



Axio Power Canada Inc./  
SunEdison Canada

## Water Body Site Investigation Report

For

Norfolk Bloomsburg TS  
Solar Energy Project

H335467

Rev. 0

November 25, 2011

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Project Report

November 25, 2011

**Axio Power Canada Inc./SunEdison Canada  
Norfolk Bloomsburg TS - Solar Energy Project**

**Water Body Site Investigation Report**

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## 1. Introduction

### 1.1 Project Description

Axio Power Canada Inc./SunEdison Canada ("Axio/SunEdison") is proposing to develop a 10 megawatt (MW) solar photovoltaic project titled Norfolk Bloomsburg TS Solar Energy Project (the "Project"). The Project Location<sup>1</sup> is situated on an approximately 29 hectare (ha) parcel of land on Part of Lots 3 and 4, Concession 12, Norfolk County (single tier municipality).

### 1.2 Legislative Requirements

Ontario Regulation (O. Reg.) 359/09 – *Renewable Energy Approvals Under Part V.0.1 of the Act*, (herein referred to as the REA Regulation) made under the *Environmental Protection Act*, came into force on September 24, 2009 and identifies the Renewable Energy Approval (REA) requirements for renewable energy generation facilities in Ontario. The REA Regulation has since been amended by O. Reg. 521/10, which came in effect as of January 1, 2011. This report has been prepared to reflect the amended REA Regulation.

As per the REA Regulation (Part II, Section 4), ground-mounted solar facilities with a nameplate capacity greater than (>) 10 kilowatts (kW) are classified as Class 3 solar facilities and require an REA.

Part IV, subsection 29 (1) of the REA Regulation requires proponents of Class 3 solar projects to conduct a water assessment consisting of a Water Body Records Review (Hatch Ltd., 2011) and a Water Body Site Investigation.

Subsection 1 (1) of the REA Regulation defines a water body as a lake, permanent stream, intermittent stream or seepage area, but does not include:

- a) grassed waterways
- b) temporary channels for surface drainage, such as furrows, or shallow channels that can be tilled or driven through
- c) rock chutes and spillways
- d) roadside ditches that do not contain a permanent or intermittent stream
- e) temporarily ponded areas that are normally farmed
- f) dugout ponds, or
- g) artificial bodies of water intended for the storage, treatment or recirculation of runoff from farm animal yards, manure storage facilities and sites and outdoor confinement areas.

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<sup>1</sup> "Project Location means, when used in relation to a renewable energy project, a part of land and all or part of any building or structure in, on or over which a person is engaging in or proposes to engage in the project and any air space in which a person is engaging in or proposed to engage in the project" (O. Reg. 359/09, s. 1 (1)).

Further, intermittent streams are defined as “a natural or artificial channel, other than a dam, that carries water intermittently and does not have established vegetation within the bed of the channel, except vegetation dominated by plant communities that require or prefer the continuous presence of water or continuously saturated soils for their survival” (O. Reg. 359/09).

Seepage areas are defined as “a site of emergence of groundwater where the water table is present at the ground surface, including a spring” (O. Reg. 359/09).

Subsection 31 (1) requires an investigation of the land and water within 120 metres of the Project Location, either by visiting the site or by alternative investigation of the site, in order to determine the following:

- (a) whether the results of the analysis summarized in the Water Body Records Review Report (Hatch Ltd., 2011) prepared under subsection 30 (2) are correct or require correction, and identifying any required corrections;
- (b) whether any additional water bodies exist, other than those that were identified in the Water Body Records Review Report (Hatch Ltd., 2011) prepared under subsection 30 (2);
- (c) the boundaries, located within 120 m of the Project location, of any water body that was identified in the Water Body Records Review Report (Hatch Ltd., 2011) or the site investigation; and
- (d) the distance from the Project location to the boundaries determined under clause (c). O.Reg. 359/09, s. 31 (1); O. Reg. 521/10, s. 18 (1).

Subsection 31 (2) has specific requirements if designated lake trout lakes are present within 300 m of the Project location. Since the Water Body Records Review Report (Hatch Ltd., 2011) did not identify any lake trout lakes within 300 m of the Project Location, the requirements under subsection 31 (2) do not apply.

Subsection 31 (3) states that the person mentioned in subsection (1) may, for the purpose of subsection (1) or (2), conduct an alternative investigation of the site only if he or she determines that it is not reasonable to conduct a site investigation by visiting the site. O. Reg. 521/10, s. 18 (2). The site investigation completed for this Project involved visiting the site. Therefore, the requirements for completing an alternative investigation of the site do not apply to this Project.

Subsection 31 (4) requires the proponent to prepare a report setting out the following with respect to the land and water in respect of which any site investigation was conducted:

- 1. A summary of any corrections to the Water Body Records Review Report (Hatch Ltd., 2011) and the determinations made as a result of conducting the site investigation.
- 2. Information relating to each water body identified in the Water Body Records Review Report (Hatch Ltd., 2011) and in the site investigation, including the type of water body, plant and animal composition and the ecosystem of the land and water investigated.

3. A map showing,
  - i. the boundaries mentioned in clause 31 (1) (c),
  - ii. the location and type of each water body identified in relation to the Project Location, and
  - iii. all distances mentioned in clause 31 (1) (d).
4. A summary of methods used to make observations for the purposes of the site investigation.
5. The name and qualifications of any person conducting the site investigation.
6. If an investigation was conducted by visiting the site:
  - i. the dates and times of the beginning and completion of the site investigation.
  - ii. the duration of the site investigation.
  - iii. the weather conditions during the site investigation
  - iv. field notes kept by the person conducting the site investigation
7. If an alternative investigation of the site was conducted:
  - i. the dates of the generation of the data used in the site investigation.
  - ii. an explanation of why the person who conducted the alternative investigation determined that it was not reasonable to conduct the site investigation by visiting the site. O. Reg. 521/10, s. 18 (2).

Subsection 31 (5) requires the proponent to submit the report prepared under subsection 31 (4) as part of an application for the issue of a renewable energy approval. O. Reg. 521/10, s. 18 (2).

This Water Body Site Investigation Report has been prepared to meet the requirements under Section 31. A physical examination of the site was completed and any requirements under Section 31 related to an alternative investigation of the site do not apply to this Project and will not be included in this report.

## 2. Summary of Results of Records Review

Table 2.1 summarizes the results of the Water Body Records Review Report (Hatch Ltd., 2011).

**Table 2.1 Summary of Records Review Determinations**

Determination to be Made	Yes/No	Description
Is the Project Location in a water body?	No	No part of the Project will be constructed within a water body.
Is the Project Location within 120 m of the average annual high water mark of a lake, other than a lake trout lake that is at or above development capacity?	Yes	The OBM mapping identified a pond approximately 70 m west of the Project Location. The presence of this pond will be confirmed during the site investigation and assessed to determine if it meets the definition of a water body as defined in the REA Regulation. No other lakes are present in the study area.
Is the Project Location within 300 m of the average annual high water mark of a lake trout lake that is at or above development capacity?	No	No lake trout lakes are present in the study area.
Is the Project Location within 120 m of the average annual high water mark of a permanent or intermittent stream?	Yes	The NRCAN topographic mapping shows a tributary of Davis Creek south of the Project Location, within the 120 m setback. This drainage feature appears to be an intermittent stream; however, this is not identified on the OBM mapping.
Is the Project Location within 120 m of a seepage area?	No	No seepage areas were identified during the Records Review.

Therefore, based on the information obtained in the Water Body Records Review Report (Hatch Ltd., 2011), a site investigation is required to verify the water features within 120 m of the Project Location. The following sections outline the methodology and results of the site investigation as per the requirements of the REA Regulation.



### **3. Site Investigation Methodology**

A water body site investigation was completed for this Project, as described in the following sections.

#### **3.1 Site Investigation**

##### **3.1.1 *Date, Time and Duration of Site Investigation***

- Date: October 2, 2010
- Start Time: 15:00 hours
- Duration: approximately 1 hour.

##### **3.1.2 *Weather Conditions During Site Investigation***

- Temperature: 10°C
- Beaufort Wind: 1 (0 to 5.5 km/h)
- Cloud Cover: 70%
- Rainfall on day of site investigation: No
- Rainfall in days preceding site investigation: Yes, the previous day.

##### **3.1.3 *Name and Qualifications of Person Conducting Site Investigation***

The site investigations were completed by Paul Ashley of Hatch Ltd.

Paul Ashley, M.Sc. is a senior ecologist with Hatch. Paul has wide-ranging experience working in terrestrial and wetland landscapes. He has led many management and rehabilitation projects related to forests, savannahs, wetlands and riparian corridors. While doing so he has worked with representatives from all tiers of government, NGO's, universities and the private sector. Paul joined Hatch in 2010 and is actively involved in the Renewable Energy Approval process for various solar photovoltaic projects throughout Ontario.

#### **3.2 Survey Methods**

The lands on and within 120 m of the Project Location were searched by the observer on foot in order to document waterbodies. Photographs of the Project (i.e. on and within 120 m of the Project Location) were taken. The observer's notes typically include the type of water body, instream habitat types, surrounding riparian areas, average annual high water mark and wildlife use as well as geographic coordinates at representative areas of the average annual high water mark for waterbodies on and within 120 m of the Project Location. A copy of the field notes kept by the observer during the site investigations is provided in Appendix A.

## **4. Results of Site Investigation**

This section documents the results of the site investigation and discusses specific water features observed on and within 120 m of the Project Location. Water features confirmed to be on or within 120 m of the Project Location are shown in Figure 4.1.

### **4.1 General Site Description**

The Project Location is bounded to the west by Cloet Road and to the south by Concession 13 Road. Properties adjacent to the site are active agricultural lands associated with farmsteads and rural residential dwellings present along Cloet and Concession Roads. The Project Location is comprised of agricultural lands used for the production of row crops (at the time of the site investigation, the land was planted entirely with soybean), as is the surrounding area. The areas adjacent to the Project Location that are not in agricultural production are comprised of small hedgerows as well as natural and man-made water bodies.

The water features identified on and within 120 m of the Project Location are discussed in the following sections. These include the intermittent tributary of Davis Creek identified on NRCAN topographic mapping, and a dug pond located within 120 m of the Project Location. No lakes or grassed waterways, drainage ditches, channels or seepage areas were identified on or within 120 m of the Project Location.





### LEGEND

- +— Railway
- Road
- ..... Temporary Channel (Non-Water Body)
- Topographic Contour (5 m interval)
- Transmission Line
- Dugout Pond
- Parcel
- - - Project Location
- ▭ 120 m from Project Location
- ▭ Project Site

Notes:  
1. OBM and NRVIS data downloaded from LIO, with permission.  
2. Spatial Referencing UTM NAD 83, August 2010  
3. Satellite imagery obtained from Google Earth Pro, imagery dated April 2009.

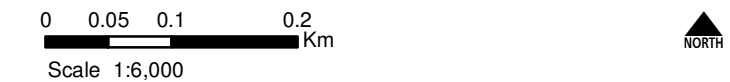



Figure 4.1  
Axio Power Canada Inc./SunEdison Canada  
**Norfolk Bloomsburg TS**  
**Water Body Features** 



## **4.2 Permanent or Intermittent Streams**

Subsection 1 (1) of O. Reg. 359/09 defines permanent stream as “a stream that continually flows in an average year” and intermittent stream as “a natural channel, other than a dam, that carries water intermittently and does not have established vegetation within the bed of the channel, except vegetation dominated by plant communities that require or prefer the continuous presence of water or continuously saturated soil for their survival.”

The Water Body Records Review Report (Hatch Ltd., 2011) identified a tributary of Davis Creek along the southern boundary of the Project Location, within the 120 m setback. The results of the site investigation as it relates to this water feature is discussed in the following section.

### **4.2.1 Tributary of Davis Creek**

The NRCAN topographic mapping shows a tributary of Davis Creek south of the Project Location, within the 120 m setback (Hatch Ltd., 2011). As mentioned in the Water Body Records Review Report (Hatch Ltd., 2011), this drainage feature was not identified on the OBM mapping.

A site investigation, completed on October 2, 2010, determined that the drainage feature identified on the NRCAN topographic mapping does not exist on or within 120 m of the Project Location. Antecedent moisture conditions during the site investigation were fairly high as it had rained the previous day and the fields were wet but no evidence of a permanent or intermittent stream was found. The rolling topography where this drainage feature is shown on the NRCAN mapping is actively used for the production of row crops. Although this area has a natural slope in the topography that would naturally convey water during heavy precipitation events, there was no defined channel or established vegetation that would characterize this as a permanent or intermittent stream. Temporary channels for surface drainage, such as furrows or shallow channels that can be tilled and driven through and temporarily ponded areas that are normally farmed do not meet the definition of a water body according to subsection 1 (1) of the REA Regulation. A photograph showing the location where this drainage feature is depicted on the NRCAN topographic mapping is provided in Figure 4.2.



**Figure 4.2** Photograph of the agricultural field where the tributary of Davis Creek is shown on the NRCAN mapping

Based on the results of the site investigation, the drainage feature identified on the NRCAN mapping does not exist and therefore does not meet the definition of a water body as defined in subsection 1 (1) of the REA Regulation. There were no water features observed on or within 120 m of the Project Location.

### **4.3 Lakes**

The Water Body Records Review Report (Hatch Ltd., 2011) identified a pond located approximately 70 m west of the Project Location, within the 120 m setback. A site investigation, completed on October 2, 2010, confirmed the presence of this pond, however, determined that it does not meet the definition of a water body as defined in subsection 1 (1) of the REA Regulation. This water feature is described further in section 4.5.1.

### **4.4 Seepage Areas**

The information sources reviewed in the Water Body Records Review Report (Hatch Ltd., 2011) did not identify any seepage areas on or within 120 m of the Project Location. This information was confirmed during a site investigation completed on October 2, 2010.

## 4.5 Other Water Features

Other water features observed during the site investigation that do not meet the definition of a water body are discussed below.

### 4.5.1 Dugout Pond

As mentioned in Section 4.3, the site investigation confirmed the presence of a pond approximately 70 m west of the Project Location, within the 120 m setback. This pond was identified in the Water Body Records Review Report (Hatch Ltd., 2011), however, the site investigation determined that it is not a lake, but rather a dugout pond and does not meet the definition of a water body.

The dugout pond is approximately 50 m long, 25 m wide and 10 m deep. There was no water or aquatic vegetation observed within the dugout pond during the time of the site investigation. A photograph of the dugout pond is provided in Figure 4.3.



**Figure 4.3 Photograph of Dry Dugout Pond near the Northwest Portion of Project Location**

Based on the results of the site investigation, the water feature identified during the site investigation is described as a dugout pond. Dugout ponds are not considered a water body as defined in subsection 1 (1) of the REA Regulation. No other water features were observed on or within 120 m of the Project Location. Therefore, there are no specific setback requirements for development in proximity to this feature.



## 5. Conclusions

Subsection 31 (1) of the REA Regulation requires that the Water Body Site Investigation Report include a summary of any corrections to the Water Body Records Review Report (Hatch Ltd., 2011) and the determinations made as a result of conducting the site investigation. The following table identifies the corrections required (if any) and determinations made for the water features identified in the *Water Body Records Review Report* (Hatch Ltd., 2011) and documented during the site investigation (Table 5.1).

**Table 5.1 Summary of the Determinations Made as a Result of the Site Investigation**

Determination to be Made	Yes/No	Corrections Required?
Is the Project Location in a water body?	No	The results of the site investigation have determined that there are no corrections required to the Water Body Records Review Report (Hatch Ltd., 2011) with respect to water bodies on the Project Location.
Is the Project Location within 120 m of the average annual high water mark of a lake, other than a lake trout lake that is at or above development capacity?	No	The results of the site investigation have determined that the following corrections are required to the Water Body Records Review Report (Hatch Ltd., 2011): the pond identified along the western boundary of the Project Location, within the 120 m setback, is described as a dugout pond and therefore does not meet the definition of a water body according to the REA Regulation.
Is the Project Location within 300 m of the average annual high water mark of a lake trout lake that is at or above development capacity?	No	The results of the site investigation have determined that there are no corrections required to the Water Body Records Review Report (Hatch Ltd., 2011) with respect to lakes within 120 m of the Project Location.
Is the Project Location within 120 m of the average annual high water mark of a permanent or intermittent stream?	No	The results of the site investigation have determined that the following corrections are required to the Water Body Records Review Report (Hatch Ltd., 2011): the drainage feature shown on the NRCAN mapping does not exist within 120 m of the Project Location.
Is the Project Location within 120 m of a seepage area?	No	The results of the site investigation have determined that there are no corrections required to the Water Body Records Review Report (Hatch Ltd., 2011) with respect to seepage areas.

As shown on Figure 4.1 and summarized in Table 5.1., there are no water bodies on or within 120 m of the Project Location. As a result, a Water Body Environmental Impact Study is not required.

## 6. References

Hatch Ltd. 2011. Norfolk Bloomsburg TS Proposed Solar Photovoltaic Project Water Body Records Review Report. Axio Power Canada Inc./SunEdison Canada. Niagara Falls, Ontario.

Long Point Region Conservation Authority (LPRCA) 2006 Long Point Region Conservation Authority Maps No. 101 and 81 under Ontario Regulation 97/04 Development, Interference with Wetlands, Alterations to Shorelines and Watercourses Ontario Regulation 178/06. On-line at <http://www.lprca.on.ca/planning.htm>. Accessed August 3, 2010.



# Appendix A

## Field Investigation Notes



## Water Assessment - Site Investigation Field Notes

### Project Identification

Project Name: Norfolk Bloomsburg

### Site Information

Lot Number: lots 3+4 Concession Number: 12

Municipality: \_\_\_\_\_ County: Norfolk

Location: \_\_\_\_\_

UTM: 17T 557323.97 E 4747101.27 N

Latitude: \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "N Longitude: \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "W

### Investigator Information

Name: Paul Asilov

Title: Senior Ecologist

Company Name: HATCH

Address: Niagara Falls Ont

Phone: \_\_\_\_\_

### General Information

Date (Day of the week, m/d/y): 10/02/10

Investigation Start Time: 15:00

Duration: 1 hr.

### Weather Conditions

Temperature: + 10 °C Cloud Cover: 70 % Beaufort Wind: 1

Rainfall: Y ☐ N ☒

Rainfall in days preceding investigation: Y ☒ N ☐ 1

Other: \_\_\_\_\_

## Summary of Water Assessment Records Review

Is Project:

- a) in a water body? Y ☐ N ☒ \_\_\_\_\_
- b) within 120 m of the average annual high water mark of a lake, other than a lake trout lake that is at or above development capacity? Y ☐ N ☒ \_\_\_\_\_
- c) within 300 m of the average annual high water mark of a lake trout lake that is at or above development capacity? Y ☐ N ☒ \_\_\_\_\_
- d) within 120 m of the average annual high water mark of a permanent or intermittent stream? Y ☐ N ☒ \_\_\_\_\_
- e) within 120 m of a seepage area? Y ☐ N ☒ \_\_\_\_\_

Features identified in Records Review in need of confirmation:

- ① intermittent stream on south side of road
- ② irrigation pond
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

## Water Bodies Identified in the Records Review

Purpose: To **confirm** or **provide corrections** to the information identified in the Water Assessment Records Review, i.e. location of WB within Project boundaries, distance of WB from the Project boundaries etc.

Water Bodies within Project Boundaries			
Water Body ID (e.g. lake, stream, seepage area, pond, drainage ditch, grassed waterway etc.)	Location		Notes (e.g. size, length, drainage area, plant and animal composition, ecosystem type etc.)
① intermittent stream	south of Project in buffer on S side of road		does not exist
② irrigation pond at farmhouse			- bone dry, no water
Lake Trout Lake – at or above development capacity – within 300 m			
Lake ID	Distance from Project Boundaries	Location	Notes
Lakes – other than Lake Trout Lakes at or above development capacity – within 120 m			
Lake ID	Distance from Project Boundaries	Location	Notes
Permanent or Intermittent streams within 120 m			
Stream ID	Distance from Project Boundaries	Location	Notes (e.g. presence of water, riparian and aquatic vegetation, wildlife, high water mark etc.)
Others			
Water Body ID	Location / Distance from Project		Notes

### Water Bodies NOT Identified in the Records Review

[illegible]

# Site Investigation Observations

Water Body/Feature ID# 1

Map ID #: 1

Location (UTM): 17T 557479.12E 4746927.26N

## Water Body Type, Morphology, Habitat and Ecosystem Type Descriptors:

WB Type	Description		
Lake Trout Lake at/above dev. capacity	<input type="checkbox"/>		
Lake - other than above	<input type="checkbox"/>		
Permanent Stream	<input type="checkbox"/>	Riffle <input type="checkbox"/>	Run <input type="checkbox"/> Pool <input type="checkbox"/>
Intermittent Stream	<input checked="" type="checkbox"/>	<i>shown on map but does not exist</i>	
Pond	<input type="checkbox"/>	Natural <input type="checkbox"/>	Man-made <input type="checkbox"/>
Seepage Area	<input type="checkbox"/>	Based on:	
Drainage Ditch	<input type="checkbox"/>		
Grassed Waterway	<input type="checkbox"/>		
Other	<input type="checkbox"/>		
Size/Length			
Depth of water (h)			
Wetted width (T)			
High water mark		Based on: Vegetation <input type="checkbox"/> Top of bank <input type="checkbox"/> Other <input type="checkbox"/>	
Estimate of bank full width			
Substrate Type:			
Presence of Riparian Vegetation:			
Presence of Aquatic Vegetation:			
Presence of Wildlife:			

Other Notes: - photos taken of field

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Water Body/Feature ID# 2  
 Map ID #: 2  
 Location (UTM): \_\_\_\_\_

**Water Body Type, Morphology, Habitat and Ecosystem Type Descriptors:**

WB Type	Description		
Lake Trout Lake at/above dev. capacity	<input type="checkbox"/>		
Lake - other than above	<input type="checkbox"/>		
Permanent Stream	<input type="checkbox"/>	Riffle <input type="checkbox"/>	Run <input type="checkbox"/> Pool <input type="checkbox"/>
Intermittent Stream	<input type="checkbox"/>		
Pond	<input type="checkbox"/>	Natural <input type="checkbox"/>	Man-made <input checked="" type="checkbox"/>
Seepage Area	<input type="checkbox"/>	Based on:	
Drainage Ditch	<input type="checkbox"/>		
Grassed Waterway	<input type="checkbox"/>		
Other	<input type="checkbox"/>		
Size/Length			
Depth of water (h)			
Wetted width (T)			
High water mark		Based on: Vegetation <input type="checkbox"/> Top of bank <input type="checkbox"/> Other <input type="checkbox"/>	
Estimate of bank full width			
Substrate Type:			
Presence of Riparian Vegetation:			
Presence of Aquatic Vegetation:			
Presence of Wildlife:			

Other Notes: pond is 30 ft deep but totally dry!  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Water Body/Feature ID# \_\_\_\_\_

Map ID #: \_\_\_\_\_

Location (UTM): \_\_\_\_\_

**Water Body Type, Morphology, Habitat and Ecosystem Type Descriptors:**

WB Type		Description
Lake Trout Lake at/above dev. capacity	<input type="checkbox"/>	
Lake - other than above	<input type="checkbox"/>	
Permanent Stream	<input type="checkbox"/>	Riffle <input type="checkbox"/> Run <input type="checkbox"/> Pool <input type="checkbox"/>
Intermittent Stream	<input type="checkbox"/>	
Pond	<input type="checkbox"/>	Natural <input type="checkbox"/> Man-made <input type="checkbox"/>
Seepage Area	<input type="checkbox"/>	Based on:
Drainage Ditch	<input type="checkbox"/>	
Grassed Waterway	<input type="checkbox"/>	
Other	<input type="checkbox"/>	
Size/Length		
Depth of water (h)		
Wetted width (T)		
High water mark		Based on: Vegetation <input type="checkbox"/> Top of bank <input type="checkbox"/> Other <input type="checkbox"/>
Estimate of bank full width		
Substrate Type:		
Presence of Riparian Vegetation:		
Presence of Aquatic Vegetation:		
Presence of Wildlife:		

Other Notes: \_\_\_\_\_

\_\_\_\_\_

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\_\_\_\_\_

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\_\_\_\_\_



Water Body/Feature ID# \_\_\_\_\_

Map ID #: \_\_\_\_\_

Location (UTM): \_\_\_\_\_

### Water Body Type, Morphology, Habitat and Ecosystem Type Descriptors:

WB Type				Description	
Lake Trout Lake at/above dev. capacity	<input type="checkbox"/>				
Lake - other than above	<input type="checkbox"/>				
Permanent Stream	<input type="checkbox"/>	Riffle <input type="checkbox"/>	Run <input type="checkbox"/>	Pool <input type="checkbox"/>	
Intermittent Stream	<input type="checkbox"/>				
Pond	<input type="checkbox"/>	Natural <input type="checkbox"/>	Man-made <input type="checkbox"/>		
Seepage Area	<input type="checkbox"/>	Based on:			
Drainage Ditch	<input type="checkbox"/>				
Grassed Waterway	<input type="checkbox"/>				
Other	<input type="checkbox"/>				
Size/Length					
Depth of water (h)					
Wetted width (T)					
High water mark		Based on: Vegetation <input type="checkbox"/> Top of bank <input type="checkbox"/> Other <input type="checkbox"/>			
Estimate of bank full width					
Substrate Type:					
Presence of Riparian Vegetation:					
Presence of Aquatic Vegetation:					
Presence of Wildlife:					

Other Notes: \_\_\_\_\_

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\_\_\_\_\_

Water Body/Feature ID# \_\_\_\_\_

Map ID #: \_\_\_\_\_

Location (UTM): \_\_\_\_\_

**Water Body Type, Morphology, Habitat and Ecosystem Type Descriptors:**

WB Type		Description
Lake Trout Lake at/above dev. capacity	<input type="checkbox"/>	
Lake - other than above	<input type="checkbox"/>	
Permanent Stream	<input type="checkbox"/>	Riffle <input type="checkbox"/> Run <input type="checkbox"/> Pool <input type="checkbox"/>
Intermittent Stream	<input type="checkbox"/>	
Pond	<input type="checkbox"/>	Natural <input type="checkbox"/> Man-made <input type="checkbox"/>
Seepage Area	<input type="checkbox"/>	Based on:
Drainage Ditch	<input type="checkbox"/>	
Grassed Waterway	<input type="checkbox"/>	
Other	<input type="checkbox"/>	
Size/Length		
Depth of water (h)		
Wetted width (T)		
High water mark		Based on: Vegetation <input type="checkbox"/> Top of bank <input type="checkbox"/> Other <input type="checkbox"/>
Estimate of bank full width		
Substrate Type:		
Presence of Riparian Vegetation:		
Presence of Aquatic Vegetation:		
Presence of Wildlife:		

Other Notes: \_\_\_\_\_

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\_\_\_\_\_

Water Body/Feature ID# \_\_\_\_\_

Map ID #: \_\_\_\_\_

Location (UTM): \_\_\_\_\_

**Water Body Type, Morphology, Habitat and Ecosystem Type Descriptors:**

WB Type					Description		
Lake Trout Lake at/above dev. capacity	<input type="checkbox"/>						
Lake - other than above	<input type="checkbox"/>						
Permanent Stream	<input type="checkbox"/>	Riffle <input type="checkbox"/>	Run <input type="checkbox"/>	Pool <input type="checkbox"/>			
Intermittent Stream	<input type="checkbox"/>						
Pond	<input type="checkbox"/>	Natural <input type="checkbox"/>	Man-made <input type="checkbox"/>				
Seepage Area	<input type="checkbox"/>	Based on:					
Drainage Ditch	<input type="checkbox"/>						
Grassed Waterway	<input type="checkbox"/>						
Other	<input type="checkbox"/>						
Size/Length							
Depth of water (h)							
Wetted width (T)							
High water mark		Based on: Vegetation <input type="checkbox"/> Top of bank <input type="checkbox"/> Other <input type="checkbox"/>					
Estimate of bank full width							
Substrate Type:							
Presence of Riparian Vegetation:							
Presence of Aquatic Vegetation:							
Presence of Wildlife:							

Other Notes:

Photos taken of area of intermittent stream  
+ dug out pond 16681  
found in P drive P: 1688 | 222 Can Solo-  
REA Temp | Axis Sites x9 | Norfolk Bloomsburg TS



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