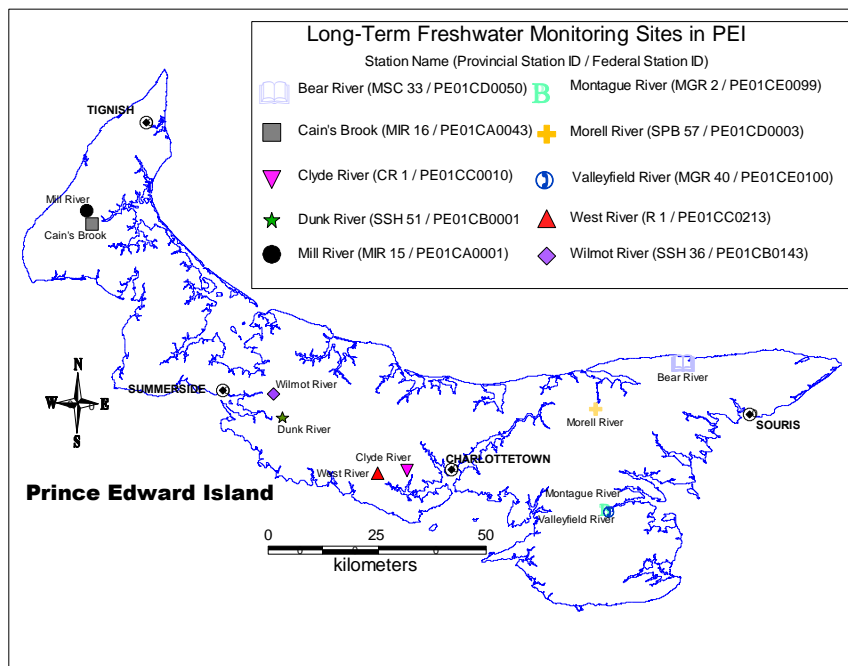




Nitrate Trends for Individual Streams

PEI Department of Environment, Energy and Climate Action
August 2021

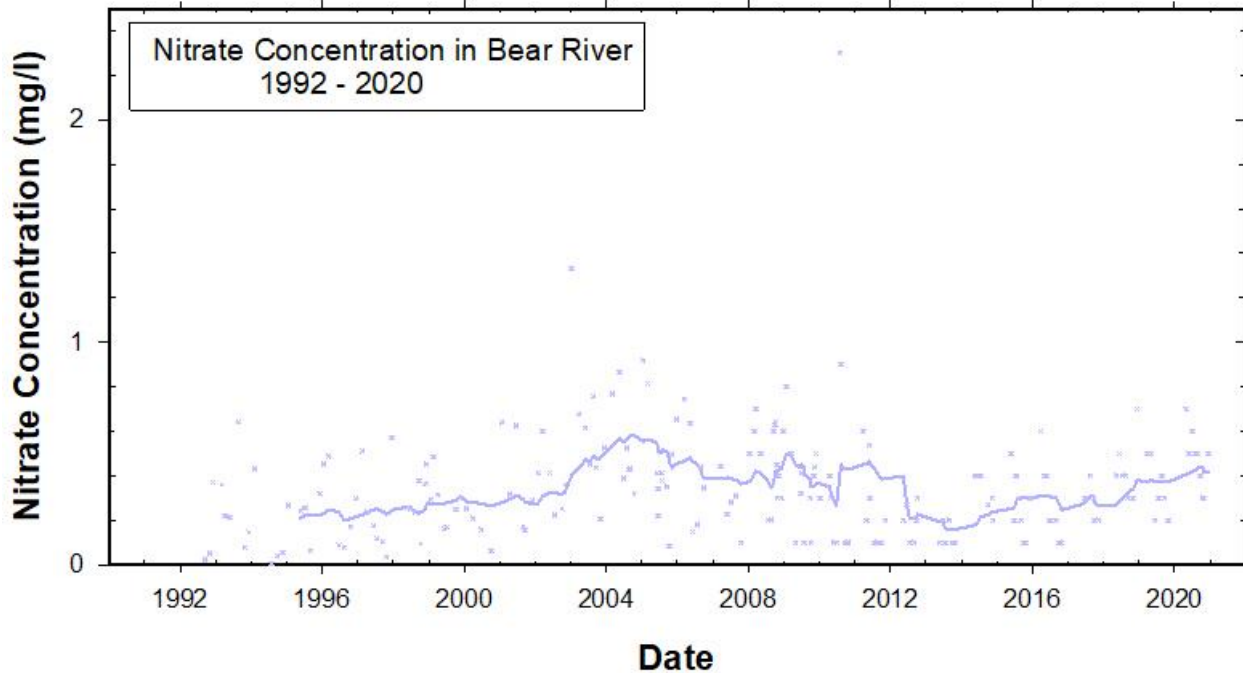
Individual nitrate-trend results are available for each of the streams in the long-term monitoring program.



- [Bear River](#)
- [Cain's Brook](#)
- [Clyde River](#)
- [Dunk River](#)
- [Mill River](#)
- [Montague River](#)
- [Morell River](#)
- [Valleyfield River](#)
- [West River](#)
- [Wilmot River](#)

For additional information please contact:
PEI Department of Environment, Energy and Climate Action
Water and Air Management Section
Ph: (902) 368-5179
cscrane@gov.pe.ca

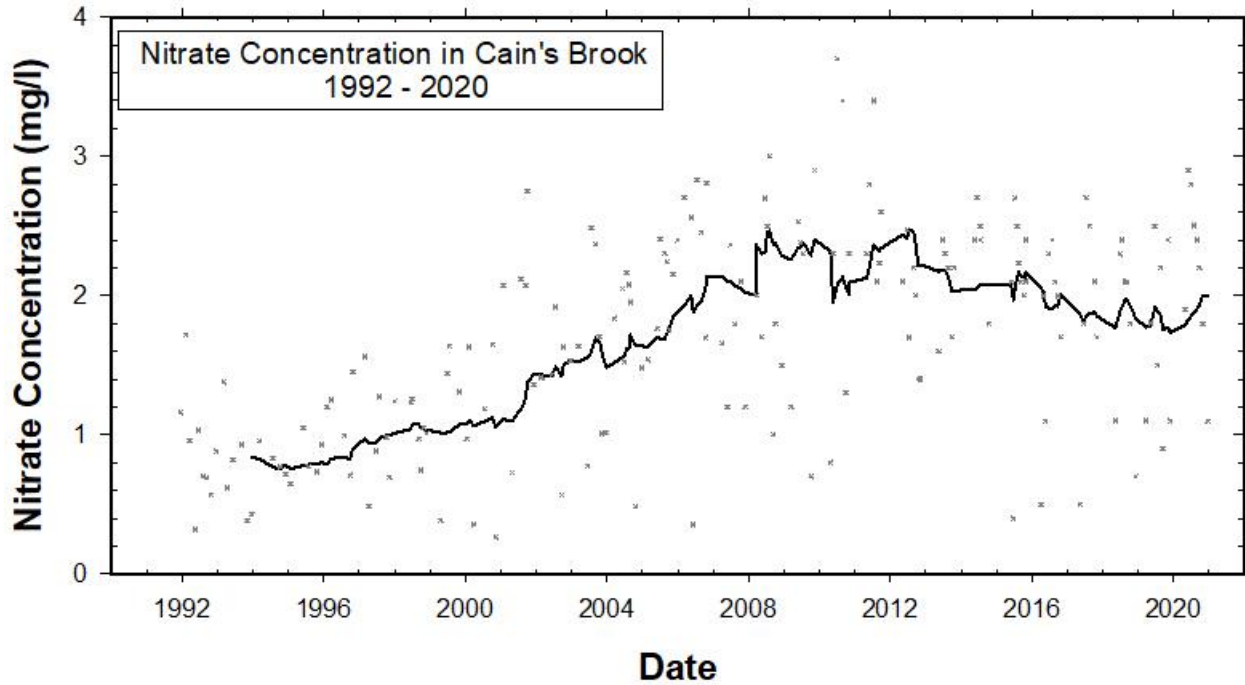
Bear River



Nitrate levels in the Bear River are very low for PEI and are close to levels that are considered pristine. Measured concentrations were in the range of 0.2 - 0.7 mg N/l in the last 15 samples. Average concentrations declined for a brief period after 2012 but have been increasing since mid-2014. The most recent data shows that nitrate levels are continuing to increase. Current average nitrate concentrations in Bear River are about 27% lower than the peak average recorded in 2004. This site is located in St. Margaret's just upstream of the culvert on the Bear River Road near Rt. 16.

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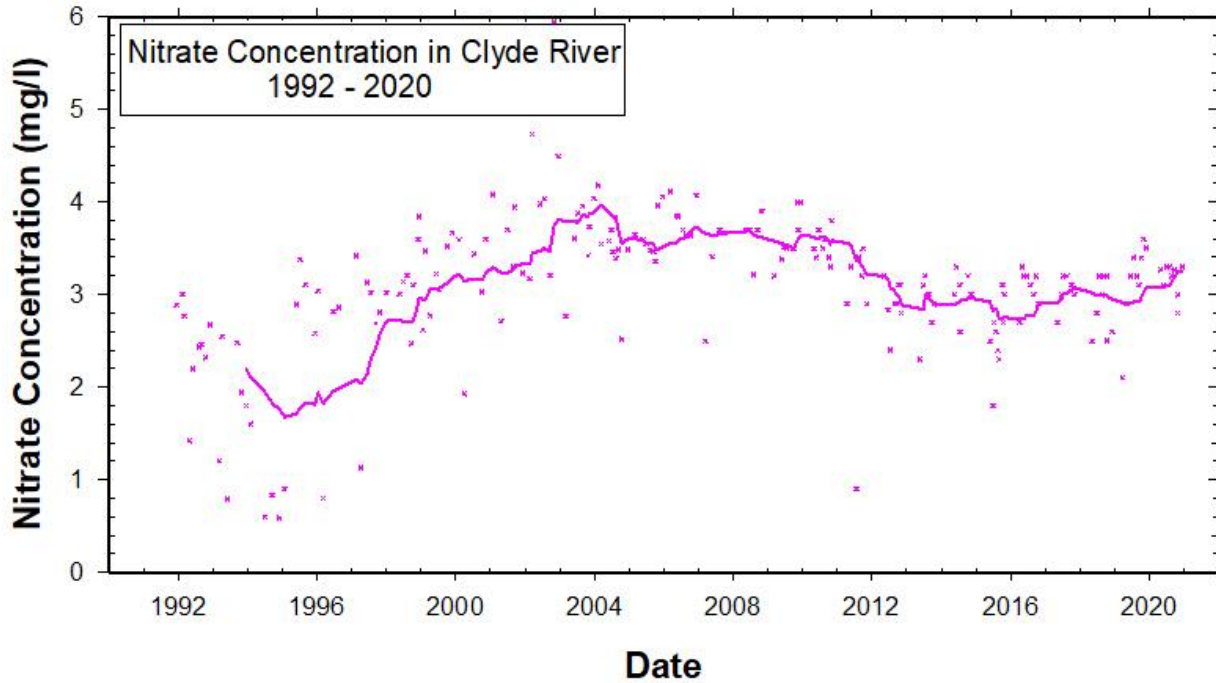
Cain's Brook



Nitrate levels in Cain's Brook are currently in the range of 0.9 – 2.9 mg N/l (last 15 samples). Nitrate in Cain's Brook had a lengthy period of increasing concentrations between 1992 and 2012. There has been an overall decline in average concentrations since 2012 however the most recent data show increasing concentrations. Currently the average concentration is about 23% lower than the peak averages recorded in 2009 and 2012. This station is located at the Rt. 2 stream crossing in Bloomfield.

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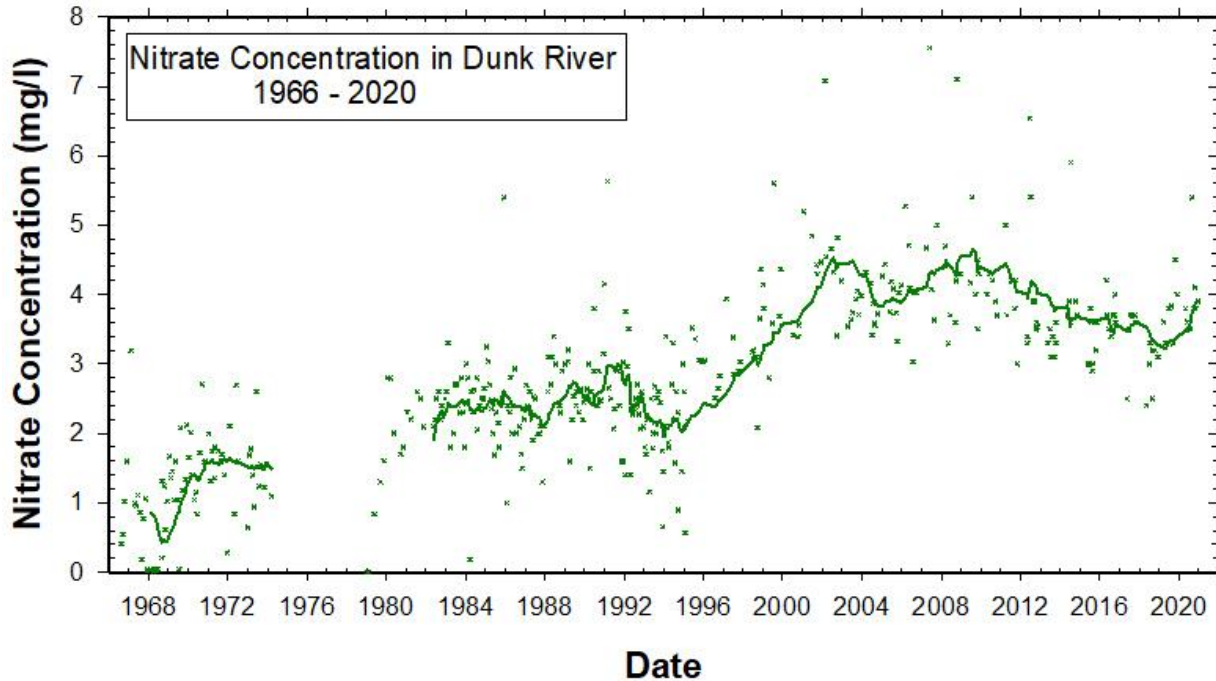
Clyde River



Nitrate levels in the Clyde River are currently in the range of 2.8 – 3.6 mg N/l (last 15 samples). The average nitrate concentration in the Clyde River is currently about 20% lower than the peak average recorded in 2004. The most recent data indicates that concentrations are increasing after a brief period of declining concentrations. This site is located downstream of the Bannockburn Road in Clyde River.

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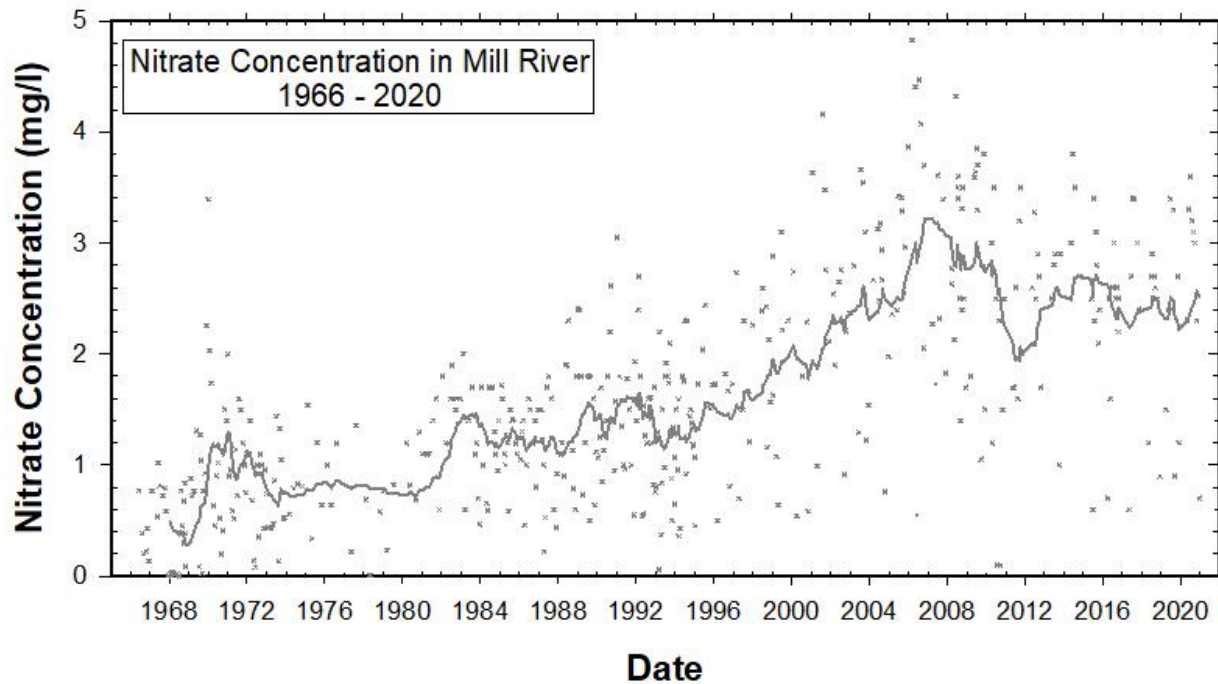
Dunk River



Nitrate levels in the Dunk River are currently in the range of 3.3 – 5.5 mg N/l (last 15 samples). There is a short gap in the data as the Dunk River was not sampled between 1974 and 1979. The highest average nitrate level recorded in the Dunk River was in 2009. The current average is about 20% lower than that peak average. The most recent data indicates that nitrate concentrations are increasing this site. This site is located at the Wall Road stream crossing.

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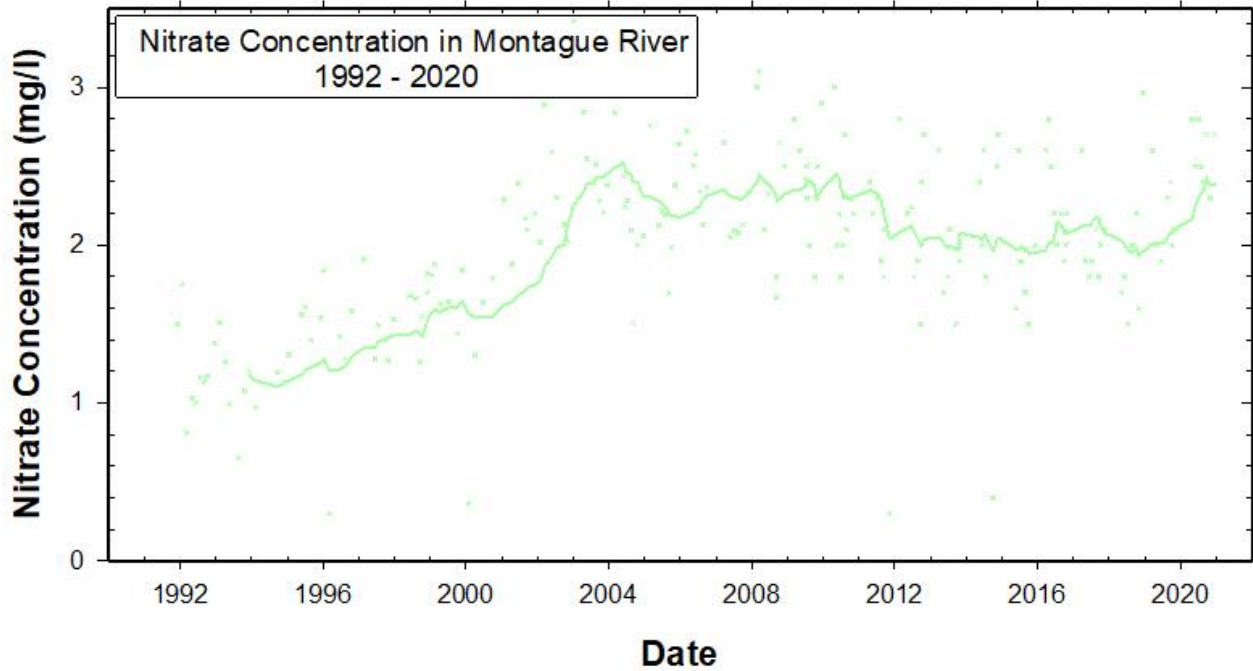
Mill River



Nitrate levels in the Mill River are currently in the range of 0.7 to 3.6 mg N/l (last 15 samples). Average nitrate levels in the Mill River have been variable since 2007, but with an overall decline in average concentration until recently. The most recent data indicates that this variability is continuing but that an increase in concentration is now present. Current nitrate levels in Mill River are about 35% below the highest concentrations recorded (in 2006-2007). This station is located just upstream of Bloomfield Park.

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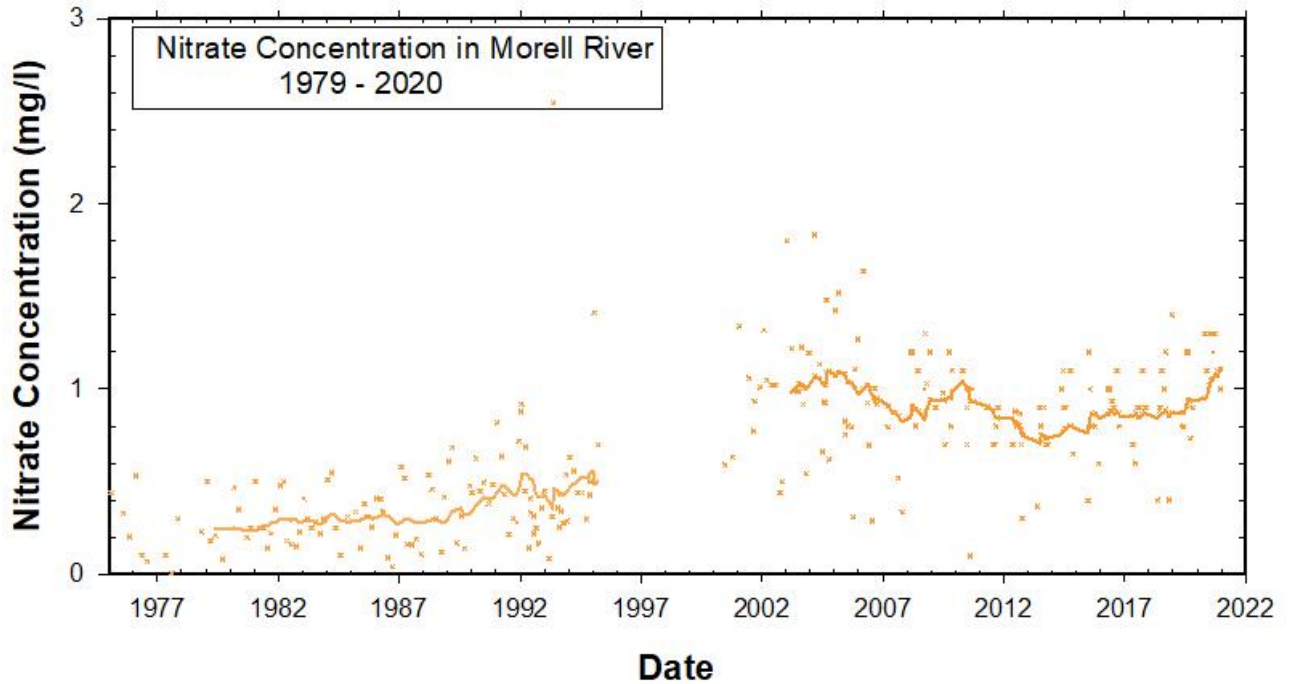
Montague River



Nitrate levels in the Montague River are currently in the range of 1.9 – 2.8 mg N/l (last 15 samples). Nitrate levels remained constant at this site between 2012 and 2018 but rolling averages have been increasing since about mid 2018. Currently, average nitrate levels in the Montague River are now only about 6% lower than the highest average concentrations recorded in 2004. This site is located just upstream of Knox's Pond.

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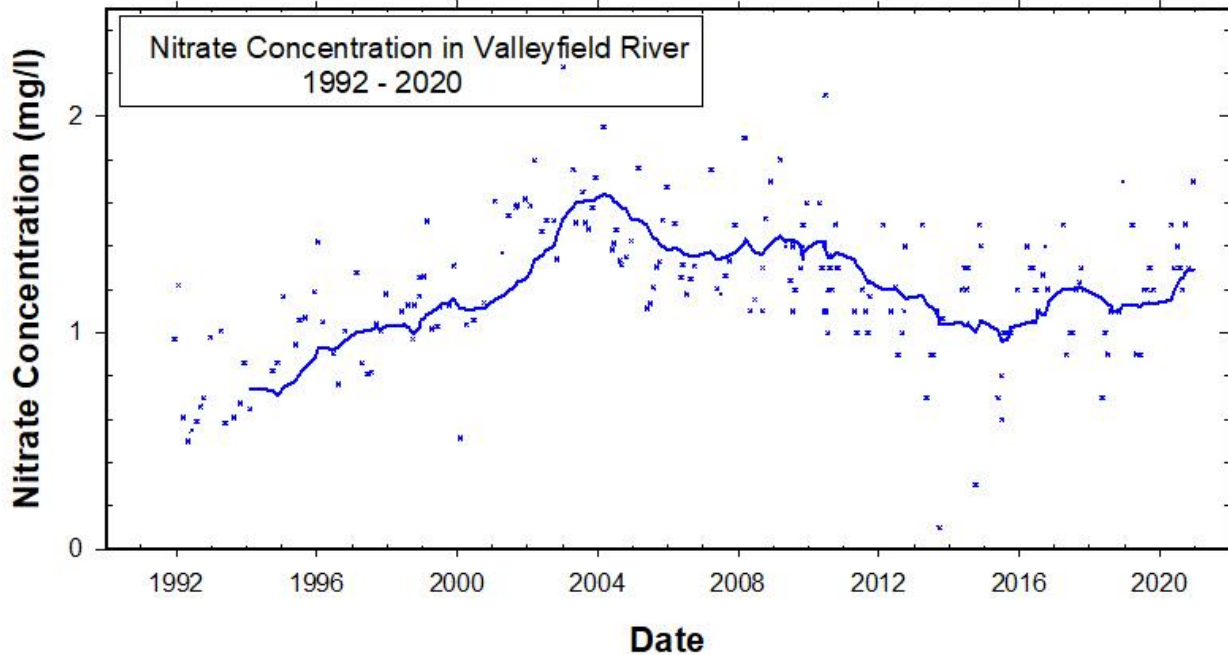
Morell River



Nitrate concentrations in the Morell River are relatively low for PEI. Nitrate is currently between 0.7 and 1.4 mg N/l. (last 15 samples). Average nitrate levels peaked in the river in 2004 and declined until about 2013, with a steady increase in average concentration since that time. The most recent rolling average data indicates this increase is continuing. Currently, average nitrate concentrations are only about 6% lower than the highest average concentrations recorded in 2004. There is a gap in the data as the Morell River was not sampled between 1995 and 2000. The site is located at the stream crossing at Indian Bridge.

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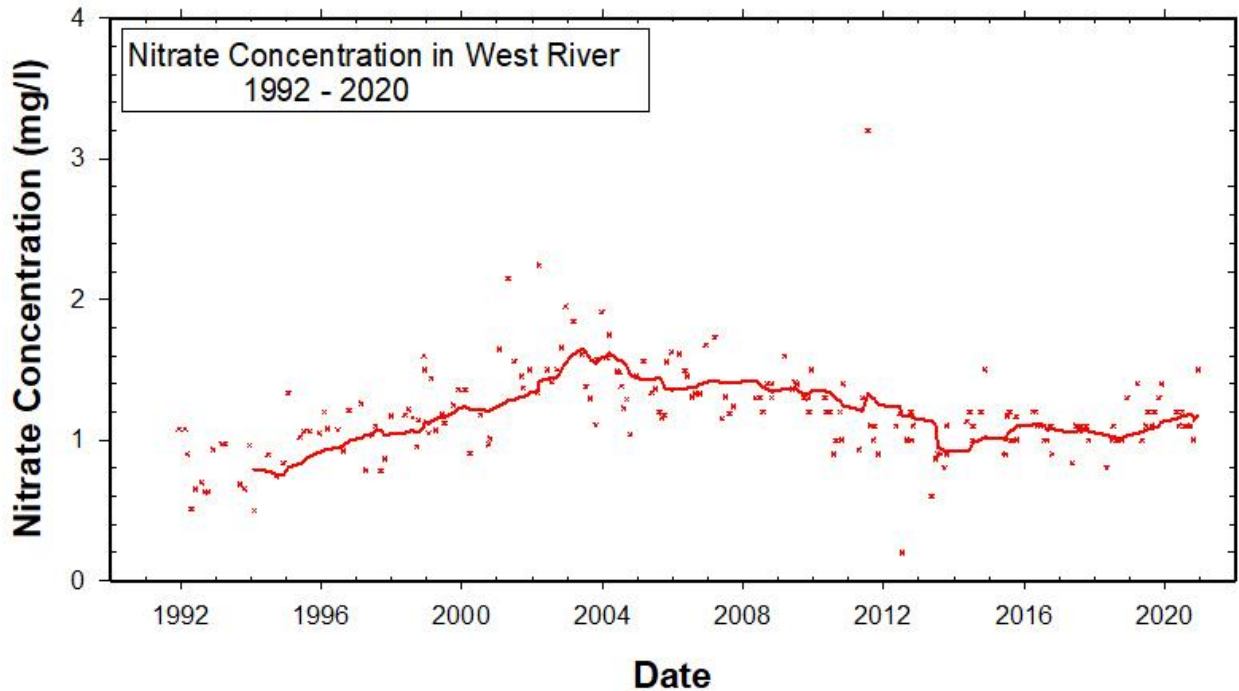
Valleyfield River



Nitrate levels in the Valleyfield River are currently between 0.9 and 1.7 mg N/l (last 15 samples). Average nitrate levels in the Valleyfield River were at their maximum in 2003 - 2004 and current average nitrate levels are about 24% lower than that at that time. The most recent results indicate that nitrate concentrations have recently begun to increase. The site is located in Kilmuir at the stream crossing on the Loane Rd.

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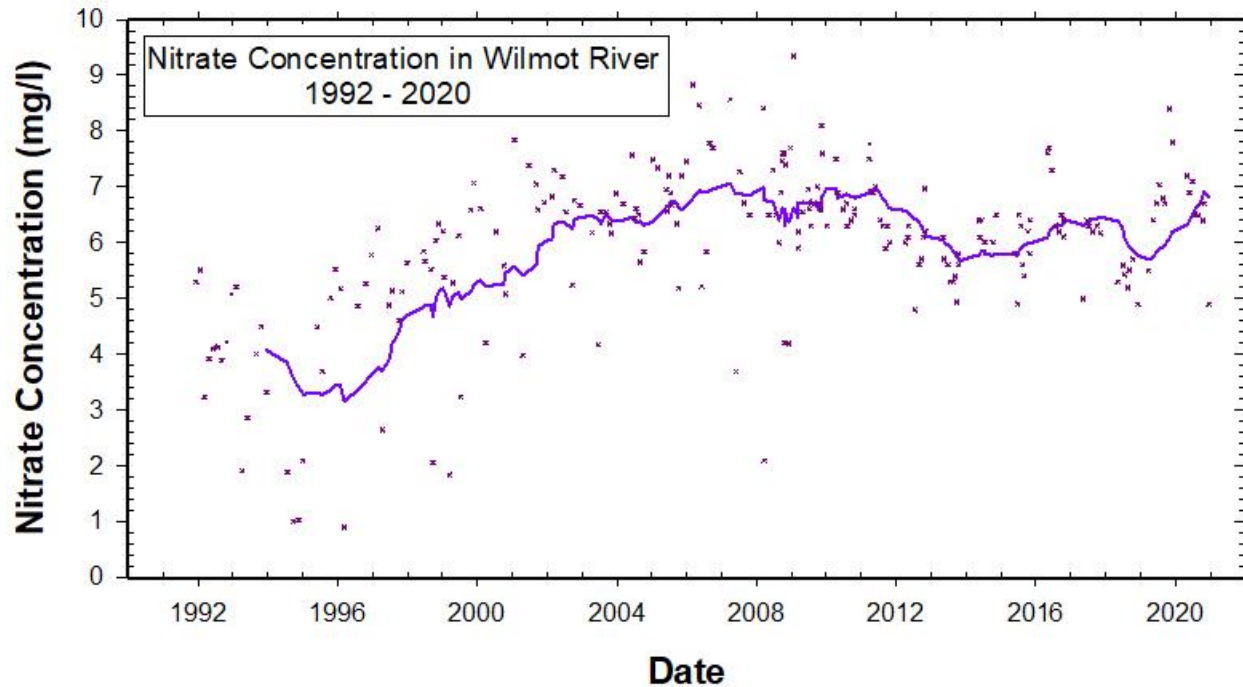
West River



Nitrate levels in the West River are currently between 1.0 and 1.5 mg N/l (last 15 samples). Current average nitrate levels in the West River are about 29% lower than the peak average concentration recorded in 2003. The latest rolling average concentrations show that nitrate concentrations are increasing. This site is located in Riverdale at the stream crossing on the Bolger Park Road.

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Wilmot River



Nitrate levels in the Wilmot River are high for PEI and are currently between 4.9 and 8.4 mg N/l (last 15 samples). The most recent rolling average results indicate that nitrate concentrations in the Wilmot River are increasing. Current average nitrate levels in the Wilmot River are now only about 6% lower than the maximum average recorded in 2006/2007. This site is located at the stream crossing on the Cairns Road.

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