TOTAL MAXIMUM DAILY LOAD (TMDL) DEVELOPMENT

For Low Dissolved Oxygen Below Dams

303(d) Listed Stream Segments

Chattahoochee River downstream W.F. George Dam

Chattahoochee River downstream West Point Dam to Johnson Island

Etowah River: Lake Allatoona to Richland Creek

Savannah River: Lake Hartwell to Lake Russell

Savannah River: Clarks Hill Lake to Stevens Creek Dam

Savannah River: Stevens Creek Dam to US Hwy 78/278

Nottely River downstream Lake Nottely

Toccoa River downstream Lake Blue Ridge

November 1, 2000
Eight rivers below dams were included on the State of Georgia’s 1996 303(d) List because of dissolved oxygen (DO) measurements less than 4 mg/l. Since the impairment is caused by the low DO levels in the dams’ release waters and is not due to a specific pollutant, the TMDL is equal to the dams’ release waters meeting the appropriate DO criterion for the downstream waters’ designated use. The TMDL applies at all flows and at all times.

- Chattahoochee River downstream W.F. George. The designated use is fishing and the TMDL is the dam release DO meeting a 5 mg/l daily average and 4 mg/l minimum values.

- Chattahoochee River downstream West Point Dam. The designated use is drinking water and the TMDL is the dam release DO meeting a 5 mg/l daily average and 4 mg/l minimum values.

- Etowah River downstream Lake Allatoona. The designated use is drinking water and the TMDL is the dam release DO meeting a 5 mg/l daily average and 4 mg/l minimum values.

- Savannah River downstream Lake Hartwell. The designated use is recreation (trout stream) and the TMDL is the dam release DO meeting a 6 mg/l daily average and 5 mg/l minimum values.

- Savannah River downstream Clarks Hill Lake. The designated use is drinking water and the TMDL is the dam release DO meeting a 5 mg/l daily average and 4 mg/l minimum values.

- Savannah River downstream Stevens Creek Dam. The designated use is drinking water and the TMDL is the dam release DO meeting a 5 mg/l daily average and 4 mg/l minimum values.
• Nottely River downstream Lake Nottely. The designated use is recreation and the TMDL is the dam release DO meeting a 5 mg/l daily average and 4 mg/l minimum values.

• Toccoa River downstream Lake Blue Ridge. The designated use is recreation (trout stream) and the TMDL is the dam release DO meeting a 6 mg/l daily average and 5 mg/l minimum values.

It is recommended that the appropriate federal and state agencies work together in developing an implementation strategy to provide higher oxygenated water from these dam releases. These strategies may include oxygenation or aeration of the water, redesigned spillways or other measures. Further ongoing monitoring needs to be completed to monitor progress and to assure further degradation does not occur.

Approved

______________________________                                 __________________________
Beverly H. Banister, Acting Director                                   Date

Water Management Division
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Introduction

Section 303(d) of the Clean Water Act (CWA) as Amended by the Water Quality Act of 1987, Public Law 100-4, and the EPA’s Water Quality Planning and Management Regulations [Title 40 of the Code of Federal Regulation (40 CFR), Part 130] require each State to identify those waters within its boundaries not meeting water quality standards applicable to the waters’ designated uses. The identified waters are prioritized based on the severity of pollution with respect to designated use classifications. TMDLs for all pollutants violating or causing violation of applicable water quality standards are established for each identified water. Such loads are established at levels necessary to implement the applicable water quality standards with seasonal variations and margins of safety. The TMDL process establishes the allowable loadings of pollutants or other quantifiable parameters for a water body, based on the relationship between pollution sources and in-stream water quality conditions, so that states can establish water-quality based controls to reduce pollution from both point and nonpoint sources and restore and maintain the quality of their water resources. (USEPA, 1991)

Eight rivers below dams were included on Georgia’s 1996 303(d) list because of DO measurements less than 4 mg/l. The 303(d) listed stream segments for low dissolved oxygen below dams are:

- Chattahoochee River downstream W.F. George Dam
- Chattahoochee River downstream West Point Dam
- Etowah River downstream Lake Allatoona
- Savannah River downstream Lake Hartwell
- Savannah River downstream Clarks Hill Lake
- Savannah River downstream Stevens Creek Dam
- Nottely River downstream Lake Nottely
• Toccoa River downstream Lake Blue Ridge

**Problem Definition**

Poorly oxygenated reservoir release waters can result in a contravention of state water quality standards and an impairment of the designated uses. Section 303(d) of the Clean Water Act requires states to develop Total Maximum Daily Loads (TMDLs) for waterbodies not meeting water quality standards. Since DO is not itself a pollutant, and the impairment is due to poorly oxygenated dam release water rather than a specific pollutant, an unique approach was taken in the development of this TMDL.

The low DO in the listed waterbodies may be less than 4mg/l for up to 50 percent of the time during the summer months and reach a minimum value of less than 1 mg/l.

**Target Identification**

**Numeric Target**

The endpoint or goal of these TMDLs is the attainment of the State’s DO criterion for each of the waterbodies’ designated uses. The criteria and uses are established in the Georgia’s Rules and Regulations for Water Quality Control, Chapter 391-3-6, Revised November 23, 1998. Georgia Regulation 391-3-6. The uses and criteria are as follows:

- Chattahoochee River downstream W.F. George - Designated use is fishing with DO criteria of 5 mg/l daily average and 4 mg/l minimum;

- Chattahoochee River downstream West Point Dam - Designated use is drinking water with DO criteria of 5 mg/l daily average and 4 mg/l minimum;

- Etowah River downstream Lake Allatoona - Designated use is drinking water with DO criteria of 5 mg/l daily average and 4 mg/l minimum;
• Savannah River downstream Lake Hartwell - Designated use is recreation (trout stream) with DO criteria of 6 mg/l daily average and 5 mg/l minimum;

• Savannah River downstream Clarks Hill Lake - Designated use is drinking water with DO criteria of 5 mg/l daily average and 4 mg/l minimum;

• Savannah River downstream Stevens Creek Dam - Designated use is drinking water with DO criteria of 5 mg/l daily average and 4 mg/l minimum;

• Nottely River downstream Lake Nottely - Designated use is recreation with DO criteria of 5 mg/l daily average and 4 mg/l minimum;

• Toccoa River downstream Lake Blue Ridge - Designated use is recreation (trout stream) with DO criteria of 6 mg/l daily average and 5 mg/l minimum.

Sources

Depressed instream DO concentrations may be caused by several sources including the decay of oxygen demanding waste from both point and nonpoint sources, algal respiration, sediment oxygen demand or other sources. However, for each of the listed waters the low DO levels have been determined to be caused by the poorly oxygenated dam release waters. It is expected that the correction of the release water problem (i.e., raising the dam release water’s oxygen level to a 4 mg/l minimum and a daily average of 5 mg/l for the waterbodies with fishing designated use) will allow these listed waters to meet the DO standards.

Total Maximum Daily Load (TMDL)

Seasonal Variation

The TMDL applies any time during the year when the DO levels are below 4 mg/l. This situation most often occurs during the summer months.

Margin of Safety
As required by section 303(d)(1)(C) of the Clean Water Act, a component of a TMDL is a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality. As further clarified by EPA Guidance (EPA, 1991), a margin of safety takes into account the uncertainty about the relationship between the pollutant loads and the receiving waterbody.

With respect to these TMDLs, water quality standards violations and 303(d) listing are related to low DO in dam release waters and not related to a pollutant. To address this low DO situation, the TMDLs are equal to the dam release waters meeting the appropriate DO criterion for the downstream waters use. Since there is no pollutant being addressed by these TMDLs, the application of a margin of safety is inappropriate and additional consideration of a margin of safety for these TMDLs is not warranted.

**TMDL Determination**

Since the impairment is caused by the low DO levels in the dams’ release waters and is not due to a specific pollutant, the TMDL is equal to the dams’ release waters meeting the appropriate DO criterion for the downstream waters’ designated use. The TMDL applies at all flows and at all times as follows:

- Chattahoochee River downstream W.F. George Dam, the designated use is fishing and the TMDL is the dam release DO meeting a 5 mg/l daily average and 4 mg/l minimum values.

- Chattahoochee River downstream West Point Dam, the designated use is drinking water and the TMDL is the dam release DO meeting a 5 mg/l daily average and 4 mg/l minimum values.

- Etowah River downstream Lake Allatoona, the designated use is drinking water and the TMDL is the dam release DO meeting a 5 mg/l daily average and 4 mg/l minimum values.

- Savannah River downstream Lake Hartwell, the designated use is recreation (trout stream) and the TMDL is the dam release DO meeting a 6 mg/l daily average and 5 mg/l minimum
values.

- Savannah River downstream Clarks Hill Lake, the designated use is drinking water and the TMDL is the dam release DO meeting a 5 mg/l daily average and 4 mg/l minimum values.

- Savannah River downstream Stevens Creek Dam, the designated use is drinking water and the TMDL is the dam release DO meeting a 5 mg/l daily average and 4 mg/l minimum values.

- Nottely River downstream Lake Nottely, the designated use is recreation and the TMDL is the dam release DO meeting a 5 mg/l daily average and 4 mg/l minimum values.

- Toccoa River downstream Lake Blue Ridge, the designated use is recreation (trout stream) and the TMDL is the dam release DO meeting a 6 mg/l daily average and 5 mg/l minimum values.

**Recommendations**

It is recommended that the appropriate federal and state agencies work together in developing an implementation strategy to provide higher oxygenated water from these dam releases. These strategies may included oxygenation or aeration of the water, redesigned spillways or other measures. Further ongoing monitoring needs to be completed to monitor progress and to assure further degradation does not occur.
Reference and Administrative Record Index

Rules and Regulations for Water Quality Control, Chapter 391-3-6-.03, Water Use Classifications and Water Quality Standards, November 1998


RESPONSIVENESS SUMMARY

CONCERNING EPA’s JUNE 30, 1997 PUBLIC NOTICE,

EXCLUDING DECISIONS ON TMDLs FOR

FECAL COLIFORM, PCBs, AND CHLORDANE *

* Refer to EPA’s February 19, 1998 Responsiveness Summary and EPA’s February 23, 1998 Addendum to the February 19, 1998 Responsiveness Summary for additional information

Public Participation Activity Conducted:

EPA Region 4 published an abbreviated public notice in the legal advertising section of the Atlanta Journal/Constitution newspaper (a paper of Statewide distribution) on July 5, 1997. Additionally, Region 4 mailed copies of a detailed public notice (dated June 30, 1997) to persons, identified by the Georgia Environmental Protection Division and by personal, expressed interest in past newspaper notices, on a mailing list. The public notice requested comments from the public on EPA's notice of availability of proposed total maximum daily loads (TMDLs) for waters and pollutants of concern in the State of Georgia.

Matters on Which Public Was Consulted:

The public was consulted on proposed TMDLs for 124 waters and pollutants of concern on Georgia's 1996 ' 303(d) list. Persons wishing to comment on the proposed TMDLs or to offer new data regarding the proposed TMDLs were invited to submit the same in writing no later than August 4, 1997.
**Summary of Public's Comments:**

A number of people contacted the EPA Region 4 offices, during the public comment period, just to request information. The following is a brief summary of those contacts by the public:

1. **James H. Scarbrough**  
   Gwinnett County Department of Public Utilities  
   Lawrenceville, Georgia  
   July 3, 1997 (WRITTEN REQUEST)  
   Requested copies of the administrative records for Big Creek (fecal coliform), Flowery Branch (fecal coliform), Toccoa River (dissolved oxygen), and Jackson Lake (PCBs, Chlordane).

2. **Dieter Franz**  
   Camp, Dresser, and McKee  
   Atlanta, Georgia  
   July 8, 1997 (TELEPHONE REQUEST)  
   Requested copies of June 30, 1997 public notice and of all proposed TMDLs.

3. **Elizabeth Krousell**  
   CH2M Hill, Atlanta, Georgia  
   July 8, 1997 (TELEPHONE MESSAGE)  
   Interested in June 30, 1997 public notice.

4. **Upper Chattahoochee Riverkeeper**  
   Atlanta, Georgia  
   July 8, 1997 (TELEPHONE REQUEST) and July 29, 1997 (TELEPHONE REQUEST)  
   Requested copies of water quality standards for fecal coliform and dissolved oxygen; requested appointment to review entire administrative record for the proposed TMDLs.
5.  Larry Neal  
Law Engineering, Kennesaw, Georgia  
July 8, 1997 (TELEPHONE MESSAGE)  
Interested in June 30, 1997 public notice.

6.  Jerry Seaborn  
Law Engineering, Kennesaw, Georgia  
July 8, 1997 (TELEPHONE MESSAGE)  
Interested in June 30, 1997 public notice.

7.  Eric Mack  
Troutman and Sanders, Atlanta, Georgia  
July 8, 1997 (TELEPHONE REQUEST)  
Requested appointment to review administrative record for proposed TMDLs.

8.  Mukesh Cupta  
Law Engineering  
Kennesaw, Georgia, July 8, 1997 (TELEPHONE REQUEST)  
Requested copies of proposed TMDLs.

9.  Tom Stenco  
Atlanta Regional Commission, Atlanta, Georgia  
July 8, 1997  
Requested clarifying information on the June 30, 1997 public notice.

10.  Michael Stevens  
Arnall, Golden, and Gregory, Atlanta, Georgia  
July 8, 1997 (TELEPHONE REQUEST)
Requested copies of proposed TMDLs.

11. Frank Green
Forestry Commission, Georgia
July 14, 1997 (TELEPHONE REQUEST)
Requested copy of proposed Acorn Creek TMDL.

12. Kevin Farrell
Georgia Environmental Protection Division, Atlanta, Georgia
July 14, 1997 (TELEPHONE REQUEST)
Requested a copy of one proposed fecal coliform TMDL.

13. Max Walker
Georgia Environmental Protection Division, Atlanta, Georgia
July 14, 1997 (TELEPHONE REQUEST)
Requested a copy of a complete administrative record for one of the proposed fecal coliform TMDL.

14. Doug Haines
Georgia Center for Law in the Public Interest, Athens, Georgia
July 17, 1997 (TELEPHONE REQUEST)
Requested a map locating 9 water segments in Athens for which TMDLs had been proposed and copies of the proposed TMDLs.

15. Steve Ospina
CH2M Hill, Atlanta, Georgia
July 17, 1997 and July 21, 1997 (TELEPHONE REQUESTS)
Requested copies of the proposed TMDLs for waters in Douglas, Hall, Forsyth, and Rockdale Counties and of the proposed PCBs-Chlordane TMDL for Cobb County.

16. David Dean
PTI Environmental Services, Woodstock, Georgia

July 18, 1997 (TELEPHONE REQUEST)

Requested copies of all proposed TMDLs.

17. Ralph Yarbrough
Ogeechee River Valley Association, Georgia

July 21, 1997 (TELEPHONE REQUEST)

Requested copy of the proposed TMDL for Jackson Branch.

18. John Storm
Prime Engineering, Atlanta, Georgia

July 23, 1997 (TELEPHONE REQUEST)

Requested a copy of the June 30, 1997 public notice.

19. Rick Parrish
Southern Environmental Law Center, Charlottesville, Virginia

July 24, 1997 (TELEPHONE REQUEST)

Requested copies of all proposed TMDLs for waters and pollutants in Georgia.

20. Susan Davis
Athens, Georgia

July 28, 1997 (TELEPHONE REQUEST)
Requested a copy of the proposed fecal coliform TMDL for Conasauga River.

21. Jim Smith

Enviro-Smith Engineering, Atlanta, Georgia

July 28, 1997 (TELEPHONE REQUEST)

Requested copy of June 30, 1997 public notice and the proposed TMDL for Cox Creek.

22. Elaine Gray

Hunton and Williams, Atlanta, Georgia

July 28, 1997 (TELEPHONE REQUEST)

Requested copies of proposed TMDLs.

23. Al Hackell

Statesboro Herald, Statesboro, Georgia

July 29, 1997 (TELEPHONE CONVERSATION)

Requested information about the proposed TMDLs in response to information from Mr. Ralph Yarbrough (concerning the Jackson Branch proposed TMDL).

24. Gail Adams

Lee DeHihns = office

Atlanta, Georgia, August 1, 1997 (TELEPHONE REQUEST)

Requested copies of all proposed TMDLs.

25. John Wellborn

Fort Gordon, Georgia

August 1, 1997 (TELEPHONE REQUEST)

Requested copies of dissolved oxygen proposed TMDL and of the Fortson Creek proposed fecal coliform TMDL; also, requested information on obtaining a copy of the Technical Guidance Manual for Developing TMDLs - Book 2.
The following persons visited the EPA Region 4 offices in order to review the administrative record for the proposed TMDLs:

1. Upper Chattahoochee Riverkeeper, Atlanta, Georgia
   July 30, 1997

2. Eric Mack
   Troutman and Sanders, Atlanta, Georgia
   July 10, 1997

3. David Dean
   PTI Environmental Services, Woodstock, Georgia
   July 22, 1997

4. Jim Smith
   Enviro-Smith Engineering, Atlanta, Georgia
   August 1, 1997
The following people provided written comments concerning the proposed TMDLs:

1. Ralph Yarbrough  
Ogeechee River Valley Association, Eden, Georgia  
About July 28, 1997

2. Douglas P. Haines  
Georgia Center for Law in the Public Interest, Athens, Georgia  
August 1, 1997

3. David Dean  
PTI Environmental Services, Woodstock, Georgia  
August 4, 1997

4. Gary V. Mauldin  
Corps of Engineers, Department of the Army, Atlanta, Georgia  
April 21, 1998
Agency's Specific Responses in Terms of Modifications of the Proposed Action or an Explanation for Rejection of Proposals Made by the Public:

The February 19, 1998 Responsiveness Summary and the February 23, 1998 Addendum to the February 19, 1998 Responsiveness Summary address EPA's specific responses to comments received from the public prior to the completion of the February 1998 Responsiveness Summary and Addendum. At this time, EPA offers the following responses to those comments submitted on April 21, 1998 regarding TMDLs proposed for low dissolved oxygen below dams:

**COMMENT:**

Dissolved oxygen (DO) is not a pollutant and the TMDL does not appear to be an appropriate vehicle to strengthen water quality requirements to improve DO concerns in reservoir releases.

Gary V. Mauldin, Corps of Engineers, Department of the Army, Atlanta, Georgia

**RESPONSE:**

TMDLs must be developed for impaired waterbodies where the impairment is a pollutant and TMDLs may also be developed for the other categories of impaired waterbodies. For the eight '303(d) impaired stream segments, located below reservoir dam releases, that are listed for low DO, the cause of the low DO is the low DO in the water from the dam releases. The dam releases come from the lower layer of the upstream reservoir which at times, especially during warm weather, have normally occurring low DO concentrations. This low DO stratification is a normal occurrence in lakes and reservoirs due to the depth and slow velocities in lakes and reservoirs.

These low DO impairments are caused by pollution and not a specific pollutant. Federal regulations do not require that TMDLs be developed for pollution impairments. However, EPA has been ordered by the federal court to develop these TMDLs in accordance with a Georgia 1997 TMDL lawsuit consent decree and subsequent rulings.

**COMMENT:**

EPA should not resolve its concerns about water quality below dams by passing the blame on to the U.S. Army Corps of Engineers without regard to all available information or concerns.

Gary V. Mauldin, Corps of Engineers, Department of the Army, Atlanta, Georgia

**RESPONSE:**

EPA considered all available data and information that it had at its disposal. For the eight '303(d) impaired stream segments, located below reservoir dam releases, that are impaired for low DO, the cause of the low DO is the low DO in the water from the dam releases. The dam releases come from the lower layer of the upstream reservoir which at times, especially during warm weather, have normally occurring low DO concentrations. This low DO stratification is a normal occurrence in lakes and reservoirs due to the depth and slow velocities in lakes and reservoirs.
COMMENT:

The application of DO criteria that were developed for ambient conditions in streams is too stringent, too expensive, and may not be required to support the desired use downstream from hydropower projects. The higher DO concentrations required for water classified as trout waters are not required to maintain a quality put, grow, and take trout fishery.

Below dams, trout fisheries are created by stocking programs. The DO requirements for these programs should not be the same as in streams that have naturally reproducing trout populations. The EPA DO criteria document appears to support this assumption. States vary in this matter - Georgia applies the higher DO requirement for all waters designated as trout water while South Carolina applies the less stringent 5/4 mg/l criteria to put and take trout fisheries.

Gary V. Mauldin, Corps of Engineers, Department of the Army, Atlanta, Georgia

RESPONSE:

TMDLs are developed to meet the existing water quality standards. It is recommended that this comment be addressed to the State of Georgia for its consideration during the next water quality standards review.

COMMENT:

These ambient trout water conditions did not exist in these rivers before construction of the impoundments. Also, when the States designated tailwater areas as trout water, the conditions meeting this criteria never existed. Their intent, however, was to best utilize the unnatural existence of a changed environment by creating a desired use. There is a significant difference between protecting ambient conditions that are appropriate for a designated use and requiring creation of conditions to provide for a desired use.

Gary V. Mauldin, Corps of Engineers, Department of the Army, Atlanta, Georgia

RESPONSE:

TMDLs are developed to meet the existing water quality standards. It is recommended that this comment be addressed to the State of Georgia for its consideration during the next water quality standards review.

COMMENT:

EPA’s ambient water quality criteria for dissolved oxygen were clearly developed to provide widespread application or guidance. This means the criteria must protect all streams, all life stages, etc. These criteria were not developed for specific application when requiring DO improvements.

Gary V. Mauldin, Corps of Engineers, Department of the Army, Atlanta, Georgia
RESPONSE:

TMDLs are developed to meet the existing water quality standards. It is recommended that this comment be addressed to the State of Georgia for its consideration during the next water quality standards review.

COMMENT:

The operation of the reservoir is not the only contributing factor for less than desirable DO concentrations in release waters. Point and nonpoint sources, land use, and climatic conditions in the watershed can significantly affect the oxygen demand in a reservoir. While it might seem easy to correct the problem in the reservoir releases, this approach should be carefully considered relative to the contribution to the problem from various sources and the benefits derived. Low DO in reservoir releases is a complex issue.

Gary V. Mauldin, Corps of Engineers, Department of the Army, Atlanta, Georgia

RESPONSE:

EPA concurs that other factors impact the water quality in the reservoir. TMDLs will be developed for the reservoirs that are not meeting the existing water quality standards. The primary reason for low DO in the stream segments below the dams is because the dam release water is drawn from the lower layers of the reservoir. These waters typically have a lower DO.

COMMENT:

The lower DO criteria should be considered as adequate and preferred. The difficulty and expense associated with increasing DO in reservoir releases are real. The cost of construction and operation of systems may exceed any value that can be attributed to the improvements in the downstream aquatic community. The relationship between cost and DO concentration is not linear.

Gary V. Mauldin, Corps of Engineers, Department of the Army, Atlanta, Georgia

RESPONSE:

TMDLs are developed to meet the existing water quality standards. It is recommended that this comment be addressed to the State of Georgia for its consideration during the next water quality standards review.

COMMENT:

Requiring the maximum DO improvements will slow improvements to the aquatic environment. The more difficult and costly it is to make improvements, the more resistance there will be to change.

Gary V. Mauldin, Corps of Engineers, Department of the Army, Atlanta, Georgia
**RESPONSE:**

TMDLs are developed to meet the existing water quality standards. It is recommended that this comment be addressed to the State of Georgia for its consideration during the next water quality standards review.

**COMMENT:**

It would be reasonable to identify water that is discharged from dams in a unique category and address the needs of the aquatic community downstream when establishing DO criteria. If a trout fishery can be well developed with an average of 4 or 5 mg/l, it is unjustified to require millions of dollars to be wasted by requiring 6 mg/l.

Gary V. Mauldin, Corps of Engineers, Department of the Army, Atlanta, Georgia

**RESPONSE:**

TMDLs are developed to meet the existing water quality standards. It is recommended that this comment be addressed to the State of Georgia for its consideration during the next water quality standards review.

**COMMENT:**

Each of the waters for which a TMDL was proposed may have site specific needs to optimize the benefits of environmental improvements. It appears unjust for EPA not to give this more attention.

Gary V. Mauldin, Corps of Engineers, Department of the Army, Atlanta, Georgia

**RESPONSE:**

TMDLs are developed to meet the existing water quality standards. It is recommended that this comment be addressed to the State of Georgia for its consideration during the next water quality standards review.

**Description of the Effectiveness of the Public Participation Program:**

40 C.F.R. Part 25 requires public participation in certain actions of federal agencies. The public participation process in the matter of the proposed TMDLs for waters and pollutants identified on Georgia's 1996 303(d) list is required by the federal regulations and its conduct was considered to be important.
Final Decision of the Agency:

As indicated above, EPA's public notice of June 30, 1997 announced the availability of a total of 124 proposed total maximum daily loads (TMDLs) for public review and comment. On February 19, 1998, 109 of the proposed 124 TMDLs were finalized by EPA after consideration of public comments received during the public comment period. On February 23, 1998, an additional seven of the proposed 124 TMDLs were finalized by EPA after consideration of public comments received during the public comment period.

On this date, the final eight of the 124 proposed TMDLs are finalized by EPA. The TMDLs that are finalized on this date include:

<table>
<thead>
<tr>
<th>Water Segment</th>
<th>Location</th>
<th>Pollutant</th>
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</thead>
<tbody>
<tr>
<td>Chattahoochee River Basin</td>
<td></td>
<td></td>
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<tr>
<td>Chattahoochee River</td>
<td>Downstream W.F. George Dam</td>
<td>Dissolved oxygen</td>
</tr>
<tr>
<td>Chattahoochee River</td>
<td>West Point Dam to Johnson Island</td>
<td>Dissolved oxygen</td>
</tr>
<tr>
<td>Coosa River Basin</td>
<td></td>
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<tr>
<td>Etowah River</td>
<td>Lake Allatoona to Hwy 293</td>
<td>Dissolved oxygen</td>
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<tr>
<td>Savannah River Basin</td>
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<tr>
<td>Savannah River</td>
<td>Lake Hartwell to Lake Russell</td>
<td>Dissolved oxygen</td>
</tr>
<tr>
<td>Savannah River</td>
<td>Clarks Hill Lake to Stevens Creek Dam</td>
<td>Dissolved oxygen</td>
</tr>
<tr>
<td>Savannah River</td>
<td>Stevens Creek Dam to US Hwy 78</td>
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<tr>
<td>Tennessee River Basin</td>
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</tr>
<tr>
<td>Nottely River</td>
<td>Downstream Lake Nottely</td>
<td>Dissolved oxygen</td>
</tr>
<tr>
<td>Toccoa River</td>
<td>Downstream to Lake Blue Ridge</td>
<td>Dissolved oxygen</td>
</tr>
</tbody>
</table>

These TMDLs were not finalized prior to preparation of this responsiveness summary due to time constraints associated with EPA's commitment to meet a February 28, 1998 deadline of the October 7, 1998 Court Order in the Georgia TMDL lawsuit. These eight TMDLs are finalized, at this time, after consideration of public comments received after the public participation period and in accordance with a September 29, 2000 Court Order in the Georgia TMDL lawsuit.