		YES	
Water Table Preset Saturation Present Describe Recorded 0.89" in the Remarks:	nt? ? Data (strea e last 5 days	X m gauge, monito s at Jay Peak (NO.	Depth (inches): Depth (inches): ring well, aerial photos, p AA)	10 revious inspe		vailable:			YES	
Water Table Preset Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description	nt? ? Data (strea e last 5 days	X m gauge, monito s at Jay Peak (NO	Depth (inches): Depth (inches): ring well, aerial photos, p AA) led to document the indic	10 revious inspe		vailable:			YES	
Water Table Preset Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth	nt? ? Data (strea e last 5 days : (Describe t Matrix	X m gauge, monito s at Jay Peak (NO.	Depth (inches): Depth (inches): ring well, aerial photos, p AA) led to document the indic Rec	10 revious inspe	rm the abse	vailable:	cators.)			
Water Table Presets Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color	nt? ? Data (strea e last 5 days : (Describe t Matrix (moist)	X m gauge, monito s at Jay Peak (NO.	Depth (inches): Depth (inches): ring well, aerial photos, p AA) led to document the indic	10 revious inspe		vailable:	cators.) Texture		YES	
Water Table Presets Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0.4 2.5	nt? ? Data (streal e last 5 days : (Describe t	X m gauge, monito s at Jay Peak (NO) to the depth need % 100	Depth (inches): Depth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist)	10 revious inspe	rm the abse	vailable: ence of indi	cators.) Texture SANDY LOAM			
0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0-4 2.5	nt? ? Data (strea e last 5 days : (Describe t Matrix (moist)	X m gauge, monito s at Jay Peak (NO.	Depth (inches): Depth (inches): ring well, aerial photos, p AA) led to document the indic Rec	10 revious inspe	rm the abse	vailable:	cators.) Texture			
Water Table Presets aturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0.4 2.5	nt? ? Data (streal e last 5 days : (Describe t	X m gauge, monito s at Jay Peak (NO) to the depth need % 100	Depth (inches): Depth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist)	10 revious inspe	rm the abse	vailable: ence of indi	cators.) Texture SANDY LOAM			
Water Table Preset Saturation Present Ones of the Profile Description Depth (in) Color O-4 2.5 4-15 2.5	nt? ? Data (strea e last 5 days : (Describe t	X m gauge, monito a at Jay Peak (NO. to the depth need % 100 93	Depth (inches): Depth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist)	10 revious inspe	rm the abse	vailable: ence of indi	cators.) Texture SANDY LOAM			
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Water Table Preseis Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0-4 2.5 4-15 2.5	nt? ? Data (streal e last 5 days : (Describe t	X m gauge, monito a at Jay Peak (NO. to the depth need % 100 93	Depth (inches): Depth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist) 7.5YR 4/6 x, MS=Masked Sand Grains.	ator or confi	Type ¹	vailable: ence of indi	Texture SANDY LOAM LOAMY SAND 2Location: PL=Pore Linit	ng, M=Matrix. lematic Hydric S	Remarks Soils ³ :	
Water Table Preseis Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0-4 2.5 4-15 2.5 Type: C=Concentratio Hydric Soil Indicate Histosol (A1)	nt? ? Data (streal e last 5 days : (Describe t	X m gauge, monito a at Jay Peak (NO. to the depth need % 100 93	Depth (inches): Depth (inches): Pepth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist) 7.5YR 4/6 x, MS=Masked Sand Grains. Polyvalue Be	ator or confii dox Features 7	Type ¹	vailable: ence of indi	Texture SANDY LOAM LOAMY SAND 2 Location: PL=Pore Link Indicators for Prob	ng, M=Matrix. lematic Hydric S	Remarks Soils ³ : RA 149B)	
Water Table Presets Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0-4 2.5 4-15 2.5 Type: C=Concentration Hydric Soil Indicate Histosol (A1) Histic Epiped	nt? ? I Data (streal e last 5 days : (Describe t	X m gauge, monito a at Jay Peak (NO. to the depth need % 100 93	Depth (inches): Depth (inches): Pepth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist) 7.5YR 4/6 x, MS=Masked Sand Grains. Polyvalue Be MLRA 149	ator or confii dox Features 7 Flow Surface (Si	Type ¹ C	vailable: ence of indi Loc² M	Cators.) Texture SANDY LOAM LOAMY SAND	ng, M=Matrix. lematic Hydric S k10) (LRR K, L, ML Redox (A16) (LRR	Remarks Soils ³ : RA 149B) RK, L, R)	
Water Table Presets Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0-4 2.5 4-15 2.5 Type: C=Concentratio Hydric Soil Indicate Histosol (A1)	nt? ? I Data (streal e last 5 days : (Describe t	X m gauge, monito a at Jay Peak (NO. to the depth need % 100 93	Depth (inches): Depth (inches): Pepth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist) 7.5YR 4/6 x, MS=Masked Sand Grains. Polyvalue Be MLRA 149	ator or confii dox Features 7	Type ¹ C	vailable: ence of indi Loc² M	Cators.) Texture SANDY LOAM LOAMY SAND	ng, M=Matrix. lematic Hydric S	Remarks Soils ³ : RA 149B) RK, L, R)	
Water Table Presets aturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0-4 2.5 4-15 2.5 Type: C=Concentration Hydric Soil Indicate Histosol (A1) Histic Epiped	nt? ? Data (streal e last 5 days : (Describe t	X m gauge, monito a at Jay Peak (NO. to the depth need % 100 93	Depth (inches): Depth (inches): Pepth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist) 7.5YR 4/6 x, MS=Masked Sand Grains. Polyvalue Be MLRA 149 Thin Dark Su	ator or confii dox Features 7 Flow Surface (Si	Type ¹ C 8) (LRR R,	vailable: ence of indi Loc² M	Texture SANDY LOAM LOAMY SAND	ng, M=Matrix. lematic Hydric S k10) (LRR K, L, ML Redox (A16) (LRR	Remarks 50ils ³ : .RA 149B) 8 K, L, R) (LRR K, L, R)	
Water Table Preset Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0-4 2.5 4-15 2.5 Type: C=Concentratio Hydric Soil Indicator Histosol (A1) Histic Epipec Black Histic (nt? ? I Data (streal e last 5 days : (Describe t	X m gauge, monito a at Jay Peak (NO. to the depth need % 100 93	Depth (inches): Depth (inches): Pepth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist) 7.5YR 4/6 x, MS=Masked Sand Grains. Polyvalue Be MLRA 149 Thin Dark Su Loamy Muck	ator or confii dox Features 7 Flow Surface (Si	Type ¹ C 8) (LRR R,	vailable: ence of indi Loc² M	Texture SANDY LOAM LOAMY SAND 2 Location: PL=Pore Linir Indicators for Prob 2 cm Muck (A Coast Prairie 5 cm Mucky Dark Surface	ng, M=Matrix. lematic Hydric S k10) (LRR K, L, ML Redox (A16) (LRR Peat or Peat (S3)	Remarks Soils ³ : .RA 149B) t K, L, R) (LRR K, L, R)	
Water Table Preset Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0-4 2.5 4-15 2.5 Type: C=Concentratio Hydric Soil Indicato Histosol (A1) Histic Epipec Black Histic (Hydrogen St. Stratified Lav	nt? ? Data (streal e last 5 days : (Describe t	X m gauge, monito a at Jay Peak (NO) to the depth need % 100 93	Depth (inches): Depth (inches): Pepth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist) 7.5YR 4/6 x, MS=Masked Sand Grains. Polyvalue Be MLRA 149 Thin Dark Su Loamy Muck Loamy Gleye	tator or confii dox Features % 7 felow Surface (Si B) urface (S9) (LRR cy Mineral (F1) ed Matrix (F2)	Type ¹ C 8) (LRR R,	vailable: ence of indi Loc² M	rexture SANDY LOAM LOAMY SAND LOAMY SAND Location: PL=Pore Linit Indicators for Prob 2 cm Mucky Coast Prairie 5 cm Mucky Dark Surface Polyvalue Bei	ng, M=Matrix. lematic Hydric S A10) (LRR K, L, ML Redox (A16) (LRR Peat or Peat (S3) (S9) (LRR K, L, M) ow Surface (S8) (Remarks Soils ³ : RA 149B) K, L, R) (LRR K, L, R)	
Water Table Preset Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0.4 2.5 4-15 2.5 Type: C=Concentratio Hydric Soil Indicate Histosol (A1) Histic Epipee Black Histic (Hydrogen Su Stratified Lay Depleted Be	nt? ? Data (streal e last 5 days : (Describe t	X m gauge, monito a at Jay Peak (NO) to the depth need % 100 93	Depth (inches): Depth (inches): Depth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist) 7.5YR 4/6 x, MS=Masked Sand Grains. Polyvalue Be MLRA 149 Thin Dark Su Loamy Muck Loamy Gleye X Depleted Ma	tator or confii dox Features % 7 felow Surface (Si B) urface (S9) (LRR cy Mineral (F1) ed Matrix (F2) atrix (F3)	Type ¹ C 8) (LRR R,	vailable: ence of indi Loc² M	rexture SANDY LOAM LOAMY SAND **Location: PL=Pore Linit Indicators for Prob 2 cm Muck (A Coast Prairie 5 cm Mucky Dark Surface Polyvalue Bei Thin Dark Sur	ng, M=Matrix. lematic Hydric S A10) (LRR K, L, ML Redox (A16) (LRR Peat or Peat (S3) (S9) (LRR K, L, M) low Surface (S8) (fface (S9) (LRR K,	Remarks Soils ³ : .RA 149B) 8.K, L, R) (LRR K, L, R) LRR K, L, R)	
Water Table Preseis Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0.4 2.5 4.15 2.5 Type: C=Concentratio Hydric Soil Indicator Histosol (A1) Histic Epipec Black Histic (Blydrogen Sustratified Lay Depleted Be Thick Dark S	nt? ? Data (streame last 5 days : (Describe to Matrix (moist) Y 3/1 Y 4/2 n, D=Depletion ors:) don (A2) (A3) ulfide (A4) yers (A5) low Dark Surf urface (A12)	X m gauge, monito s at Jay Peak (NO) to the depth need % 100 93 , RM=Reduced Matri	Depth (inches): Depth (inches): Depth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist) 7.5YR 4/6 X, MS=Masked Sand Grains. Polyvalue Be MLRA 149 Thin Dark Su Loamy Muck Loamy Gleye X Depleted Ma Redox Dark S	ator or confliction for the state of the sta	Type ¹ C 8) (LRR R,	vailable: ence of indi Loc² M	Texture SANDY LOAM LOAMY SAND	ng, M=Matrix. lematic Hydric S k10) (LRR K, L, ML Redox (A16) (LRR Peat or Peat (S3) (S9) (LRR K, L, M) low Surface (S8) (face (S9) (LRR K, ese Masses (F12)	Remarks Soils ³ : .RA 149B) 2 K, L, R) (LRR K, L, R) LRR K, L) (LRR K, L) (LRR K, L, R)	
Water Table Preseis Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0.4 2.5 4.15 2.5 Type: C=Concentration Hydric Soil Indicate Histosol (A1) Histic Epipec Black Histic (Epipec Black Histic (Epipec Stratified Lay Depleted Be Thick Dark S Sandy Muck	nt? ? Data (streame last 5 days : (Describe to Matrix (moist) Y 3/1 Y 4/2 n, D=Depletion Ors: don (A2) (A3) ulfide (A4) yers (A5) low Dark Surf urface (A12) y Mineral (S1	X m gauge, monito s at Jay Peak (NO) to the depth need % 100 93 , RM=Reduced Matri	Depth (inches): Depth (inches): Depth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist) 7.5YR 4/6 Polyvalue Be MLRA 149 Thin Dark Su Loamy Muck Loamy Gleye X Depleted Ma Redox Dark Su Depleted Da	ator or conflictox Features 7 Felow Surface (Silb) For Grant (F1) Add Matrix (F2) Add Matrix (F3) Surface (F6) rk Surface (F7)	Type ¹ C 8) (LRR R,	vailable: ence of indi Loc² M	rexture SANDY LOAM LOAMY SAND **Location: PL=Pore Linir Indicators for Prob 2 cm Muck (# Coast Prairie 5 cm Mucky Dark Surface Polyvalue Bel Thin Dark Sur Iron-Mangan Piedmont Flo	ng, M=Matrix. Iematic Hydric S A10) (LRR K, L, ML Redox (A16) (LRR Peat or Peat (S3) (S9) (LRR K, L, M) ow Surface (S8) (face (S9) (LRR K, ese Masses (F12) odplain Soils (F15)	Remarks Soils ³ : .RA 149B) t K, L, R) (LRR K, L, R) LN (LRR K, L) (LRR K, L, R) 9) (MLRA 149E	
Water Table Presets Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0-4 2.5 4-15 2.5 Type: C=Concentratio Hydric Soil Indicate Histosol (A1) Histic Epipec Black Histic (Hydrogen St. Stratified La, Depleted Be Thick Dark S Sandy Muck Sandy Gleye	nt? ? Data (streal e last 5 days : (Describe t	X m gauge, monito s at Jay Peak (NO) to the depth need % 100 93 , RM=Reduced Matri	Depth (inches): Depth (inches): Depth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist) 7.5YR 4/6 X, MS=Masked Sand Grains. Polyvalue Be MLRA 149 Thin Dark Su Loamy Muck Loamy Gleye X Depleted Ma Redox Dark S	ator or conflictox Features 7 Felow Surface (Silb) For Grant (F1) Add Matrix (F2) Add Matrix (F3) Surface (F6) rk Surface (F7)	Type ¹ C 8) (LRR R,	vailable: ence of indi Loc² M	rexture SANDY LOAM LOAMY SAND 2 Location: PL=Pore Linir Indicators for Prob 2 cm Muck (A Coast Prairie 5 cm Mucky Dark Surface Polyvalue Bel Thin Dark Sur Iron-Mangan Piedmont Flo Mesic Spodic	ng, M=Matrix. Idematic Hydric Stato (A16) (LRR K, L, M) Peat or Peat (S3) (S9) (LRR K, L, M) ow Surface (S8) (face (S9) (LRR K, L) ese Masses (F12) odplain Soils (F13) (TA6) (MLRA 144	Remarks Soils ³ : .RA 149B) t K, L, R) (LRR K, L, R) LN (LRR K, L) (LRR K, L, R) 9) (MLRA 149E	
Water Table Preseis Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0-4 2.5 4-15 2.5 Type: C=Concentration Hydric Soil Indicator Histosol (A1) Histic Epipec Black Histic (Epipec Stratified Lay Depleted Be Thick Dark Sandy Muck	nt? ? Data (streal e last 5 days : (Describe t	X m gauge, monito s at Jay Peak (NO) to the depth need % 100 93 , RM=Reduced Matri	Depth (inches): Depth (inches): Depth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist) 7.5YR 4/6 Polyvalue Be MLRA 149 Thin Dark Su Loamy Muck Loamy Gleye X Depleted Ma Redox Dark Su Depleted Da	ator or conflictox Features 7 Felow Surface (Silb) For Grant (F1) Add Matrix (F2) Add Matrix (F3) Surface (F6) rk Surface (F7)	Type ¹ C 8) (LRR R,	vailable: ence of indi Loc² M	rexture SANDY LOAM LOAMY SAND **Location: PL=Pore Linir Indicators for Prob 2 cm Muck (# Coast Prairie 5 cm Mucky Dark Surface Polyvalue Bel Thin Dark Sur Iron-Mangan Piedmont Flo	ng, M=Matrix. Idematic Hydric Stato (A16) (LRR K, L, M) Peat or Peat (S3) (S9) (LRR K, L, M) ow Surface (S8) (face (S9) (LRR K, L) ese Masses (F12) odplain Soils (F13) (TA6) (MLRA 144	Remarks Soils ³ : .RA 149B) t K, L, R) (LRR K, L, R) LN (LRR K, L) (LRR K, L, R) 9) (MLRA 149E	
Water Table Presets Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0-4 2.5 4-15 2.5 Type: C=Concentratio Hydric Soil Indicate Histosol (A1) Histic Epipec Black Histic (Hydrogen St. Stratified La, Depleted Be Thick Dark S Sandy Muck Sandy Gleye	nt? ? Data (streal e last 5 days : (Describe t	X m gauge, monito s at Jay Peak (NO) to the depth need % 100 93 , RM=Reduced Matri	Depth (inches): Depth (inches): Pepth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist) 7.5YR 4/6 X, MS=Masked Sand Grains. Polyvalue Be MLRA 149 Thin Dark Su Loamy Muck Loamy Gleye X Depleted Ma Redox Dark Su Depleted Da Redox Depre	ator or conflictox Features 7 Felow Surface (Silb) For Grant (F1) Add Matrix (F2) Add Matrix (F3) Surface (F6) rk Surface (F7)	Type ¹ C 8) (LRR R,	vailable: ence of indi Loc² M 9B)	Texture SANDY LOAM LOAMY SAND 2 Location: PL=Pore Linit Indicators for Prob 2 cm Muck (# Coast Prairie 5 cm Mucky Dark Surface Polyvalue Bel Thin Dark Sur Iron-Mangan Piedmont Flo Mesic Spodic Red Parent N	ng, M=Matrix. Idematic Hydric Stato (A16) (LRR K, L, M) Peat or Peat (S3) (S9) (LRR K, L, M) ow Surface (S8) (face (S9) (LRR K, L) ese Masses (F12) odplain Soils (F13) (TA6) (MLRA 144	Remarks Soils ³ : RA 149B) K, L, R) (LRR K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (MLRA 149B)	
Water Table Preset Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0-4 2.5 4-15 2.5 Type: C=Concentratio Hydric Soil Indicate Histosol (A1) Histic Epipee Black Histic (Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Muck Sandy Gleye Sandy Redoo Stripped Ma	nt? ? Data (streal e last 5 days : (Describe t	m gauge, monitons at Jay Peak (NO) to the depth need % 100 93 , RM=Reduced Matri	Depth (inches): Depth (inches): Pepth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist) 7.5YR 4/6 X, MS=Masked Sand Grains. Polyvalue Be MLRA 149 Thin Dark Suc Loamy Muck Loamy Gleye X Depleted Ma Redox Dark S Depleted Da Redox Depre	tator or confliction of the conf	Type ¹ C 8) (LRR R, R, MLRA 145 (LRR K, L)	ence of indi Loc ² M 9B)	rexture SANDY LOAM LOAMY SAND 2 Location: PL=Pore Linin Indicators for Prob 2 cm Mucky Coast Prairie 5 cm Mucky Dark Surface Polyvalue Bel Thin Dark Sui Iron-Mangan Piedmont Flo Mesic Spodio Red Parent No	ng, M=Matrix. lematic Hydric S 10) (LRR K, L, ML Redox (A16) (LRR Peat or Peat (S3) (S9) (LRR K, L, M) ow Surface (S8) (face (S9) (LRR K, ese Masses (F12) odplain Soils (F15 (TA6) (MLRA 144 laterial (F21)	Remarks Soils ³ : RA 149B) K, L, R) (LRR K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (MLRA 149B)	
Water Table Presets Saturation Present Caturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0-4 2.5 4-15 2.5 Type: C=Concentration Hydric Soil Indicate Histosol (A1) Histic Epiped Black Histic (Hydrogen Sustratified Lay Depleted Be Thick Dark Sandy Muck Sandy Gleye Sandy Redoo Stripped Ma Dark Surface	nt? ? I Data (streal e last 5 days : (Describe t	x m gauge, monito at Jay Peak (NO. s at Jay Peak (N	Depth (inches): Depth (inches): Pepth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist) 7.5YR 4/6 X, MS=Masked Sand Grains. Polyvalue Be MLRA 149 Thin Dark Suc Loamy Muck Loamy Gleye X Depleted Ma Redox Dark S Depleted Da Redox Depre	tator or confliction of the conf	Type ¹ C 8) (LRR R, R, MLRA 145 (LRR K, L)	ence of indi Loc ² M 9B)	rexture SANDY LOAM LOAMY SAND 2 Location: PL=Pore Linin Indicators for Prob 2 cm Mucky Coast Prairie 5 cm Mucky Dark Surface Polyvalue Bel Thin Dark Sui Iron-Mangan Piedmont Flo Mesic Spodio Red Parent No	ng, M=Matrix. lematic Hydric S A10) (LRR K, L, ML Redox (A16) (LRR Peat or Peat (S3) (S9) (LRR K, L, M) ow Surface (S8) (face (S9) (LRR K, ese Masses (F12) odplain Soils (F19 (TA6) (MLRA 144 laterial (F21) Dark Surface (TF	Remarks Soils ³ : RA 149B) K, L, R) (LRR K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (MLRA 149B)	
Water Table Presets Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0-4 2.5 4-15 2.5 Type: C=Concentratio Hydric Soil Indicate Histosol (A1) Histic Epipee Black Histic (Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Muck Sandy Gleye Sandy Redoo Stripped Ma	nt? ? I Data (streal e last 5 days : (Describe t	x m gauge, monito at Jay Peak (NO. s at Jay Peak (N	Depth (inches): Depth (inches): Pepth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist) 7.5YR 4/6 X, MS=Masked Sand Grains. Polyvalue Be MLRA 149 Thin Dark Suc Loamy Muck Loamy Gleye X Depleted Ma Redox Dark S Depleted Da Redox Depre	tator or confliction of the conf	Type ¹ C 8) (LRR R, R, MLRA 145 (LRR K, L)	ence of indi Loc ² M 9B)	rexture SANDY LOAM LOAMY SAND 2Location: PL=Pore Linin Indicators for Prob 2 cm Mucky Coast Prairie 5 cm Mucky Dark Surface Polyvalue Bel Thin Dark Suil Iron-Mangan Piedmont Flo Mesic Spodio Red Parent N Very Shallow Other (Explain	ng, M=Matrix. lematic Hydric S A10) (LRR K, L, ML Redox (A16) (LRR Peat or Peat (S3) (S9) (LRR K, L, M) ow Surface (S8) (face (S9) (LRR K, ese Masses (F12) odplain Soils (F19 (TA6) (MLRA 144 laterial (F21) Dark Surface (TF	Remarks Soils ³ : RA 149B) K, L, R) (LRR K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (MLRA 149B)	
Water Table Preset Saturation Present Describe Recorded 0.89" in the Remarks: SOIL Profile Description Depth (in) Color 0-4 2.5 4-15 2.5 Type: C=Concentration Hydric Soil Indicate Histosol (A1) Histic Epiped Black Histic (Hydrogen Su Stratified Lay Depleted Be Thick Dark S Sandy Muck Sandy Gleye Sandy Gleye Sandy Gleye Sandy Redoo Stripped Ma Dark Surface Restrictive Layer (i	c: (Describe t	x m gauge, monito at Jay Peak (NO. s at Jay Peak (N	Depth (inches): Depth (inches): Pepth (inches): ring well, aerial photos, p AA) led to document the indic Rec Color (moist) 7.5YR 4/6 X, MS=Masked Sand Grains. Polyvalue Be MLRA 149 Thin Dark Suc Loamy Muck Loamy Gleye X Depleted Ma Redox Dark S Depleted Da Redox Depre	tator or confliction of the conf	Type ¹ C 8) (LRR R, R, MLRA 145 (LRR K, L)	ence of indi Loc ² M 9B)	rexture SANDY LOAM LOAMY SAND 2Location: PL=Pore Linin Indicators for Prob 2 cm Mucky Coast Prairie 5 cm Mucky Dark Surface Polyvalue Bel Thin Dark Suil Iron-Mangan Piedmont Flo Mesic Spodio Red Parent N Very Shallow Other (Explain	ng, M=Matrix. Iematic Hydric S A10) (LRR K, L, ML Redox (A16) (LRR K, L, M) ow Surface (S8) (fface (S9) (LRR K, L, M) ow Surface (F12) odplain Soils (F12) TA6) (MLRA 144 laterial (F21) Dark Surface (TF n in Remarks)	Remarks Soils ³ : RA 149B) RK, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR A 149E) (MLRA 149B) 12)	

Sampling Point:

H13-WT1/a/b

	Absolute	Dom.	Indicator	
Tree Stratum (Plot size:)	_ % Cover	Sp?	Status	Dominance Test Worksheet:
1.				# Dominants OBL, FACW, FAC: 6 (A)
2.				
2				# Dominants across all strata: 6 (B)
4				Bonniants deross an strata.
-				S(B) : 1 OB) 51001 510 4000((1/0)
5				% Dominants OBL, FACW, FAC: 100% (A/B)
6.				
7.				Prevalence Index Worksheet:
		= Total	Cover	Total % Cover of: Multiply By:
Sapling Stratum (Plot size:)				OBL 110 x 1 = 110
1.				FACW 3 x 2 = 6
3				FAC 21 x3= 63
•				FACU x 4 =
4				
				UPL x5 =
5.		. ——		Sum:(A)(B)
6				
7.				Prevalence Index = B/A = 1.34
		= Total	Cover	Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size: 15'RAD)	-	•		X Dominance Test is > 50%
	15	х	OBL	X Prevalence Index is <= 3.0
3				Problematic Hydrophytic Vegetation ¹ (explain)
				Rapid Test for Hydrophytic Vegetation
4.				Morphological Adaptations
5				¹ Indicators of hydric soil and wetland hydrology must be present, unless
6.				disturbed or problematic.
7				Definitions of Vegetation Strata:
-	15	= Total	Cover	
Herb Stratum (Plot size: 5' RAD)		-		Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or
1. Carex comosa	38	x	OBL	more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).
2. Carex crinita		- X	OBL	
3. Solidago rugosa	15	<u> </u>	FAC	
4. Scirpus cyperinus	15	X	OBL	Sapling - Woody plants, excluding woody vines, approximately 20ft (6m)
5. Scirpus hattorianus	15	X	OBL	or more in height and less than 3in (7.6cm) DBH.
6. Euthamia graminifolia	3		FAC	
7. Lycopus americanus	3		OBL	
8. Scirpus atrovirens	3		OBL	Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1
9. Mimulus ringens			OBL	to 6m) in height.
10. Carex scoparia			FACW	
				Horb Allberters were the release to the least of
11. Juncus effusus	<u></u>		OBL	Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than
12. Juncus tenuis	3		FAC	approximately 3ft (1m) in height.
	119	_ = Total	Cover	,,
Woody Vines (Plot size:)				
1.				
2.				Woody vine - All woody vines, regardless of height.
3.				
4.				Hydrophytic
5.				Vegetation
				_
		= Total	Cover	Present? YES
Remarks: (If observed, list morphological adaptations below).				

Vhb	WETLAND DETERMINATION DATA FORM - Northcentra

Project Site:	JPR Golf Course We	etland Mitigation		City/County:	Jay/Orle	ans		Samp. Date: 8/4/	/2014
Applicant/Owner:	Jay Peak Resort				State:	VERMONT	Sampling Point:	H	L5-WT1
Investigator(s):	P. Werts-Kallfelz			Section,	Townsh	ip, Range:			
andform (hillslope, te	errace, etc.): Terrace	e		Local relief (concave, co	nvex, none):	Concave	Slope (%):	
Subregion (LRR or	MLRA): LRR		Lat:	44°56'35.358	3"N	Long:	72°30'46.838"W	Datum:	NAD 83
ioil Map Unit:	Cabot					-		NWI Class:	PEM
are climatic/hydrolo	gic conditions on th	e site typical for this ti	me of year	?	YES	(If no, e	xplain in Remarks.)		
Are Vegetation, Soil,	, or Hydrology signifi	cantly disturbed?	NO				Normal Ci	rcumstances?	YES
re Vegetation, Soil	, or Hydrology natur	ally problematic?	NO				(If needed, e	xplain any answers	in Remarks.)
	FINDINGS - Atta								
Hydrophytic Vegeta	tion Present?	YES				Ic Thic	Sample Area Within	a Watland?	NO
Hydrophytic Vegeta Hydric Soil Present?	tion Present?	YES				Is This	Sample Area Within	a Wetland?	NO
Hydrophytic Vegeta Hydric Soil Present? Wetland Hydrology	tion Present?					ls This	Sample Area Within	a Wetland?	NO
Hydrophytic Vegeta Hydric Soil Present? Wetland Hydrology	tion Present?	YES				Is This	Sample Area Within	a Wetland?	NO
Hydrophytic Vegeta Hydric Soil Present? Wetland Hydrology	tion Present?	YES				Is This	Sample Area Within	a Wetland?	NO
Hydrophytic Vegeta Hydric Soil Present? Wetland Hydrology	tion Present?	YES				Is This	Sample Area Within	a Wetland?	NO
Hydrophytic Vegeta Hydric Soil Present? Wetland Hydrology Remarks:	tion Present?	YES				Is This	Sample Area Within	a Wetland?	NO
Hydrophytic Vegeta Hydric Soil Present? Wetland Hydrology Remarks:	tion Present?	YES				Is This	Sample Area Within	a Wetland?	NO
Hydrophytic Vegeta Hydric Soil Present? Wetland Hydrology	tion Present? Present?	YES				Is This	Sample Area Within		

Vetland Hydrology Indicators:	Secondary Indicators (minimum of two required)			
rimary Indicators (minimum of one is required; o	heck all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B13)	Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsely Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)		
ield Observations:				
Surface Water Present?	Depth (inches):			
Water Table Present?	Depth (inches):	Wetland Hydrology Present? NO		
Saturation Present?	Depth (inches):			

Remarks:

SOIL

Depth	Matrix		Redo	x Features			Remarks			
(in)	Color (maist)	Color (moist)	%	Type ¹	Loc²	Texture				
0-10	10YR 2/2	93	2.5Y 4/2	7	D .	M	SANDY LOAM	•		
10-14	10Y 4/1	98	7.5YR 5/8	2		М	LOAMY SAND			
Type: C=C	Concentration, D=Depletion, R	M=Reduced Matr	ix, MS=Masked Sand Grains.				² Location: PL=Pore Lining, M=N	fatrix.		
Hydric So	oil Indicators:						Indicators for Problemati	c Hydric Soils ³ :		
н	istosol (A1)		Polyvalue Belo	w Surface (S	8) (LRR R,		2 cm Muck (A10) (LRR K, L, MLRA 149B)			
	istic Epipedon (A2)		MLRA 149B)		,,		Coast Prairie Redox (A16) (LRR K, L, R)			
в	lack Histic (A3)		Thin Dark Surf	Thin Dark Surface (S9) (LRR R, MLRA 149B)				5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
— н	ydrogen Sulfide (A4)	Loamy Mucky	Loamy Mucky Mineral (F1) (LRR K, L)				Dark Surface (S9) (LRR K, L, M)			
s	tratified Layers (A5)		Loamy Gleyed	Loamy Gleyed Matrix (F2)				Polyvalue Below Surface (S8) (LRR K, L)		
D	epleted Below Dark Surfac	e (A11)	X Depleted Matr	X Depleted Matrix (F3)				Thin Dark Surface (S9) (LRR K, L)		
т_т	hick Dark Surface (A12)		Redox Dark Su	rface (F6)		iron-Manganese Masses (F12) (LRR K, L, R)				
s	andy Mucky Mineral (S1)		Depleted Dark	Surface (F7))	Piedmont Floodplain Soils (F19) (MLRA 149B)				
s	andy Gleyed Matrix (S4)		Redox Depress	sions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
s	andy Redox (S5)							Red Parent Material (F21)		
S	tripped Matrix (S6)		3Indio	ators of hyd	Irophytic veg	Very Shallow Dark Surface (TF12)				
D	ark Surface (S7) (LRR R, MI		wetland hydrology must be present, unless				Other (Explain in Remarks)			
				di	isturbed or p	problematic.				
Restricti	ve Layer (if observed):							_		
	Type:						Hydric Soil I	Present? YES		
Dep	oth (inches):									

Sampling Point:

H15-WT1

	Absolute	Dom.	Indicator	
Tree Stratum (Plot size:)	% Cover	Sp?	Status	Dominance Test Worksheet:
4				
				# Dominants OBL, FACW, FAC: 5 (A)
2.				
3.				# Dominants across all strata: 5 (B)
4				
E				% Dominants OBL, FACW, FAC: 100% (A/B)
C				
7.				Prevalence Index Worksheet:
		= Total	l Cover	Total % Cover of: Multiply By:
Sapling Stratum (Plot size:)				OBL 54 x1= 54
				FACW 53 x 2 = 106
2.				
3.				FACU 3 x 4 = 12
4				UPL x5=
5.				Sum: 119 (A) 199 (B)
6.				
7.				Prevalence Index = B/A = 1.67
		= Tota	l Cover	Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size: 15'RAD)				X Dominance Test is > 50%
1. Cornus alba	15	v	EACW	
		<u> </u>	FACW	X Prevalence Index is <= 3.0
2. Salix bebbiana	15	X	FACW	Problematic Hydrophytic Vegetation ¹ (explain)
3. Acer rubrum	3		FAC	Rapid Test for Hydrophytic Vegetation
4. Betula alleghaniensis	3		FAC	Morphological Adaptations
				- · · · · · · · · · · · · · · · · · · ·
				¹ Indicators of hydric soil and wetland hydrology must be present, unless
6.				disturbed or problematic.
7				Definitions of Vegetation Strata:
	36	= Tota	l Cover	
Herb Stratum (Plot size: 5' RAD)		•		Tree - Woody plants, excluding woody vines, approximately 20ft (6m) or
`	10	v	OBL	more in height and 3in (7.6cm) or larger in diameter at breast height (DBH).
1. Carex crinita	38	. <u> </u>	OBL	more in respire and any property and interest are present respire to any
2. Carex comosa	15	X	OBL	
3. Solidago gigantea	15	X	FACW	
4. Verbena hastata	3		FACW	Sapling - Woody plants, excluding woody vines, approximately 20ft (6m)
5. Euthamia graminifolia			FAC	or more in height and less than 3in (7.6cm) DBH.
				, , , , , , , , , , , , , , , , , , ,
6. Eupatorium perfoliatum	3		FACW	<u> </u>
7. Anaphalis DC	3		FACU	
8. Onoclea sensibilis	1		FACW	Shrub - Woody plants, excluding woody vines, approximately 3 to 20ft (1
9. Thalictrum L.			NI NI	to 6m) in height.
10. Symphyotrichum novae-angliae	1		FACW	
11. Asclepias incarnata	1		OBL	Herb - All herbaceous (non-woody) plants, including herbaceous vines,
12.				regardless of size. Includes woody plants, except woody vines, less than
	84	= Tota	Cover	approximately 3ft (1m) in height.
Woody Vines (Diet size)				
Woody Vines (Plot size:)				
1				
2				Woody vine - All woody vines, regardless of height.
3.				
4.				Hydrophytic
5.				, , ,
5				Vegetation
		= Tota	l Cover	Present? YES
		=		
Remarks: (If observed, list morphological adaptations helpw)	-	****		
Remarks: (If observed, list morphological adaptations below).				
				l
				1
				1
				I
				1



Photograph 1: H5-TB3 from Station H5-TB3-P1, facing east (P. Werts, 8/5/14)



Photograph 2: H5-TB1 from Station H5-TB1-P1, facing south (P. Werts, 8/5/2014)





Photograph 3: H5-Create from Station H5-Create-P1, facing northeast (P. Werts, 8/5/2014)



Photograph 4: H6-WT1, from Station H6-WT1-P1, facing southeast (P. Werts, 8/5/14)





Photograph 5: H6-WT1, from Station H6-WT1-P2, facing east (P. Werts, 8/5/14)



Photograph 6: H6-TB1 from Station H6-TB1-P1, facing south (P. Werts, 8/5/14)





Photograph 7: H6-TB1 from Station H6-TB1-P2, facing northwest (P. Werts, 8/5/14)



Photograph 8: WH-WT1 from Station WH-WT1-P1, facing northeast (P. Werts, 8/5/14)





Photograph 9: WH-WT2 from Station WH-WT2-P1, facing southwest (P. Werts, 8/5/14)



Photograph 10: H7-SC1 from Station H7-SC1-P1, facing southeast (P. Werts, 8/5/14)





Photograph 11: H4-WT1/2 from Station H4-WT1-P1, facing southeast (P. Werts, 8/5/14)



Photograph 12: H4-WT3 from Station H4-WT3-P1, facing east (P. Werts, 8/5/14)





Photograph 13: H8-SC3 from Station H8-SC3-P1, facing east (P. Werts, 8/4/14)



Photograph 14: H8-SC1 from Station H8-SC1-P1, facing northeast (P. Werts, 8/4/14)





Photograph 15: H8-Create from Station H8-Create-P1, facing northeast (P. Werts, 8/4/14)



Photograph 16: H1-WT1 from Station H1-WT1-P1, facing north (P. Werts, 8/4/14)





Photograph 17: P2-TB1 looking upstream from Station P2-TB1-P1, facing southwest (P. Werts, 8/4/14)



Photograph 18: P2-TB1 looking downstream from Station P2-TB1-P1, facing northeast (P. Werts, 8/4/14)





Photograph 19: P2-TB1 looking upstream from Station P2-TB1-P2, facing southwest (P. Werts, 8/5/14)



Photograph 20: P2-TB1 looking upstream from Station P2-TB1-P3, facing southwest (P. Werts, 8/5/14)



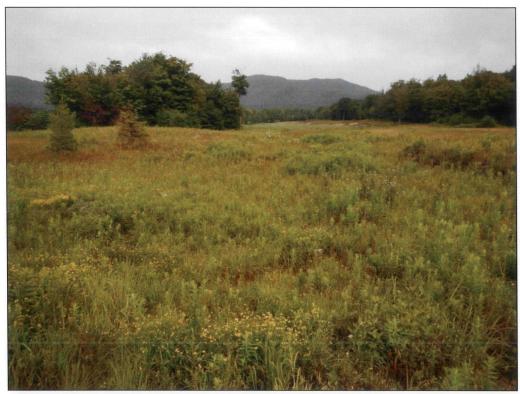


Photograph 21: H11-WT2/3 from Station H11-WT2/3-P1, facing southwest (P. Werts, 8/4/14)



Photograph 22: H11-TB1 from Station H11-TB1-P1, facing northwest (P. Werts, 8/4/14)





Photograph 23: H11-Create from Station H11-Create-P1, facing northwest (P. Werts, 8/4/14)



Photograph 24: H11-Create from Station H11-Create-P2, facing southeast (P. Werts, 8/4/14)





Photograph 25: H11-TB2 from Station H11-TB2-P1 facing north (P. Werts, 8/4/14)



Photograph 26: H11-WT6 from Station H11-WT6-P1, facing northeast (P. Werts, 8/4/14)





Photograph 27: H12-TB1u from Station H12-TB1u-P1, facing south (P. Werts, 8/4/14)



Photograph 28: H13-TB1u from Station H13-TB1u-P1, facing north (P. Werts, 8/4/14)





Photograph 29: H13-TB2 from Station H13-TB2-P1, facing south (P. Werts, 8/4/14)



Photograph 30: H13-SC/TB3 from Station H13-SC/TB3-P1, facing north (P. Werts, 8/4/14)





Photograph 31: H13-WT1/a/b from Station H13-WT1/a/b-P1, facing north (P. Werts, 8/4/14)



Photograph 32: H13-WT2-from Station H13-WT2-P1, facing west (P. Werts, 8/4/14)





Photograph 33: H13-WT3 from Station H13-WT3-P1, facing southwest (P. Werts, 8/4/14)



Photograph 34: H14-WT1u from Station H14-WT1u-P1, facing southeast (P. Werts, 8/4/14)





Photograph 35: H14-SC1 from Station H14-SC1-P1, facing northwest (P. Werts, 8/4/14)



Photograph 36: H14-WT2/3 from Station H14-WT2/3-P1, facing west (P. Werts, 8/4/14)





Photograph 37: H14-WT1d from Station H14-WT1d-P1, facing southeast (P. Werts, 8/4/14)



Photograph 38: H15-TB1 from Station H15-TB1-P1, facing south (P. Werts, 8/4/14)





Photograph 39: H15-WT1 from Station H15-WT1-P1, facing south (P. Werts, 8/4/14)



Photograph 40: H13-TB1d from Station H15-TB1d-P1, facing north (P. Werts, 8/4/14)





Photograph 41: H12-TB1d from Station H12-TB1d-P1, facing south (P. Werts, 8/4/14)



Photograph 42: H16-Create from Station H16-Create-P1, facing southwest (P. Werts, 8/4/14)





Photograph 43: H16-Create from Station H16-Create-P2, facing northwest (P. Werts, 8/4/14)



Photograph 44: H16-SC1 from Station H16-SC1-P1, facing northwest (P. Werts, 8/4/14)



APPENDIX E

MITIGATION REPORT TRANSMITTAL AND SELF-CERTIFICATION

DEPARTMENT C				NAE-2008-1314
PROJECT TITLE:	Jay Peak Resor	t Golf Cours	se	

PERMITTEE:

4850 VT Route 242

MAILING ADDRESS:

Jay, VT 05859

TELEPHONE:

802-988-2726

AUTHORIZED AGENT: Vanasse Hangen Brustlin, Inc.

MAILING ADDRESS:

40 IDX Drive, Building 100, Suite 200

South Burlington, VT 05403

TELEPHONE:

802-497-6100

ATTACHED MITIGATION REPORT Jay Peak Resort Golf Course Mitigation - Fourth Annual (2014) Mitigation Monitoring Report

TITLE:

PREPARERS:

Vanasse Hangen Brustlin, Inc.

DATE:

January 27, 2015

CERTIFICATION OF COMPLIANCE: I certify that the attached report is accurate and discloses that the mitigation required by the Department of the Army Permit (is) is not in full compliance with the terms and conditions of that permit.

CORRECTIVE ACTION: A need for corrective action [is] (is not) identified in the attached report.

CONSULTATION: I [do] (do not) request consultation with the Corps of Engineers to discuss a corrective strategy or permit modification.

CERTIFIED:

(Signature of permittee)

)711 - 26 2015 Date