Prince Edward Island Watershed Water Quality Report Cards

2022

PEI Department of Environment, Energy and Climate Action

Published November 2023

For further information: Water and Air Monitoring Section (902) 368-5179

# Prince Edward Island 2022 Watershed Water Quality Report Cards

Prince Edward Island Department of Environment, Energy and Climate Action

# **Prince Edward Island Watershed Water Quality Report Cards** 2022

The Department of Environment, Energy and Climate Action has developed an overview of water quality on a watershed basis in P.E.I. It is intended as a general guide so that Islanders can get a sense of the health of water and make general comparisons to other P.E.I. watersheds. The data and information used in these reports is current to the end of 2021.

Go to the report card for a specific watershed by selecting one of the watersheds from the list below:

Augustine Cove	Deroche Pond	Llewellyns Creek	Rollo Bay
Bains Creek	Desable River	Lower New Annan	Round Pond
Baltic River	Dunk River	Lukes Creek	Savage Harbour
Barbara Weit River	East Lake	Mackies Pond	Schooner Creek
Bear River	Enmore River	MacLaurins Creek	Shipyard River
Belle River	Flat River	MacWilliams Brook	Skinners Pond
Bentick Cove	Foleys Pond	Mill Creek	Souris River
Big Pierre Jacques	Fortune River	Mill River	South River
Black Marsh	Fox River	Miminegash River	Southwest River
Black Pond	Freeland Creek	Montague/Valleyfield	St. Chrysostome/Barachois
Black Pond Brook	French River	Morell River	St. Peters Bay
Blacketts Creek	Goose River	Murray River	St. Philip
<b>Boughton River</b>	Grahams Creek	Nail Head	Stewarts Creek
Brae River	Grand River	Nail Pond	Sturgeon River
Bristol Creek	Greek River	Naufrage River	Thompson Creek
Brooks River	Haldimand River	Nicolle Point	Tignish River
Browns Creek	Hay River	Norris Pond	Tracadie Bay
Brudenell River	<u>Hebron</u>	North Lake	Trout / Bideford River
<u>Campbellton</u>	Hillsborough River	North River	Trout / Foxley River
Cape Kildare	Hope River	Orwell/Vernon R.	Trout / Stanley River
Cape Traverse River	Hornes Creek	Ox/Sheep River	Tryon River
Cardigan River	Hunter/Clyde River	Percival River	Waites Creek
Chapel Creek	Indian River	Pinette River	West River
Cousins Pond	Jacques River	Platte River	Westmoreland River
Covehead/Brackley	Kildare/Montrose R.	Pollard Brook	Wheatley River
Cow Creek	<u>Little Harbour</u>	Prevost Cove	Whites Cove
Cross River	Little Miminegash R.	Priest Pond Creek	Wilmot River
Crossmans Brook	Little Pierre Jacques	Rayners Creek	Winter River
<u>Daltons Brook</u>	Little Tignish	Rayners Pond	

These results are also available on the PEI Water Registry.

Data Acknowledgement

## **Contact Information**

If you have any questions regarding this document, please contact:

Cindy Crane, Surface Water Biologist Department of Environment, Energy and Climate Action

**Telephone:** (902) 368-5179 **Email:** cscrane@gov.pe.ca

# **Data Acknowledgement**

The PEI Department of Environment, Energy and Climate Action (EECA) gratefully acknowledges the contribution of data, used in the calculation of water quality scores for the PEI Water Quality Report Cards (2022), from the groups and agencies listed in the table below.

Group	Data Contributed	<b>Data Source</b>
Bedeque Bay Environmental	water temperature, dissolved oxygen, SW	1, 2, 3
<b>Management Association</b>	nitrate	
<b>Belfast and Area Watershed</b>	siltation and other issues, water	1, 2, 3
Grouping	temperature	
<b>Cascumpec Bay Watershed</b>	siltation and other issues	3
Association Inc.		
<b>Central Queens Branch of the</b>	SW nitrate, siltation and other issues, SW	1, 3
PEI Wildlife Federation	temperature	
Cornwall and Area Watershed	siltation and other issues	3
Group Inc.		
Harmony and Area	SW nitrate, siltation and other issues	2, 3
Watersheds Enhancement		
Group		
<b>Environment and Climate</b>	SW nitrate and other SW data	1
Change Canada		
Harmony and Area	SW nitrate, siltation and other issues	2,3
Watersheds Enhancement		
Group Inc.		
Hillsborough Area Watershed	siltation and other issues	3
Co-operative		
Hillsborough River Association	SW temperature	1
-Pisquid	-	
Hillsborough River Association	siltation and other issues	3
-Wrights		
<b>Hunter - Clyde Watershed</b>	siltation and other issues, SW nitrate, SW	1, 3
Group Inc.	temperature	

Kensington North Watersheds Association Ltd.	siltation and other issues, SW nitrate	1, 3
Lot 11 and Area Watershed Management Group Inc.	siltation and other issues	3
Morell River Management Co- operative	siltation and other issues	3
Roseville / Miminegash Watersheds Inc.	siltation and other issues, SW nitrate	1, 3
Souris and Area Branch of the PEI Wildlife Federation	SW temperature	1,3
Southeast Environmental Association	siltation and other issues, SW nitrate, SW temperature	2, 3
Stratford Area Watershed Improvement Group	siltation and other issues, SW temperature, SW disolved oxygen, SW nitrate	1, 3
South Shore Watershed Association Inc.	siltation and other ssues, SW nitrate,	1, 4
Tignish Area Watershed Management Group Inc.	siltation and other issues, SW nitrate, SW temperature	1, 3
Trout River Environmental Committee Inc.	siltation and other issues, SW nitrate, SW temperature	1, 3
Trout Unlimited Prince County Chapter	siltation and other issues	3
West Point Watersheds Assoc	siltation and other issues, SW nitrate, SW temperature	1, 3
Wheatley River Improvement Group Inc.	siltation and other issues, SW nitrate	1, 3
Winter River / Tracadie Bay Watershed Association Inc.	siltation and other issues, SW nitrate, SW temperature	1, 3

#### Table Legend

Atlantic Datastream
 Watershed Group

3 2021 Watershed Group Survey

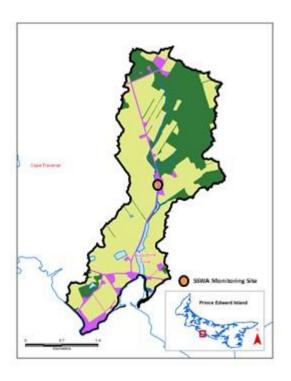
4 2021 Consultation with Watershed Groups

SW Surface Water

EECA very greatly appreciates the assistance of the PEI Watershed Alliance in conducting the 2021 survey of Island watershed goups on siltation and other water quality issues. Thank you especially to Mary Finch and Rebecca Ramos for providing invaluable input on the content of the survey, design and delivery of the survey and compilation of results.

EECA Water and Air Monitoring Section also gratefully recognizes the assistance of our coworkers at the EECA Resource Inventory and Modeling Section for their invaluable assistance in compiling the landuse data and map layers used in this report.

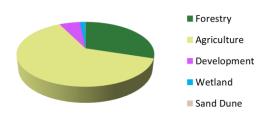
# **Augustine Cove Map**



#### **Water Quality Score**



#### **Land Use**



Watershed Area 7.77 km2

#### **Status**

The Augustine Cove watershed has *Good* water quality. The measured watershed nitrate concentration is 4.7 mg N/l which is in the high range for PEI. This result covers about 51% of the watershed and is from stream sampling data collected by the South Shore Watershed Association (SSWA) (2017-2019). Anoxic events have never been reported in the Augustine Cove estuary and no fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur frequently by the SSWA. The average groundwater nitrate concentration in the watershed is above 3 mg N/l.

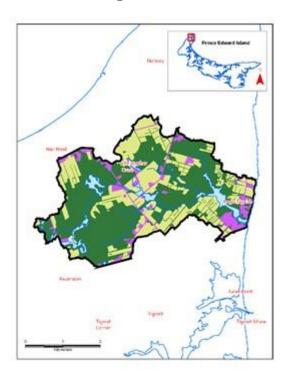
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the South Shore Watershed Association Inc., to address water quality issues in the Augustine Cove watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

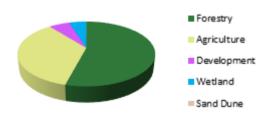
# Bains Creek Map



#### **Water Quality Score**



#### Land Use



Watershed Area 13.72 km2

#### **Status**

The Bains Creek watershed has *Good* water quality. The modeled watershed nitrate concentration is 1.5 mg N/l, which is in the low to moderate range for PEI. Anoxic events have never been reported in the small Bains Creek estuary and no fish kills have ever been recorded in the watershed. Sediment laden run-off events are thought to occur infrequently by the Tignish and Area Watershed Management Group.

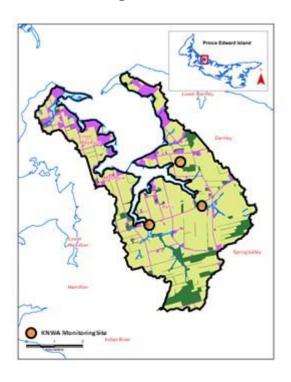
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Tignish and Area Watershed Management Group Inc., to protect water quality in the Bains Creek watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

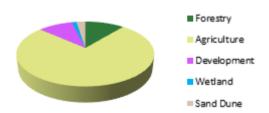
## Baltic River Map



#### Water Quality Score



#### **Land Use**



Watershed Area 26.09 km2

#### **Status**

The Baltic River watershed has *Poor* water quality. The measured watershed nitrate concentration is 5.8 mg N/l which is in the very high range for PEI. This result covers about 56% of the watershed and is from stream sampling data collected by the Kensington North Watersheds Association (KNWA) (2012-2013, 2014, 2019, 2021). Anoxic events were reported in 4 of the last 5 years in both the Hunters Creek (2018-2021) and Baltic River (2017-2019, 2021) branches of the estuary. No fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur frequently by the KNWA. Another water quality issue indicated by the KNWA is a lack of riparian cover in the watershed. The average groundwater nitrate concentration above 3 mg/l.

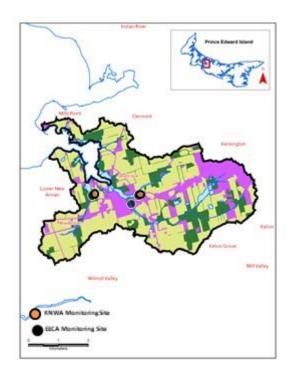
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Kensington North Watersheds Association Ltd., to address water quality issues in the Baltic River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

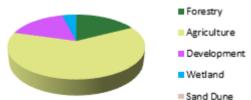
# Barbara Weit River Map



#### Water Quality Score







Watershed Area 20.80 km2

#### **Status**

The Barbara Weit River watershed has *Fair* water quality. The measured watershed nitrate concentration is 5.0 mg N/l which is in the high to very high range for PEI. This results covers about 68% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2011, 2013, 2015, 2018, 2021) and the Kensington North Watersheds Association (KNWA) (2019, 2021). Anoxic events were recorded in the estuary in 2 of the last 5 years (2018, 2021). No fish kills related to run-off have been reported in the watershed. Sediment laden run-off (red water) events are thought to occur infrequently by the KWNA.

#### **Other Information**

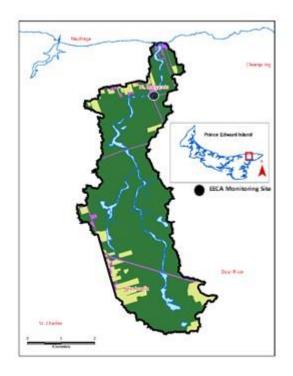
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Kensington North Watersheds Association Ltd., to address water quality issues in the Barbara Weit River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data <u>here.</u>

## **Bear River**

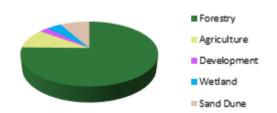
Map



#### **Water Quality Score**



#### Land Use



Watershed Area 17.36 km2

#### **Status**

The Bear River watershed has *Good* water quality. The measured watershed nitrate concentration is 0.4 mg N/l which is in the very low range for PEI. This result covers about 96% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2019-2021). There is no downstream estuary so estuarine anoxia is not an issue. No fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur infrequently. Some high temperature results have been recorded at one logger site in the river by the Souris and Area Branch of the PEI Wildlife Federation (2016-2017).

#### Other Information

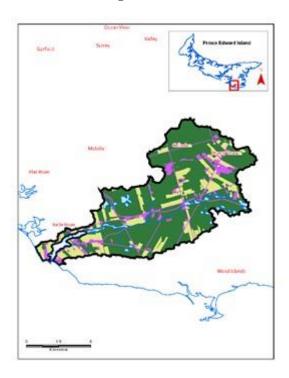
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Souris and Area Branch of the PEI Wildlife Federation, to protect water quality in the Bear River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data <u>here.</u>

## **Belle River**

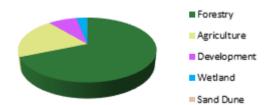
## Map



#### **Water Quality Score**



#### Land Use



Watershed Area 32.97 km2

#### **Status**

The Belle River watershed has *Excellent* water quality. The modeled watershed nitrate concentration is 1.0 mg N/l, which is in the low range for PEI. No anoxic events have been reported in the small Belle River estuary and no fish kills have been recorded in the watershed. Sediment laden run-off events are thought to occur infrequently by the Belfast and Area Watershed Group. Elevated temperatures were logged/recorded in 2021 in Compton's Pond by the watershed group.

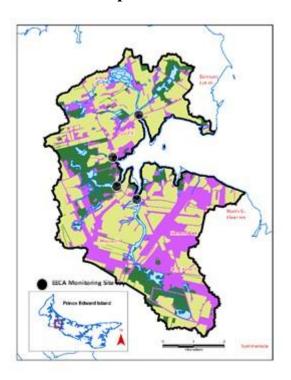
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Belfast and Area Watershed Group, to protect water quality in the Belle River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

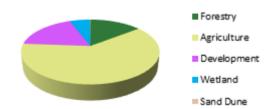
# Bentick Cove Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 32.82 km2

#### **Status**

The Bentick Cove watershed has *Fair* water quality. The measured watershed nitrate concentration is 3.8 mg N/l which is in the high range for PEI. This result covers about 76% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2008-2009, 2014, 2017, 2020). No anoxic events were reported in the Bentick Cove estuary in the last 5 years (2017 - 2021). No fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur very frequently. The average groundwater nitrate concentration in the watershed is above 3 mg N/l.

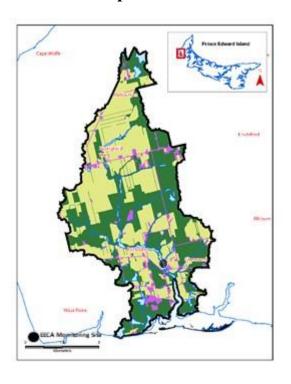
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

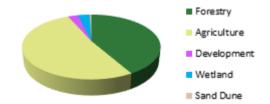
# Big Pierre Jacques River Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 34.73 km2

#### **Status**

The Big Pierre Jacques River watershed has *Fair* water quality. The measured watershed nitrate concentration is 4.0 mg N/l which is in the high range for PEI. This result covers about 83% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2014, 2017, 2020). No anoxic events have been reported for the small estuary but a fish kill related to run-off have occurred in 2012. Sediment laden run-off (red water) events are thought to occur frequently by the West Point & Area Watersheds Inc. Elevated water temperatures were recorded in Glenwood Pond in 2020 by the watershed group. The average groundwater nitrate concentration is above 3 mg/l.

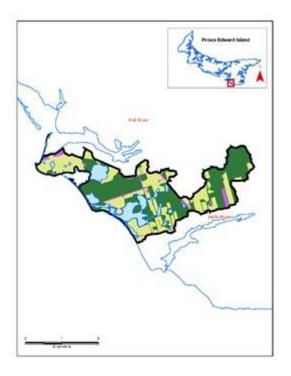
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the West Point & Area Watersheds Inc., to address water quality issues in the Big Pierre Jacques River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data <u>here.</u>

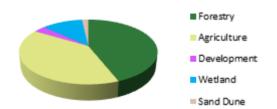
# Black Marsh Map



#### **Water Quality Score**



#### Land Use



Watershed Area 7.02 km<sup>2</sup>

#### **Status**

The Black Marsh watershed has *Good* water quality. The modeled watershed nitrate concentration is 1.3 mg/l, which is in the low range for PEI. No anoxic events have been reported in the small barrier beach pond and no fish kills have been recorded in the watershed. Sediment laden run-off events ae thought to occur infrequently by the Belfast and Area Watershed Group (BAWG).

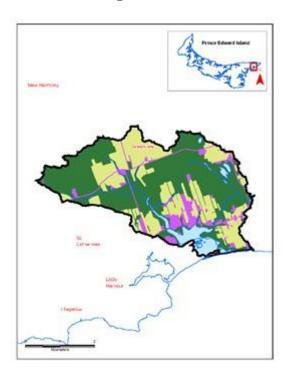
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Belfast and Area Watershed Group, to protect water quality in the Black Marsh watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

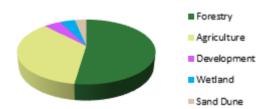
# Black Pond Map



#### **Water Quality Score**



#### Land Use



Watershed Area 14.49 km2

#### **Status**

The Black Pond watershed has *Good* water quality. The modeled watershed nitrate concentration is 2.2 mg N/l which is in the moderate range for PEI. No anoxic events have been documented by the province in the barrier beach pond however the community reported eutrophic conditions as part of considerations to replace a bridge that bisects the pond. No fish kills have been reported in the watershed. Professional opinion is that sediment laden run-off (red water) events occur frequently. The average groundwater nitrate concentration in the watershed is above 3 mg/l.

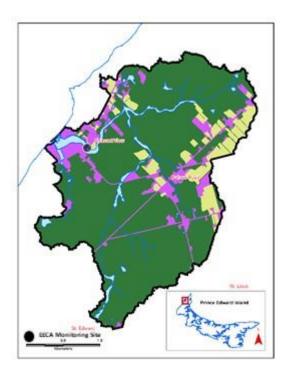
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Souris and Area Branch of the PEI Wildlife Federation, to address water quality issues in the Black Pond watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

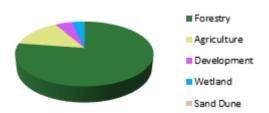
# Black Pond Brook Map



#### **Water Quality Score**



#### Land Use



Watershed Area 21.59 km2

#### **Status**

The Black Pond Brook watershed has *Good* water quality. The measured watershed nitrate concentration is 0.8 N mg/l, which is in the low range for PEI. This result covers about 86% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2008 - 2009). Anoxic events have never been reported in the small barrier beach pond and no fish kills have been recorded in the watershed. Siltation (red water) events are thought to occur infrequently by the Roseville/Miminegash Watersheds Inc. (RMWI). The RMWI also reported that elevated water temperatures are an issue in the watershed.

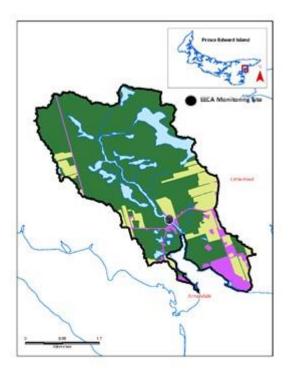
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Roseville/Miminegash Watersheds Inc., to protect water quality in the Black Pond Brook watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data <u>here.</u>

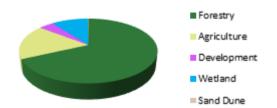
# Blacketts Creek Map



#### **Water Quality Score**



#### Land Use



Watershed Area 12.10 km2

#### **Status**

The Blacketts Creek watershed has *Excellent* water quality. The measured watershed nitrate concentration is < 0.2 mg N/l, which is in the very low range for PEI. This result is from monitoring carried out by the Department of Environment, Energy and Climate Action (EECA) (2008 - 2009) and represents about 71% of the watershed. Anoxic events have never been reported in the small estuary and no fish kills related to run-off have been recorded. Professional opinion is that sediment laden run-off (red-water) events are infrequent in the watershed.

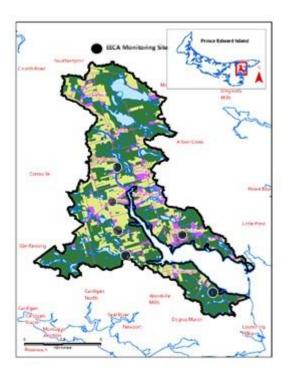
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Southeast Environmental Association, to protect water quality in the Blacketts Creek watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

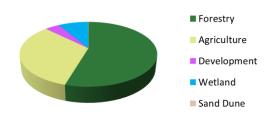
# Boughton River Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 93.78 km2

#### **Status**

The Boughton River watershed has *Good* water quality. The measured watershed nitrate concentration is 0.5 mg N/l which is in the very low range for PEI. This result covers about 71% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2008-2010, 2016, 2019). Anoxic events have been reported in the Boughton River estuary twice in the last 5 years (2017-2018) but no fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events are infrequent in the watershed. Elevated water temperatues were logged at three sites by the Southeast Environmental Association during 2021. The watershed used for this assessment has been drawn to contain the drainage area of the entire Boughton River estuary. It has 5 subwatersheds which would have water quality in the Good (Boughton River, Greystone Creek, Narrows Creek) to Excellent (Morrison Pond, Poplar Point) categories if considered separately.

#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Southeast Environmental Association, to address water quality issues in the Boughton River watershed.

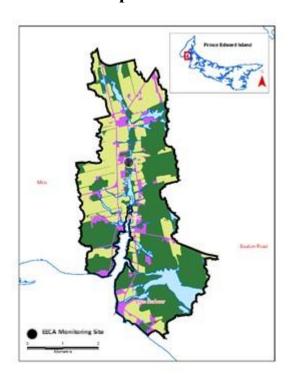
View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data <u>here.</u>

Return to the list of watersheds  $\underline{\text{here}}$ .

## **Brae River**

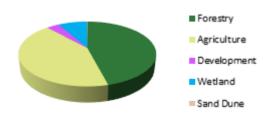
Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 17.68 km2

#### **Status**

The Brae River watershed has *Good* water quality. The measured watershed nitrate concentration is 4.1 mg N/l which is in the high range for PEI. This result covers about 31% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2014, 2017, 2020). No anoxic events have been ever been reported in the small estuary and no fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur infrequently by Trout Unlimited, Prince County Chapter. The average groundwater nitrate concentration is above 3 mg/l.

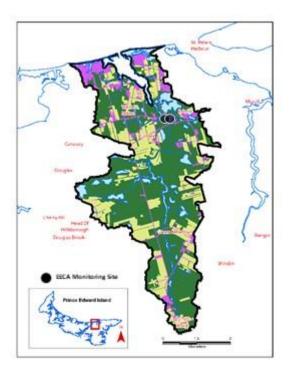
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, Trout Unlimited Prince County Chapter, to address water quality issues in the Brae River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

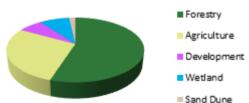
# **Bristol Creek** Map



#### **Water Quality Score**







Watershed Area 43.50 km2

#### **Status**

The Bristol Creek watershed has *Excellent* water quality. The measured watershed nitrate concentration is estimated to be < 0.2 mg N/l which is in the very low range for PEI. This result covers about 78% of the watershed and is from a very small amount of stream sampling data collected by the Department of Environment, Energy and Climate Action (2008). No anoxic events have been reported in St. Peters Lake in the last 5 years (2017-2021) and no fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur infrequently by the Morell River Management Cooperative.

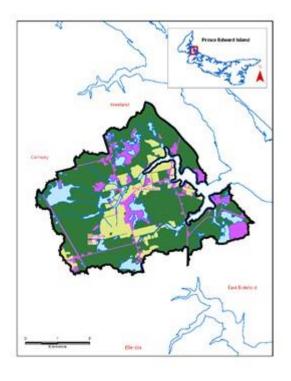
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the local community watershed group. The Department is working with a local community group, the Morell River Management Cooperative, to protect water quality in the Bristol Creek watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

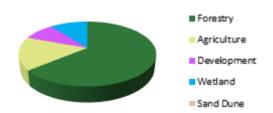
# **Brooks River**Map



#### **Water Quality Score**



#### Land Use



Watershed Area 20.00 km2

#### **Status**

The Brooks River watershed has *Excellent* water quality. The modelled watershed nitrate concentration is 0.8 mg N/l which is in the low range for PEI. No anoxic events have been reported in the Brooks River estuary, and no fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur infrequently by the Lot 11 and Area Watershed Management Group Inc.

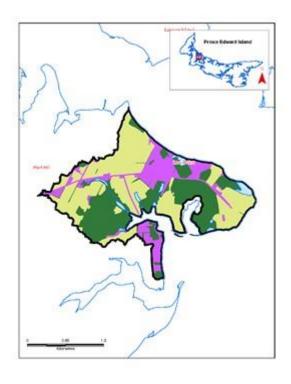
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Lot 11 and Area Watershed Management Group Inc., to protect water quality in the Brooks River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

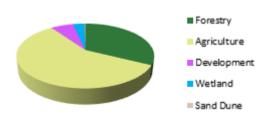
# Browns Creek Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 4.46 km2

#### **Status**

The Browns Creek watershed has *Good* water quality. The modelled watershed nitrate concentration is 1.7 mg N/l which is in the moderate range for PEI. No anoxia has been reported in the Brown's Creek estuary in the last 5 years (2017 - 2021) but the Richmond Bay Watershed Association indicates that there are water quality is a concern in the estuary. No fish kills have been reported in the watershed. Professional opinion is that sediment laden run-off (red water) events occur frequently. The average groundwater nitrate concentration is above 3 mg N/l.

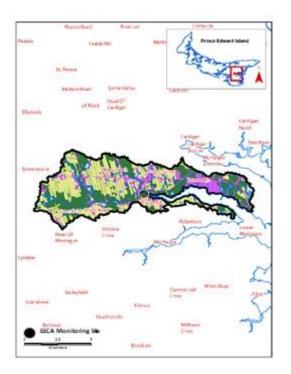
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Richmond Bay Watershed Association Inc., to address water quality issues in the Browns Creek watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

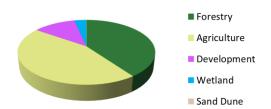
# Brudenell River Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 55.81 km2

#### **Status**

The Brudenell River watershed has *Good* water quality. The measured watershed nitrate concentration is 2.0 mg N/l which is in the moderate range for PEI. This result covers about 64% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2012-2013, 2016). Anoxia has not been reported in the Brudenell River estuary in the last 5 years (2017-2021) and no fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur infrequently in the watershed. The average groundwater nitrate concentration in the watershed is above 3 mg N/l.

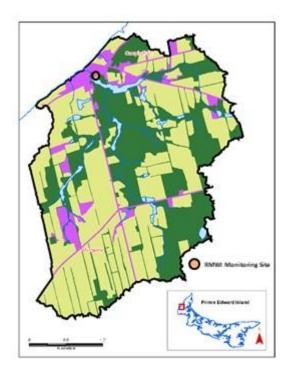
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Southeast Environmental Association, to protect water quality in the Brudenell River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

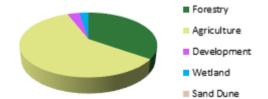
# Campbellton Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 11.20 km2

#### **Status**

The Campbellton watershed has *Fair* water quality. The measured watershed nitrate concentration is 2.5 mg N/l which is in the moderate range for PEI. This result covers about 90% of the watershed and is from stream sampling data collected by the Roseville/Miminegash Watersheds Inc.(RMWI) in 2021. The Campbellton watershed does not have an estuary, so estuarine anoxic events are not a factor. A fish kill related to run-off occurred in 2017. Sediment laden run-off (red water) events are thought to occur very frequently by the RMWI. The RMWI also reports a lack of riparian cover in the watershed as an issue.

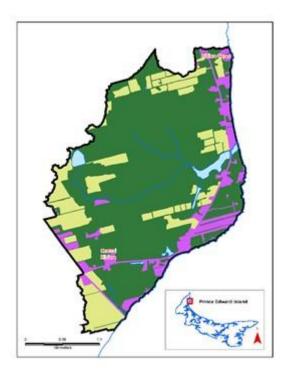
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Roseville/Miminegash Watersheds Inc., to address water quality issues in the Cambellton watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

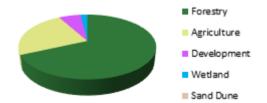
# Cape Kildare Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 7.87 km2

#### **Status**

The Cape Kildare watershed has *Good* water quality. The modelled watershed nitrate concentration is 1.5 mg N/l which is in the low/moderate range for PEI. The Cape Kildare watershed does not have an estuary, so estuarine anoxic events are not a factor. No fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur infrequently by the Tignish and Area Watershed Management Group Inc.

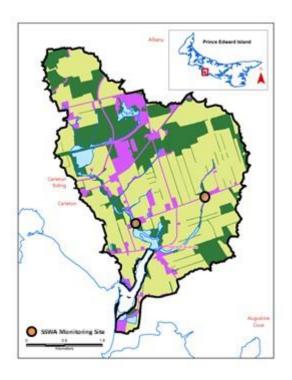
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Tignish & Area Watershed Management Group Inc., to protect water quality in the Cape Kildare watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

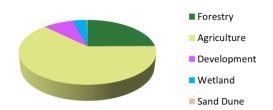
# Cape Traverse River Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 18.34 km2

#### **Status**

The Cape Traverse River watershed has *Fair* water quality. The measured nitrate concentration is 3.9 mg N/l. which is in the high range for PEI. This result covers about 66% of the watershed and comes from stream sampling data collected by the South Shore Watershed Association Inc. (SSWA) (2016-2019). Anoxic events have never been reported in the Cape Traverse River estuary and no fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur very frequently by the SSWA. The average groundwater nitrate concentration in the watershed is above 3 mg N/l.

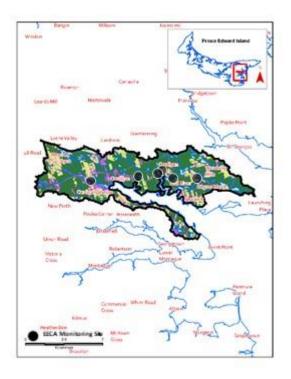
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the South Shore Watershed Association Inc., to address water quality issues in the Cape Traverse River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

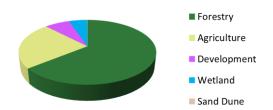
# Cardigan River Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 82.74 km2

#### **Status**

The Cardigan River watershed has *Good* water quality. The measured watershed nitrate concentration is 0.80 mg N/l which is in the low range for PEI. This result covers about 57% of the watershed and comes from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2005-2009, 2012, 2014, 2016, 2019) and the Southeast Environmental Association (SEA) (2014, 2016). An anoxic event was reported in the Cardigan River estuary (2017), but no fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events are frequent in the watershed. Local residents report that effluents from a fish hatchery are a concern for water quality and stream habitat in the Cardigan River. The watershed used for this assessment has been drawn to contain the drainage area of the entire Cardigan River estuary. It has 4 subwatersheds which would have water quality in the Good (Cardigan River, Byrnes Creek) to Excellent (Mitchell River, Seal River) categories if considered separately.

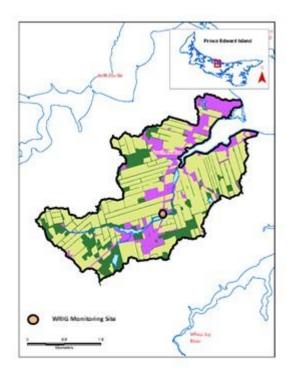
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Southeast Environmental Association, to address water quality issues in the Cardigan River watershed.

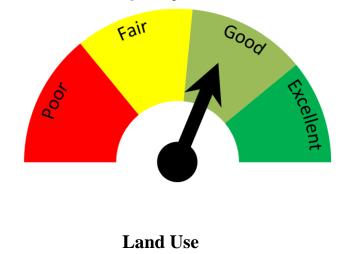
View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

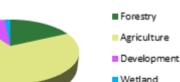
View or download the available raw water quality monitoring data <u>here.</u>

# Chapel Creek Map



#### **Water Quality Score**





Sand Dune

Watershed Area 11.41 km2

#### **Status**

The Chapel Creek watershed has *Good* water quality. The measured watershed nitrate concentration is 4.7 mg N/l which is in the high range for PEI. This result is from stream sampling carried out by the Wheatley River Improvement Group (WRIG) in 2021 and represents about 35% of the watershed. No anoxic events were documented in the Chapel Creek estuary between 2016 and 2021, however some discolorations of the water and odors have been reported in the past. No fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) are thought to occur infrequently by the WRIG. The average groundwater nitrate concentration is above 3 mg/l.

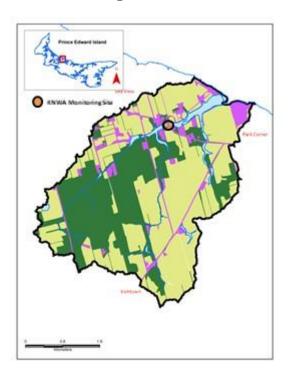
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Wheatley River Improvement Group Inc., to address water quality issues in the Chapel Creek watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

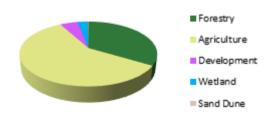
# Cousins Pond Map



#### **Water Quality Score**



#### Land Use



Watershed Area 13.80 km2

#### **Status**

The Cousins Pond watershed has *Fair* water quality. The measured watershed nitrate concentration is 2.6 mg N/l which is in the moderate range for PEI. This result covers about 72% of the watershed and is from stream sampling data collected by the Kensington North Watersheds Association Ltd. (KNWA) (2012-2013). No anoxic events have ever been reported in the barrier beach pond. A fish kill related to a spill of liquid manure was recorded in 2020. Sediment laden run-off (red water) events are thought to occur frequently by the KNWA. The average groundwater nitrate concentration is above 5mg/l. Deforestation in the watershed has also been cited as a concern by the KNWA.

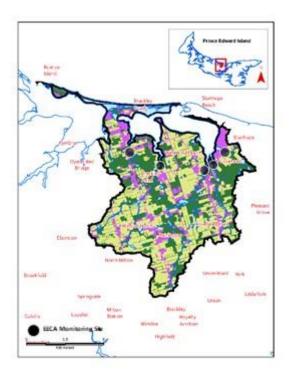
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Kensington North Watersheds Association Ltd., to address water quality issues in the Cousins Pond watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data <u>here.</u>

# Covehead Bay /Brackley Bay Map



#### **Water Quality Score**







Sand Dune

Watershed Area 78.34 km2

#### **Status**

The Covehead/Brackley Bay watershed has *Fair* water quality. The measured watershed nitrate concentration is 2.6 mg N/l which is in the moderate range for PEI. This result covers about 70% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2006 -2009, 2009-2010, 2015, 2018, 2020, 2021). Anoxic events have been reported in Brackley Bay in 4 of the last 5 years (2017-2020) and in three of five years in Covehead Bay (2017-2019). No fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment-laden run-off (red water) events occur very frequently in the watershed. The Friends of Covehead and Brackley Bays Inc. (FCBBI) have reported elevated water temperatures in freshwater ponds located near the head of tide. The watershed used for this assessment has been drawn to contain the drainage area of the entire Covehead Bay / Brackley Bay system. It has 3 subwatersheds (Bells Creek, Black River McCallum Creek) which would all have water quality in the Fair category if considered separately.

#### Other Information

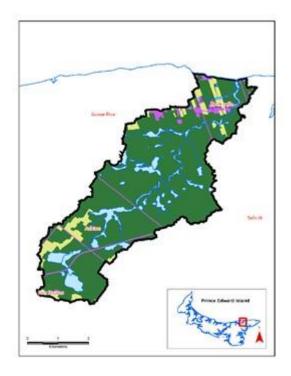
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Friends of

Covehead and Brackley Bays Inc., to address water quality issues in the Covehead Bay/Brackley Bay watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

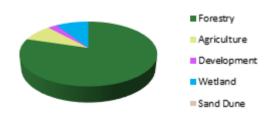
# Cow Creek Map



#### **Water Quality Score**



#### Land Use



Watershed Area 22.94 km2

#### **Status**

The Cow Creek watershed has *Excellent* water quality. The modelled watershed nitrate concentration is 0.8 mg N/l which is in the low range for PEI. The watershed does not have an estuary, so estuarine anoxic events are not a factor. No fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur infrequently in the watershed.

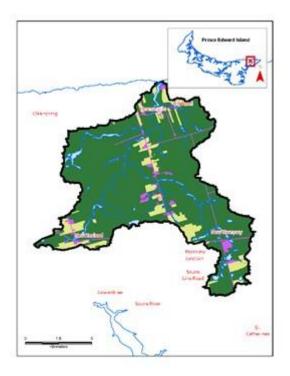
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Souris and Area Branch of the PEI Wildlife Federation, to protect water quality in the Cow Creek watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

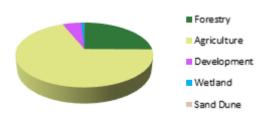
# Cross River Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 45.05 km2

#### **Status**

The Cross River watershed has *Good* water quality. The modelled watershed nitrate concentration is 0.8 mg N/l which is in the low range for PEI. The watershed does not have an estuary, so estuarine anoxic events are not a factor. No fish kills related to run-off have ever been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur infrequently in the watershed. The average groundwater nitrate concentration is above 3 mg N/l. Some elevated water temperatures were recorded at stream sites in the watershed in 2016 by the Souris and Area Branch of the PEI Wildlife Federation.

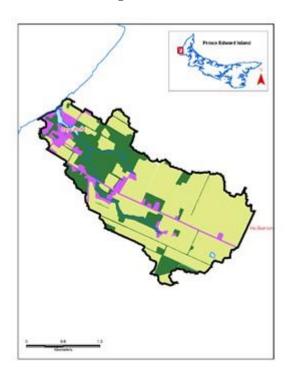
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Souris and Area Branch of the PEI Wildlife Federation, to protect water quality in the Cross River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

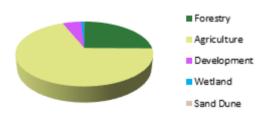
## Crossmans Brook Map



#### **Water Quality Score**



#### Land Use



Watershed Area 5.09 km2

#### **Status**

The Crossmans Brook watershed has *Fair* water quality. The modelled watershed nitrate concentration is 6.0 mg N/l which is in the very high range for PEI. The watershed does not have an estuary, so estuarine anoxic events are not a factor. No fish kills related to run-off have ever been documented in the watershed. Sediment laden run-off (red water) events are thought to occur infrequently by the West Point & Area Watersheds Inc. The average groundwater nitrate concentration is above 3 mg/l.

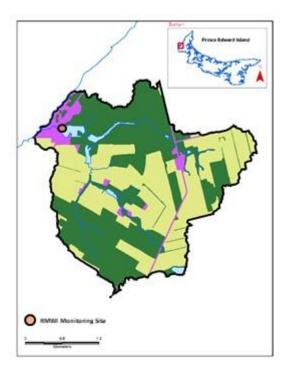
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the West Point & Area Watersheds Inc., to address water quality issues in the Crossmans Brook watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

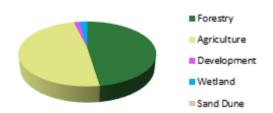
## Daltons Brook Map



#### **Water Quality Score**



#### Land Use



Watershed Area 7.50 km2

#### **Status**

The Daltons Brook watershed has *Good* water quality. The measured watershed nitrate concentration is 3.1 mg N/l which is in the moderate to high range for PEI. This result is from stream sampling conducted in 2021 by the Roseville/Miminegash Watersheds Inc. (RMWI) The watershed does not have an estuary, so estuarine anoxic events are not a factor. No fish kills related to run-off have ever been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur frequently. High pH values were recorded in a few samples in 2021. There are currently no results for groundwater nitrate in the watershed.

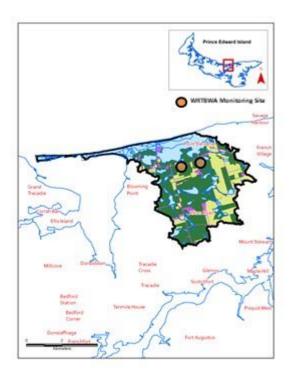
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Roseville/Miminegash Watersheds Inc., to address water quality issues in the Daltons Brook watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

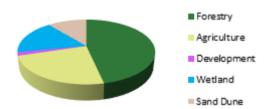
View or download the available raw water quality monitoring data here.

## **Deroche Pond** Map



#### **Water Quality Score**





Watershed Area 28.08 km2

#### **Status**

The Deroche Pond watershed has *Good* water quality. The measured watershed nitrate concentration is < 1.5 mg N/l which is in the low range for PEI. This result is from a very small amount of sampling carried out by the Winter River - Tracadie Bay Watershed Association Inc. (WRTBWA) (2016, 2017) and represents about 61% of the watershed. Occasional late-spring anoxia is reported to be an issue in the large barrier beach pond by a provincial biologist. No fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur infrequently, by the WTTBWA. Some elevated temperatures were recorded by the WRTBWA in one stream during 2016.

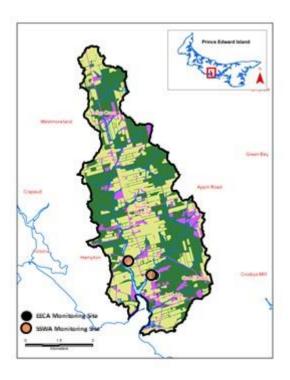
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the local community watershed group. The Department is working with a local community group, the Winter River-Tracadie Bay Watershed Association Inc., to protect water quality in the Deroche Pond watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data <u>here.</u>

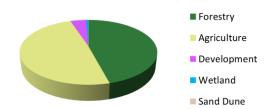
## Desable River Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 41.78 km2

#### **Status**

The Desable River watershed has *Good* water quality. The measured watershed nitrate concentration is 1.4 mg N/l which is in the low range for PEI. This result covers about 79% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2013, 2015, 2018) and the South Shore Watershed Association (SSWA) (2015, 2017). Anoxic events have never been documented in the Desable River estuary however there have been reports of odors in the estuary associated with decaying sea lettuce exposed at low tides in the intertidal zone. No fish kills related to run-off have been documented in the watershed in over 50 years. Sediment-laden run off (red water) events are thought to occur frequently in the watershed by the SSWA.

#### Other Information

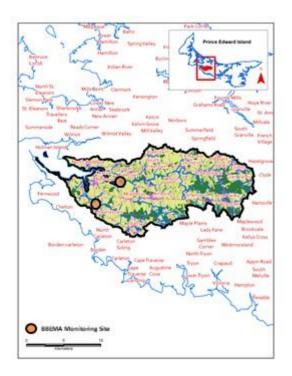
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the South Shore Watershed Association, to address water quality issues in the Desable River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

## **Dunk River**

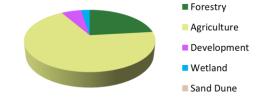
## Map



#### **Water Quality Score**







Watershed Area 213.3 km2

#### **Status**

The Dunk River watershed has *Poor* water quality. The measured watershed nitrate concentration is 5.1 mg N/l which is in the high to very high range for PEI. This result covers 78% of the watershed and is from stream sampling data collected by the Bedeque Bay Environmental Management Association (BBEMA) (2016-2018). Anoxia was recorded in the Dunk River estuary in 2018 and 2020, but no fish kills related run-off were reported between 2012 and 2021. Professional opinion is that sediment laden run-off (red water) events occur very frequently. The average groundwater nitrate concentration in the watershed is above 5 mg N/l. Elevated water temperatures have been recorded by BBEMA in streams and ponds in the watershed. The watershed used for this assessment has been drawn to contain the drainage area of the entire Dunk River estuary. It has 2 subwatersheds; Dunk River would have water quality in the Fair category while Bradshaw River would have water quality in the Poor category if considered separately.

#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Bedeque Bay Environmental Management Association, to address water quality issues in the Dunk River watershed.

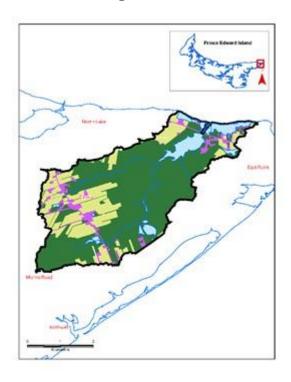
View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

Return to the list of watersheds  $\underline{\text{here}}$ .

### **East Lake**

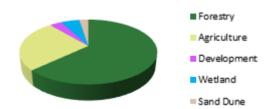
## Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 16.81 km2

#### **Status**

The East Lake watershed has *Good* water quality. The modelled watershed nitrate concentration is 1.9 mg N/l which is in the low to moderate range for PEI. The watershed does not have an estuary, so estuarine anoxic events are not a factor. No fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur frequently.

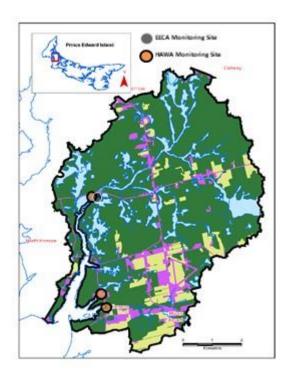
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Souris and Area Branch of the PEI Wildlife Federation, to protect water quality in the East Lake watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

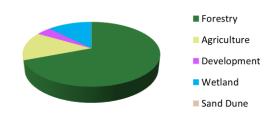
# **Enmore River**Map



#### **Water Quality Score**



#### Land Use



Watershed Area 45.89 km2

#### **Status**

The Enmore River watershed has *Excellent* water quality. The measured nitrate concentration from streams in the watershed is < 0.2 mg N/l in two streams (60% of the watershed) and 1.7-3.7 mg N/l from one stream (10% of the watershed). Overall this would result in a watershed nitrate concentration that is in the low range for PEI. These results are from data collected by the Harmony and Area Watersheds Enhancement Group (HAWAEG) (2008-2009, 2012, 2013,2015) and the PEI Department of Environment, Energy and Climate Action (EECA) (2008-2009). Anoxic events have never been reported in the Enmore River estuary and no fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur infrequently by HAWAEG.

#### Other Information

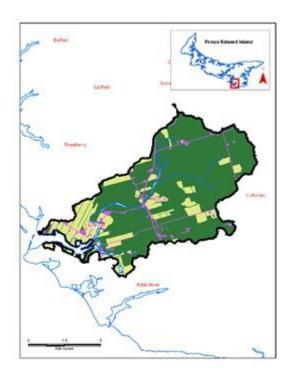
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Harmony & Area Watersheds Enhancement Group, to protect water quality in the Enmore River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

### **Flat River**

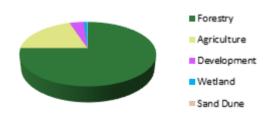




#### **Water Quality Score**



#### **Land Use**



Watershed Area 30.34 km2

#### **Status**

The Flat River watershed has *Good* water quality. The modelled watershed nitrate concentration is about 1.0 mg N/l which is in the low range for PEI. Anoxic events have not been reported in the estuary and no fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur infrequently by the Belfast and Area Watershed Group.

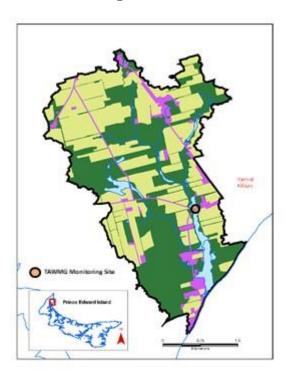
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Belfast and Area Watershed Group, to protect water quality issues in the Flat River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

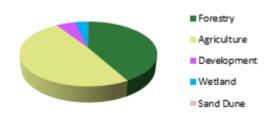
## Foleys Pond Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 12.46 km2

#### **Status**

The Foleys Pond watershed has *Good* water quality. The measured watershed nitrate concentration is 4.2 mg N/l which is in the high range for PEI. This result is from stream sampling conducted by the Tignish and Area Watershed Management Group (TAWMG) in 2021 and covers about 55% of the watershed. Anoxic events have not been reported in the small barrier beach pond and no fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur frequently by TAWMG. The average groundwater nitrate concentration is above 3 mg N/l.

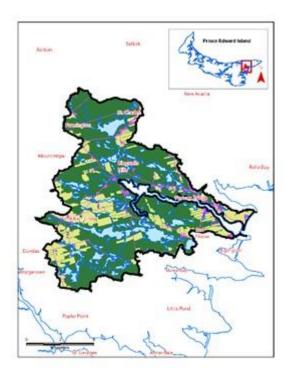
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Tignish & Area Watershed Management Group Inc., to address water quality issues in the Foleys Pond watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

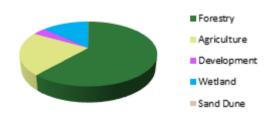
## Fortune River Map



#### **Water Quality Score**



#### Land Use



Watershed Area 76.71 km2

#### **Status**

The Fortune River watershed has *Good* water quality. The modelled watershed nitrate concentration is 1.2 mg N/l which is in the low range for PEI. Anoxic events have not been reported in the estuary and no fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur infrequently. A temperature logger placed by the Southeast Environmental Association showed a significant proportion of elevated water temperatures greater than 20 degrees C in 2016. The average groundwater nitrate concentration is above 3 mg/l.

#### Other Information

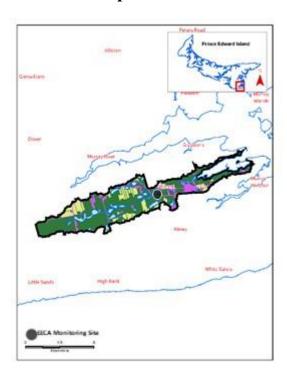
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Souris and Area Branch of the PEI Wildlife Federation, to protect water quality in the Fortune River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

#### **Fox River**

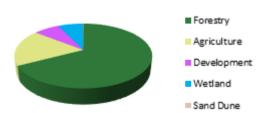
## Map



#### **Water Quality Score**







Watershed Area 11.09 km2

#### **Status**

The Fox River watershed has *Good* water quality. The average watershed nitrate concentration is 0.5 mg N/l which is in the very low to low range for PEI. This result is from sampling carried out by the PEI Department of Environment, Energy and Climate Action (EECA) (2008-2010). Anoxic events have not been reported in the Fox River estuary and no fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur frequently.

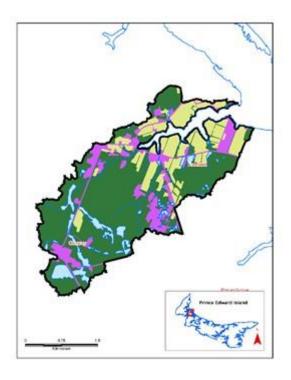
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Southeast Environmental Association, to protect water quality in the Fox River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

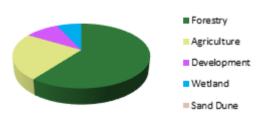
## Freeland Creek Map



#### **Water Quality Score**



#### Land Use



Watershed Area 9.50 km<sup>2</sup>

#### **Status**

The Freeland Creek watershed has *Excellent* water quality. The modelled watershed nitrate concentration is about 1.5 mg N/l which is in the low lo moderate range for PEI. Anoxic events have not been reported in the Freeland Creek estuary and no fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur infrequently by the Lot 11 and Area Watershed Management Group Inc.

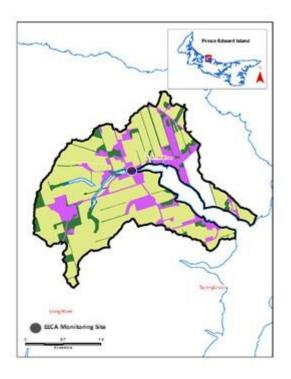
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Lot 11 and Area Watershed Management Group Inc., to protect water quality in the Freeland Creek watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

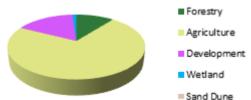
## French River Map



#### **Water Quality Score**







Watershed Area 6.83 km<sup>2</sup>

#### **Status**

The French River watershed has *Fair* water quality. The measured watershed nitrate concentration is 3.8 mg N/l which is in the moderate range for PEI. This result is from sampling carried out by the PEI Department of Environment, Energy and Climate Action (EECA) in 2005. 2009 and 2021 and represents 42% of the watershed. Anoxic events have been reported in the estuary in three (2017 - 2019) of the last 5 years but no fish kills related to run-off have been documented in the watershed in the last 10 years. Professional opinion is that sediment laden run-off (red water) events occur frequently. The average groundwater concentration is above 3 mg N/l.

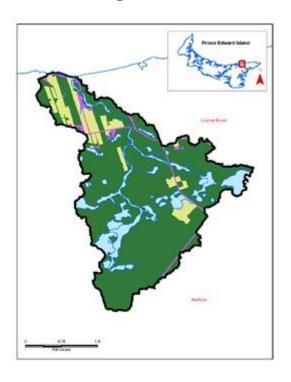
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Kensington North Watersheds Association Ltd., to address water quality issues in the French River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

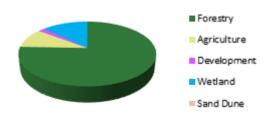
## Goose River Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 10.07 km2

#### **Status**

The Goose River watershed has *Excellent* water quality. The modelled watershed nitrate concentration is 0.7 mg N/l which is in the low range for PEI. The watershed does not have an estuary, so estuarine anoxic events are not a factor. No fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur infrequently.

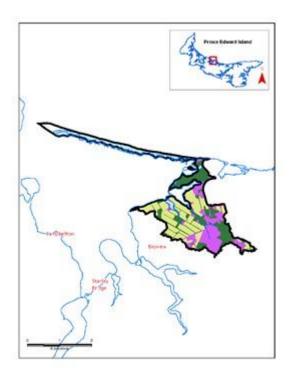
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Souris and Area Branch of the PEI Wildlife Federation, to protect water quality in the Goose River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

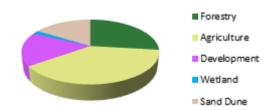
## Grahams Creek Map



#### **Water Quality Score**



#### Land Use



Watershed Area 5.51 km2

#### **Status**

The Grahams Creek watershed has *Good* water quality. The modelled watershed nitrate concentration is 1.2 mg N/l which is in the low range for PEI. Anoxic events have not been reported in the small Grahams Creek estuary and no fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur frequently in this watershed.

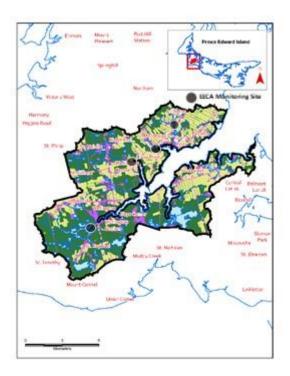
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Trout River Environmental Committee Inc., to protect water quality in the Grahams Creek watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

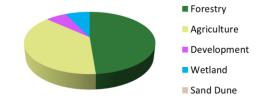
## Grand River Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 130.10 km2

#### **Status**

The Grand River watershed has *Good* water quality. The measured watershed nitrate concentration is 1.1 mg N/l which is in the low range for PEI. This result covers 47% of the watershed and it is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2008-2010, 2012-2014, 2017, 2020). A single anoxic event was recorded in a tributary of the Grand River estuary in 2020. No fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur frequently in the watershed. The average groundwater nitrate is above 3 mg/l for the Grand River. The watershed used for this assessment has been drawn to contain the drainage area of the entire Grand River estuary. It has 4 subwatersheds which would have water quality in the Good (Shipyard Creek, Little Trout River, Nebraska Creek) to Excellent (Grand River) categories if considered separately.

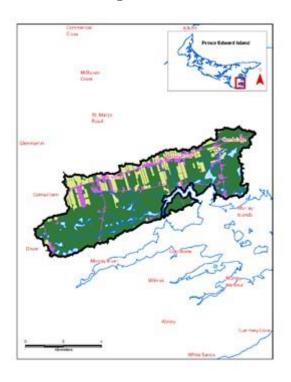
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Richmond Bay Watershed Association Inc., to address water quality issues in the Grand River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

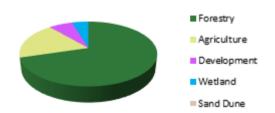
## Greek River Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 36.30 km2

#### **Status**

The Greek River watershed has *Excellent* water quality. The modelled watershed nitrate concentration is 1.1 mg N/l which is in the low range for PEI. No anoxic events have been reported in the Greek River estuary. No fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur infrequently.

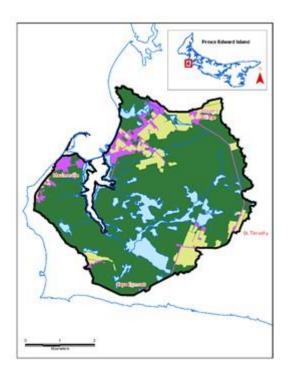
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Southeast Environmental Association, to protect water quality in the Greek River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

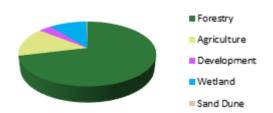
## Haldimand River Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 23.72 km2

#### **Status**

The Haldimand River watershed has *Good* water quality. The modelled watershed nitrate concentration is 0.9 mg N/l which is in the low range for PEI. Anoxic events have not been reported in the small estuary and no fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur infrequently. The average groundwater nitrate is above 3 mg N/l in the Haldimand River watershed.

#### Other Information

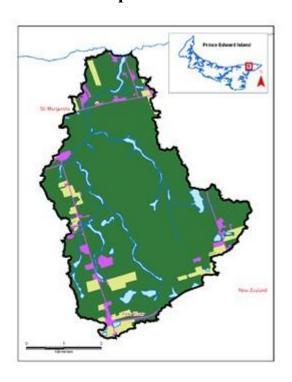
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

### **Hay River**

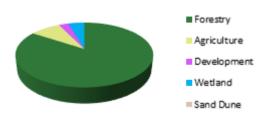




#### **Water Quality Score**



#### **Land Use**



Watershed Area 23.97 km2

#### **Status**

The Hay River watershed has *Good* water quality. The modelled watershed nitrate concentration is 0.8 mg N/l which is in the low range for PEI. The watershed does not have an estuary so estuarine anoxic events are not a factor. No fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur infrequently. Elevated water temperatures were recorded by the Souris and Area Branch of the PEI Wildlife Federation at one logger site in the watershed in 2019.

#### Other Information

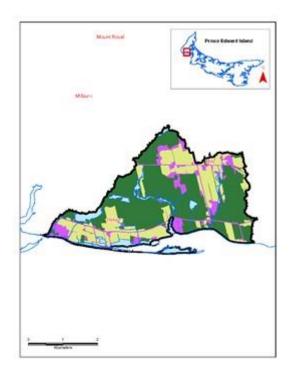
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Souris and Area Branch of the PEI Wildlife Federation, to protect water quality in the Hay River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

#### Hebron

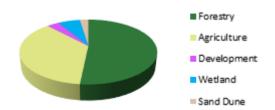
### Map



#### **Water Quality Score**



#### Land Use



Watershed Area 12.37 km2

#### **Status**

The Hebron watershed has *Good* water quality. The modelled watershed nitrate concentration is 2.4 mg N/l which is in the moderate range for PEI. The Hebron has a small estuary which has not reported an anoxic event. No fish kills related to run-off have been documented in the Herbron watershed. Sediment laden run-off (red water) events are thought to occur infrequently by the local watershed group, Trout Unlimited Prince County Branch. The average groundwater nitrate is above 3 mg N/l in the Hebron watershed.

#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, Trout Unlimited Prince County Chapter, to protect water quality in the Hebron watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

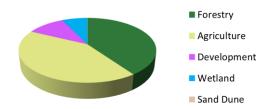
## Hillsborough River Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 347.76 km2

#### **Status**

The Hillsborough River watershed has *Good* water quality. The measured watershed nitrate concentration is 1.4 mg N/l which is in the low range for PEI. This result covers 59% of the watershed and it is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2005-2007, 2007-2008, 2007-2009, 2008-2009, 2009, 2013, 2016, 2020) and the Stratford and Area Watershed Improvement Group (SAWIG) (2018-2020). Anoxic events have not been recorded in the Hillsborough River estuary and no fish kills have been recorded in the watershed in the last 10 years (2012-2021). Sediment laden run-off (red water) events in the sub-watersheds are thought to occur frequently to very frequently by the Hillsborough Area Watershed Co-operative and infrequently to very frequently by SAWIG. Other concerns include low dissolved oxygen events and elevated water temperatures in some small freshwater ponds in the watershed. The average groundwater nitrate concentration in the watershed is above 3 mg N/l. The watershed used for this assessment has been drawn to contain the drainage area of the entire Hillsborough River estuary. It has 17 subwatersheds which would have water quality in the Good (Charlottetown, Wrights Creek, Hornes Creek, Scotts Creek, Appletree Creek, Millers Creek, Scotchfort, Hillsborough River, Pisquid River, Clarks Brook, Cheese Factory Creek, Fullertons Creek, Rosebank) and Excellent (Riverside, Black Brook, Glenfinnan River, Johnstons River) categories if considered separately.

#### **Other Information**

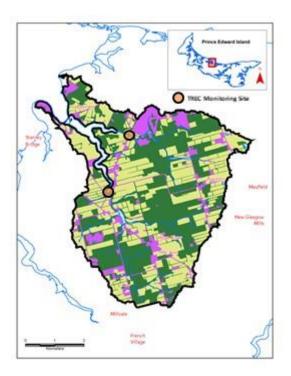
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with three local community groups, The Ellen's Creek Watershed Group Inc., the Hillsborough Area Watershed Co-operative and the Stratford and Area Watershed Improvement Group, to address water quality issues in the Hillsborough River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

## **Hope River**

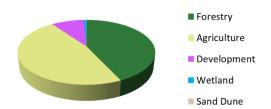
Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 31.41 km2

#### **Status**

The Hope River watershed has *Good* water quality. The measured watershed nitrate concentration is 2.0 mg N/l which is in the moderate range for PEI. This result covers 77% of the watershed and it is from stream sampling data collected by the Trout River Environmental Committee Inc.(TREC) (2016-2017, 2019, 2021). Anoxic events were recorded in 3 (2017, 2018, 2021) of the last 5 years. No fish kills related to run-off have been recorded in the watershed. Sediment laden run-off events are thought to occur infrequently by TREC. The watershed used for this assessment has been drawn to contain the drainage area of the entire Hope River estuary. It has 2 subwatersheds; Bayview River would have water quality in the Good category while Hope River would be in the Fair category if considered separately.

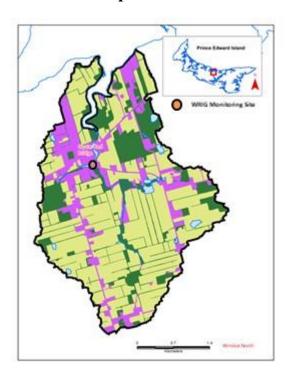
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Trout River Environmental Committee Inc., to address water quality issues in the Hope River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

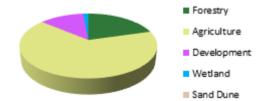
## Hornes Creek Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 11.92 km2

#### **Status**

The Hornes Creek watershed has *Good* water quality. The measured watershed nitrate concentration is 4.9 mg N/l which is in the high range for PEI. This result covers 60% of the watershed and it is from stream sampling data collected by the Wheatley River Improvement Group Inc. (WRIG) (2017-2018, 2021). Anoxic events have never been reported in the estuary and no fish kills related to run-off have been recorded in the watershed. Sediment laden run-off events are thought to occur infrequently by WRIG.

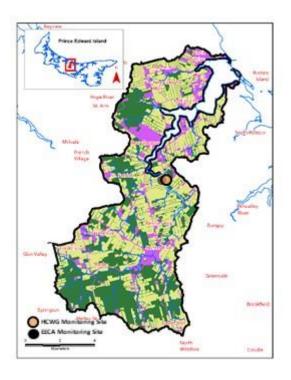
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Wheatley River Improvement Group Inc., to protect quality in the Hornes Creek watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

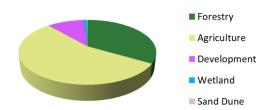
## Hunter / Clyde River Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 89.53 km2

#### **Status**

The Hunter River/River Clyde watershed has *Fair* water quality. The measured watershed concentration is 1.5 mg N/l which is in the low range for PEI. This result covers 57% of the watershed and it is from stream sampling data collected by the Department Environment, Energy and Climate Action (EECA) (2015, 2018, 2021) and the Hunter-Clyde Watershed Group (HCWG) (2018,2019). Anoxic events have been recorded in the Hunter River/River Clyde estuary in 3 of the last 5 years (2017-2018, 2020) but no fish kills related to run-off have been recorded in the watershed. Sediment laden run-off (red water) events are thought to occur infrequently by HCWG. Other issues include a lack of riparian cover reported by HCWG and an average groundwater nitrate concentration is above 3 mg/l.

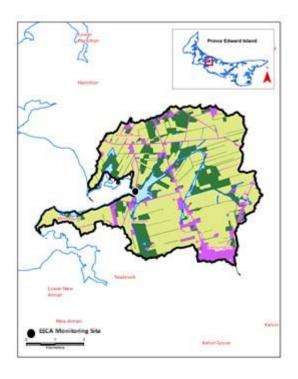
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Hunter-Clyde Watershed Group Inc., to address water quality issues in the Hunter/Clyde River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

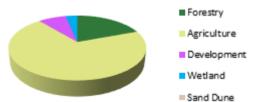
## Indian River Map



#### **Water Quality Score**



## **Land Use**



Watershed Area 25.87 km2

#### **Status**

The Indian River watershed has *Fair* water quality. The measured watershed concentration is 3.2 mg N/l which is in the moderate range for PEI. This result covers 85% of the watershed and it is from stream sampling data collected by the PEI Department of Environment, Energy and Climate Action (2015, 2018, 2021). Anoxic events have been recorded in the estuary in 2 of the last 5 years (2018 and 2020). No fish kills related to run-off have been recorded in the watershed in the last 10 years (2012-2021). Sediment laden run-off (red water) events are thought to occur infrequently in the watershed by the Kensington North Watersheds Association. The average groundwater nitrate concentration is above 3 mg/l.

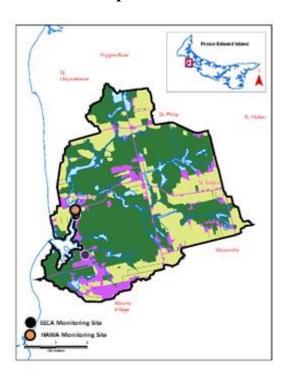
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Kensington North Watersheds Association Ltd., to address water quality issues in the Indian River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data <u>here.</u>

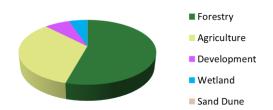
## Jacques River Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 27.88 km2

#### **Status**

The Jacques River watershed has *Good* water quality. The measured watershed nitrate concentration is 0.4 mg N/l which is in the very low range for PEI. This result covers about 83% of the watershed and is from data collected by the by the Department Environment, Energy and Climate Action (EECA) (2008–2009) and the Harmony and Area Watersheds Enhancement Group Inc. (HAWEG) (2010- 2014, 2017). Anoxic events have never been reported in the Jacques River estuary and no fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur infrequently by HAWEG.

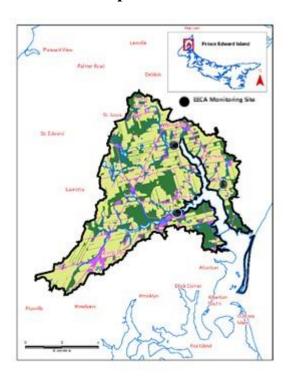
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Harmony and Area Watersheds Enhancement Group Inc., to protect water quality in the Jacques River watershed.

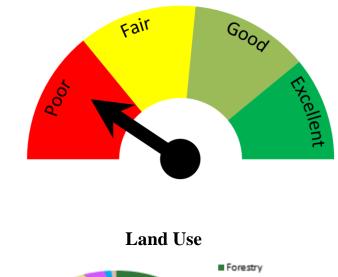
View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

## Kildare / Montrose River Map



#### **Water Quality Score**



Agriculture
 Development
 Wetland
 Sand Dune

Watershed Area 57.38 km2

#### **Status**

The Kildare/Montrose watershed has *Poor* water quality. The measured watershed nitrate concentration is 4.2 mg N/l which is in the high range for PEI. This result covers about 67% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2013-2014, 2017, 2020). Anoxic events have been recorded in the Kildare/Montrose River estuary in 3 of the last 5 years (2018, 2020, 2021) and there have been 2 run-off related fish kills (2017, 2020) in the watershed in the last 10 years. Sediment laden run-off (red water) events are thought to occur very frequently by the Cascumpec Bay Watershed Association Inc. Another concern is high summertime temperatures in a freshwater pond located at the head of tide. The average groundwater nitrate concentration in the watershed is above 3 mg N/l. The watershed used for this assessment has been drawn to contain the drainage area of the entire Kildare / Montrose River estuary. It has 2 subwatersheds which would have water quality in the Poor (Kildare River) and Fair (Huntley River) categories if considered separately.

#### Other Information

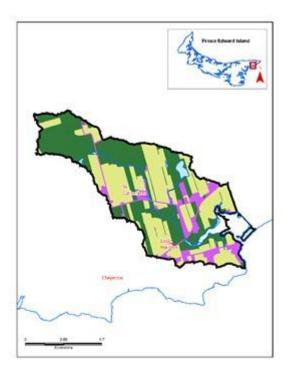
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local</u> <u>community watershed group</u>. The Department is working with a local community group, the Cascumpec

Bay Watershed Association Inc., to address water quality issues in the Kildare River/Montrose River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

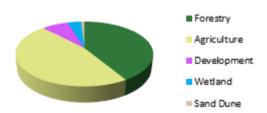
## Little Harbour Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 7.83 km<sup>2</sup>

#### **Status**

The Little Harbour watershed has *Good* water quality. The modelled watershed nitrate concentration is 2.9 mg N/l which is in the moderate range for PEI. No anoxic events have been recorded in the estuary and there have been no fish kills related to run-off recorded in the watershed. Professional opinion is that silt laden run-off (red water) events occur frequently in the watershed.

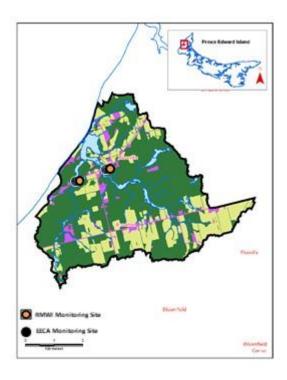
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Souris and Area Branch of the PEI Wildlife Federation, to protect water quality in the Little Harbour watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

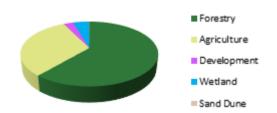
## Little Miminegash River Map



#### **Water Quality Score**



#### Land Use



Watershed Area 26.64 km2

#### **Status**

The Little Miminegash River watershed has *Fair* water quality. The measured watershed nitrate concentration is about 2.0 mg N/l which is in the moderate range for PEI. This result covers 78% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2008-2009) and the Roseville/Miminegash Watersheds Inc (RMWI) (2021). Anoxic events have not been confirmed in the large barrier beach pond. A run-of related fish kill occurred in the watershed in 2016. Sediment laden run-off events are thought to be very frequent by RMWI. Other reported issues include a lack of riparian cover and elevated water temperatures.

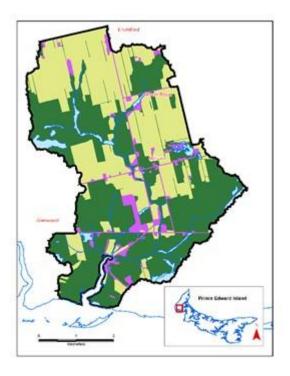
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Roseville/Miminegash Watersheds Inc., to address water quality issues in the Little Miminegash River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

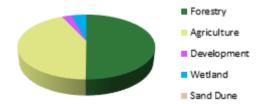
## Little Pierre Jacques River Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 26.75 km2

#### **Status**

The Little Pierre Jacques River watershed has *Good* water quality. The modelled watershed nitrate concentration is 3.4 mg N/l which is in the moderate to high range for PEI. Anoxic events have not been reported in the small estuary and no fish kills related to run-off have been documented in the Little Pierre Jacques watershed. Sediment laden run-off (red water) events are thought to occur frequently in the watershed by the West Point and Area Watersheds Inc.

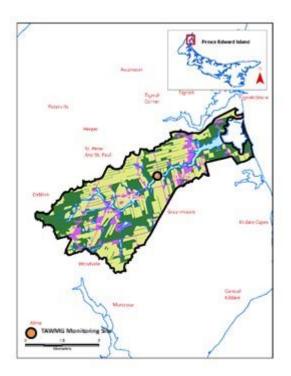
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the West Point and Area Watersheds Inc. , to address water quality issues in the Little Pierre Jacques River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

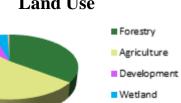
View or download the available raw water quality monitoring data here.

## Little Tignish River Map



#### **Water Quality Score**





Sand Dune

Watershed Area 22.07 km2

#### **Status**

The Little Tignish River watershed has *Good* water quality. The measured watershed nitrate concentration is 4.2 mg N/l which is in the high range for PEI. This result covers 68% of the watershed and it is from stream sampling data collected by the Tignish and Area Watershed Management Group Inc. (TAWMG) (2020-2021). Anoxic events have not been reported in the large barrier beach pond and no fish kills related to run-off have been recorded in the watershed. Sediment laden run-off events are thought to occur frequently by the TAWMG. A blue-green algae (cyanobacteria) bloom occurred in Doyle's Pond in 2015. The average groundwater nitrate concentration is above 3 mg/l.

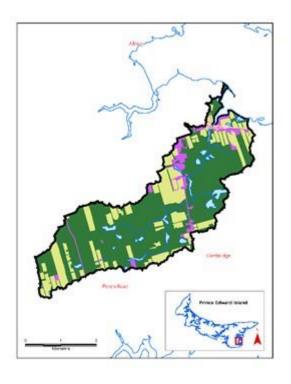
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Tignish & Watershed Management Group Inc., to address water quality issues in the Little Tignish River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data <u>here.</u>

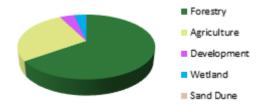
## Llewellyns Creek Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 13.91 km2

#### **Status**

The Llewellyn's Creek watershed has Good water quality. The modelled watershed nitrate concentration is 1.6 mg N/l which is in the moderate range for PEI. Anoxic events have not been reported in the small estuary and no fish kills related to run-off have been documented in the Llewellyn's Creek watershed. Professional opinion is that sediment laden run-off (red water) events occur infrequently in the watershed. The average groundwater nitrate concentration is above 3 mg N/l in the watershed.

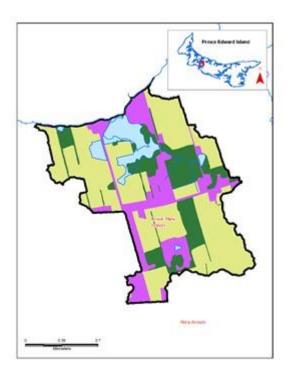
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Southeast Environmental Association, to protect water quality in the Llewellyns Creek watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

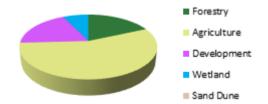
## Lower New Annan Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 2.28 km2

#### **Status**

The Lower New Annan watershed has *Fair* water quality. The modelled watershed nitrate concentration is 4.6 mg N/l which is in the high range for PEI. Lower New Annan does not have an estuary so estuarine anoxia is not a factor in this watershed. No fish kills related to run-off have been documented in the Lower New Annan watershed. Professional opinion is that sediment laden run-off (red water) events occur very frequently in the watershed. The average groundwater nitrate value is greater than 3 mg N/l.

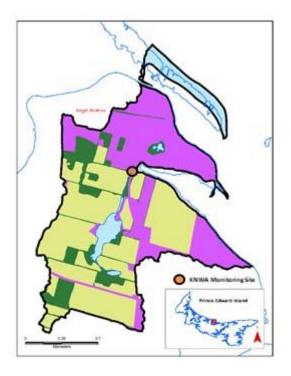
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

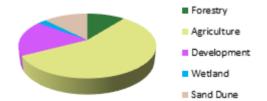
## Lukes Creek Map



#### **Water Quality Score**



#### **Land Use**



Watershed Area 2.77 km2

#### **Status**

The Luke's Creek watershed has *Good* water quality. The measured watershed nitrate concentration is 1.2 mg N/l which is in the low range for PEI. This result covers 57% of the watershed and it is from stream sampling data collected by the Wheatley River Improvement Group Inc. (WRIG) (2018, 2021). Anoxic events have not been reported in the Luke's Creek estuary and no fish kills related to run-off have been recorded in the watershed. Sediment laden run-off (run-off) events are thought to occur infrequently by WRIG. Some low dissolved oxygen results have been collected from the stream near the head of tide.

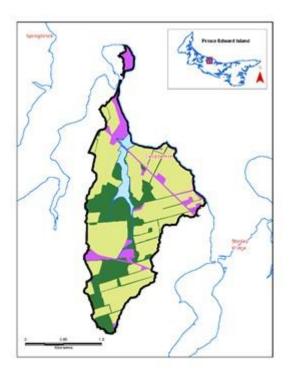
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Wheatley River Improvement Group Inc., to protect water quality in the Lukes Creek watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

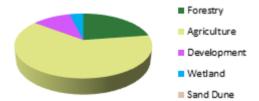
# Mackies Pond Map



## **Water Quality Score**







Watershed Area 4.61 km2

#### **Status**

The Mackies Pond watershed has *Fair* water quality. The modelled watershed nitrate concentration is 4.6 mg N/l which is in the high range for PEI. There have been no anoxic events recorded in the Mackies Pond estuary and there have been no fish kills related to run-off in the watershed. Professional opinion is that sediment laden run-off (red water) events are very frequent. The average groundwater nitrate concentration is above 5 mg N/l in the Mackies Pond watershed.

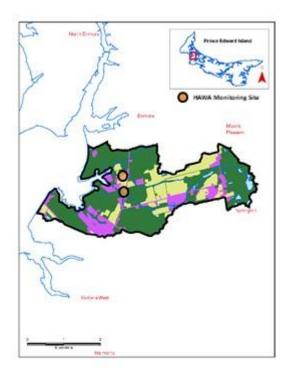
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Trout River Environmental Committee Inc., to address water quality issues in the Mackies Pond watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

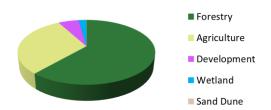
# MacLaurins Creek Map



# **Water Quality Score**



#### Land Use



Watershed Area 9.09 km2

#### **Status**

The MacLaurins Creek watershed has *Good* water quality. The measured watershed nitrate concentration from streams in the watershed are 0.9-1.9 mg N/l (5 samples 2010-2012, 2016-2017) from one stream (34% of the watershed) and 4.7-7.3 mg N/l (3 samples 2009,2010,2012) from another stream (16% of the watershed). Overall this would result in a watershed nitrate concentration in the moderate range for PEI. These results are from stream sampling data collected by the Harmony & Area Watersheds Enhancement Group Inc. (HAWEG). Anoxic events have never been reported in the MacLaurins Creek estuary and no fish kills related to run-off have ever been documented in the watershed. Sediment laden run-off (red water) events hare thought to occur infrequently by HAWEG.

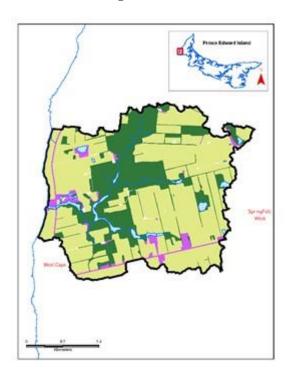
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Harmony & Area Watersheds Enhancement Group Inc, to protect water quality in the MacLaurins Creek watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

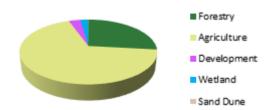
# MacWilliams Brook Map



# **Water Quality Score**



#### Land Use



Watershed Area 10.47 km2

#### **Status**

The MacWilliams Brook watershed has *Good* water quality. The modelled watershed nitrate concentration is 4.8 mg N/l which is in the high range for PEI. MacWilliams Brook does not have an estuary so estuarine anoxia is not an issue. No fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur infrequently by the West Point & Area Watersheds Inc. The average groundwater nitrate concentration is above 5 mg/l.

#### Other Information

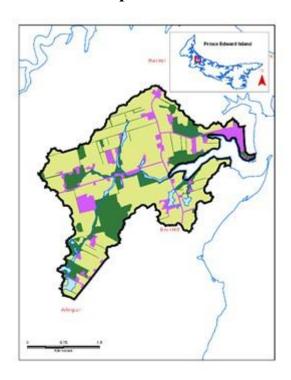
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the West Point & Area Watersheds Inc., to address water quality issues in the MacWilliams Brook watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

# Mill Creek

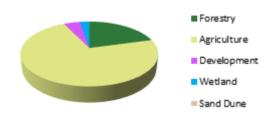
# Map



## **Water Quality Score**



## **Land Use**



Watershed Area 8.70 km<sup>2</sup>

#### **Status**

The Mill Creek watershed has *Fair* water quality. The modelled watershed nitrate concentration is 4.4 mg/l which is in the high range for PEI. An anoxic event was recorded in the Mill Creek estuary in 2020 but no fish kills related to run-off have been reported. Professional opinion is that sediment laden run-off (red-water) events are very frequent in the watershed. There has been some concern expressed about water quality in the Mill Creek estuary by the Richmond Bay Watershed Association.

#### Other Information

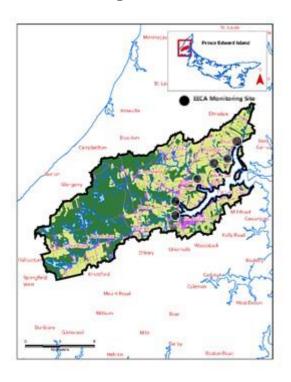
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Richmond Bay Watershed Association Inc., to address water quality issues in the Mill Creek watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

## Mill River

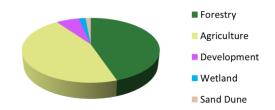
Map



# **Water Quality Score**



## **Land Use**



Watershed Area 134.45 km2

#### **Status**

The Mill River watershed has *Poor* water quality. The measured watershed nitrate concentration is 3.1 mg N/l which is in the high range for PEI. This result covers about 78% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2009, 2013-2014, 2019-2021). Anoxic events have been reported in the Mill River estuary and/or its tributaries in each of the last 5 years (2017-2021). One fish kill related to run-off was documented in the watershed in the last 10 years (2013). Sediment laden run-off (red water) events are thought to occur either frequently or very frequently in subwatersheds by Trout Unlimited Prince County Chapter and the Cascumpec Bay Watershed Association. The average groundwater nitrate concentration in the watershed is above 3 mg N/l. Elevated water temperatures have also been reported to exist in streams in the watershed. The watershed used for this assessment has been drawn to contain the drainage area of the entire Mill River estuary. It has 2 subwatersheds which would have water quality in the Poor (Mill River) to Fair (Hills River) category if considered separately.

#### Other Information

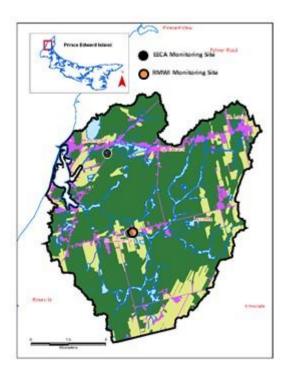
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with two local community groups, the

Cascumpec Bay Watershed Association Inc. and Trout Unlimited-Prince County Chapter, to address water quality issues in the Mill River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

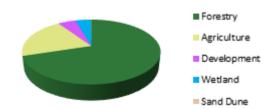
# Miminegash River Map



## **Water Quality Score**



## **Land Use**



Watershed Area 58.36 km2

#### **Status**

The Miminegash River watershed has *Good* water quality. The measured watershed nitrate concentration is about 0.4 mg N/l which is in the low range for PEI. This result covers 67% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2008-2009, 2020) and the Roseville/Miminegash Watersheds Inc. (RMWI) (2021). Anoxic events have not been reported in the Miminegash River estuary in the last 5 years (2016-2020) and no fish kills related to run-off have been documented. Sediment laden run-off events are thought to occur frequently by RMWI. Another reported issue include a lack of riparian cover in the watershed. Some high pH results were also recorded in some samples from 2021.

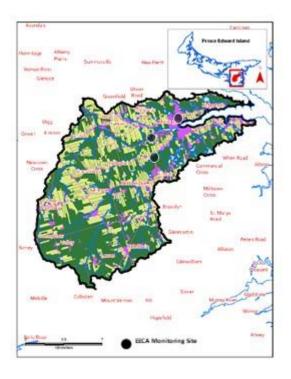
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Roseville/Miminegash Watersheds Inc, to protect water quality in the Miminegash River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

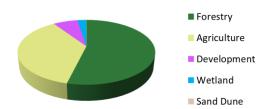
# Montague / Valleyfield River Map



# **Water Quality Score**



#### Land Use



Watershed Area 196.44 km2

#### **Status**

The Montague/Valleyfield River watershed has *Good* water quality. The measured watershed nitrate concentration is 1.8 mg N/l which is in the low to moderate range for PEI. This result covers about 70% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2019-2021). No anoxic events have been recorded in the Montague/Valleyfield estuary in the last 5 years (2017 - 2021) and there have been no fish kills related to run-off documented in the last 10 years (2011-2020). Professional opinion is that sediment laden run-off (red water) events occur frequently in the watershed. A brackish pond, located on Vesey's Creek in Montague, has been anoxic twice in the last 5 years (2018, 2019). Temperature logger data collected by the Southeast Environmental Association shows some elevated water temperatures, associated with impoundments, in branches of both the Montague and Valleyfield Rivers.

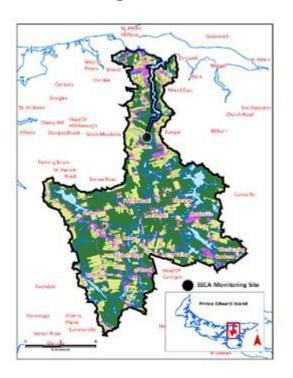
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Southeast Environmental Association, to protect water quality in the Montague River/Valleyfield River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data  $\underline{\text{here.}}$ 

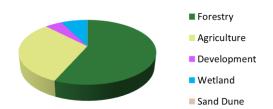
# Morell River Map



# **Water Quality Score**



#### Land Use



Watershed Area 175.49 km2

#### **Status**

The Morell River watershed has *Good* water quality. The measured watershed nitrate concentration is 1.2 mg N/l which is in the low range for PEI. This result covers about 85% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2019-2021). No anoxic events have been reported in the Morell River estuary since 2016 and there have been no fish kills related to run-off in over 30 years. Sediment laden run-off (red water) events are thought to occur frequently by the Morell River Management Co-operative. The average groundwater nitrate concentration in the watershed is above 3 mg N/l. High water temperatures have also been reported for streams in the watershed.

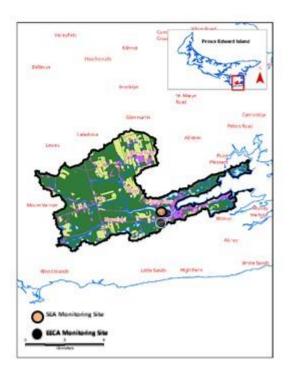
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Morell River Management Co-operative, to address water quality issues in the Morell River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

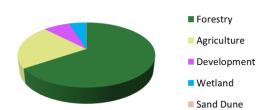
# Murray River Map



## **Water Quality Score**



#### Land Use



Watershed Area 70.27 km2

#### **Status**

The Murray River watershed has *Good* water quality. The measured watershed nitrate concentration is 0.3 mg N/l which is in the very low range for PEI. This result covers about 81% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2007-2009, 2010, 2014, 2016) and by the Southeast Environmental Association (SEA) (2014, 2016). No anoxic events were recorded in the Murray River estuary in the last 5 years (2017-2021) and no fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur infrequently. One concern is cyanobacteria (blue-green algae) blooms which have been recorded in MacLure's Dam four times between 2010 and 2021 (2010, 2013. 2018 and 2020).

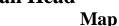
#### Other Information

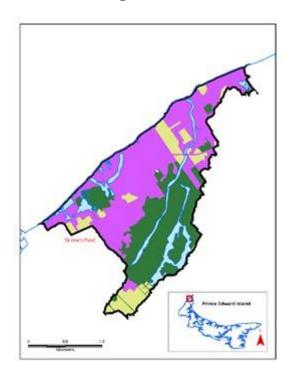
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Southeast Environmental Association, to protect water quality in the Murray River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data  $\underline{\text{here.}}$ 

# **Nail Head**

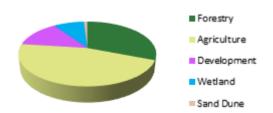




# **Water Quality Score**



## **Land Use**



Watershed Area 5.25 km2

#### **Status**

The Nail Head watershed has *Excellent* water quality. The modelled watershed nitrate concentration is 1.3 mg N/l which is in the low range for PEI. The Nail Head watershed has no estuary so estuarine anoxia is not a factor. No fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur infrequently by the Tignish and Area Watershed Management Group Inc.

## **Other Information**

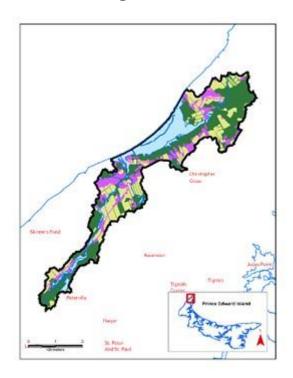
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Tignish & Area Watershed Management Group Inc., to protect water quality in the Nail Head watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

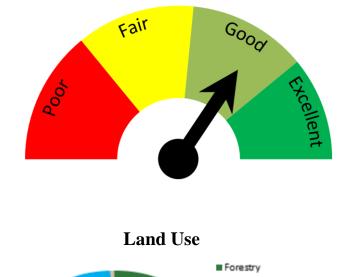
View or download the available raw water quality monitoring data here.

## **Nail Pond**





# **Water Quality Score**



Agriculture
 Development
 Wetland
 Sand Dune

Watershed Area 15.16 km2

#### **Status**

The Nail Pond watershed has *Good* water quality. The modelled watershed nitrate concentration is 1.8 mg N/l which is in the moderate range for PEI. Anoxia has never been documented in the large barrier beach pond and no fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur infrequently by the Tignish and Area Watershed Management Group Inc. The average watershed groundwater nitrate concentration is above 3 mg N/l.

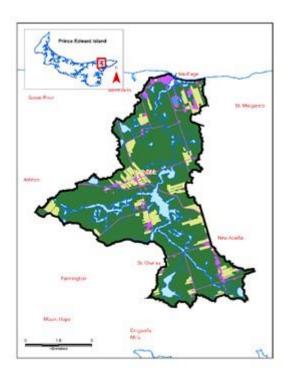
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Tignish & Area Watershed Management Group Inc., to protect water quality in the Nail Pond watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

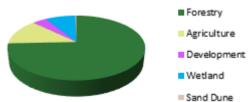
# Naufrage River Map



# **Water Quality Score**







Watershed Area 43.57 km2

#### **Status**

The Naufrage River watershed has *Good* water quality. The modelled watershed nitrate concentration is 0.9 mg N/l which is in the low range for PEI. Anoxia has not been reported in the Naufrage lagoon; reported odour issues have been related to rotting beach wrack collecting in the harbour/bullpen area. No fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur infrequently in the watershed. A stream logger placed by the Souris and Area Branch of the PEI Wildlife Federation showed some incidences of elevated temperature in 2016 and 2017.

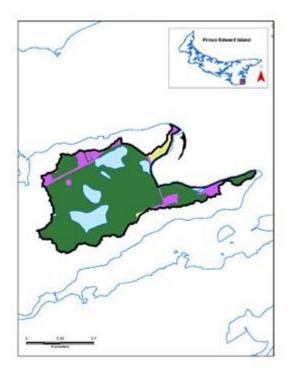
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Souris and Area Branch of the PEI Wildlife Federation, to protect water quality in the Naufrage River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

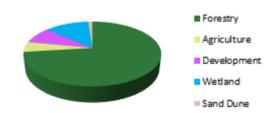
# Nicolle Point Map



# Water Quality Score



## **Land Use**



Watershed Area 1.24 km2

#### **Status**

The Nicolle Point watershed has **Excellent** water quality. The modelled watershed nitrate result is 0.7 mg N/l which is in the low range for PEI. A modelled result is the only one possible as there are no streams in this watershed. There have been no fish kills associated with run-off and no anoxic events have been reported in the small estuary. Professional opinion is that sediment laden run-off (red water) events do not occur in this watershed.

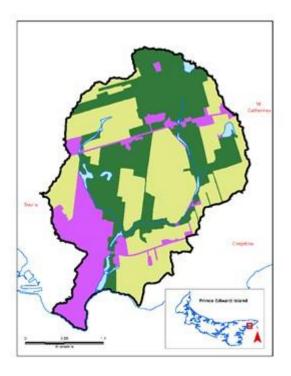
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Southeast Environmental Association, to protect water quality in the Nicolle Point watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

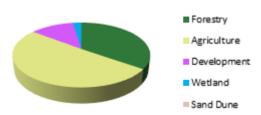
# Norris Pond Map



# **Water Quality Score**







Watershed Area 6.99 km2

#### **Status**

The Norris Pond watershed has *Good* water quality. The modelled watershed nitrate result is 3.1 mg/l which is in the moderate to high range for PEI. There have been no fish kills associated with run-off in this watershed. No anoxic events have been reported in the small coastal inlet associated with this watershed. Professional opinion is that sediment laden run-off (red water) events occur very frequently in the Norris Pond watershed.

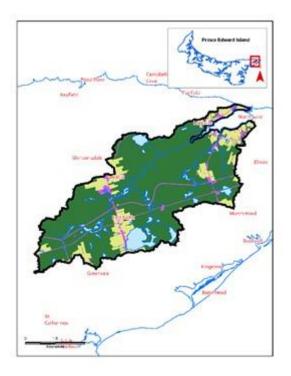
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Souris and Area Branch of the PEI Wildlife Federation, to protect water quality in the Norris Pond watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

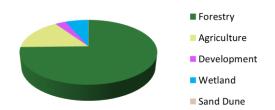
# North Lake Map



# **Water Quality Score**



## **Land Use**



Watershed Area 47.52 km2

#### **Status**

The North Lake watershed has *Good* water quality. The modelled watershed nitrate concentration is 1.3 mg N/l which is in the low range for PEI. Anoxic events have not been reported in the North Lake lagoon and no fish kills related to run-off have been recorded in the watershed. Professional opinion is that sediment laden run-off (red water) events are infrequent in the watershed. The average groundwater nitrate concentration in the watershed is above 3 mg N/l. A few elevated temperature results were found in stream temperature logger results collected by the Souris and Area Branch of the PEI Wildlife Federation during 2016 and 2017.

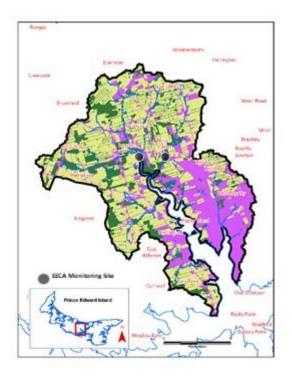
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Souris and Area Branch of the PEI Wildlife Federation, to protect water quality in the North Lake watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

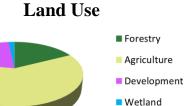
View or download the available raw water quality monitoring data here.

# North River Map



# **Water Quality Score**





Sand Dune

Watershed Area 97.20 km2

#### **Status**

The North River watershed has *Fair* water quality. The measured watershed nitrate concentration is 3.3 mg N/l which is in the moderate to high range for PEI. This result covers 48% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2009, 2012, 2015, 2018). No anoxic events have been recorded in the North River estuary in the last 5 years but one fish kill related to run-off was recorded in the watershed in 2014. Sediment laden run-off (red water) events are thought to occur very frequently by the Cornwall and Area Watershed Group Inc. (CAWG). Some elevated water temperatures, possibly associated with low streamflow, have also been reported by the CAWG.

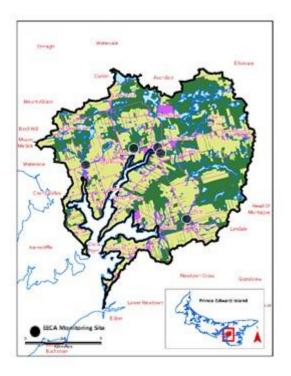
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with two local community groups, the Cornwall & Area Watershed Group Inc. and the Ellen's Creek Watershed Group Inc. to address water quality issues in the North River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

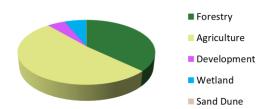
# Orwell River/Vernon River Map



## **Water Quality Score**



#### Land Use



Watershed Area 126.40 km2

#### **Status**

The Orwell River/Vernon River watershed has *Fair* water quality. The measured watershed nitrate concentration is 1.9 mg N/l which is in the moderate range for PEI. This result covers 67% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2008-2010, 2013, 2016, 2019). No anoxic events have been recorded in the Orwell/Vernon River estuary in the last five years (2017-2021) and no fish kills related to run-off have been documented in the last 10 years (2012-2021). Sediment laden run-off (red water) events are thought to occur very frequently by the Hillsborough Area Watershed Cooperative. The average groundwater nitrate concentration in the watershed is above 3 mg N/l. Elevated water temperatures were also found in the main branch of the Vernon River in 2020. The watershed used for this assessment has been drawn to contain the drainage area of the entire Orwell / Vernon estuary. It has 4 subwatersheds which would have water quality in the Fair (Orwell Cove, Orwell River) to Good (Vernon River, Seal River) categories if considered separately.

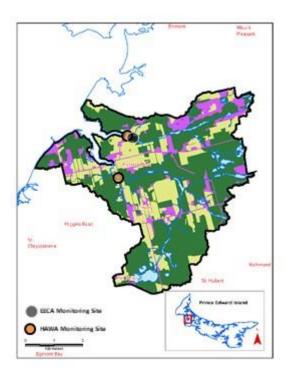
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Hillsborough Area Watershed Co-operative, to address water quality issues in the Orwell/Vernon River watershed.

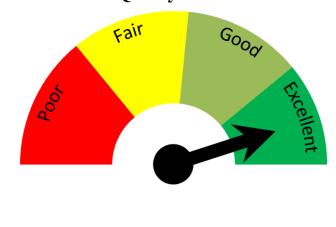
View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

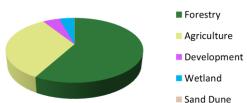
# Ox/Sheep River Map



## **Water Quality Score**







Watershed Area 29.24 km2

#### **Status**

The Ox/Sheep River Watershed has *Excellent* water quality. The measured watershed nitrate concentration is 0.9 mg N/l which is in the low range for PEI. This result covers about 76% of the watershed and is from data collected by the Harmony and Area Watersheds Enhancement Group (HAWEG) (2012- 2017) and the PEI Department of Environment, Energy and Climate Action (EECA) (2020). No anoxic events have been reported in the Ox/Sheep River estuary and no fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur infrequently by HAWEG.

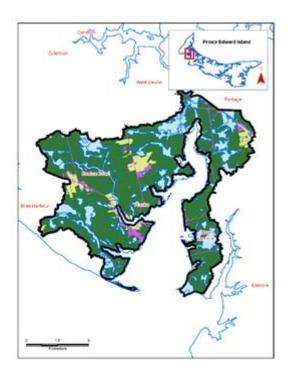
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Harmony & Area Watersheds Enhancement Group Inc., to protect water quality in the Ox/Sheep River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

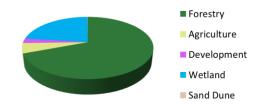
# Percival River Map



# **Water Quality Score**



## **Land Use**



Watershed Area 50.08 km2

#### **Status**

The Percival Bay watershed has *Good* water quality. The modelled watershed nitrate concentration is 0.7 mg N/l which is in the low range for PEI. No anoxic events have been reported in Percival Bay and no fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to be infrequent by Trout Unlimited Prince County Branch (TUPCB). TUPCB reports some low dissolved oxygen results in streams. The Beaton's Creek portion of the watershed has an average groundwater concentration above 3 mg N/l however this is from a very small number of samples. There is some debate on whether to include high temperature and stream sediments as issues of concern for the tributary streams of Percival Bay; This may be a natural situation for the streams because of their low gradient or it could be due to beaver impoundments.

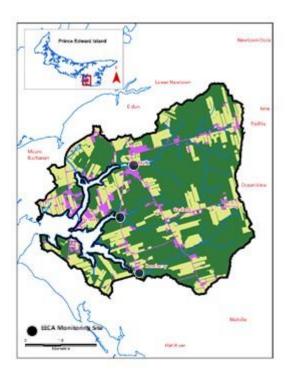
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, Trout Unlimited Prince County Chapter, to protect water quality in the Percival River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

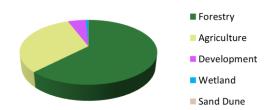
# Pinette River Map



# **Water Quality Score**



## **Land Use**



Watershed Area 53.08 km2

#### **Status**

The Pinette River watershed has *Excellent* water quality. The measured watershed nitrate concentration is 1.2 mg N/l which is in the low range for PEI. This result covers 65% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2008-2009, 2016, 2019). No anoxic events have been recorded in the Pinette River estuary in the last 5 years (2017-2021) and no fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) are thought to occur infrequently by the Belfast and Area Watershed Group.

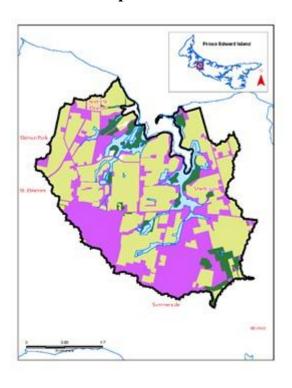
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Belfast and Area Watershed Group, to protect water quality in the Pinette River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

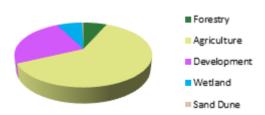
# Platte River Map



# **Water Quality Score**



## **Land Use**



Watershed Area 14.98 km2

#### **Status**

The Platte River watershed has *Fair* water quality. The modelled watershed nitrate concentration is 4.2 mg N/l which is in the high range for PEI. No anoxic events have been recorded in the Platte River estuary in the last 5 years (2017-2021) and no fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden (red-water) run-off events are very frequent in the watershed. The average groundwater nitrate concentration is above 5 mg N/l for the watershed.

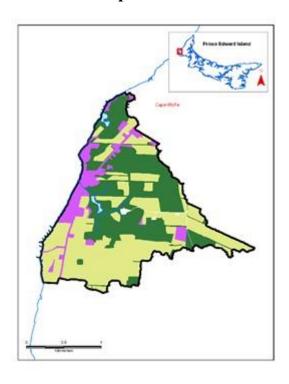
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

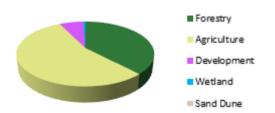
# Pollard Brook Map



# **Water Quality Score**



#### Land Use



Watershed Area 3.47 km2

#### **Status**

The Pollard Brook watershed has *Good* water quality. The modelled watershed nitrate concentration is 3.6 mg N/l which is in the high range for PEI. The Pollard Brook watershed has no estuary so estuarine anoxia is not an issue. No fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are considered to occur infrequently by the West Point & Area Watersheds Inc.

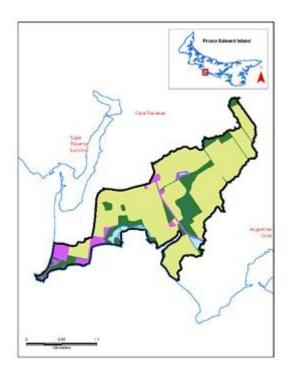
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the West Point & Area Watersheds Inc., to protect water quality in the Pollard Brook watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

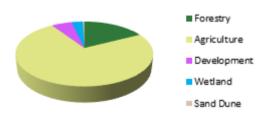
# Prevost Cove Map



# **Water Quality Score**



# **Land Use**



Watershed Area 3.28 km2

#### **Status**

The Prevost Cove watershed has *Fair* water quality. The modelled watershed nitrate concentration is 5.0 mg N/L which is in the high to very high range for PEI. No anoxic events have been reported in the very small estuary/coastal inlet. No fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur very frequently in the watershed. The average groundwater nitrate concentration is above 3 mg N/l.

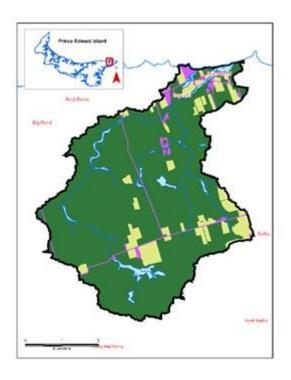
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the South Shore Watershed Association Inc., to address water quality issues in the Pollard Brook watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

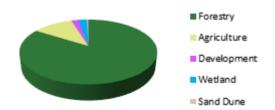
# Priest Pond Creek Map



# **Water Quality Score**



## **Land Use**



Watershed Area 24.79 km2

#### **Status**

The Priest Pond Creek watershed has *Excellent* water quality. The modeled watershed nitrate concentration is 0.9 mg N/l which is in the low range for PEI. There is no estuary so downstream eutrophication is not an issue in this watershed. No fish kills related to run-off have been documented in the Priest Pond Creek watershed. Professional opinion is that sediment laden run-off (red water) events occur infrequently in this watershed.

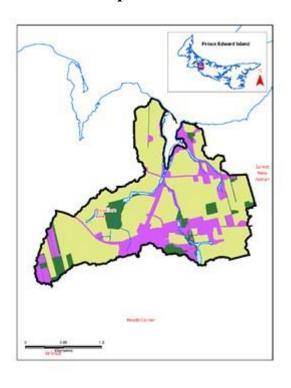
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Souris and Area Branch of the PEI Wildlife Federation, to protect water quality in the Priest Pond Creek watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

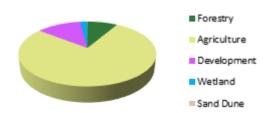
# Rayners Creek Map



# **Water Quality Score**



## **Land Use**



Watershed Area 5.83 km<sup>2</sup>

#### **Status**

Rayners Creek has *Fair* water quality. The modelled watershed nitrate concentration is 5.0 mg N/L which is in the high to very high range for PEI. No anoxic events have been reported in the very small estuary. No fish kills related to run-off have been documented in Rayners Creek. Professional opinion is that sediment laden run-off (red water) events occur very frequently in the watershed. The average groundwater nitrate concentration is above 5 mg N/l.

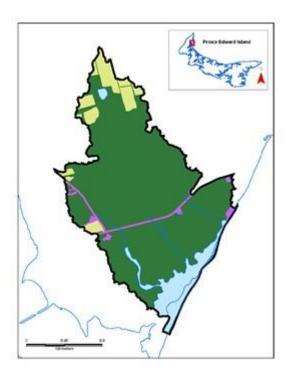
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local</u> community watershed group.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data <u>here.</u>

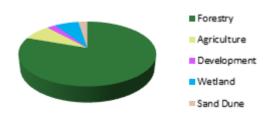
# Rayners Pond Map



# **Water Quality Score**



## **Land Use**



Watershed Area 3.50 km<sup>2</sup>

#### **Status**

The Rayners Pond watershed has *Excellent* water quality. The modelled watershed nitrate concentration is 0.8 mg N/l which is in the low range for PEI. Rayners Pond has no estuary so estuarine anoxia is not an issue. No fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur infrequently by the Tignish and Area Watershed Management Group.

# **Other Information**

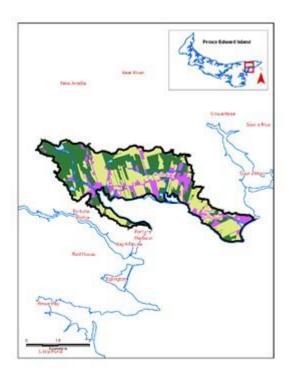
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Tignish & Area Watershed Management Group Inc., to protect water quality in the Rayners Pond watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

# **Rollo Bay**

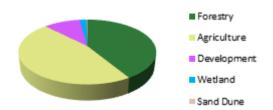
Map



# **Water Quality Score**



# **Land Use**



Watershed Area 20.95 km2

#### **Status**

The Rollo Bay watershed has *Good* water quality. The modelled watershed nitrate concentration is 2.9 mg N/l which is in the moderate range for PEI. No anoxic events have been reported in the Rollo Bay estuary and there have been no fish kills related to run-off in in the watershed. Professional opinion is that sediment laden run-off (red water) events are very frequent in the watershed. The average groundwater nitrate concentration is above 3 mg N/l.

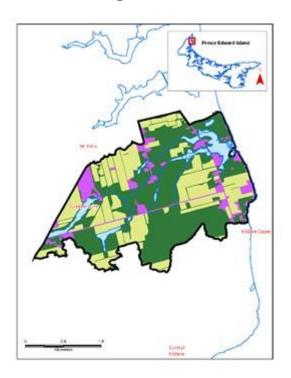
## **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Souris and Area Branch of the PEI Wildlife Federation, to address water quality in the Rollo Bay watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

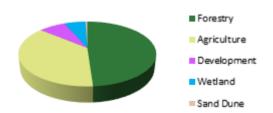
# Round Pond Map



# **Water Quality Score**



## **Land Use**



Watershed Area 12.14 km2

#### **Status**

The Round Pond watershed has *Good* water quality. The modelled watershed nitrate concentration is 3.2 mg N/l which is in the high range for PEI. Anoxic events were not reported in the barrier beach pond between 2016 and 2020 and no fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur frequently by the Tignish and Area Watershed Management Group Inc.

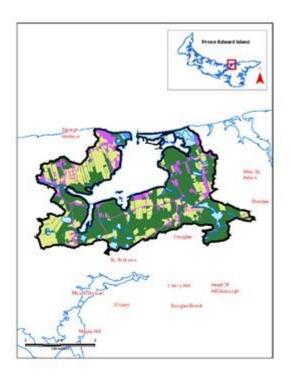
## **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Tignish & Area Watershed Management Group Inc., to address water quality issues in the Round Pond watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

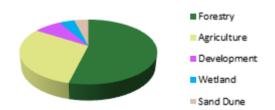
# Savage Harbour Map



# **Water Quality Score**



#### Land Use



Watershed Area 27.73 km2

#### **Status**

The Savage Harbour watershed has *Excellent* water quality, The modelled watershed nitrate concentration is 1.42 mg N/l which is in the low range for PEI. No anoxic events have been reported in Savage Harbour lagoon and no fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur infrequently in the watershed.

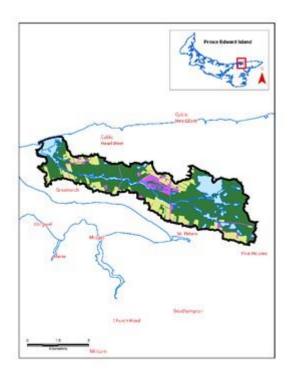
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Hillsborough Area Watershed Co-operative, to protect water quality in the Savage Harbour watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

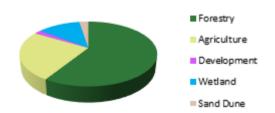
# Schooner Creek Map



# **Water Quality Score**



#### Land Use



Watershed Area 22.95 km2

#### **Status**

The Schooner Creek watershed has *Good* water quality. The modelled watershed nitrate concentration is 1.2 mg N/l which is in the low range for PEI. Schooner Creek does not have an estuary so estuarine anoxic events are not a factor in this watershed. There have been no fish kills related to run-off in the watershed. Professional opinion is that sediment laden run-off occurs infrequently in the watershed. The average groundwater nitrate concentration is above 3 mg N/l.

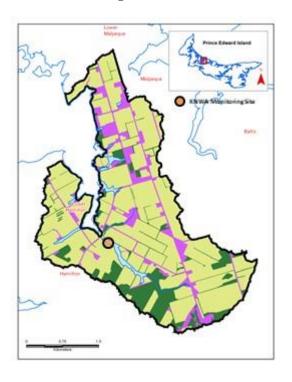
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Morell River Management Co-operative, to protect water quality in the Schooner Creek watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

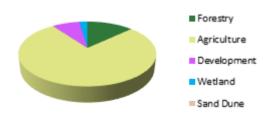
# Shipyard River Map



# **Water Quality Score**



## **Land Use**



Watershed Area 12.05 km2

#### **Status**

The Shipyard Creek watershed has *Good* water quality. The measured watershed nitrate concentration is 3.6 mg N/l which is in the high range for PEI. This result covers 39% of the watershed and it is from stream sampling data collected by the Kensington North Watersheds Association Ltd. (KNWA) (2012-2013). Anoxic events have not been documented in the Shipyard Creek estuary but reports of foul odors in the estuary have been received in the past. No fish kills related to run-off have been documented. Sediment laden run-off events are thought to be infrequent by the KNWA. The average groundwater nitrate concentration is above 5 mg N/l.

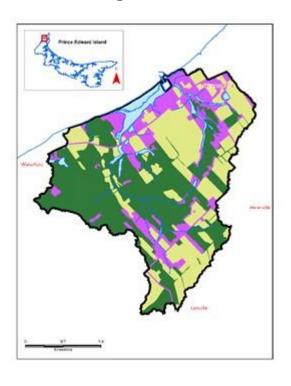
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Kensington North Watersheds Association Ltd., to address water quality issues in the Shipyard Creek watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

# Skinners Pond Map



# **Water Quality Score**



Agriculture
 Development
 Wetland
 Sand Dune

Watershed Area 10.22 km2

#### **Status**

The Skinners Pond watershed has *Good* water quality. The modelled watershed nitrate concentration is 2.1 mg N/l which is in the moderate range for PEI. Anoxic events have never been reported in the brackish pond and no fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to be infrequent by the Tignish and Area Watershed Management Group,

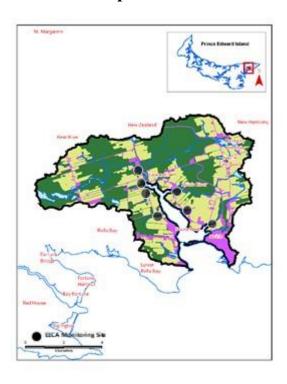
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Tignish & Area Watershed Management Group Inc., to protect water quality in the Skinners Pond watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

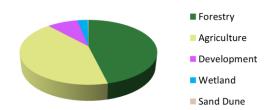
# Souris River Map



# **Water Quality Score**



#### Land Use



Watershed Area 52.51 km2

#### **Status**

The Souris River watershed has *Fair* water quality. The measured watershed nitrate concentration is 2.2 mg N/l which is in the moderate range for PEI. This result covers about 56% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2007-2008, 2009, 2016). Anoxic events were recorded in the Souris River estuary three times in the last 5 years (2019-2021) but no fish kills related to run-off have been documented in the watershed in the last 10 years (2012-2021). Professional opinion is that sediment laden run-off (red water) events occur frequently in the watershed. Some elevated water temperatures have been recorded in one pond in the watershed by the Souris and Area Branch of the PEI Wildlife Federation. The average groundwater nitrate concentration is above 3 mg N/l.

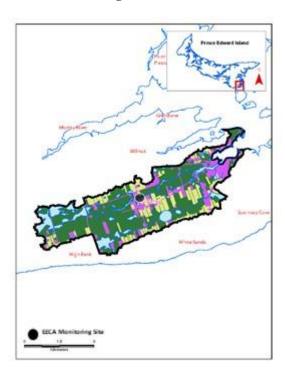
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Souris and Area Branch of the PEI Wildlife Federation, to address water quality issues in the Souris River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

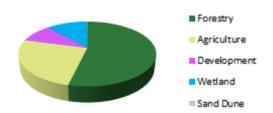
# South River Map



# **Water Quality Score**



## **Land Use**



Watershed Area 20.22 km2

#### **Status**

The South River watershed has *Excellent* water quality. The measured watershed nitrate concentration is 0.5 mg N/l. This result is in the low to very low range for PEI. This result is based on sampling carried out by the Department of Environment, Energy and Climate Action (EECA) (2008 - 2009) and represents about 36% of the watershed. No anoxic events have been reported in the South River estuary and there have been no fish kills related to run-off documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur infrequently in the watershed.

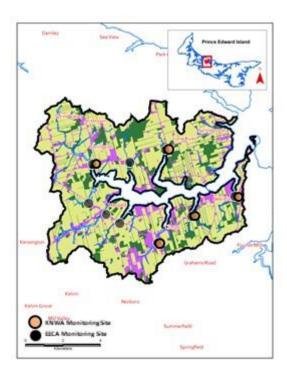
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Southeast Environmental Association, to protect water quality in the South River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

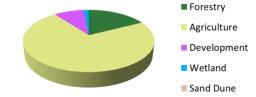
# Southwest River Map



# **Water Quality Score**



# **Land Use**



Watershed Area 74.71 km2

#### **Status**

The Southwest River watershed has *Fair* water quality. The measured watershed nitrate concentration is 4.8 mg N/l which is in the high range for PEI. This result covers about 56% of the watershed and is from stream sampling data collected by the Department Environment, Energy and Climate Action (EECA) (2011, 2013-2014, 2018, 2021) and the Kensington North Watersheds Association (KNWA) (2021). Anoxic events have occurred in the Southwest River estuary and/or some of its salt water tributaries in each of the last 5 years (2017-2021) but no fish kills related to run-off have been documented in the watershed. Sediment laden run-off events are thought to be frequent by the KNWA. A freshwater pond in the watershed has had anoxic events twice in the last 5 years (2020-2021). The average groundwater nitrate concentration in the watershed is above 3 mg N/l. Lack of riparian cover has also been reported as an issue by the KNWA. The watershed used for this assessment has been drawn to contain the drainage area of the entire Southwest River estuary. It has 8 subwatersheds. Six of them (Macintyre's Creek, Sutherland Creek, Harding Creek, Durant Creek, Tuplin Creek, Long River) would have water quality in the Fair category if considered separately. The Southwest river subwatershed would have Poor water quality and Paynter's Creek would have Good water quality if considered separately.

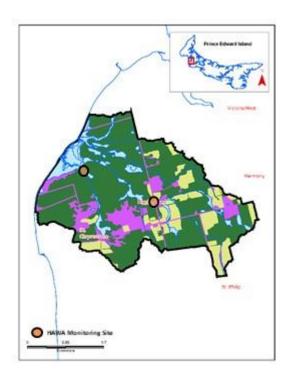
# **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Kensington North Watersheds Association Ltd., to address water quality issues in the Southwest River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

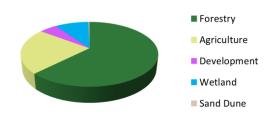
# St. Chrysostome/Barachois River Map



# **Water Quality Score**



#### Land Use



Watershed Area 10.56 km2

#### **Status**

The St. Chrysostome/Barachois Run watershed has *Excellent* water quality. The measured watershed nitrate concentration is 1.2 mg N/l which is in the low range for PEI, This result covers about 42% of the watershed and is from data collected by the Harmony and Area Watersheds Enhancement Group (HAWEG) (2008-2010, 2012, 2014, 2015). Anoxic events have never been reported in the St. Chrysostome/Barachois Run barrier beach pond. No fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to occur infrequently by the HAWEG.

#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Harmony & Area Watersheds Enhancement Group Inc., to protect water quality in the St. Chrysostome/Barachois River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

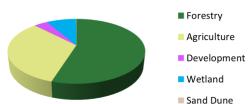
# St. Peters Bay Map



# **Water Quality Score**



# **Land Use**



Watershed Area 137.04 km2

#### **Status**

The St. Peters Bay watershed has *Good* water quality. The measured watershed nitrate concentration is 0.5 mg N/l which is in the very low to low range for PEI. This result covers 63% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2006, 2007, 2008, 2010, 2013, 2016, 2019). An anoxic events was recorded in St. Peters Bay or its tributaries once in the last 5 years (2018) but no fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to be infrequent by the Morell River Management Cooperative (MRMC). The average groundwater nitrate concentration in the watershed is above 3 mg N/l. The watershed used for this assessment has been drawn to contain the drainage area of St. Peters Bay without the Morell River. It has 3 subwatersheds (Marie River, Midgell River, and St. Peters River) which would all have water quality in the Good category if considered separately.

#### Other Information

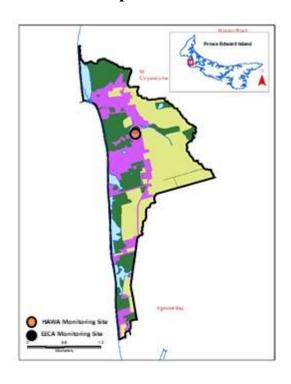
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Morell River Management Co-operative, to address water quality issues in the St. Peters Bay watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data  $\underline{\text{here.}}$ 

# St. Philip

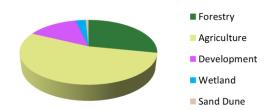




# **Water Quality Score**



## **Land Use**



Watershed Area 3.81 km2

#### **Status**

The St. Philip Shore watershed has *Good* water quality. The measured watershed nitrate concentration is 3.5 mg N/l. which is in the high range for PEI. This result covers about 19% of the watershed and is from data collected by Department of Environment, Energy and Climate Action (EECA) (2015-2016) and the Harmony & Area Watersheds Enhancement Group (HAWEG) (2015). There is no estuary associated with this watershed, so estuarine anoxia is not an issue. No fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to be infrequent by HAWEG. The average groundwater nitrate concentration in the watershed is above 3 mg N/l.

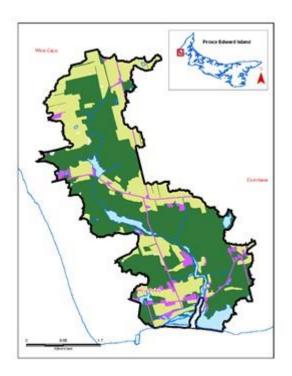
## **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Harmony & Area Watersheds Enhancement Group, to address water quality issues in the St. Philip Shore watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data <u>here.</u>

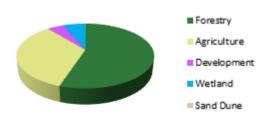
# Stewarts Creek Map



# **Water Quality Score**



#### Land Use



Watershed Area 14.64 km2

#### **Status**

The Stewarts Creek watershed has *Good* water quality. The modelled watershed nitrate concentration is 2.5 mg N/l which is in the moderate range for PEI. Anoxic events have not been reported in the small estuary and no fish kills related to run-off have been documented in the watershed. Sediment laden run-off (red water) events are thought to be infrequent by the West Point & Area Watersheds Inc. The average groundwater nitrate concentration is above 5 mg/l.

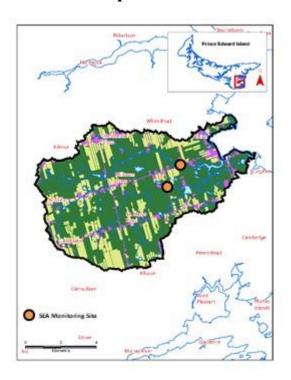
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the West Point & Area Watersheds Inc., to protect water quality in the Stewarts Creek watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

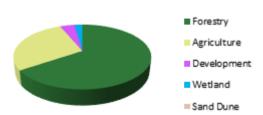
# Sturgeon River Map



# **Water Quality Score**



#### **Land Use**



Watershed Area 67.35 km2

#### **Status**

The Sturgeon River watershed has *Good* water quality, The measured watershed nitrate concentration is 0.8 mg N/l, which is in the low range for PEI. This result represents 79% of the watershed and is from stream sampling conducted by the Southeast Environmental Association (SEA) (2014, 2016). No anoxia has been recorded in the Surgeon River estuary and no fish kills related to run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur infrequently in the watershed. Some elevated water temperatures have been recorded by loggers placed by SEA. These elevated measurements were associated with a pond system in the watershed.

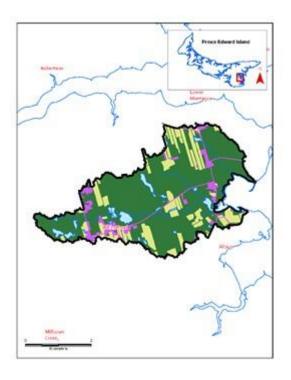
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Southeast Environmental Association, to protect water quality in the Sturgeon River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data <u>here.</u>

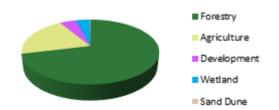
# Thompson Creek Map



# **Water Quality Score**



## **Land Use**



Watershed Area 14.68 km2

#### **Status**

The Thompson Creek watershed has *Excellent* water quality. The modelled watershed nitrate concentration is 1.27 mg N/l which is in the low range for PEI. There have been no anoxic events in the Thompson Creek estuary and no fish kills associated with run-off have been documented in the watershed. Professional opinion is that sediment laden run-off (red water) events occur infrequently in the watershed.

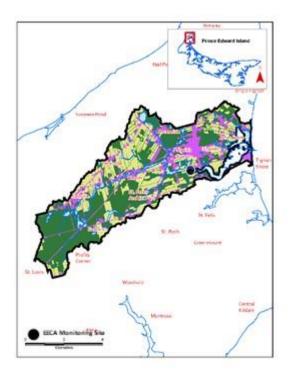
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Southeast Environmental Association, to protect water quality in the Thompson Creek watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

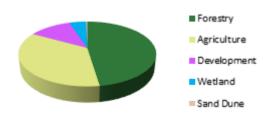
# Tignish River Map



# **Water Quality Score**



## **Land Use**



Watershed Area 42.75 km2

#### **Status**

The Tignish River watershed has *Fair* water quality. The measured watershed nitrate concentration is 3.0 mg N/l which is in the moderate range for PEI. This result covers 76% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2009, 2020) and the Tignish and Area Watershed Management group (TAWMG). One anoxic event was recorded in the Tignish River estuary in the last 5 years (2017) but no fish kills related to run-off have been documented in the watershed. Sediment laden run-off events are thought to occur frequently by TAWMG. High water temperatures and lack of riparian cover have been reported as water quality issues by the TAWMG.

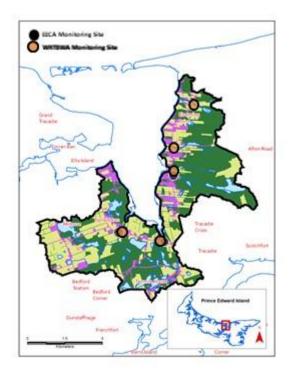
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Tignish & Area Watershed Management Group Inc., to address water quality issues in the Tignish River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

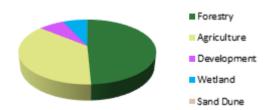
# Tracadie Bay Map



# **Water Quality Score**



## **Land Use**



Watershed Area 29.96 km2

#### **Status**

The Tracadie Bay watershed has *Good* water quality. The measured watershed nitrate concentration is 1.6 mg N/l which is in the moderate range for PEI. This result covers 64% of the watershed and is from stream sampling data collected by the Department Environment, Energy and Climate Action (EECA) (2007 - 2009) and the Winter River - Tracadie Bay Watershed Association (WRTBWA) (2016-2021), No anoxic events have been recorded in Tracadie Bay and there have been no fish kills related to run-off in the watershed. Sediment laden run-off (red water) events are thought to be frequent by the WRTBWA. Some high water temperatures have been recorded in small eastern tributaries of the bay by WRTBWA. The watershed used for this assessment has been drawn to contain the drainage area of the Tracadie Bay estuary without the Winter River. It has 3 subwatersheds (Black River, Kelly's Point, Pipers Creek) which would all have water quality in the Good category if considered separately.

#### **Other Information**

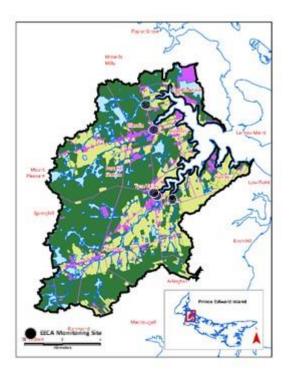
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Winter River - Tracadie Bay Watershed Association, to address water quality issues in the Tracadie Bay watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data <u>here.</u>

Return to the list of watersheds  $\underline{\text{here}}$ .

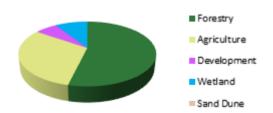
# Trout / Bideford River Map



# **Water Quality Score**



#### Land Use



Watershed Area 85.05 km2

#### **Status**

The Trout River/ Bideford River watershed has *Good* water quality. The measured watershed nitrate concentration is 1.1 mg N/l which is in the low range for PEI. This result covers about 73% of the watershed and is from stream sampling data collected by the Department Environment, Energy and Climate Action (EECA) (2008- 2009, 2014, 2017, 2020). No anoxic events have been documented in the Trout River/Bideford River estuary in the last 5 years (2017-2021) and no fish kills have been documented in the watershed in the last 10 years (2012 - 2021). Sediment laden run-off (red water) events are thought to be infrequent by the Lot 11 and Area Watershed Management Group. A water quality concern is the release of peat to the estuary from a local mining facility. The watershed used for this assessment has been drawn to contain the drainage area of the entire Trout / Bideford River estuary. It has 2 subwatersheds which would have water quality in the Good (Bideford) and Excellent (Trout River - Tyne Valley) category if considered separately.

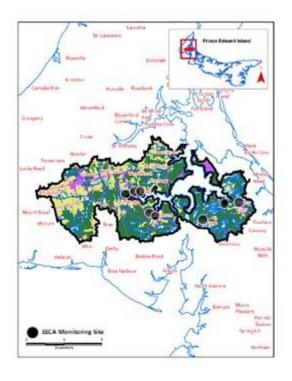
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with two local community groups, the Lot 11 and Area Watershed Management Group Inc. and the Richmond Bay Watershed Association Inc., to protect water quality in the Trout River/Bideford River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

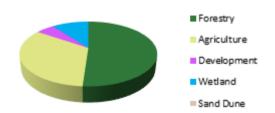
# Trout / Foxley River Map



## **Water Quality Score**



## **Land Use**



Watershed Area 149.66 km2

#### **Status**

The Trout River/Foxley River watershed has *Fair* water quality. The measured watershed nitrate concentration is 1.6 mg N/l which is in the moderate range for PEI. This result covers 58% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2006, 2008-2010, 2012-2014, 2017). Anoxic events have been reported in the Trout River/Foxley River estuary in just one (2020) of the last 5 years. Two fish kills related to run-off have been documented in the last 10 years (2012-2013). Sediment laden run-off (red water) are thought to be infrequent by Trout Unlimited Prince County Branch (TUPCB). The average groundwater nitrate concentration is above 3 mg N/l. The watershed used for this assessment has been drawn to contain the drainage area of the entire Trout / Foxley River estuary. It has 2 subwatersheds which would have water quality in the Fair (Trout River – Roxbury) and Excellent (Foxley River) categories if considered separately.

#### **Other Information**

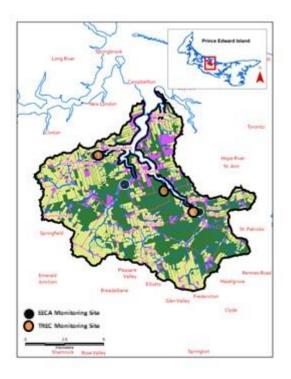
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with two local community group, Trout Unlimited Prince County Chapter and the Lot 11 and Area Watershed Management Group Inc., to address water quality issues in the Trout / Foxley River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

Return to the list of watersheds  $\underline{\text{here}}$ .

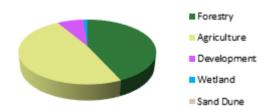
# Trout /Stanley River Map



# **Water Quality Score**



## **Land Use**



Watershed Area 92.22 km2

#### **Status**

The Trout River/Stanley River watershed has *Fair* water quality. The measured watershed nitrate concentration is 2.0 mg N/l which is in the moderate range for PEI. This result is from stream sampling carried out by the Department of Environment, Energy and Climate Action (EECA) (2015, 2018, 2021) and the Trout River Enhancement Committee (TREC) (2014, 2016-2017, 2018, 2019, 2021) The Trout/Stanley River estuary has had anoxic events in 4 of the last 5 years (2017-2018, 2020-2021) but there have been no fish kills related to run-off documented in the watershed. Sediment laden run-off (red water) events are thought to be frequent by TREC. There are some low pH values in the stream sampling dataset. The watershed used for this assessment has been drawn to contain the drainage area of the entire Trout / Stanley River estuary. It has 3 subwatersheds (Trout River-Millvale, Granville Creek, Founds River) which would all have water quality in the Fair category if considered separately.

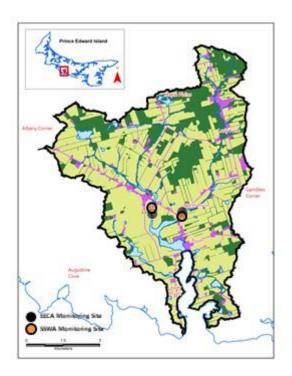
## **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Trout River Environmental Committee Inc., to address water quality issues in the Trout/ Stanley River watershed.

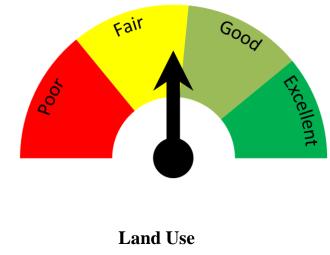
View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

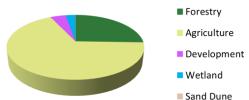
View or download the available raw water quality monitoring data <u>here.</u>

# Tryon River Map



# **Water Quality Score**





Watershed Area 52.49 km2

#### **Status**

The Tryon River watershed has *Fair* water quality. The measured nitrate concentration is 3.9 mg N/l which is in the high range for PEI. This result covers about 69% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2018) and the South Shore Watershed Association (SSWA) (2017-2019). Anoxic events have never been reported in the Tryon River estuary and there have been no run-off related fish kills in the last 10 years (2011-2020). Professional opinion is that sediment laden (red water) events are very frequent in the Tryon watershed. The average groundwater nitrate concentration in the watershed is above 3 mg N/l.

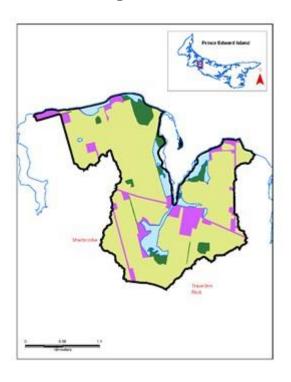
## **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the South Shore Watershed Association Inc., to address water quality issues in the Tryon River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

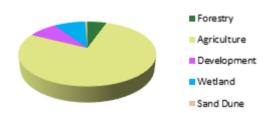
# Waites Creek Map



# **Water Quality Score**



## **Land Use**



Watershed Area 4.59 km2

#### **Status**

The Waites Creek watershed has *Fair* water quality. The modelled watershed nitrate concentration is 7.0 mg N/l which is in the very high range for PEI. No anoxic events have been reported in the Waites Creek estuary in the last 5 yeas (2017-2021). No fish kills related to runoff events have been reported in the watershed. Professional opinion is that sediment laden runoff (red water) events are very frequent in the watershed. The average groundwater nitrate concentration is above 5 mg N/l.

#### Other Information

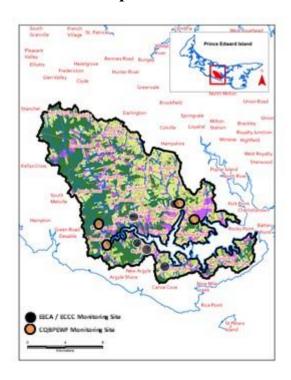
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

# **West River**

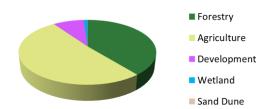
# Map



# **Water Quality Score**



#### Land Use



Watershed Area 224.60 km2

#### **Status**

The West River watershed has *Fair* water quality. The measured watershed nitrate concentration is 1.7 mg N/l which is in the moderate range for PEI. This result covers 66% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2005-2009, 2012-2013, 2019-2021) and the Central Queens Branch of the PEI Wildlife Federation (CQBPEIWF) (2012-2017, 2019). No anoxic events have been reported in the estuary in the last 5 years (2017-2021). Two fish kills related to run-off were documented in the watershed in the last 10 years (2016 and 2017). Sediment laden run-off (red water) events are thought to occur very frequently, in parts of the watershed, by the CQBPEIWF. The average groundwater nitrate concentration is above 3 mg N/l in some parts of the watershed. Another concern, identified by researchers, is that low light levels due to turbid water is having a negative effect on the growth of macroalgae and marine plants in the estuary. The watershed used for this assessment has been drawn to contain the drainage area of the entire West River estuary. It has 10 subwatersheds which would have water quality in the Fair (Clyde River, Hyde Creek) and Good (Fairview, Long Creek, MacLeod's Creek, MacLaughlin's Creek, MacFayden's Creek, West River, Churchill, McPhee Creek) categories if considered separately.

#### Other Information

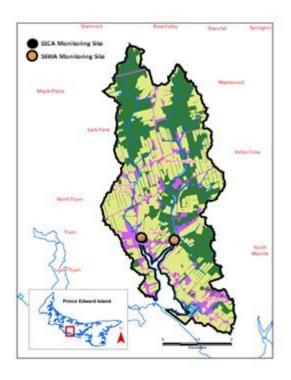
If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local</u>

<u>community watershed group.</u> The Department is working with two local community groups, the Central Queens Branch of the PEI Wildlife Federation and the Cornwall & Area Watershed Group Inc., to address water quality issues in the West River watershed.

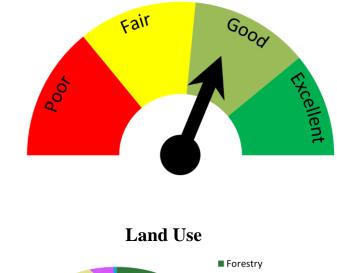
View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

# Westmoreland River Map



# **Water Quality Score**



AgricultureDevelopmentWetlandSand Dune

# Watershed Area 44.61 km2

#### **Status**

The Westmoreland River watershed has *Good* water quality. The measured watershed nitrate concentration is 2.8 mg N/l, which is in the moderate range for PEI. This result covers about 79% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2015, 2018) and the South Shore Watershed Association (SSWA) (2016-2018). Anoxic events have not been reported in the Westmoreland River and no fish kills related to run-off have been documented in the watershed in the last 10 years (2012-2021). Professional opinion is that sediment laden run-off (red water) events occur frequently in the watershed. The average groundwater nitrate concentration in the watershed is above 3 mg N/l.

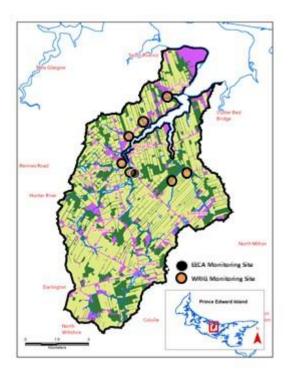
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the South Shore Watershed Association Inc., to address water quality issues in the Westmoreland River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

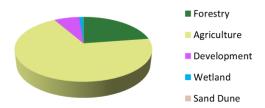
View or download the available raw water quality monitoring data here.

# **Wheatley River** Map



# **Water Quality Score**





Watershed Area 63.69 km2

#### **Status**

The Wheatley River watershed has *Fair* water quality. The measured watershed nitrate concentration is 3.1 mg N/l which is in the moderate to high range for PEI. This result covers about 73% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2021) and the Wheatley River Improvement Group (WRIG) (2017-2018, 2021). Anoxic events have been recorded in the Wheatley River estuary in each of the last 5 years (2017-2021) but there have been no fish kills related to run-off documented in the watershed. Sediment laden run-off (red water) events are thought to be frequent by WRIG. The average groundwater nitrate concentration in the watershed is above 3 mg N/l.

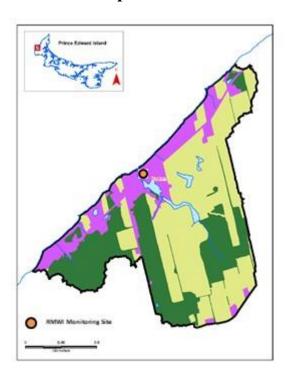
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the local community watershed group. The Department is working with a local community group, the Wheatley River Improvement Group Inc., to address water quality issues in the Wheatley River watershed.

View how the Water Quality Score is calculated here. View the data used for this calculation here.

View or download the available raw water quality monitoring data here.

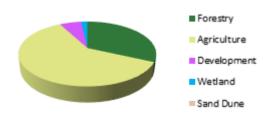
# White's Cove Map



# **Water Quality Score**



## **Land Use**



Watershed Area 4.62 km2

#### **Status**

The White's Cove watershed has *Good* water quality. The measured watershed nitrate concentration is 2.0 mg N/l which is in the moderate range for PEI. This result is from stream sampling conducted by the Roseville/Miminegash Watersheds Inc. (RMWI)) and represents about 62% of the watershed. The White's Cove watershed has no estuary so estuarine anoxia is not an issue. No fish kills related to run-off have been recorded in this watershed. Professional opinion is that sediment laden run-off events occur very frequently in the White's Cove watershed. Some elevated pH results have been found in stream sampling results.

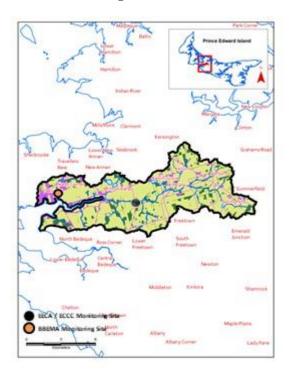
#### Other Information

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Roseville/Miminegash Watersheds Inc., to address water quality issues in the White's Cove watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.

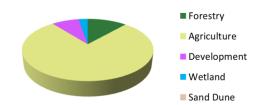
# Wilmot River Map



# **Water Quality Score**







Watershed Area 83.76 km2

#### **Status**

The Wilmot River watershed has *Fair* water quality. The measured watershed nitrate concentration is 6.9 mg N/l which is in the very high range for PEI. This result covers about 61% of the watershed and is from stream sampling data collected by the Department of Environment, Energy and Climate Action (EECA) (2019-2021), the Department of Environment and Climate Change Canada (ECCC) (2019, 2022) and the Bedeque Bay Environmental Management Committee (BBEMA) (2014). An anoxic event was recorded in the Wilmot River estuary in 2018 but no fish kills related to run-off have been documented in the watershed in the last 10 years (2012-2021). Professional opinion is that sediment laden run-off (red water) events occur very frequently in the watershed. The average groundwater nitrate concentration is above 5 mg N/l for the Wilmot River watershed.

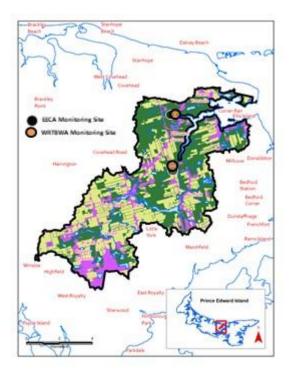
#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Bedeque Bay Environmental Management Association, to address water quality issues in the Wilmot River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data <u>here.</u>

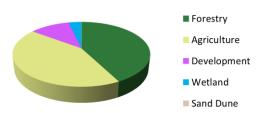
# Winter River Map



## **Water Quality Score**







Watershed Area 70.54 km2

#### **Status**

The Winter River watershed has *Fair* water quality. The measured watershed nitrate concentration is 1.9 mg N/l which is in the moderate range for PEI. This result covers 75% of the watershed area and is from stream sampling data collected by the Department Environment, Energy and Climate Action (EECA) (2016, 2019, 2020) and the Winter River - Tracadie Bay Watershed Association (WRTBWA) (2016-2019, 2018-2021). Anoxic events have been recorded in the Winter River estuary in four of the last 5 years (2017-2020) but no fish kills related to run-off have been recorded in the watershed. Sediment laden run-off (red water) events are thought to occur very frequently by the WRTBWA. Other concerns include elevated summer water temperature and low dissolved oxygen recorded in ponds and upper tributaries of the Winter River watershed. These may be the result of low flow in some streams in the watershed

#### **Other Information**

If you have any questions about water quality in this or any other watershed in P.E.I., please contact the provincial Department of Environment, Energy and Climate Action at 1-866-368-5044 and/or the <u>local community watershed group</u>. The Department is working with a local community group, the Winter River - Tracadie Bay Watershed Association, to address water quality issues in the Winter River watershed.

View how the Water Quality Score is calculated <u>here</u>. View the data used for this calculation <u>here</u>.

View or download the available raw water quality monitoring data here.