

# *Alabama's Final 2004 Section 303(d) List Fact Sheet*

## **Background**

Section 303(d) of the Clean Water Act requires that each state identify those waters that do not currently support designated uses, and to establish a priority ranking of these waters by taking into account the severity of the pollution and the designated uses of such waters. For each waterbody on the list, the state is required to establish a total maximum daily load (TMDL) for the pollutant or pollutants of concern at a level necessary to implement the applicable water quality standards. Guidance issued in August 1997 by the Environmental Protection Agency (EPA) suggested that states also include a schedule for TMDL development. The TMDL schedule included as part of Alabama's Final 2004 List provides the expected date the specific TMDL will be drafted and submitted for public notice and comment. TMDL dates range from one to ten years following EPA approval of the Final 2004 303(d) List. For some waterbody/pollutant combinations the Draft TMDL date is historical (i.e. 2002), which signifies a Draft TMDL has been established but remains to be finalized and approved for various reasons.

## **Alabama's Final 2004 Section 303(d) List**

Alabama's 2004 Section 303(d) List includes segments of rivers, streams, lakes, reservoirs, and estuaries that either do not support or partially support their currently designated use or uses. Most of the waterbodies on the 2004 Section 303(d) List also appeared on Alabama's 2002 Section 303(d) List. The Department has attempted to obtain and evaluate all existing and readily available water quality-related data and information. The notice soliciting this information is included in **Appendix A**. The notice was published in Alabama's four major daily newspapers, appeared on the Department's web page, and was mailed to the Department's general mailing list. The Final 2004 §303(d) List has been developed using the Final 2002 §303(d) List approved by EPA on July 14, 2003 as the starting point. Data in the Department's multiple databases, information from §319 nonpoint assessments, special watershed studies, other federal and state agencies, industries, and watershed initiatives were evaluated as the Final 2004 §303(d) List was compiled. Any individual or organization may submit additional data or information during the advertised comment period relative to water quality impairment in waterbodies in Alabama. Chemical, physical, and biological data collected primarily during the previous five years have been considered in the preparation of the 2004 §303(d) List. Data older than five years was generally not considered suitable for adding new segments to the list, except when the data may be used to demonstrate water quality trends. Data sources include the Alabama Department of Environmental Management, the Alabama Department of Public Health, the Geological Survey of Alabama, the United States Geological Survey, the Tennessee Valley Authority, other public agencies, universities, county and municipal governments, and industries.

The list contains information such as the waterbody name, county(s) in which the listed segment is located, dates when the data on which the listing is based were collected, cause(s) for the use impairment, the source(s) of the pollutant(s) causing the impairment, the size of the impaired segment, and the location of the listed waterbody. Also included on the list is the segment's priority ranking (high, low, medium), which was developed using the prioritization strategy included in **Appendix B**.

Use-support status for waterbodies was determined in several ways. In cases where the monitored data was primarily chemical data from the water column, use-support status was based on the percentage of measurements not meeting applicable water quality criteria. More specifically, when 10 percent or fewer measurements exceeded a water quality criterion, the waterbody was considered to be fully supporting its designated use. When less than 25 percent but more than 10 percent of the measurements exceeded a water quality criterion, the waterbody was considered to be partially supporting its designated use. When more than 25 percent of the measurements exceeded a water quality criterion, the waterbody was considered to not be supporting its designated use. In other waterbodies, use-support status was assigned based on fish consumption or shellfish harvesting advisories issued by the Alabama Department of Public Health. When available, biological assessment data were used in combination with other surface water quality data or information to arrive at an overall use support determination. Alabama's water quality assessment methodology is included as **Appendix C**.

### **Changes Since the Final 2002 Section 303(d) List**

A number of differences exist between the Final 2002 Section 303(d) List and the Final 2004 303(d) List. Many of the changes were to correct errors or omissions in the 2002 List and to provide additional or updated information about waterbodies on the list. Other significant changes since 2002 include the addition and deletion of waterbodies. **Table 1** shows the waterbody/pollutant combinations that were added to Alabama's §303(d) List and the justification for the additions. **Table 2** provides the waterbody/pollutant combinations that were removed from the list and the corresponding justification for each removal.

Changes have also been made to the TMDL completion schedule included on the Final 2004 Section 303(d) List. The changes reflect the pace of TMDL development that can reasonably be expected given ADEM's current funding and staffing levels. The TMDL schedule provides the expected date the specific TMDL will be drafted and submitted for public notice and comment. TMDL dates range from one to seven years following EPA approval of the Final 2004 303(d) List. Where more than one TMDL is required for a segment, TMDLs for specific pollutants may be developed in advance of the expected date shown on the list. A notice of availability will be published on the Department's web page as draft TMDLs are completed and offered for public review and comment.

**Table 3** provides a listing of other changes appearing on the Final 2004 303(d) List that were not on the Final 2002 List. Most of these changes result from the use of the revised hydrological unit codes for Alabama which are the basis for the assessment unit number assigned to each listed segment. Many previously listed segments have been subdivided to coincide with the new hydrological unit codes and to more closely reflect the designated uses shown in ADEM Administrative Rules 335-6-11-.02. Segment lengths for some previously listed segments may be slightly different due to the use of the available high resolution National Hydrography Database (NHD) for delineation of listed segments.

**Table 4** provides revisions made between the Draft 2004 List and the Final 2004 List. These revisions were made to the list as a result of additional minor errors or omissions identified by ADEM staff since the Draft 2004 303(d) List was public noticed.

**Table 1**  
**Alabama's Final 2004 §303(d) List**  
**Waterbody/Pollutant Combinations Added to the List**

The waterbody/pollutant combinations listed in the following table were added to Alabama's Final 2004 §303(d) List for the reasons presented in the table.

| <b>Assessment Unit</b> | <b>Waterbody Name</b> | <b>River Basin</b> | <b>County</b> | <b>Causes</b> | <b>Basis for Addition to the List</b>   | <b>Source / Date of Data</b>                |
|------------------------|-----------------------|--------------------|---------------|---------------|---|---|
| AL03160112-0101-200    | Opossum Creek         | Black Warrior      | Jefferson     | Mercury       | Alabama Fish Consumption Advisory issued by the Alabama Department of Public Health in March 2003 advising "No Consumption" of largemouth bass. | ADPH Fish Consumption Advisory / March 2003 |
| AL03160112-0101-101    | Valley Creek          | Black Warrior      | Jefferson     | Mercury       | Alabama Fish Consumption Advisory issued by the Alabama Department of Public Health in March 2003 advising "No Consumption" of largemouth bass. | ADPH Fish Consumption Advisory / March 2003 |
| AL03150202-0202-101    | Buck Creek            | Cahaba             | Shelby        | Pathogens     | Geometric mean of 5 samples collected during 2003 exceeded the summer geometric mean criterion of 200 col/100 mL.                               | ADEM / 2003                                 |
| AL03150202-0202-401    | Cahaba Valley Creek   | Cahaba             | Shelby        | Pathogens     | Eleven of 36 samples exceeded the single sample maximum criterion.  | USGS / 1999-2000                            |

| <b>Assessment Unit</b> | <b>Waterbody Name</b> | <b>River Basin</b> | <b>County</b>  | <b>Causes</b> | <b>Basis for Addition to the List</b>   | <b>Source / Date of Data</b>                      |
|------------------------|-----------------------|--------------------|----------------|---------------|---|---|
| AL03140201-1001-700    | UT to Harrand Creek   | Choctawhahtchee    | Coffee         | Siltation     | Habitat and Macroinvertebrate Assessment conducted in 1999 by ADEM indicated poor habitat and EPT communities due to siltation. This segment is currently listed for nutrients. | ADEM / 1999                                       |
| AL03150105-0807-200    | Mud Creek             | Coosa              | Cherokee       | Pathogens     | Geometric mean of 5 samples collected during 2002 exceeded 200 col/100 ml criterion.  | ADEM / 2002                                       |
| AL03150105-0807-102    | Spring Creek          | Coosa              | Cherokee       | Pathogens     | Geometric mean of 5 samples collected during 2002 exceeded 200 col/100 ml criterion.  | ADEM / 2002                                       |
| AL03160205-0202-300    | Bolton Branch         | Mobile             | Mobile         | Pathogens     | Five of 40 fecal coliform samples collected by the MAWSS during 2003 exceeded the single sample maximum criterion.  | Mobile Area Water and Sewer Service (MAWSS) /2003 |
| AL03160205-0202-400    | Eslava Creek          | Mobile             | Mobile         | Pathogens     | Seven of 40 fecal coliform samples collected by the MAWSS during 2003 exceeded the single sample maximum criterion.   | Mobile Area Water and Sewer Service (MAWSS) /2003 |
| AL03160204-0201-200    | Middle River          | Mobile             | Mobile Baldwin | Mercury       | Alabama Fish Consumption Advisory issued by the Alabama Department of Public Health in March 2003 advising "No Consumption" of largemouth bass.                                 | March 2003 ADPH Fish Consumption Advisory         |

| <b>Assessment Unit</b> | <b>Waterbody Name</b>                | <b>River Basin</b> | <b>County</b> | <b>Causes</b> | <b>Basis for Addition to the List</b>  | <b>Source / Date of Data</b>                |
|------------------------|--------------------------------------|--------------------|---------------|---------------|--|---|
| AL03160204-0504-102    | Threemile Creek                      | Mobile             | Mobile        | Pathogens     | Three of seven fecal coliform samples collect by USGS in 2000 – 2001 exceeded the single sample maximum criterion. Threemile Creek is currently listed for OE/DO and chlordanes. | USGS / 2000                                 |
| AL03160204-0504-300    | Toulmins Spring Branch               | Mobile             | Mobile        | Pathogens     | Four of seven fecal coliform samples collected by USGS in 2000 – 2001 exceeded the single sample maximum criterion.  | USGS / 2000                                 |
| AL03160204-0504-500    | Unnamed Tributary to Threemile Creek | Mobile             | Mobile        | Pathogens     | Five of seven fecal coliform samples collected by USGS in 2000 – 2001 exceeded the single sample maximum criterion.  | USGS / 2000                                 |
| AL03140305-0301-100    | Big Escambia Creek                   | Perdido-Escambia   | Escambia      | Mercury       | Alabama Fish Consumption Advisory issued by the Alabama Department of Public Health in March 2003 advising “No Consumption” of largemouth bass.                                  | ADPH Fish Consumption Advisory / March 2003 |
| AL03140304-0605-100    | Little Escambia Creek                | Perdido-Escambia   | Escambia      | Mercury       | Alabama Fish Consumption Advisory issued by the Alabama Department of Public Health in March 2003 advising “No Consumption” of spotted bass.                                     | ADPH Fish Consumption Advisory / March 2003 |

| <b>Assessment Unit</b> | <b>Waterbody Name</b> | <b>River Basin</b> | <b>County</b> | <b>Causes</b> | <b>Basis for Addition to the List</b>   | <b>Source / Date of Data</b>                |
|------------------------|-----------------------|--------------------|---------------|---------------|---|---|
| AL03140304-0106-100    | Conecuh River         | Perdido-Escambia   | Escambia      | Mercury       | Alabama Fish Consumption Advisory issued by the Alabama Department of Public Health in March 2003 advising "No Consumption" of largemouth bass. | ADPH Fish Consumption Advisory / March 2003 |
| AL03140106-0603-101    | Blackwater River      | Perdido-Escambia   | Baldwin       | Mercury       | Alabama Fish Consumption Advisory issued by the Alabama Department of Public Health in March 2003 advising "No Consumption" of largemouth bass. | ADPH Fish Consumption Advisory / March 2003 |
| AL03140104-0104-100    | Blackwater River      | Perdido-Escambia   | Escambia      | Mercury       | Alabama Fish Consumption Advisory issued by the Alabama Department of Public Health in March 2003 advising "No Consumption" of largemouth bass. | ADPH Fish Consumption Advisory / March 2003 |
| AL03140103-0402-100    | Yellow River          | Perdido-Escambia   | Covington     | Mercury       | Alabama Fish Consumption Advisory issued by the Alabama Department of Public Health in March 2003 advising "No Consumption" of largemouth bass. | ADPH Fish Consumption Advisory / March 2003 |

| <b>Assessment Unit</b> | <b>Waterbody Name</b> | <b>River Basin</b> | <b>County</b> | <b>Causes</b>      | <b>Basis for Addition to the List</b>  | <b>Source / Date of Data</b>                |
|------------------------|-----------------------|--------------------|---------------|--------------------|--|---|
| AL06030004-0105-101    | Elk River             | Tennessee          | Limestone     | Nutrients          | The growing season average chlorophyll-a concentration is 2 times the average of other tributary embayments on Wheeler Reservoir. The growing season average total phosphorus for Elk River is also over 2 times the average for other tributary embayments. | TVA / 1999-2002                             |
| AL03160203-1103-102    | Tombigbee River       | Lower Tombigbee    | Mobile        | Mercury            | Alabama Fish Consumption Advisory issued by the Alabama Department of Public Health in March 2003 advising "No Consumption" of largemouth bass and channel catfish.  | ADPH Fish Consumption Advisory / March 2003 |
| AL03160203-0601-100    | Bassett Creek         | Lower Tombigbee    | Clarke        | Pathogens          | One of eight fecal coliform measurements was greater than 2000 at two different stations on Bassett Creek.   | ADEM / 2001-02                              |
| AL03160203-1103-700    | Bilbo Creek           | Lower Tombigbee    | Washington    | OE/DO              | Five of 13 dissolved oxygen measurements were less than 5.0 mg/L.  | ADEM / 2001-02                              |
| AL03160106-0606-101    | Factory Creek         | Upper Tombigbee    | Sumter        | OE/DO<br>Nutrients | Four of 7 dissolved oxygen measurements were less than 5.0 mg/L. The average chlorophyll-a concentration was over 3 times the average of the other embayment stations on Lake Demopolis.   | ADEM / 2001                                 |

**Table 2**  
**Alabama's Final 2004 §303(d) List**  
**Waterbody/Pollutants Removed from the 2002 List**

The waterbody/pollutant combinations listed in the following table are proposed for removal from Alabama's 2002 §303(d) List and will not be included on Alabama's Final 2004 §303(d) List for the reasons presented.

| <b>Waterbody ID</b> | <b>Waterbody Name</b>             | <b>River Basin</b> | <b>County</b> | <b>Pollutant</b> | <b>Good Cause Justification for Removal</b>   |
|---------------------|-----------------------------------|--------------------|---------------|------------------|---|
| AL/Alabama R_01     | Alabama River<br>(Claiborne Lake) | Alabama            | Wilcox        | Nutrients        | Data collected by ADEM since 1990 indicate chlorophyll- <u>a</u> levels are in compliance with a chlorophyll- <u>a</u> criterion of 15 ug/L being proposed for the dam forebay of Claiborne Lake. |
| AL/Alabama R_03     | Alabama River<br>(Claiborne Lake) | Alabama            | Wilcox        | Nutrients        | Data collected by ADEM since 1990 indicate chlorophyll- <u>a</u> levels are in compliance with a chlorophyll- <u>a</u> criterion of 15 ug/L being proposed for the dam forebay of Claiborne Lake. |
| AL/Alabama R_02     | Alabama River<br>(Claiborne Lake) | Alabama            | Wilcox        | Nutrients        | Data collected by ADEM since 1990 indicate chlorophyll- <u>a</u> levels are in compliance with a chlorophyll- <u>a</u> criterion of 15 ug/L being proposed for the dam forebay of Claiborne Lake. |



| <b>Waterbody ID</b> | <b>Waterbody Name</b>          | <b>River Basin</b> | <b>County</b> | <b>Pollutant</b> | <b>Good Cause Justification for Removal</b>   |
|---------------------|--------------------------------|--------------------|---------------|------------------|---|
| AL/03160109-030_01  | Brindley Creek                 | Black Warrior      | Cullman       | OE/DO            | ADEM performed an intensive survey in 2001 where no dissolved oxygen concentrations below 5.0 mg/l were measured. A combination of the DO data from the 2001-2003 303(d) sampling program yielded a total of seventy-eight samples at four stations. Of these seventy-eight samples collected, no dissolved oxygen values less than 5.0 mg/l were measured. Therefore, more recent and accurate data shows that Brindley Creek is fully supporting its use classification with respect to dissolved oxygen. |
| AL/03160109-030_01  | Brindley Creek (lower segment) | Black Warrior      | Cullman       | Pathogens        | Data collected by ADEM from 1997 to 2002 showed that 6 stations located on the lower portion of Brindley Creek did not report any exceedances of the single sample maximum for the fecal coliform criterion. Thus, the lower portion of Brindley Creek for 8.93 miles will be removed from the 303(d) list as the data shows it is fully supporting its use classification with respect to pathogens.   |
| AL/03160109-050_01  | Broglen River                  | Black Warrior      | Cullman       | Pathogens        | Data collected by ADEM between 1997 and 2002 indicated an exceedance of the single sample maximum criterion of 2,000 col/100 ml to be less than 10%. One of sixteen samples exceeded the single sample maximum criterion.   |
| AL/03160110-090_01  | Crooked Creek                  | Black Warrior      | Cullman       | Pathogens        | EPA Finalized TMDL on January 30, 2003.   |
| AL/03160109-040_01  | Eightmile Creek                | Black Warrior      | Cullman       | Pathogens        | Data collected by ADEM in 2001 indicated no exceedances of the fecal coliform criterion. This data consisted of 20 samples. Out of 4 geometric means all were below the summer geometric mean criterion of 200 col/100 ml.  |

| <b>Waterbody ID</b> | <b>Waterbody Name</b> | <b>River Basin</b> | <b>County</b> | <b>Pollutant</b> | <b>Good Cause Justification for Removal</b>  |
|---------------------|-----------------------|--------------------|---------------|------------------|--|
| AL/03160111-150_02  | Locust Fork           | Black Warrior      | Jefferson     | OE/DO            | Of 60 samples collected in the past five years, two measured less than 5.0 mg/L, resulting in an exceedance of only 3%. In 2003, ADEM also collected diurnal DO measurements which revealed no exceedances of ADEM's DO criterion. This data demonstrates that Locust Fork is fully supporting its use classification with respect to OE/DO. |
| AL/03160109-020_02  | Long Branch           | Black Warrior      | Cullman       | Pathogens        | EPA Finalized TMDL on January 30, 2003.  |
| AL/03160110-080_01  | Rock Creek            | Black Warrior      | Winston       | Pathogens        | EPA Finalized TMDL on January 30, 2003.  |
| AL/03160109-080_01  | Thacker Creek         | Black Warrior      | Cullman       | Pathogens        | EPA Finalized TMDL on January 30, 2003.  |
| AL/03150202-060_02  | Mill Creek            | Cahaba             | Jefferson     | Pathogens        | EPA Finalized TMDL on October 29, 2003.  |
| AL/03150202-060_04  | Cooley Creek          | Cahaba             | Jefferson     | Pathogens        | EPA Finalized TMDL on October 29, 2003.  |
| AL/03150202-170_01  | Dry Creek             | Cahaba             | Dallas        | Pathogens        | EPA Finalized TMDL on October 29, 2003.  |
| AL/03150202-060_03  | Mud Creek             | Cahaba             | Jefferson     | Pathogens        | EPA Finalized TMDL on October 29, 2003.  |
| AL/03150202-060_01  | Shades Creek          | Cahaba             | Jefferson     | Pathogens        | EPA Finalized TMDL on October 29, 2003.  |
| AL/03150105-180_01  | UT to Weiss Lake      | Coosa              | Cherokee      | Ammonia          | Data collected by ADEM in 2002 indicated no exceedances of EPA's recommended ammonia criterion.  |
| AL/03150105-180_01  | UT to Weiss Lake      | Coosa              | Cherokee      | Nutrients        | Data collected by ADEM in 2002 did not show any indication of nutrient enrichment. A habitat assessment was also conducted which resulted in a habitat score of "excellent."   |
| AL/03150105-180_01  | UT to Weiss Lake      | Coosa              | Cherokee      | OE/DO            | Data collected by ADEM in 2002 indicated no exceedances of the dissolved oxygen criterion of 5.0 mg/l. Six samples were analyzed with a minimum of 5.69 mg/l and a maximum of 10.95 mg/l.  |
| AL/03150105-180_01  | UT to Weiss Lake      | Coosa              | Cherokee      | Pathogens        | Data collected by ADEM in 2002 indicated no exceedances of the fecal coliform criterion. Twelve samples were analyzed.   |

| <b>Waterbody ID</b> | <b>Waterbody Name</b>   | <b>River Basin</b> | <b>County</b> | <b>Pollutant</b> | <b>Good Cause Justification for Removal</b>   |
|---------------------|-------------------------|--------------------|---------------|------------------|---|
| AL/03150106-080_01  | Black Creek             | Coosa              | Etowah        | OE/DO            | Of 21 samples collected, from 2 stations located on the listed segment collected during 2002 and 2003, none were measured below the allowable water quality criteria. In addition, a major point source is no longer discharging to Black Creek.  |
| AL/03150106-080_01  | Black Creek             | Coosa              | Etowah        | Ammonia          | Data collected during 2002 and 2003 indicated exceedances of EPA's recommended water quality criteria for ammonia. In addition, a major point source is no longer discharging to Black Creek.   |
| AL/Mitchell Res_01  | Lake Mitchell           | Coosa              | Coosa         | OE/DO            | Based on the analysis of 99 DO samples collected at five different stations between 1995 and 2000, no station exceeds the dissolved oxygen criterion of 5 mg/l in more than 10% of the samples.   |
| AL/03150106-050_01  | Little Wills Creek      | Coosa              | DeKalb        | Nutrients        | Recent ADEM habitat and macroinvertebrate assessments of Little Wills Creek revealed "good" ratings when compared to composite scores from four ecoregional reference sites.  |
| AL/03160204-030_01  | Bayou Sara/Norton Creek | Mobile             | Mobile        | Nutrients        | Data collected by ADEM in 2001 and 2002 indicate nutrient levels are at or below the 90 <sup>th</sup> percentile concentrations of TP and TN from the three ecological reference streams (sites) used in the analysis. The median TP concentration for the three stations was below the ecological reference stream value. The median TN concentration for the three stations were 0.899 mg/L, 0.615 mg/L, and 0.876 mg/L and the ecological reference stream was 0.885 mg/L. |

| <b>Waterbody ID</b> | <b>Waterbody Name</b> | <b>River Basin</b> | <b>County</b> | <b>Pollutant</b> | <b>Good Cause Justification for Removal</b>  |
|---------------------|-----------------------|--------------------|---------------|------------------|--|
| AL/03160205-070_01  | Intracoastal Waterway | Mobile             | Baldwin       | OE/DO            | Of 41 Samples collected from both listed Intracoastal waterway segments none were less than the water quality criterion for dissolved oxygen.  |
| AL/03160205-010_01  | Mobile Bay            | Mobile             | Mobile        | OE/DO            | Of 39 samples collected by ADEM from 2000 though 2003, no exceedances of water quality criteria for dissolved oxygen were indicated.   |
| AL/03140107-040_01  | Intracoastal Waterway | Perdido-Escambia   | Baldwin       | OE/DO            | Of 41 Samples collected from both listed Intracoastal waterway segments none exceeded the water quality criteria for dissolved oxygen.   |
| AL/03150109-190_01  | Sugar Creek           | Tallapoosa         | Tallapoosa    | Metals (Cu)      | Of 13 samples collected by ADEM in 2003, none exceeded the water quality criteria for metals. A benthic macroinvertebrate and habitat assessment conducted by ADEM in 2003 showed fair and good ratings, respectively. In addition, the point source previously contributing to Copper impairments has been removed. |
| AL/03150109-190_01  | Sugar Creek           | Tallapoosa         | Tallapoosa    | Color            | A benthic macroinvertebrate and habitat assessment conducted by ADEM in 2003 showed fair and good ratings respectively. In addition, the point source previously contributing to color impairments has been removed.   |
| AL/06030002-230_01  | Aldridge Creek        | Tennessee          | Madison       | Siltation        | EPA Approved TMDL on October 20, 2003.   |
| AL/06030004-080_01  | Big Creek             | Tennessee          | Limestone     | OE/DO            | Data collected in 1997 by TVA and in 1998 and 2003 by ADEM indicated no exceedances of the dissolved oxygen criterion.   |
| AL/06030005-010_01  | Big Nance Creek       | Tennessee          | Lawrence      | Siltation        | EPA Approved TMDL on October 20, 2003.   |
| AL/06030002-360_01  | Big Shoal Creek       | Tennessee          | Lawrence      | OE/DO            | EPA Finalized TMDL on September 30, 2003.  |

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|---------------------|-----------------------|--------------------|---------------|------------------|--|
| AL/06030002-180_01  | Brier Fork            | Tennessee          | Madison       | Unknown Toxicity | Data collected in 1997-1999 and 2001-2003 did not reveal any pollutant that might be causing or contributing to instream toxicity in Brier Fork. The dissolved oxygen criterion of 5.0 mg/L was not met in two of seventy samples and the pH exceeded 8.5 s.u. only once. In addition, there were no indicated exceedances of dissolved metals, organics, or pesticide/herbicide criteria from the aforementioned sampling events. The only NPDES discharges in the Brier Fork watershed are small domestic WWTP's that are not typically associated with discharging toxic materials. |
| AL/06030002-220_01  | Cane Creek            | Tennessee          | Marshall      | Nutrients        | Data collected in 1998 and 2003 indicate nutrient levels are less than 90 <sup>th</sup> percentile values for the reference sites for the ecoregion. The median total phosphorus concentration for Cane Creek was 0.031 mg/L and the reference value was 0.051 mg/L.   |
| AL/06030002-220_01  | Cane Creek            | Tennessee          | Marshall      | Siltation        | EPA Approved TMDL on October 20, 2003.   |
| AL/06030002-330_06  | Cedar Creek           | Tennessee          | Morgan        | OE/DO            | EPA Finalized TMDL on September 30, 2003.  |
| AL/06030002-330_06  | Cedar Creek           | Tennessee          | Morgan        | Pathogens        | EPA Finalized TMDL on September 30, 2003.  |
| AL/06030002-190_01  | Chase Creek           | Tennessee          | Madison       | Siltation        | EPA Approved TMDL on October 20, 2003.   |
| AL/06030002-070_01  | Cole Spring Branch    | Tennessee          | Jackson       | Siltation        | EPA Approved TMDL on October 20, 2003.   |
| AL/06030002-340_01  | Crowdabout Creek      | Tennessee          | Morgan        | Siltation        | EPA Approved TMDL on October 20, 2003.   |
| AL/06030002-340_01  | Crowdabout Creek      | Tennessee          | Morgan        | Pathogens        | EPA Finalized TMDL on September 30, 2003.  |
| AL/06030002-340_01  | Crowdabout Creek      | Tennessee          | Morgan        | OE/DO            | EPA Finalized TMDL on September 30, 2003.  |
| AL/06030002-330_07  | East Fork Flint Creek | Tennessee          | Cullman       | OE/DO            | EPA Finalized TMDL on September 30, 2003.  |
| AL/06030002-330_07  | East Fork Flint Creek | Tennessee          | Cullman       | Pathogens        | EPA Finalized TMDL on September 30, 2003.  |
| AL/06030002-360_04  | Elam Creek            | Tennessee          | Lawrence      | OE/DO            | EPA Finalized TMDL on September 30, 2003.  |

| <b>Waterbody ID</b> | <b>Waterbody Name</b>    | <b>River Basin</b> | <b>County</b> | <b>Pollutant</b> | <b>Good Cause Justification for Removal</b>  |
|---------------------|--------------------------|--------------------|---------------|------------------|--|
| AL/Wheeler Res_02   | Elk River                | Tennessee          | Limestone     | OE/DO            | Data has been collected by TVA, International Paper Company, and ADEM from 1988 -2003. There were no dissolved oxygen concentrations less than the criterion from samples taken by ADEM and International Paper Company. In all, 2 of 278 (0.7%) measurements were less than 5.0 mg/L. |
| AL/06030002-440_02  | First Creek              | Tennessee          | Lauderdale    | Pathogens        | Data collected by ADEM in 1998 and 2003 indicated no exceedances of the single sample maximum criterion.   |
| AL/06030002-360_03  | Flat Creek               | Tennessee          | Lawrence      | Siltation        | EPA Approved TMDL on October 20, 2003.   |
| AL/06030002-360_03  | Flat Creek               | Tennessee          | Lawrence      | OE/DO            | EPA Finalized TMDL on September 30, 2003.  |
| AL/06030002-330_01  | Flint Creek              | Tennessee          | Morgan        | OE/DO            | EPA Finalized TMDL on September 30, 2003.  |
| AL/06030002-330_01  | Flint Creek              | Tennessee          | Morgan        | Pathogens        | EPA Finalized TMDL on September 30, 2003.  |
| AL/06030002-330_01  | Flint Creek              | Tennessee          | Morgan        | Nutrients        | EPA Finalized TMDL on September 30, 2003.  |
| AL/06030002-330_01  | Flint Creek              | Tennessee          | Morgan        | Siltation        | EPA Approved TMDL on October 20, 2003.   |
| AL/06030006-040_02  | Harris Creek             | Tennessee          | Franklin      | Siltation        | EPA Approved TMDL on October 20, 2003.   |
| AL/06030002-340_02  | Herrin Creek             | Tennessee          | Morgan        | Siltation        | EPA Approved TMDL on October 20, 2003.   |
| AL/06030002-340_02  | Herrin Creek             | Tennessee          | Morgan        | OE/DO            | EPA Finalized TMDL on September 30, 2003.  |
| AL/06030002-240_02  | Huntsville Spring Branch | Tennessee          | Madison       | Metals           | Concentrations of dissolved arsenic and dissolved mercury exceeded criteria in 2 of 23 samples. These exceedances are considered to be due to natural conditions. Additionally concentrations in fish collected downstream on Indian Creek did not exceed FDA action levels.           |
| AL/06030002-250_02  | Indian Creek             | Tennessee          | Madison       | Siltation        | EPA Approved TMDL on October 20, 2003.   |
| AL/06030002-330_09  | Indian Creek             | Tennessee          | Morgan        | OE/DO            | EPA Finalized TMDL on September 30, 2003.  |
| AL/06030002-100_01  | L. Paint Rock Creek      | Tennessee          | Marshall      | Siltation        | EPA Approved TMDL on October 20, 2003.   |
| AL/06030002-300_01  | Limestone Creek          | Tennessee          | Limestone     | Siltation        | EPA Approved TMDL on October 20, 2003.   |
| AL/06030002-330_04  | Mack Creek               | Tennessee          | Morgan        | Siltation        | EPA Approved TMDL on October 20, 2003.   |
| AL/06030002-330_04  | Mack Creek               | Tennessee          | Morgan        | OE/DO            | EPA Finalized TMDL on September 30, 2003.  |

| <b>Waterbody ID</b> | <b>Waterbody Name</b> | <b>River Basin</b> | <b>County</b> | <b>Pollutant</b> | <b>Good Cause Justification for Removal</b>   |
|---------------------|-----------------------|--------------------|---------------|------------------|---|
| AL/06030002-410_01  | Mallard Creek         | Tennessee          | Lawrence      | Siltation        | EPA Approved TMDL on October 20, 2003.  |
| AL/06030002-360_02  | McDaniel Creek        | Tennessee          | Lawrence      | Siltation        | EPA Approved TMDL on October 20, 2003.  |
| AL/06030002-360_02  | McDaniel Creek        | Tennessee          | Lawrence      | OE/DO            | EPA Finalized TMDL on September 30, 2003.   |
| AL/06030002-270_04  | Mill Pond Creek       | Tennessee          | Marshall      | Pathogens        | ADEM pathogen data from June and August 2003 for Mill Pond Creek revealed no exceedances of ADEM's single sample criterion of 2,000 colonies/100 ml or summer geometric mean criterion of 200 colonies/100 ml.  |
| AL/06030001-170_01  | Mud Creek             | Tennessee          | Jackson       | OE/DO            | In 2003, ADEM sampled Mud Creek from March through October as part of the 303(d) sampling program. Of the 39 samples collected, none were less than the 5 mg/l criterion.   |
| AL/06030002-350_01  | No Business Creek     | Tennessee          | Morgan        | OE/DO            | EPA Finalized TMDL on September 30, 2003.   |
| AL/06030002-350_01  | No Business Creek     | Tennessee          | Morgan        | Pathogens        | EPA Finalized TMDL on September 30, 2003.   |
| AL/06030005-160_01  | Pond Creek            | Tennessee          | Colbert       | Metals           | Pond Creek was originally listed for copper and cyanide. Over 100 samples were collected by ADEM in 2000-2003 and CH2M Hill in 2003, and no exceedances were indicated for copper or cyanide. Three arsenic exceedances were found to be above the applicable water quality criteria, however these were determined to be below background levels, thus attributable to natural conditions. |
| AL/06030002-330_05  | Robinson Creek        | Tennessee          | Morgan        | Siltation        | EPA Approved TMDL on October 20, 2003.  |
| AL/06030002-330_05  | Robinson Creek        | Tennessee          | Morgan        | OE/DO            | EPA Finalized TMDL on September 30, 2003.   |
| AL/06030002-400_01  | Round Island Creek    | Tennessee          | Limestone     | Siltation        | EPA Approved TMDL on October 20, 2003.  |
| AL/06030001-270_01  | Scarham Creek         | Tennessee          | Marshall      | Siltation        | EPA Approved TMDL on October 20, 2003.  |
| AL/06030002-330_02  | Shoal Creek           | Tennessee          | Morgan        | OE/DO            | EPA Finalized TMDL on September 30, 2003.   |
| AL/06030002-330_02  | Shoal Creek           | Tennessee          | Morgan        | Pathogens        | EPA Finalized TMDL on September 30, 2003.   |

| <b>Waterbody ID</b> | <b>Waterbody Name</b> | <b>River Basin</b> | <b>County</b> | <b>Pollutant</b> | <b>Good Cause Justification for Removal</b>   |
|---------------------|-----------------------|--------------------|---------------|------------------|---|
| AL/06030001-220_01  | South Sauty Creek     | Tennessee          | DeKalb        | pH               | ADEM data from January to June 2003 revealed no exceedances out of 24 pH samples and AWW data from July 1997 to June 1999 revealed no exceedances out of 17 pH samples.                   |
| AL/06030002-390_01  | Swan Creek            | Tennessee          | Limestone     | Siltation        | EPA Approved TMDL on October 20, 2003.  |
| AL/06030002-330_03  | Town Branch           | Tennessee          | Morgan        | OE/DO            | EPA Finalized TMDL on September 30, 2003.   |
| AL/06030001-250_01  | Town Creek            | Tennessee          | DeKalb        | pH               | ADEM data from January to June 2003, for Town Creek revealed 1 exceedance out of 24 pH samples and AWW data from May 1996 to September 2002 revealed no pH exceedances out of 44 samples. |
| AL/06030002-350_03  | Village Branch        | Tennessee          | Morgan        | Siltation        | EPA Approved TMDL on October 20, 2003.  |
| AL/06030002-350_03  | Village Branch        | Tennessee          | Morgan        | OE/DO            | EPA Finalized TMDL on September 30, 2003.   |
| AL/06030002-350_02  | West Flint Creek      | Tennessee          | Morgan        | Siltation        | EPA Approved TMDL on October 20, 2003.  |
| AL/06030002-350_02  | West Flint Creek      | Tennessee          | Morgan        | Pathogens        | EPA Finalized TMDL on September 30, 2003.   |
| AL/06030002-350_02  | West Flint Creek      | Tennessee          | Morgan        | OE/DO            | EPA Finalized TMDL on September 30, 2003.   |



**Table 3**  
**List of Other Changes Appearing on the Final 2004 303(d) List**

| <b>Assessment Unit ID</b> | <b>Waterbody Name</b> | <b>River Basin</b> | <b>County</b>          | <b>Revision</b>   |
|---------------------------|-----------------------|--------------------|------------------------|---|
| AL03150201-0104-302       | Three Mile Branch     | Alabama            | Montgomery             | The length of this segment was corrected to 7.6 miles.  |
| AL03160109-0105-101       | Brindley Creek        | Black Warrior      | Cullman                | The length of this segment was corrected to 7.1 miles.  |
| AL03160109-0105-102       | Brindley Creek        | Black Warrior      | Cullman                | The length of this segment was corrected to 9.9 miles.  |
| AL03160109-0404-101       | Cane Creek            | Black Warrior      | Walker                 | This segment was created from the 2002 303(d) list Cane Creek segment to better match designated use classifications.   |
| AL03160109-0404-102       | Cane Creek            | Black Warrior      | Walker                 | This segment was created from the 2002 303(d) list Cane Creek segment to better match designated use classifications.   |
| AL03160109-0404-103       | Cane Creek            | Black Warrior      | Walker                 | This segment was created from the 2002 303(d) list Cane Creek segment to better match designated use classifications.   |
| AL03160111-0408-300       | Camp Branch           | Black Warrior      | Jefferson              | The length of this segment was corrected to 4.2 miles.  |
| AL03160112-0105-101       | Mud Creek             | Black Warrior      | Jefferson              | The length of this segment was corrected to 14.1 miles.   |
| AL03160112-0201-101       | Big Yellow Creek      | Black Warrior      | Jefferson              | The length of this segment was corrected to 14 miles.   |
| AL03150202-0103-300       | Lee Branch            | Cahaba             | Shelby                 | The length of this segment was corrected to 1.6 miles.  |
| AL03150202-0201-300       | Patton Creek          | Cahaba             | Shelby                 | The length of this segment was corrected to 8.3 miles.  |
| AL03150202-0503-102       | Cahaba River          | Cahaba             | Bibb                   | This segment was created from the 2002 303(d) list Cahaba River segment to better match designated use classifications. |
| AL03150202-0405-100       | Cahaba River          | Cahaba             | Bibb                   | This segment was created from the 2002 303(d) list Cahaba River segment to better match designated use classifications. |
| AL03150202-0203-101       | Cahaba River          | Cahaba             | Shelby                 | This segment was created from the 2002 303(d) list Cahaba River segment to better match designated use classifications. |
| AL03150202-0203-102       | Cahaba River          | Cahaba             | Shelby                 | This segment was created from the 2002 303(d) list Cahaba River segment to better match designated use classifications. |
| AL03150202-0201-101       | Cahaba River          | Cahaba             | Jefferson<br>Shelby    | This segment was created from the 2002 303(d) list Cahaba River segment to better match designated use classifications. |
| AL03150202-0201-102       | Cahaba River          | Cahaba             | Jefferson              | This segment was created from the 2002 303(d) list Cahaba River segment to better match designated use classifications. |
| AL03150202-0104-102       | Cahaba River          | Cahaba             | Jefferson<br>St. Clair | This segment was created from the 2002 303(d) list Cahaba River segment to better match designated use classifications. |
| AL03150202-0101-102       | Cahaba River          | Cahaba             | Jefferson              | This segment was created from the 2002 303(d) list Cahaba River segment to better match designated use classifications. |

| <b>Assessment Unit ID</b> | <b>Waterbody Name</b> | <b>River Basin</b> | <b>County</b>                           | <b>Revision</b>  |
|---------------------------|-----------------------|--------------------|---|--|
| AL03150202-0302-100       | Shades Creek          | Cahaba             | Jefferson<br>Bibb<br>Shelby             | The length of this segment was corrected to 56.3 miles.  |
| AL03130003-1307-100       | Barbour Creek         | Chattahoochee      | Barbour                                 | The length of this segment was corrected to 25.1 miles.  |
| AL03150105-1003-102       | Weiss Lake            | Coosa              | Cherokee                                | This segment was created from the 2002 303(d) list Weiss Lake segment to better match designated use classifications.        |
| AL03150105-1001-102       | Weiss Lake            | Coosa              | Cherokee                                | This segment was created from the 2002 303(d) list Weiss Lake segment to better match designated use classifications.        |
| AL03150106-0612-102       | Chocolocco Creek      | Coosa              | Talladega<br>Calhoun                    | Calhoun County was added as a location to this segment.  |
| AL03150106-0801-100       | Lake Logan Martin     | Coosa              | St. Clair<br>Talladega                  | This segment was created from the 2002 303(d) list Lake Logan Martin segment to better match designated use classifications. |
| AL03150106-0501-101       | Lake Logan Martin     | Coosa              | St. Clair<br>Talladega<br>Calhoun       | This segment was created from the 2002 303(d) list Lake Logan Martin segment to better match designated use classifications. |
| AL03150106-0501-102       | Lake Logan Martin     | Coosa              | St. Clair<br>Calhoun                    | This segment was created from the 2002 303(d) list Lake Logan Martin segment to better match designated use classifications. |
| AL03150106-0309-101       | Lake Neely Henry      | Coosa              | Etowah<br>St. Clair<br>Calhoun          | This segment was created from the 2002 303(d) list Lake Neely Henry segment to better match designated use classifications.  |
| AL03150106-0309-102       | Lake Neely Henry      | Coosa              | Etowah                                  | This segment was created from the 2002 303(d) list Lake Neely Henry segment to better match designated use classifications.  |
| AL03150106-0104-101       | Lake Neely Henry      | Coosa              | Etowah                                  | This segment was created from the 2002 303(d) list Lake Neely Henry segment to better match designated use classifications.  |
| AL03150106-0104-102       | Lake Neely Henry      | Coosa              | Etowah<br>Cherokee                      | This segment was created from the 2002 303(d) list Lake Neely Henry segment to better match designated use classifications.  |
| AL03150107-0401-100       | Lay Lake              | Coosa              | Talladega<br>Chilton<br>Coosa<br>Shelby | This segment was created from the 2002 303(d) list Lay Lake segment to better match designated use classifications.          |
| AL03150107-0101-102       | Lay Lake              | Coosa              | Talladega<br>Shelby                     | This segment was created from the 2002 303(d) list Lay Lake segment to better match designated use classifications.          |
| AL03150107-0808-102       | Lay Lake              | Coosa              | Talladega<br>Shelby<br>St. Clair        | This segment was created from the 2002 303(d) list Lay Lake segment to better match designated use classifications.          |
| AL03170008-0302-100       | Escatawpa River       | Escatawpa          | Mobile                                  | Swimming was added as a designated use to this segment.  |

| Assessment Unit ID  | Waterbody Name    | River Basin          | County            | Revision  |
|---------------------|-------------------|----------------------|-------------------|---|
| AL03170008-0402-700 | Collins Creek     | Escatawpa            | Mobile            | The length of this segment was corrected to 4.9 miles.  |
| AL03170009-0102-100 | Bayou la Batre    | Escatawpa            | Mobile            | The length of this segment was corrected to 5.2 miles.  |
| AL03160204-0403-103 | Eightmile Creek   | Mobile               | Mobile            | Public Water Supply was removed as a designated use for this segment. Also, the downstream location was corrected to US Highway 45.   |
| AL03160204-0504-101 | Threemile Creek   | Mobile               | Mobile            | This segment was created from the 2002 303(d) list Threemile Creek segment to better match designated use classifications. Also, the downstream location was corrected to the Mobile River. |
| AL03160204-0504-102 | Threemile Creek   | Mobile               | Mobile            | This segment was created from the 2002 303(d) list Threemile Creek segment to better match designated use classifications.  |
| AL03160204-0404-101 | Chickasaw Creek   | Mobile               | Mobile            | This segment was created from the 2002 303(d) list Chickasaw Creek segment to better match designated use classifications.  |
| AL03160204-0404-102 | Chickasaw Creek   | Mobile               | Mobile            | This segment was created from the 2002 303(d) list Chickasaw Creek segment to better match designated use classifications.  |
| AL03160204-0402-100 | Chickasaw Creek   | Mobile               | Mobile            | This segment was created from the 2002 303(d) list Chickasaw Creek segment to better match designated use classifications.  |
| AL03160204-0505-201 | Bay Minette Creek | Mobile               | Mobile            | The length of this segment was corrected to 17.9 miles.   |
| AL03160204-0505-201 | Tensaw River      | Mobile               | Baldwin           | This segment was created from the 2002 303(d) list Tensaw River segment to better match designated use classifications.   |
| AL03160204-0505-202 | Tensaw River      | Mobile               | Baldwin           | This segment was created from the 2002 303(d) list Tensaw River segment to better match designated use classifications.   |
| AL03160204-0105-302 | Tensaw River      | Mobile               | Baldwin           | This segment was created from the 2002 303(d) list Tensaw River segment to better match designated use classifications.   |
| AL03160204-0505-303 | Tensaw River      | Mobile               | Mobile<br>Baldwin | This segment was created from the 2002 303(d) list Tensaw River segment to better match designated use classifications.   |
| AL03160204-0505-100 | Mobile River      | Mobile               | Mobile            | This segment was created from the 2002 303(d) list Mobile River segment to better match designated use classifications.   |
| AL03160204-0303-102 | Mobile River      | Mobile               | Mobile            | This segment was created from the 2002 303(d) list Mobile River segment to better match designated use classifications.   |
| AL03160205-0204-101 | Dog River         | Mobile               | Mobile            | This segment was created from the 2002 303(d) list Dog River segment to better match designated use classifications.  |
| AL03160205-0204-102 | Dog River         | Mobile               | Mobile            | This segment was created from the 2002 303(d) list Dog River segment to better match designated use classifications.  |
| AL03140106-0506-100 | Styx River        | Perdido-<br>Escambia | Baldwin           | This segment was created from the 2002 303(d) list Styx River segment to better match designated use classifications.   |

| <b>Assessment Unit ID</b> | <b>Waterbody Name</b> | <b>River Basin</b> | <b>County</b>           | <b>Revision</b>  |
|---------------------------|-----------------------|--------------------|-------------------------|--|
| AL03140106-0502-100       | Styx River            | Perdido-Escambia   | Baldwin                 | This segment was created from the 2002 303(d) list Styx River segment to better match designated use classifications.      |
| AL03140301-0404-100       | Conecuh River         | Perdido-Escambia   | Covington               | This segment was created from the 2002 303(d) list Conecuh River segment to better match designated use classifications.   |
| AL03140301-0403-102       | Conecuh River         | Perdido-Escambia   | Covington<br>Crenshaw   | This segment was created from the 2002 303(d) list Conecuh River segment to better match designated use classifications.   |
| AL03150110-0703-100       | Cubahatchee Creek     | Tallapoosa         | Macon<br>Bullock        | Bullock County was added as a location to this segment.  |
| AL03150110-0903-101       | Line Creek            | Tallapoosa         | Macon<br>Montgomery     | Montgomery County was added as a location to this segment.   |
| AL03150110-0903-102       | Line Creek            | Tallapoosa         | Macon<br>Montgomery     | Montgomery County was added as a location to this segment.   |
| AL06030002-0405-100       | Flint River           | Tennessee          | Madison                 | This segment was created from the 2002 303(d) list Flint River segment to better match designated use classifications.     |
| AL06030002-0404-102       | Flint River           | Tennessee          | Madison                 | This segment was created from the 2002 303(d) list Flint River segment to better match designated use classifications.     |
| AL06030002-0604-100       | Town Creek            | Tennessee          | Morgan                  | The length of this segment was corrected to 5.5 miles.   |
| AL06030002-0603-102       | Cotaco Creek          | Tennessee          | Morgan                  | Swimming was added as a designated use to this segment.  |
| AL06030002-0601-300       | Hughes Creek          | Tennessee          | Morgan<br>Marshall      | Marshall County was added as a location to this segment.   |
| AL06030004-0105-101       | Elk River             | Tennessee          | Limestone<br>Lauderdale | Lauderdale County was added as a location to this segment.   |
| AL06030005-0701-201       | McKiernan Creek       | Tennessee          | Colbert                 | Public Water Supply and Swimming were added as designated uses to this segment.  |
| AL3160103-0204-202        | Purgatory Creek       | Upper<br>Tombigbee | Marion                  | This segment was created from the 2002 303(d) list Purgatory Creek segment to better match designated use classifications. |
| AL3160103-0204-203        | Purgatory Creek       | Upper<br>Tombigbee | Marion                  | This segment was created from the 2002 303(d) list Purgatory Creek segment to better match designated use classifications. |

**Table 4**  
**Additional Revisions made between the Draft 2004 List and the Final 2004 List**

| <b>Assessment Unit ID</b> | <b>Waterbody Name</b>        | <b>River Basin</b> | <b>County</b>     | <b>Revision</b>   |
|---------------------------|------------------------------|--------------------|-------------------|---|
| AL03150203-0805-102       | Alabama River                | Alabama            | Wilcox            | This segment was created from the draft 2004 303(d) list Alabama River segment to better match designated use classifications from ADEM regulations 335-6-11.                                     |
| AL03150203-0805-103       | Alabama River                | Alabama            | Wilcox            | This segment was created from the draft 2004 303(d) list Alabama River segment to better match designated use classifications from ADEM regulations 335-6-11.                                     |
| AL03150203-0805-104       | Alabama River                | Alabama            | Wilcox            | The Assessment Unit ID for this segment was renumbered from AL03150203-0805-103 to match the previous segment changes.  |
| AL03150203-0805-105       | Alabama River                | Alabama            | Wilcox            | This segment was created from the draft 2004 303(d) list Alabama River segment to better match designated use classifications from ADEM regulations 335-6-11.                                     |
| AL03150201-0309-100       | Catoma Creek                 | Alabama            | Montgomery        | The Assessment Unit ID for this segment was corrected from AL03150203-0309-101.   |
| AL03160109-0404-500       | Black Branch                 | Black Warrior      | Walker            | The length of this segment was corrected to 3.2 miles.  |
| AL03160109-0503-101       | Wolf Creek                   | Black Warrior      | Walker            | The length of this segment was corrected to 38.4 miles.   |
| AL03160109-0404-101       | Cane Creek (Oakman)          | Black Warrior      | Walker            | This segment was renamed to match its listing in chapter 335-6-11.  |
| AL03160109-0404-102       | Cane Creek (Oakman)          | Black Warrior      | Walker            | This segment was renamed to match its listing in chapter 335-6-11.  |
| AL03160109-0404-103       | Cane Creek (Oakman)          | Black Warrior      | Walker            | This segment was renamed to match its listing in chapter 335-6-11.  |
| AL03160111-0408-101       | Village Creek (Bayview Lake) | Black Warrior      | Jefferson         | This segment was renamed to match its listing in chapter 335-6-11.  |
| AL03160111-0408-102       | Village Creek                | Black Warrior      | Jefferson         | This segment was corrected from AL03160111-0408-103.  |
| AL03160111-0404-102       | Locust Fork                  | Black Warrior      | Blount, Jefferson | This segment was created from the original AL03160111-0404-102 Locust Fork segment from the draft 2004 303(d) list to better match designated use classifications from ADEM regulations 335-6-11. |

| Assessment Unit ID  | Waterbody Name         | River Basin      | County            | Revision  |
|---------------------|------------------------|------------------|-------------------|---|
| AL03160111-0306-102 | Locust Fork            | Black Warrior    | Blount, Jefferson | This segment was created from the original AL03160111-0404-102 Locust Fork segment from the draft 2004 303(d) list to better match designated use classifications from ADEM regulations 335-6-11. |
| AL03160111-0303-102 | Locust Fork            | Black Warrior    | Blount, Jefferson | This segment was created from the original AL03160111-0404-102 Locust Fork segment from the draft 2004 303(d) list to better match designated use classification changes.                         |
| AL03140201-0602-201 | Beaver Creek           | Choctawhatchee   | Houston           | The length of this segment was corrected to 2.0 miles.  |
| AL03140201-1001-700 | UT to Harrand Creek    | Choctawhatchee   | Coffee            | The length of this segment was corrected to 3.5 miles.  |
| AL03150107-0502-100 | Buxahatchee Creek      | Coosa            | Chilton, Shelby   | The length of this segment was corrected to 14 miles.   |
| AL03160204-0505-100 | Mobile River           | Mobile           | Mobile            | The length of this segment was corrected to 8.0 miles.  |
| AL03160204-0303-102 | Mobile River           | Mobile           | Mobile            | The length of this segment was corrected to 20.7 miles.   |
| AL03160205-0310-702 | UT to Bon Secour River | Mobile           | Baldwin           | The length of this segment was corrected to 1.5 miles.  |
| AL03160205-0204-102 | Dog River              | Mobile           | Mobile            | The upstream location of this segment was changed to Moore Creek to more accurately delineate this segment.   |
| AL03160204-0504-101 | Threemile Creek        | Mobile           | Mobile            | This segment was created from the original AL03160204-0504-101 Threemile Creek draft 2004 303(d) List segment to more accurately delineate this segment.  |
| AL03160204-0504-102 | Threemile Creek        | Mobile           | Mobile            | This segment was created from the original AL03160204-0504-102 Threemile Creek draft 2004 303(d) List segment to better match designated use classifications from ADEM regulations 335-6-11.      |
| AL03160204-0504-103 | Threemile Creek        | Mobile           | Mobile            | This segment was created from the original AL03160204-0504-102 Threemile Creek draft 2004 303(d) List segment to better match designated use classifications from ADEM regulations 335-6-11.      |
| AL03140103-0102-800 | UT to Jackson Lake 3-C | Perdido-Escambia | Covington         | The length of this segment was corrected to 1.8 miles.  |
| AL03150108-1004-300 | Wolf Creek             | Tallapoosa       | Randolph          | The length of this segment was corrected to 5.4 miles.  |
| AL03150109-0503-401 | Sugar Creek            | Tallapoosa       | Tallapoosa        | The length of this segment was corrected to 3.6 miles.  |
| AL03150110-0703-100 | Cubahatchee Creek      | Tallapoosa       | Macon, Bullock    | The length of this segment was corrected to 44.4 miles.   |
| AL06030001-0402-401 | Warren Smith Creek     | Tennessee        | Jackson           | The length of this segment was corrected to 1.9 miles.  |
| AL06030002-0105-101 | Guess Creek            | Tennessee        | Jackson           | The length of this segment was corrected to 11.1 miles.   |
| AL06030002-0304-100 | Mountain Fork          | Tennessee        | Madison           | The length of this segment was corrected to 15.3 miles.   |
| AL06030002-0307-100 | Brier Fork             | Tennessee        | Madison           | The length of this segment was corrected to 22.5 miles.   |

| Assessment Unit ID  | Waterbody Name           | River Basin     | County           | Revision  |
|---------------------|--------------------------|-----------------|------------------|---|
| AL06030002-0306-100 | Beaverdam Creek          | Tennessee       | Madison          | The length of this segment was corrected to 22.1 miles.                         |
| AL06030002-0404-200 | Goose Creek              | Tennessee       | Madison          | The length of this segment was corrected to 8.9 miles.                          |
| AL06030002-0401-102 | Flint River              | Tennessee       | Madison          | The length of this segment was corrected to 15.3 miles.                         |
| AL06030002-0403-101 | Hurricane Creek          | Tennessee       | Madison          | The length of this segment was corrected to 7.3 miles.                          |
| AL06030002-0502-101 | Huntsville Spring Branch | Tennessee       | Madison          | The length of this segment was corrected to 11.1 miles.                         |
| AL06030002-0505-101 | Indian Creek             | Tennessee       | Madison          | The Assessment Unit ID for this segment was corrected from AL06030002-0503-101. |
| AL06030002-0604-100 | Town Creek               | Tennessee       | Morgan           | The length of this segment was corrected to 8.7 miles.                          |
| AL06030002-0603-102 | Cotaco Creek             | Tennessee       | Morgan           | The length of this segment was corrected to 5.4 miles.                          |
| AL06030002-0602-102 | West Fork Cotaco Creek   | Tennessee       | Morgan           | The length of this segment was corrected to 7.9 miles.                          |
| AL06030002-0601-300 | Hughes Creek             | Tennessee       | Morgan, Marshall | The length of this segment was corrected to 5.5 miles.                          |
| AL06030002-0802-201 | French Mill Creek        | Tennessee       | Limestone        | The length of this segment was corrected to 5.2 miles.                          |
| AL06030002-1008-200 | Flat Creek               | Tennessee       | Lawrence         | The length of this segment was corrected to 7.8 miles.                          |
| AL06030002-1204-102 | Second Creek             | Tennessee       | Lauderdale       | The length of this segment was corrected to 13 miles.                           |
| AL06030004-0102-100 | Shoal Creek              | Tennessee       | Limestone        | The length of this segment was corrected to 7.2 miles.                          |
| AL06030005-0702-100 | Pond Creek               | Tennessee       | Colbert          | The length of this segment was corrected to 12.5 miles.                         |
| AL06030005-0701-201 | McKiernan Creek          | Tennessee       | Colbert          | The length of this segment was corrected to 2.7 miles.                          |
| AL03160106-0402-102 | Tombigbee River          | Upper Tombigbee | Pickens          | The length of this segment was corrected to 5.7 miles.                          |
| AL03160107-0306-100 | Sipsey River             | Upper Tombigbee | Pickens, Greene  | The length of this segment was corrected to 43.1 miles.                         |

Footnote: While the Department has used various methods to calculate 303(d) stream lengths in the past, we have standardized on using segment lengths from the National Hydrography Dataset (NHD) for this cycle of reporting. This will provide a consistency with our GIS layers for the Assessment Units project for the 305(b) report as mandated by EPA. Some of the segment lengths have changed due to the availability of new, high resolution NHD coverages being available. These GIS layers are derived from the 1:24,000 USGS quad sheets and are much more detailed than before.

# **APPENDIX A**

## **Public Notice Soliciting Available Data and Information for Preparation of the 2004 303(d) List**



**NOTICE REQUESTING DATA AND INFORMATION FOR PREPARATION OF  
ALABAMA'S DRAFT 2004 SECTION 303(d) LIST OF IMPAIRED WATERS**

Section 303(d) of the Clean Water Act requires that each state identify those waters that do not currently support designated uses, and establish a priority ranking of the waters taking into account the severity of the pollution and the uses to be made of the waters. For each water on the list, the state is required to establish the total maximum daily load (TMDL) at a level necessary to implement the applicable water quality standards.

The Alabama Department of Environmental Management (ADEM) has begun development of the draft 2004 Section 303(d) list and is soliciting data and information for consideration during preparation of the list. In order to be fully considered in this process, the data should be submitted to ADEM by October 31, 2003. If possible, the data should be submitted in electronic format.

While the Department will consider all data submitted, we reserve the right to incorporate only those data that meet minimum quality standards. In addition, the Department is not bound by interpretations provided by data submitters. It should also be noted that the Department is unable to pay a fee for the use of data. Data and information should be submitted to the following contact person:

Joseph Roy  
ADEM – Water Division  
P.O. Box 301463  
Montgomery, Alabama 36130-1463

Mr. Roy's phone number is 334-270-5635. His e-mail address is [jtr@adem.state.al.us](mailto:jtr@adem.state.al.us).

Copies of Alabama's Final 2002 Section 303(d) list can be viewed at <http://adem.state.al.us/WaterDivision/WQuality/303d/WQ303d.htm>

This notice is hereby given this **September 15, 2003**, by authorization of the Alabama Department of Environmental Management.

Original signed by

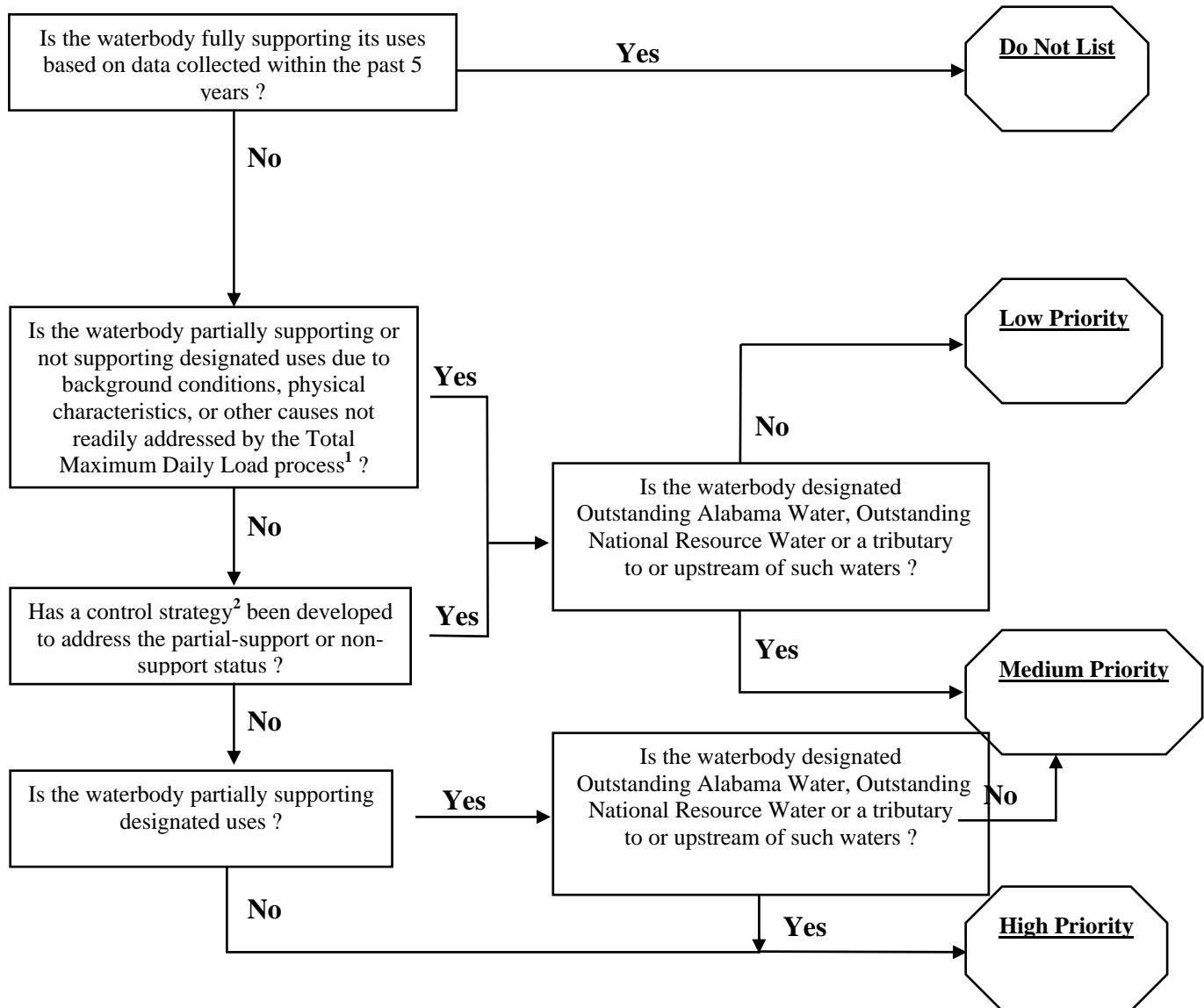
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James W. Warr, Director

# **APPENDIX B**

## **Prioritization Strategy**

# 2004 §303(d) List - Prioritization Strategy



1 Examples of other causes not readily addressed by the TMDL process include in place contaminants, flow regulation/modification, unknown sources, and atmospheric deposition.

2 Examples of control strategies include wastewater treatment upgrades or removal, best management practice implementation, and permit modifications.

# **APPENDIX C**

## **Alabama's Water Quality Assessment Methodology**

# ***Alabama Department of Environmental Management Water Quality Assessment Methodology***

## **Introduction**

Surface water quality data and information collected by the Alabama Department of Environmental Management (ADEM) and others is used for many purposes. One of the principal purposes of this information is assessment of beneficial use support. Surface waters in Alabama are assigned various use classifications based on existing utilization, uses reasonably expected in the future, and those uses that could be possible after the effects of pollution are controlled or eliminated. Alabama's use classification system contains the following use classifications:

1. Public Water Supply
2. Swimming and Other Whole Body Water-Contact Sports
3. Shellfish Harvesting
4. Fish and Wildlife
5. Limited Warmwater Fishery
6. Agricultural and Industrial Water Supply

For each of the uses listed above, water quality criteria are applied for determining how the waters may be best utilized, for determining waste treatment requirements, and for standards of quality for State waters. The following methodology will set forth the manner in which ADEM uses surface water quality data and related information for determining whether a waterbody meets the minimum standards for its designated use. The methodology will also describe the procedure used for establishing the size or extent of assessed waterbodies.

## **Waterbody Assessments – Monitored versus Evaluated**

Water quality data and information can take many forms, from anecdotal or casual observations to intensive water chemistry, biological, and physical characterization. When use support assessments are made it is important to understand the basis for the assessment. When information such as observed conditions, limited water quality data, water quality data older than five years, or estimated impacts from observed or suspected activities are used as the basis for the assessment, the assessment is generally referred to as an evaluated assessment. Evaluated assessments usually require the use of some degree of professional judgment by the person making the assessment. Monitored assessments are based on chemical, physical, and / or biological data collected using commonly accepted and well-documented methods. The following criteria are used to determine if information and /or data can be considered monitored or if it should be considered evaluated.

**Table 1 - Assessment Level Criteria**

| <b>Monitored Data</b>  | <b>Evaluated Data</b>  |
|--|--|
| <ul style="list-style-type: none"> <li>At least one measurement of chemical, physical, and biological conditions obtained between April and October. The biological conditions must be characterized by at least one biological indicator, i.e. macroinvertebrate community, pollutant levels in fish tissue, chl-a, toxicity to aquatic organisms.</li> </ul> | <ul style="list-style-type: none"> <li>Data and information obtained during reconnaissance visits, complaint investigations, screening level assessments, and once per year sampling of randomly selected sites (ALAMAP).</li> </ul> |
| <ul style="list-style-type: none"> <li>At least five measurements of chemical and physical conditions obtained between April and October or over a time period considered critical for the particular pollutant of interest.</li> </ul>  | <ul style="list-style-type: none"> <li>Alabama Soil Conservation Service watershed assessments.</li> </ul>   |
| <ul style="list-style-type: none"> <li>All data must be collected by personnel utilizing EPA approved QA/QC, an EPA approved SOP, and EPA approved analysis methods.</li> </ul>  | <ul style="list-style-type: none"> <li>Data and information older than five years or otherwise not meeting the criteria for monitored data.</li> </ul>   |

**Waterbody Assessments – Estimating the Size of the Assessed Waterbody**

The United States Environmental Protection Agency’s (EPA) published guidelines for preparation of the 1998 §305(b) reports provide only general guidance on estimating the extent or size of a waterbody represented by a given monitoring station. The general guidance suggests that a station represent no more than five to 10 miles on a wadeable stream and no more than 25 miles for large rivers. Because of the complexity of monitoring lakes and estuaries, no general guidance is given on estimating the size assessed by individual stations in those waterbodies. Geographic information systems are proving very useful in making these determinations but site specific knowledge of the waterbody is needed.

The following guidelines are intended to provide consistency in estimates of the size or extent of waterbodies assessed by individual sampling points. However, water quality and biological conditions may vary naturally from waterbody to waterbody or from sampling location to sampling location and are affected by numerous factors such as stream flow and velocity, stream bed composition, riparian and upstream land uses and land cover, geology, stream canopy, and seasonal changes. Some degree of knowledge of the waterbody being assessed will be necessary to make appropriate use of these guidelines. Different guidelines have been developed for the following different types of waterbodies.

- Wadeable streams and rivers
- Flowing and non-wadeable streams and rivers
- Impounded rivers (reservoirs)
- Natural lakes and public fishing or water supply lakes

- Tidal rivers and streams
- Estuaries

**Table 2 – Guidelines for Estimating Size or Extent of Assessed Waterbodies**

| <b>Waterbody Type</b>                                  | <b>Size or Extent Assessed</b>   |
|--|--|
| Wadeable stream / river                                | Use the lessor of the distances to the following points but not to exceed a total distance of 15 miles per sampling point: <ul style="list-style-type: none"> <li>▪ Upstream and downstream to the first point source</li> <li>▪ Upstream and downstream to the next sampling location</li> <li>▪ Upstream and downstream to the first tributary contributing 20% or more of the drainage area at the confluence of the tributary with the mainstem of the waterbody</li> <li>▪ Upstream and downstream to the first significant change in land use or land disturbance activity</li> <li>▪ Any combination of the above points</li> </ul>             |
| Flowing and non-wadeable stream / river                | Use the lessor of the distances to the following points but not to exceed a total distance of 25 miles per sampling point: <ul style="list-style-type: none"> <li>▪ Upstream and downstream to the first significant point source</li> <li>▪ Upstream and downstream to the next sampling location</li> <li>▪ Upstream and downstream to the first tributary contributing 20% or more of the drainage area at the confluence of the tributary with the mainstem of the waterbody</li> <li>▪ Upstream and downstream to the first significant change in land use or land disturbance activity</li> <li>▪ Any combination of the above points</li> </ul> |
| Impounded rivers (reservoirs)                          | The network of reservoir sampling stations assesses all mainstem reservoirs in Alabama on a rotating basis. Embayments will not be considered assessed unless specifically sampled.  |
| Embayments of Impounded rivers (reservoirs)            | Embayments must have at least one sampling station to determine use support.   |
| Natural lakes and public fishing or water supply lakes | Areas considered assessed should not exceed 200 acres per sampling point.  |

|                          |   |
|--------------------------|---|
| Tidal rivers and streams | <p>Use the lessor of the distances to the following points but not to exceed a total distance of 5 miles per sampling point:</p> <ul style="list-style-type: none"> <li>▪ Upstream and downstream to the first point source</li> <li>▪ Upstream and downstream to the next sampling location</li> <li>▪ Upstream and downstream to the first tributary contributing 20% or more of the drainage area at the confluence of the tributary with the mainstem of the waterbody</li> <li>▪ Upstream and downstream to the first significant change in land use or land disturbance activity</li> <li>▪ Upstream to the extent of the tidal influence</li> </ul> <p>Any combination of the above points</p> |
| Estuaries                | Areas considered assessed should not exceed 5 square miles per sampling point.  |

**Determining a Waterbody’s Use Support Status**

A variety of water quality data and related information can be used to determine the use support status of a waterbody. In most cases chemical water quality data will serve as the basis for the use support determination. However, biological data such as macroinvertebrate community indices, fish community indices, trophic status, bioassay results, or bacteriological indicators are often used in addition to chemical data to provide a more comprehensive use support determination. Fish consumption advisories and shellfish harvesting closures can also serve as the basis for a waterbody’s use support determination.

The EPA guidelines for preparation of the 1998 §305(b) Water Quality Report to Congress offer the following guidance regarding use support determinations using conventional water quality parameters (i.e. dissolved oxygen, temperature, pH).

- Fully Supporting – For any one pollutant or stressor the criteria is exceeded in  $\leq 10$  percent of the measurements.
- Partially Supporting – For any one pollutant or stressor the criteria is exceeded in 11 to 25 percent of the measurements.
- Not Supporting – For any one pollutant or stressor the criteria is exceeded in  $> 25$  percent of the measurements.

For toxicants (i.e. priority pollutants, metals, chlorine, and ammonia) the guidelines suggest the following criteria.



- Fully Supporting – For any one pollutant, no more than 1 exceedance of acute or chronic criteria in a 3-year period based on 10 or more samples.
- Partially Supporting – For any one pollutant, acute or chronic criteria exceeded more than once in a 3-year period but in  $\leq 10$  percent of the samples based on 10 or more samples.
- Not Supporting – For any one pollutant, acute or chronic criteria exceeded in  $> 10$  percent of the samples based on 10 or more samples.

In those cases where the applicable water quality criteria is less than the method detection limit for a particular pollutant the waterbody will be considered unassessed for that pollutant. When the number of samples collected in a 3-year period is between 5 and 10 the use support status will be based on best professional judgement using the available information and applying the same guidelines as for conventional parameters.

Biological assessments compare data from biological surveys and other direct measurements of resident biota in surface waters to established biological criteria and assess the waterbody's degree of use support. Alabama has not established numeric biological criteria and, as a result, biological data are used as a means of applying narrative criteria contained in Alabama's water quality criteria document (ADEM Admin. Code R. 335-6-10). Although EPA has not made specific recommendations concerning the interpretation of biological data it has offered the following technical considerations when using biological data to make use support determinations.

- A waterbody's use support should be based on a comparison of site-specific biological data to a reference condition established for the ecoregion in which the waterbody is located.
- A multimetric approach to bioassessment is recommended.
- The biosurvey should include an assessment of habitat structure or condition.
- The use of a standardized index or sampling period is recommended.
- Standard operating procedures and a quality assurance program should be established.
- A determination of the performance characteristics of the bioassessment methodology is suggested.
- An identification of the appropriate number of sampling sites that are representative of the waterbody is also recommended.

Biological assessment data will generally be used in combination with other surface water quality data or information to arrive at an overall use support determination. However, EPA recommends that biological data should be weighted more heavily than other types of data when integrating information to make use support determinations since biological data provide a more direct indication of the condition of the aquatic community. For the purpose of making use support determinations for Alabama's §305(b) report and §303(d) list the following guidelines regarding interpretation of biological data will be used.

- Fully Supporting – Macroinvertebrates determined to be Excellent (Unimpaired), Good (Slightly Impaired) or Fair (Moderately Impaired) rating if Chemical /Physical/Field data indicates compliance.
- Partial Support - Macroinvertebrates determined to be Fair (Moderately Impaired) and Chemical/Physical/Field data indicates impairment.
- Not Supporting – Macroinvertebrates determined to be Poor (Severely Impaired) and Chemical/Physical/Field data indicates impairment.