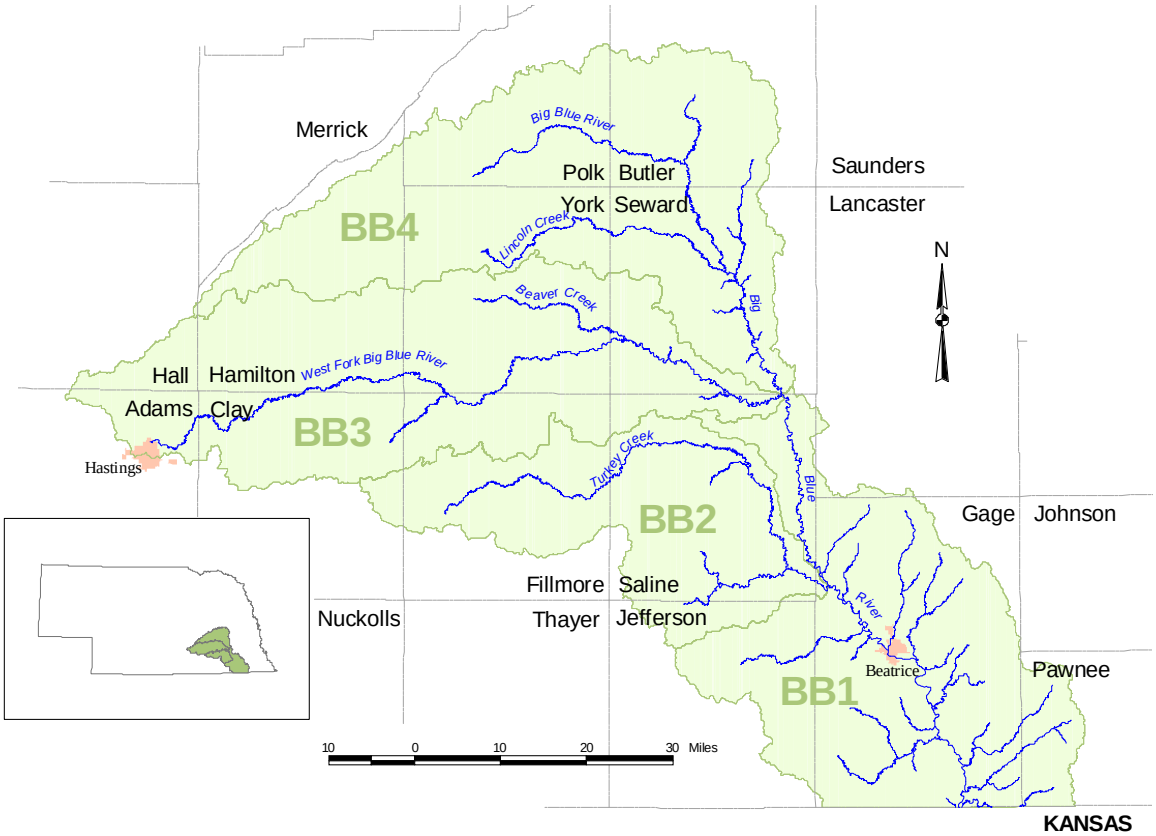


# BIG BLUE RIVER BASIN (and Subbasins)

## Big Blue Basin – Hydrologic Units 10270201, 10270202, 10270203, 10270204 and 10270205

The Big Blue River Basin includes 63 designated stream segments and 31 lakes/reservoirs. Beneficial uses assigned to designated water in the basin can be found in the below table.

| Waterbody Type | Primary Contact Recreation | Aquatic Life CA[1] | Aquatic Life CB[1] | Aquatic Life WA[1] | Aquatic Life WB[1] | Water Supply – Public Drinking | Water Supply – Ag | Water Supply-Ind. | Aesthetics |
|---|---|---|---|---|---|---|---|---|---|
| Lakes | 31 | 0 | 0 | 31 | 0 | 0 | 31 | 0 | 31 |
| Streams | 10 | 0 | 0 | 16 | 47 | 0 | 63 | 0 | 63 |

[1] CA = Coldwater Class A, CB = Coldwater Class B, WA = Warmwater Class A and WB = Warmwater Class B

**Delisting/ Changes from 2008 IR**

The following are waters and or parameters that were delisted – removed from category 5 or other significant changes from the 2008 IR.

***BB1-L0065: Bear Creek Lake*** - The 2008 Integrated Report included this waterbody as impaired by excessive nutrients. The nutrient assessment process for 2008 was designed to provide numeric translators to the narrative aesthetic beneficial use criteria as defined in the State of Nebraska approved Title 117 – Nebraska Surface Water Quality Standards. EPA concluded that the nutrient values used to derive the numeric translators were not acceptable and could not be used for Clean Water Act purposes.

For the 2010 Integrated Report, EPA and NDEQ agreed to an alternative set of nutrient assessment end points for this reporting cycle. Following the agreed upon nutrient translators and the 2010 assessment methodologies, the nutrient data and information for this waterbody do not meet the requirements for assessment. Additional parameters designed to protect aquatic life indicate this waterbody is supporting the aquatic life beneficial use. Additionally, the 2010 aesthetics beneficial use assessment for this waterbody demonstrates full support; therefore this waterbody will be relocated to category 2.

***BB1-L0090: Clatonia Lake, BB3-L0010: Smith Creek Lake –*** These waterbodies were listed as impaired for nutrients in the 2006 Integrated Report. EPA indicated that the nutrient values NDEQ used for the 2006 assessments were not acceptable and not suitable for Clean Water Act purposes. In February 2009 EPA deferred taking action on these waterbodies until the 2010 Integrated Report when a mutually agreed upon nutrient criteria would be used to assess for nutrient impairments. Following the agreed upon nutrient translators and the 2010 assessment methodologies, the nutrient data and information for these waterbodies do not meet the requirements for assessment. Additional parameters designed to protect aquatic life indicate these waterbodies are supporting the aquatic life beneficial use. Additionally, the 2010 aesthetics beneficial use assessment for these waterbodies demonstrates full support; therefore these waterbodies will be placed in category 2.

| Waterbody ID | Waterbody Name | Recreation | Aquatic Life | Public Drinking Water | Agriculture Water Supply | Industrial Water Supply | Aesthetics | Overall Assessment | 2010 IR | Impairments | Parameters of Concern | Comments/Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lakes** | | | | | | | | | | | | |
| BB1-L0010 | Donald Whitney Memorial Lake | NA | NA | | NA | | NA | | 3 | | | |
| BB1-L0020 | Diamond Lake South | NA | NA | | NA | | NA | | 3 | | | |
| BB1-L0030 | Big Indian Lake (11A) | S | I | | S | | I | I | 5 | Nutrients, Sediment | Total Phosphorus, Total Nitrogen, Sediment | Fish consumption assessment |
| BB1-L0040 | Arrowhead Lake | NA | NA | | NA | | NA | | 3 | | | |
| BB1-L0050 | Wolf Wildcat Lake | NA | I | | NA | | NA | I | 5 | Fish consumption advisory | Mercury | Fish consumption assessment |
| BB1-L0060 | Rockford Lake | S | I | | S | | S | I | 5 | Fish consumption advisory, Nutrients | Hazard index compounds, Mercury, Total Phosphorus, Total Nitrogen, Chlorophyll a | Fish consumption assessment |
| BB1-L0065 | Bear Creek Lake | NA | S | | S | | S | S | 2 | | | Delist nutrients - insufficient data for assessment procedures |
| BB1-L0070 | Leisure Lake | NA | S | | NA | | S | S | 2 | | | |
| BB1-L0080 | Cub Creek Lake | I | I | | S | | S | I | 5 | E. coli, Nutrients | E. coli, Total Phosphorus | |
| BB1-L0090 | Clatonia Lake (3A) | NA | S | | S | | S | S | 2 | | | |
| BB1-L0100 | Walnut Creek Lake (2A) | NA | NA | | NA | | NA | | 3 | | | |
| BB2-L0005 | Swanton Lake | NA | NA | | NA | | NA | | 3 | | | |

| Waterbody ID | Waterbody Name | Recreation | Aquatic Life | Public Drinking Water | Agriculture Water Supply | Industrial Water Supply | Aesthetics | Overall Assessment | 2010 IR | Impairments | Parameters of Concern | Comments/Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BB2-L0010 | Swan Creek Lake 2A | NA | I | | S | | S | I | 5 | Dissolved Oxygen | Unknown | Fish consumption assessment, Delist nutrients- insufficient data for assessment procedures |
| BB2-L0020 | Swan Creek Lake (5A) | S | I | | S | | S | I | 5 | Fish consumption advisory, Nutrients, High pH | Hazard index compounds, Mercury, Total phosphorus, Total nitrogen, Chlorophyll a | Delist algal toxins- assessments shows full support, Fish consumption assessment |
| BB2-L0030 | Friend City Park Lake | NA | NA | | NA | | S | S | 2 | | | |
| BB2-L0040 | Geneva City Lake | NA | NA | | NA | | NA | | 3 | | | |
| BB3-L0010 | Smith Creek Lake | NA | S | | S | | S | S | 2 | | | |
| BB3-L0030 | Waco Basin | NA | NA | | NA | | NA | | 3 | | | |
| BB3-L0035 | Overland Trail Reservoir | NA | NA | | NA | | NA | | 3 | | | |
| BB3-L0040 | Henderson Pond | NA | NA | | NA | | S | S | 2 | | | |
| BB3-L0045 | Clark's Pond | NA | NA | | NA | | S | S | 2 | | | |
| BB3-L0050 | Lake Hastings | NA | I | | NA | | I | I | 5 | Fish consumption advisory, Sedimentation | Cancer risk compounds, Hazard index compounds, Sediment | Fish consumption assessment |
| BB3-L0060 | Hastings Northwest Dam Lake | NA | NA | | NA | | NA | | 3 | | | |
| BB3-L0070 | Heartwell Lake | NA | NA | | NA | | I | I | 5 | Algal blooms | Nutrients | |
| BB3-L0080 | Recharge Lake | NA | I | | S | | S | I | 5 | Fish consumption advisory, | Hazard index compounds, Mercury, | Fish consumption assessment, Delist |

| Waterbody ID | Waterbody Name | Recreation | Aquatic Life | Public Drinking Water | Agriculture Water Supply | Industrial Water Supply | Aesthetics | Overall Assessment | 2010 IR | Impairments | Parameters of Concern | Comments/Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Nutrients | Total phosphorus, Total nitrogen, Chlorophyll a | atrazine-assessment show full support |
| BB4-L0010 | David City Park Lake | NA | NA | | NA | | S | S | 2 | | | |
| BB4-L0020 | Seward City Park Pond | NA | NA | | NA | | NA | | 3 | | | |
| BB4-L0030 | Surprise City Lake | NA | NA | | NA | | NA | | 3 | | | |
| BB4-L0035 | Oxbow Trail Reservoir | NA | I | | S | | S | I | 5 | Nutrients | Total phosphorus, Chlorophyll a | |
| BB4-L0040 | Pioneer Trails Lake | NA | NA | | NA | | NA | | 3 | | | |
| BB4-L0045 | Aurora Leadership Center Lake | NA | NA | | NA | | NA | | 3 | | | |
| **Streams** | | | | | | | | | | | | |
| BB1-10000 | Big Blue River | I | I | | S | | S | I | 5 | E. coli, May-June atrazine, Fish consumption advisory | E. coli, Atrazine, Cancer risk compounds, Hazard index compounds | E. coli TMDL approved 3/05, Fish consumption assessment |
| BB1-10100 | Mission Creek | I | I | | S | | S | I | 5 | E. coli, May-June atrazine | E. coli, Atrazine | |
| BB1-10200 | Mission Creek | | NA | | NA | | NA | | 3 | | | |
| BB1-10300 | Spring Creek | | S | | NA | | NA | S | 2 | | | Aquatic community assessment |
| BB1-10400 | Plum Creek | | NA | | NA | | NA | | 3 | | | |
| BB1-10410 | Arkeketa Creek | | NA | | NA | | NA | | 3 | | | |
| BB1-10500 | Plum Creek | | NA | | NA | | NA | | 3 | | | |

| Waterbody ID | Waterbody Name | Recreation | Aquatic Life | Public Drinking Water | Agriculture Water Supply | Industrial Water Supply | Aesthetics | Overall Assessment | 2010 IR | Impairments | Parameters of Concern | Comments/Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BB1-10510 | Tipps Creek | | NA | | NA | | NA | | 3 | | | |
| BB1-10600 | Wildcat Creek | | NA | | NA | | NA | | 3 | | | |
| BB1-10610 | Wolf Creek | | S | | NA | | NA | S | 2 | | | Aquatic community assessment |
| BB1-10700 | Wildcat Creek | | NA | | NA | | NA | | 3 | | | |
| BB1-10800 | Big Indian Creek | I | I | | S | | S | I | 5 | E. coli, May-June atrazine | E. coli, Atrazine | |
| BB1-10810 | Squaw Creek | | NA | | NA | | NA | | 3 | | | |
| BB1-10820 | Sicily Creek | | NA | | NA | | NA | | 3 | | | |
| BB1-10900 | Big Indian Creek | NA | I | | NA | | NA | I | 5 | May-June atrazine | Atrazine | Fish consumption assessment |
| BB1-11000 | Bills Creek | | NA | | NA | | NA | | 3 | | | |
| BB1-11100 | Mud Creek | | S | | NA | | NA | S | 2 | | | Aquatic community assessment |
| BB1-11110 | Bloody Run | | NA | | NA | | NA | | 3 | | | |
| BB1-11200 | Mud Creek | | NA | | NA | | NA | | 3 | | | |
| BB1-11300 | Cedar Creek | | NA | | NA | | NA | | 3 | | | |
| BB1-11400 | Bear Creek | | NA | | NA | | NA | | 3 | | | |
| BB1-11410 | Pierce Creek | | S | | NA | | NA | S | 2 | | | Aquatic community assessment |
| BB1-11500 | Bear Creek | | S | | NA | | NA | S | 2 | | | Aquatic community assessment |
| BB1-11600 | Indian Creek | | NA | | NA | | NA | | 3 | | | |
| BB1-11610 | Town Creek | | NA | | NA | | NA | | 3 | | | |
| BB1-11700 | Indian Creek | | NA | | NA | | NA | | 3 | | | |
| BB1-11800 | Bottle Creek | | NA | | NA | | NA | | 3 | | | |

| Waterbody ID | Waterbody Name | Recreation | Aquatic Life | Public Drinking Water | Agriculture Water Supply | Industrial Water Supply | Aesthetics | Overall Assessment | 2010 IR | Impairments | Parameters of Concern | Comments/Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BB1-11900 | Cub Creek | | S | | NA | | NA | S | 2 | | | Aquatic community assessment |
| BB1-12000 | Soap Creek | | S | | NA | | NA | S | 2 | | | Aquatic community assessment |
| BB1-20000 | Big Blue River | I | I | | S | | S | I | 5 | E. coli, May-June atrazine, Selenium | E. coli, Atrazine Selenium, Unknown | E. coli TMDL approved 3/05, Fish consumption assessment |
| BB1-20100 | Clatonia Creek | | NA | | NA | | NA | | 3 | | | |
| BB2-10000 | Turkey Creek | I | I | | S | | S | I | 5 | E. coli, May-June atrazine, Selenium, Impaired aquatic community | E. coli, Atrazine, Selenium, Unknown | Aquatic community and Fish consumption assessment |
| BB2-10100 | Swan Creek | | S | | NA | | S | S | 2 | | | |
| BB2-10110 | South Fork Swan Creek | | S | | NA | | NA | S | 2 | | | Aquatic community assessment |
| BB2-10120 | North Fork Swan Creek | | NA | | NA | | NA | | 3 | | | |
| BB2-20000 | Turkey Creek | I | I | | NA | | S | I | 5 | E. coli, May-June atrazine | E. coli, Atrazine | Aquatic community assessment |
| BB2-20100 | Spring Creek | | NA | | NA | | NA | | 3 | | | |
| BB2-30000 | Turkey Creek | | S | | NA | | NA | S | 2 | | | Aquatic community assessment |
| BB2-40000 | Turkey Creek | | S | | NA | | NA | S | 2 | | | Aquatic community assessment |
| BB3-10000 | West Fork Big Blue River | I | I | | S | | S | I | 5 | E. coli, May-June atrazine, Selenium | E. coli, Atrazine, Selenium | E. coli TMDL approved 3/05, Delist fish consumption advisory based on new assessment |

| Waterbody ID | Waterbody Name | Recreation | Aquatic Life | Public Drinking Water | Agriculture Water Supply | Industrial Water Supply | Aesthetics | Overall Assessment | 2010 IR | Impairments | Parameters of Concern | Comments/Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BB3-10100 | Johnson Creek | | NA | | NA | | NA | | 3 | | | |
| BB3-10200 | Walnut Creek | | NA | | NA | | NA | | 3 | | | |
| BB3-10300 | Beaver Creek | | I | | NA | | S | I | 5 | May-June atrazine | Atrazine | |
| BB3-10400 | Beaver Creek | | I | | NA | | NA | I | 5 | Impaired aquatic community | Unknown | Aquatic community assessment |
| BB3-20000 | West Fork Big Blue River | I | I | | S | | S | I | 5 | E. coli, May-June atrazine, Impaired aquatic community | E. coli, Atrazine, Unknown | Aquatic community and Fish consumption assessment |
| BB3-20100 | School Creek | | NA | | NA | | NA | | 3 | | | |
| BB3-30000 | West Fork Big Blue River | | S | | NA | | NA | S | 2 | | | Aquatic community assessment |
| BB4-10000 | Big Blue River | I | I | | S | | S | I | 5 | E. coli, May-June atrazine | E. coli, Atrazine | |
| BB4-20000 | Big Blue River | I | S | | S | | S | I | 5 | E. coli | E. coli | Delist atrazine-assessment shows full support |
| BB4-20100 | Coon Creek | | NA | | NA | | NA | | 3 | | | |
| BB4-20200 | Wolf Creek | | NA | | NA | | NA | | 3 | | | |
| BB4-20300 | Crooked Creek | | NA | | NA | | NA | | 3 | | | |
| BB4-20400 | Clark Creek | | NA | | NA | | NA | | 3 | | | |
| BB4-20500 | Unnamed Creek | | S | | NA | | NA | S | 2 | | | Aquatic community assessment |
| BB4-20600 | Plum Creek | | S | | NA | | NA | S | 2 | | | Aquatic community assessment |
| BB4-20610 | Big Weedy Creek | | NA | | NA | | NA | | 3 | | | |
| BB4-20700 | Plum Creek | | S | | NA | | NA | S | 2 | | | Aquatic community |

| Waterbody ID | Waterbody Name | Recreation | Aquatic Life | Public Drinking Water | Agriculture Water Supply | Industrial Water Supply | Aesthetics | Overall Assessment | 2010 IR | Impairments | Parameters of Concern | Comments/Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | assessment |
| BB4-20800 | Lincoln Creek | | I | | S | | S | I | 5 | May-June atrazine, Selenium, Impaired aquatic community | Atrazine, Selenium, Unknown | Aquatic community and Fish consumption assessment |
| BB4-20900 | Lincoln Creek | | I | | NA | | NA | I | 5 | Impaired aquatic community | Unknown | Aquatic community assessment |
| BB4-30000 | Big Blue River | | NA | | NA | | NA | | 3 | | | |
| BB4-30100 | North Fork Big Blue River | | NA | | NA | | NA | | 3 | | | |
| BB4-30200 | North Fork Big Blue River | | NA | | NA | | NA | | 3 | | | |
| BB4-40000 | Big Blue River | | I | | S | | S | I | 5 | Low dissolved oxygen, Atrazine | Unknown, Atrazine | Aquatic community assessment |
| **Wetlands** | | | | | | | | | | | | |
| BB3-Undesig. | County Line WPA | | NA | | NA | | NA | | 3 | | | |
| BB3-Undesig. | Harvard WPA | | NA | | NA | | NA | | 3 | | | |
| BB3-Undesig. | Real WPA | | NA | | NA | | NA | | 3 | | | |
| BB3-Undesig. | Sininger WPA | | NA | | NA | | NA | | 3 | | | |
| BB3-Undesig. | Wilkins WPA | | NA | | NA | | NA | | 3 | | | |