<table>
<thead>
<tr>
<th>Water Index Number</th>
<th>Waterbody Segment</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ont 139 (portion 1)</td>
<td>Johnson Creek, Lower, and trib (0301-0007)</td>
<td>MinorImpacts</td>
</tr>
<tr>
<td>Ont 139 (portion 2)/P172</td>
<td>Lyndonville Reservoir (0301-0043)</td>
<td>UnAssessed</td>
</tr>
<tr>
<td>Ont 139 (portion 3)</td>
<td>Johnson Creek, Upper, and minor trib (0301-0044)</td>
<td>UnAssessed</td>
</tr>
<tr>
<td>Ont 139-9</td>
<td>Jeddo Creek and minor trib (0301-0045)</td>
<td>MinorImpacts</td>
</tr>
<tr>
<td>Ont 139-9-1-P177a</td>
<td>Middleport Reservoir (0301-0047)</td>
<td>UnAssessed</td>
</tr>
<tr>
<td>Ont 139-9-1-P177a-</td>
<td>Tribs to Middleport Reservoir (0301-0046)</td>
<td>UnAssessed</td>
</tr>
</tbody>
</table>
Johnson Creek, Lower, and tribs (0301-0007)  

Waterbody Location Information  

- **Water Index No:** Ont 139 (portion 1)  
- **Drain Basin:** Lake Ontario  
- **Hydro Unit Code:** 04130001/060  
- **Str Class:** C  
- **Reg/County:** 8/Orleans Co. (37)  
- **Waterbody Type:** River  
- **Waterbody Size:** 46.5 Miles  
- **Quad Map:** ASHWOOD (H-07-3)  
- **Seg Description:** stream and tribs from mouth to Lyndonville  

Water Quality Problem/Issue Information  

<table>
<thead>
<tr>
<th>Use(s) Impacted</th>
<th>Severity</th>
<th>Problem Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish Consumption</td>
<td>Stressed</td>
<td>Known</td>
</tr>
<tr>
<td>Aquatic Life</td>
<td>Stressed</td>
<td>Known</td>
</tr>
<tr>
<td>Recreation</td>
<td>Stressed</td>
<td>Known</td>
</tr>
</tbody>
</table>

Type of Pollutant(s)  

- **Known:** NUTRIENTS, PRIORITY ORGANICS (PCBs, dioxin), PESTICIDES (mirex)  
- **Suspected:** Silt/Sediment  
- **Possible:** Pathogens  

Source(s) of Pollutant(s)  

- **Known:** - - -  
- **Suspected:** AGRICULTURE, Other Source (migratory fish species), Streambank Erosion, Tox/Contam. Sediment  
- **Possible:** Landfill/Land Disp.  

Resolution/Management Information  

- **Issue Resolvability:** 1 (Needs Verification/Study (see STATUS))  
- **Verification Status:** 4 (Source Identified, Strategy Needed)  
- **Lead Agency/Office:** ext/WQCC  
- **Resolution Potential:** Medium  
- **TMDL/303d Status:** n/a

Further Details  

Aquatic life support and recreational uses in this portion of Johnson Creek are known to experience minor impacts due to nutrient loads from agricultural and various other nonpoint sources in the watershed. Fish consumption is also restricted as a result of a health advisory for Lake Ontario that extends to tribs up to the first impassable barrier.  

A biological (macrionvertebrate) assessment of Johnson Creek in Lyndonville (at Blood Road) was conducted in 2004 and 2005. Sampling results indicated slightly impacted water quality conditions. Nonpoint source nutrient enrichment was identified as the primary cause of impacts to the stream. Sampling results at this site have varied between slightly (1995, 2004, 2005) and moderately (1996, 1999) impacted. Although aquatic life is supported in the stream, nutrient biotic evaluation indicates the level of eutrophication is sufficient to stress aquatic life support. (DEC/DOW, BWAM/SBU, June 2005)  

A study of the creek by researchers at SUNY Brockport (Analysis of Johnson Creek, Makarewicz and Lewis) found high levels of nutrient and sediment loadings. Contaminated sediments are also documented in the report. An inactive
hazardous waste disposal site is also a concern. (Orleans County WQCC, April 2001)

Fish consumption advisories for Lake Ontario (and all tribs to the first barrier) also applies to this tributary water. A NYSDOH health advisory recommends eating no American eel, channel catfish, carp, chinook salmon, larger lake trout (over 25") or larger brown trout (over 20"). The advisory also recommends that consumption of white sucker, rainbow trout, smaller lake and brown trout, and larger coho salmon (over 25") be limited to no more than one meal per month. White perch is limited to one meal per month East of Point Breeze, and eat none west of the point. The fish consumption advisories are a result of PCB, mirex and dioxin contamination of lake sediments. Priority organics have also been found in sediments behind the Lyndonville Dam and may be impacting uses. (2006-07 NYS-DOH Health Advisories)

This segment includes the portion of the stream and all tribs from the mouth to the Lyndonville Reservoir. The waters of the stream and its tribs are Class C. (May 2001)
Jeddo Creek and minor trib (0301-0045) Minor Impacts

Waterbody Location Information

Water Index No: Ont 139-9
Hydro Unit Code: 04130001/060
Waterbody Type: River
Water Index No: 139-9
Drain Basin: Lake Ontario
Hydro Unit Code: 04130001/060
Str Class: C
Reg/County: 8/Orleans Co. (37)
Waterbody Size: 55.9 Miles
Quad Map: LYNDONVILLE (H-07-4)
Seg Description: Stream and trib from mouth to Middleport

Water Quality Problem/Issue Information

Use(s) Impacted Severity Problem Documentation
Aquatic Life Stressed Known
Recreation Stressed Suspected

Type of Pollutant(s)
Known: - - -
Suspected: NUTRIENTS
Possible: Metals, Pesticides, Pathogens

Source(s) of Pollutant(s)
Known: - - -
Suspected: INDUSTRIAL, MUNICIPAL (unknown), Agriculture
Possible: Hydro Modification

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 3 (Cause Identified, Source Unknown)
Lead Agency/Office: DOW/Reg8
TMDL/303d Status: n/a
Resolution Potential: Medium

Further Details

Aquatic life support and recreational uses in Jeddo Creek are known to experience minor impacts due to nutrient loads from agricultural and various other nonpoint sources in the watershed.

A biological (macroinvertebrate) assessment of Jeddo Creek in North Ridgeway (at Mill Road) was conducted in 2004. Sampling results indicated slightly impacted water quality conditions. Sampling results at this site have varied between slightly (2000, 2005) and moderately (1999) impacted. Previously, municipal and/or industrial inputs were identified as the likely primary cause of the impact. However, in the most recent sampling nutrient biotic evaluation determined the effects on the fauna to be minor. In spite of these minor impacts, aquatic life support is considered to be fully supported in the stream. (DEC/DOW, BWAM/SBU, June 2005)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Jeddo Creek in North Ridgeway, Orleans County, (at Mill Road) was conducted in 2000. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. During this sampling the biological (macroinvertebrate) sampling results indicated slightly impacted water
quality conditions. However this was a high flow year and may have masked impacts that were apparent during biological screening at this site in 1999. At that time the site was assessed as having moderate impacts. The fauna was dominated by filter-feeding caddisflies and species richness was very low. Water column sampling revealed iron to be the only parameter of concern. Bottom sediment sampling results revealed no parameters to be exceeding the Probable Effects Level - a level at which adverse impacts are expected. Arsenic was found at a level exceeding the Threshold Effects Level - levels at which adverse impacts occasionally occur. Toxicity testing of the water column showed no significant mortality or reproductive impacts. (DEC/DOW, BWAM/RIBS, January 2005)

A number of possible sources of impacts have been previously suggested. These include municipal inputs in Middleport, urban/stormwater runoff, an industrial facility (FMC), an inactive hazardous waste site (also FMC) and nonpoint agricultural impacts. Study of the creek by researchers at SUNY Brockport (Makarewicz and Lewis) found high levels of organic nitrogen and sediment loads. A stone cutter (Carter Stone) pumps clean water into the creek. Though this does not impact water quality, hydrology of the creek may be affected. (Orleans County WQCC, April 2001)

This segment includes the entire stream and selected/smaller tribs. The waters of the stream and its tribs are primarily Class C. Middleport Reservoir (P177a) and tribs to the reservoir are listed separately. (May 2001)