# MVC Subwatersheds

#### Big Gull Subwatershed

Three sampling sites are monitored as part of the MVC watershed watch lake monitoring program in the Big Gull subwatershed. All of the sites in the Big Gull subwatershed indicated excellent water quality with regards to the indicator parameters pH and TP.

### Buckshot Creek Subwatershed

Eight sampling sites are monitored as part of the MVC watershed watch lake monitoring program in the Buckshot Creek subwatershed. All of the sites in the Buckshot Creek subwatershed indicated excellent water quality with regards to the indicator parameters pH and TP, with the exception of the following locations:

- Grindstone Lake, North Basin had fair water quality results for pH and good water quality results for TP; and
- Grindstone Lake, South basin had good water quality results for TP.

### Carp River Watershed

Seven sampling sites are monitored in the Carp River watershed (two PWQMN and five OBSWQ monitoring program). A summary of the water quality is presented below:

- Excellent water quality with regards to the following indicator parameters:
  - o un-ionized ammonia,
  - o chloride (all stations except Carp Richardson Side Rd. OBSWQ station),
  - o copper (Carp and Kinburn PWQMN stations),
  - o lead,
  - o nitrate,
  - o nitrite (Carp and Kinburn PWQMN stations),
  - o pH (all stations except Carp Fitzroy OBSWQ station), and
  - o zinc;
- Good water quality with regards to the following indicator parameters:
  - o chloride (Carp Richardson Side Rd. OBSWQ station),
  - o copper (Carp OBSWQ stations), and
  - TSS (Carp PWQMN station and Carp Fitzroy and Carp Craig Side Rd. OBSWQ stations);
- Fair water quality with regards to the following indicator parameters:
  - o copper (Poole Creek OBSWQ station),
  - o E. coli (Carp Kinburn OBSWQ station),
  - o pH (Carp Fitzroy OBSWQ station),
  - TP (Poole Creek OBSWQ station), and
  - TSS (Kinburn PWQMN station and Carp Kinburn, Carp Richardson Side Rd. and Poole Creek OBSWQ stations);
- Marginal water quality with regards to the following indicator parameters:
- E. coli (Carp Fitzroy and Carp Richardson Side Rd. OBSWQ stations); and
- Poor water quality with regards to the following indicator parameters:
  - o E. coli (Carp Craig Side Rd. and Poole Creek OBSWQ stations),
  - o nitrite (all OBSWQ stations),
  - o TKN, and
  - TP (all stations except Poole Creek OBSWQ station).

### Clyde River Subwatershed

Fifteen sampling sites are monitored in the Clyde River subwatershed (two PWQMN and thirteen MVC watershed watch). A summary of the water quality is presented below:

- Excellent water quality with regards to the following indicator parameters:
  - o un-ionized ammonia,
  - o chloride,
  - o copper,
  - o lead,
  - o nitrate,
  - o nitrite,
  - pH (Lanark and Kerr Lake PWQMN stations, Flower Round, Horne, Paddys and Sunday Lakes MVC watershed watch stations),
  - TP (Lanark and Kerr Lake PWQMN stations, Canonto, Clyde, Horne, Joes and Widow Lakes MVC watershed watch stations),
  - o TSS and
  - o zinc;
  - Good water quality with regards to the following indicator parameters:
    - $\circ~$  pH (Joes and Upper Park Lakes MVC watershed watch stations) and
    - TP (Flower Round, Palmerston, Robertson and Upper Park Lakes MVC watershed watch stations);
    - Fair water quality with regards to the following indicator parameters:
      - o pH (Clyde, Palmerston and Widow Lakes MVC watershed watch stations),
      - o TKN, and
      - o TP (Sunday Lake MVC watershed watch station); and
  - Marginal water quality with regards to the following indicator parameters:
    - o pH (Canonto and Robertson Lakes MVC watershed watch stations) and
      - TP (Paddys Lake MVC watershed watch station).

# CP Dam Subwatershed

Five sampling sites are monitored in the CP Dam subwatershed (one PWQMN and four MVC watershed watch). A summary of the water quality is presented below:

- Excellent water quality with regards to the following indicator parameters:
  - o un-ionized ammonia,
  - o chloride,
  - o copper,
  - o lead,
  - o nitrate,
  - o nitrite,
  - pH (Dalhousie Lake PWQMN station and Mississippi Lake (Big & Second Lakes) MVC watershed watch stations),
  - o TP,
  - o TSS and
  - o zinc;
- Good water quality with regards to the following indicator parameter TKN;
- Fair water quality with regards to the following indicator parameter pH (Patterson Lake MVC watershed watch station); and

• Marginal water quality with regards to the following indicator parameter – pH (Dalhousie Lake MVC watershed watch station).

## Fall River Subwatershed

Eleven sampling sites are monitored in the Fall River subwatershed (one PWQMN and ten MVC watershed watch). A summary of the water quality is presented below:

- Excellent water quality with regards to the following indicator parameters:
  - o un-ionized ammonia,
  - o chloride,
  - o copper,
  - o lead,
  - o nitrate,
  - o nitrite,
  - o pH (Bennett Lake PWQMN station),
  - o TP (all stations except Bennett Lake MVC watershed watch station),
  - o TSS and
  - o zinc;
- Good water quality with regards to the following indicator parameters:
  - o pH (Bennett and Black Lakes MVC watershed watch stations) and
  - TP (Bennett Lake MVC watershed watch station);
- Fair water quality with regards to the following indicator parameter pH (Clear, Sharbot Main Basin and Silver Lakes MVC watershed watch stations);
- Marginal water quality with regards to the following indicator parameters:
  - pH (Sharbot Lake East, South-West and West Basins MVC watershed watch stations) and
  - o TKN; and
- Poor water quality with regards to the following indicator parameter pH (White Lake MVC watershed watch station).

#### Indian River Subwatershed

Two sampling sites are monitored as part of the MVC watershed watch lake monitoring program in the Indian River subwatershed. A summary of the water quality is presented below:

- Excellent water quality with regards to the following indicator parameter TP;
- Fair water quality with regards to the following indicator parameters pH (Taylor Lake MVC watershed watch station); and
- Marginal water quality with regards to the following indicator parameter pH (Clayton Lake MVC watershed watch station).

#### Lower Mississippi Subwatershed

Eight sampling sites are monitored in the Lower Mississippi River subwatershed (four PWQMN and four City of Ottawa Baseline Surface Water Quality Monitoring program). A summary of the water quality is presented below:

- Excellent water quality with regards to the following indicator parameters:
  - o un-ionized ammonia,
  - o chloride,
  - o copper (all PWQMN stations and Mississippi Galetta OBSWQ station),
  - o E. coli (Cody Hwy 44 OBSWQ station),

- o lead,
- o nitrate,
- o nitrite (all stations except Cody Hansen Side Rd. OBSWQ station),
- o pH (all stations except Appleton PWQMN station),
- TP (Almonte, Appleton and Pakenham PWQMN stations and Cody March Rd. OBSWQ station),
- TSS (all stations except Cody Hansen Side Rd. OBSWQ station), and
- o zinc;
- Good water quality with regards to the following indicator parameters:
  - o copper (Cody OBSWQ stations),
  - o E. coli (Mississippi Galetta OBSWQ station),
  - o pH (Appleton PWQMN station),
  - TKN (Appleton PWQMN station), and
  - TP (Galetta PWQMN station and Mississippi Galetta OBSWQ station);
- Fair water quality with regards to the following indicator parameters:
  - E. coli (Cody March Rd. OBSWQ station),
  - o nitrite (Cody Hansen Side Rd. OBSWQ station),
  - o TKN (Almonte and Galetta PWQMN stations), and
  - TP (Cody Hwy 44 OBSWQ station);
- Marginal water quality with regards to the following indicator parameter:
  - TKN (Pakenham PWQMN station and Mississippi Galetta OBSWQ station), and
  - o TSS (Cody Hansen Side Rd. OBSWQ station); and
- Poor water quality with regards to the following indicator parameters:
  - o E. coli (Cody Hansen Side Rd. OBSWQ station),
  - o TKN (Cody OBSWQ stations), and
  - TP (Cody Hansen Side Rd. OBSWQ station).

#### Mazinaw Subwatershed

Nine sampling sites are monitored in the Mazinaw subwatershed (one PWQMN and eight MVC watershed watch). A summary of the water quality is presented below:

- Excellent water quality with regards to the following indicator parameters:
  - o un-ionized ammonia,
  - o chloride,
  - o copper,
  - o lead,
  - o nitrate,
  - o nitrite,
  - pH (Mazinaw PWQMN station, Kishkebus, Makavoy Mazinaw and McCausland Lakes MVC watershed watch stations),
  - o TP (Mazinaw Lake MVC watershed watch station),
  - o TSS and
  - o zinc;
- Good water quality with regards to the following indicator parameters:
  - o TKN and
  - TP (Mazinaw PWQMN station); and
- Fair water quality with regards to the following indicator parameter pH (Marble and Mississagagon Lakes MVC watershed watch stations).

# Upper Mississippi Subwatershed

Nine sampling sites are monitored as part of the MVC watershed watch lake monitoring program in the Upper Mississippi River subwatershed. A summary of the water quality is presented below:

- Excellent water quality with regards to the following indicator parameters:
  - pH (Ardoch, Crotch, Kashwakamak and Pine Lakes MVC watershed watch stations) and
  - TP (Ardoch, Malcolm and Pine Lakes MVC watershed watch stations);
  - Good water quality with regards to the following indicator parameters:
    - o pH (Mosque Lake MVC watershed watch station) and
    - TP (Crotch South Basin, Fawn and Mosque Lakes MVC watershed watch stations); and
- Fair water quality with regards to the following indicator parameters:
  - o pH (Fawn and Malcolm Lakes MVC watershed watch stations) and
    - TP (Crotch Lake North Basin MVC watershed watch station).

### MVC Ottawa River Subwatersheds

Eight sampling sites are monitored in the MVC Ottawa River subwatersheds in the OBSWQ monitoring program. A summary of the water quality is presented below:

- Excellent water quality with regards to the following indicator parameters:
  - o un-ionized ammonia,
  - chloride (Casey Creek, Constance Creek, Constance Lake, and Shirleys Brook OBSWQ stations),
  - o copper (Constance Creek and Constance Lake OBSWQ stations),
  - o E. coli (Constance Lake OBSWQ station),
  - o lead,
  - o nitrate,
  - o nitrite (Casey Creek, Constance Creek and Constance Lake OBSWQ stations),
  - pH (Casy Creek, Constance Creek, Harwood Creek, Shirley's Brook, Watts Creek Corkstown Rd. OBSWQ stations),
  - o TSS (Constance Creek and Constance Lake OBSWQ stations), and
  - o zinc (all stations except Watts Creek Corkstown Rd. OBSWQ station);
- Good water quality with regards to the following indicator parameters:
  - chloride (Harwood Creek OBSWQ station),
  - o copper (Casey Creek, Harwood Creek and Shirley's Brook OBSWQ stations),
  - o pH (Watts Creek Shirley Blvd. OBSWQ station),
  - TSS (Harwood Creek OBSWQ station), and
  - o zinc (Watts Creek Corkstown Rd. OBSWQ station);
- Fair water quality with regards to the following indicator parameters:
  - o chloride (Watts Creek Shirley Blvd. OBSWQ station),
  - o E. coli (Constance Creek OBSWQ station),
  - o nitrite (Harwood Creek and Shirley's Brook Hines Rd. OBSWQ stations),
  - o pH (Constance Lake OBSWQ station),
  - TKN (Shirley's Brook Hines Rd. and Watts Creek Corkstown Rd. OBSWQ stations), and
  - TP (Constance Lake OBSWQ station);
- Marginal water quality with regards to the following indicator parameters:
  - o copper (Watts Creek OBSWQ stations),

- o E. coli (Harwood Creek OBSWQ station),
- TKN (Harwood Creek and Shirley's Brook Fourth Line Rd. OBSWQ stations), and
- o TSS (Shirley's Brook and Watts Creek Corkstown Rd. OBSWQ stations); and
- Poor water quality with regards to the following indicator parameters:
  - o chloride (Watts Creek Corkstown Rd. OBSWQ station),
  - o E. coli (Casey Creek, Shirley's Brook and Watts Creek OBSWQ stations),
  - o nitrite (Shirley's Brook Fourth Line Rd. and Watts Creek OBSWQ stations),
  - TKN (Casey Creek, Constance Creek, Constance Lake, Watts Creek Shirley Blvd. OBSWQ stations),
  - TP (all stations except Constance Lake OBSWQ station), and
  - TSS (Casey Creek and Watts Creek Shirley Blvd. OBSWQ stations).

### Ottawa River

Sixteen sampling sites are monitored in the Ottawa River (one PWQMN site and 15 OBSWQ site). A summary of the water quality is presented below:

- Excellent water quality with regards to the following indicator parameters:
  - o un-ionized ammonia,
  - o chloride,
  - copper (Chats Falls PWQMN station and Deschenes Rapids 210.30, Deschenes Rapids 210.40, Kettle Island 430.70, Upper Duck Island 430.10 and Upper Duck Island 430.30 OBSWQ stations),
  - o E. coli (Deschenes Rapids and Woolsey Narrows OBSWQ stations),
  - o lead,
  - o nitrate,
  - o nitrite,
  - o pH,
  - TKN (Chats Falls PWQMN station and Deschenes Rapids, Hiawatha 450.30, Kettle Island, Petrie Island – 500.20, Petrie Island – 500.50, Upper Duck Island, Woolsey Narrows OBSWQ stations),
  - o TP,
  - o TSS, and
  - o zinc;
- Good water quality with regards to the following indicator parameters:
  - copper (Deschenes Rapids 210.10, Hiawatha, Kettle Island 430.60, Petrie Island and Woolsey Narrows OBSWQ stations),
  - o E. coli (Petrie Island 500.10 and Petrie Island 500.20 OBSWQ stations), and
  - TKN (Hiawatha 450.10, Hiawatha 450.20, Hiawatha 450.40 and Petrie Island 500.10 OBSWQ stations);
- Fair water quality with regards to the following indicator parameter:
  - E. coli (Kettle Island and Upper Duck Island OBSWQ stations);
- Marginal water quality with regards to the following indicator parameter:
  - E. coli (Hiawatha 450.20 and Hiawatha 450.30 OBSWQ stations); and
  - Poor water quality with regards to the following indicator parameter:
    - *E. coli* (Hiawatha 450.40 and Petrie Island 500.50 OBSWQ stations).

# **RVCA Subwatersheds**

Jock River Subwatershed

Seven sampling sites are monitored in the Jock River subwatershed (one PWQMN and six OBSWQ monitoring program). A summary of the water quality is presented below:

- Excellent water quality with regards to the following indicator parameters:
  - o un-ionized ammonia,
  - o chloride,
  - copper (Jock River PWQMN station and Jock River Jockvale Rd. and Jock River – Ottawa St. OBSWQ stations),
  - o lead,
  - o nitrate,
  - nitrite (Jock River PWQMN station and Jock River Bleeks Side Rd., Jock River – Jockvale Rd., Jock River – Moodie Dr. and Jock River – Ottawa St. OBSWQ stations),
  - o pH,
  - $\circ~$  TSS (Jock River Jockvale Rd. and Jock River Ottawa St. OBSWQ stations), and
  - o zinc;
- Good water quality with regards to the following indicator parameters:
  - copper (Flowing Creek OBSWQ station and Jock River Bleeks Side Rd., Jock River – Moodie Dr. and Jock River – Prince of Wales OBSWQ stations),
  - o E. coli (Jock River Jockvale Rd. OBSWQ station),
  - o nitrite (Jock River Prince of Wales OBSWQ station), and
  - TSS (Jock River PWQMN station and Jock River Bleeks Side Rd., Jock River Moodie Dr. and Jock River Prince of Wales OBSWQ stations);
- Fair water quality with regards to the following indicator parameter:
  - *E. coli* (Jock River Moodie Dr, Jock River Ottawa St. and Jock River Prince of Wales OBSWQ stations);
- Marginal water quality with regards to the following indicator parameters:
  - *E. coli* (Jock River PWQMN station and Jock River Bleeks Side Rd. OBSWQ station), and
  - TP (Jock River Bleeks Side Rd. and Jock River Ottawa St. OBSWQ stations); and
- Poor water quality with regards to the following indicator parameters:
  - o E. coli (Flowing Creek OBSWQ station),
  - o nitrite (Flowing Creek OBSWQ station),
  - o TKN,
  - TP (Jock River PWQMN station and Flowing Creek, Jock River Jockvale Rd., Jock River – Moodie Dr. and Jock River – Prince of Wales OBSWQ stations), and
  - o TSS (Flowing Creek OBSWQ station).

#### Kemptville Creek Subwatershed

Fifteen sampling sites are monitored in the Kemptville Creek subwatershed (one PWQMN, one OBSWQ monitoring program and 13 RVCA surface water monitoring program). A summary of the water quality is presented below:

- Excellent water quality with regards to the following indicator parameters:
  - un-ionized ammonia (all stations with the exception of Barnes Creek RVCA surface water station),
  - o chloride,

- copper (all stations with the exception of Kemptville Creek OBSWQ station and Barnes Creek, Kemptville Creek – Highway 43 and Kyle Rd. RVCA surface water stations),
- o E. coli (Kemptville Creek Oxford Mills RVCA surface water station),
- o lead,
- o nitrate,
- o nitrite,
- o pH,
- TP (Kemptville Creek Hurd St., County Rd. 18 and Oxford Mills and North Kemptville Creek – Bishops Mills and County Rd. 15 RVCA surface water stations),
- TSS (all stations with the exception of Barnes Creek, Kemptville Creek County Rd. 20 and North Kemptville Creek – Bishops Mills RVCA surface water stations), and
- zinc (all stations with the exception of Barnes Creek and Kemptville Creek Garretton RVCA surface water stations);
- Good water quality with regards to the following indicator parameters:
  - o un-ionized ammonia (Barnes Creek RVCA surface water station),
  - copper (Kemptville Creek OBSWQ station and Kemptville Creek Highway 43 and Kyle Rd. RVCA surface water stations),
  - *E. coli* (Kemptville Creek PWQMN, Kemptville Creek County Rd. 18, County Rd. 20, Garretton, Limerick Rd. and Pattersons Corners RVCA surface water stations),
  - TP (Kemptville Creek OBSWQ station and Kemptville Creek Pattersons Corners and North Augusta RVCA surface water stations),
  - TSS (Kemptville Creek County Rd. 20 and North Kemptville Creek Bishops Mills RVCA surface water stations), and
  - zinc (Barnes Creek and Kemptville Creek Garretton RVCA surface water stations);
- Fair water quality with regards to the following indicator parameters:
  - o copper (Barnes Creek RVCA surface water station),
  - *E. coli* (Kemptville Creek OBSWQ station and Kemptville Creek Hurd St., Kyle Rd. and North Augusta and North Kemptville Creek – County Rd. 15 RVCA surface water stations), and
  - TP (Kemptville Creek County Rd. 20 RVCA surface water station);
  - Marginal water quality with regards to the following indicator parameters:
    - *E. coli* (Kemptville Creek Highway 43 and North Kemptville Creek Bishops Mills RVCA surface water stations), and
    - TP (Kemptville Creek Limerick Rd., Garretton and Kyle Rd. RVCA surface water stations); and
- Poor water quality with regards to the following indicator parameters:
  - o E. coli (Barnes Creek surface water station),
  - o TKN,
  - o TP (Barnes Creek RVCA surface water station), and
  - o TSS (Barnes Creek RVCA surface water station).

Lower Rideau Subwatershed

Thirty-eight sampling sites are monitored in the Lower Rideau River subwatershed (four PWQMN, 29 OBSWQ monitoring program and five RVCA surface water monitoring program). A summary of the water quality is presented below:

- Excellent water quality with regards to the following indicator parameters:
  - o un-ionized ammonia,
  - chloride (all stations except Hunt Club Creek DeNiverville Dr., Hunt Club Creek – Riverside Dr., Nepean Creek and Sawmill Creek OBSWQ stations),
  - copper (Mosquito Creek Rideau Rd., and Stevens Creek Roger Stevens Rd. OBSWQ stations and all PWQMN stations),
  - *E. coli* (Rideau River Black Rapids Dam (dam channel), Rideau River Burritts Rapids, Rideau River Long Island, Rideau River Mooney's Bay and Rideau River Roger Stevens Rd. OBSWQ stations and Kars PWQMN station),
  - o lead,
  - o nitrate,
  - nitrite (Brassils Creek, Stevens Creek Church St., and Stevens Creek Roger Stevens Rd. OBSWQ stations, all Rideau River OBSWQ stations except Rideau River – Mooney's Bay and all PWQMN stations),
  - o pH,
  - o TKN (Hunt Club Creek DeNiverville Dr. OBSWQ station),
  - o TKN (Brassils Creek, and Stevens Creek Roger Stevens Rd. OBSWQ stations),
  - TSS (Brassils Creek, Rideau River Burritts Rapids, Rideau River Long Island, Rideau River – Mooney's Bay, Rideau River – Roger Stevens Rd., and Stevens Creek – Roger Stevens Rd. OBSWQ stations, all PWQMN stations and Brassils Creek RVCA surface water station), and
  - zinc (Black Rapids Creek, Brassils Creek, Cranberry Creek, Hunt Club Creek Riverside Dr., Mosquito Creek, Mud Creek, Sawmill Creek – NE tributary, Stevens Creek and Taylor Drain OBSWQ stations, all Rideau River OBSWQ stations except Rideau River – Mooney's Bay, all PWQMN stations and all RVCA surface water stations);
- Good water quality with regards to the following indicator parameters:
  - chloride (Hunt Club Creek DeNiverville Dr., Hunt Club Creek Riverside Dr., and Sawmill Creek NE tributary OBSWQ station),
  - copper (Black Rapids Creek, Brassils Creek, Cranberry Creek, Hunt Club Creek

     DeNiverville Dr., Mosquito Creek Leitrim Rd., Mosquito Creek Limebank
     Rd., Mud Creek, Rideau River, Sawmill Creek NE tributary, Stevens Creek –
     Church St., and Stevens Creek Second Line Rd. OBSWQ stations and Brassils
     Creek, McDermott and Murphy Drains RVCA surface water stations),
  - *E. coli* (Brassils Creek, Rideau River Bank St., Rideau River Barnsdale Rd., Rideau River – Black Rapids Dam (centre sluice), Rideau River – St. Patrick St., and Stevens Creek – Roger Stevens Rd. OBSWQ stations, Long Island PWQMN station and Brassils Creek RVCA surface water station),
  - nitrite (Cranberry Creek, Rideau River Mooney's Bay, Stevens Creek Second Line Rd., and Taylor Drain OBSWQ stations),
  - TP (Hunt Club Creek DeNiverville Dr., and Rideau River Buritts Rapids OBSWQ stations and Brassils Creek RVCA surface water station),
  - TSS (Cranberry Creek, Hunt Club Creek Country Club Rd., Hunt Club Creek DeNiverville Dr., Mud Creek, Rideau River – Bank St., Rideau River – Barnsdale Rd., Rideau River – Black Rapids Dam, and Rideau River – St. Patrick St. OBSWQ stations and Murphy Drain RVCA surface water station), and
  - zinc (Hunt Club Creek Country Club Rd., Hunt Club Creek DeNiverville Dr., Nepean Creek, Rideau River – Mooney's Bay, Sawmill Creek – Brookfield Rd.,

Sawmill Creek – Johnston Rd., Sawmill Creek – Riverside Dr., and Sawmill Creek – Walkley Rd. OBSWQ stations);

- Fair water quality with regards to the following indicator parameters:
  - chloride (Sawmill Creek Johnston Rd., and Sawmill Creek Walkley Rd. OBSWQ stations),
  - copper, (Hunt Club Creek Country Club Rd., Hunt Club Creek Riverside Dr., Sawmill Creek – Johnston Rd., Sawmill Creek – Walkley Rd., and Taylor Drain OBSWQ stations and Arcand Drain RVCA surface water station),
  - *E. coli* (Cranberry Creek, Hunt Club Creek DeNiverville Dr., Mosquito Creek Limebank Rd., Sawmill Creek – NE tributary, and Stevens Creek – Second Line Rd. OBSWQ station, Hogs Back and St. Patrick St. PWQMN stations and Arcand Drain RVCA surface water station),
  - TP (Sawmill Creek NE tributary OBSWQ station), and
  - TSS (Hunt Club Creek Riverside Dr., Mosquito Creek, Sawmill Creek NE tributary, Sawmill Creek – Walkley Rd., Stevens Creek – Church St., and Stevens Creek – Second Line Rd. OBSWQ stations and McDermott Drain RVCA surface water stations);
- Marginal water quality with regards to the following indicator parameters:
  - chloride (Nepean Creek, Sawmill Creek Brookfield Rd. and Sawmill Creek Riverside Dr. OBSWQ stations),
  - copper (Nepean Creek, Sawmill Creek Brookfield Rd., and Sawmill Creek Riverside Dr. OBSWQ stations),
  - *E. coli* (Black Rapids Creek, Hunt Club Creek Country Club Rd., Mosquito Creek Leitrim Rd., Mud Creek, Nepean Creek and Taylor Drain OBSWQ stations and McDermott and Murphy Drains RVCA surface water stations),
  - o nitrite (Mosquito Creek Limebank Rd. OBSWQ station),
  - TKN (Hunt Club Creek Country Club Rd., and Sawmill Creek NE tributary OBSWQ stations),
  - TP (Rideau River Barnsdale Rd., Rideau River Long Island, and Rideau River Roger Stevens Rd. OBSWQ stations and Hogs Back, Kars, Long Island and St. Patrick St. PWQMN stations), and
  - TSS (Black Rapids Creek, and Taylor Drain OBSWQ stations and Arcand Drain RVCA surface water station); and
- Poor water quality with regards to the following indicator parameters:
  - *E. coli* (Hunt Club Creek Riverside Dr., Mosquito Creek Rideau Rd., Sawmill Creek – Brookfield Rd., Sawmill Creek – Johnston Rd., Sawmill Creek – Riverside Dr., Sawmill Creek – Walkley Rd., Stevens Creek – Church St. OBSWQ stations),
  - nitrite (Black Rapids Creek, Hunt Club Creek, Mosquito Creek Rideau Rd., Mud Creek, Nepean Creek, and Sawmill Creek OBSWQ stations),
  - TKN (all stations except Hunt Club Creek Country Club Rd., Hunt Club Creek DeNiverville Dr., and Sawmill Creek NE tributary OBSWQ stations),
  - TP (Black Rapids Creek, Cranberry Creek, Hunt Club Creek Country Club Rd., Hunt Club Creek – Riverside Dr., Mosquito Creek, Mud Creek, Nepean Creek, Rideau River – Bank St., Rideau River – Black Rapids Dam, Rideau River – Mooney's Bay, Rideau River – St. Patrick St., Sawmill Creek – Brookfield Rd., Sawmill Creek – Johnston Rd., Sawmill Creek – Riverside Dr., Sawmill Creek – Walkley Rd., Stevens Creek – Church St., Stevens Creek – Second Line Rd., and Taylor Drain OBSWQ stations and Arcand, McDermott and Murphy Drains RVCA surface water stations), and

• TSS (Nepean Creek, Sawmill Creek – Brookfield Rd., Sawmill Creek – Johnston Rd., and Sawmill Creek – Riverside Dr. OBSWQ stations).

### Middle Rideau Subwatershed

Eleven sampling sites are monitored in the Middle Rideau River subwatershed (two PWQMN, eight RVCA surface water monitoring program and one RVCA watershed watch monitoring program). A summary of the water quality is presented below:

- Excellent water quality with regards to the following indicator parameters:
  - o un-ionized ammonia,
  - o chloride,
  - copper (Andrewsville and Kilmarnock PWQMN stations and Irish and Otter Creeks RVCA surface water stations),
  - *E. Coli* (Andrewsville and Kilmarnock PWQMN stations, Irish Creek RVCA surface water station and Otter Lake RVCA watershed watch station),
  - o lead (all stations with the exception of Andrewsville PWQMN station),
  - o nitrate,
  - o nitrite,
  - o pH (all stations with the exception of Kilmarnock PWQMN station),
  - TP (Otter Lake RVCA watershed watch station),
  - TSS (Andrewsville PWQMN station and Cockburn, Dales, Irish and Rideau Creeks RVCA surface water stations) and
  - o zinc;
- Good water quality with regards to the following indicator parameters:
  - o copper (Barbers, Dales, Hutton and Rideau Creeks RVCA surface water stations),
  - o lead (Andrewsville PWQMN station),
  - o TKN (Otter Lake RVCA watershed watch station),
  - TP (Andrewsville and Kilmarnock PWQMN stations and Irish and Rideau Creeks RVCA surface water stations) and
  - TSS (Kilmarnock PWQMN station and Barbers, Hutton and Otter Creeks RVCA surface water stations);
- Fair water quality with regards to the following indicator parameters:
  - o copper (Cockburn and Rosedale Creeks RVCA surface water stations),
  - o pH (Kilmarnock PWQMN station) and
  - TP (Dales Creek RVCA surface water station);
- Marginal water quality with regards to the following indicator parameter:
  - o E. Coli (Cockburn and Rideau Creeks RVCA surface water stations); and
- Poor water quality with regards to the following indicator parameters:
  - *E. Coli* (Barbers, Dales, Hutton, Otter and Rosedale Creeks RVCA surface water stations),
  - TKN (all stations with the exception of Otter Lake RVCA watershed watch station),
  - TP (Barbers, Cockburn, Hutton, Otter and Rosedale Creeks RVCA surface water stations) and
  - o TSS (Rosedale Creek RVCA surface water station).

Rideau Lakes Subwatershed

Twenty sampling sites are monitored in the Rideau Lakes subwatershed (five RVCA surface water monitoring program and thirteen lakes within the RVCA watershed watch monitoring program). A summary of the water quality is presented below:

- Excellent water quality with regards to the following indicator parameters:
  - o un-ionized ammonia,
  - o chloride,
  - o copper (Blacks Creek RVCA surface water station),
  - *E. Coli* (Westport Dam RVCA surface water station and Adam, Big Rideau, Big Rideau Hoggs Bay, Black, Burridge, Long East, Loon, Lower Rideau, Round, Upper Rideau, Westport Sand and Wolfe Lakes RVCA watershed watch stations),
  - o lead,
  - o nitrate,
  - pH (all stations with the exception of Westport Dam RVCA surface water station),
  - o TKN (Wolfe Lake RVCA watershed watch station),
  - TP (Adam, Bass, Big Rideau, Black, Burridge, Long East, Loon, Lower Rideau, Round, Westport Sand and Wolfe Lakes RVCA watershed watch stations),
  - o TSS (Black Creek RVCA surface water station) and
  - o zinc;
- Good water quality with regards to the following indicator parameters:
  - copper (Adrains and Sheldons Creeks and Westport Dam RVCA surface water stations),
  - *E. Coli* (Black Creek RVCA surface water station and Bass Lake RVCA watershed watch station),
  - o pH (Westport Dam RVCA surface water station),
  - TKN (Adam, Bass, Big Rideau, Burridge, Long East and Lower Rideau Lakes RVCA watershed watch stations),
  - TP (Westport Dam RVCA surface water station and Big Rideau Hoggs Bay RVCA watershed watch station) and
  - o TSS (Sheldons Creek and Westport Dam RVCA surface water stations);
- Fair water quality with regards to the following indicator parameters:
  - o E. Coli (Sheldons Creek RVCA surface water station),
  - TKN (Big Rideau Hoggs Bay, Upper Rideau and Westport Sand Lakes RVCA watershed watch stations) and
  - TP (Upper Rideau Lake RVCA watershed watch station);
- Marginal water quality with regards to the following indicator parameters:
  - TKN (Westport Dam RVCA surface water station),
  - TP (Black Creek RVCA surface water station) and
  - TSS (Adrains Creek RVCA surface water station); and
- Poor water quality with regards to the following indicator parameters:
  - o E. Coli (Adrains Creek RVCA surface water station),
  - TKN (Adrains, Black and Sheldons Creeks RVCA surface water stations and Black and Loon Lakes RVCA watershed watch stations) and
  - o TP (Adrains and Sheldons Creeks RVCA surface water stations).

Tay River Subwatershed

Fifty-seven sampling sites are monitored in the Tay River subwatershed (two PWQMN, 23 RVCA surface water monitoring program and 32 RVCA watershed watch monitoring program). A summary of the water quality is presented below:

- Excellent water quality with regards to the following indicator parameters:
  - o un-ionized ammonia,
  - o chloride,
  - copper (Bolingbroke and Tay Marsh PWQMN stations and Eagle Creek, Fish Creek – County Rd. 38 and upstream of Bobs Lake, Grants Creek – Upper Scotch Line, County Rd. 10. and Pike Lake Dam, Jebbs Creek, Ruddsdale Creek, Scotts Snye, Stub Creek and Tay River – Port Elmsley, Rogers Rd., Gore St., upstream of Tay Marsh, downstream of Christie Lake, Bolingbroke and Craig St. RVCA surface water stations),
  - *E. Coli* (Bolingbroke PWQMN station, Tay River Bolingbroke and Uens Creek RVCA surface water stations and all RVCA watershed watch stations),
  - o lead,
  - o nitrate,
  - o nitrite,
  - pH (all samples with the exception of Tay River upstream of Tay Marsh RVCA surface water station),
  - TKN (Bolingbroke PWQMN station, Tay River Adams Pond, Bolingbroke and downstream of Christie Lake RVCA surface water stations and Bobs Lake – Narrows, Green Bay and Norris Bay, Christie Lake, Crow Lake, Eagle Lake, Farren Lake and Leggatt Lake RVCA watershed watch stations),
  - TP (Bolingbroke PWQMN station, Grants Creek Pike Lake Dam, Scotts Snye and Tay River Adams Pond, Bolingbroke, downstream of Christie Lake, Glen Tay, Craig St., Gore St. and Rogers Rd. RVCA surface water stations and Bobs Lake Buck Bay, Narrows, Green Bay, Long Bay, Mud Bay, Norris Bay and West Basin, Christie Lake, Crosby Lake, Crow Lake, Davern Lake, Eagle Lake, Farren Lake, Leggatt Lake, Little Crosby Lake, Little Silver, O'Brien Lake, Otty Lake, Pike Lake RVCA watershed watch stations),
  - TSS (all stations with the exception of Grants Creek Glen Tay Rd. and downstream of Upper Scotch Line RVCA surface water station) and
  - o zinc;
- Good water quality with regards to the following indicator parameters:
  - copper (Fish Creek, Grants Creek Glen Tay Rd. and downstream of Upper Scotch Line, Tay River – Glen Tay and Adams Pond, and Uens Creek),
  - *E. Coli* (Eagle Creek, Fish Creek upstream of Bobs Lake, Grants Creek County Rd. 10 and Pike Lake Dam, Jebbs Creek, Stub Creek and Tay River Port Elmsley, Glen Tay, Gore St., Adams Pond and downstream of Christie Lake RVCA surface water stations),
  - o pH (Tay River upstream of Tay Marsh RVCA surface water station),
  - TKN (Scotts Snye RVCA surface water station and Bobs Lake Buck Bay, Long Bay, Mud Bay and West Basin, Crosby Lake, Davern Lake, Little Crosby Lake and Little Silver Lake RVCA watershed watch stations),
  - TP (Tay Marsh PWQMN station, Grants Creek County Rd. 10, Jebbs Creek and Tay River – Port Elmsley and upstream of Tay Marsh RVCA surface water stations and Bobs Lake – Mill Bay, Carnahan Lake, Elbow Lake, Long Lake – West and Rainbow Lake RVCA watershed watch stations) and
  - o TSS (Grants Creek Glen Tay Rd. RVCA surface water station);
- Fair water quality with regards to the following parameters:

- *E. Coli* (Tay Marsh PWQMN station, and Grants Creek Glen Tay Rd., Ruddsdale Creek, Scotts Snye and Tay River – Rogers Rd. and upstream of Tay Marsh RVCA surface water stations),
- TKN (Grants Creek Pike Lake Dam and Tay River Glen Tay and Gore St. RVCA surface water station and Pike Lake RVCA watershed watch station),
- TP (Fish Creek upstream of Bobs Lake, Fish Creek, Stub Creek and Uens Creek RVCA surface water stations) and
- o TSS (Grants Creek Glen Tay Rd. RVCA surface water stations);
- Marginal water quality with regards to the following parameters:
  - *E. Coli* (Fish Creek Fish Creek and County Rd. 38 and Tay River Craig St. RVCA surface water stations),
  - TKN (Grants Creek County Rd. 10, Stub Creek and Tay River Rogers Rd. and Craig St. RVCA surface water station and O'Brien Lake RVCA watershed watch station) and
  - TP (Eagle Creek, Grants Creek Upper Scotch Line and Ruddsdale Creek RVCA surface water stations); and
- Poor water quality with regards to the following indicator parameters:
  - *E. Coli* (Grants Creek Upper Scotch Line and downstream of Upper Scotch Line RVCA surface water stations),
  - TKN (Tay Marsh PWQMN station, Eagle Creek, Fish Creek, Grants Creek Glen Tay Rd., Upper Scotch Line, and downstream of Upper Scotch Line, Jebbs Creek, Ruddsdale Creek, Tay River – Port Elmsley and upstream of Tay Marsh and Uens Creek RVCA surface water stations and Bobs Lake – Mill Bay, Carnahan Lake, Elbow Lake, Long Lake – West, Otty Lake and Rainbow Lake RVCA watershed watch stations) and
  - TP (Fish Creek County Rd. 38, Grants Creek Glen Tay Rd. and downstream of Upper Scotch Line RVCA surface water station).

#### RVCA Ottawa River East Subwatersheds

Ten sampling sites are monitored in the RVCA Ottawa River East subwatersheds in the OBSWQ monitoring program. A summary of the water quality is presented below:

- Excellent water quality with regards to the following indicator parameters:
  - o un-ionized ammonia,
  - o chloride (Becketts Creek, Black Creek, Cardinal Creek and MacKay Lake OBSWQ stations),
  - o copper (MacKay Lake OBSWQ station),
  - o E. coli (MacKay Lake OBSWQ station),
  - o lead,
  - o nitrate,
  - o nitrite (Becketts Creek, Black Creek and MacKay Lake OBSWQ station),
  - o pH (all stations except Becketts Creek and MacKay Lake OBSWQ stations),
  - TP (MacKay Lake OBSWQ station),
  - TSS (MacKay Lake OBSWQ station), and
  - zinc (Becketts Creek, Black Creek, Cardinal Creek, MacKay Lake, Ramsay Creek, and Taylor Creek OBSWQ stations);
- Good water quality with regards to the following indicator parameters:
  - o chloride (Ramsay Creek OBSWQ station),
  - o copper (Black Creek OBSWQ station),
  - o pH (Becketts Creek and MacKay Lake OBSWQ stations),

- o TSS (Black Creek OBSWQ station), and
- o zinc (Bilberry Creek, Greens Creek and Voyager Creek OBSWQ stations);
- Fair water quality with regards to the following indicator parameters:
  - o copper (Cardinal Creek OBSWQ station),
  - o E. coli (Becketts Creek and Black Creek OBSWQ stations), and
  - o nitrite (Ramsay Creek OBSWQ station);
- Marginal water quality with regards to the following indicator parameters:
  - chloride (Greens Creek Montreal Rd., Taylor Creek and Voyager Creek OBSWQ stations),
  - copper (Becketts Creek, Bilberry Creek, Greens Creek Innes Rd., Taylor Creek and Voyager Creek OBSWQ stations),
  - o E. coli (Cardinal Creek OBSW station),
  - TKN (Taylor Creek OBSWQ station), and
  - TSS (Becketts Creek, Greens Creek Innes Rd. and Taylor Creek OBSWQ stations); and
- Poor water quality with regards to the following indicator parameters:
  - o chloride (Bilberry Creek and Greens Creek Innes Rd. OBSWQ stations),
  - o copper (Greens Creek Montreal Rd. and Ramsay Creek OBSWQ stations),
  - *E. coli* (Bilberry Creek, Greens Creek, Ramsay Creek, Taylor Creek and Voyager Creek OBSWQ stations),
  - nitrite (Bilberry Creek, Cardinal Creek, Greens Creek, Taylor Creek and Voyager Creek OBSWQ stations),
  - o TKN (all stations except Taylor Creek OBSWQ station),
  - o TP (all stations except MacKay Lake OBSWQ station), and
  - TSS (Bilberry Creek, Cardinal Creek, Greens Creek Montreal Rd., Ramsay Creek, and Voyager Creek OBSWQ stations).

#### RVCA Ottawa River West Subwatersheds

Seven sampling sites are monitored in the RVCA Ottawa River East subwatersheds in the OBSWQ monitoring program. A summary of the water quality is presented below:

- Excellent water quality with regards to the following indicator parameters:
  - o un-ionized ammonia,
  - o chloride (Mud Lake and Rideau Canal OBSWQ stations),
  - o copper (Rideau Canal Bronson St. OBSWQ station),
  - o E. coli (Rideau Canal Bronson St. OBSWQ station),
  - o lead,
  - o nitrate,
  - o nitrite (Mud Lake OBSWQ station),
  - o pH (Graham Creek, Pinecrest Creek and Stillwater Creek OBSWQ stations),
  - TSS (Rideau Canal OBSWQ stations), and
  - zinc (Graham Creek Siskin Court, Mud Lake, Rideau Canal, and Stillwater Creek OBSWQ stations);
  - Good water quality with regards to the following indicator parameters:
    - o chloride (Graham Creek Siskin Court OBSWQ station),
    - o copper (Mud Lake and Rideau Canal Rideau St. OBSWQ stations),
    - E. coli (Mud Lake OBSWQ station),
    - o nitrite (Rideau Canal Rideau St. OBSWQ station),
    - o pH (Rideau Canal OBSWQ stations),
    - TSS (Mud Lake OBSWQ station), and

- o zinc (Graham Creek Carling Ave., and Pinecrest Creek OBSWQ stations);
- Fair water quality with regards to the following indicator parameters:
  - o chloride (Stillwater Creek OBSWQ station),
  - o copper (Graham Creek, Pinecrest Creek and Stillwater Creek OBSWQ stations),
  - o E. coli (Rideau Canal Rideau St. OBSWQ station),
  - o nitrite (Rideau Canal Bronson St. OBSWQ station),
  - o pH (Mud Lake OBSWQ station),
  - o TKN (Graham Creek Carling Ave and Pinecrest Creek OBSWQ stations), and
  - TSS (Pinecrest Creek OBSWQ station);
- Marginal water quality with regards to the following indicator parameters:
  - o chloride (Graham Creek Carling Ave OBSWQ station),
  - o TKN (Graham Creek Siskin Court OBSWQ station),
  - TP (Pinecrest Creek OBSWQ station), and
  - TSS (Graham Creek Carling Ave., Stillwater Creek OBSWQ stations); and
- Poor water quality with regards to the following indicator parameters:
  - o chloride (Pinecrest Creek OBSWQ station),
    - o E. coli (Graham Creek, Pincrest Creek and Stillwater Creek OBSWQ stations),
    - o nitrite (Graham Creek, Pinecrest Creek and Stillwater Creek OBSWQ stations),
    - o TKN (Mud Lake, Rideau Canal, and Stillwater Creek OBSWQ stations),
    - o TP (all stations except Pinecrest Creek OBSWQ station), and
    - TSS (Graham Creek Siskin Court OBSWQ station).