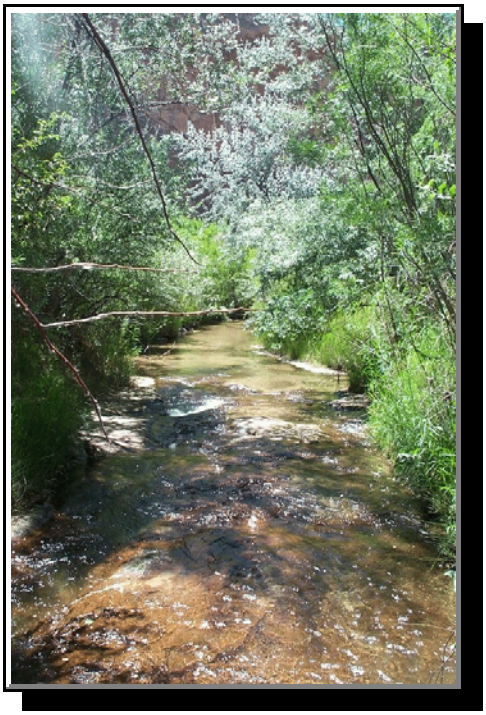
Utah
Water Quality Assessment
Report to Congress 2004

McCleod Creek



Sand Creek

Department of
Environmental Quality

Division of
Water Quality

Utah 2004
Water Quality Assessment
Report to Congress

2004

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Chapter 1: Executive Summary

Introduction

Utah's surface water resources include 14,250 miles of rivers and streams, nearly 3,000 lakes and reservoirs. Utah is the second driest state in the country and these waters play a major role in the private, commercial and industrial development of the state. They are sources of drinking water, provide enormous recreational opportunities, sustain a wide variety of wildlife, and provide water for agricultural production. Utah's beneficial use classifications for waters of the state are listed in Table 1-1.

Utah assesses the quality of its surface water resources to protect it for drinking, fishing, boating, irrigation, stock watering, and supporting aquatic wildlife. Data are compared against State water quality standards to determine beneficial use support (DWQ, 2002). Various reports are written and disseminated to project sponsors, local and state officials, government and private entities and the public to expand the awareness of the need to protect and enhance the water quality of Utah's rivers, streams, lakes and reservoirs. In addition, water quality data are used to identify impaired waterbodies and establish water quality goals for implementing projects to restore or protect water quality. Water quality data are also collected to do Total Maximum Daily Load analyses for discharge permits and to assure that permit requirements under the Utah Pollution Discharge Elimination System (UPDES) program are being met. Data are also collected to evaluate the effectiveness of nonpoint source projects, and to do TMDL analyses on selected waterbodies or watersheds.

Stream Monitoring

Utah has adopted a basin rotation type of monitoring for its rivers and streams. This allows the State to assess a greater portion of its rivers and streams. The State is divided into five monitoring regions and there are ten watershed management regions.

The stream monitoring program consists of basin intensive and long-term ambient water quality monitoring stations. The fixed-station monitoring network consists of 64 stations. These stations will be used to evaluate long-term water quality trends. Samples are collected every six weeks (eight times per year).

The data collected and analyzed provide essential river, stream, lake and reservoir water quality assessment data to identify and quantify water quality problems that may exist and provide background information for the development of possible solutions to those problems. They also allow water quality programs to be focused on critical areas, and allow the Division of Water Quality to prioritize its management plans. The data are used to determine the effectiveness of the Division's water quality management plans and to assist individuals and agencies involved in protecting the quality of the State's waters.

Rivers / Streams Assessment

Six of the 10 watershed management units were assessed using new data collected during intensive monitoring surveys. Cooperative monitoring data and data from long term monitoring sites were also used. These watersheds were the Unita, Sevier River, Colorado River West, Colorado River Southeast, Lower Colorado River and the Cedar/Beaver. The assessment for each of these watersheds are discussed in detail in this report.

The results of the watershed assessments that were discussed in detail in the 2002 305(b) report, Bear River, Weber River and the Jordan River/Utah Lake were combined with the above basins to provide a current statewide assessment

of the state's rivers and streams. Maps showing the assessment for these watersheds are included in this report, but a detailed narrative was not included. If data were collected in the above watersheds since 2002, the data were evaluated to determine if the 2002 assessment had changed. This only occurred at a few monitoring sites.

Utah assessed approximately 10,606 miles of perennial streams. Of the 10,606 stream miles assessed for at least one beneficial use class; 7,850.8 miles (74.0 %) were rated as fully supporting at least one assessed beneficial use, 1,425.9 miles (13.5%) were rated as partially supporting and 1,329.1 miles (12.5%) were rated as not supporting one or more of their designated beneficial uses (Figure 1-1).

Table 1-1. Designated Beneficial Uses for Rivers, Streams, Lakes, and Reservoirs.

Class	Definition
1	Protected for use as a raw water source for domestic water systems.
1C	Protected for domestic purposes with prior treatment by treatment processes as required by the Utah Division of Drinking Water.
2	Protected for recreational use and aesthetics.
2A	Protected for primary contact recreation such as swimming.
2B	Protected for secondary contact recreation such as boating, wading, or similar uses.
3	Protected for use by aquatic wildlife.
3A	Protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain.
3B	Protected for warm water species of game fish and other warm water aquatic life, including the necessary aquatic organisms in their food chain.
3C	Protected for nongame fish and other aquatic life, including he necessary aquatic organisms in their food chain.
3D	Protected for waterfowl, shore birds and other water-oriented wildlife not included in Classes 3A, 3B, or 3C, including the necessary aquatic organisms in their food chain.
3E	Severely habitat-limited waters. Narrative standards will be applied to protect these waters for aquatic wildlife.
4	Protected for agricultural uses including irrigation of crops and stock watering.
5	The Great Salt Lake. Protected for primary and secondary contact recreation, aquatic wildlife, and mineral extraction.

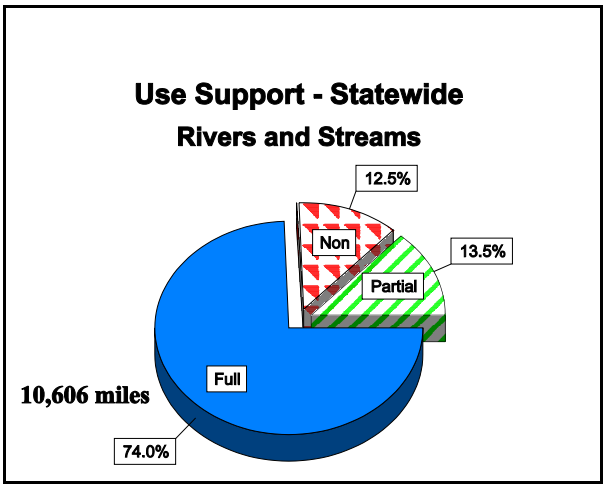

Figure 1-1. Statewide beneficial use support for rivers and streams based upon at least one beneficial use being assessed.

The major causes of water quality impairment are total dissolved solids, nutrients, sediments, and stream habitat alterations. Stream habitat alterations include riparian habitat and in-stream habitat.

The major sources of pollutants are agriculture, natural sources, hydrological modification, and habitat modification. About 3% percent of the stream miles are affected by point source discharges. Agricultural practices, such as grazing and irrigation, caused increased nutrient and sediment loading into streams. Point sources are also responsible for nutrient input into streams, while natural sources contributed metals, total dissolved solids and sediments to streams in some areas. Resource extraction and associated practices such as road construction contributed significantly to impairment of water quality also.

Individual beneficial use assessment is listed in Table 1-2 below.

The river and stream assessment units (AUs) were also assessed and placed into the five new assessment categories that the U.S. EPA has adopted for the 305(b) report (Table 1-3). These new categories provide more information on the waters of the state. They identify those assessment units that all beneficial uses were assessed and found fully supporting them (Category 1). Those where some were assessed and those assessed were fully supporting their beneficial uses (Category 2) and those that were not assessed at all (Category 3).

For the first time, the reader will be able to identify those AUs for which a TMDL has been completed and approved, but are still not meeting water quality standards or supporting beneficial use assessments (Category 4A). Waters that are impaired by pollution, such as habitat impairment, are placed in Category 4C, no TMDL required. For these waters, Best Management Practices (BMPs) need to be implemented so the waters support their beneficial uses. Those waters identified as not supporting their beneficial use because of a pollutant requiring a TMDL are placed in Category 5A. Category 5B is designated as a request for removal from the 303(d) list and those waters where some, but not all of the pollution causes have a completed TMDL.

Utah's proposed 303(d) list for streams includes 57 stream segments. Because multiple causes affected some of the segments, 75 parameters were listed for TMDL analysis (Table B-5).

Table 1-2. Individual Use Support Summary							
Goals[a]	**Use**	**Size Assessed**	**Size Fully Supporting**	**Size Fully Supporting but Threatened**	**Size Partially Supporting**	**Size Not Supporting**	**Size Not Attainable**
Protect & Enhance Ecosystems	Aquatic Life	10,579.9	9,016.2 (85.2%)	0.0	1,205.9 (11.4%)	357.9 (3.4%)	0.0
Protect & Enhance Public Health	Fish Consumption	46.8	0.0	0.0	0.0	46.8 (100%)	0.0
	Swimming[b]	675.1	634.5 (94.0%)	0.0	30.8 (4.6%)	9.8 (1.4%)	0.0
	Secondary Contact	675.1	634.5 (94.0%)	0.0	30.8 (4.6%)	9.8 (1.4%)	0.0
	Drinking Water	4,054.6	3,999.9 (98.7%)	0.0	12.4 (.3 %)	43.2 (1.0%)	0.0
Social and Economic	Agricultural	10,203.9	8,785.0 (86.1%)	0.0	376.7 (3.7%)	1,042.2 (10.2%)	0.0
	Overall Use Support	10,606.0	7,850.5 (74.0%)	0.0	1,425.9 (13.5%)	1,329.1 (12.5%)	0.0

[a] These goals are part of the national water quality goals adopted by the EPA Office of Water and the ITFM in their Environmental Goals and Indicators effort

[b] Class 2B (secondary contact) streams were evaluated as swimmable for proposes of the CWA goals, therefore the swimming and secondary contact classification categories are the same.

Table 1-3. Stream Miles by Assessment Category		
Category	**Definition**	**Steam Miles**
1	All designated uses assigned to an assessment unit were assessed and are fully supported.	415
2	Some of the designated uses are fully supported, but there is insufficient data to determine beneficial use support for the remaining designated uses.	7,435
3	Insufficient or no data and information to determine if any designated use is attained	3,644
4A	TMDL has been completed for all pollutants	910
4B	Other pollution control requirements are reasonably expected to result in attainment of the water quality standard in the near future	0
4C	The impairment is not caused by a pollutant, e.g. habitat alteration	658
5A	Assessment unit is impaired by a pollutant and a TMDL is needed.	1,726
5B	AUs are listed in this category to identify those pollutants for which a TMDL has been approved, but TMDLs are still required for other pollutants identified, water quality standards are now being met, new delineation of assessment unit, changes in beneficial use classification result in meeting standards, change in listing methods results in meeting standards or change in water quality standards and standards now being met.	146

Lakes / Reservoirs

The 132 lakes assessed during this reporting cycle account for 97.1% (467,787 acres) of the total lake acreage in the state. When accounting by acreage, 67.7% were found supporting their designated uses, 31.8% was partially supporting and about 0.5% was not supporting designated uses. Of the 132 lakes surveyed, 74 (56 %) were fully supporting, 49 (37 %) partially supporting, and 9 (7 %) not supporting (Figure 1-2).

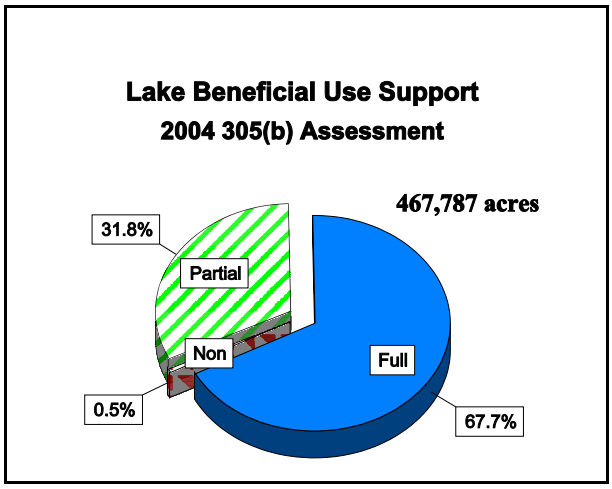

Figure 1-2. Statewide beneficial use support for reservoirs and lakes based upon at least one beneficial use being assessed.

The causes of impairment in lakes and reservoirs continue to be nutrients, siltation, low dissolved oxygen, suspended solids, organic enrichment, and noxious aquatic plants.

The major sources of pollutants causing impairments are nonpoint sources, agricultural practices, industrial and municipal point sources, and habitat modification (draw-down of reservoirs).

Thirty-seven lakes are now on the 303(d) list including a of 62 parameters that need TMDL analysis. Two of these, Cutler Reservoir and Pelican Lake, were added for the first time. TMDLs for seven lakes have been written and approved by EPA. We will request that these be removed in the next cycle. The lakes have a Category 5D. These are lakes or reservoirs which were assessed as fully supporting in one of the two most recent assessment cycles and either partially supporting or not supporting in the other. For these waters to be listed on the 303(d) list, they need to be assessed as not supporting their beneficial use for two consecutive monitoring cycles. Several lakes remain under additional stress due to continuing drought conditions.

Table 1-4. Lake Beneficial Use Assessment by Categories - Acreage

Category	Definition	Acres
1	All designated uses assigned to an assessment unit were assessed and are fully supported.	162,700
2	Some of the designated uses are fully supported, but there is insufficient data to determine beneficial use support for the remaining designated uses.	156,919
3	Insufficient or no data and information to determine if any designated use is attained	13,851
4A	TMDL has been completed for all pollutants	8,235
4B	Other pollution control requirements are reasonably expected to result in attainment of the water quality standard in the near future	0

Table 1-4. Lake Beneficial Use Assessment by Categories - Acreage		
Category	**Definition**	**Acres**
4C	The impairment is not caused by a pollutant, e.g. habitat alteration	0
5A	Assessment unit is impaired by a pollutant and a TMDL is needed.	135,710
5B	AUs are listed in this category to identify those pollutants for which a TMDL has been approved, but TMDLs are still required for other pollutants identified, water quality standards are now being met, new delineation of assessment unit, changes in beneficial use classification result in meeting standards, change in listing methods results in meeting standards or change in water quality standards and standards now being met.	3,478
5D	The assessment has identified impairment during one of the even or odd year monitoring cycles. If the AU is assessed as impaired during the next assessment period, it will be listed in Category 5A, TMDL required.	1,204

Chapter 2: Statewide River and Stream Water Quality Assessment

Introduction

Water quality monitoring conducted as part of the Section 305(b) report form the basis of the Division of Water Quality's assessment work. As part of this assessment, the State uses a five-year rotating monitoring program to collect data and to assess the beneficial use support of its rivers and streams. The State has been divided into ten watershed management units (Figure 2-1) and aggregated into five monitoring regions (Table 2-1). Each region is monitored on an intensive basis once every five years.

For this assessment cycle, the statewide assessment consists of the summary evaluations of the intensive monitoring surveys for six watershed management units. These watersheds were the Uinta (2000-2001) , Sevier River (2002-2003), Cedar/Beaver (2001-2002), Lower Colorado (2001-2002), Colorado River West (2003-2004) and the Colorado River Southeast (2003-2004).

These watershed assessments were combined with the results of the intensive watershed assessments of the Jordan River/Utah Lake and Sevier River which were completed for the 2002 305(b) report. Evaluation of data collected at sites within any of the watershed assessment units since the 2002 305(b) report was also done. Intensive monitoring occurs from July 1 a year until June 30 of the next year. No samples are collected during December.

Use support of beneficial uses was arrived at using chemical, physical, biological data and other information collected by theDWQ, Cooperating Agencies, and other entities involved in collecting data related to water quality. Federal and other public agencies involved with cooperative monitoring agreements or providing information used during this cycle to assess beneficial use support are listed below:

1. United States Forest Service
2. United States Bureau of Land Management
3. Salt Lake City
4. United States National Park Service
5. Central Utah Water Conservancy District.
6. United States Bureau of Reclamation
7. United States Geological Survey
8. Utah Division of Solid and Hazardous Waste
9. Salt Lake County
10. Utah State Valley College

Bacteriological data collected by Salt Lake City were used to assess streams in the Jordan River watershed. Bacteriological data provided by Salt Lake County were used to assess Emigration Creek in the Jordan River watershed. Physical and water chemistry data collected by the U. S. Geological Survey (U.S.G.S.) as part of the Great Salt Lake River Basins NAWQUA study and from other monitoring sites throughout the state were used to assess beneficial use support.

Benthic macroinvertebrate data collected by the Division of Water Quality and the National Aquatic Monitoring Center at Utah State were used to assess several waters within the State. The results of Dr. Lawrence J. Gray's (Utah Valley State College) benthic macroinvertebrate study of Soldier Creek and Thistle Creek were used to supplement water chemistry data collected on these two streams.

The assessment results were combined with the results of previous regional assessments for the Bear River, Weber River, and the Utah Lake/Jordan River assessment units to provide a statewide assessment.

Materials and Methods

Samples collected as part of DWQ's intensive

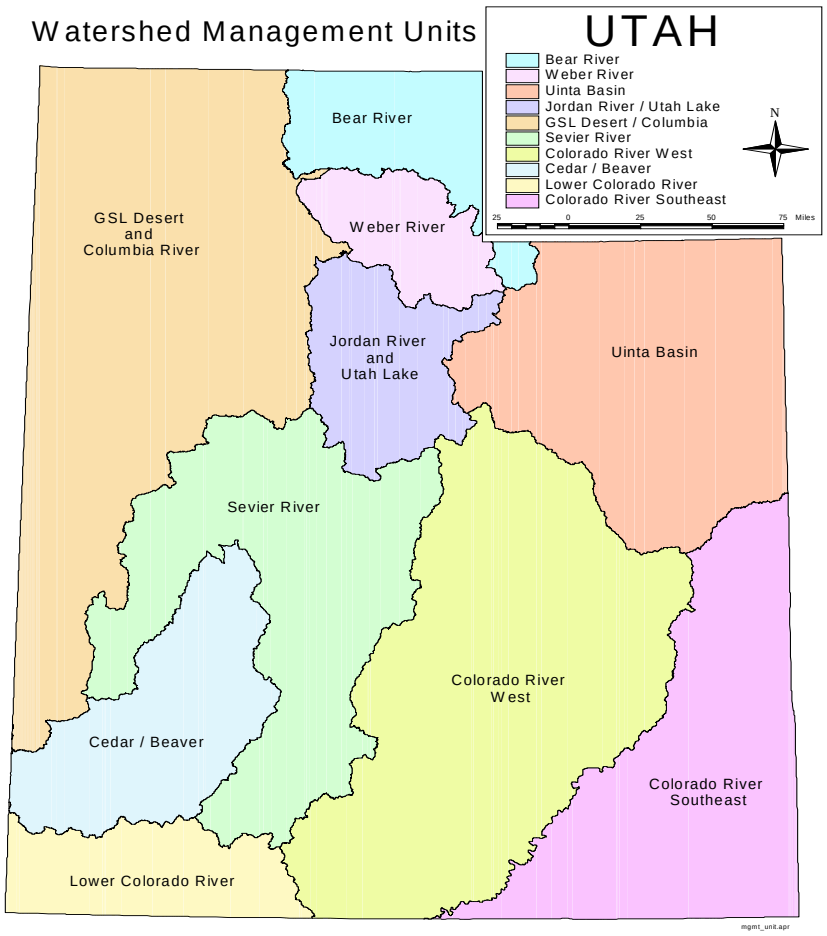

Figure 2-1. Watershed Management Units.

Table 2-1. Water Quality Monitoring Regions.

Region	**Management Units**
1	Bear River, Weber River, Great Salt Lake Desert/Columbia (northern portion of the GSL Desert)
2	Jordan River, Great Salt Lake Desert (southern portion of Great Salt Lake)
3	Uinta
4	Sevier River, Cedar/Beaver, Lower Colorado
5	Colorado River West, Colorado River Southeast

monitoring program were collected twice a month during spring runoff period and then monthly during the remainder of the survey. Samples were not collected during December. Dissolved metals were collected quarterly (4 times). For the majority of the monitoring sites, dissolved oxygen, pH, water temperature, and conductivity were measured *in situ* using a Hydrolab. Instantaneous flows were measured using a Marsh-McBurney flow meter during

each survey or flow data from a nearby U.S.G.S. gaging station were obtained. Water quality samples were collected according to standard field procedures defined and adopted by the DWQ in 1996.

Chemical analysis in the laboratory included ammonia, total phosphorus, dissolved nitrate-nitrite, total suspended solids, total dissolved solids, dissolved calcium, dissolved magnesium, dissolved potassium, dissolved sodium chloride concentration, sulfate, alkalinity and hardness. Turbidity was also determined in the laboratory. Dissolved concentrations for the following metals were determined: arsenic, barium, cadmium, chromium, copper, iron, lead, selenium, silver and zinc.

Beneficial use assessments were made based upon the methods listed in Appendix A, Tables A-1 through A-4. Water chemistry data were compared against Utah's standards in 'Standards of Quality for Waters of the State', R317-2, Utah Administrative Code (DWQ, 2001). Benthic macroinvertebrate data were used in a weight-of-evidence test to determine beneficial use assessment. Beneficial use assessments for aquatic life were based upon acute and chronic standards.

Samples collected by other programs within DWQ and outside were collected at various frequencies depending upon the program and accessibility to the sites. Cooperating agencies were asked to sample monthly if possible.

Category Definitions for Assessing Assessment Units--In previous 305(b) reports, three designated use support determinations were used to indicate beneficial use support: **Fully Supporting, Partially Supporting and Non Supporting**. For this reporting cycle, these support determinations were used and assessment units (AUs) were placed in one of five attainment categories with sub-categories as needed (USEPA, 2004).

The methodology for determining whether or not an AU is meeting water quality standards or fully supporting its designated beneficial uses is discussed in Appendix A. For those AUs for which there are no reliable data, either monitored or evaluated, for a specific designated beneficial use, a designation of Not Assessed for that specific beneficial use shall be assigned. For those AUs for which there are no reliable data, either monitored or evaluated, for all applicable designated uses, a designation of **Not Assessed** was assigned to all the designated beneficial uses for that AU.

The determination of use support using methods described in Appendix A and other specified protocols were combined to determine the overall assessment category for each AU. The assessment categories are described as follows (see Figure 1 also):

1. All designated uses are attained-- AUs are listed in this category if there are data and information that meet all requirements of the assessment and listing methodology and support a determination of full support for all of an AU's designated beneficial uses.

2. Some of the designated uses are attained, but here is insufficient data to determine beneficial use support for the remaining designated uses-- AUs are listed in this category if there are data and information that meet requirements of the assessment and listing methodology to support a determination that some, but not all, uses are attained. Attainment status of the remaining uses is unknown because there is insufficient or no data to assess beneficial use support.

3. Insufficient or no data and information to determine if any designated use is attained -- AUs are listed in this category where data or information is not sufficient or does not exist to determine whether any beneficial use is attained following the requirements of the assessment and listing methodology.

4. Impaired for one or more designated uses, but does not require development of a TMDL.

A. TMDL has been completed for all pollutants--AUs are listed in this sub-category once all TMDL(s) have been developed and approved by EPA, that when implemented, are expected to result in full support of the water quality standards or support the designated beneficial use(s). Where more than one pollutant is associated with the impairment of an AU, the AU remains in Category 5A for those pollutants that still need a TMDL. The completed TMDLs will be placed in Category 5B, some TMDLs completed for the AU, but some remain to be completed and approved by EPA.

B. Other pollution control requirements are reasonably expected to result in attainment of the water quality standard in the near future-- Consistent with the regulation under 40 CFR, 130.7(b)(I),(ii), and (iii), AUs are listed in this subcategory where other pollution control requirements (e.g., best management practices) required by local, state, or federal authority are stringent enough to meet any water quality standard or support any beneficial use applicable to such waters.

C. The impairment is not caused by a pollutant-- Assessment units are listed in this subcategory if the impairment is not caused by a pollutant (e.g., habitat alteration).

5. The water quality standard is not attained and is caused by a pollutant–- The AU is found not supporting one or more of its designated beneficial uses as determined by current water quality standards and assessment methodologies. **This category constitutes the Section 303(d) list of waters.** Category 5 is further delineated into the following sub-categories.

A. A TMDL is underway or scheduled [303(d) list]--AUs are listed in this category if the AU is impaired for one or more designated uses by a pollutant. Where more than one pollutant is associated with the impairment of a single AU, the AU remains in Category 5A for the pollutant(s) for which a TMDL has not been completed and approved by EPA.

B. Some but not all TMDLs have been completed, water quality standards are now being met, new delineation of

assessment unit, changes in beneficial use classification result in meeting standards, change in listing methods results in meeting or change in water quality standards: AUs are listed in this category to identify those pollutants for which a TMDL has been approved, but TMDLs are still required for other pollutants identified for the AU. If the most recent water quality assessment indicates that water quality standards are being met, the AU is listed in this sub-category also. Errors in previous assessments or a new delineation of an assessment unit is the cause for meeting water quality standards, the AU is included in this sub-category. If a change in the water quality standards was made and it results in the AU meeting the standard, the AU is listed in this category. Those AUs not listed because of a TMDL are requests for removal from the 303(d) list.

C. UPDES permit renewals scheduled for completion from April 1, 2004 to March 31, 2006 or older permit TMDLs for which a letter of approval has not been received-- A Utah Pollutant Discharge Elimination System permit renewal TMDL is scheduled to determine discharge limitations that will meet water quality standards or protect designated beneficial uses. Parameters listed with UPDES Permit Renewal TMDLs are effluent limited and the receiving water is not impaired and does not violate water quality standards. Water quality standards may be violated and water quantity impaired if the permitted effluent limits are not met. Assessment units are listed in this category if there is a discharge permit renewal scheduled between April 1, 2004 to March 31, 2006 or a letter of approval has not been received from EPA.

D. A Lake or Reservoir has been assessed as not meeting standards for one monitoring cycle-- The assessment has identified impairment during one of the even or odd year monitoring cycles. If the AU is assessed as impaired during the next assessment period, it will be listed in Category 5A, TMDL required.

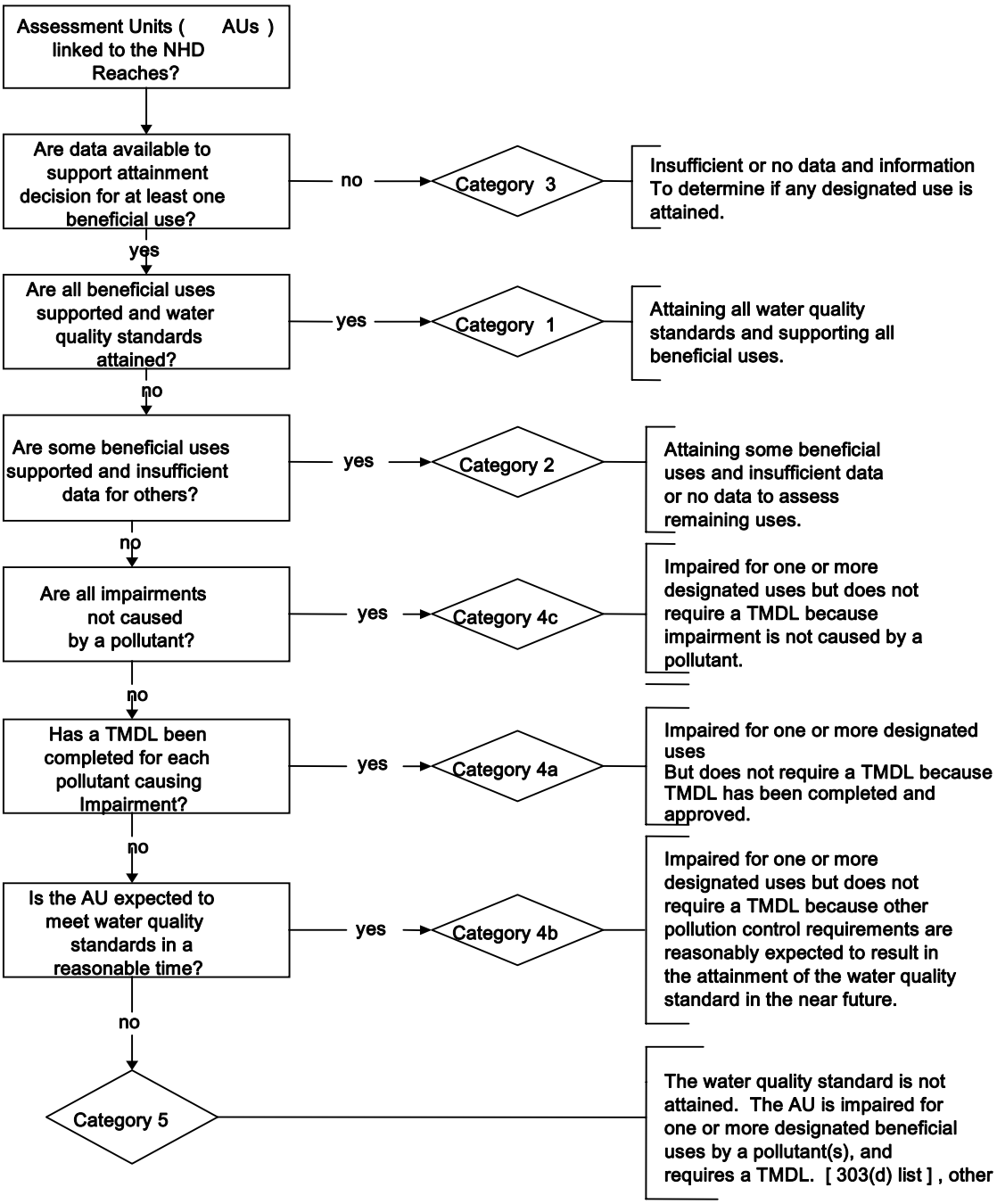

Figure 2-2. Category assessment decision and flow chart.

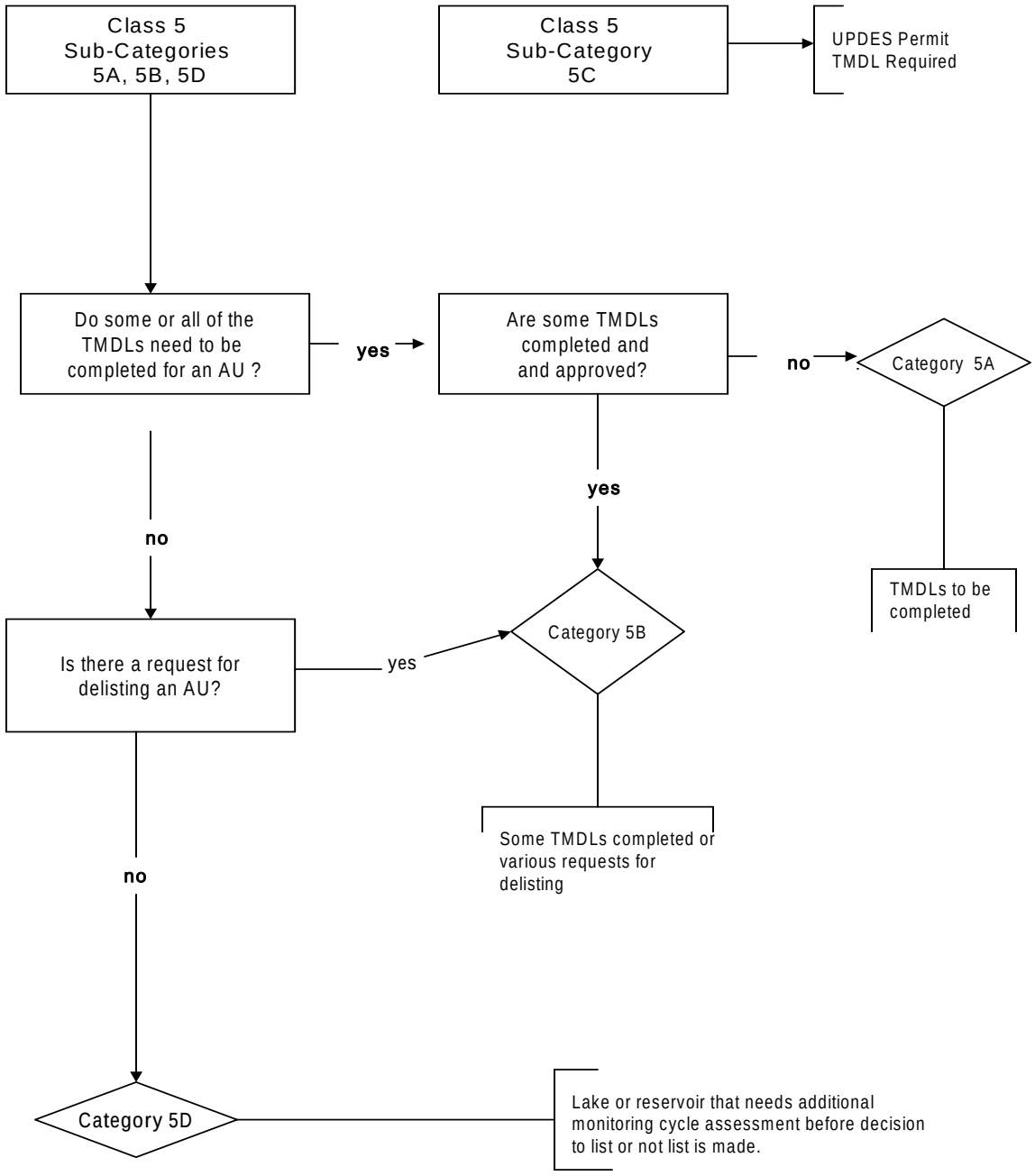

Figure 2-3. Sub-categories of Category 5.

Results

There were 10,606 perennial stream miles assessed for at least one beneficial use during this reporting period. This is 74.4% of the stream miles within the state.

Assessment by Categories–The following table provides a list of the categories and the stream miles that were assigned to each category.

Table 2-2. Stream Miles by Assessment Category - Statewide

Category	Steam Miles
Category 1	415
Category 2	7,435
Category 3	3,644
Category 4A	910
Category 4B	0
Category 4C	658
Category 5A	1,726
Category 5B	146

Overall Use Support--Of the 10,605.9 stream miles assessed, 7,850.5 miles (74.0 %) were rated as fully supporting based upon at least one assessed beneficial use, 1,425.9 miles (13.5%) were rated as partially supporting and 1,329.1 miles (12.5%) were rated as not supporting one or more of their designated beneficial uses (Figure 2-4). For the majority of streams, the Class 2B (protected for contact recreation) was not assessed because bacteriological data were not available. Waters with this classification were only considered assessed if bacteriological data were collected unless there was physical or chemical impairment such as pH.

Individual Use Support--Use support by individual beneficial use designations is summarized in Table 2-3. The drinking water use (Class 1C) was assessed on 4,054.6 miles of streams. About 12.3 miles were assessed as partially supporting this beneficial use and 43.3 miles were assessed as not supporting. Over 98%, were assessed as fully supporting. For contact recreation (Class 2B), 675.1 miles were assessed. Bacteriological samples were collected and used to assess 97 miles of streams. Eighty-four percent (84.0%) of these stream miles were supporting contact recreation. Twenty-three miles were assessed as impaired because of high pH readings.

Streams classified for agricultural use (Class 4) had 8,785 miles (86.1 %) that were rated as fully supporting, 376.6 miles (3.7%) as partially supporting and 1,042.2 miles (10.2 %) as not supporting agricultural usage.

The aquatic life use (Classes 3A, 3B, 3C, and 3D) was assessed on 10,579.9 stream miles. Full use support was assessed on 9,016.2 miles (85.2%). A partial support rating was given to 1,205.9 miles (11.4%) and 357.9 miles (3.4 %) were rated as not supporting the aquatic life use support category.

Causes of Less Than Fully Supporting--Stream miles impacted by specific causes are summarized in Table 2-5. Stream segments

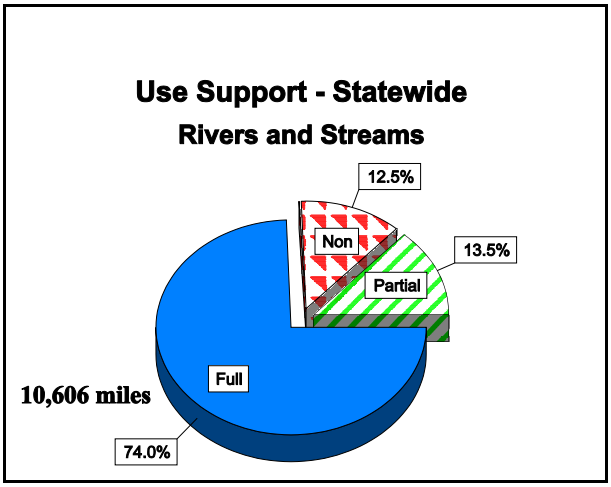

Figure 2-4. Statewide beneficial use support for rivers and streams based upon at least one beneficial use being assessed.

may have been impacted by multiple causes. The primary causes of impairment were total dissolved solids (12.7%), nutrients (8.0%), sediment (5.5%) and habitat alterations (6.3%)(Figure 2-3). The relative percent contribution of each cause is shown in Figure 2-6. Selenium was included within the metals cause category.

Sources of Less Than Fully Supporting--The sources of stream water quality impairment are summarized in Table 2-7. Like causes, stream segments may have been impacted by multiple sources. The primary sources of impairment were agricultural practices (21.4%), natural sources (15.1%) hydrological modification (8.6%), and habitat modification (7.8%) (Figure 2-5). The relative percent contribution of each source for impairments are shown in Figure 2-8.

Table 2-3. Individual Use Support Summary - Statewide

Goals[a]	Use	Size Assessed	Size Fully Supporting	Size Fully Supporting but Threatened	Size Partially Supporting	Size Not Supporting	Size Not Attainable
Protect & Enhance Ecosystems	Aquatic Life	10,579.9	9,016.2 (85.2%)	0.0	1,205.9 (11.4%)	357.9 (3.4%)	0.0
Protect & Enhance Public Health	Fish Consumption	46.8	0.0	0.0	0.0	46.8 (1005)	0.0
	Swimming[b]	675.1	634.5 (94.0%)	0.0	30.8 (4.6%)	9.8 (1.4%)	0.0
	Secondary Contact	675.1	634.5 (94.0%)	0.0	30.8 (4.6%)	9.8 (1.4%)	0.0
	Drinking Water	4,054.6	3,999.9 (98.7%)	0.0	12.4 (.3 %)	43.2 (1.0%)	0.0
Social and Economic	Agricultural	10,203.9	8,785.0 (86.1%)	0.0	376.7 (3.7%)	1,042.2 (10.2%)	0.0
	Overall Use Support	10,606.0	7,850.5 (74.0%)	0.0	1,425.9 (13.5%)	1,329.1 (12.5%)	0.0

[a] These goals are part of the national water quality goals adopted by the EPA Office of Water and the ITFM in their Environmental Goals and Indicators effort.

[b] Class 2B (secondary contact) streams were evaluated as swimmable for proposes of the CWA goals, therefore the swimming and secondary contact classification categories are the same.

Table 2-4. Total Waters Impaired by Various Cause Categories - Statewide Stream Summary	
Cause Category	**Miles Impaired**
Cause unknown	0.0
Unknown toxicity	0.0
Pesticides	-
Priority organics	-
Nonpriority organics	-
Metals	197.5
Ammonia	7.3
Chlorine	0.0
Other inorganics	0.0
Nutrients	845.0
pH	77.0
Siltation/Sediments	586.0
Organic enrichment/low DO	199.0
Salinity/TDS/Chlorides	1,351.0
Thermal modifications	299.0
Flow alterations	96.7
Other habitat alterations	670.9
Pathogen Indicators	14.1
Radiation	21.8
Oil and grease	-
Taste and odor	0.0
Noxious aquatic plants (algae)	50.6
Total toxics	-
Turbidity	-
Exotic Species	-

- = Category applicable, no data available.

0 = Category applicable, but size of waters in the category is zero.

Table 2-5. Total Waters Impaired by Various Source Categories - Statewide Stream Summary	
Source Category	**Miles Impacted**
Industrial Point Sources	98.2
Municipal Point Sources	128.9
Combined Sewer Overflow	0.0
Agriculture	2,273.0
Silviculture	0.0
Construction	35.0
Urban Runoff/Storm Sewers	89.6

Table 2-5. Total Waters Impaired by Various Source Categories - Statewide Stream Summary	
Source Category	**Miles Impacted**
Resource Extraction	232.0
Land Disposal	0.0
Hydromodification	912.0
Habitat Modification	830.0
Marinas	0.0
Atmospheric Deposition	0.0
Contaminated Sediments	0.0
Unknown Source	307.0
Natural Sources	1,605.0

- = Category applicable, no data available.

0 = Category applicable, but size of waters in the category is zero.

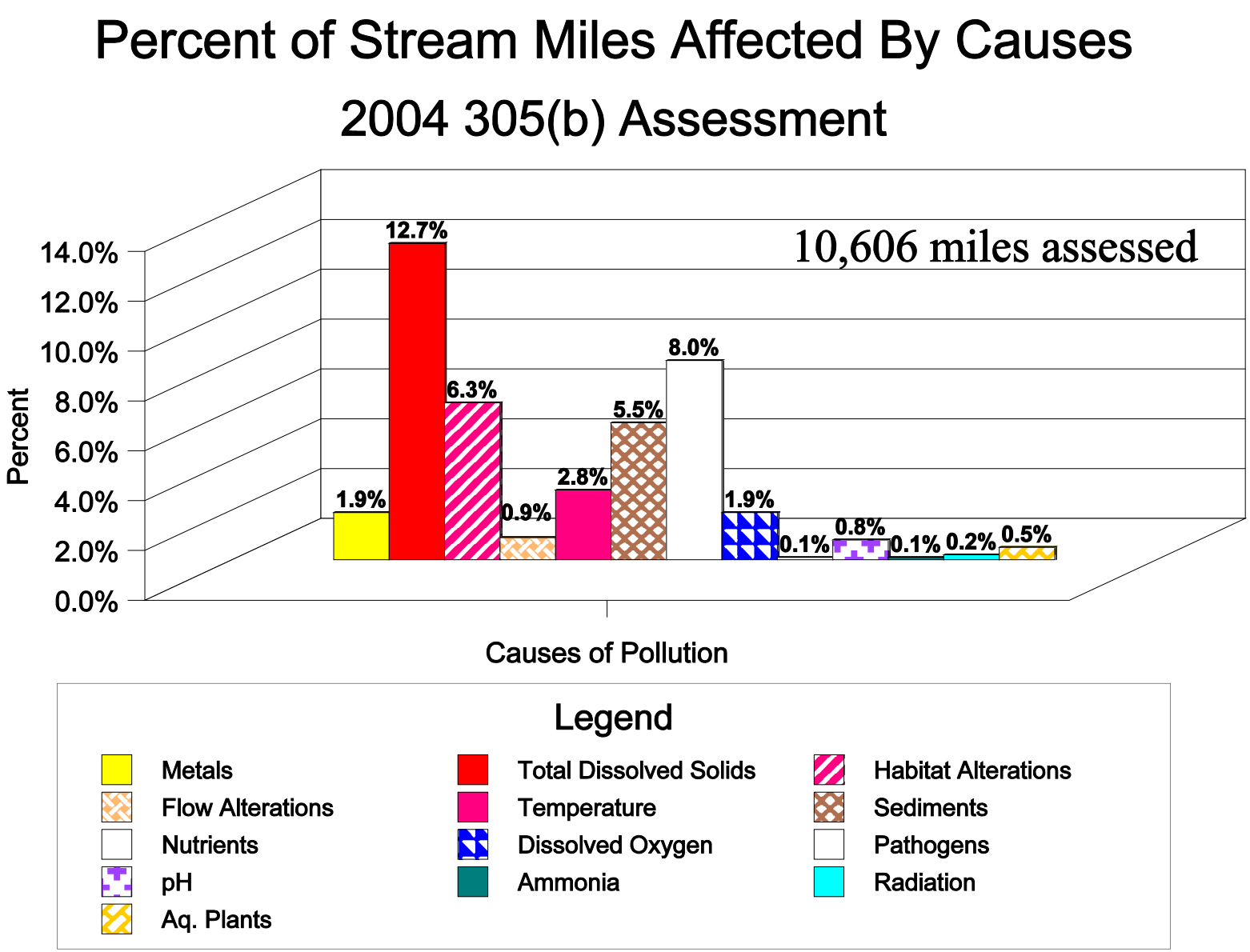

Figure 2-5. Percent of assessed stream impacted by causes on stream water quality - 2004 305(b).

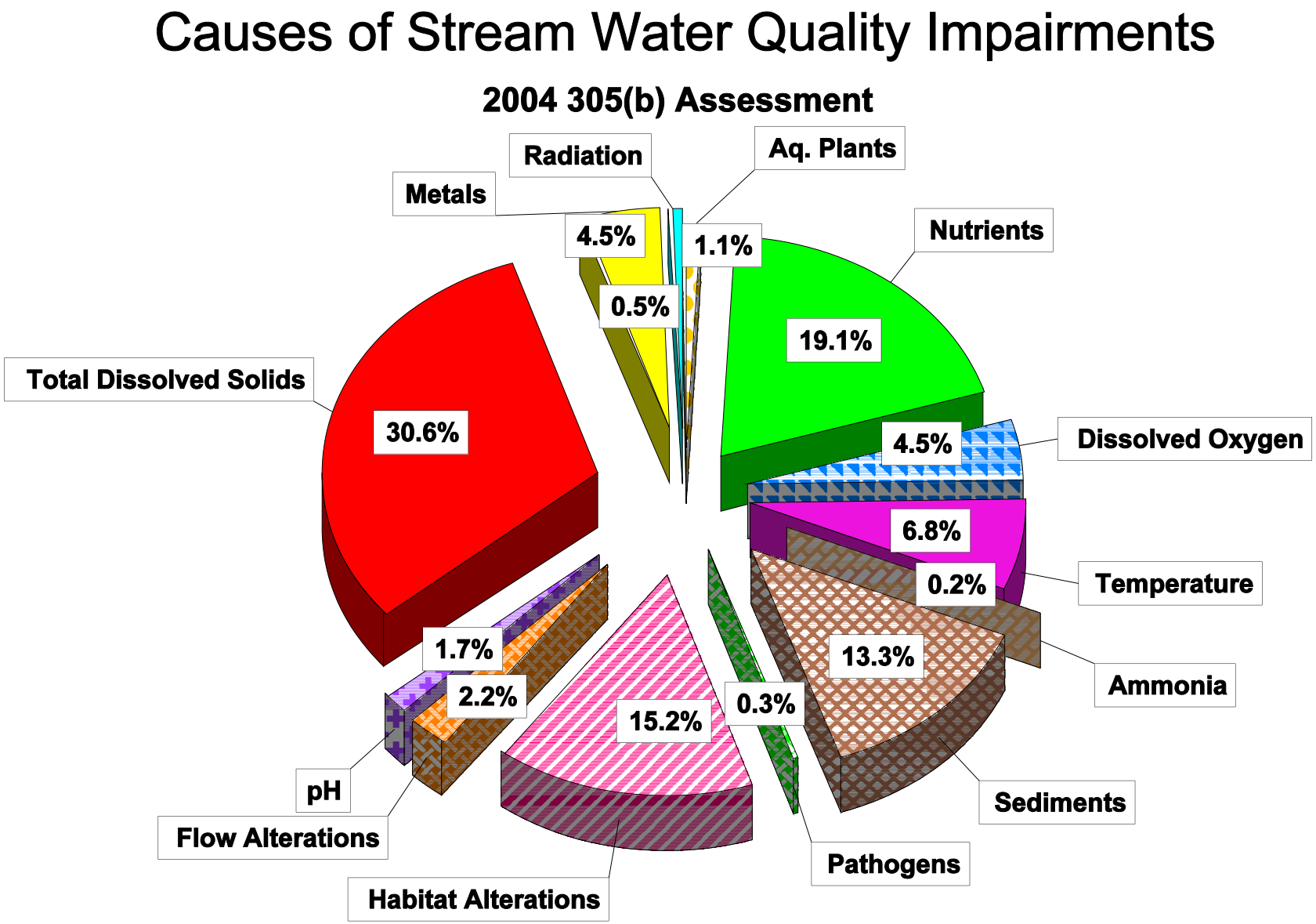

Figure 2-6. Relative percent contribution of causes on stream water quality - 2004 305(b).

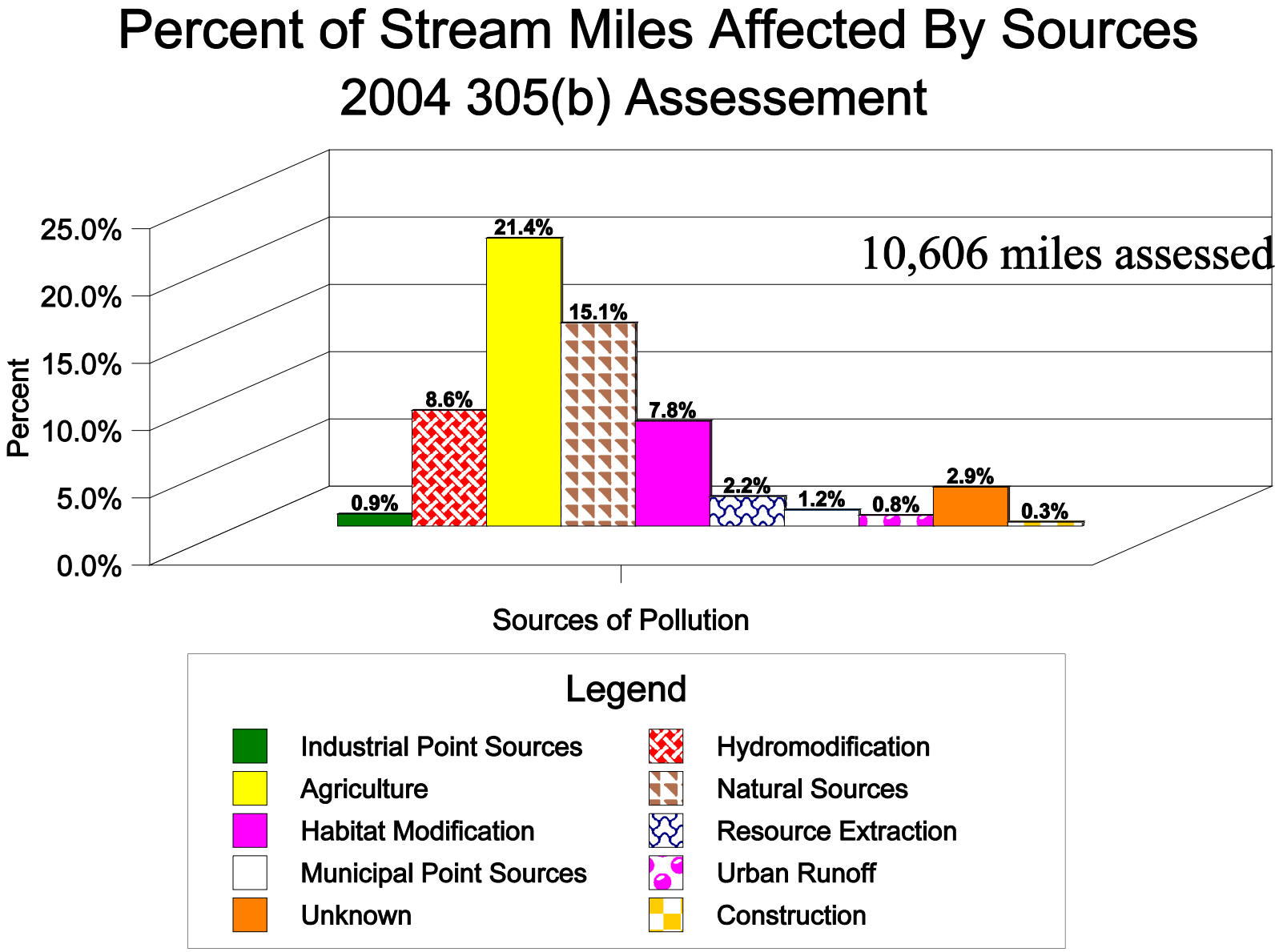

Figure 2-7. Percent of stream miles impacted by sources on stream water quality - 2004 305(b).

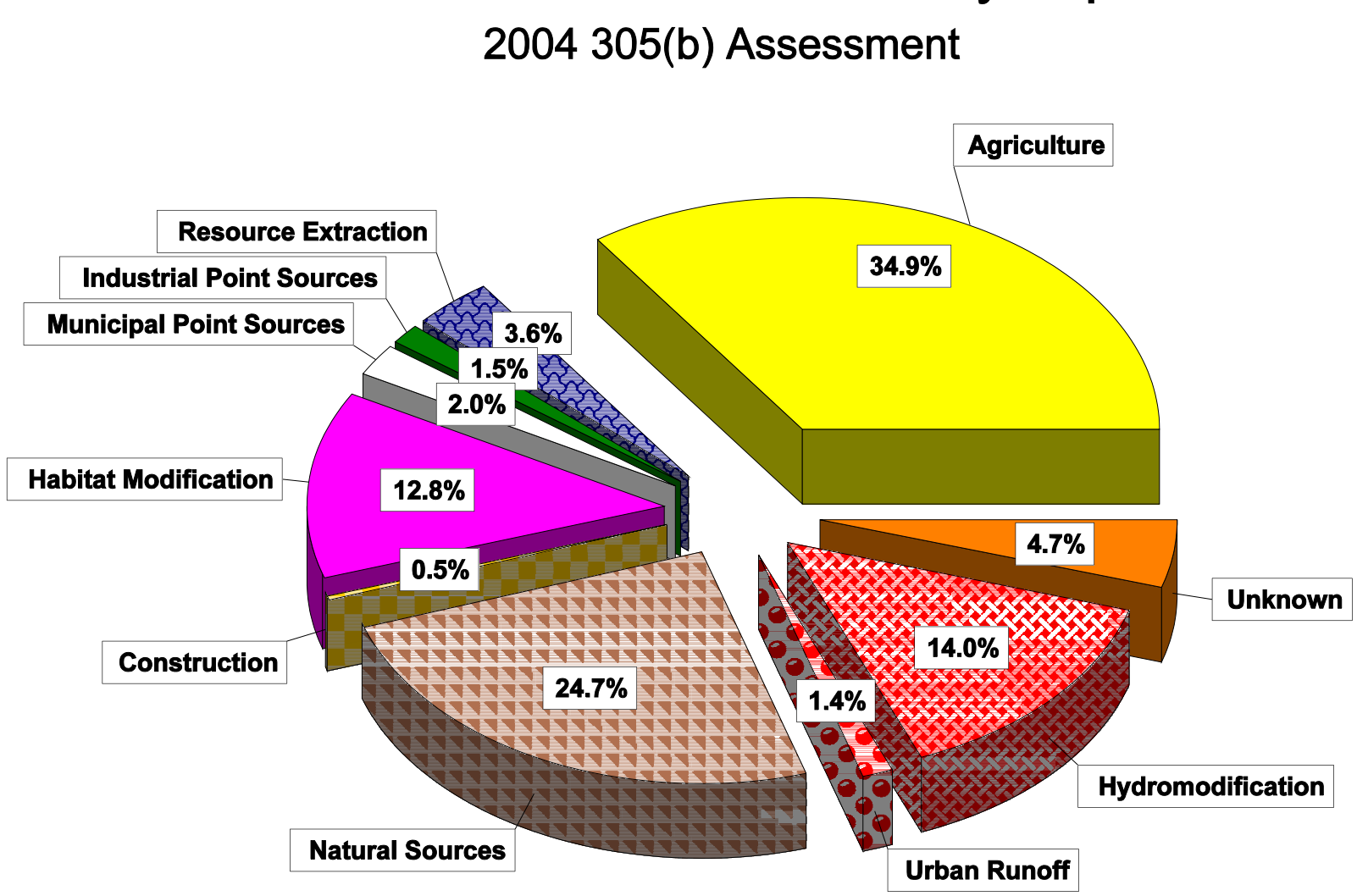

Figure 2-8. Relative percent contribution of sources on stream water quality - 2004 305(b).

Chapter 3. Unita Watershed Management Unit Assessment

Introduction

The Uinta Watershed Management Unit lies in northeastern Utah and includes the U.S.G.S. hydrological units listed in Table 3-1.

Table 3-1. U.S.G.S. Hydrological Units in the Uinta Watershed Management Unit

Number	Name
14040106	Upper Green-Flaming Gorge Reservoir
14040107	Blacks Fork
14040108	Muddy
14050007	Lower White
14060001	LowerGreen-Diamond
14060002	Ashley-Brush
14060003	Duchesne
14060004	Strawberry
14060005	Lower Green - Desolation Canyon
14060006	Willow

This includes the Green River and the tributaries streams that flow into it downstream to approximately where the Price River enters the Green River. Tributary streams include those on the north and south slopes of the Uinta Mountains. Major streams on the north slope include the West Fork Blacks Fork, East Fork Blacks Fork, Blacks Fork, West Fork Smiths Fork, East Fork Smiths Fork, Henry's Fork and Burnt Fork Rivers. Major south slope streams include Currant Creek, Duchesne River, Rock Creek, Lake Fork Creek, Yellowstone River, Uinta River, Ashley Creek, and Brush Creek. Two other major rivers are the Strawberry and White Rivers. The Strawberry River, located in the western part of the management unit, flows east to join the Duchesne River downstream from Starvation Reservoir. The White River flows west from the Utah-Colorado border to join the Green River near the confluence of the Duchesne and Green Rivers. Smaller tributaries to the south include Nine Mile Creek and Range Creek.

Results

The intensive survey for this watershed was done from July 1, 2000 to June 30, 2001.

There are an estimated 3,445 perennial stream miles within the Uinta Watershed Management Unit. An assessment of the support of beneficial uses was made for 2,718.7 miles. Based upon at least one beneficial use being assessed, 2,114.4 (77.8%), were assessed as fully supporting , 229 miles (8.4%) were assessed as partially supporting, and 375.3 miles (13.8%) were assessed as not supporting at least one designated beneficial use (Figure 3-1).

The results of the assessment using the five categories are listed in the table below.

Table 3.2. Stream Miles by Assessment Category Uinta Watershed Management Unit

Category	Stream Miles
1	0
2	2,114
3	710
4A	116
4B	0
4C	99
5A	412
5B	31

Figure3-2 is a map of the designated beneficial uses assigned to the rivers and streams in the management unit.

The beneficial uses not supported were aquatic life and agriculture (Table 3-3). Dissolved metals, water temperature, habitat alterations, flow alterations and a fish consumption advisory were the cause of non support for aquatic life and total dissolved solids were the

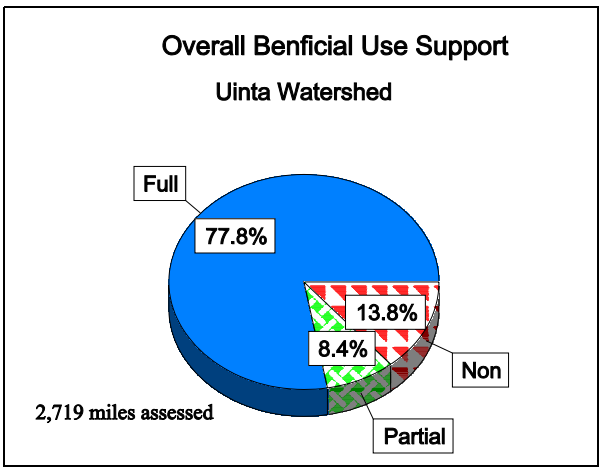

Figure 3-1. Overall beneficial use support based upon at least one beneficial use being assessed-Uinta Watershed.

cause of non support for agricultural use.

The major causes of water quality impairment were total dissolved solids, habitat alterations and dissolved oxygen. The percent of stream miles affected by causes are presented in Figure 3-4. The relative effect of each cause is found in Figure 3-5.

The major sources of impairment were agricultural activities, natural, and habitat modification (Figure 3-6). Other sources included hydrological modification, industrial and municipal point discharge sources. The relative percent impacts by sources are shown in Figure 3-7.

Duchesne River - Portions of the main stem of the Duchesne River were assessed as partially supporting its beneficial uses. Total dissolved solids (TDS) were still a problem from its confluence with the Green River to Myton. Its agricultural classification (Class 4) was designated as impaired.

Lake Fork River--Lake Fork River from its confluence with the Duchesne River to the Pigeon Water Creek confluence was listed as non supporting its cold water game fish classification (Class 3A) because of temperature and was also evaluated as not supporting its agricultural classification because of total dissolved solid concentrations greater that the standard. The other segments of Lake Fork River and its tributaries were assessed as fulling supporting all of the beneficial uses that were assessed.

Dry Gulch Creek–A TMDL for Dry Gulch Creek and its tributaries has been completed and approved for total dissolved solids.

Antelope Creek--This stream was assessed as non supporting its agricultural use. Irrigation return flows, grazing, and habitat alteration are thought to be the most significant source of total dissolved solids.

Uinta River -A TMDL for total dissolved solids has been completed for the Uinta River-1 and Uinta River-2 segments. Assessment unit Uinta River-1, Uinta River and tributaries from confluence Duchesne River upstream to Dry Gulch confluence, was placed in Category 5B. Uinta River-2 was placed in Category 4A, because the TMDL has been approved. The assessment unit, Uinta River-1, had the temperature and habitat alteration impairments removed because it had been incorrectly assessed as a Class 3A stream instead of a 3B, warm water fishery.

White River--The White River was assessed as fully supporting all of the beneficial uses it was assessed for.

Willow Creek--Excessive levels of total dissolved solids were the reason for listing Willow Creek from the White River to the Meadow Creek confluence as partially supporting its agriculture beneficial use.

Pariette Draw- This stream was assessed as impaired for agricultural activities due to boron and total dissolved solids. It also was listed as not supporting its aquatic life beneficial use because of selenium violations of the chronic standard for selenium.

Ashley Creek--The lower 16 miles of Ashley

Creek were found not supporting its fishery and agriculture classifications. This stream segment also has a fish consumption advisory on it because of elevated levels of selenium found in fish tissue. Seepage from municipal wastewater lagoons leaches selenium from the geological strata and it enters the stream. Irrigation return flows probably add to the elevated concentrations of total dissolved solids found in this segment also. A TMDL has been completed, but not approved by EPA yet.

Range Creek--The lower segment of Range Creek was assessed as fully supporting its beneficial uses. The middle and upper reaches were not assessed.

Green River--All segments of the Green River in the Uinta watershed management unit were supporting all of the beneficial uses assessed.

North Slope Uinta Streams–All streams on the North Slope of the Uinta Mountains that were assessed were found to be supporting all of their beneficial uses that were assessed.

Table 3-3. Individual Beneficial Use Support Summary
Uinta Watershed Management Unit

Goals[a]	Use	Size Assessed	Size Fully Supporting	Size Fully Supporting but Threatened	Size Partially Supporting	Size Not Supporting	Size Not Attainable
Protect & Enhance Ecosystems	Aquatic Life	2,718.7	2,418.5 (89.0%)	0.0	99.0 (3.6%)	201.3 (7.4%)	0.0
Protect & Enhance Public Health	Fish Consumption	16.0	0.0	0.0	0.0	16.0 (100%)	0.0
	Swimming[b]	0.0	0.0	0.0	0.0	0.0	0.0
	Secondary Contact	0.0	0.0	0.0	0.0	0.0	0.0
	Drinking Water[c]	1,534.9	1,534.9 (100%)	0.0	0.0	0.0	0.0
Social and Economic	Agricultural	2,711.5	2,322.1 (85.6%)	0.0	152.8 (5.6%)	236.6 (8.7%)	0.0
	Total	2,718.7	2,114.4 (77.8%)	0.0	229.0 (8.4%)	375.3 (13.8%)	0.0

[a] These goals are part of the national water quality goals adopted by the EPA Office of Water and the ITFM in their Environmental Goals and Indicators effort.

[b] Class 2B (secondary contact) streams were evaluated as swimmable for proposes of the CWA goals, therefore the swimming and secondary contact classification categories are the same.

Table 3-4. Total Waters Impaired By Various Causes Categories Uinta Water Quality Management Unit.	
Cause Category	**Stream Miles Impaired**
Cause unknown	0.0
Unknown toxicity	0.0
Pesticides	-
Priority organics	-
Nonpriority organics	-
Metals	62.6
Ammonia	0.0
Chlorine	0.0
Other inorganics	0.0
Nutrients	0.0
pH	0.0
Siltation/Sediments	19.7
Organic Enrichment/low DO	0.0
Salinity/TDS/Chlorides	389.5
Thermal modifications	119.0
Flow alterations	64.2
Other habitat alterations	99.0
Pathogen Indicators	-
Radiation	-
Oil and grease	0.0
Taste and odor	-
Noxious aquatic plants	-
Total toxics	0.0
Turbidity	0.0
Exotic species	-
Other (specify)	-

- = Category applicable, no data available.
0 = Category applicable, but size of waters in the category is zero.

Table 3-5. Total Waters Impaired by Various Source Categories Uinta Watershed Management Unit	
Source Category	**Stream Miles Impaired**
Industrial Point Sources	8.1
Municipal Point Sources	8.1
Combined Sewer Overflow	-
Agriculture	572.7
Silviculture	0.0
Construction	0.0
Urban Runoff/Storm Sewers	0.0
Resource Extraction	0.0
Land Disposal	0.0
Hydromodification	115.5
Habitat Modification	329.0
Marinas	-
Atmospheric Deposition	-
Contaminated Sediments	-
Unknown Source	0.0
Natural Sources	453.6

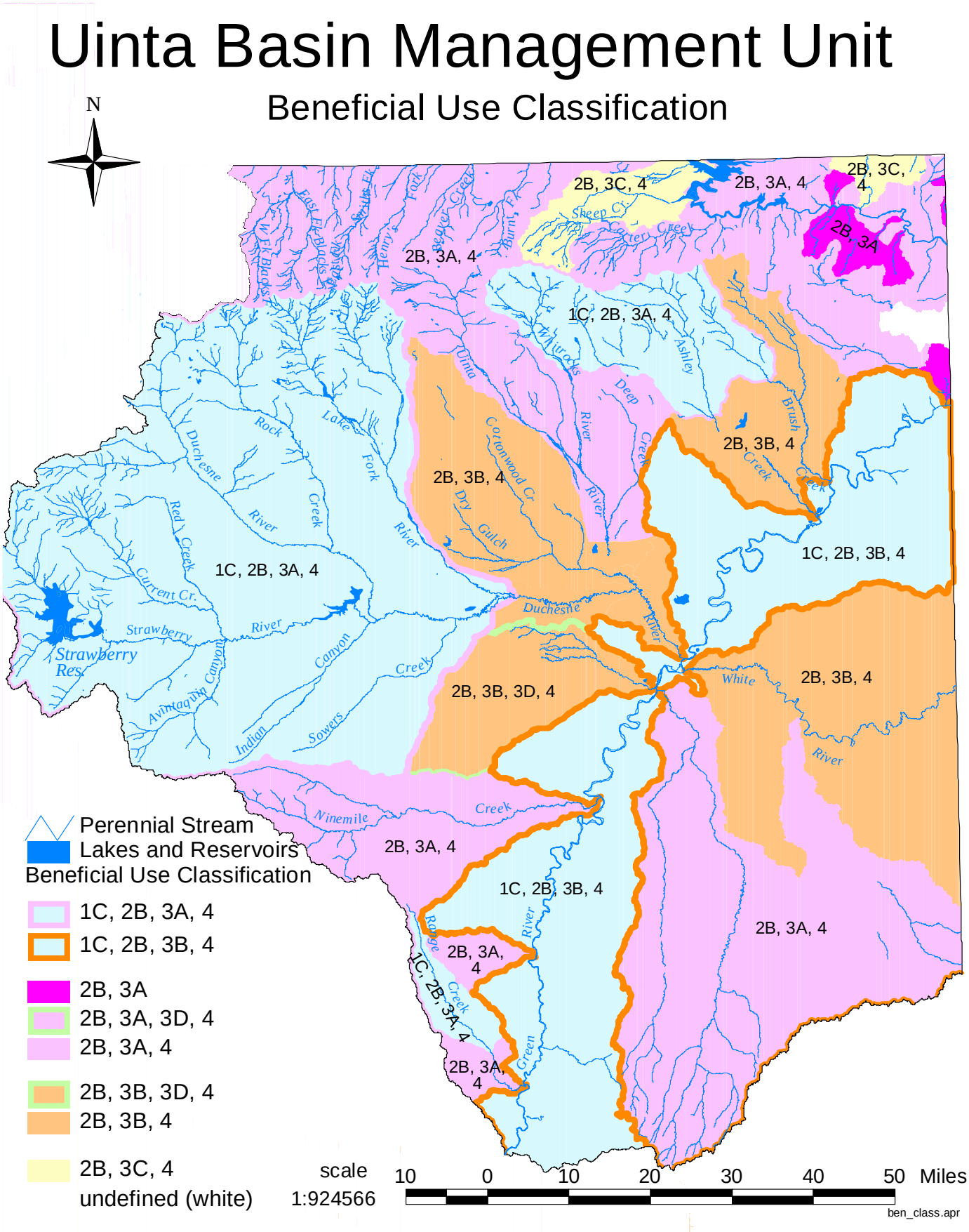

Figure 3-2. River and stream designated beneficial use classifications - Uinta Watershed Management Unit

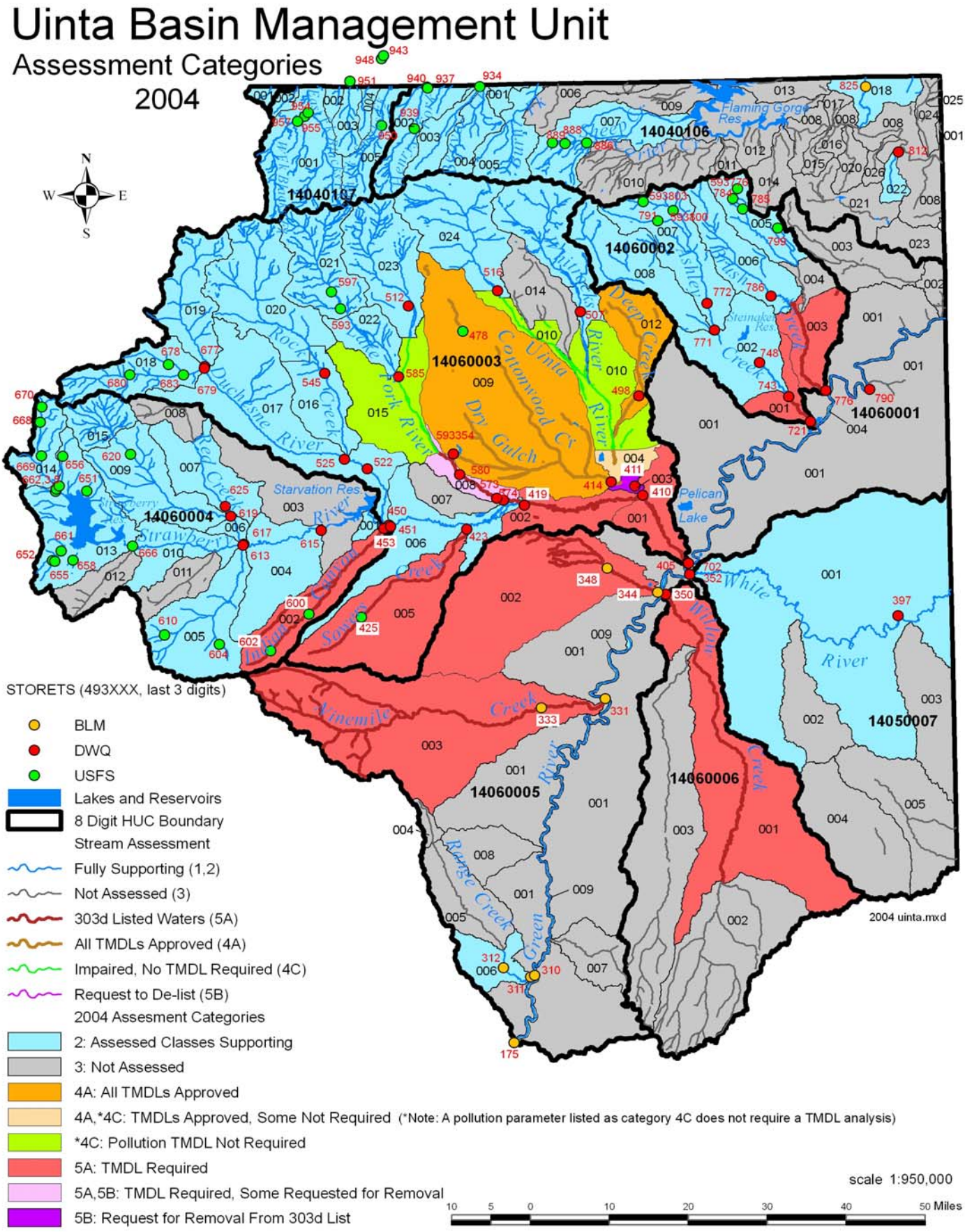

Figure 3-3. Stream beneficial use assessment by category - Uinta Watershed Management Unit.

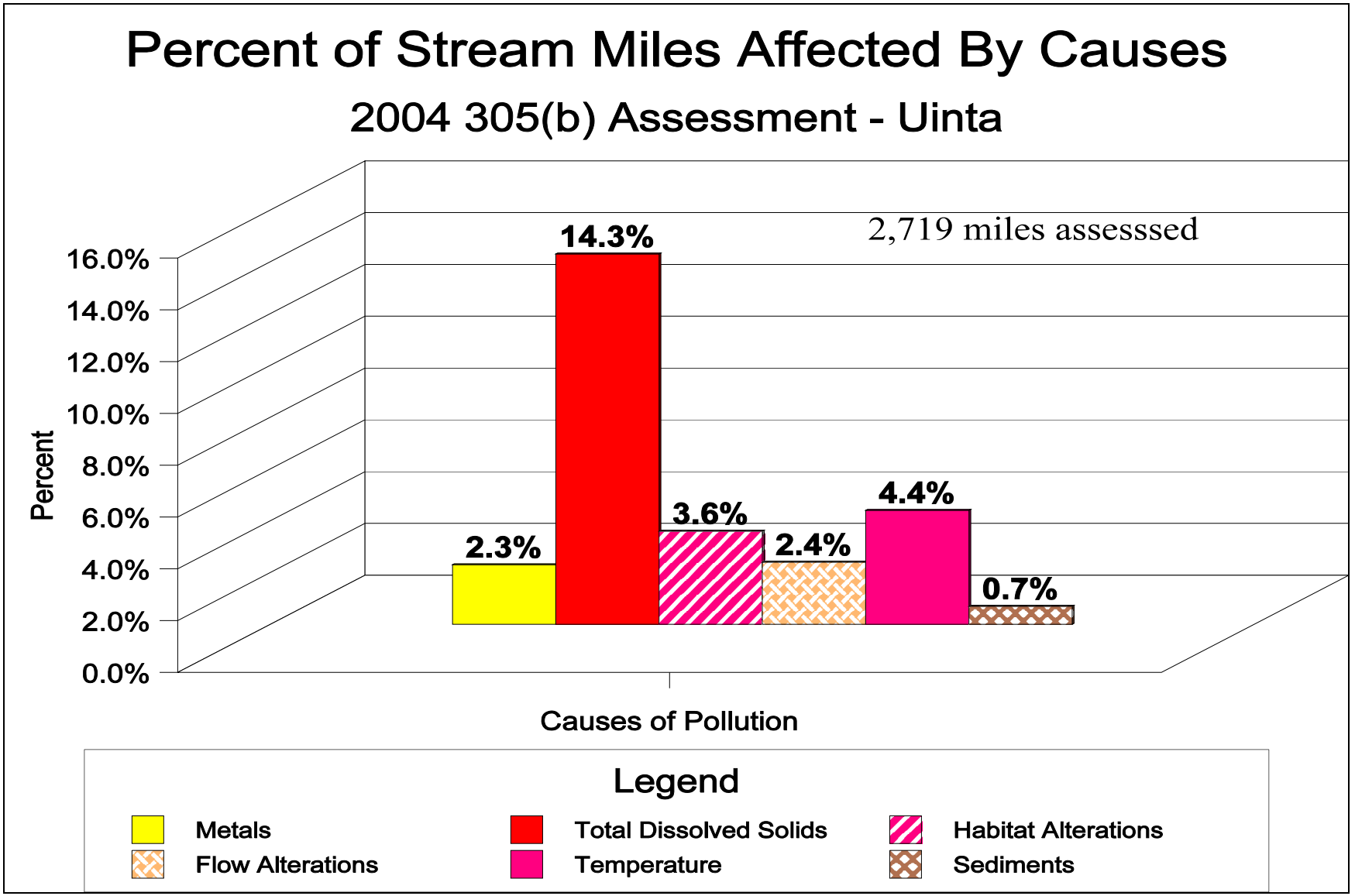

Figure 3-4. Percent of assessed stream miles impacted by causes - Uinta Watershed Management Unit.

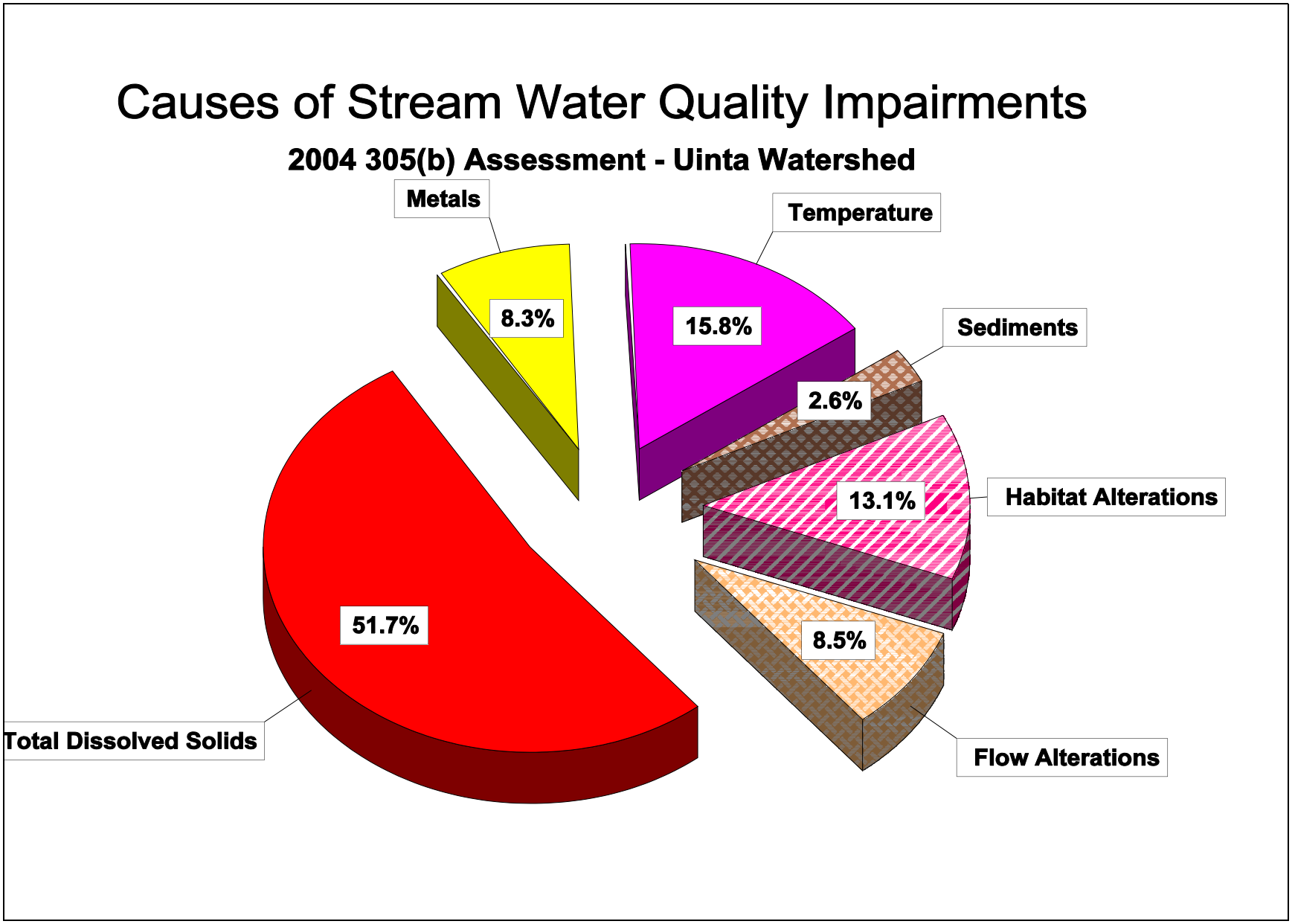

Figure 3-5. Relative percent contribution by cause to impairment of stream water quality - Uinta Watershed Management Unit.

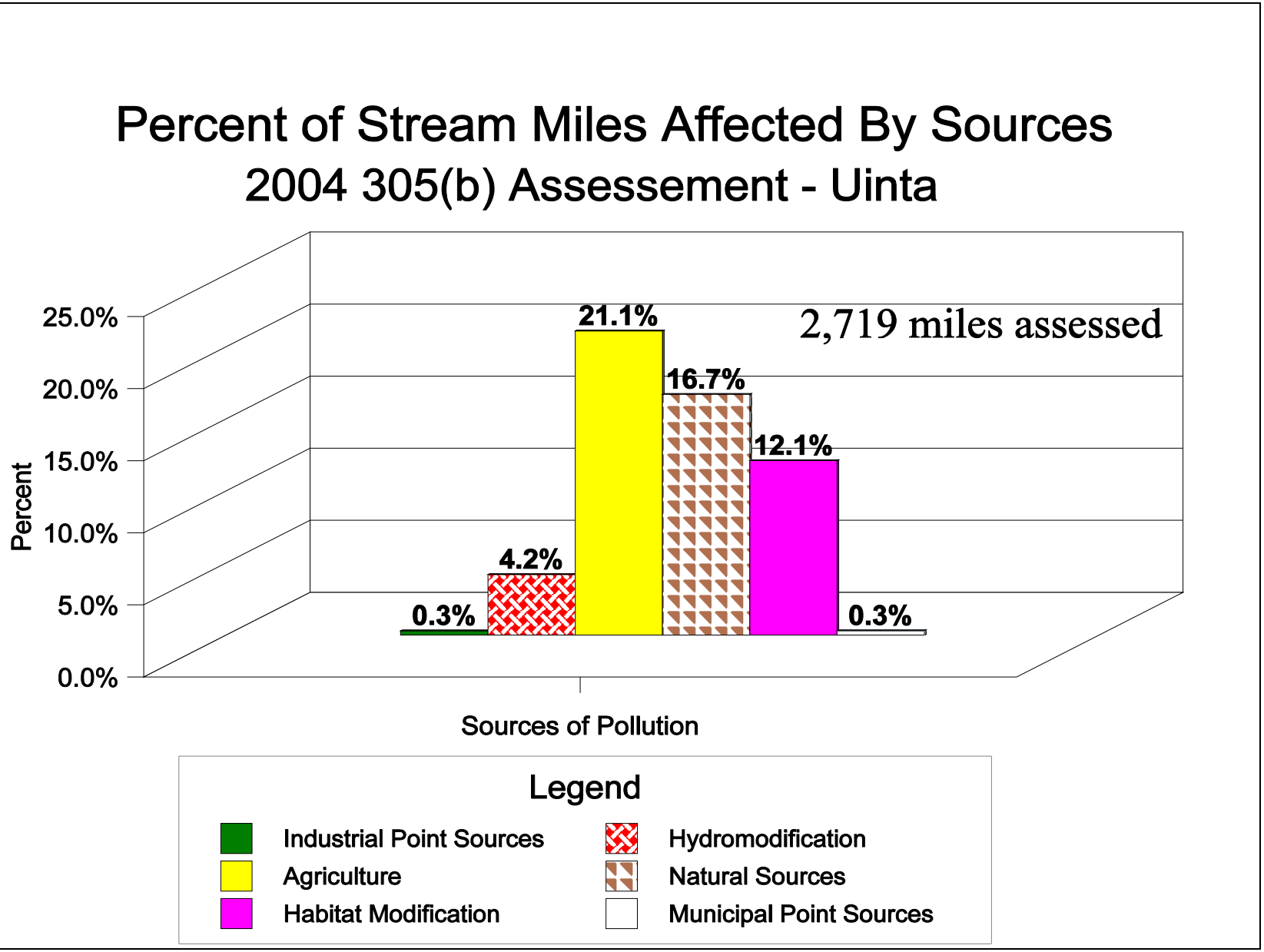

Figure 3-6. Percent of assessed stream miles impacted by sources - Uinta Watershed Management Unit.

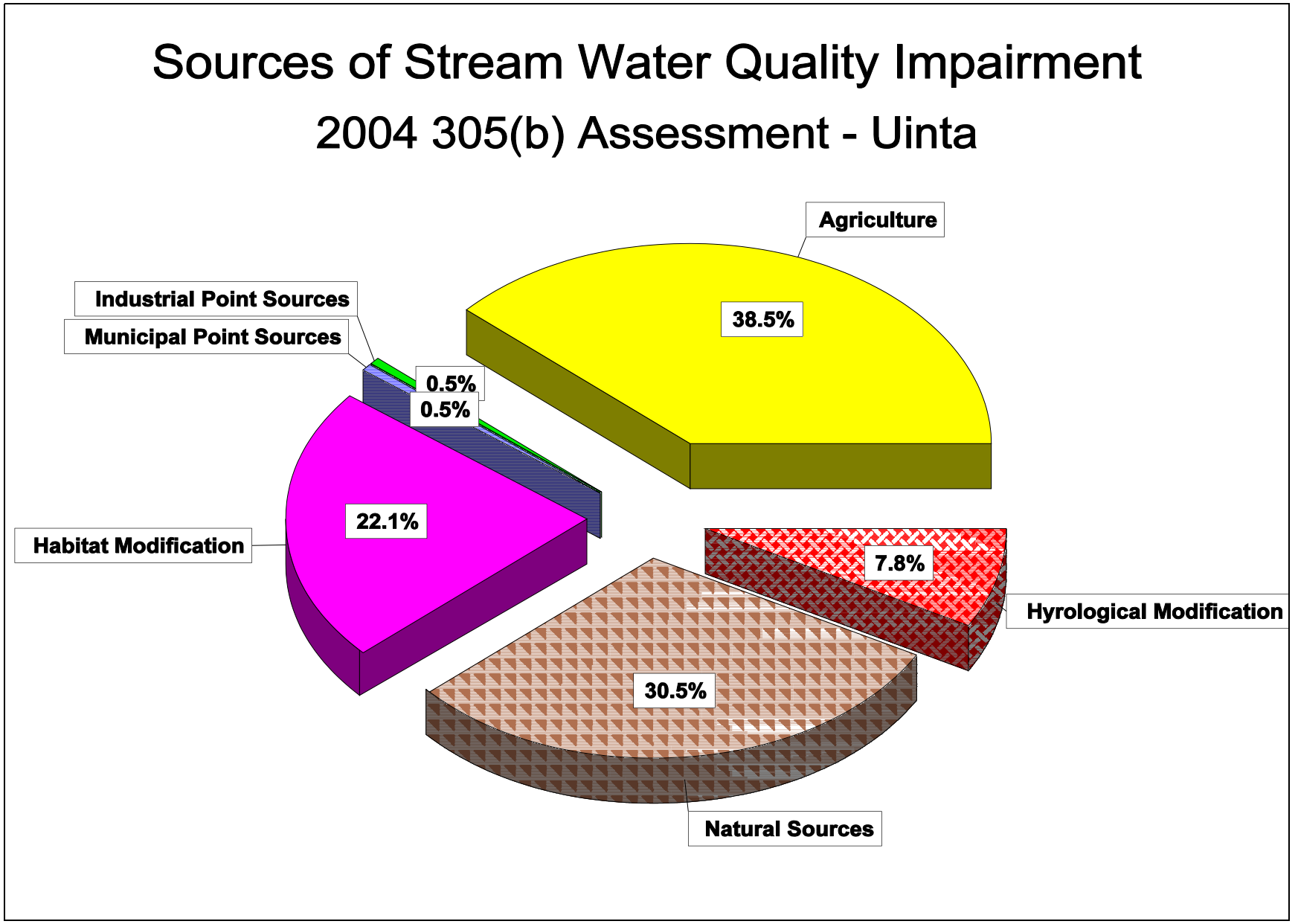

Figure 3-7. Relative percent contribution of sources to impairment of stream water quality - Uinta Watershed Management Unit.

Chapter 4: Sevier River Watershed Management Unit Assessment

Introduction

The Sevier River Watershed Management Unit includes all streams located in the U.S.G.S Hydrological Units (HUCs) listed in Table 4-1. Some of the major streams within unit are the Sevier River, San Pitch River, Otter Creek, Salina Creek, and the East Fork Sevier River.

Table 4-1. U.S.G.S. Hydrological Units in the Sevier Watershed Management Unit.

Hydrological Unit Code	Hydrological Unit Name
14030001	Upper Sevier
14030002	East Fork Sevier
14030003	Middle Sevier
14030004	San Pitch
14030005	Lower Sevier
14030009	Sevier Lake

Results

There were 1,575 stream miles assessed. Of these, 1,055.1 miles (67.0%) were assessed as fully supporting all of the beneficial uses that were assessed, 349.3 miles (22.2%) were assessed as partially supporting, and 170.6 miles (10.8 %) were assessed as not supporting at least one designated beneficial use (Figure 4-1).

Sevier Watershed Management Unit assessment units were assessed by categories and the results listed in Table 4-2. Specific assessment units within each category are listed in Appendix B, Tables B-1 through B-7.

Individual beneficial use support is listed in Table 4-3. One-thousand five-hundred six (1,575) stream miles were assessed for aquatic life and agricultural use support. This was 80.2% of the estimated stream miles that were classified for these two beneficial uses.

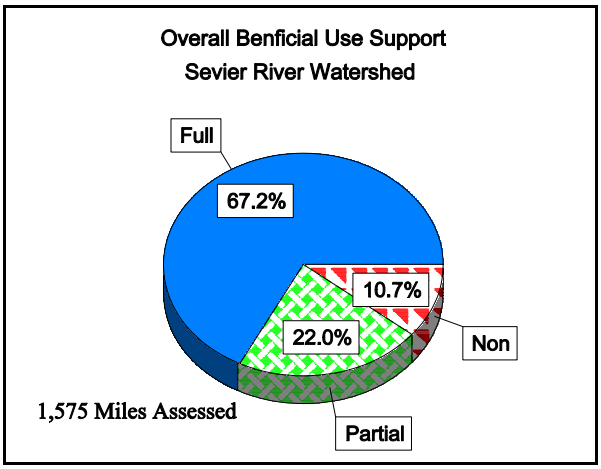

Figure 4-1. Overall beneficial use support based upon at least one beneficial use being assessed-Sevier River.

Of the streams assessed for agricultural use, 1,344.2 miles (85.3%) were assessed as fully supporting, 41.5 miles (2.6%) partially supporting, and 170.6 miles (10.8%) not supporting this beneficial use.

Table 4-2. Stream Miles by Assessment Category - Sevier River

Category	Stream Miles
1	0
2	1,055
3	350
4A	187
4B	0
4C	340
5A	340
5B	0

Of the streams assessed for aquatic life, 1,215.5 miles (77.2%) were assessed as fully supporting, 359.5 miles (22.8%) partially supporting this beneficial use and no miles were listed as being non supporting.

Figure 4-3 identifies the beneficial use classifications and Figure 4-4 shows the assessment by categories and the STORET sampling sites used to assess waters within this unit.

The causes and sources of impairment are listed in Table 4-3 and Table 4-4 respectively. The major causes of impairment were nutrients (total phosphorus), sediment, habitat alterations, and total dissolved solids. The percent of miles impacted were 24.9, 23.3, 21.6 and 14.7 percent respectively (Figure 4-6). The relative impact of these causes is shown in Figure 4-7.

The major sources of impairment were agricultural activities, hydromodification, habitat modification, and natural as shown in Figure 4-8. They affected 32.3 , 30.2, 16.2, and 16.8% percent respectively of the stream miles assessed. The relative percent impairment by sources is illustrated in Figure 4-9.

Sevier River–The Sevier River from Crear Lake upstream to Leamington exceeds the agriculture standard for total dissolved solids. It was assessed as not meeting the agriculture beneficial use below Gunnison Bend Reservoir and was listed as partially supporting this beneficial use from there to Leamington. From Gunnison Bend Reservoir upstream to Yuba Reservoir, the river was assessed as partially supporting the Class 3B, warm water game fish, beneficial use. This was due to excessive nutrients, sediments, and poor habitat.

From Yuba Reservoir upstream to the Salina Creek confluence, the Sevier River was assessed as not supporting its agricultural beneficial use and partially supporting the warm water game fish designation.

Several upstream segments of the Sevier River were found to be only partially supporting the agricultural and the Class 3A, cold water game fish, beneficial use classification. The stream segments not supporting the Class 3A classification included the following segments: Sevier River and tributaries from the Circleville Irrigation Diversion upstream to the Horse Valley Diversion, from the Horse Valley Diversion upstream to the Long Canal diversion (does not include all tributaries), and from the Long Creek Diversion upstream to the Mammouth Creek confluence. The causes of impairment were excessive sedimentation, total phosphorus, and habitat alteration. The major sources were hydromodification and agricultural practices. Another source of total phosphorus was aquiculture (fish hatchery) effluent.

San Pitch River–The segments of the San Pitch River, below Gunnison Reservoir, and upstream including the tributary Silver Creek to its headwaters were assessed as not supporting the agricultural beneficial use because of TDS. A TMDL was submitted to EPA this cycle for these waters. The primary source of total dissolved solids was attributed to agricultural activities and to the naturally occurring saline soils and salt springs in the lower portions of the valley.

Salina Creek–The lower portion of Salina Creek continues to have high concentrations of total dissolved solids and still exceed the total dissolved solids criteria for agriculture.

Lost Creek–This small stream has high TDS concentrations and contributes a significant amount of TDS to the Sevier River system. Highly saline geological formations and saline springs are located in the lower portion of Lost Creek.

East Fork Sevier River–The East Fork Sevier River was found to be supporting all of its beneficial uses with the exception of one segment. That segment runs from the confluence with the Sevier River upstream to the Antimony Creek confluence, excluding Otter Creek and its tributaries. This was due to high nutrient and sediment loads and the loss of stream habitat.

Otter Creek–Otter Creek and its tributaries were designated as partially supporting their cold water game fish classification due to excessive total phosphorus, sedimentation, and habitat alteration. A total maximum daily load analysis has been submitted to EPA and it was approved. With the approval of the TMDL the Otter Creek assessment units were moved to Category 4A. Impairments caused by habitat modification are now listed under Category 4A, and do not require a TMDL. However, best management practices should be implemented to reduce the impact cause by habitat alterations. The Otter Creek assessment units are still assessed as partially supporting there Class 3A beneficial use (cold water game fish).

Peterson Creek–This tributary to the Sevier River was assessed as being non supporting of its agricultural usage because of total dissolved solids. It is a newly created assessment unit and was listed in Category 5A.

Table 4-3. Individual Use Support Summary for the Sevier River Watershed Management Unit (Stream Miles).

Goals [a]	Use	Size Assessed	Size Fully Supporting	Size Fully Supporting but Threatened	Size Partially Supporting	Size Not Supporting	Size Not Attainable
Protect & Enhance Ecosystems	Aquatic Life	1,575.0	1,215.5 (77.2%)	0.0	359.5 (22.8%)	0.0	0.0
Protect & Enhance Public Health	Fish Consumption	0.0	0.0	0.0	0.0	0.0	0.0
	Swimming [b]	0.0	0.0	0.0	0.0	0.0	0.0
	Secondary Contact	0.0	0.0	0.0	0.0	0.0	0.0
	Drinking Water	0.0	0.0	0.0	0.0	0.0	0.0
Social and Economic	Agricultural	1,575.0	1,344.2 (85.3%)	0.0	41.5 (2.6%)	170.6 (10.8%)	0.0
	Total	1,575.0	1,055.1 (64.0%)	0.0	349.3 (26.1%)	170.6 (10.8%)	0.0

a - These goals are part of the national water quality goals adopted by the EPA Office of Water and the ITFM in their Environmental Goals and Indicators effort.

b - Class 2B (secondary contact) streams were evaluated as swimmable for proposes of the CWA goals, therefore the swimming and secondary contact classification categories are the same.

Table 4-3. Total Waters Impaired by Various Causes within the Sevier River Water Quality Management Unit.

Cause Category	Stream Miles Impaired
Cause unknown	0.0

Table 4-3. Total Waters Impaired by Various Causes within the Sevier River Water Quality Management Unit.	
Cause Category	**Stream Miles Impaired**
Unknown toxicity	0.0
Pesticides	-
Priority organics	-
Nonpriority organics	-
Metals	0.0
Ammonia	0.0
Chlorine	0.0
Other inorganics	0.0
Nutrients	392.8
pH	0.0
Siltation/Sediments	367.5
Organic Enrichment/low DO	0.0
Salinity/TDS/Chlorides	230.8
Thermal modifications	0.0
Flow alterations	0.0
Other habitat alterations	340.4
Pathogen Indicators	-
Radiation	-
Oil and grease	0.0
Taste and odor	-
Noxious aquatic plants	-
Total toxics	0.0
Turbidity	0.0
Exotic species	-
Other (specify)	-

- = Category applicable, no data available.
0 = Category applicable, but size of waters in the category is zero.

Table 4-4. Total Waters Impaired by Various Source Categories in the Sevier River Watershed Management Unit	
Source Category	**Stream Miles Impaired**
Industrial Point Sources	0.0
Municipal Point Sources	0.0
Combined Sewer Overflow	-
Agriculture	509.5
Silviculture	0.0
Construction	0.0
Urban Runoff/Storm Sewers	0.0
Resource Extraction	0.0
Land Disposal	0.0
Hydromodification	475.5
Habitat Modification	255.7
Marinas	-
Atmospheric Deposition	-
Contaminated Sediments	-
Unknown Source	0.0
Natural Sources	264.2

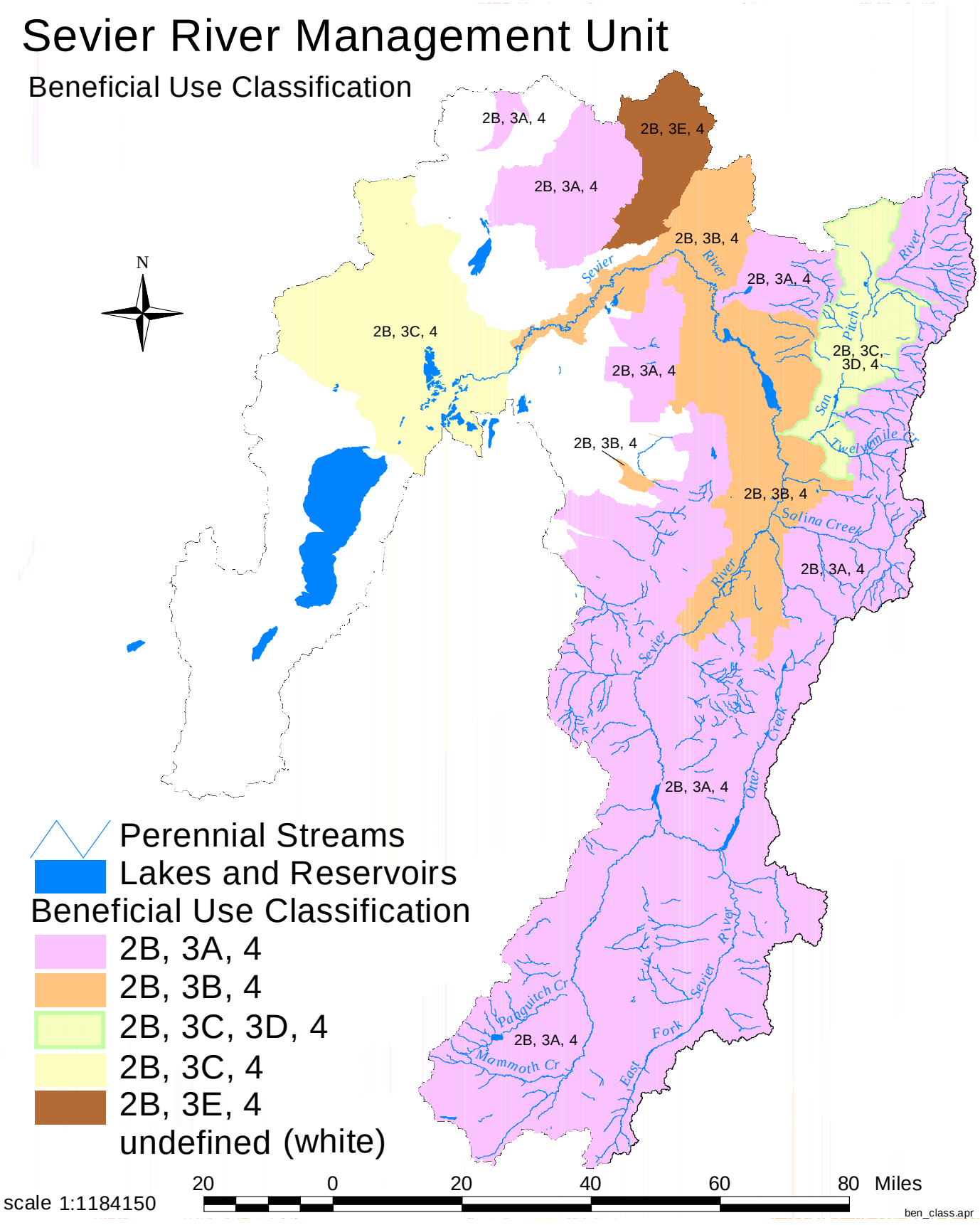

Figure 4-2. River and stream designated beneficial use classifications - the Sevier Watershed Management Unit.

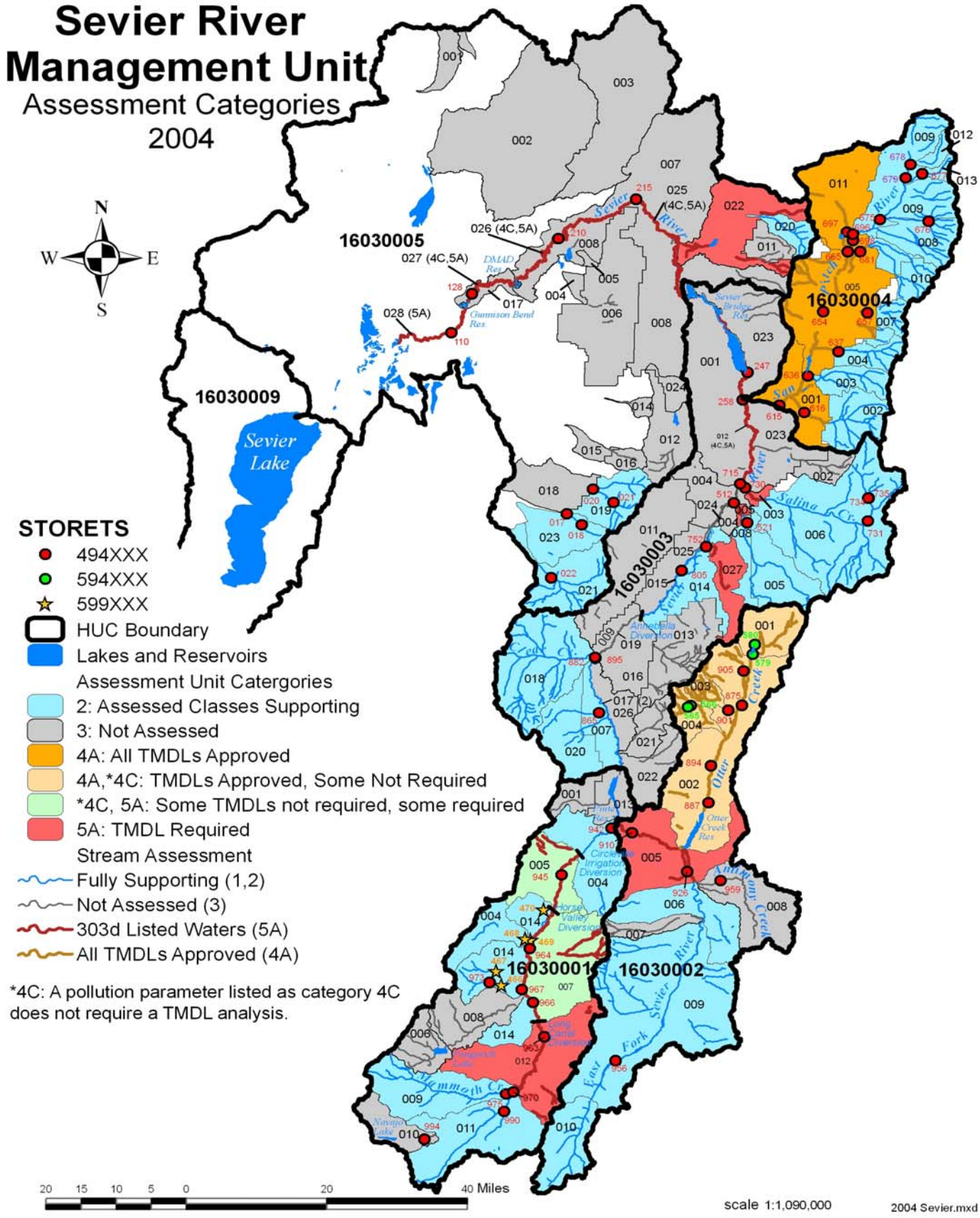

Figure 4-3. River and stream beneficial use support by category - Sevier Watershed Management Unit.

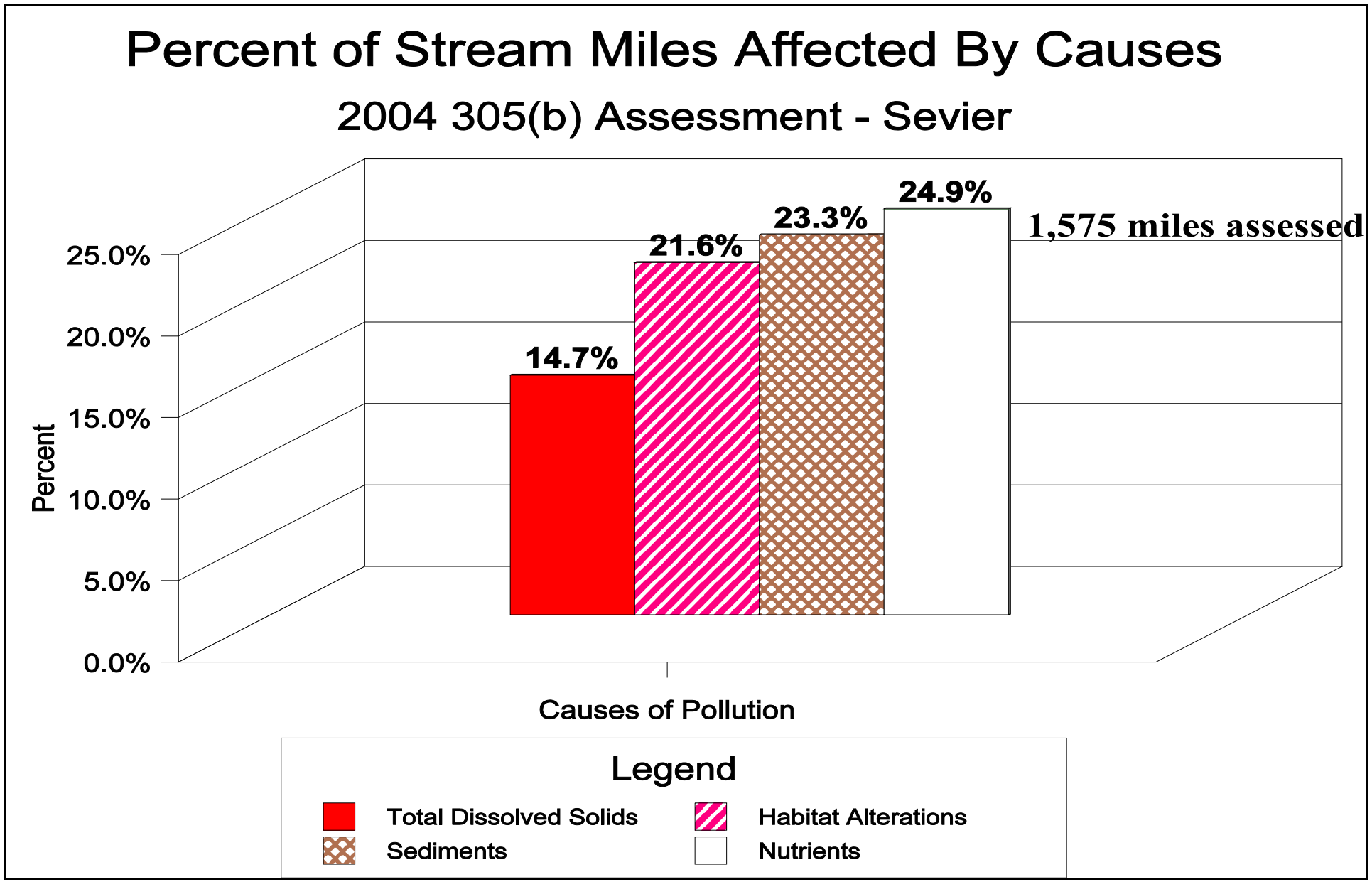

Figure 4-4. Percent of assessed stream miles impacted by causes - Sevier River Watershed Management Unit.

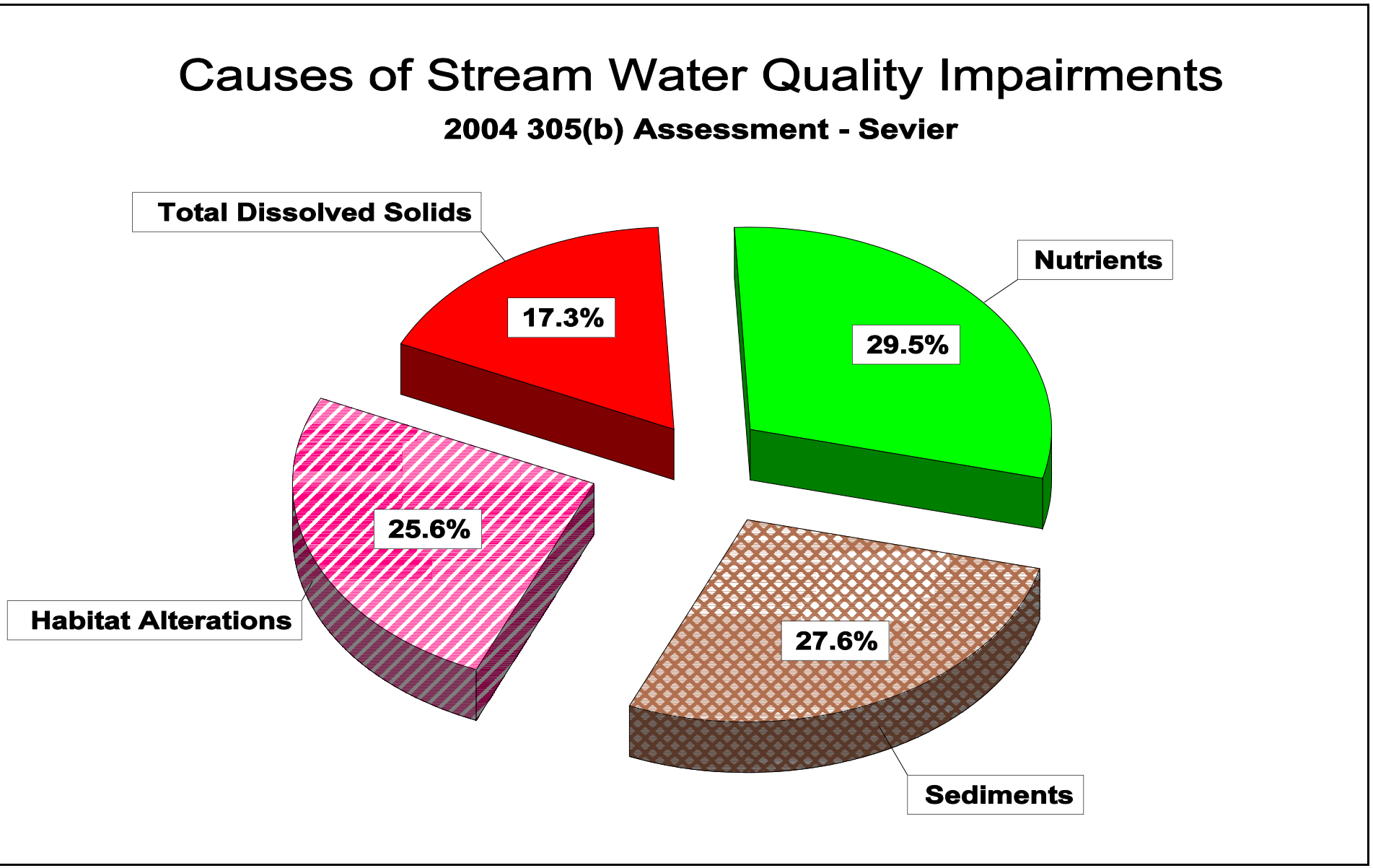

Figure 4-5. Relative percent contribution by cause to impairment of stream water quality - Sevier Watershed Management Unit.

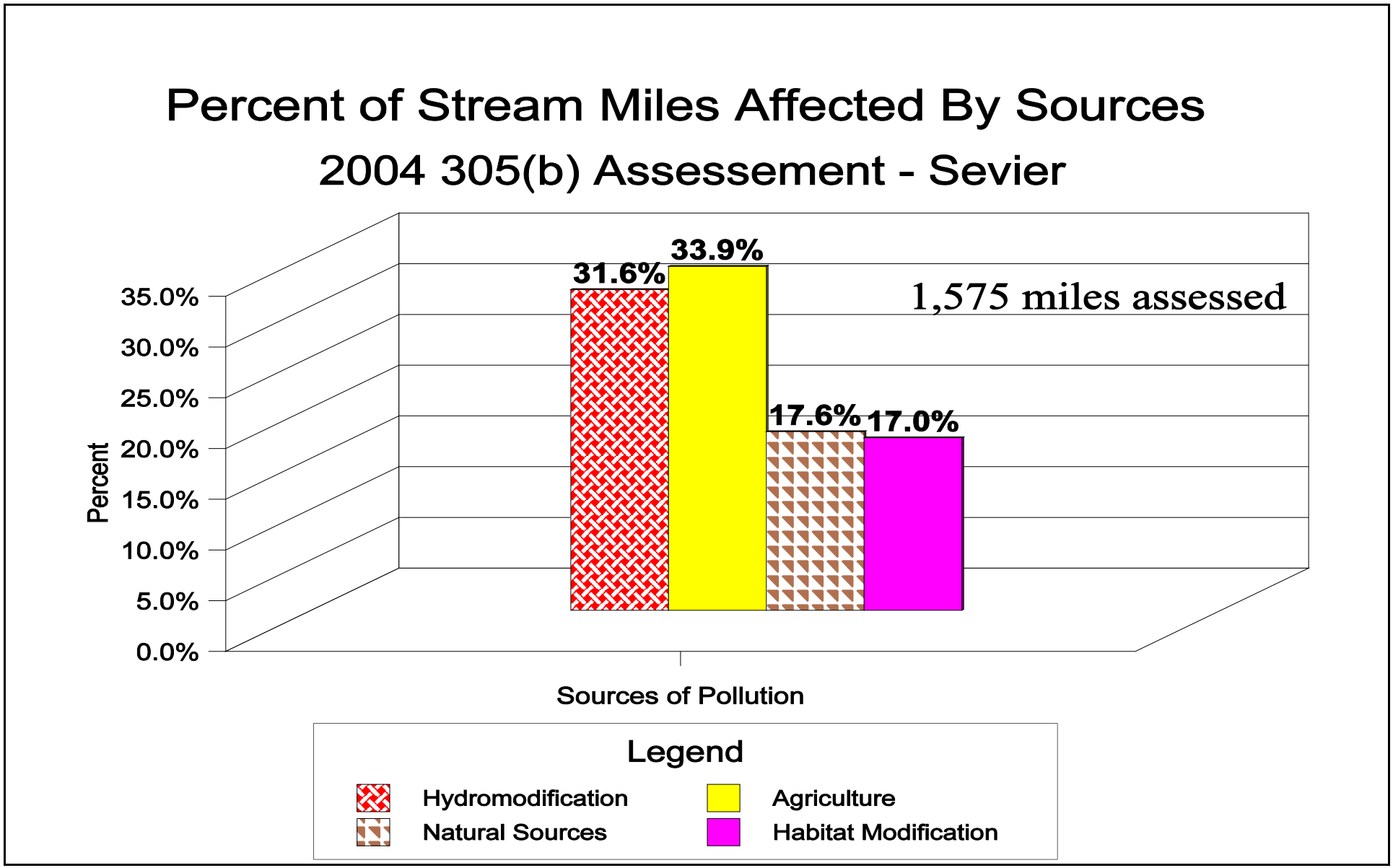

Figure 4-6. Percent of assessed stream miles impacted by sources - Sevier River Watershed Management Unit.

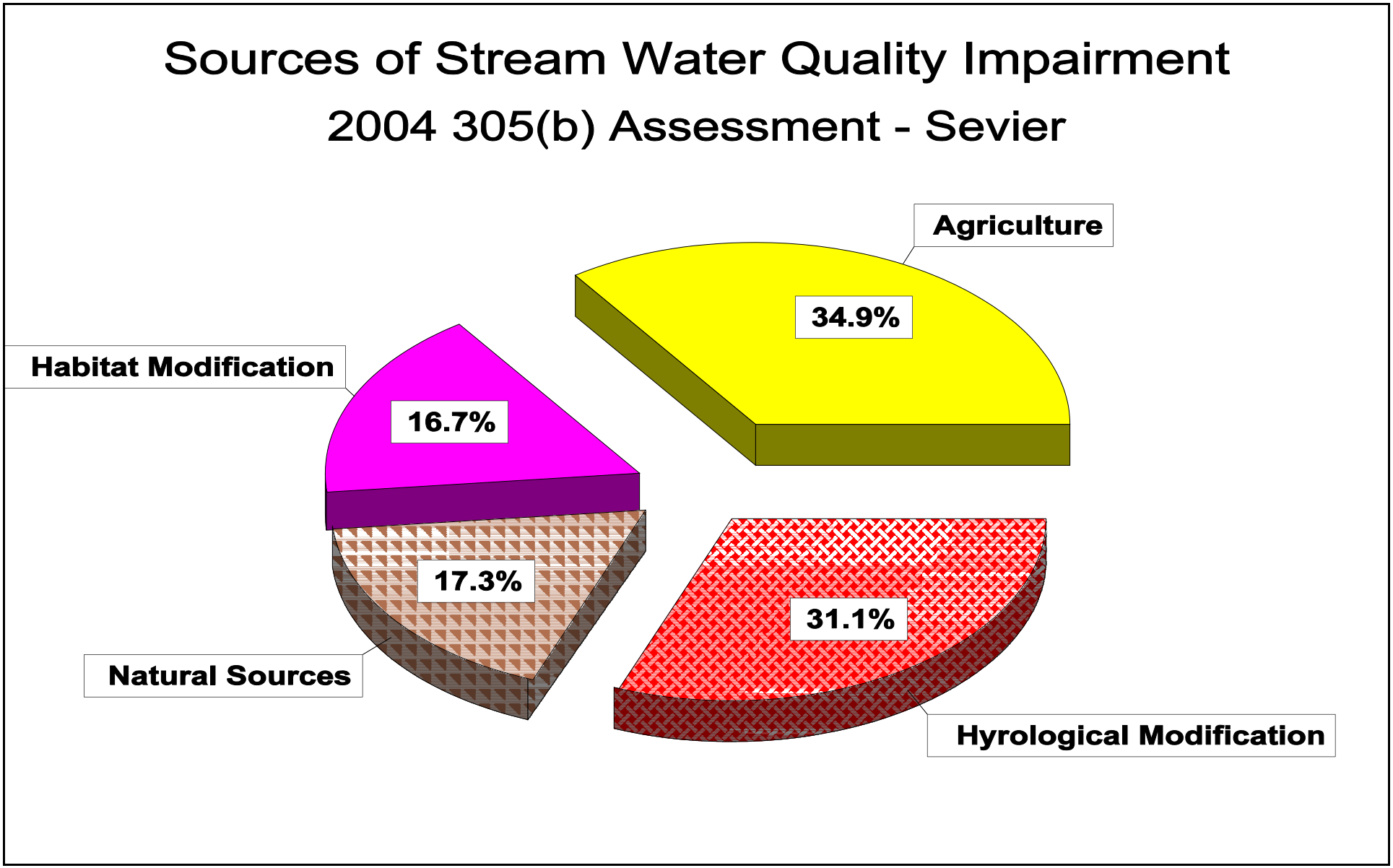

Figure 4-7. Relative percent contribution by source to impairment of stream water quality - the Sevier River Watershed Management Unit.

Chapter 4: Sevier River Watershed Management Unit Assessment

Introduction

The Sevier River Watershed Management Unit includes all streams located in the U.S.G.S Hydrological Units (HUCs) listed in Table 4-1. Some of the major streams within unit are the Sevier River, San Pitch River, Otter Creek, Salina Creek, and the East Fork Sevier River.

Table 4-1. U.S.G.S. Hydrological Units in the Sevier Watershed Management Unit.

Hydrological Unit Code	Hydrological Unit Name
14030001	Upper Sevier
14030002	East Fork Sevier
14030003	Middle Sevier
14030004	San Pitch
14030005	Lower Sevier
14030009	Sevier Lake

Results

There were 1,575 stream miles assessed. Of these, 1,055.1 miles (67.0%) were assessed as fully supporting all of the beneficial uses that were assessed, 349.3 miles (22.2%) were assessed as partially supporting, and 170.6 miles (10.8 %) were assessed as not supporting at least one designated beneficial use (Figure 4-1).

Sevier Watershed Management Unit assessment units were assessed by categories and the results listed in Table 4-2. Specific assessment units within each category are listed in Appendix B, Tables B-1 through B-7.

Individual beneficial use support is listed in Table 4-3. One-thousand five-hundred six (1,575) stream miles were assessed for aquatic life and agricultural use support. This was 80.2% of the estimated stream miles that were classified for these two beneficial uses.

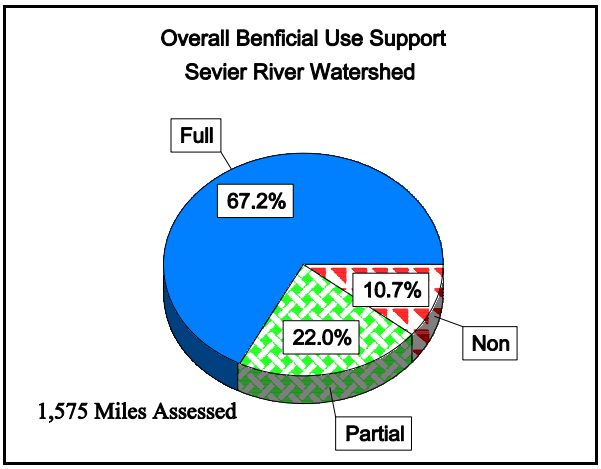

Figure 4-1. Overall beneficial use support based upon at least one beneficial use being assessed-Sevier River.

Of the streams assessed for agricultural use, 1,344.2 miles (85.3%) were assessed as fully supporting, 41.5 miles (2.6%) partially supporting, and 170.6 miles (10.8%) not supporting this beneficial use.

Table 4-2. Stream Miles by Assessment Category - Sevier River

Category	Stream Miles
1	0
2	1,055
3	350
4A	187
4B	0
4C	340
5A	340
5B	0

Of the streams assessed for aquatic life, 1,215.5 miles (77.2%) were assessed as fully supporting, 359.5 miles (22.8%) partially supporting this beneficial use and no miles were listed as being non supporting.

Figure 4-3 identifies the beneficial use classifications and Figure 4-4 shows the assessment by categories and the STORET sampling sites used to assess waters within this unit.

The causes and sources of impairment are listed in Table 4-3 and Table 4-4 respectively. The major causes of impairment were nutrients (total phosphorus), sediment, habitat alterations, and total dissolved solids. The percent of miles impacted were 24.9, 23.3, 21.6 and 14.7 percent respectively (Figure 4-6). The relative impact of these causes is shown in Figure 4-7.

The major sources of impairment were agricultural activities, hydromodification, habitat modification, and natural as shown in Figure 4-8. They affected 32.3 , 30.2, 16.2, and 16.8% percent respectively of the stream miles assessed. The relative percent impairment by sources is illustrated in Figure 4-9.

Sevier River–The Sevier River from Crear Lake upstream to Leamington exceeds the agriculture standard for total dissolved solids. It was assessed as not meeting the agriculture beneficial use below Gunnison Bend Reservoir and was listed as partially supporting this beneficial use from there to Leamington. From Gunnison Bend Reservoir upstream to Yuba Reservoir, the river was assessed as partially supporting the Class 3B, warm water game fish, beneficial use. This was due to excessive nutrients, sediments, and poor habitat.

From Yuba Reservoir upstream to the Salina Creek confluence, the Sevier River was assessed as not supporting its agricultural beneficial use and partially supporting the warm water game fish designation.

Several upstream segments of the Sevier River were found to be only partially supporting the agricultural and the Class 3A, cold water game fish, beneficial use classification. The stream segments not supporting the Class 3A classification included the following segments: Sevier River and tributaries from the Circleville Irrigation Diversion upstream to the Horse Valley Diversion, from the Horse Valley Diversion upstream to the Long Canal diversion (does not include all tributaries), and from the Long Creek Diversion upstream to the Mammouth Creek confluence. The causes of impairment were excessive sedimentation, total phosphorus, and habitat alteration. The major sources were hydromodification and agricultural practices. Another source of total phosphorus was aquiculture (fish hatchery) effluent.

San Pitch River–The segments of the San Pitch River, below Gunnison Reservoir, and upstream including the tributary Silver Creek to its headwaters were assessed as not supporting the agricultural beneficial use because of TDS. A TMDL was submitted to EPA this cycle for these waters. The primary source of total dissolved solids was attributed to agricultural activities and to the naturally occurring saline soils and salt springs in the lower portions of the valley.

Salina Creek–The lower portion of Salina Creek continues to have high concentrations of total dissolved solids and still exceed the total dissolved solids criteria for agriculture.

Lost Creek–This small stream has high TDS concentrations and contributes a significant amount of TDS to the Sevier River system. Highly saline geological formations and saline springs are located in the lower portion of Lost Creek.

East Fork Sevier River–The East Fork Sevier River was found to be supporting all of its beneficial uses with the exception of one segment. That segment runs from the confluence with the Sevier River upstream to the Antimony Creek confluence, excluding Otter Creek and its tributaries. This was due to high nutrient and sediment loads and the loss of stream habitat.

Otter Creek–Otter Creek and its tributaries were designated as partially supporting their cold water game fish classification due to excessive total phosphorus, sedimentation, and habitat alteration. A total maximum daily load analysis has been submitted to EPA and it was approved. With the approval of the TMDL the Otter Creek assessment units were moved to Category 4A. Impairments caused by habitat modification are now listed under Category 4A, and do not require a TMDL. However, best management practices should be implemented to reduce the impact cause by habitat alterations. The Otter Creek assessment units are still assessed as partially supporting there Class 3A beneficial use (cold water game fish).

Peterson Creek–This tributary to the Sevier River was assessed as being non supporting of its agricultural usage because of total dissolved solids. It is a newly created assessment unit and was listed in Category 5A.

Table 4-3. Individual Use Support Summary for the Sevier River Watershed Management Unit (Stream Miles).

Goals [a]	Use	Size Assessed	Size Fully Supporting	Size Fully Supporting but Threatened	Size Partially Supporting	Size Not Supporting	Size Not Attainable
Protect & Enhance Ecosystems	Aquatic Life	1,575.0	1,215.5 (77.2%)	0.0	359.5 (22.8%)	0.0	0.0
Protect & Enhance Public Health	Fish Consumption	0.0	0.0	0.0	0.0	0.0	0.0
	Swimming [b]	0.0	0.0	0.0	0.0	0.0	0.0
	Secondary Contact	0.0	0.0	0.0	0.0	0.0	0.0
	Drinking Water	0.0	0.0	0.0	0.0	0.0	0.0
Social and Economic	Agricultural	1,575.0	1,344.2 (85.3%)	0.0	41.5 (2.6%)	170.6 (10.8%)	0.0
	Total	1,575.0	1,055.1 (64.0%)	0.0	349.3 (26.1%)	170.6 (10.8%)	0.0

a - These goals are part of the national water quality goals adopted by the EPA Office of Water and the ITFM in their Environmental Goals and Indicators effort.

b - Class 2B (secondary contact) streams were evaluated as swimmable for proposes of the CWA goals, therefore the swimming and secondary contact classification categories are the same.

Table 4-3. Total Waters Impaired by Various Causes within the Sevier River Water Quality Management Unit.

Cause Category	Stream Miles Impaired
Cause unknown	0.0

Table 4-3. Total Waters Impaired by Various Causes within the Sevier River Water Quality Management Unit.	
Cause Category	**Stream Miles Impaired**
Unknown toxicity	0.0
Pesticides	-
Priority organics	-
Nonpriority organics	-
Metals	0.0
Ammonia	0.0
Chlorine	0.0
Other inorganics	0.0
Nutrients	392.8
pH	0.0
Siltation/Sediments	367.5
Organic Enrichment/low DO	0.0
Salinity/TDS/Chlorides	230.8
Thermal modifications	0.0
Flow alterations	0.0
Other habitat alterations	340.4
Pathogen Indicators	-
Radiation	-
Oil and grease	0.0
Taste and odor	-
Noxious aquatic plants	-
Total toxics	0.0
Turbidity	0.0
Exotic species	-
Other (specify)	-

- = Category applicable, no data available.
0 = Category applicable, but size of waters in the category is zero.

Table 4-4. Total Waters Impaired by Various Source Categories in the Sevier River Watershed Management Unit	
Source Category	**Stream Miles Impaired**
Industrial Point Sources	0.0
Municipal Point Sources	0.0
Combined Sewer Overflow	-
Agriculture	509.5
Silviculture	0.0
Construction	0.0
Urban Runoff/Storm Sewers	0.0
Resource Extraction	0.0
Land Disposal	0.0
Hydromodification	475.5
Habitat Modification	255.7
Marinas	-
Atmospheric Deposition	-
Contaminated Sediments	-
Unknown Source	0.0
Natural Sources	264.2

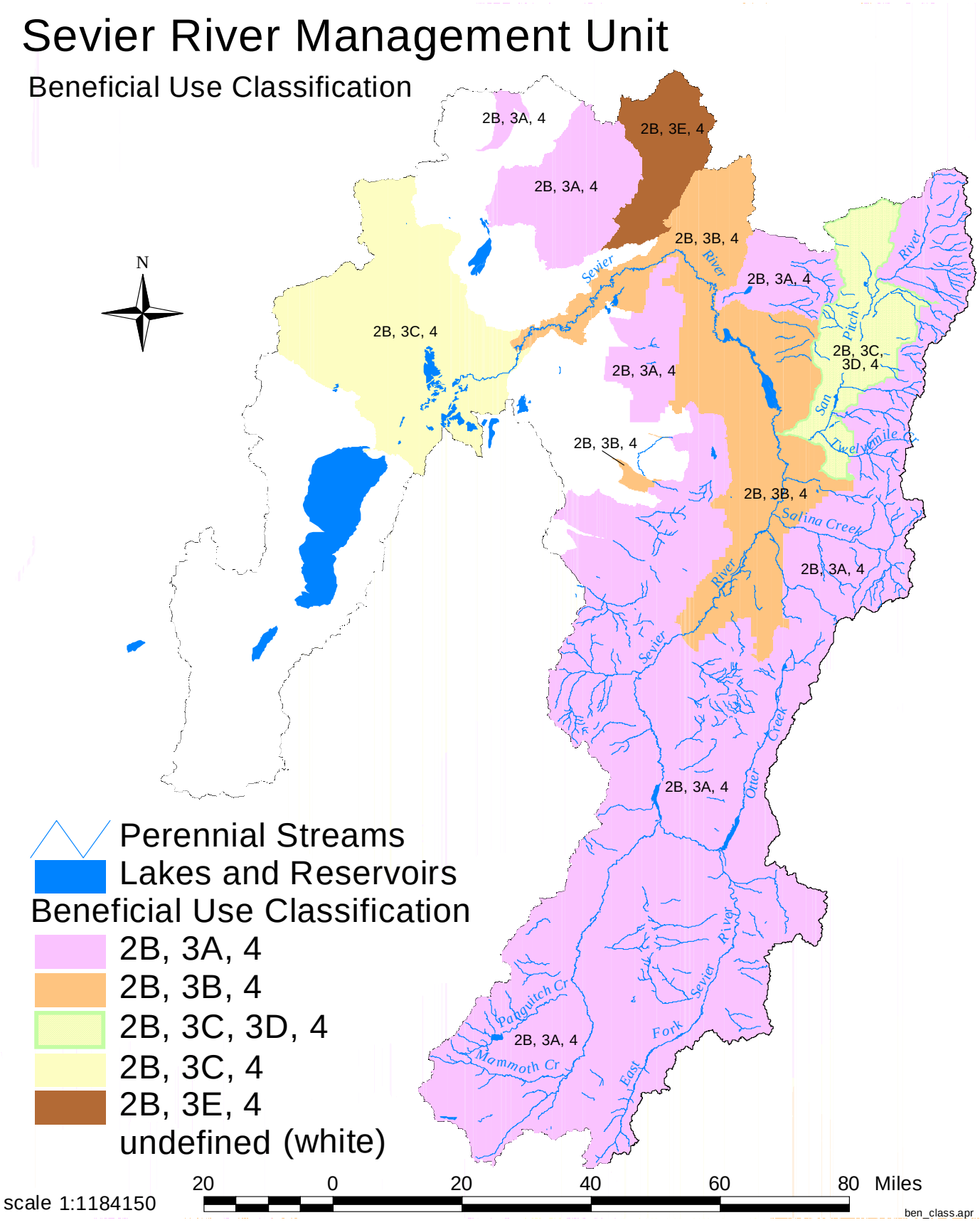

Figure 4-2. River and stream designated beneficial use classifications - the Sevier Watershed Management Unit.

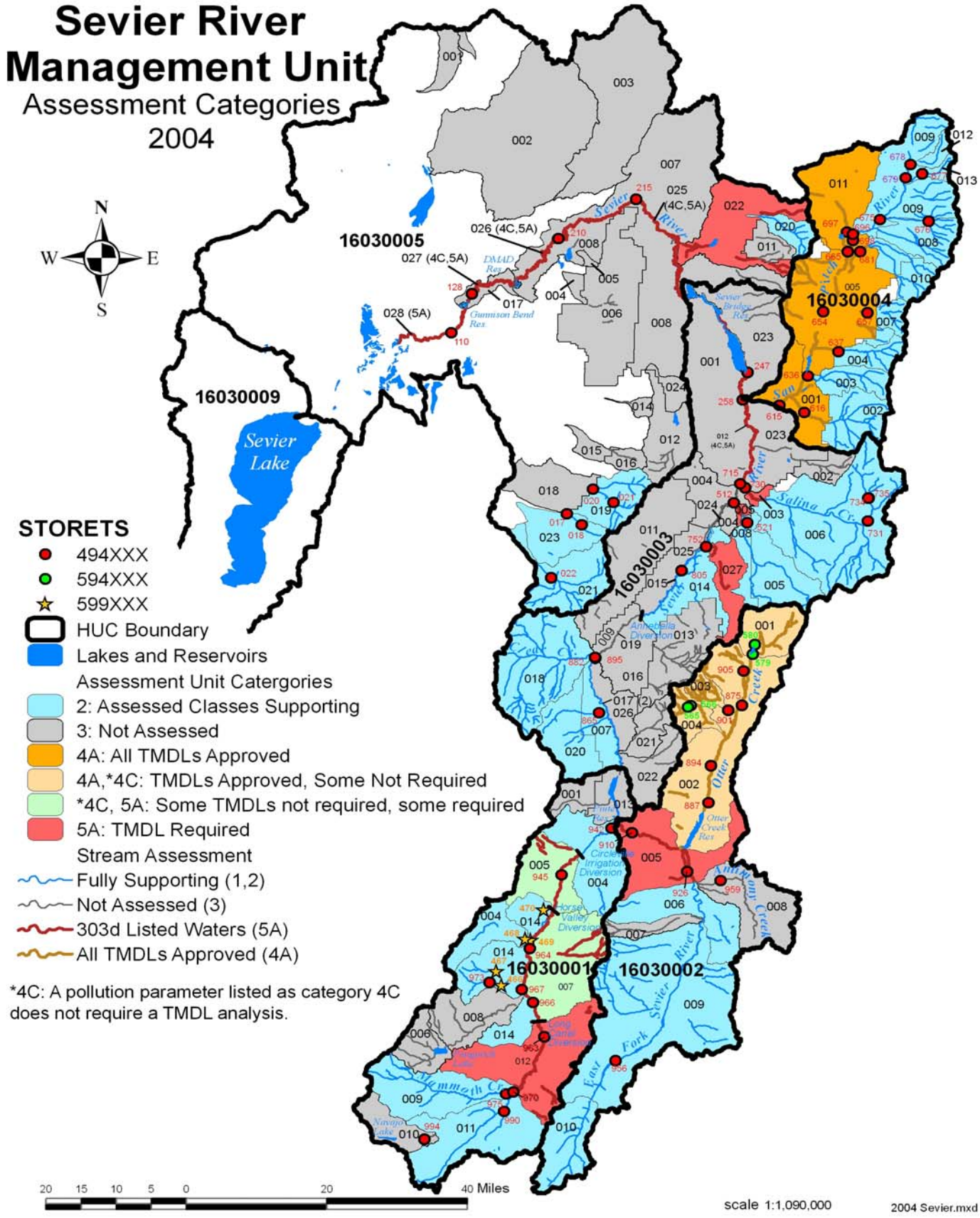

Figure 4-3. River and stream beneficial use support by category - Sevier Watershed Management Unit.

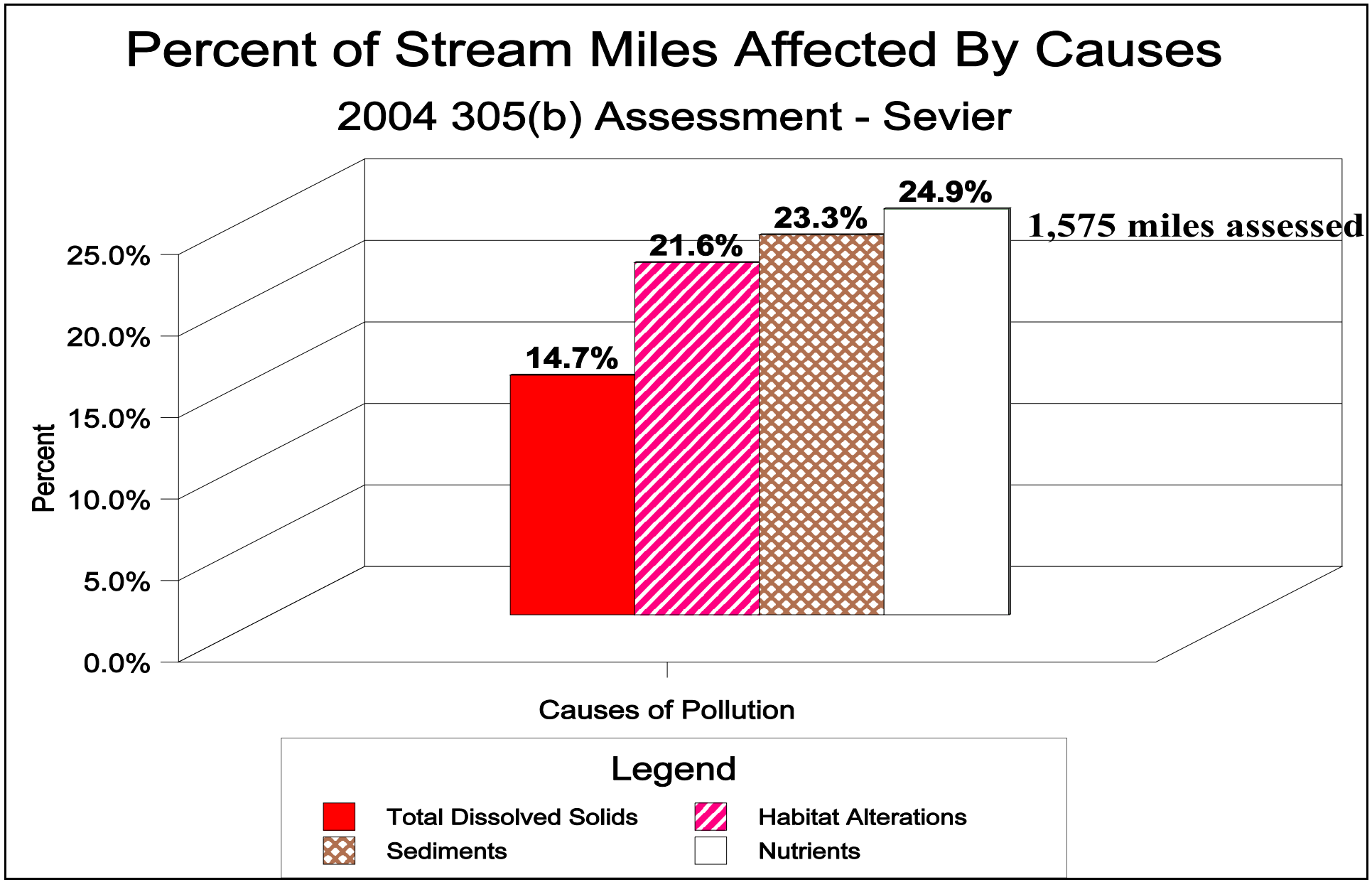

Figure 4-4. Percent of assessed stream miles impacted by causes - Sevier River Watershed Management Unit.

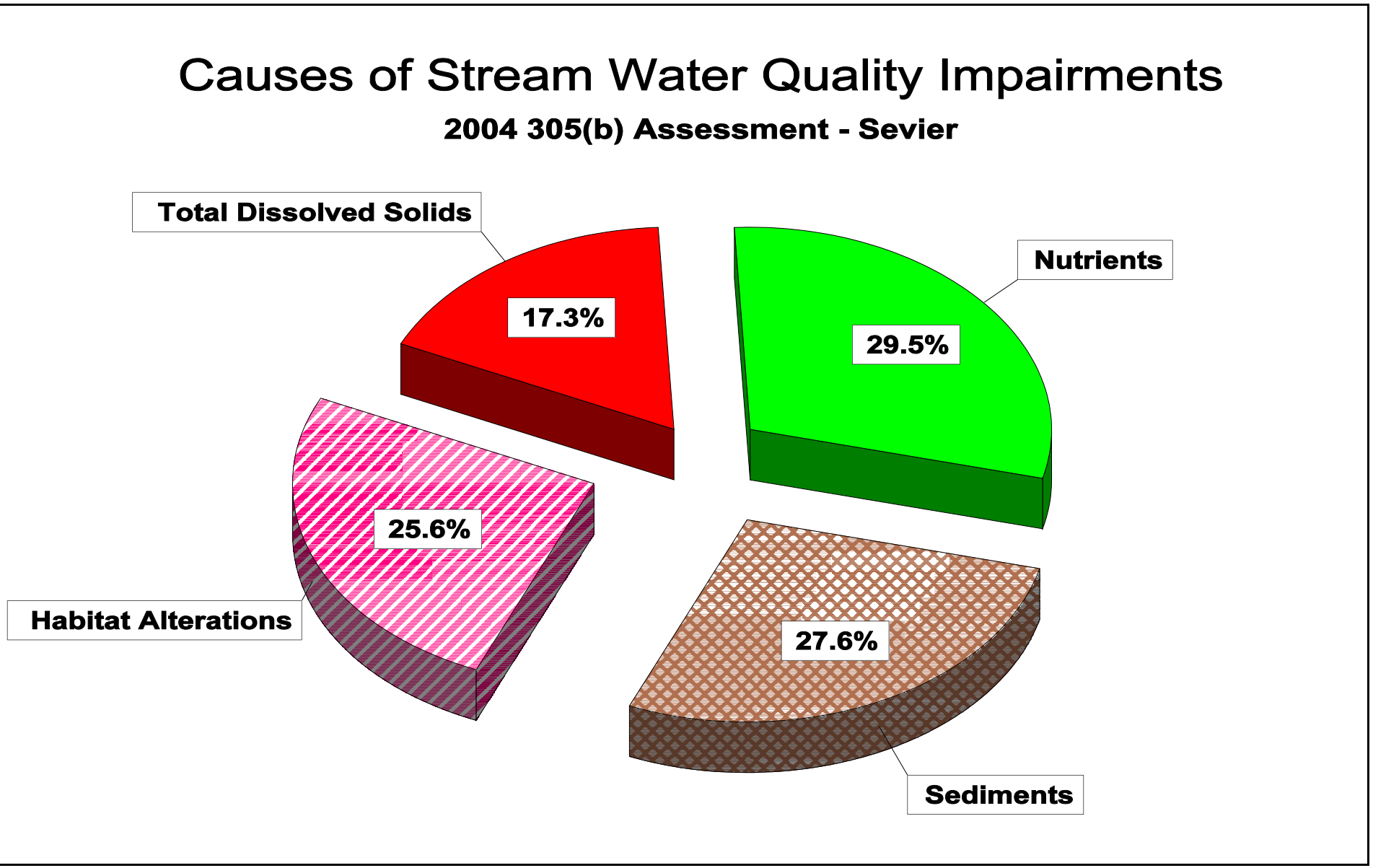

Figure 4-5. Relative percent contribution by cause to impairment of stream water quality - Sevier Watershed Management Unit.

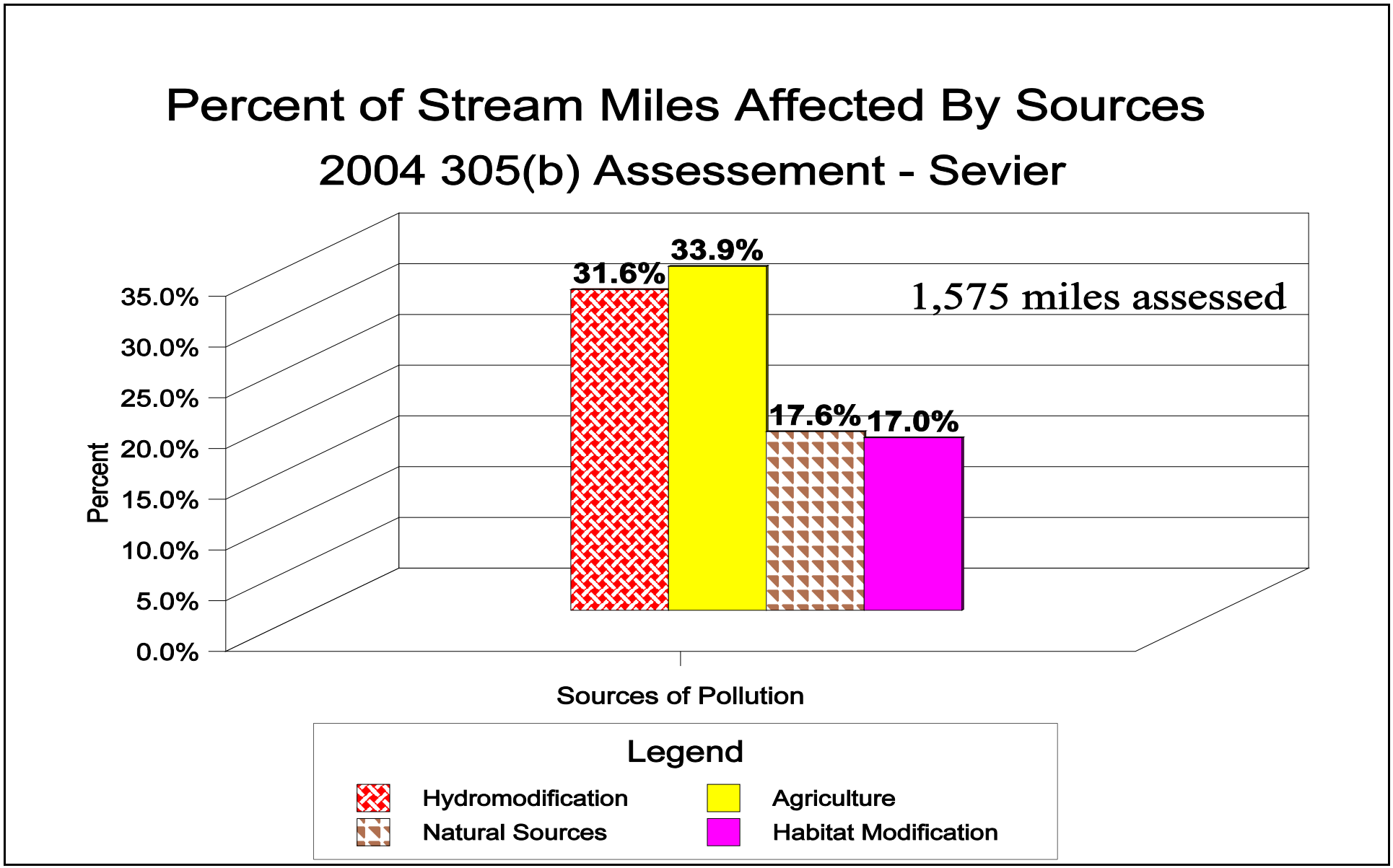

Figure 4-6. Percent of assessed stream miles impacted by sources - Sevier River Watershed Management Unit.

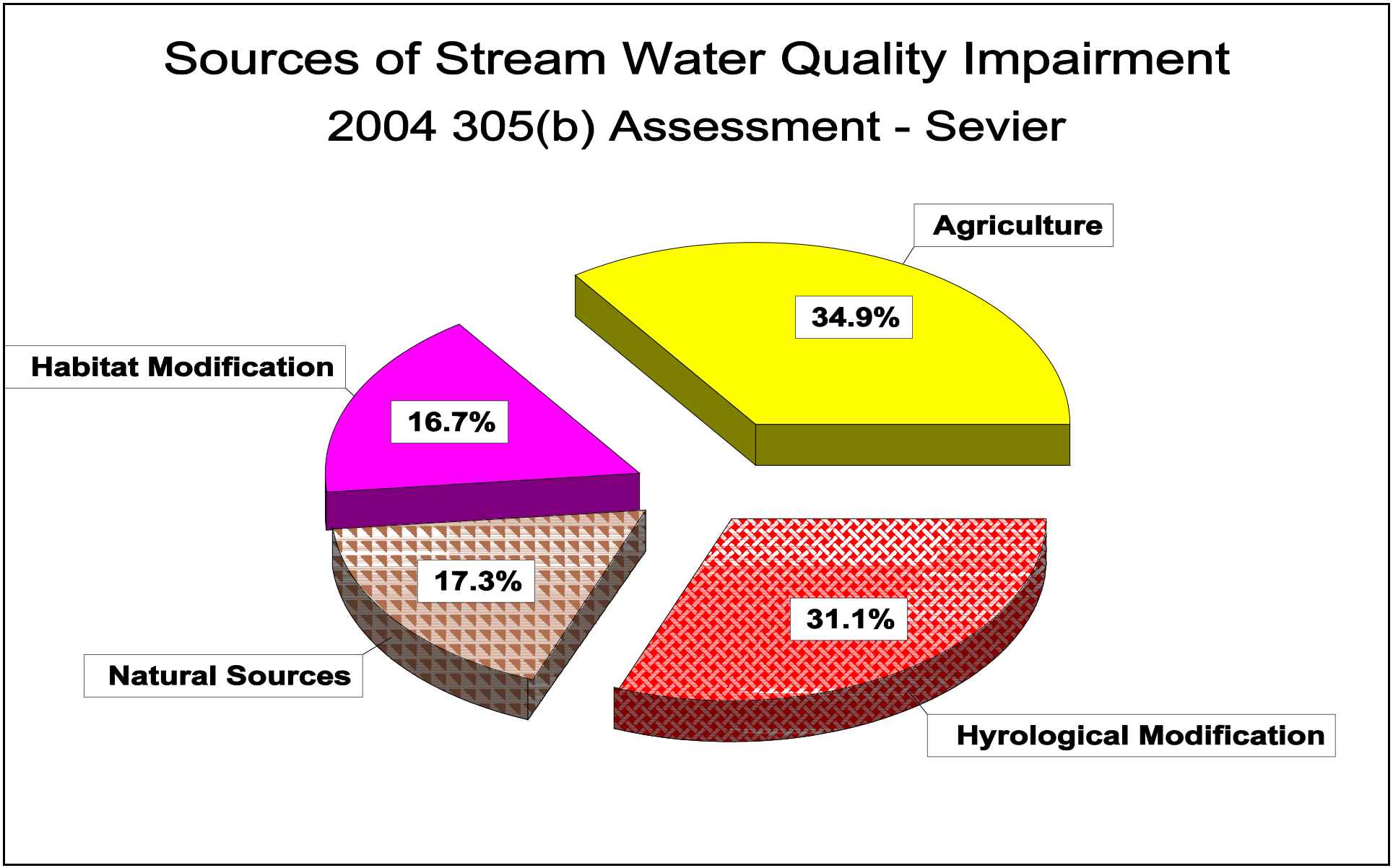

Figure 4-7. Relative percent contribution by source to impairment of stream water quality - the Sevier River Watershed Management Unit.

Chapter 5. West Colorado Watershed Management Unit Stream Water Quality Assessment

Introduction

The West Colorado Watershed Management Unit includes all streams located in the U.S.G.S. Hydrological Units (HUCs) listed in Table 5-1 Some of the major streams are the Price River, Huntington Creek, Cottonwood Creek, Ferron Creek, San Rafael River, Escalante River, Muddy Creek, Dirty Devil River, the Fremont River, and portions of the Green River.

Table 5-1. U.S.G.S. Hydrological Units in the Colorado River West Watershed Management Unit.

Hydrological Unit Code	Hydrological Unit Name
14060007	Price
14060008	Lower Green
14060009	San Rafael
14070001	Upper Lake Powell
14070002	Muddy
14070003	Fremont
14070004	Dirty Devil
14070005	Escalante
14070006	Lower Lake Powell

Results

The intensive survey for this watershed was done from July 1, 2002 to June 30, 2003.

There are an estimated 2,551 perennial stream miles within the West Colorado Watershed Management Unit. An assessment of at least one beneficial use was made on 1,918.6 miles of streams. Of these 1,339.3 (69.8%) miles were assessed as fully supporting at least one beneficial use, 133.7 miles (7.0%) were assessed as partially supporting, and 445.6 miles (23.2%) were assessed as not supporting at least one designated beneficial use (Figure 5-1).

Figure 5-2 is a map of the designated beneficial use classifications assigned to the rivers and streams in this management unit.

Figure 5-3 is a map of the assessment categories that the rivers and streams were assigned to when the field and water quality data were compared against state standards. Benthic macroinvertebrate data were also used to evaluate the Escalante River and Calf Creek.

Overall beneficial use support, based upon at least some but not all beneficial uses being assessed, was 1,339.3 miles (69.8%) were fully supporting, 133.7 (7.0%) partially supporting, and 445.6 miles (23.2.0%) as non supporting.

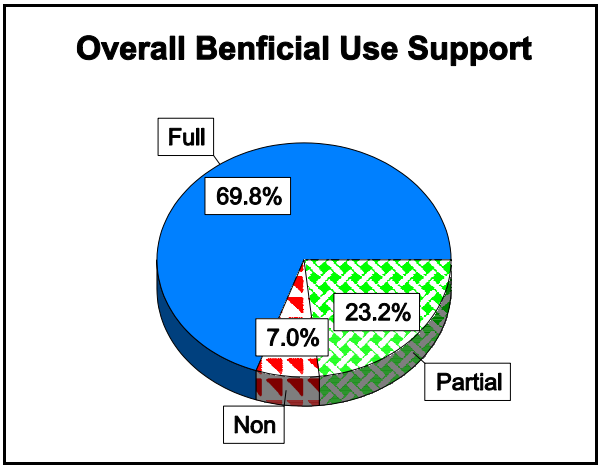

Figure 5-1. Overall beneficial use support based upon at least one beneficial use being assessed-Colorado River West.

Table 5-3 lists the beneficial use support by individual beneficial use classes. Seven-hundred seven (708.2) miles of Class 1C (source of drinking water) were assessed as fully supporting this beneficial use. One-thousand eight-hundred thirty-one (1,830.9) miles were assessed as supporting aquatic life beneficial uses. This was 95.4% of the stream miles assessed. There were 26.7 miles (1.4%) were assessed as partially supporting and 24.5 miles (1.3%) as not supporting aquatic life. Of the, 1,693.8 miles assessed for agricultural use, 1,202.2 (71.0%) were fully supporting, 75.6 miles (4.5%) partially supporting, and 415.9 (24.5%) not supporting this beneficial use.

The number of stream miles in each assessment

category are listed in Table 5-2. Tables B-1 through B-7 contain individual assessment units within each assessment category. Tables 5-3 and 5-4 lists the miles of streams affected by the various cause and source categories identified as generally affecting water quality.

The major cause of water quality impairment was total dissolved solids (Figure 5-4). Other factors affecting beneficial uses were temperature, dissolved oxygen, and nutrients. The relative percent impact by causes is shown in Figure 5-5.

The major sources of impairment were natural sources and agricultural activities. It was estimated that they affected 27.2% and 26.7% of the stream miles assessed (Figure 5-6).

Aquaculture was identified as a source of nutrients on the Fremont River. About 4.3% of the sources of stream impairment were listed as unknown. The relative percent impacts by sources are shown in Figure 5-7.

Table 5-2. Stream Miles by Assessment Category - Colorado River West

Category	Stream Miles
1	0
2	1,339
3	453
4A	89
4B	0
4C	0
5A	489
5B	14

Aquaculture was identified as a source of nutrients on the Fremont River. About 4.3% of the sources of stream impairment were listed as unknown.

Price River–Several segments of the Price River from its confluence to the Carbon Canal Diversion were assessed as partial supporting or non supporting their agricultural beneficial use designation. A TMDL has been submitted to EPA for these assessment units. The probable sources of the total dissolved solids were natural sources and agricultural activities such as irrigation return flows.

San Rafael River–The San Rafael River from the Green River to its confluence with Huntington and Cottonwood Creeks was assessed as not supporting its Class 4 (agriculture) designation because of the high levels of total dissolved solids.

Muddy River–Two segments of the Muddy River were assessed as non supporting agricultural usage because of high total dissolved solids. These two segments include the river from its confluence with the Dirty Devil River to the U-10 highway crossing. Like other streams in the West Colorado Unit, the probable sources were agricultural practices and natural.

Fremont River–A TMDL for the Fremont River from Bicknell to the U.S. Forest Service boundary has been completed and approved for low dissolved oxygen and total phosphorus. The Fremont River and tributaries from confluence with the Dirty Devil to the east boundary of Capitol Reef National Park also have a TMDL completed for total dissolved solids that affect agricultural use.

Other streams which had segments that exceeded the total dissolved solids criteria and were assessed as either partially or non supporting of their agricultural beneficial use were the lower portions of Huntington Creek, Cottonwood Creek, Quitchipah Creek and Ivie Creek.

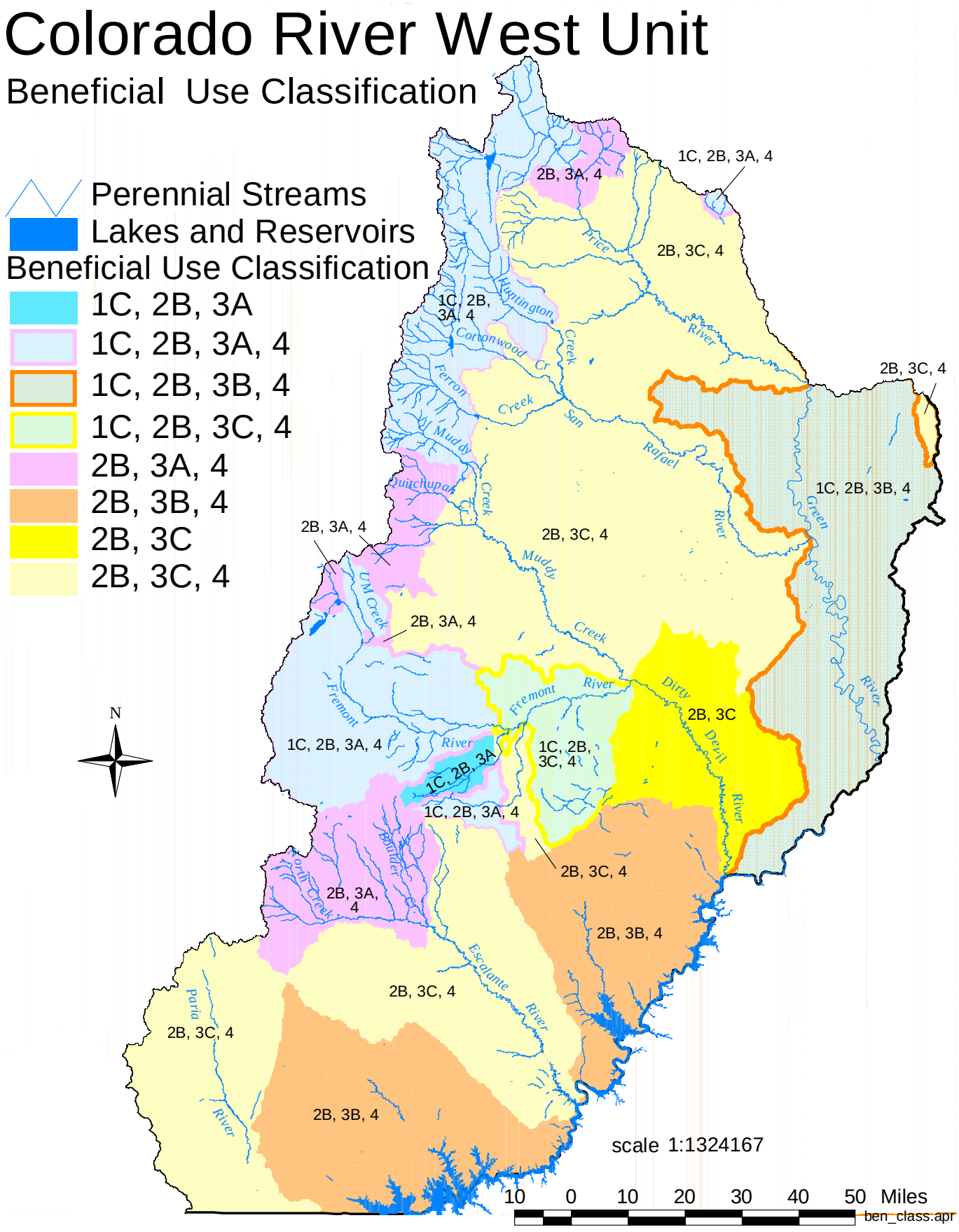

Figure 5-2. River and stream designated beneficial use classes - Colorado River West Watershed Management Unit.

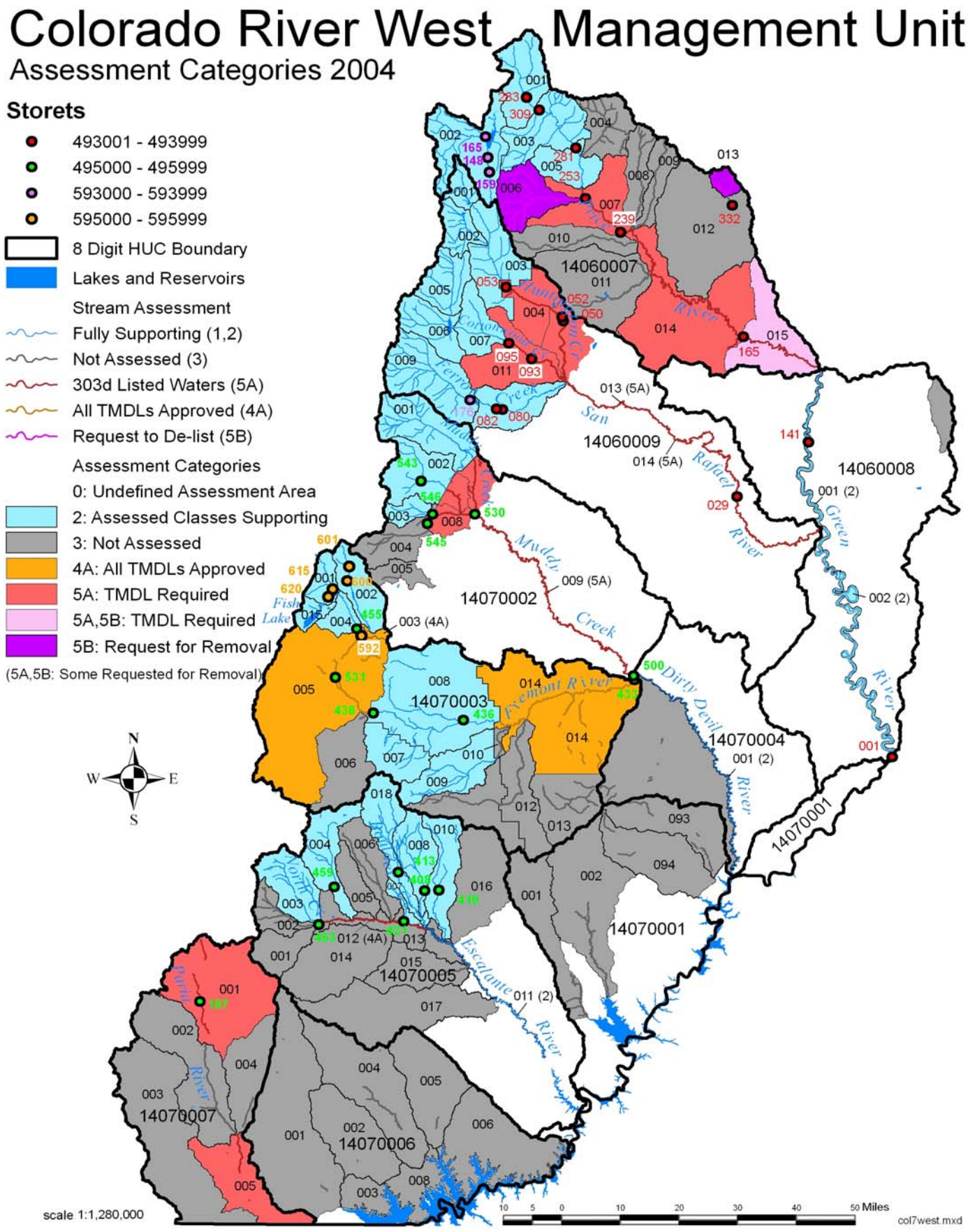

Figure 5-3. Beneficial use support categories for assessment units - Colorado River West Watershed Management Unit.

Table 5- 3. Individual Beneficial Use Support Summary Colorado River West Watershed Management Unit (Stream Miles)							
Goals[a]	**Use**	**Size Assessed**	**Size Fully Supporting**	**Size Fully Supporting but Threatened**	**Size Partially Supporting**	**Size Not Supporting**	**Size Not Attainable**
Protect & Enhance Ecosystems	Aquatic Life	1,918.6	1830.9 (95.4	0.0	26.7 (1.4%)	24.5 (1.3%)	0.0
Protect & Enhance Public Health	Fish Consumption	0.0	0.0	0.0	0.0	0.0	0.0
	Swimming[b]	0.0	0.0	0.0	0.0	0.0	0.0
	Secondary Contact	0.0	0.0	0.0	0.0	0.0	0.0
	Drinking Water	708.2	708.2 (100%)	0.0	0.0	0.0	0.0
Social and Economic	Agricultural	1,693.8	1,202.2 (71.0%)	0.0	75.6 (4.5%)	415.9 (24.6%)	0.0
	Total	1,918.6	1,339.3 (69.8%)		133.7 (7.0%)	445.6 (23.2%)	0.0

[a] These goals are part of the national water quality goals adopted by the EPA Office of Water and the ITFM in their Environmental Goals and Indicators effort.

[b] Class 2B (secondary contact) streams were evaluated as swimmable for proposes of the CWA goals, therefore the swimming and secondary contact classification categories are the same.

Table 5-4. Total Waters Impaired by Various Cause Categories - Colorado River West Watershed Management Unit.	
Cause Category	**Stream Miles**
Cause unknown	0.0
Unknown toxicity	0.0
Pesticides	-
Priority organics	-
Nonpriority organics	-
Metals	0.0
Ammonia	0.0
Chlorine	0.0
Other inorganics	0.0
Nutrients	29.3
pH	0.0
Siltation/Sediments	0.0
Organic enrichment/low DO	31.3
Salinity/TDS/Chlorides	491.6
Thermal modifications	0.0

Table 5-4. Total Waters Impaired by Various Cause Categories - Colorado River West Watershed Management Unit.	
Cause Category	**Stream Miles**
Flow alterations	0.0
Other habitat alterations	0.0
Pathogen Indicators	-
Radiation	-
Oil and grease	-
Taste and odor	0.0
Noxious aquatic plants	0.0
Total toxics	0.0
Turbidity	-
Exotic Species	-

- = Category applicable, no data available.
0 = Category applicable, but size of waters in the category is zero.

Table 5-5. Total Waters Impaired by Various Source Categories - West Colorado Watershed Management Unit.	
Source Category	**Stream Miles**
Industrial Point Sources	0.0
Municipal Point Sources	0.0
Combined Sewer Overflow	0.0
Agriculture	511.7
Silviculture	-
Construction	0.0
Urban Runoff/Storm Sewers	
Resource Extraction	0.0
Land Disposal	0.0
Hydromodification	0.0
Habitat Modification	0.0
Marinas	*
Atmospheric Deposition	-
Contaminated Sediments	-
Unkown Source	82.5
Natural Sources	521.3
Reservoir Releases	0.0
Recreation	0.0

- = Category applicable, no data available.
0 = Category applicable, but size of waters in the category is zero.

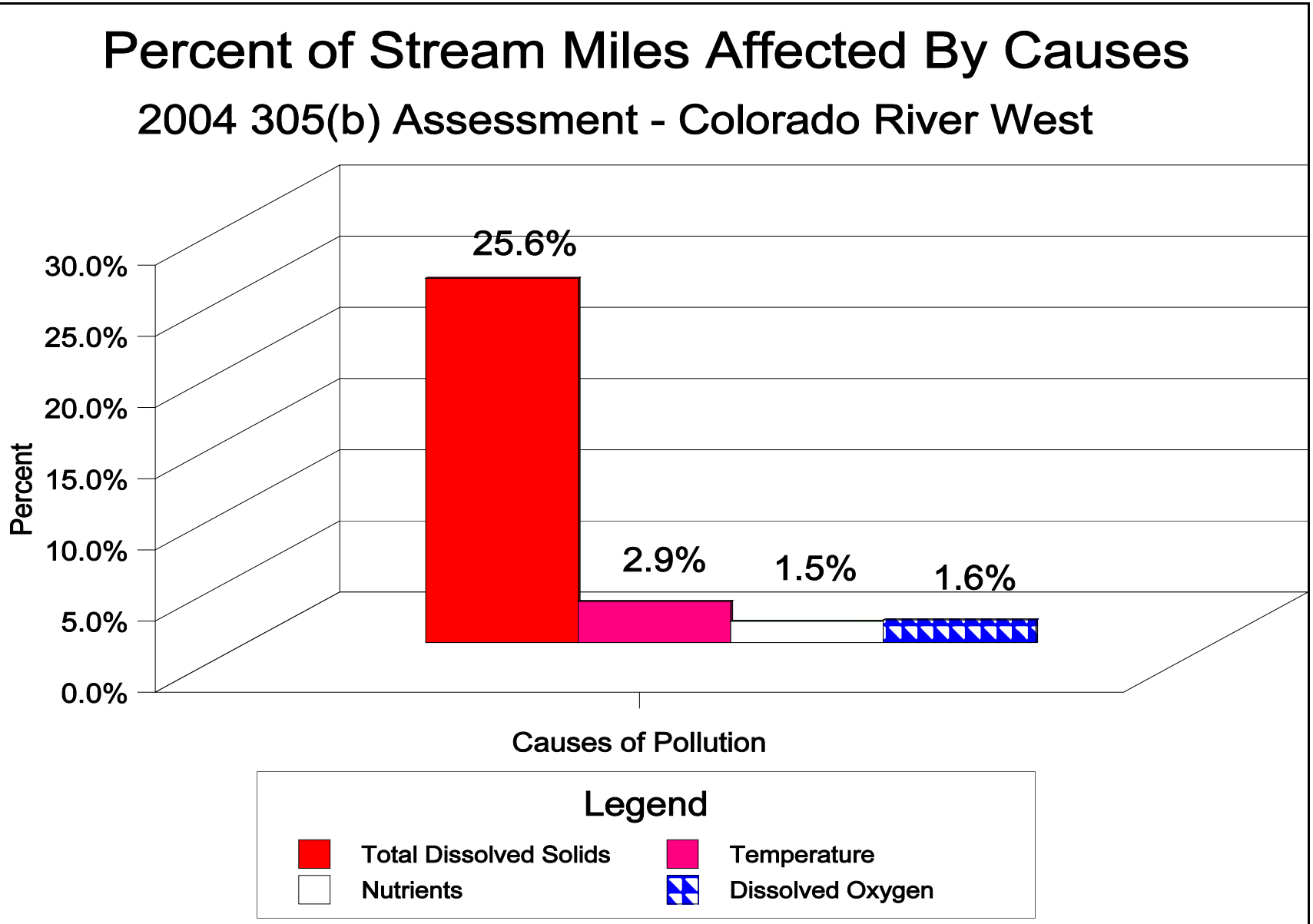

Figure 5-4. Percent of assessed stream miles impacted by various causes - Colorado River West Watershed Management Unit.

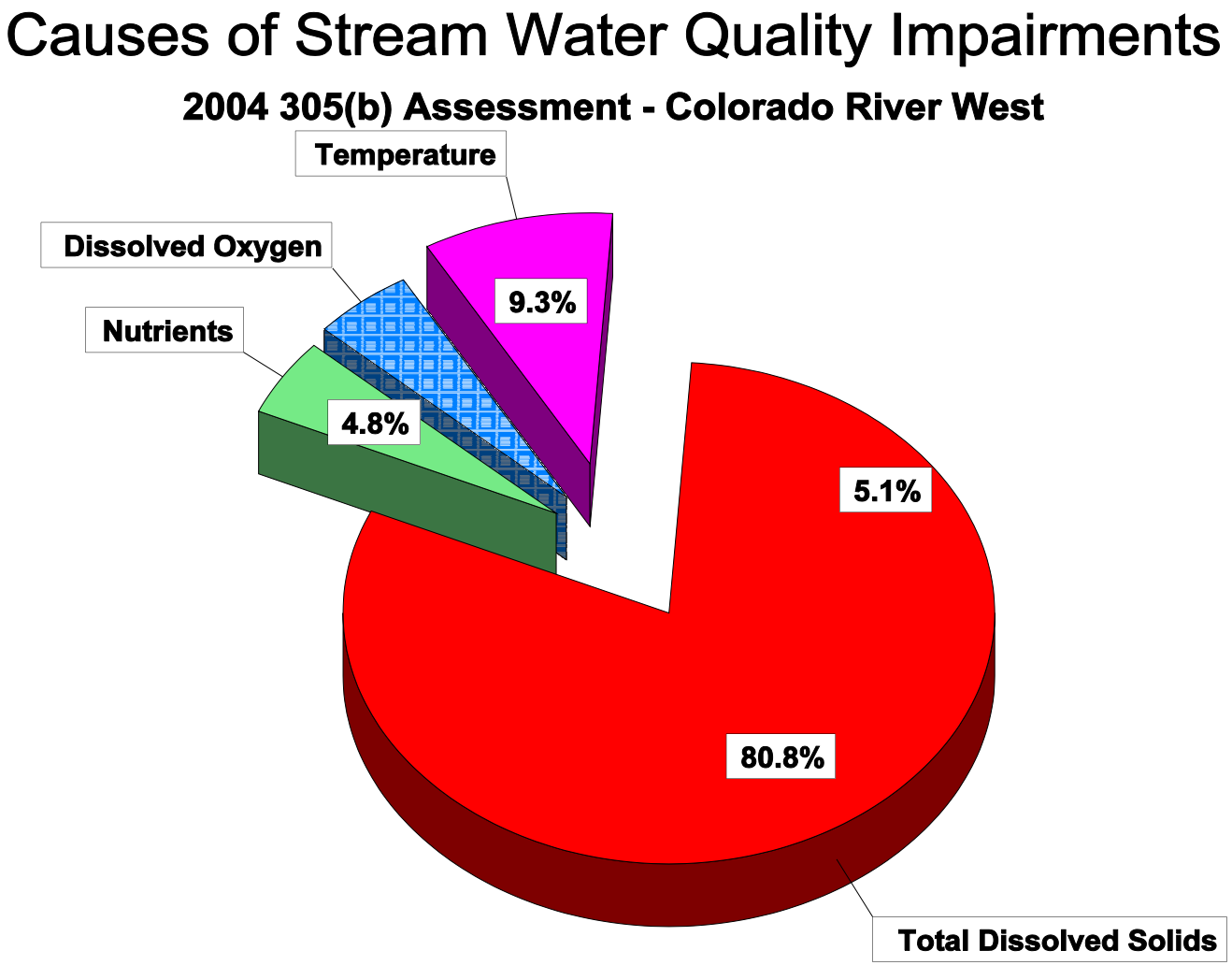

Figure 5-5. Relative percent impact by causes on water quality - Colorado River West Watershed Management Unit.

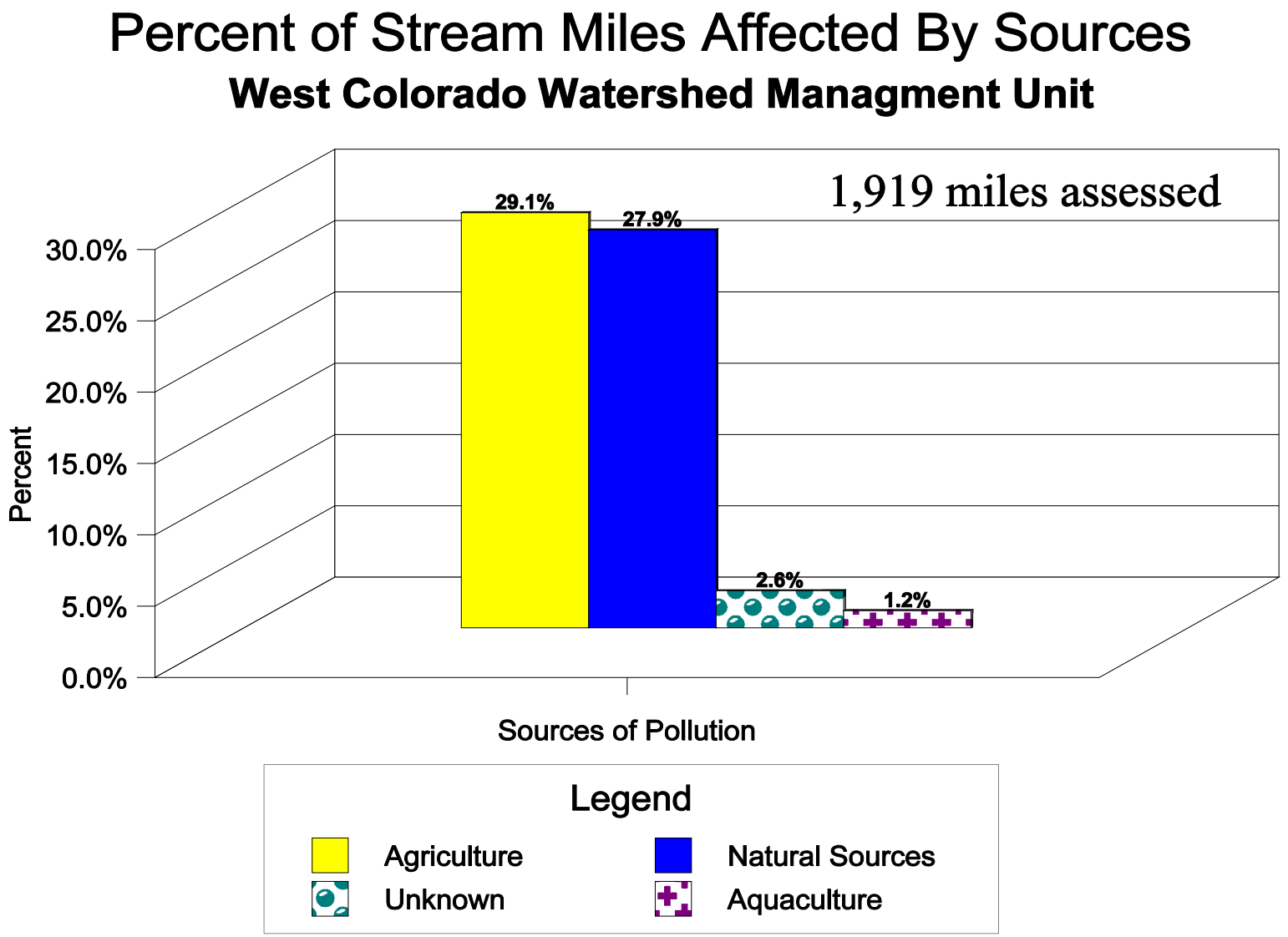

Figure 5-6. Percent of assessed stream miles impacted by various sources - Colorado River West Watershed Management unit.

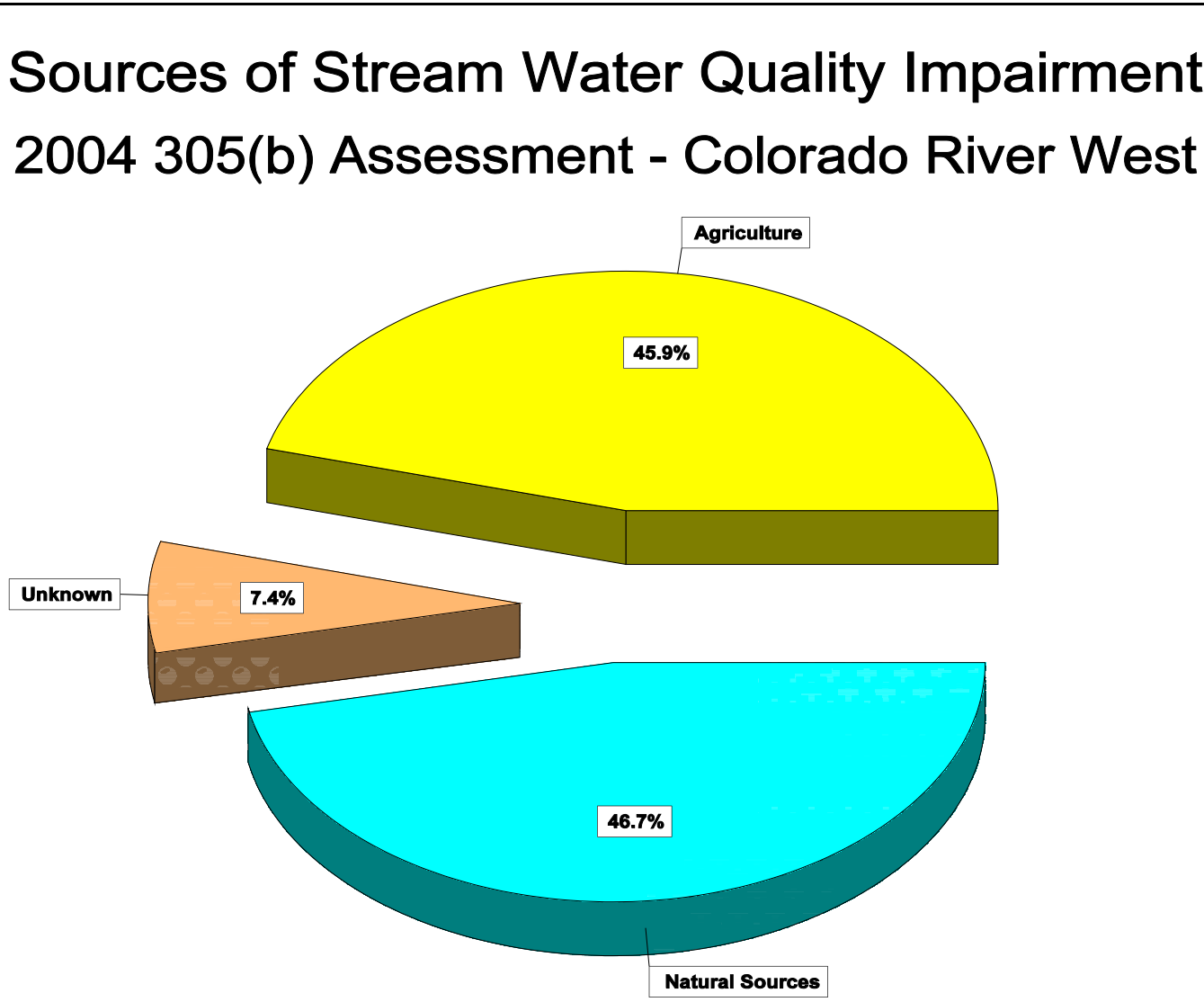

Figure 5-7. Relative percent impact by sources on stream water quality - Colorado River West Watershed Management Unit.

Chapter 6. Colorado River Southeast Watershed Management Unit Streams

Introduction

The Colorado River Southeast Watershed Management Unit includes all streams located in the U.S.G.S Hydrological Units (HUCs) listed in Table 6-1. Some of the major streams are the San Juan River, Dolores River, Mill Creek, Montezuma Creek, LaSal River, Geyser Creek and part of the Colorado River.

Table 6-1. U.S.G.S. Hydrological Units in the Colorado River Southeast Watershed Management Unit.

Hydrological Unit Code	Hydrological Unit Name
14010005	Colorado Headwaters/Plateau Utah
14030001	Westwater Canyon
14030002	Upper Delores
14030004	Lower Delores
14030005	Upper Colorado-Kane Springs
14070006	Lower Lake Powell
14070007	Paria
14080201	Lower San Juan-Four Corners Southeast
14080202	McElmo
14080203	Montezuma
14080204	Chinle
14080205	Lower San Juan

Results

The intensive monitoring of this water shed was done from July 1, 2003 through June 30, 2004.

An assessment for at least one beneficial use was made for 566 miles (76.2%) Of those assessed, 431.3 miles (76.2%) were assessed as fully supporting all the beneficial uses assessed. About eighteen percent (18.2%) of the stream miles were assessed as partially supporting, 31.9 miles (5.6%) were assessed as not supporting at least one designated beneficial use (Figure 6-1).

A list of the categories and the stream miles included in each of the assessment categories is in Table 6-2.

Table 6-3 lists the beneficial use support by individual beneficial use class. Five-hundred sixty-six (566) stream miles were assessed for aquatic life and agricultural use support.

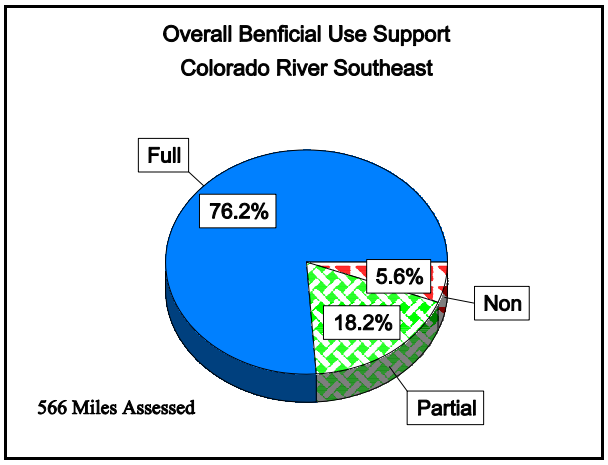

Figure 6-1. Overall beneficial use support base upon at least one beneficial use being assessed-Colorado River Southeast.

Table 6-2. Stream Miles by Assessment Categories - Colorado River Southeast

Category	Stream Miles
1	0
2	432
3	269
4A	79
4B	0
4C	0
5A	55
5B	0

Of the stream miles assessed for aquatic life, 481.4 miles (76.2%) were assessed as fully supporting, 84.6 miles (14.9%) not supporting this beneficial use.

Of the stream miles assessed for agricultural use, 518.6 miles (91.6%) were assessed as fully supporting, 37.3 miles (6.6%) partially supporting, and 10.2 miles (1.8%) not

supporting this beneficial use.

For Class 1 waters (source of drinking water), four-hundred (451.2) miles were assessed. Of these, 429.4 miles (95.2%) were assessed as fully supporting, 21.8 miles (4.8%) were partially supporting, and no stream miles were assessed as not supporting this beneficial use.

Figure 6-2 is a map of the designated beneficial use classifications for streams and rivers in this watershed management unit.

Tables B1-B7 are lists of the AUs assigned to the various assessment categories. The assessment units and STORET monitoring stations for this management unit are shown in Figure 6-3.

Tables 6-5 and 6-6 lists the miles of streams affected by the various causes and sources identified as generally affecting water quality.

Figures 6-4 illustrates the percent of stream miles affected by various causes of pollution. Figure 6-5 shows the relative percent of stream miles effected by various causes of water quality impairment. The causes of impairment included total dissolved solids, metals, temperature, and gross alpha. The percent of stream miles affected by various sources is shown in Figure 6-6. The relative impact of each source is shown in Figure 6-7. The major sources of impairment were agricultural activities and natural sources. Resource extraction from uranium mining was the source of gross alpha contamination.

Colorado River–The Colorado River was assessed as fully supporting all of its beneficial uses except for 37.6 miles downstream from the Utah/Colorado stateline. This portion of the river exceeded the chronic levels for selenium and the source is outside the boundaries of the state.

San Juan River–The two segments of the San Juan River that were assessed were found to be supporting their beneficial uses. That portion of the San Juan River that is entirely within the boundaries of the Navajo Indian Reservation was not assessed. The Navajo Indian Nation requested that Utah not list any waters that were within their reservation boundaries as being assessed or placed on the State's 303(d) list because they are in the process of having their water quality program approved by EPA. As such, the waters within their boundaries would fall under their jurisdiction. The State agreed with their request and did not assess or list that the portions of the San Juan River or McElmo Creek that are completely within the reservation boundaries. For those waters where the waterbodies are contiguous with both tribal lands and state or federal lands, either group can choose to list the water on their respective 303(d) lists.

Paria River–The upper and lower sections of the Paria River remained on the 303(d) list as not supporting the agricultural beneficial use classification because of high concentrations of total dissolved solids. During the extreme drought that was in southern Utah, the Paria River dried up and it was not possible to collect samples during the intensive monitoring survey.

Cottonwood Wash–This areas was assessed as not supporting its 1C (source of drinking water) classification because violations of the standard for gross alpha. A TMDL has been completed and approved by EPA and was moved to Category 4A, all TMDLs completed and approved by EPA.

Onion Creek has a completed TMDL for total dissolved solids and was placed in the new Category 4A also.

Mill Creek also has an approved TMDL for total dissolved solids and is now listed in Category 4A also.

Dolores River–The Dolores River was

assessed as fully supporting all of the beneficial uses that it was assessed for. Although the total dissolved solids exceeded the standard, it was listed because it was determined that the increase in salinity was caused by the severe drought.

LaSal Creek–This stream was assessed as fully supporting its beneficial uses.

Table 6-3. Individual Beneficial Use Support Summary
Colorado River Southeast Watershed Management Unit

Goals[a]	Use	Size Assessed	Size Fully Supporting	Size Fully Supporting but Threatened	Size Partially Supporting	Size Not Supporting	Size Not Attainable
Protect & Enhance Ecosystems	Aquatic Life	566.0	481.4 (85.1%)	0.0	84.6 (14.9%)	0.0	0.0
Protect & Enhance Public Health	Fish Consumption	0.0	0.0	0.0	0.0	0.0	0.0
	Swimming[b]	0.0	0.0	0.0	0.0	0.0	0.0
	Secondary Contact	0.0	0.0	0.0	0.0	0.0	0.0
	Drinking Water[c]	451.2	429.4 (95.2%)	0.0	0.0	21.8 (4.8%)	0.0
Social and Economic	Agricultural	566.0	518.6 (91.6%)	0.0	37.3 (6.6%)	10.2 (1.8%)	0.0
	Total	566.0	431.3 (76.2%)	0.0	102.8 (18.2%)	31.9 (5.6%)	0.0

[a] These goals are part of the national water quality goals adopted by the EPA Office of Water and the ITFM in their Environmental Goals and Indicators effort.

[b] Class 2B (secondary contact) streams were evaluated as swimmable for proposes of the CWA goals, therefore the swimming and secondary contact classification categories are the same.

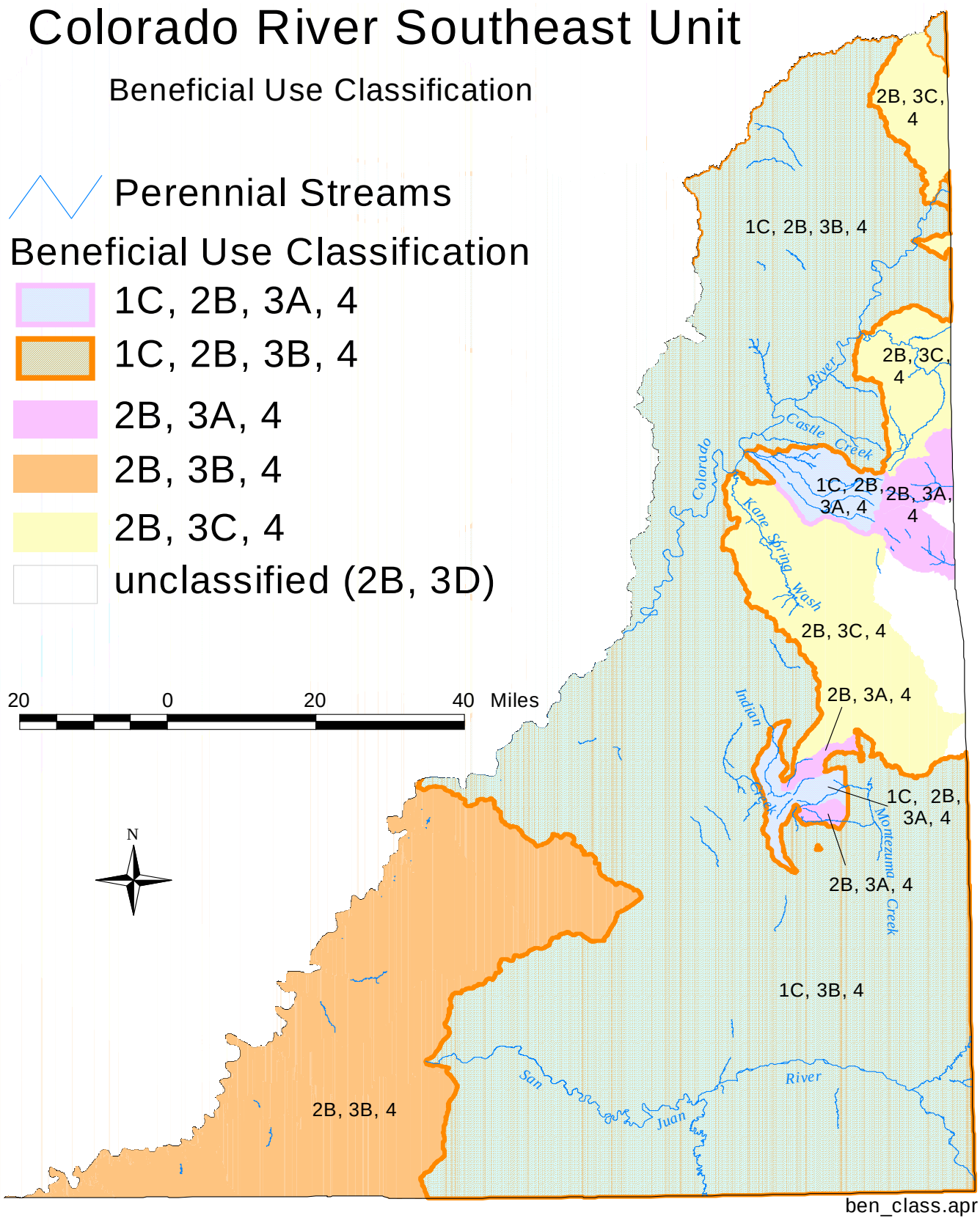

Figure 6-2. Stream and river designated beneficial use classifications - Colorado River Southeast Watershed Management Unit.

Table 6-4. Total Waters Impaired by Various Cause Categories - Colorado River South East Management Unit	
Cause Category	**Stream Miles**
Cause unknown	0.0
Unknown toxicity	0.0
Pesticides	-
Priority organics	-
Nonpriority organics	-
Metals	37.4
Ammonia	0.0
Chlorine	0.0
Other inorganics	0.0
Nutrients	0.0
pH	0.0
Siltation/Sediments	0.0
Organic enrichment/low DO	0.0
Salinity/TDS/Chlorides	43.6
Thermal modifications	47.0
Flow alterations	0.0
Other habitat alterations	0.0
Pathogen Indicators	-
Radiation	21.8
Oil and grease	-
Taste and odor	0.0
Noxious aquatic plants	0.0
Total toxics	-
Turbidity	-
Exotic Species	-

- = Category applicable, no data available.
0 = Category applicable, but size of waters in the category is zero.

Table 6-5. Total Waters Impaired by Various Source Categories - Colorado River Southeast Management Unit	
Source Category	**Stream Miles**
Industrial Point Sources	0.0
Municipal Point Sources	0.0
Combined Sewer Overflow	0.0
Agriculture	43.6
Silviculture	-
Construction	0.0
Urban Runoff/Storm Sewers	0.0
Resource Extraction	0.0
Land Disposal	0.0
Hydromodification	0.0
Habitat Modification	0.0
Marinas	-
Atmospheric Deposition	-
Contaminated Sediments	-

Table 6-5. Total Waters Impaired by Various Source Categories - Colorado River Southeast Management Unit	
Source Category	**Stream Miles**
Unknown Source	31.7
Natural Sources	43.6
Reservoir Releases	0.0
Sources Outside State	37.6
Recreation	0.0

- = Category applicable, no data available.
0 = Category applicable, but size of waters in the category is zero.

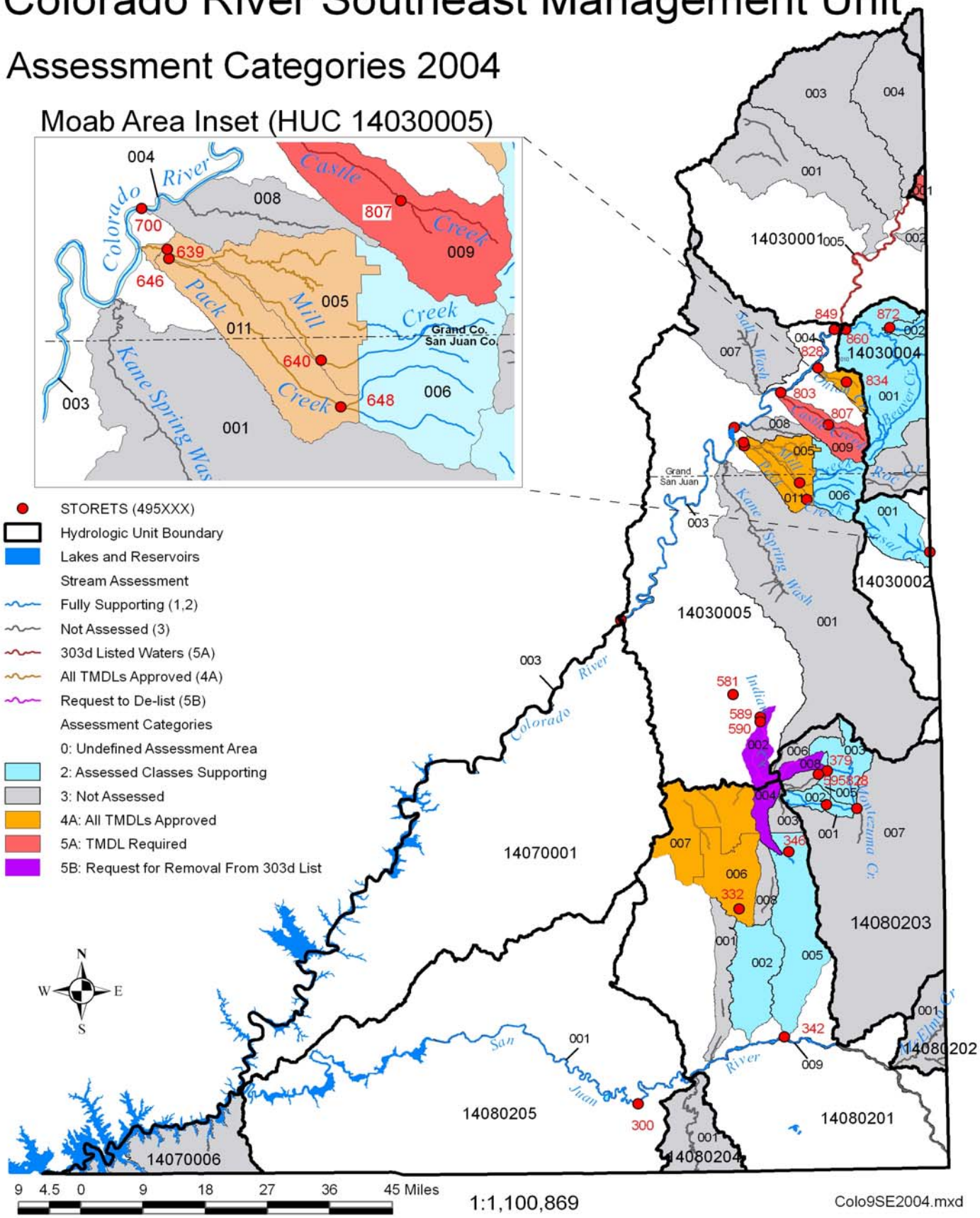

Figure 6.3. Beneficial use assessment by categories - Colorado River Southeast Watershed Management Unit.

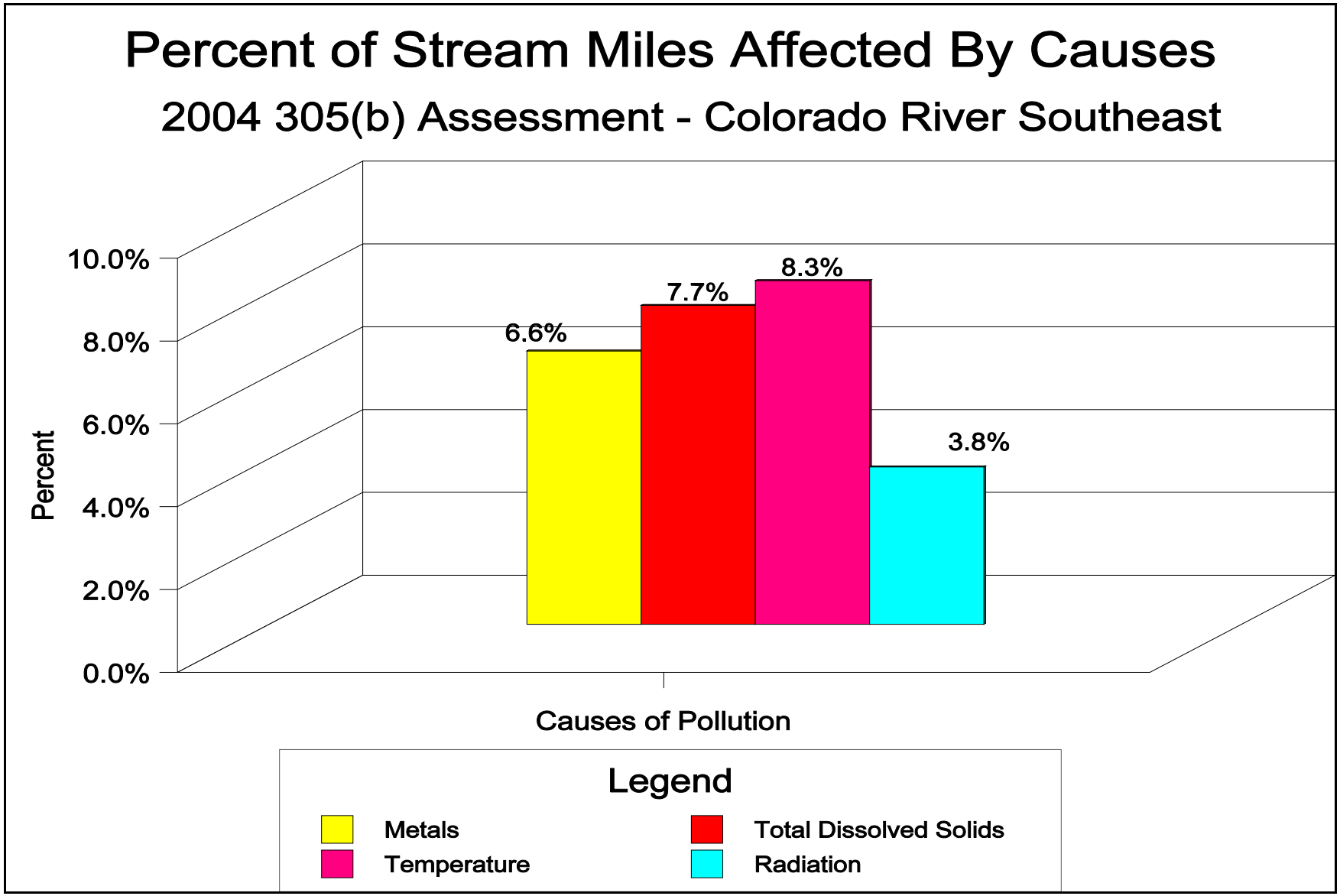

Figure 6-4. Percent of assessed stream miles impacted by causes - Colorado River Southeast Management Unit.

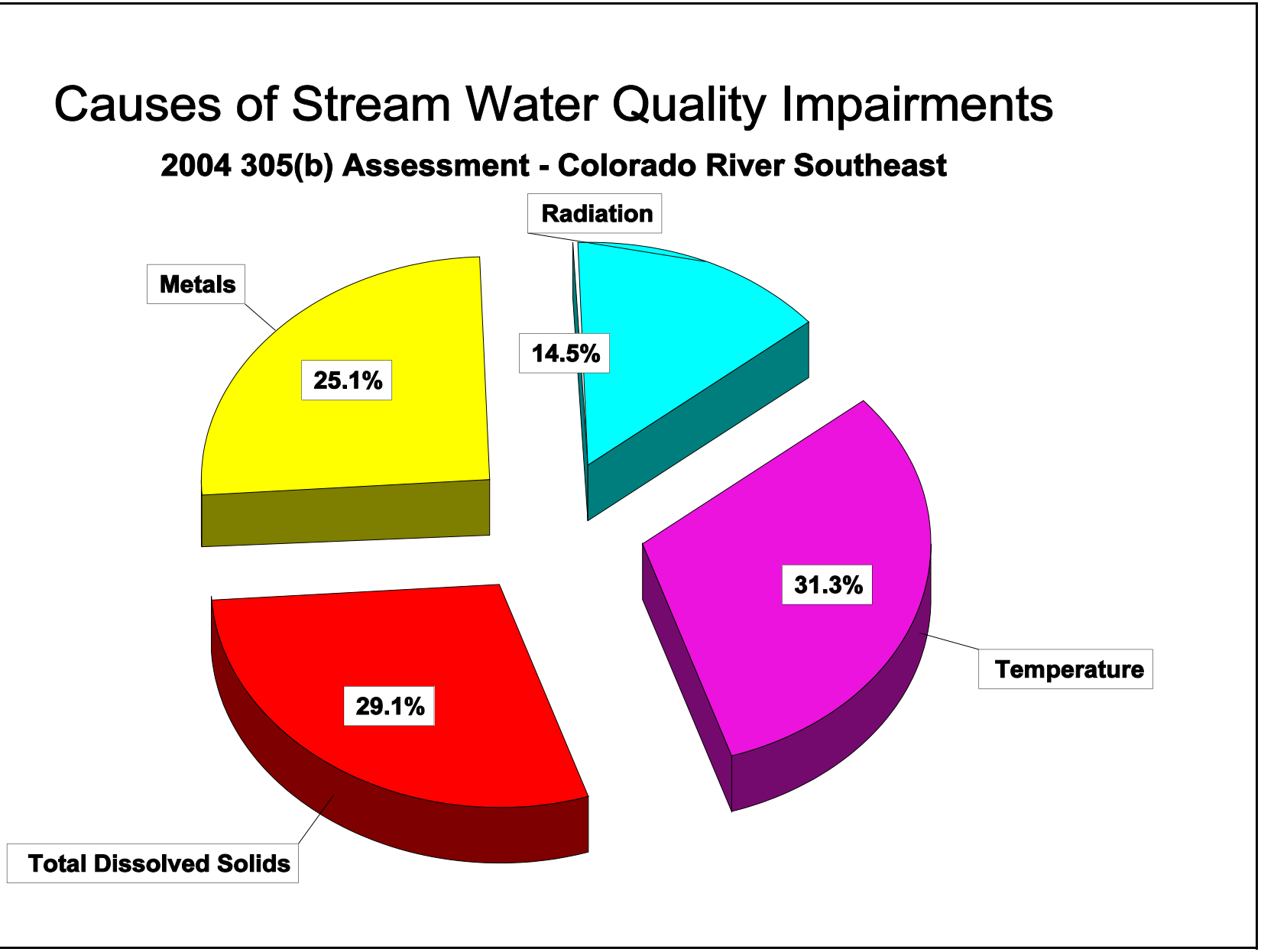

Figure 6-5. Relative percent contribution of causes to impairment of stream water quality - Colorado River Southeast Watershed Management Unit.

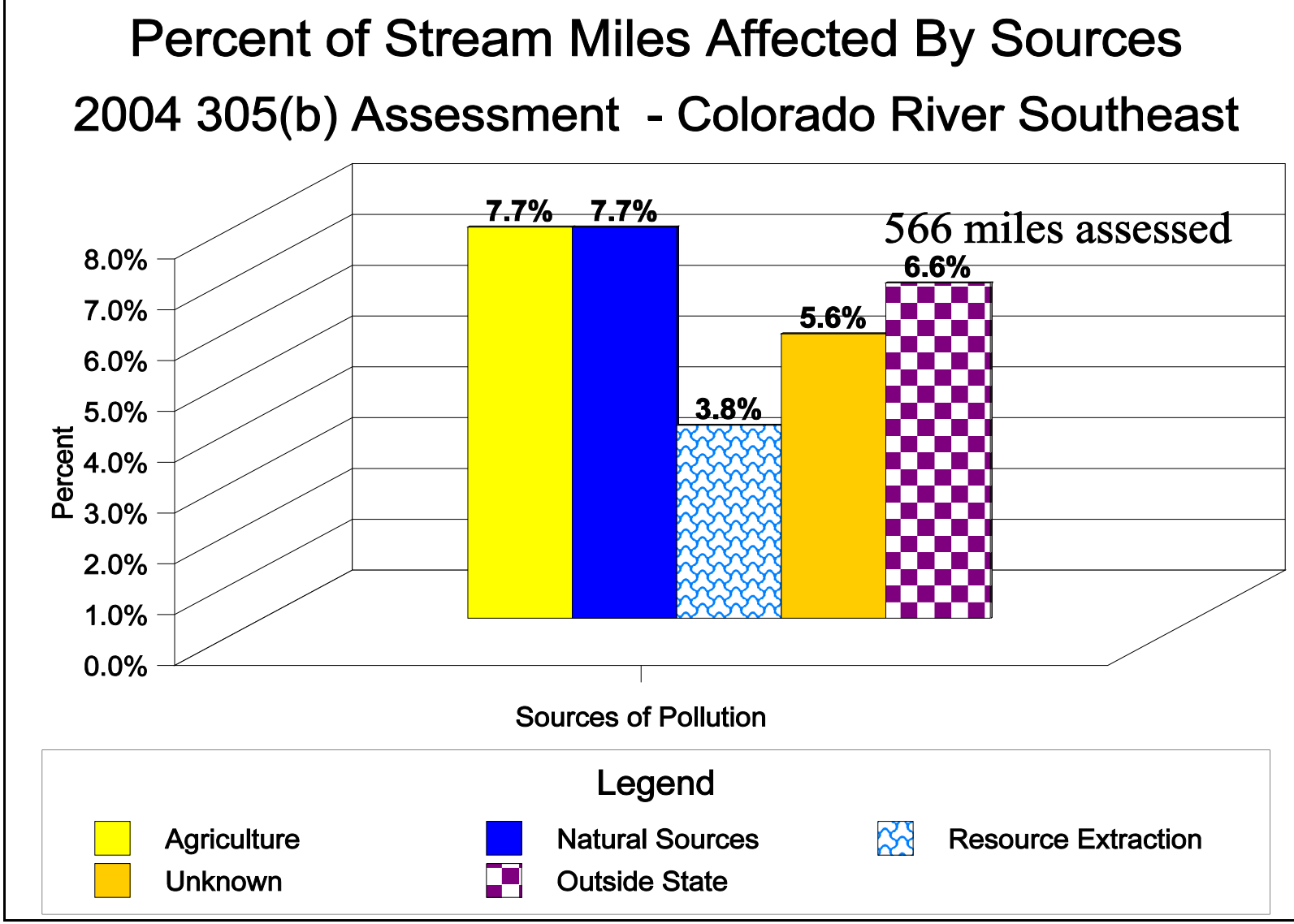

Figure 6-6. Percent of stream miles impacted by sources - Colorado River Southeast Watershed Management Unit.

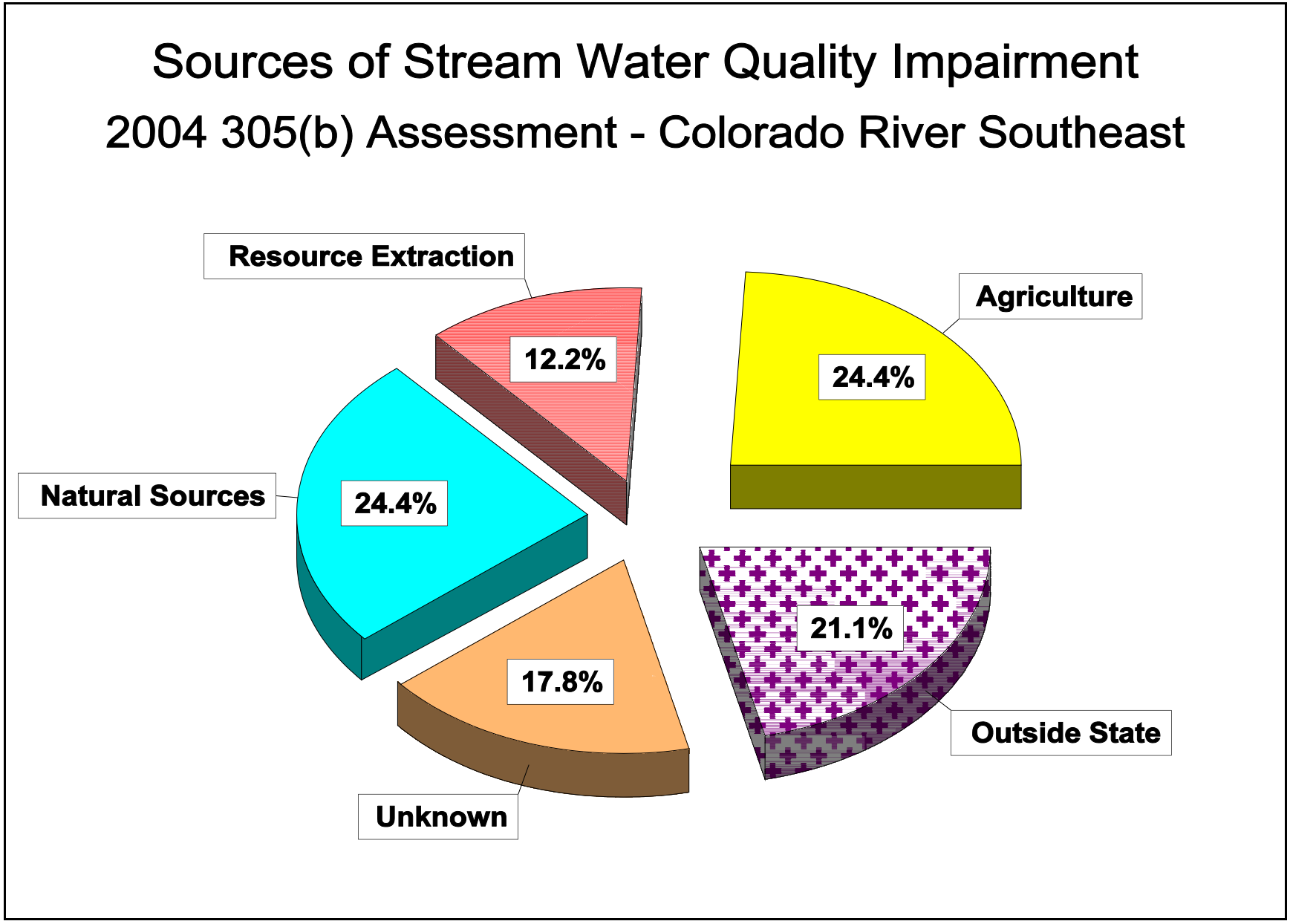

Figure 6-7. Relative percent contribution by sources to impairment of stream water quality - Colorado River Southeast Management Unit.

Chapter 7. Lower Colorado River Watershed Management Unit Assessment

Introduction

The Lower Colorado River Watershed Management Unit includes all streams located in the U.S.G.S. Hydrological Units (HUCs) listed in Table 7-1. Some of the major streams are the Santa Clara River, Virgin River, East Fork of the Virgin River, North Fork of the Virgin River, North Creek, Kanab Creek and Laverken Creek.

Table 7-1. U.S.G.S. Hydrological Units in the Lower Colorado Watershed Management Unit.

Hydrological Unit Code	Hydrological Unit Name
15010003	Kanab
15010008	Upper Virgin
15010009	Fort Pierce Wash
15010010	Lower Virgin

Results

The intensive monitoring for this watershed was done from July 1, 2001 through June 30, 2002.

An assessment of support for at least one beneficial use was made for 478.6 stream miles. Of those assessed, 354.2 miles (74.0%) were assessed as fully supporting all the beneficial uses assessed, 12 miles (2.5%) were assessed as partially supporting, 112.5 miles (23.5%) were assessed as not supporting at least one designated beneficial use. The overall beneficial use assessment is shown in Figure 7-1.

Beneficial use assessment by categories are listed in Table 7.2.

Individual beneficial use assessments are found in Table 7.3

All aquatic life use classifications were fully supported.

Of the streams assessed for agricultural use, 336.6 miles (73.0%) were assessed as fully supporting, 12 miles (2.6%) partially supporting, and 112.5 miles (24.4%) not supporting this beneficial use. Total dissolved solids were the cause of the impairment.

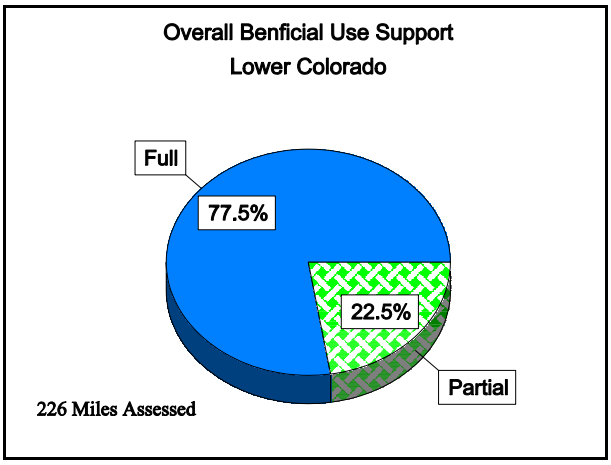

Figure 7-1. Overall beneficial use support based upon at least one beneficial use being assessed-Lower Colorado.

Figure 7-2 is a map of the beneficial use classifications assigned to the rivers and streams in this watershed management unit.

Table 7-2. Stream Miles by Assessment Category Lower Colorado River Watershed Management Unit

Category	Stream Miles
1	0
2	354
3	122
4A	0
4B	0
4C	0
5A	124
5B	31

Tables B-1 through B-7 lists the stream individual assessment units that were placed in

each of the new assessment categories.

Tables 7-3 and 7-4 lists the miles of streams affected by the various causes and sources categories identified as generally affecting water quality.

Figure 7.3 is a presentation of the miles of streams affected by causes. Figure 7.4 is the relative percent impact by the various causes on water quality.

Figure 7.5 is the percent of stream miles affected by various sources. Figure 7.6 is the relative percent of various sources that impact water quality.

Santa Clara River–The assessment unit from the confluence with the Virgin River to Gunlock Reservoir was assessed as impaired for agricultural usage because of TDS and the aquatic life use because of selenium. The upper two assessment units, Gunlock Reservoir Santa Clara River and tributaries from Gunlock Reservoir to Baker Dam Reservoir (included Maogatsue Creek and tributaries to USFS boundary and from Baker Dam upstream, including tributaries, were evaluated as supporting those beneficial uses assessed.

Virgin River–The Virgin River from the state line upstream to the Quail Creek Diversion was evaluated as impaired for agricultural use because of total dissolved solids. A request to remove the assessment unit Santa Clara-1 from the 303(d) list for temperature was made because it is meeting the state standard now.The two remaining segments of the Virgin River were assessed as fully supporting all of the beneficial use classes that were assessed.

East Fork Virgin River–All three assessment units of this river were assessed as fully supporting those beneficial uses assessed.

North Creek--This stream was listed as impaired due to total dissolved solids that can affect agricultural usage.

Table 7-3. Individual Beneficial Use Support Summary
Lower Colorado River Watershed Management Unit

Goals[a]	Use	Size Assessed	Size Fully Supporting	Size Fully Supporting but Threatened	Size Partially Supporting	Size Not Supporting	Size Not Attainable
Protect & Enhance Ecosystems	Aquatic Life	435.4	435.4 (100%)	0.0	0.0 (0.0%)	0.0 (0.0%)	0.0
Protect & Enhance Public Health	Fish Consumption	0.0	0.0	0.0	0.0	0.0	0.0
	Swimming[b]	0.0	0.0	0.0	0.0	0.0	0.0
	Secondary Contact	0.0	0.0	0.0	0.0	0.0	0.0
	Drinking Water[c]	198.2	198.2 (100%)	0.0	0.0	0.0	0.0
Social and Economic	Agricultural	461.0	336.6 (73.0%)	0.0	12.0 (2.6%)	112.5 (24.4%)	0.0

Table 7-3. Individual Beneficial Use Support Summary Lower Colorado River Watershed Management Unit							
Goals[a]	**Use**	**Size Assessed**	**Size Fully Supporting**	**Size Fully Supporting but Threatened**	**Size Partially Supporting**	**Size Not Supporting**	**Size Not Attainable**
	Total	478.6	354.2 74.0%	0.0	12.0 2.5%	112.5 23.5%	0.0

[a] These goals are part of the national water quality goals adopted by the EPA Office of Water and the ITFM in their Environmental Goals and Indicators effort.

[b] Class 2B (secondary contact) streams were evaluated as swimmable for proposes of the CWA goals, therefore the swimming and secondary contact classification categories are the same.

Table 7-4. Total Waters Impaired by Various Cause Categories - Lower Colorado Watershed Management Unit	
Cause Category	**Stream Miles**
Cause unknown	0.0
Unknown toxicity	0.0
Pesticides	-
Priority organics	-
Nonpriority organics	-
Metals	23.7
Ammonia	0.0
Chlorine	0.0
Other inorganics	0.0
Nutrients	0.0
pH	0.0
Siltation/Sediments	0.0
Organic enrichment/low DO	0.0
Salinity/TDS/Chlorides	124.4
Thermal modifications	0.0
Flow alterations	0.0
Other habitat alterations	0.0
Pathogen Indicators	-
Radiation	0.0
Oil and grease	-
Taste and odor	0.0
Noxious aquatic plants	0.0
Total toxics	-
Turbidity	-
Exotic Species	-

- = Category applicable, no data available.
0 = Category applicable, but size of waters in the category is zero.

Table 7-5. Total Waters Impaired by Various Source Categories - Lower Colorado Management Unit

Source Category	Stream Miles
Industrial Point Sources	0.0
Municipal Point Sources	0.0
Combined Sewer Overflow	0.0
Agriculture	112.5
Silviculture	-
Construction	0.0
Urban Runoff/Storm Sewers	23.7
Resource Extraction	0.0
Land Disposal	0.0
Hydromodification	39.9
Habitat Modification	0.0
Marinas	-
Atmospheric Deposition	-
Contaminated Sediments	-
Unknown Source	0.0
Natural Sources	124.4
Reservoir Releases	0.0
Sources Outside State	0.0
Recreation	0.0

- = Category applicable, no data available.
0 = Category applicable, but size of waters in the category is zero.

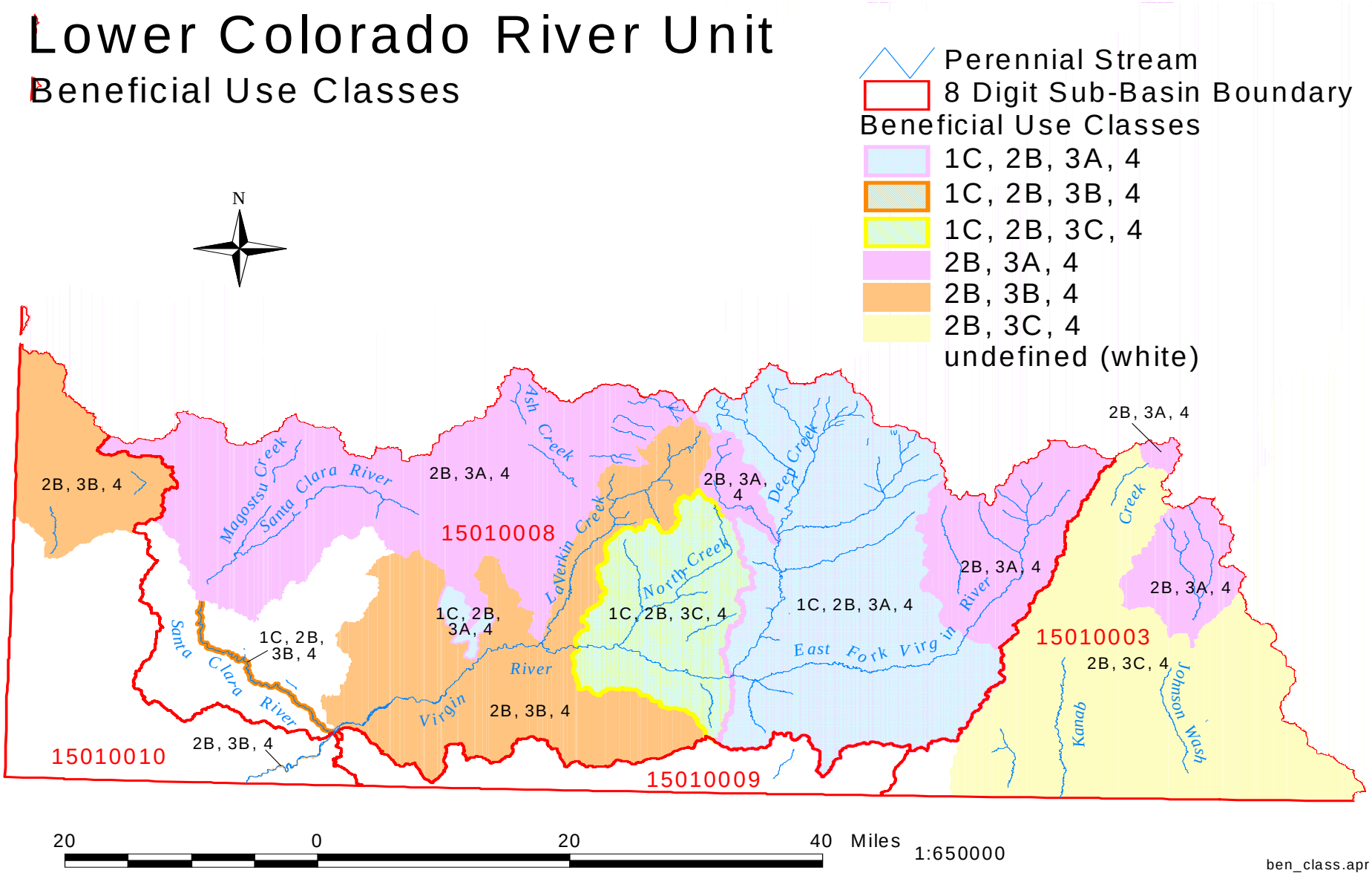

Figure 7-2. River and stream beneficial use classifications - Lower Colorado River Watershed Management Unit.

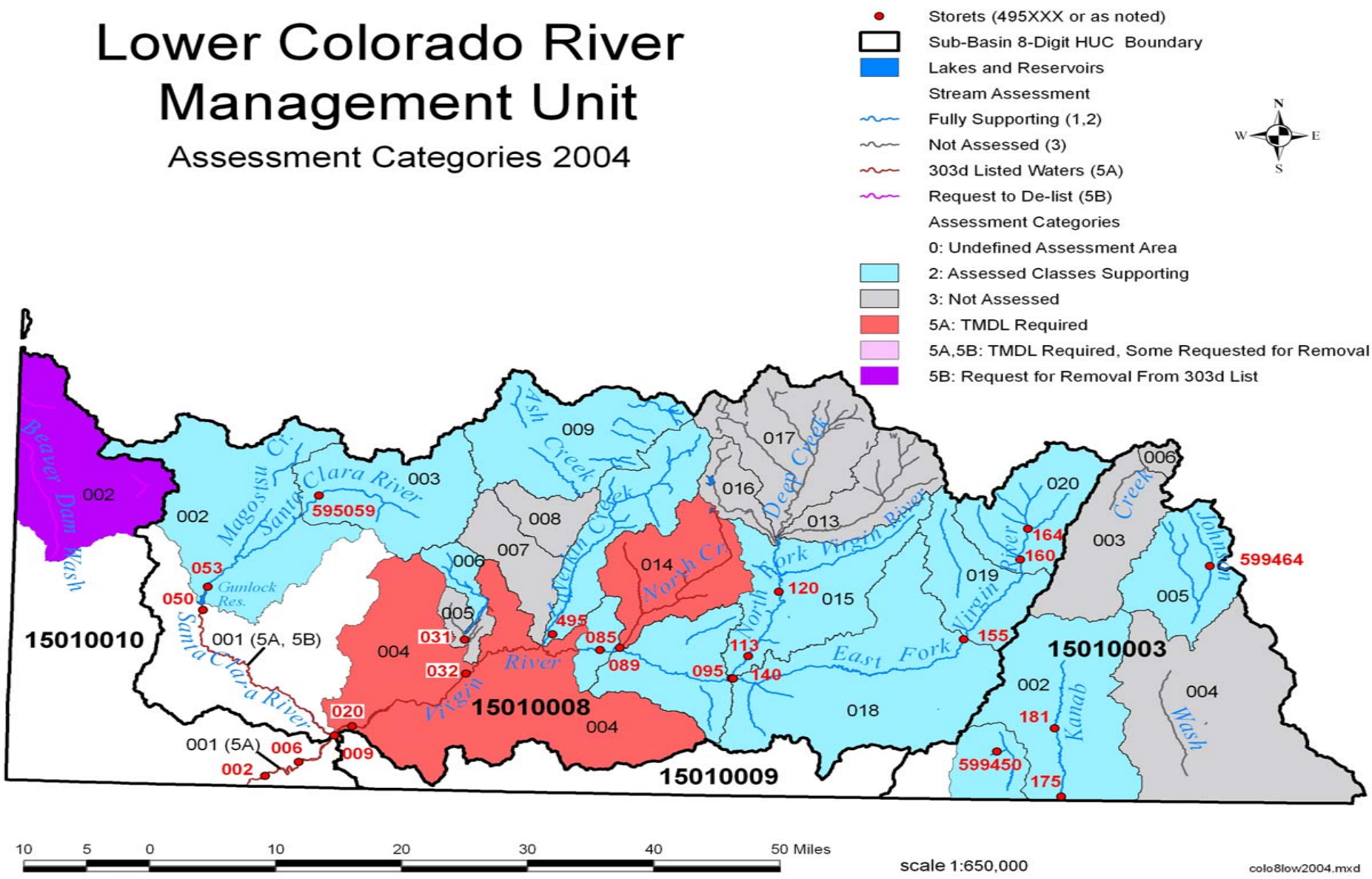

Figure 7-3. Beneficial use assessment by categories - Lower Colorado River Watershed Management Unit.

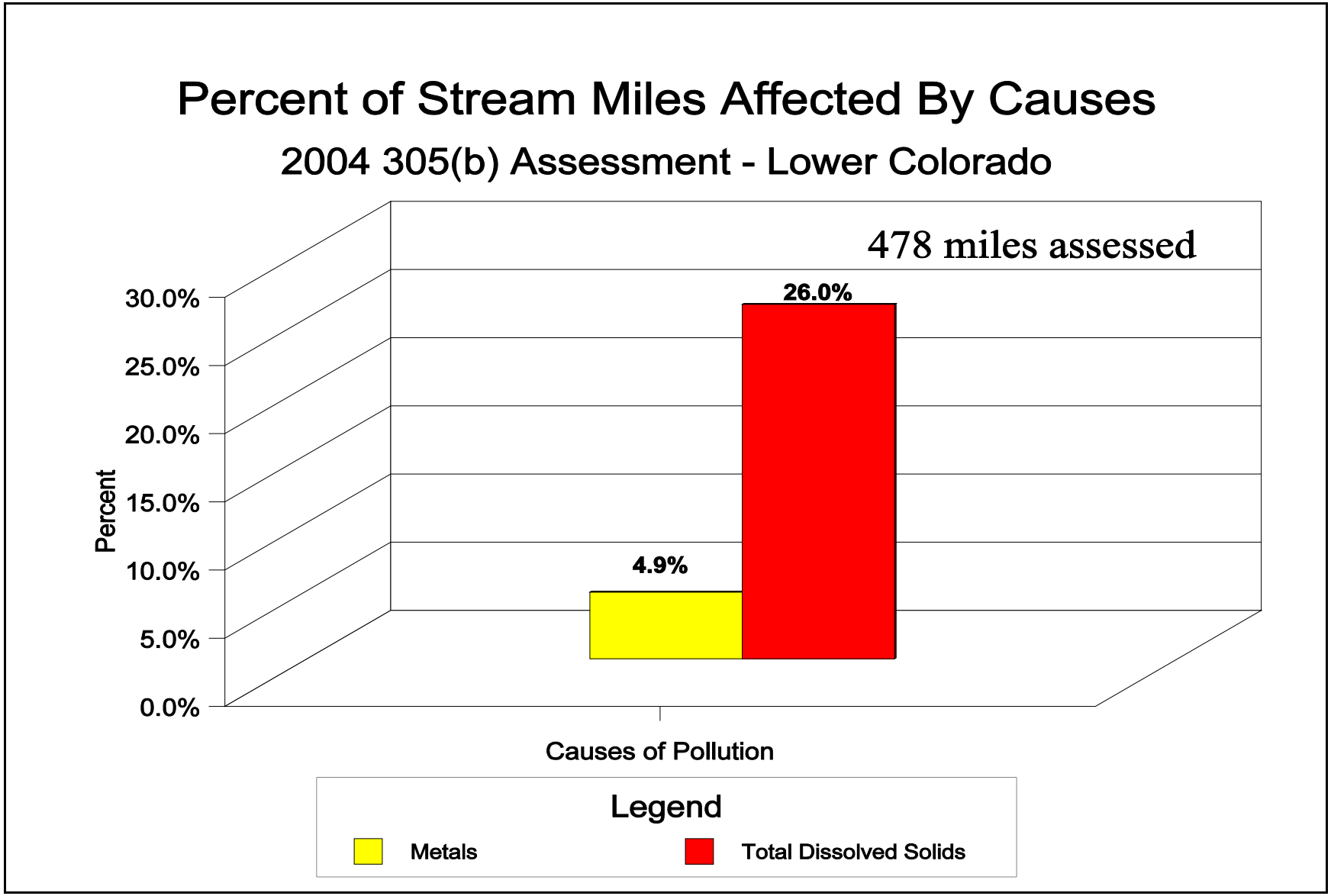

Figure 7-4. Percent impact by causes on stream water quality - Lower Colorado River Watershed Management Unit.

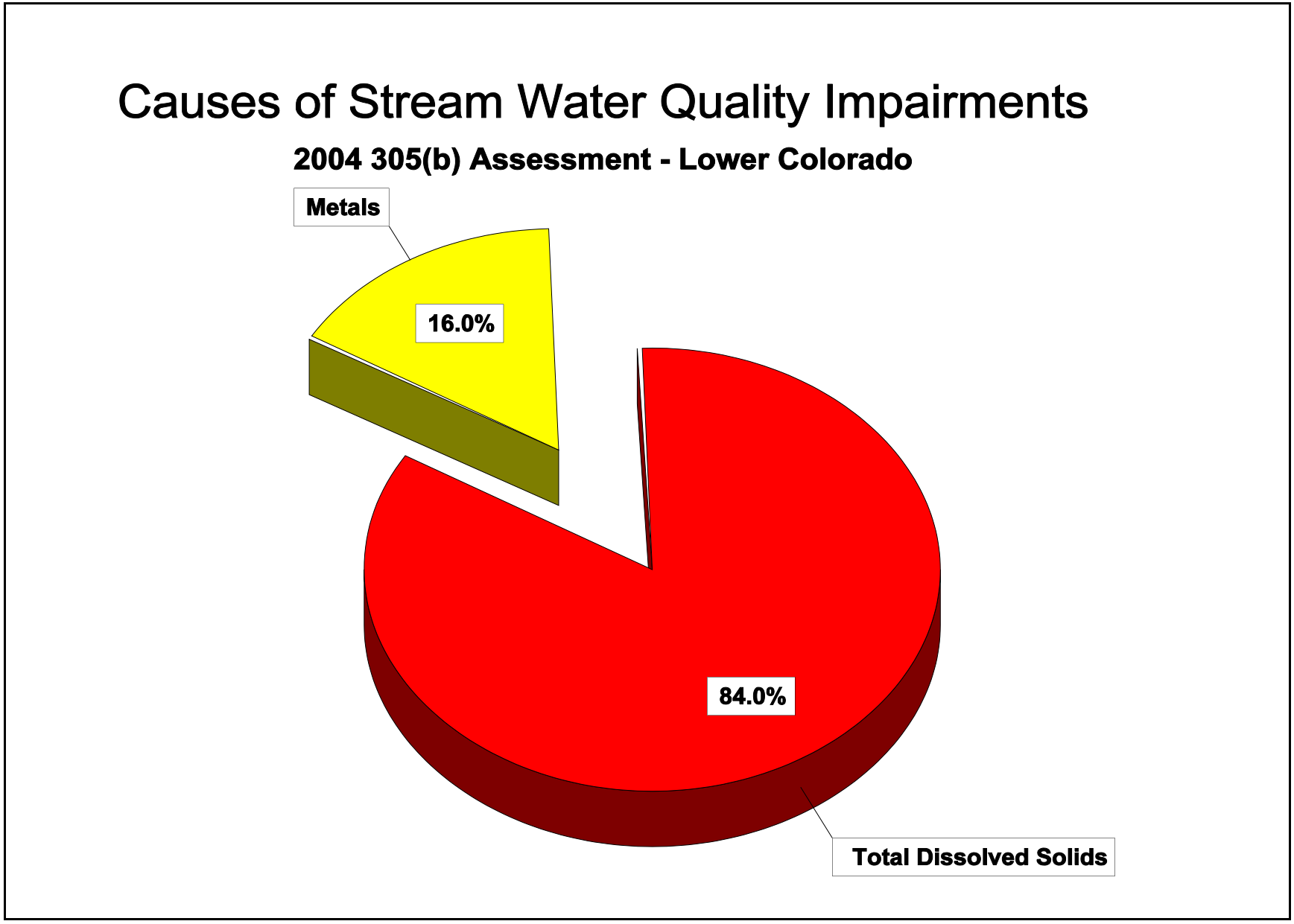

Figure 7-5. Relative percent contribution of causes on stream water quality - Lower Colorado River Watershed Management Unit.

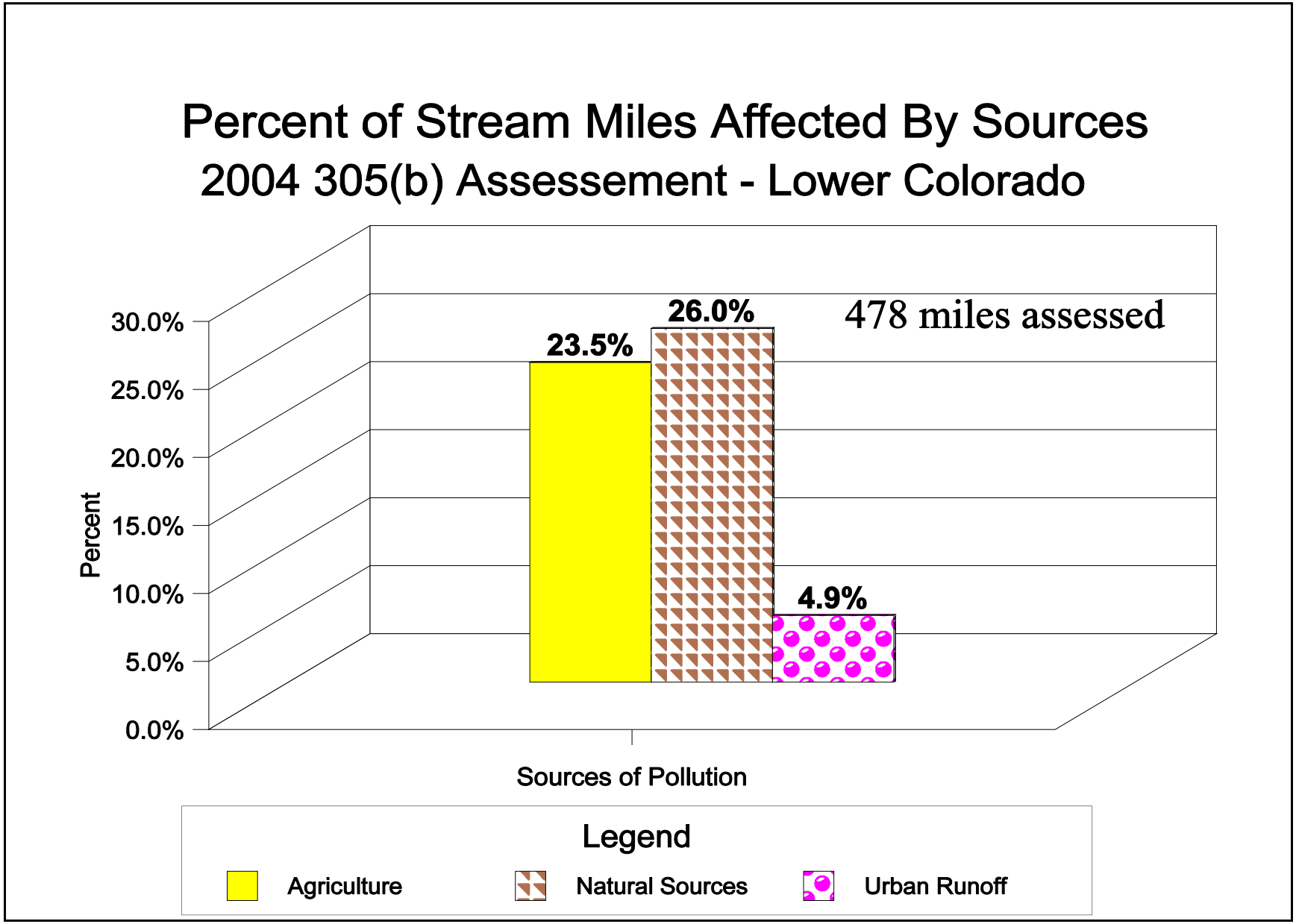

Figure 7-6. Percent impact by sources on stream water quality - Lower Colorado Watershed Management Unit.

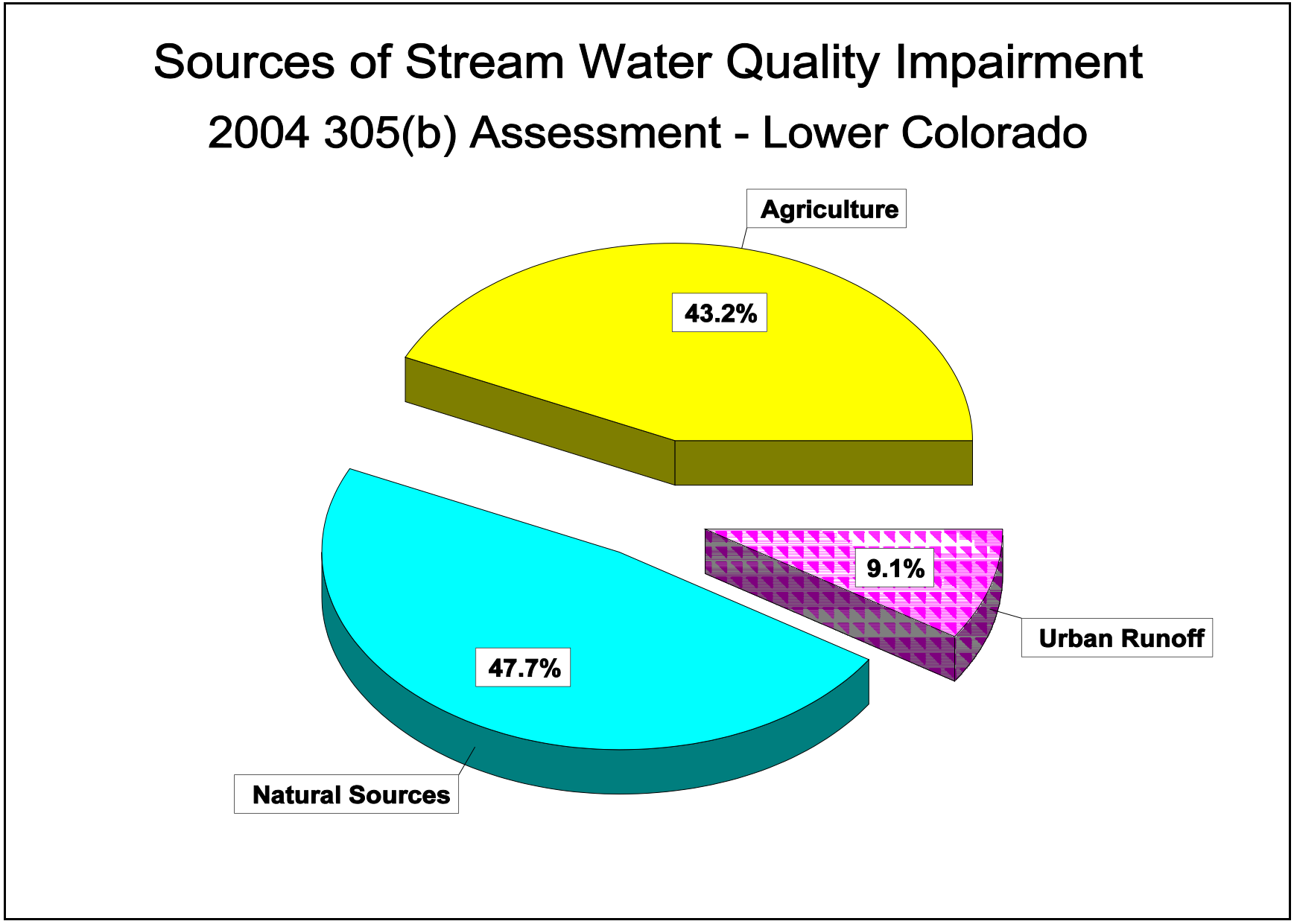

Figure 7-7. Relative percent contribution of sources on stream water quality - Lower Colorado Watershed Management Unit.

Chapter 8: Cedar / Beaver Watershed Management Unit Assessment

Introduction

The Cedar / Beaver Watershed Management Unit includes all streams located in the U.S.G.S Hydrological Units (HUCs) listed in Table 8-1. There are not many streams within this unit with the major streams being the Beaver River, Coal Creek, Shoal Creek and Pinto Creek.

Table 8-1. U.S.G.S. Hydrological Units in the Cedar / Beaver Watershed Management Unit.

Hydrological Unit Code	Hydrological Unit Name
16030006	Escalante Desert
16030007	Beaver Bottoms-Upper Beaver
16030008	Lower Beaver

Results

There were 226 stream miles assessed. Of these, 176 miles (77.7%) were assessed as fully supporting based up at least one beneficial use being assessed; and 51 (22.3 %) were assessed as partially supporting at least one beneficial use. (Figure 8-1).

Two-hundred twenty-six (226) stream miles were assessed for aquatic life and agricultural use support.

Of the stream miles assessed for agricultural use, all of them were evaluated as fully supporting this designated beneficial use. For aquatic life use support, 176 miles (77.7%) were assessed as fully supporting and 23 miles (23.3%) as partially supporting.

The stream assessment by categories was also completed. The number of stream miles by categories is listed in Table 8-2. Specific assessment units within each assessment category are listed in Tables B-1 through B-7.

Figure 8-2 is a map of the designated beneficial uses assigned to the river and streams in this water shed unit. Figure 8-3 illustrates the results of the new beneficial use assessment by categories and the STORET sites used in the assessment.

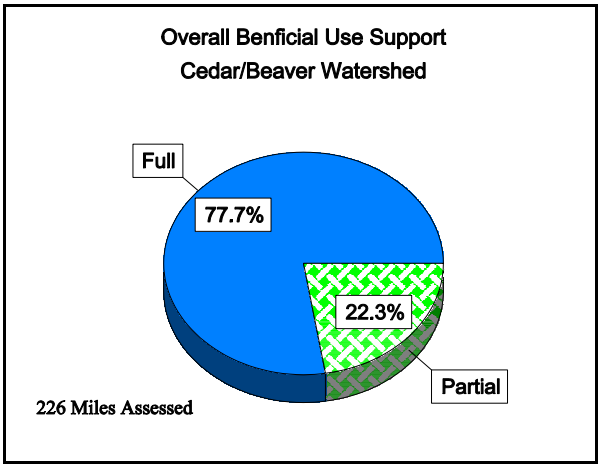

Figure 8-1. Overall beneficial use support based upon at least one beneficial use being assessed-Cedar/Beaver.

Table 8-2. Stream Miles by Assessment Category - Cedar / Beaver

Category	Stream Miles
1	0
2	176
3	184
4A	51
4B	0
4C	51
5A	0
5B	0

The causes and sources of impairment are listed in Tables 8-3 and 8-4 respectively. The major causes of impairment were nutrients (total phosphorus), temperature, and habitat alterations. The percent of miles impacted were 22.3 percent respectively for all causes.(Figure 8-4). The relative impact of

these causes is shown in Figure 8-5.

The major sources of impairment were agricultural activities, hydromodification, habitat modification, and unknown sources as shown in Figure 8-6. The relative percent impairment by sources is illustrated in Figure 8-7.

Beaver River–The Beaver River and its tributaries from the USFS boundary to its headwaters was assessed as a Category 2 water, all beneficial uses assessed were fully supported.

From Minersville Reservoir to the USFS boundary, the river and its tributaries were assessed as partially supporting its aquatic life beneficial use. A TMDL for total phosphorus has been completed and approved by EPA. This section was assessed as a Category 4A water, all TMDLs completed. In addition, it was placed in Category 4C, waters that are affected by pollution. The cause was habitat alteration and it does not require a TMDL.

The section of the Beaver River below Minersville Reservoir was not assessed and that segment was placed in Category 3.

Coal Creek–All beneficial uses that were assessed were fully supporting and it was placed in Category 2.

Table 8-3. Individual Use Support Summary for the Cedar/Beaver Watershed Management Unit

Goals [a]	Use	Size Assessed	Size Fully Supporting	Size Fully Supporting but Threatened	Size Partially Supporting	Size Not Supporting	Size Not Attainable
Protect & Enhance Ecosystems	Aquatic Life	226.4	175.8 (77.7%)	0.0	50.6 (22.3%)	0.0	0.0
Protect & Enhance Public Health	Fish Consumption	0.0	0.0	0.0	0.0	0.0	0.0
	Swimming [b]	0.0	0.0	0.0	0.0	0.0	0.0
	Secondary Contact	0.0	0.0	0.0	0.0	0.0	0.0
	Drinking Water	0.0	0.0	0.0	0.0	0.0	0.0
Social and Economic	Agricultural	226.4	226.4 (100%)	0.0	0.0	0.0	0.0
	Total	226.4	175.8 (77.7%)	0.0	50.6 (22.3%)	0.0	0.0

a - These goals are part of the national water quality goals adopted by the EPA Office of Water and the ITFM in their Environmental Goals and Indicators effort.

b - Class 2B (secondary contact) streams were evaluated as swimmable for proposes of the CWA goals, therefore the swimming and secondary contact classification categories are the same.

Table 8-4. Stream Miles Impaired by Various Causes within the Cedar Beaver Water Quality Management Unit.	
Cause Category	**Miles Impaired**
Cause unknown	0.0
Unknown toxicity	0.0
Pesticides	-
Priority organics	-
Nonpriority organics	-
Metals	0.0
Ammonia	0.0
Chlorine	0.0
Other inorganics	0.0
Nutrients	50.6
pH	0.0
Siltation/Sediments	0.0
Organic Enrichment/low DO	0.0
Salinity/TDS/Chlorides	0.0
Thermal modifications	50.6
Flow alterations	0.0
Other habitat alterations	50.6
Pathogen Indicators	-
Radiation	-
Oil and grease	0.0
Taste and odor	0.0
Noxious aquatic plants (algae)	50.6
Total toxics	0.0
Turbidity	0.0
Exotic species	-
Other (specify)	-

- = Category applicable, no data available.
0 = Category applicable, but size of waters in the category is zero.

Table 8-5. Stream Miles Impaired by Various Source Categories in the Cedar / Beaver Watershed Management Unit	
Source Category	**Stream Miles Impaired**
Industrial Point Sources	0.0
Municipal Point Sources	0.0
Combined Sewer Overflow	-
Agriculture	50.6
Silviculture	0.0
Construction	0.0
Urban Runoff/Storm Sewers	0.0
Resource Extraction	0.0
Land Disposal	0.0
Hydromodification	50.6
Habitat Modification	50.6
Marinas	-
Atmospheric Deposition	-
Contaminated Sediments	-
Unknown Source	50.6
Natural Sources	0.0

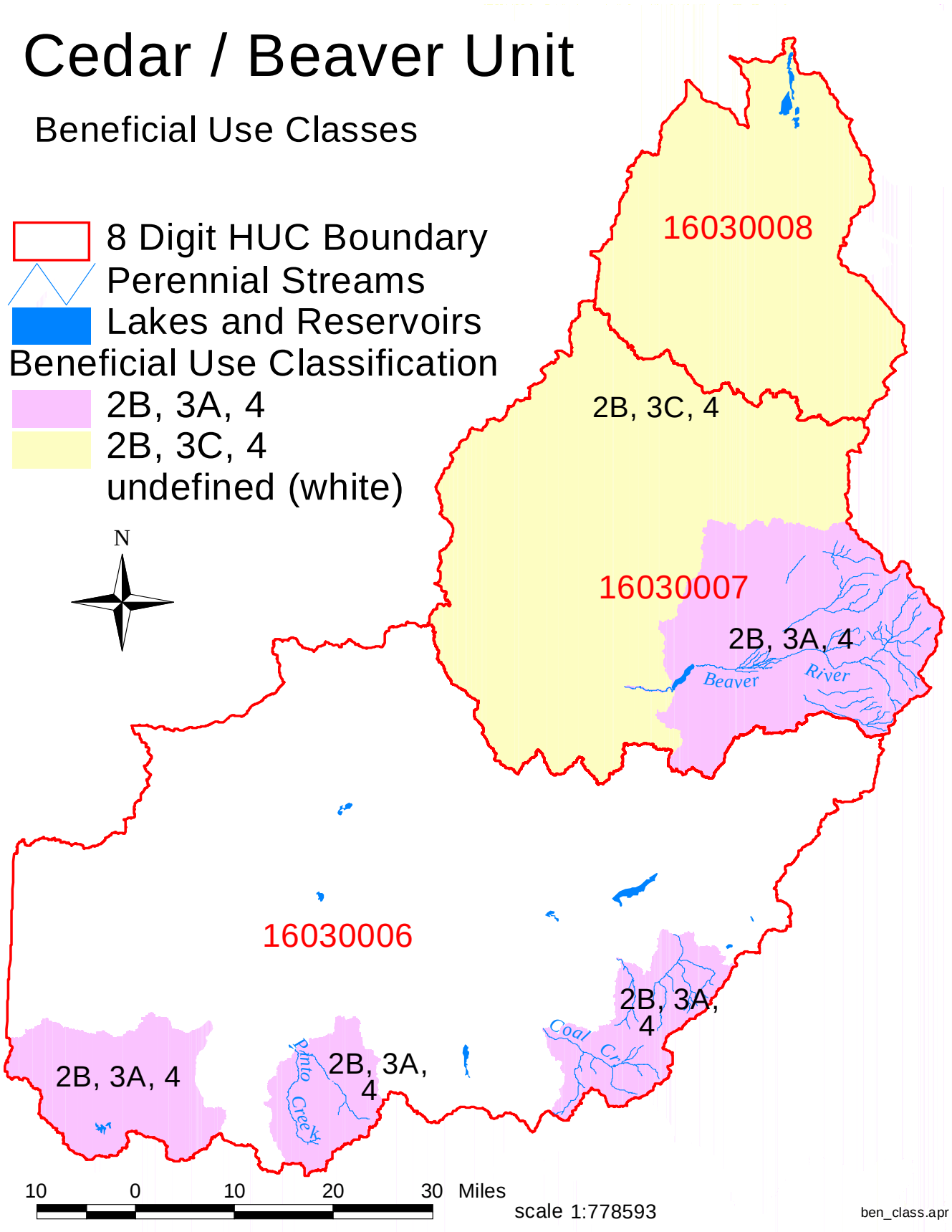

Figure 8-2. River and stream designated beneficial use classifications - Cedar/Beaver Watershed Management Unit.

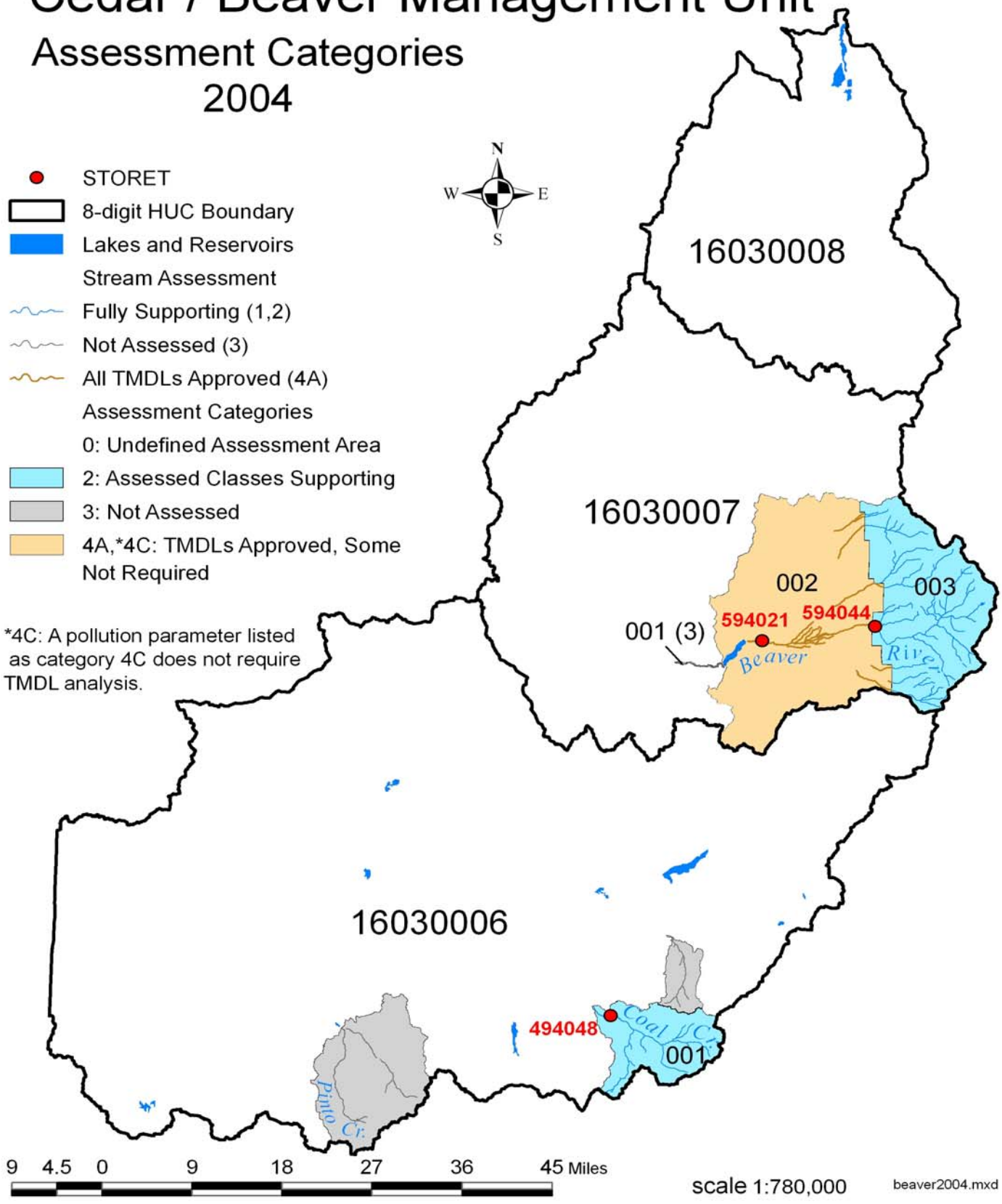

Figure 8-3. Stream and river beneficial use support by category - Cedar / Beaver Watershed Management Unit.

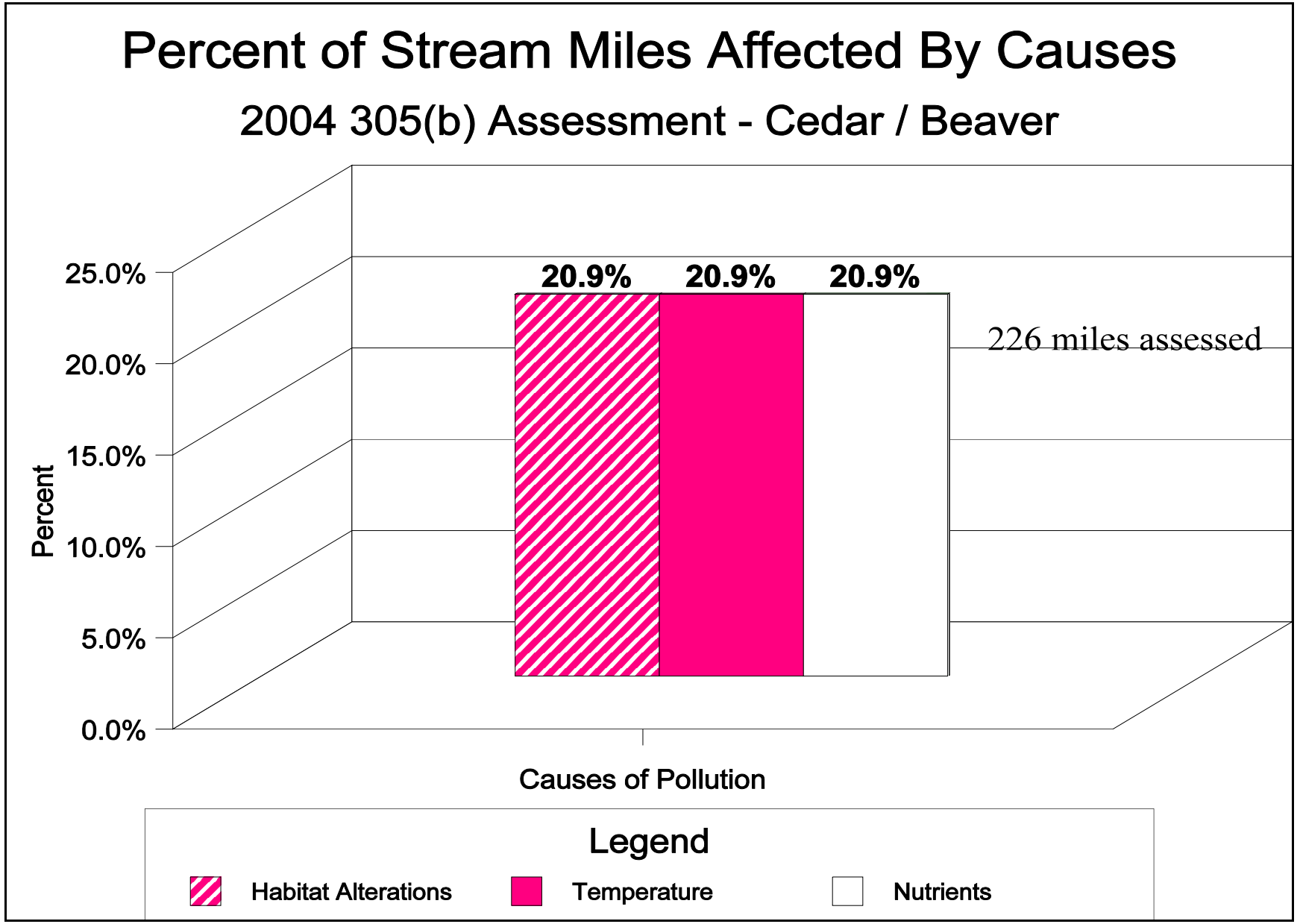

Figure 8-6. Percent of assessed stream miles impacted by sources - Cedar / Beaver Watershed Management Unit.

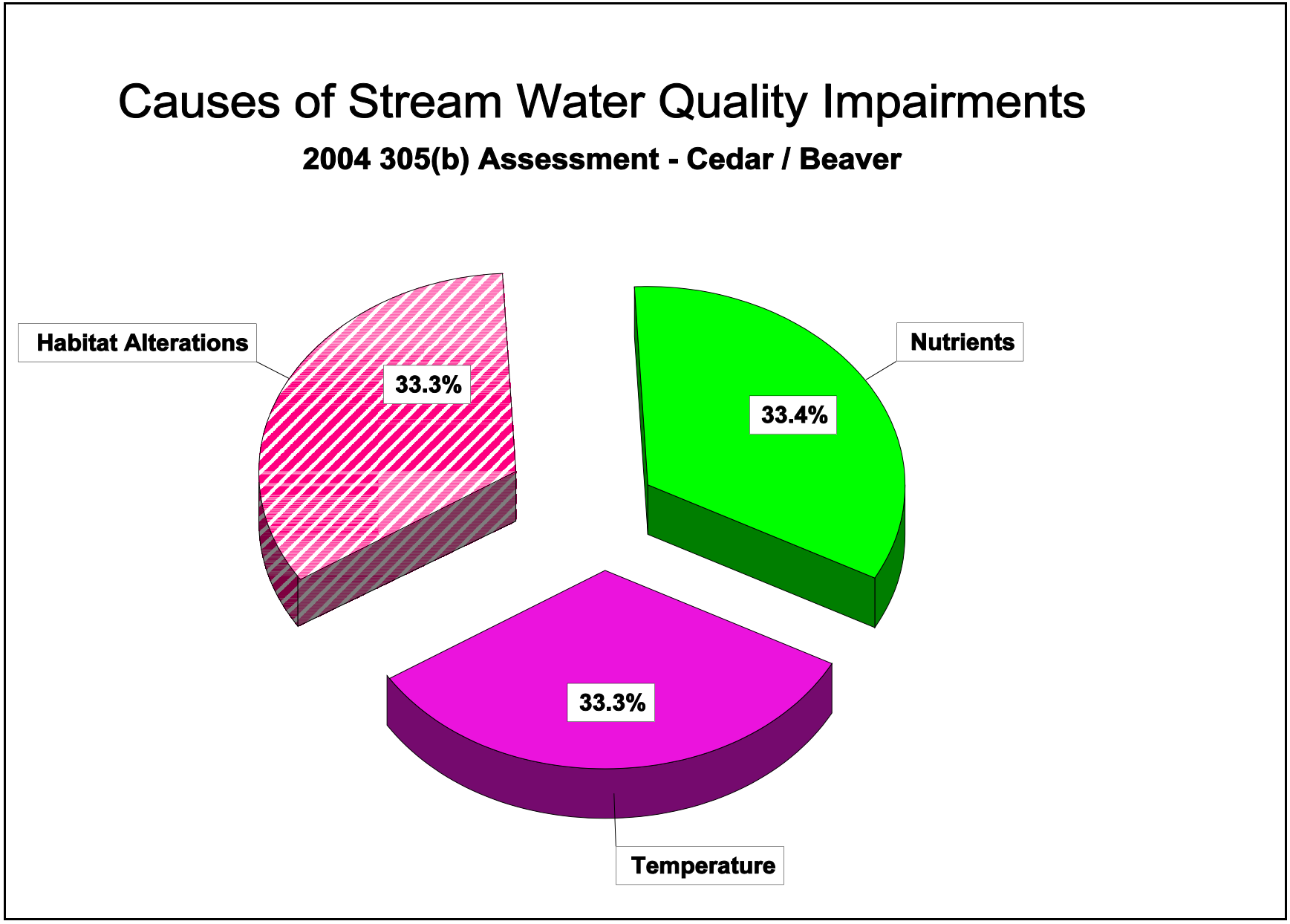

Figure 8-5. Relative percent contribution by cause to impairment of stream water quality - Cedar / Beaver Watershed Management Unit.

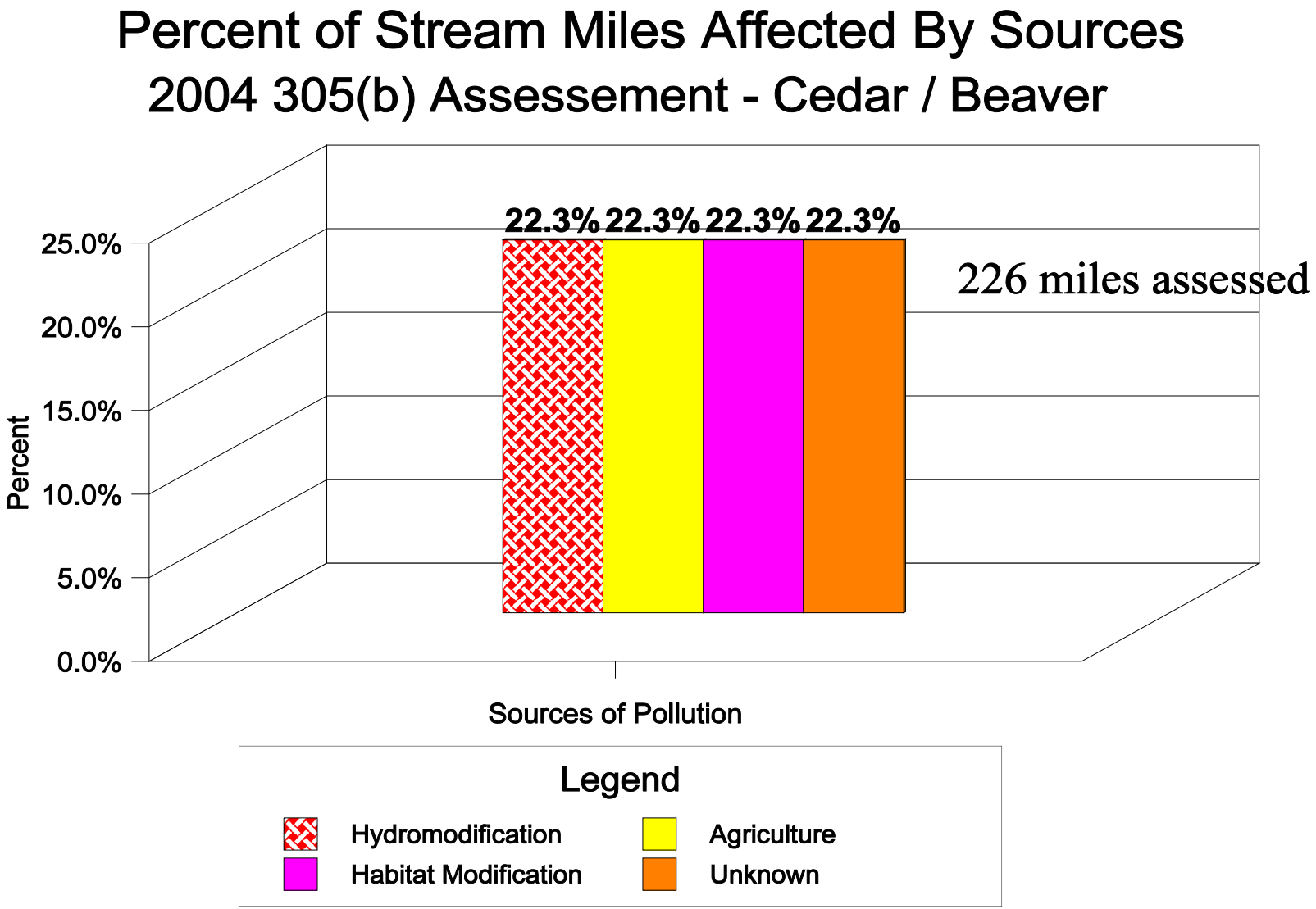

Figure 8-6. Percent of assessed stream miles impacted by sources - Cedar/Beaver Watershed Management Unit.

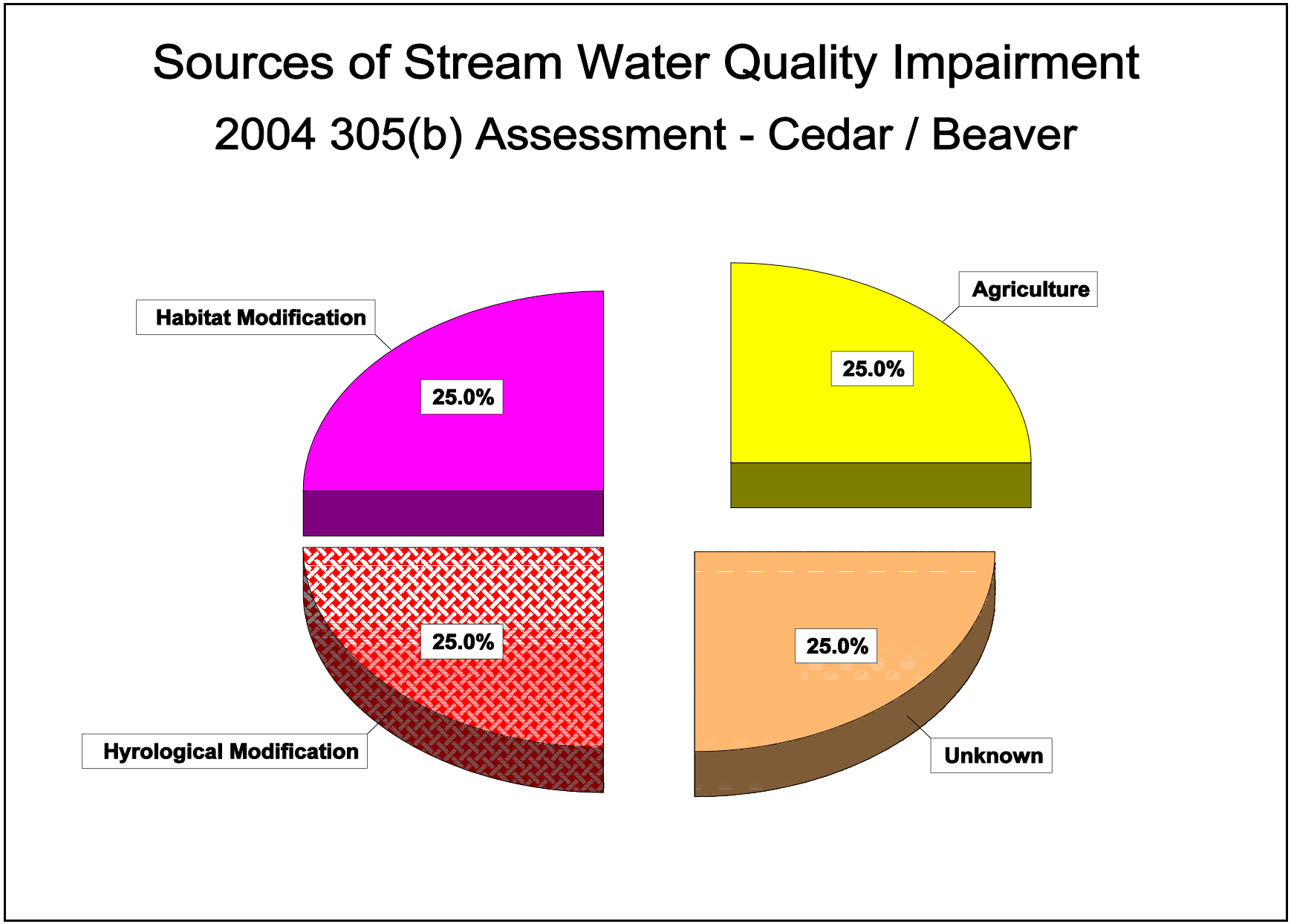

Figure 8-7. Relative percent contribution by source to impairment of stream water quality - Cedar / Beaver Watershed Management Unit.

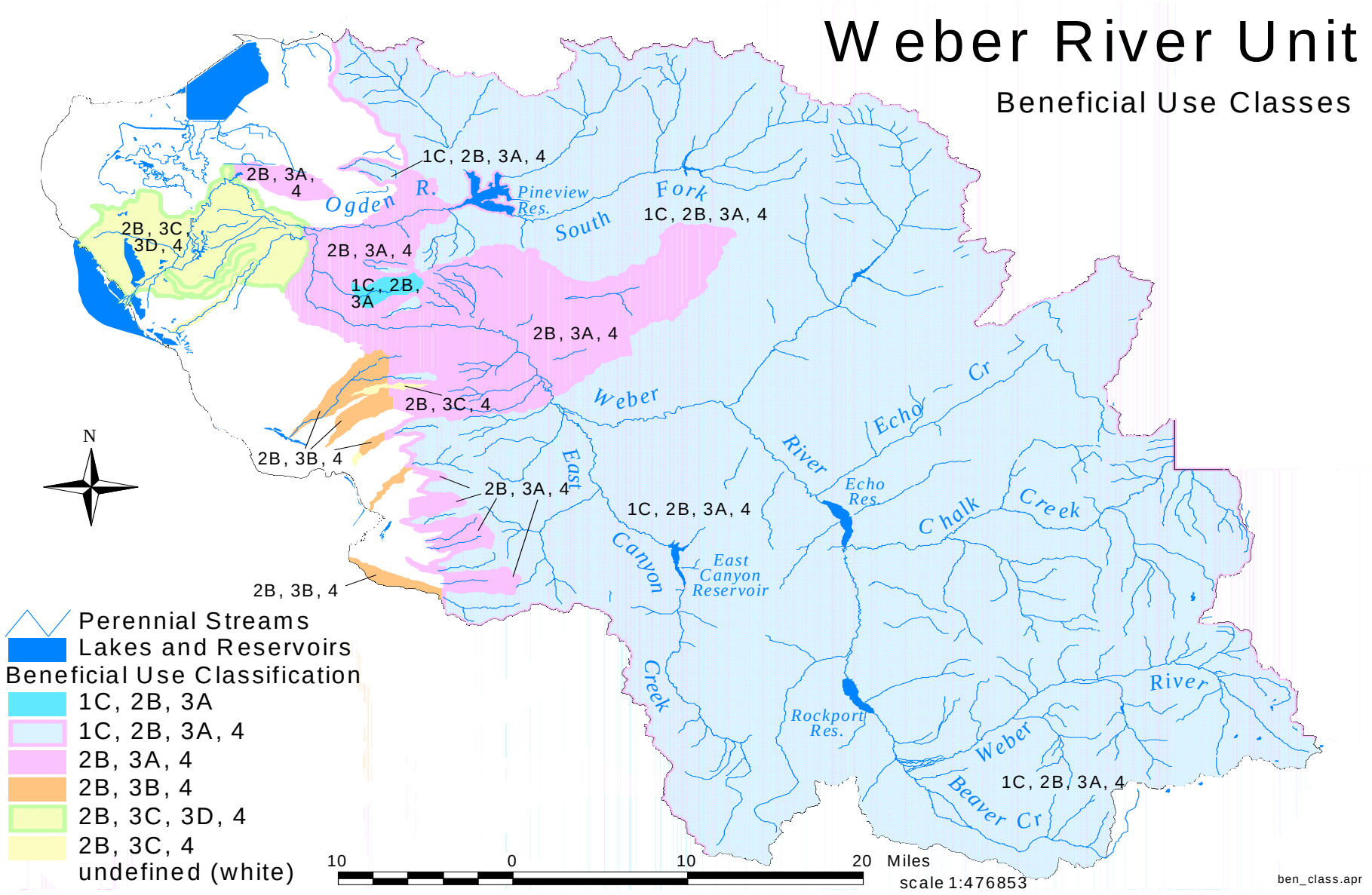

Figure 9-3. River and stream designated beneficial uses - Weber River Watershed Management Unit.

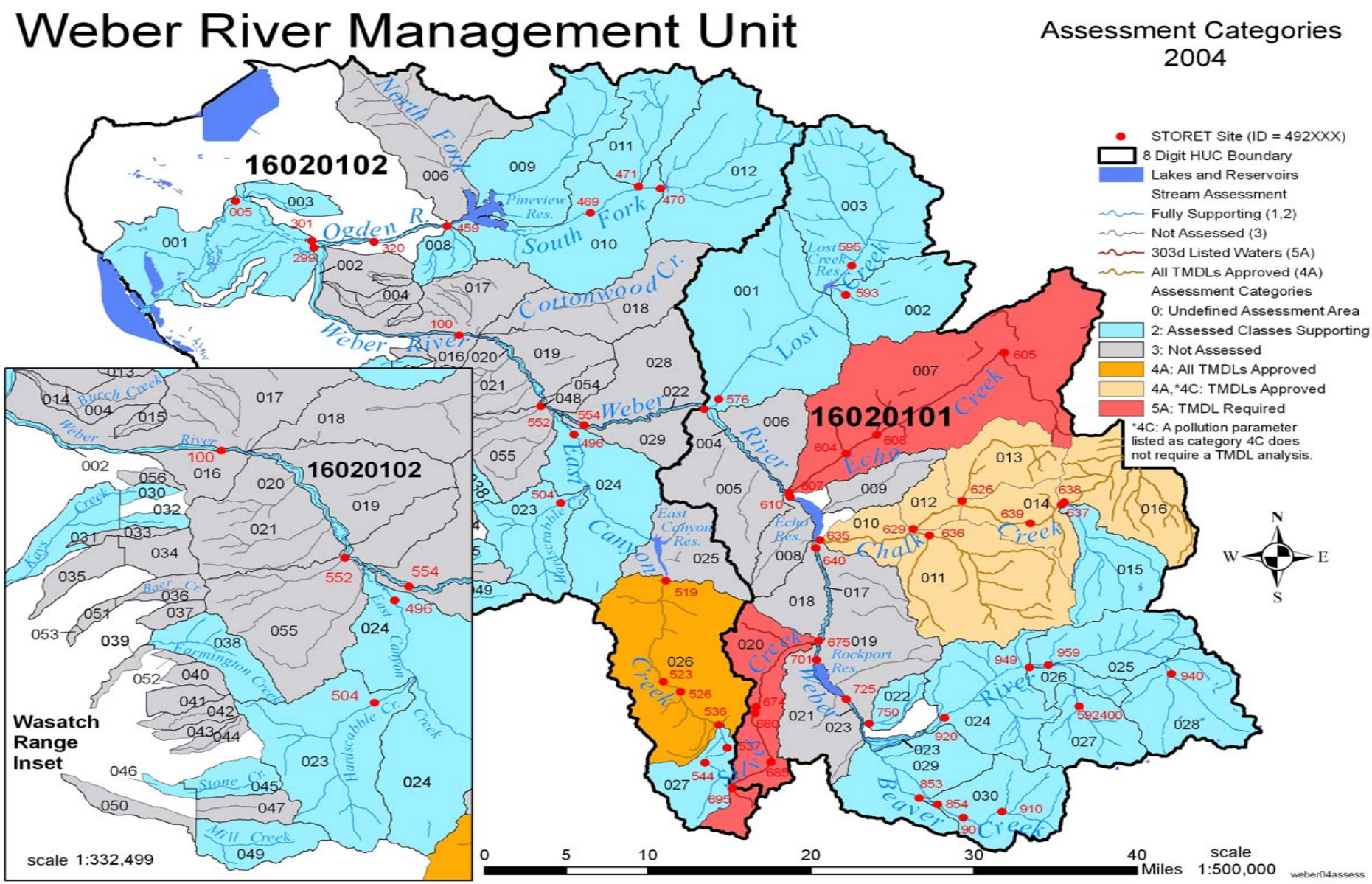

Figure 9-4. Stream and river beneficial use assessment by categories - Weber River Watershed Management Unit.

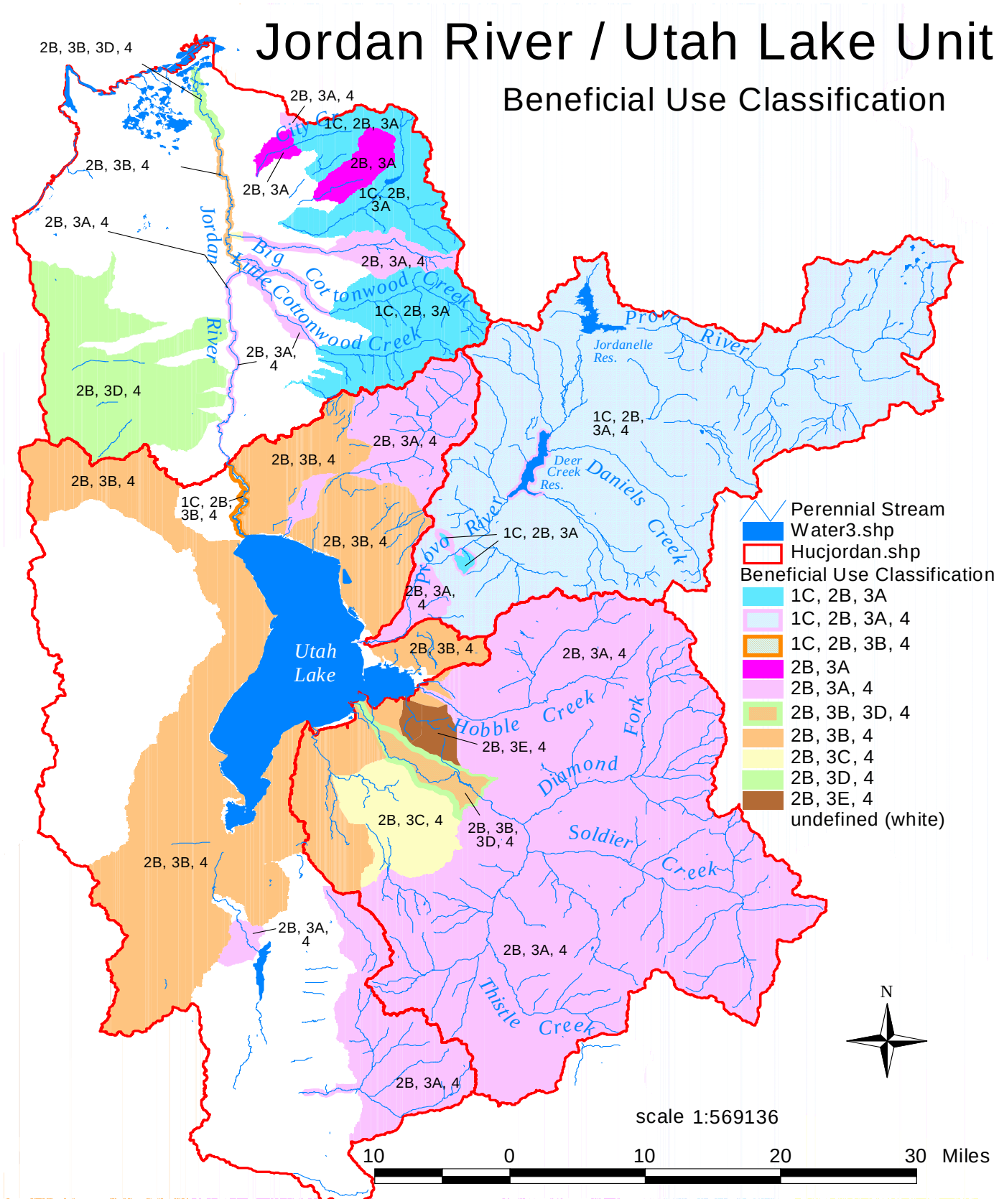

Figure 9-5. River and stream designated beneficial use classes - Jordan River / Utah Lake Watershed Management Unit.

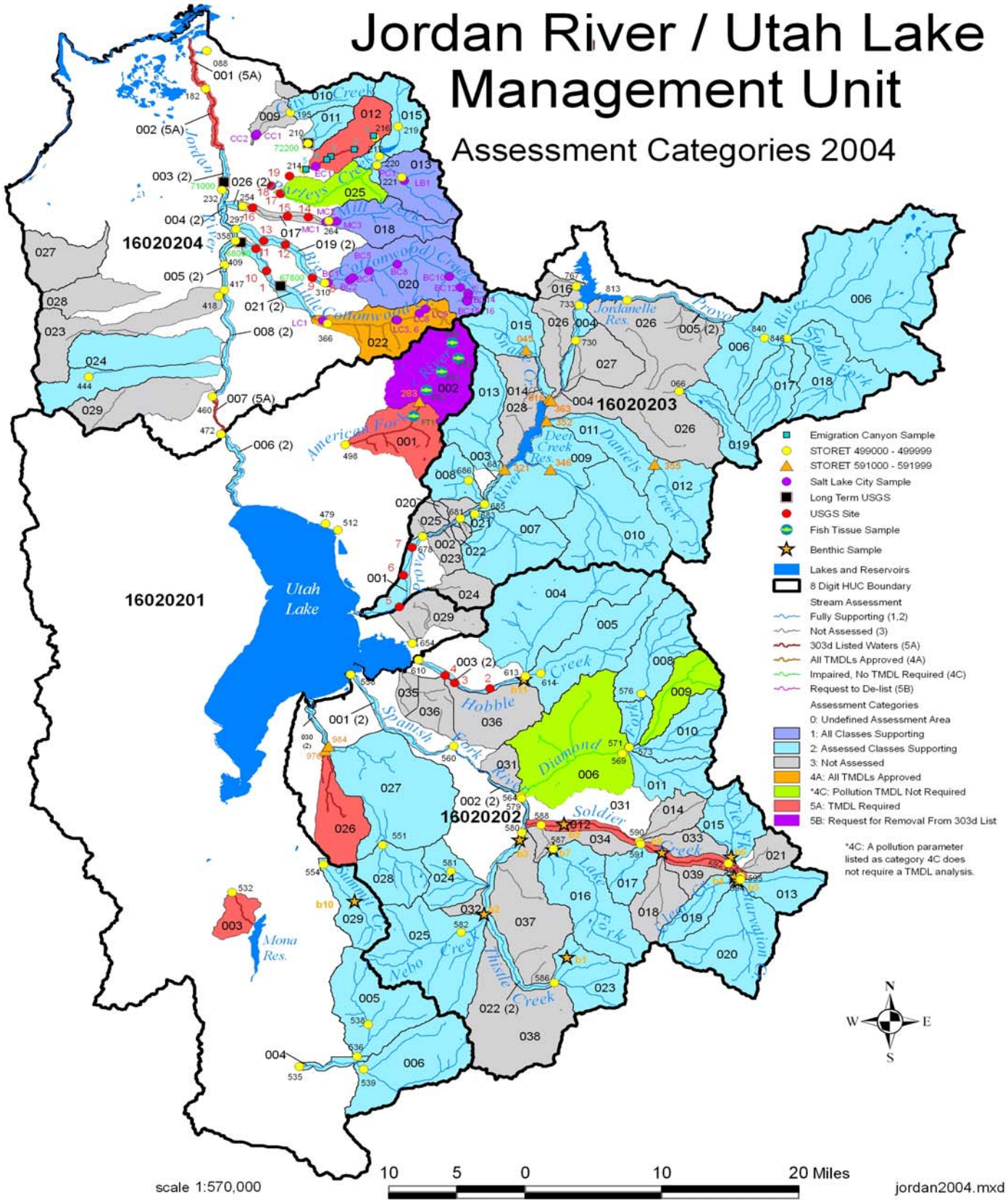

Figure 9-6. Beneficial use assessment by categories - Jordan River / Utah Lake Watershed Management Unit.

Chapter 10. Assessment Units With Elevated Levels of Phosphorus

Because total phosphorus does not directly affect water quality, but can be the cause of noxious aquatic plant growth and cause heavy blooms of algae that can reduce the level of oxygen in the water to the point that fish can be stressed or killed, it is important to look at waters that have elevated levels of phosphorus and determine the beneficial use support for aquatic life using some other method of assessment than just the concentration of total phosphorus.

Measuring dissolved diurnal oxygen levels is one method that can be used to determine beneficial use support. Another is to compare the benthic macroinvertebrate population to that of a reference site to determine if there are significant differences in the benthic macroinvertebrate populations. A direct evaluation of the fisheries population can also be used to obtain data and information about the possible effects of total phosphorus.

The DWQ has set the following guidance for possibly looking at waters with "high" levels of total phosphorus. If the mean concentration of total phosphorus for the sample set is > .06 mg/l, and the indicator value of .05 mg/l is exceeded in more than 10% of the samples, the assessment unit is designated as one that needs further study or evaluation. A map of the assessment units identified as having elevated levels of total phosphorus is in Figure 10-1.

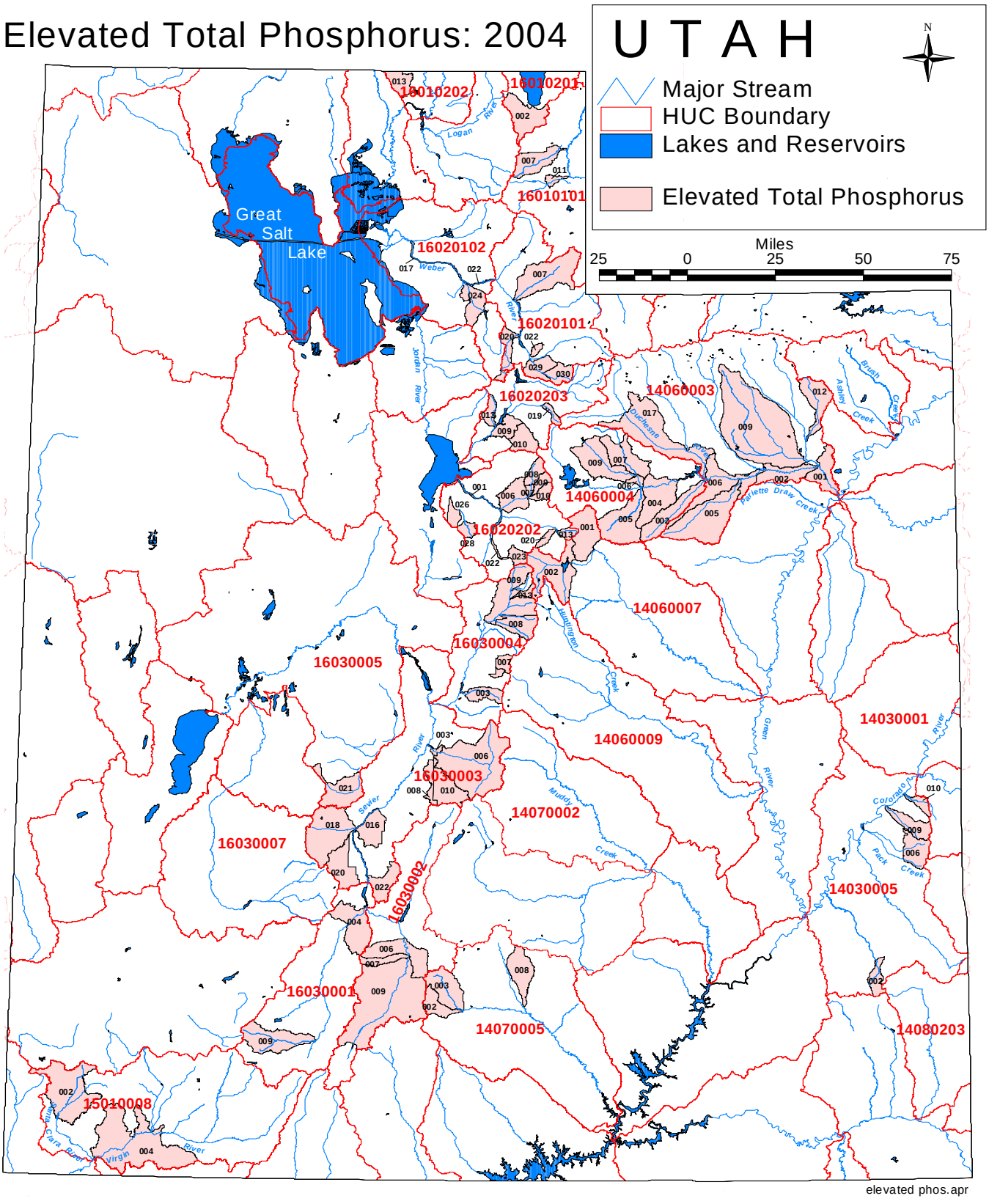

Figure 10-1. Assessment units with elevated levels of total phosphorus.

Table 10-1. Assessment Units With Elevated Levels of Total Phosphorus.				
Watershed Management Unit	Assessment Unit ID	Assessment Unit NAME	Assessment Unit Description	Stream Miles
Bear River	UT16010202-013	Clarkston Creek	Clarkston Creek and tribs from Newton Reservoir to Utah/Idaho State Line	60.1
Bear River	UT16010201-002	North Eden	North Eden Creek & tribs from Bear lake to headwaters	12.0
Bear River	UT16010101-007	Big Creek	Big Creek & tribs from Bear River to headwaters	38.8
Bear River	UT16010101-011	Woodruff Creek - 1	Woodruff Creek from confl/w Bear River to Birch Creek confluence	8.7
Weber	UT16020101-007	Echo Creek	confluence w/ Weber River to headwaters-tribs	43.0
Weber	UT16020102-024	East Canyon Creek -1	confluence w/ Weber River to East Canyon Dam	13.8
Weber	UT16020101-020	Silver Creek	Silver Creek from confluence w/Weber River to headwaters-tribs	21.4
Weber	UT16020101-022	Fort Creek	confluence w/ Weber River to headwaters-tribs	10.2
Weber	UT16020101-029	Beaver Creek-1	confluence with Weber River to Kamas	16.4
Weber	UT16020102-022	Weber River-6	segment between East Canyon Creek confluence and Lost Creek confluence	14.7
Weber	UT16020101-017	Weber River-8	Echo Reservoir to Rockport Reservoir	10.7
Weber	UT16020101-030	Beaver Creek-2	Beaver Creek from Kamas to headwaters	23.4
Weber	UT16020102-002	Weber River -3	Weber River from Ogden River confluence to Cottonwood Creek confluence	17.7
Weber	UT16020102-020	Weber River-4	Cottonwood Creek confluence to Stoddard Diversion	13.0
Weber	UT16020102-048	Weber River-5	Weber River from Stoddard Diversion to East Canyon Creek confluence	1.5
Jordan River / Utah Lake	UT16020203-013	Provo Deer Creek	Provo Deer Creek and tributaries from confluence w/ Provo River to headwaters	19.1
Jordan River / Utah Lake	UT16020203-019	Lake Creek-2	Lake Creek and tributaries above Timber Creek confluence to headwaters	14.7
Jordan River / Utah Lake	UT16020203-010	Main Creek-2	Main Creek and tributaries from Round Valley to headwaters-tribs	32.1
Jordan River / Utah Lake	UT16020202-008	Diamond Fork-3	Diamond Fork Creek from Hawthorne Campground to headwaters-tribs	22.1
Jordan River / Utah Lake	UT16020202-009	Sixth Water Creek	Sixth Water Creek and tributaries from confluence w/ Diamond Fork Creek to headwaters	13.4
Jordan River / Utah Lake	UT16020202-006	Diamond Fork- 1	Diamond Fork Creek from confluence w/ Spanish Fork River to Sixth Water confluence-tribs	20.0
Jordan River / Utah Lake	UT16020202-007	Diamond Fork-2	Diamond Fork Creek from Sixth Water Creek confluence to Hawthorne Campground.	5.3
Jordan River / Utah Lake	UT16020202-010	Third Water Creek	Third Water Creek and tributaries from confluence w/ Sixth Water Creek to headwaters	19.6
Jordan River / Utah Lake	UT16020202-026	Spring Creek	Spring Creek and tributaries from confluence w/ Beer Creek to headwaters	11.4
Jordan River / Utah Lake	UT16020202-002	Spanish Fork River-2	Spanish Fork River from Moark Diversion to Thistle Creek confluence	8.0
Jordan River / Utah Lake	UT16020202-022	Thistle Creek-1	Thistle Creek from confluence w\ Soldier Creek to USFS Forest Boundary	18.3
Jordan River / Utah Lake	UT16020202-028	Peteetneet Creek	Peteetneet Creek and tributaries from Maple Dell Campground to headwaters	18.5
Jordan River / Utah Lake	UT16020202-013	Soldier Creek-2	Soldier Creek and tributaries from confluence of Starvation Creek to headwaters	6.4
Jordan River / Utah Lake	UT16020202-019	Clear Creek	Clear Creek and tributaries from confluence w/ Soldier Creek to headwaters	12.6

Table 10-1. Assessment Units With Elevated Levels of Total Phosphorus.				
Watershed Management Unit	Assessment Unit ID	Assessment Unit NAME	Assessment Unit Description	Stream Miles
Jordan River / Utah Lake	UT16020201-004	Salt Creek-1	Salt Creek from mouth of Canyon to USFS Boundary	5.0
Jordan River / Utah Lake	UT16020203-009	Main Creek-1	Main Creek from Deer Creek Res to Round Valley and other tributaries from South Fork Provo River to Daniels Cr	6.2
Jordan River / Utah Lake	UT16020202-023	Thistle Creek-2	Thistle Creek and tributaries from USFS Boundary to headwaters	16.7
Jordan River / Utah Lake	UT16020202-001	Spanish Fork River-1	Spanish Fork River from Utah Lake to Moark Diversion	14.6
Uinta	UT14060003-012	Deep Creek	Deep Creek-tribs: confluence Uintah River to headwaters.	24.7
Uinta	UT14060003-017	Duchesne River-4	Duchesne River: from Strawberry River confluence to West Fork Duchesne confluence.	67.3
Uinta	UT14060004-007	Lower Red Creek	Red Creek-tribs: confluence Current Creek to Red Creek Reservoir.	15.6
Uinta	UT14060004-009	Middle Currant Creek	Current Creek-tribs: Red Creek confluence to Current Creek Reservoir.	60.1
Uinta	UT14060003-006	Duchesne River-3	Duchesne River: from Myton to Strawberry River confluence.	40.0
Uinta	UT14060004-004	Stawberry River-2	Stawberry River-tribs: Starvation Reservoir to Avintaquin Creek confluence.	16.1
Uinta	UT14060004-006	Lower Red Creek	Red Creek-tribs: confluence Strawberry River to Currant Creek Confluence.	4.7
Uinta	UT14060004-002	Indian Canyon Creek	Indian Canyon Creek-tribs: confluence Strawberry River to headwaters.	44.4
Uinta	UT14060003-005	Antelope Creek	Antelope Creek-tribs: confluence Duchesne River to headwaters.	31.4
Uinta	UT14060004-005	Avintaquin Creek	Avintaquin Creek-tribs: confluence Strawberry River to headwaters.	54.4
Uinta	UT14060003-001	Duchesne River-1	Duchesne River-tribs: confluence Green River to Randlett.	19.1
Uinta	UT14060003-002	Duchesne River-2	Duchesne River: Randlett to Myton.	31.8
Uinta	UT14060003-009	Dry Gulch Creek	Dry Gulch Creek-tribs: confluence Duchesne River to headwaters.	87.7
Sevier River	UT16030003-010	Lost Creek-3	Lost Creek and tributaries from USFS boundary to headwaters	24.3
Sevier River	UT16030004-013	Cottonwood Creek-SP	Cottonwood Creek and tributaries from confluence w/San Pitch River to headwaters	9.3
Sevier River	UT16030004-007	Ephraim Creek	Ephraim Creek and tributaries from USFS boundary to headwaters	13.2
Sevier River	UT16030003-006	Salina Creek-2	Salina Creek and tributaries from USFS boundary to headwaters	139.7
Sevier River	UT16030003-003	Salina Creek-1	Salina Creek and tributaries from confluence w/Sevier River to USFS boundary	4.2
Sevier River	UT16030003-018	Clear Creek	Clear Creek and tributaries from confluence w/Sevier River to headwaters	100.2

Table 10-1. Assessment Units With Elevated Levels of Total Phosphorus.				
Watershed Management Unit	**Assessment Unit ID**	**Assessment Unit NAME**	**Assessment Unit Description**	**Stream Miles**
Sevier River	UT16030003-020	Beaver Creek-2	West side tributaries to Sevier River above USFS boundary from Clear Creek upstream to HUC boundary	16.5
Sevier River	UT16030002-006	East Fork Sevier-3	East Fork Sevier River and tributaries from Antimony Ck confluence to Deer Creek confluence	20.8
Sevier River	UT16030002-007	Deer Creek	Deer Creek and tributaries from confluence w/East Fork Sevier River to headwaters	17.4
Sevier River	UT16030001-009	Mammoth Creek	Mammoth Creek and tributaries from confluence w/Sevier River to headwaters	43.3
Sevier River	UT16030001-002	Sevier River-4	Sevier River and tributaries from Piute Reservoir to Circleville Irrigation Diversion excluding East Fork Sevier River and tributaries.	15.7
Sevier River	UT16030003-022	Sevier River-5	Tributaries on east side of Sevier River from Manning Creek confluence to HUC boundary.	12.5
Sevier River	UT16030003-019	Sevier River-9	River from Annabelle Diversion to Clear Creek Confluence	11.4
Sevier River	UT16030003-016	Sevier River-10	East side tributaries below USFS to Sevier River from Annabelle Diversion upstream to Clear Creek confluence.	0.4
Sevier River	UT16030003-008	Lost Creek-2	Lost Creek and tributaries from ~ 6 miles upstream to USFS boundary	5.2
Sevier River	UT16030004-008	Pleasant Creek	Pleasant Creek and Cedar Creek and their tributaries from confluence w/San Pitch River to headwaters	49.9
Sevier River	UT16030004-003	Six Mile Creek	Six Mile Creek and tributaries from confluence w/San Pitch River to headwaters	27.0
Sevier River	UT16030002-009	East Fork Sevier-2	East Fork Sevier River and tributaries from Deer Creek confluence to Tropic Reservoir	126.1
Sevier River	UT16030004-009	San Pitch-5	San Pitch River and tributaries from U132 to Pleasant Creek confluence excluding Cedar Creek / Oak Creek / Pleasant Creek and Cottonwood Creek.	58.2
Sevier River	UT16030003-017	Sevier River-6	Sevier River from Clear Ck confluence to HUC unit boundary.	27.1
Sevier River	UT16030005-021	Corn Creek	Corn Creek and tributaries from mouth to headwaters	45.9
West Colorado River	UT14060007-002	Scofield Reservoir Tribs	Tributaries to Scofield Reservoir	76.5
West Colorado River	UT14060007-001	White River	White R. from confluence w/Price R. to Headwaters	36.0
West Colorado River	UT14070005-002	Birch Creek	Birch Creek & tribs from confl w/Escalante R. to headwaters	27.7
West Colorado River	UT14070005-003	North Creek	North Creek from confl w/Escalante R. to headwaters	38.7
West Colorado River	UT14070005-008	Deer Creek	Deer Creek & trib from cnfl w/Escalante River to headwaters	57.0
Southeast Colorado River	UT14030005-009	Castle Creek	Castle Creek & tribs from confluence with Colorado River to headwaters	11.9
Southeast Colorado River	UT14030005-006	Mill Creek-2	Mill Creek & tribs from U.S.F.S. boundary to headwaters	25.3
Southeast Colorado River	UT14030002-001	LaSal Creek	LaSal Creek from Utah-Colorado stateline to headwaters-tribs	17.7
Southeast Colorado River	UT14030005-002	Indian Creek-2	Indian Creek from Newspaper Rock north boundary to headwaters	15.8

Table 10-1. Assessment Units With Elevated Levels of Total Phosphorus.				
Watershed Management Unit	**Assessment Unit ID**	**Assessment Unit NAME**	**Assessment Unit Description**	**Stream Miles**
Southeast Colorado River	UT14030005-010	Onion Creek	Onion Creek and tributaries from the confluence with Colorado River to headwaters	0.0
Lower Colorado River	UT15010008-002	Santa Clara-2	Santa Clara River-tribs: from Gunlock Reservoir to Baker Dam Resevoir (include Mogatsue Creek and	
Lower Colorado River	UT15010008-004	Virgin River-2	Virgin River-tribs: from Santa Clara River confluence to Quail Creek diversion (excludes Quail Creek and Leads Creek)	40.1

Chapter 11: Lake Water Quality Assessment

Lake eutrophication is a naturally occurring aging process that is often accelerated by human activities. Through a growing public awareness of this problem, Congress passed legislation in 1972 (Section 314 of the Federal Water Pollution Control Act) mandating states to inventory and classify their lakes according to trophic condition. States were initially to develop a ranking system used to prioritize the lakes for potential protective or restorative projects. This system was more recently replaced with the 1987 Clean Water Act Amendments requiring biannual 305(b) assessments and a concomitant 303(d) list of impaired waters.

Over three thousand assessment units, i.e. lakes, reservoirs, and wetlands, were identified in the initial Utah's Clean Lakes inventory. (State of Utah Clean Lakes Inventory and Classification, Volumes I & II, April 1982). Lakes selected for further study and evaluation ("significant lakes") were chosen according to the following criteria. The assessment unit is any publicly owned lake/reservoir/pond with a surface area equal to or greater than 50 acres with the following characteristics: (1) accessibility to the public is provided; (2) beneficial use status has been defined or is anticipated to protect water quality for public benefit; and (3) the lake provides important recreational benefit to the public. Marshes, springs, waterfowl management areas and intermittent lakes were not considered in the report. Exceptions in size were made in cases of high recreation use. Under these guidelines a list of 127 lakes and reservoirs was developed.

Table 11-1 provides a summary of the number of lakes and lake surface area in the State of Utah. Seventy-seven percent of the total surface acres lake in Utah are found in 6 lakes and reservoirs, Bear Lake, Utah Lake, Flaming Gorge Reservoir, Lake Powell, Strawberry Reservoir, and Sevier Bridge Reservoir. The Great Salt Lake is not included in this table.

The State currently assesses 132 lakes and reservoirs. They include most of those previously inventoried. Changes were based on actual data collected and subsequent re-evaluation of the selection criteria for the original priority list. In addition, some new reservoirs that have been created since the original assessment in 1981-1982 and other lakes assessed by the State or other agencies on a cooperative basis have also been added. Water quality assessment includes determination of Carlson's trophic state index (TSI), dissolved oxygen concentrations throughout the water column, phytoplankton species dominance, reported fish kills and water quality trend. General ambient water quality conditions of Utah's lakes and reservoirs vary greatly in relation to their respective watersheds and lake morphometry. Nutrient concentrations and trophic status range from the oligotrophic conditions of many high mountain lakes to highly eutrophic downstream lakes such as Lower Box Creek Reservoir, Redmond Reservoir, Utah Lake, Kent's Lake and Minersville Reservoir. Other water chemical characteristics vary from extremely soft water conditions of the high Uinta lakes to highly saline conditions in reservoirs on the lower Sevier drainage such as Gunnison Bend and D.M.A.D. Reservoirs.

Many lakes and reservoirs experience problems relating to thermal stratification and subsequent depletion of dissolved oxygen (DO) in lower strata. This oxygen depletion is most often linked to excessive algal production and, in some lakes, results in frequent fish kills. Many lakes and reservoirs also have aesthetic and recreational use impairment because of severe annual drawdown. Such drawdowns leave expanses of exposed mud flats and often

Table 11-1. Utah Freshwater Lakes and Reservoirs by Size Class Showing Numbers, Surface Acres, and Percent of Total Lake Surface		
Size Class (Surface Acres)	**Number of Lakes / Reservoirs**	**Total Surface Acres**
10,000 and greater	6 (0.2%)	370,905 (77.0%)
5,000 - 9,999	2 (0.07%)	15,584 (3.2%)
1,000 - 4,999	18 (0.6%)	34,119 (7.1%)
500 - 999	17 (0.57%)	12,475 (2.6%)
100 - 499	87 (2.9%)	19,890 (4.1%)
50 - 99	68 (2.3%)	4,594 (1.0%)
20 - 49	202 (6.7%)	5,871 (1.2%)
20 or less	2600 (86.7%)	18,200 (3.8%)
Total	3,000	481,638

insufficient waters for overwintering fish populations. During recent years, an EPA assistance grant has been utilized to obtained additional water quality data to assist in the evaluation and assessment of lakes and reservoirs for this report. The initial purpose of this program was to assess newly created reservoirs and to conduct ongoing monitoring programs to reassess the lakes and reservoirs contained in the 1981-1982 Clean Lakes Inventory of the State of Utah.

Historically, one half, or about 65 lakes were sampled each year. Hence, all 132 lakes were sampled over a two-year assessment period. Sampling was performed during two visits between June and September for the year it was scheduled. More recently, additional data has been obtained during the winter period , as part of cooperative programs with other agencies, or to provide additional data for TMDL preparation. This effort often includes monthly sampling from June to September in order to more clearly understand important limnological factors contributing to impairment and to help us determine appropriate restoration strategies.

In addition, during the summer of 2002, we began a voluntary citizen monitoring program to provide additional water quality data and collect recreational usage data. Information pamphlets on subjects ranging from descriptions of nutrient loading and eutrophication to explaining our monitoring program have been distributed to popular recreational lakes and reservoirs in order to stimulate awareness of lake water quality and conditions in our State.

Trophic Status

Carlson's Trophic State Index (TSI) has been determined since the initial classification and inventory project in 1981 to 1982. This has provided long-term trend data for most of our lakes and reservoirs.

To determine the annual TSI values, the following procedure is used:

1 - Individual TSI values for total phosphorus, secchi depth and chlorophyll-a was determined for each sampling station on the lake or reservoir.

2 - The values obtained from step one are then averaged among the two sampling visits at each of the sampling station.

3 - An average annual summer TSI value for each lake is then calculated by averaging all the station TSI Index values for a given lake or reservoir.

4 - TSI Index values utilized in this report were calculated for each lake or reservoir by determining the average TSI value for the period in two year increment periods since 1989.

TSI values are compared to the following index values to determine current trophic state condition.

TSI Index value < 40 - Oligotrophic
TSI Index value 40 to 50 - Mesotrophic
TSI Index value 51 to 70 - Eutrophic
TSI Index value > 70 - Hypereutrophic

Table 11-2 contains a summary of lake trophic status for Utah's lakes and reservoirs by study periods. Lakes that have been determined to be hypereutrophic during the various periods of study include the following assessment units by periods: (1991-1992) Baker Dam Reservoir, DMAD Reservoir, Forsyth Reservoir, Gunnison Bend Reservoir, Johnson Reservoir, Koosharem Reservoir, Mill Meadow Reservoir, Redmond Reservoir, Rush Lake, Scofield Reservoir, Upper Enterprise Reservoir and Utah Lake, Barney Lake, Big Lake, Gunnison Bend Reservoir, Johnson Reservoir, Kents Lake, Lower Box Reservoir, Mill Meadow Reservoir, Mona Reservoir, Newton Reservoir, Redmond Reservoir, Rush Lake, Sevier Bridge Reservoir, Utah Lake and Willard Bay Reservoir; and (1993-94) Lower Bowns Reservoir, Rush Lake, Redmond Lake, Utah Lake, Kent's Lake, LaBaron Reservoir, Minersville Reservoir, Matt Warner Reservoir, Johnson Valley Reservoir, Newton Reservoir, Barney Reservoir and DMAD Reservoir; (1995-96) Rush Lake, Redmond Lake, Utah Lake, Kent's Lake, LaBaron Reservoir, Johnson Valley Reservoir, and Barney Reservoir; (1998-99) Koosharem Reservoir, Lower Box Reservoir, Redmond Reservoir, Rush Lake, and Utah Lake; (2000-2001) Utah Lake, Redmond Lake, Panguitch Lake, Lower Box Reservoir, Koosharem Reservoir, Kents Lake and Cook Lake; (2002-2003) Lower Box Reservoir, Rush Lake and Utah Lake. In the last two assessment periods, there has been an increase in the number of eutrophic lakes although the number of oligotrophic lakes has varied. We believe that this change is largely due to the drought that began in 1998 and has continued to worsen.

Control and Restoration Efforts

Several of our watersheds are known to be impaired for water quality and these are reflected in our 2004 303(d) list of impaired waters. Many of these problems were recognized several years ago and restoration efforts have been ongoing through Section 314 Clean Lakes Project grants, Section 319 grants and wastewater treatment plant upgrading. Best Management Practices (BMPs) which we are using to protect and restore water quality include chemical removal of phosphorus in wastewater treatment plants, eliminating the discharge of animal feeding operations to tributary streams, controlling grazing and restricting excessive animal stream access, establish riparian buffer strips adjacent to agricultural lands, restore stream bank and slope stability, maintaining property tidiness, keeping

Table 11-2. Trophic Status of Lakes.

Number and Acreage of Assessed Lakes and Reservoirs.

Trophic Class	91/92		93/94		95/96		98/99		00/01		02/03	
Oligotrophic	27 (22%)	239888 (58%)	42 (32%)	290,432 (63%)	47 (36%)	285,154 (62%)	36 (28%)	288,029 (63%)	28 (21%)	50,380 (11%)	38 (29%)	52,880 (11%)
Mesotrophic	52 (42%)	21,061 (5%)	51 (39%)	46,678 (10%)	57 (44%)	59,191 (13%)	66 (52%)	63,648 (14%)	60 ((46%)	275,274 (60%)	59 (45%)	252,470 (54%)
Eutrophic	30 (24%)	31,990 (8%)	24 (19%)	22,670 (5%)	24 (19%)	116,166 (25%)	21 (16%)	11,390 (2%)	36 (27%)	36,285 (8%)	31 (24%)	65,407 (14%)
Hypereutrophic	15 (12%)	122,069 (29%)	13 (11%)	100,808 (22%)	1 (1%)	50 (-)	5 (4%)	97,500 (21%)	7 (5%)	98,703 (21%)	3 (2%)	97,030 (20.7%)
TOTALS	124	415,008	130	460,588	129	460,561	128	460,567	131	460,642	132	467,787

streets and gutters clean, reducing return flows from excess irrigation, restricting excessive use of fertilizers and pesticides, and regulating off-road activities. Proper design, construction, and maintenance of sewage facilities, solid waste disposal facilities and fish cleaning stations have also been installed at popular lakes. Cooperation with other agencies, including the US Forest

Service, BLM, NRCS and State conservation districts has facilitated the education of individuals using both public and private lands as to various activities which have the potential to adversely impact water quality and utilize practices to limit or control these negative impacts. Table 11-3 contains a listing of specific lake rehabilitation techniques that have been used in addressing problems identified in diagnostic/feasibility studies funded under Section 314 of the Clean Water Act and ongoing lake assessments.

Specific watershed management plans or TMDLs (Total Maximum Daily Load) are currently being developed to address the unique problems and conditions identified for a particular lake or reservoir. In addition, wherever point sources are identified in a watershed that are impacting water quality, appropriate steps need to be taken to control the discharge of contaminants under existing water quality standards and guidelines. Clean Lakes Program Phase I studies were completed on Scofield Reservoir, Panguitch Lake, Deer Creek Reservoir, Bear Lake, Pineview Reservoir, Salem Pond, Minersville Reservoir, Otter Creek Reservoir, Navajo Lake, Mantua Reservoir, Pelican Lake, Hyrum Reservoir, East Canyon Reservoir and Utah Lake. Phase II lake restoration projects were conducted on four of these assessment units (Panguitch Lake, Scofield Reservoir, Deer Creek Reservoir and Salem Pond). For specific details on Clean Lakes and Section 319 Projects please refer to the summary listed in Table 11-4.

Impaired and Threatened Lakes

Several factors were considered in the assessment for beneficial use support. The monitoring program for lakes and reservoirs is designed to determine a basic water quality characterization, and evaluate the productivity during the summer period. Additional winter monitoring is conducted to evaluate dissolved oxygen deficiencies as indicated by the summer monitoring. Water quality standards are evaluated to assess impairment for waters classified in classes 2 (recreation), 3 (aquatic life), and 4 (agriculture). Three basic areas of data that are compared to standards in addition to other specific parameters include dissolved oxygen, pH, and temperature. These basic parameters are obtained in the field as part of

Table 11-3. Lake Rehabilitation Techniques.		
Technique	**Lakes using Technique**	**Lake Acreage**
In-lake Treatments		
1. Phosphorus Precipitation/Inactivation		
2. Sediment Removal/Dredging	1	11
3. Artificial circulation to increase oxygen		
4. Aquatic Macrophyte harvesting	1	120
5. Application of aquatic herbicides		
6. Drawdown for macrophyte control		
7. Hypolimnetic aeration		
8. Sediment oxidation		
9. Hypolimnetic withdrawal of low DO water		
10. Dilution/Flushing		
11. Shading/sediment covers or barriers		
12. Destratification		
13. Sand or other filters to clarify water		
14. Food chain manipulation		
15. Biological controls	1	11
16. Fish Clean Station Installed	23	437,046
Watershed Treatments		
20. Sediment Traps/Detention ponds	2	1,368
21. Erosion control Shoreline/Streambank	7	26,565
22. Diversion of nutrient rich inflows		
23. Conservation tillage used		
24. Integrated pest management practices applied		
25. Animal waste management practices installed	6	9,850
26. Porous pavement used		
27. Redesign streets/parking lots to reduce runoff		
28. Road or skid trail management		
29. Land surface roughening for erosion control		
30. Riprap installation	2	4,063
31. Unspecified BMPs installed	9	2,990
32. Riparian Fencing	8	12,924
33. Diversion structures installed	1	2,015
34. Checkdams or stream structures	6	9,850
35. Reseeding areas for erosion control	6	9,850
36. Streambank stabilization using vegetative controls	6	12,924
37. Wetland treatment of inflow waters	1	11
Other Lake Protection/Restoration Efforts		
40. Local Lake Management Program in place	3	168,540
41. Public Information/Education Program	21	141,288
42. Local Ordinance control to protect lakes	3	4,063
43. Point Source Controls	2	4,359
44. Municipal sewer system developed	1	2,815

Table 11-4. Listing of Phase II and Section 319 Projects for Lake Water Quality Control.

Name of Lake	Date Completed	Type	Federal Funding	Problems	Rehabilitation
Minersville	1991-1998	319	$ 889,120	Eutrophication	21,25,31,32,35,36,41
Hyrum	1991-1995	319	$1,582,215	Eutrophication	10,16,21,25,31,32,35,36,41
Otter Creek	1991-1998	319	$682,000	Eutrophication	16,21,25,31,32,35,36,41
Echo	1992-1998	319	$2,050,6000	Eutrophication	16,21,25,31,32,35,41
Scofield	1992	Phase II	$120,000	Watershed Erosion	16,21,30,32,33,34,35,36,41
Panguitch Lake	1989	Phase II	$ 95,925	Watershed Erosion	16,20,21,30,32,34,35,36,41
Deer Creek	1992	Phase II	$328,393	Agricultural Wastes	20,21,25,29,31,40,41,42,43
Salem Pond	1995	Phase II	$ 95,000	Macrophytes, Depth	2,15,37,41,
Decker Lake		Phase II	$1,000,000	Sedimentation	2

the overall monitoring program. The data for these three parameters are measured at 1-meter intervals throughout the water column and evaluated according to current 305(b)guidelines. A comparison of water column values with State standards is determined as follows. For any one pollutant or stressor, exceedence of standards in less than or equal to 10 percent of measurements, a designation of fully supporting was assigned. For any one pollutant or stressor, criteria exceeded in greater than 10, but less than or equal to 25 percent of measurements, a designation of partially supporting was assigned. For any one pollutant or stressor, criteria exceeded in greater than 25 percent of measurements a designation of not supporting was assigned. An exception to these guidelines has been provided for dissolved oxygen. Exceedance criteria for dissolved oxygen have been defined using the 1 day minimum dissolved oxygen concentration of 4.0 mg/l State standards account for the fact that anoxic or low dissolved oxygen conditions may exist in the bottom of deep reservoirs and therefore, the dissolved oxygen standard is applied as follows. When the concentration is above 4.0 mg/l for greater than 50% of the water column depth, a fully supporting status is assigned. When 25-50% of the water column is above 4.0 mg/l, it is designated as partial supporting and when less than 25% of the water column exceeds the 4.0 mg/l criteria, it is designated as not supporting its defined beneficial use.

Having determined support status for individual pollutants or stressors, an overall use designation was determined based on a combination of the individual pollutant or stressor support designations. A ‘not supportive´ status was assigned to a body of water when at least two of the basic criteria (dissolved oxygen, pH or temperature) were found to be not supportive. A ‘fully supporting´ status was assigned when all of the criteria were found to be fully supporting. All other assessment units were assigned a 'partially supporting' status for criteria found in the various remaining combinations.

Next there is a modification of the initial support status through an evaluation of the trophic state index (TSI), winter dissolved oxygen conditions with reported fish kills, and the presence of significant blue green algal species in the phytoplankton community. This evaluation, although based to an extent on professional judgement, could shift initial support status ranking downward if two of the three criteria indicate there is an impairment in the water quality.

A final determination to list the assessment unit

is made through an evaluation of assessment trends since 1989. Since that time, we have incorporated the hydrology and seasonal variations associated with lakes and reservoirs. In general if a assessment unit exhibits a consistent status of 'partial supporting or not supporting', it should be entered on the 303(d) list. Lakes that exhibit a mixture of partially and fully supporting conditions over a period of time are not listed. For such borderline lakes, two consecutive assessment cycles demonstrating impairment, as well as a long-term downward trend in TSI, winter dissolved oxygen, or increased densities of blue green algae are required before we list the assessment unit as impaired.

Where other data was obtained (dissolved metal data or biological data) determinations of exceedence against reported water quality standards were made, but in only one case (Lake
Powell) have portions of the assessment unit, on occasion, been identified as partially supporting because of heavy metal contamination.

Table 11-5 presents summary data for each of the 132 lakes and reservoirs. Table 11-6 lists the total in each support status. Of the 467,787 surface acres evaluated 67.7 % were found to be supporting their designated uses, 31.8% partially supporting and 0.5% not supporting. Tabulation by individual lakes indicates that for the 132 lakes assessed 56% were fully supporting, 37% partially supporting and 7% not supporting. It should be noted that the biological data used to modify the initial conventional assessment (winter dissolved oxygen and fish kills) may have been collected prior to the data summary period (2002-2003) for this report. Table 11-7 summarizes the use support by classification. Tables 11-8 and 11-9 summarize the various cause and source categories for those lakes found not fully supporting their designated uses. The Division of Water Quality will continue to conduct reconnaissance level investigations on several lakes and reservoirs in the future with other agencies including but not limited to the following: Strawberry Reservoir, Lake Powell, and Flaming Gorge Reservoir. However, all of these studies will depend on the available time and resources.

Acid Effects on Lakes

Since this report came out, the Acid Deposition Technical Advisory Committee has been relatively inactive. In 1986, the Acid Deposition Technical Advisory Committee recommended that reconnaissance surveys be conducted in areas considered potentially sensitive to acid deposition. In response to this recommendation, a cooperative agreement involving private individuals, private industries, and several State and Federal agencies was developed and approved. This agreement organized efforts to sample selected streams and lakes in ten different mountain ranges in Utah during the summer of 1987. The water chemistry data were then used to determine the Acid Neutralizing Capacity (ANC) of the sampled lakes and streams and their sensitivity to acid deposition. Generally, it was concluded that several of the high lakes in the State, were susceptible to acid precipitation due to their low buffering capacities but at the moment, none were actually affected by acid deposition.

Toxic Effects on Lakes

All 132 lakes/reservoirs were assessed for toxic metals during this reporting cycle (Table 11-10). Because of the association of metal solubility with decreasing reduction/oxidation potential at the sediment-water interface, samples were collected approximately 0.5 m above the bottom

Table 11-5. Summary of Individual Lake Beneficial Use Support.																
LAKE DESCRIPTION	ACRES	OVERALL SUPPORT STATUS						OVERALL SUPPORT (Acreage)			On 303d list	Conventional Parameters DO, Temp, pH	Total P > 0.025 mg/L Indicator	TSI >50	Winter DO/ Fish Kills	BG Algae
		1994	1996	1998	2000	2002	2004	FS	PS	NS						
Anderson Meadow Reservoir	8	PS	FS	FS	FS	FS	FS	8				FS				Y
Ashley Twin Lakes	27	FS	FS	ND	FS	PS	FS		27			FS				N
Baker Dam Reservoir	63			NS	PS	PS	PS		63		X	PS- T,DO	Y	Y		Y
Barney Reservoir	19	PS	PS	PS	FS	PS	FS		19			FS	Y			Y
Bear Lake	69,760	FS	FS	FS	FS	FS	FS	69760				FS				N
Beaver Meadow Reservoir	5	FS	FS	FS	FS	FS	FS	5				FS				N
Big East Lake	23	NS	NS	PS	PS	PS	PS		23		X	PS- DO		Y		Y
Big Sand Wash Reservoir	390	FS	FS	PS	FS	FS	FS	390				FS				Y
Birch Creek Reservoir #2	63	PS	PS	PS	FS	FS	FS	63				FS		Y		N
Blanding City Reservoir #4	32	PS	NS	PS	FS	FS	FS	32				FS				N
Bridger Lake	21	PS	PS	PS	PS	PS	PS		21		X	PS- DO			DO	Y
Brough Reservoir	150		NS	NS	PS	PS	PS		150		X	PS- T,DO				Y
Browne Reservoir	54	PS	PS	PS	PS	PS	PS		54		X	PS- DO	Y	Y	DO	Y
Butterfly Lake	5	PS	PS	FS	FS	FS	FS	5				FS				Y
Calder Reservoir	99		PS	NS	PS	PS	PS		99		X	PS- DO	Y	Y	DO/FK	Y
Causey Reservoir	142	PS	PS	PS	FS	FS	FS	142				FS				N
China Lake	47	PS	NS	NS	NS	NS	NS			47	X	NS- T,DO			DO/FK	Y
Cleveland Reservoir	185	PS	PS	PS	FS	FS	FS	185				FS				Y
Cook Lake	9	PS	PS	PS	FS	PS	PS		9			PS-pH	Y	Y		ND
Currant Creek Reservoir	305	PS	FS	FS	FS	FS	FS	305				FS				Y
Cutler Reservoir						PS	PS		7184		X	PS	Y	Y		Y
Dark Canyon Lake	6		PS	PS	FS	FS	FS	6				FS				ND
Deer Creek Reservoir	2,965	PS	PS	PS	PS	PS	PS		2965		X	PS- DO,T	Y			Y
DMAD Reservoir	1,199	PS	PS	FS	FS	FS	FS	1199				FS		Y		Y
Donkey Reservoir	40	PS	PS	FS	FS	FS	FS	40				FS				N
Duck Fork Reservoir	47	FS	PS	PS	FS	FS	FS	47				FS	Y	Y	DO	N
East Canyon Reservoir	173	NS	NS	NS	NS	NS	NS			173	TMDL Completed	NS- DO	Y	Y	FK	Y
East Park Reservoir	684	FS	FS	FS	PS	FS	FS	684				FS			DO	Y
Echo Reservoir	1,394	PS	PS	PS	PS	PS	PS		1394		X	PS- DO/T	Y	Y		Y
Electric Lake	425	PS	PS	PS	FS	FS	FS	425				FS				Y
Fairview Reservoir #2	105	PS	PS	PS	FS	FS	FS	105				FS				N
Ferron Reservoir	55	PS	PS	PS	FS	FS	FS	55				FS				N
Fish Lake	2,500	PS	PS	PS	FS	FS	FS	2500				FS				N
Flaming Gorge Reservoir	42,020	FS	FS	FS	FS	FS	FS	42020				FS				Y
Forsyth Reservoir	158	PS	PS	PS	PS	PS	PS		158		X	PS- DO		Y		N
Grantsville Reservoir	88		FS	FS	FS	FS	FS	88				FS				Y
Gunlock Reservoir	266	PS	PS	PS	PS	PS	PS		266		X	PS- DO	Y			Y
Gunnison Bend Reservoir	706	FS	FS	FS	FS	FS	FS	706				FS		Y		N
Gunnison Reservoir	1,287	PS	PS	PS	FS	FS	FS	1287				FS	Y			N
Hoop Lake	162	PS	PS	FS	FS	FS	FS	162				FS				Y
Hoover Lake	17	PS	FS	FS	FS	FS	FS	17				FS				Y
Huntington Lake North	225	PS	FS	PS	FS	FS	FS	225				FS				N
Huntington Reservoir	115	PS	PS	PS	FS	FS	FS	115				FS				N
Hyrum Reservoir	438	PS	PS	NS	PS	PS	PS		438		X	PS- T				N
Joes Valley Reservoir	1,183	PS	PS	FS	FS	FS	FS	1183				FS				N
Johnson Valley Reservoir	285		PS	PS	PS	PS	PS		285		X	PS- DO	Y	Y	DO	Y
Jordanelle Reservoir	3,068	NS	PS	FS	FS	FS	FS	3068				FS				N
Kens Lake	86	PS	PS	NS	PS	PS	PS		86		X	PS, T				N
Kents Lake	26		NS	NS	PS	PS	PS		26		TMDL Completed	PS- T,DO	Y	Y		N
Kolob Reservoir	335	PS	PS	PS	FS	PS	PS		335			PS- DO	Y			

Table 11-5. Summary of Individual Lake Beneficial Use Support.																
LAKE DESCRIPTION	ACRES	OVERALL SUPPORT STATUS						OVERALL SUPPORT (Acreage)			On 303d list	Conventional Parameters DO, Temp, pH	Total P > 0.025 mg/L Indicator	TSI >50	Winter DO/ Fish Kills	BG Algae
		1994	1996	1998	2000	2002	2004	FS	PS	NS						
Koosharem Reservoir	310	PS	PS	PS	PS	PS	PS		310		X	FS	Y	Y		Y
Labaron Reservoir	24	PS	NS	NS	NS	NS	NS			24	TMDL Completed	PS- DO			DO	Y
Lake Mary	23	PS	PS	PS	FS	FS	FS	23				FS				N
Lake Powell	162,760	FS	FS	FS	FS	FS	FS	162,760				FS				ND
Little Creek Reservoir	65	FS	PS	PS	FS	FS	FS	65				FS				Y
Little Dell Reservoir	249	FS	PS	PS	FS	FS	FS	249				FS				Y
Lloyds Reservoir	104	PS	PS	PS	FS	FS	PS		104			FS				Y
Long Park Reservoir	60	PS	FS	FS	FS	FS	FS	60				FS				Y
Lost Creek Reservoir	52	PS	PS	FS	FS	FS	FS	52				FS				N
Lower Bowns Reservoir	90	PS	PS	PS	FS	FS	PS		90			PS-pH	Y			Y
Lower Box Reservoir	50	PS	NS	NS	PS	PS	PS		50		X	PS- DO	Y	Y		Y
Lower Gooseberry Reservoir	57	PS	NS	PS	PS	PS	PS		57		X	PS- pH	Y		DO	Y
Lyman Lake	27	PS	NS	NS	PS	PS	PS		27		X	PS- DO			DO	Y
Manning Meadow Reservoir	59	PS	NS	NS	PS	PS	PS		59		X	PS- DO	Y	Y	DO/FK	N
Mantua Reservoir	554	NS	NS	NS	PS	PS	PS		554		X	PS- T,pH	Y			Y
Marsh Lake	38	NS	NS	NS	PS	PS	PS		38		X	PS- DO			DO/FK	Y
Marshall Reservoir	18	PS	PS	PS	FS	PS	FS	18				PS- DO			DO/FK	Y
Matt Warner Reservoir	433		NS	NS	NS	NS	NS			433	X	PS- DO,T	Y	Y	DO/FK	N
Meeks Cabin Reservoir	477	PS	FS	FS	FS	FS	FS	477				FS				N
Mill Hollow Reservoir	15	PS	PS	PS	PS	PS	PS		15		X	PS- pH	Y	Y		Y
Mill Meadow Reservoir	156		PS	PS	PS	PS	PS		156		X	PS- DO	Y	Y		Y
Miller Flat Reservoir	65	PS	FS	FS	FS	FS	FS	65				FS				Y
Millsite Reservoir	435	PS	FS	PS	FS	FS	FS	435				FS				N
Minersville Reservoir	990	PS	PS	NS	PS	PS	PS		990		TMDL Completed	PS- T		Y		N
Mirror Lake	50	PS	PS	PS	PS	PS	FS	50			X	PS-DO	Y		DO	Y
Mona Reservoir	1,110	PS	FS	FS	FS	FS	FS	1,110				FS				N
Monticello Lake	3	PS	FS	FS	FS	FS	FS	3				FS				N
Moon Lake	768	PS	FS	FS	FS	FS	FS	768				FS				N
Navajo Lake	714	NS	NS	PS	PS	PS	PS		714		X	PS-DO,pH			DO/FK	NA
Newcastle Reservoir	163	PS	NS	NS	NS	NS	PS		163		X	PS-DO,T		Y		N
Newton Reservoir	350	PS	NS	NS	NS	NS	PS		350		X	PS- DO	Y	Y		Y
Nine Mile Reservoir	197	PS	NS	NS	NS	NS	NS			197	X	NS- T, pH PS-DO	Y	Y		N
Oak Park Reservoir	382	PS	PS	FS	FS	FS	FS	382				FS				N
Otter Creek Reservoir	2,520	PS	PS	PS	NS	PS	PS		2,520		X	PS- T	Y	Y		Y
Palisades Lake	66	PS	PS	PS	PS	PS	PS		66		X	PS- T	Y			N
Panguitch Lake	1,248	PS	PS	NS	PS	PS	PS		1,248		X	PS- DO	Y	Y		Y
Paradise Park Reservoir	143	PS	FS	FS	FS	FS	FS	143				FS				N
Pelican Lake	1,680	NS	NS	PS	FS	PS	PS		1,680		X	PS- pH	Y			Y
Pine Lake	77	PS	NS	PS	FS	PS	NA		77			NA				N
Pineview Reservoir	2,874	PS	NS	PS	PS	PS	PS		2,874		X	PS-T, DO	Y			Y
Piute Reservoir	2,508	PS	FS	PS	PS	PS	PS		2,508		X	PS- T	Y	Y		Y
Porcupine Reservoir	190	PS	PS	PS	PS	PS	PS		190		X	PS- T	Y			N
Posey Lake	20	NS	PS	PS	FS	FS	FS	20				FS	Y			N
Puffer Lake	65	NS	PS	NS	PS	PS	PS		65		TMDL Completed	PS-DO			FK	Y
Quail Creek Reservoir	590	PS	PS	PS	FS	FS	FS	590				FS				N
Recapture Reservoir	265	NS	NS	PS	PS	PS	PS		265		X	PS- DO,T				N
Red Creek Reservoir	142	PS	PS	PS	FS	FS	FS	142				FS				Y
Red Creek Reservoir (Iron Co.)	39	PS	NS	NS	NS	NS	NS			39	X	PS- DO	Y	Y	DO	N
Red Fleet Reservoir	520	PS	PS	FS	PS	PS	PS		520		X	PS- T,DO				Y
Redmond Lake	160	PS	FS	PS	FS	FS	FS	160				FS		Y		N

Table 11-5. Summary of Individual Lake Beneficial Use Support.

LAKE DESCRIPTION	ACRES	OVERALL SUPPORT STATUS						OVERALL SUPPORT (Acreage)			On 303d list	Conventional Parameters DO, Temp, pH	Total P > 0.025 mg/L Indicator	TSI >50	Winter DO/ Fish Kills	BG Algae
		1994	1996	1998	2000	2002	2004	FS	PS	NS						
Rex's Reservoir	46	PS	PS	PS	FS	FS	FS	46				FS				N
Rockport Reservoir	1,189	PS	PS	FS	FS	FS	FS	1,189				FS				Y
Rush Lake	80	PS	NS	PS	FS	FS	FS	80				FS	Y	Y		N
Salem Pond	11	PS	PS	FS	FS	FS	FS	11				FS				N
Scofield Reservoir	2,815	PS	PS	PS	PS	PS	PS		2,815		TMDL Completed	PS-DO	Y		DO/FK	Y
Scout Lake	18	PS	FS	FS	FS	FS	FS	18				FS				N
Settlement Canyon Res	315	PS	PS	FS	FS	FS	FS	315				FS				N
Sevier Bridge Reservoir	10,905	PS	PS	FS	FS	FS	FS	10,905				FS				Y
Sheep Creek Reservoir	86	PS	PS	PS	FS	FS	FS	86				FS				Y
Silver Lake Flat Reservoir	54				FS	FS	FS	54				FS				N
Smith and Morehouse Reservoir	197	PS	FS	PS	FS	FS	FS	197				FS				N
Spirit Lake	41	PS	FS	PS	PS	PS	FS	41				FS				N
Stansbury Lake	120	FS	FS	PS	FS	FS	FS	120				FS				N
Starvation Reservoir	2,760	PS	FS	PS	FS	PS	PS		2,760		X	PS- DO	Y	Y		Y
Stateline Reservoir	288	PS	FS	FS	FS	FS	FS	288				FS				N
Steinaker Reservoir	829	PS	PS	PS	PS	PS	PS		829		X	PS-T, DO				Y
Strawberry Reservoir	17,160	PS	PS	PS	PS	PS	PS		17,160		X	PS- DO	Y		DO	Y
Three Creeks Reservoir	57	PS	PS	PS	FS	FS	FS	57				FS				Y
Tibble Fork Reservoir	13	FS	FS	FS	FS	FS	FS	13				FS				N
Tony Grove Reservoir	25	NS	NS	NS	NS	NS	NS			25	X	NS- DO	Y		FK	Y
Trial Lake	98	PS	PS	FS	FS	FS	FS	98				FS				N
Tropic Reservoir	180	PS	PS	PS	FS	FS	FS	180				FS				N
Upper Enterprise Reservoir	200	NS	NS	NS	FS	NS	NS			200		NS DO, T	Y			Y
Upper Stillwater Reservoir	252	PS	FS	FS	FS	FS	FS	252				FS				Y
Utah Lake	96,900	PS	PS	PS	PS	PS	PS		96,900		X	FS	Y	Y		Y
Wall Lake	61	FS	PS	FS	FS	FS	FS	61				FS				N
Washington Lake	94	PS	FS	FS	FS	FS	FS	94				FS				N
Whitney Reservoir	188	PS	FS	PS	FS	FS	FS	188				FS				Y
Wide Hollow Reservoir	145	PS	NS	NS	FS	NS	NS			145		NS- T, pH	Y			N
Willard Bay Reservoir	10,000	FS	PS	PS	FS	FS	FS	10,000				FS	Y			Y
Woodruff Creek Reservoir	90	PS	PS	PS	FS	FS	FS	90				FS				Y
Yankee Meadow Reservoir	5	PS	PS	NS	PS	PS	PS		5		X	PS- DO		Y	FK	N

Table 11-6. Overall Use Support Summary for Lakes and Reservoirs (Acres).

Degree of Use Support	Assessed	Monitored	Assessed	Monitored	Total Assessed	
	Number	Acreage	Number	Acreage	Number	Acres
Fully supported:	0	0	74	316,810	74	316,810
Threatened:	0	0	0	0	0	0
Partially supporting:	0	0	49	148,250	49	148,570
Not supporting:	0	0	9	2,727	9	2,727
Total Size Assessed:	0	0	132	467,787	132	467,787

Table 11-7. Individual Use Support Summary (Acres).						
Use	Supporting	Supporting but Threatened	Partially Supporting	Not Supporting	Not Attainable	Unassessed
Fish Consumption		0	0	0	0	460,642
Aquatic Life Support	316,810	0	148,570	2,727	0	0
Shellfishing	0	0	0	0	0	467,787
Swimming	162,760			0	0	305,027
Secondary Contact	162,760			0	0	305,027
Drinking Water Supply	252,643	0	0	0	0	236,194
Agriculture	370,887	0	96,900	0	0	0

Table 11-8. Total Size of Lake Assessment Units Not Fully Supporting Uses Affected By Various Cause Categories (Acres).

Cause Categories Threatened	Major Impact	Moderate Impact	Minor Impact
Cause Unknown			
Unknown Toxicity			
Pesticides			
Priority Organics	---	---	---
Nonpriority Organics	---	---	---
Metals	0	0	0
Ammonia	0	0	0
Chlorine	---	---	---
Other Inorganics	0	0	0
Nutrients	140,431	3,928	0
pH	0	5704	0
Siltation	113,540	22,053	0
Organic Enrichment / DO	107,849	133,247	0
Salinity / TDS / Chlorine	96,900	0	0
Thermal Modification	0	0	0
Flow Alteration	---	---	—
Habitat Alteration	*	*	
Pathogen Indicators	0	1,000	0
Radiation	---	---	—

Table 11-8. Total Size of Lake Assessment Units Not Fully Supporting Uses Affected By Various Cause Categories (Acres).

Cause Categories Threatened	Major Impact	Moderate Impact	Minor Impact
Oil and Grease	0	0	0
Suspended Solids	97,185	0	0
Noxious Aquatic Plants	102,922	754	—
Total Toxics	---	---	—
Turbidity	---	---	—
Exotic Species	---	---	—
Filling and Draining	11,465	5,915	---

Table 11-9. Total Size of Lake Assessment Units Not Fully Supporting Uses Affected By Various Source Categories (acres).

Source Categories Threatened	Major Impact	Moderate impact	Minor Impact
Industrial Point Sources	97,892	0	0
Municipal Point Sources	106,205	2,965	0
Agriculture	16,796	120,613	0
Silviculture	0	990	0
Construction	4,295	103,225	0
Runoff / Storm Sewers	101,437	0	0
Resource Extraction	0	173	0
Land Disposal	0	0	0
Hydromodification	110,828	21,472	0
Habitat Modification			
Marinas	0	0	0
Atmospheric Deposition	0	0	0
Contaminated Sediments	0	0	0
Unknown Source	---	---	---
Natural Source	---	---	---

of the lake or reservoir to detect the maximum concentration within the lake. Resulting data were compared to numeric standards for the protection of aquatic life.

This monitoring would also evaluate the potential for uptake of toxic metals into the food chain initiated by benthic organisms. Hence, this type of sampling is used a s screening tool and additional water column sampling would be performed to identify the frequency of exceedence and subsequent impairment. Although some tributary stream segments have been identified as impaired with various toxic

metals, no lake samples have contained metal concentrations above the chronic water quality standards.

Table 11-10. Summary of Total Lake Assessment unit Size Affected by Toxics.		
Assessment unit Type / Unit	**Size Monitored For Toxics**	**Size With Elevated Levels of Toxics**
Lake (Acres)	467,787	0

Trends in Lake Water Quality

Table 11-11 summarizes the trends in water quality of those lakes assessed under the Lake Water Quality Assessment program. The 1981 data represents eighty-nine lakes and reservoirs where comparable data existed from the original inventory and classification study completed in 1982. These data represent a comparison of lakes and reservoirs monitored during the last seven cycles of the study (1989-1990, 1991-1992, 1993-1994, 1995-1996, 1997-1999, 2000-2001 and 2002-2003).Carlson TSI values for each assessment unit were compared to values obtained during previous periods of study for comparative lakes or reservoirs (Table 11-12). Unknown values were due to data not available at the time of assessment or the reservoir was dry. The initial data period contains the information collected for the Clean Lakes Inventory for Utah in 1982. It should be noted that the1982 data set in many cases is limited to total phosphorus and Secchi depth data or only one of the two. Chlorophyll *a* data is very limited during that study period. Trends for water quality were then determined from these comparisons. A TSI value comparison yielding a variation of ≤ 5 indicated a stable trend. A TSI value comparison yielding an increase of more than 5 is reported as a degrading condition. A TSI value comparison yielding a decrease of more than 5 is reported as an improving condition.

Table 11-11. Trends in Water Quality of Lakes and Reservoirs.														
	Number of Lakes							**Number of Acres**						
Trend	**1989 1990**	**1991 1992**	**1993 1994**	**1995 1996**	**1997-1999**	**2000-2001**	**2002-2003**	**1989 1990**	**1991 1992**	**1993 1994**	**1995 1996**	**1997-1999**	**2000-2001**	**2002-2003**
Improve	27 30%	24 24%	40 31%	32 25%	16 12%	8 6%	35 27%	9,087 5%	177,785 45%	55,302 13%	10,254 2%	4,525 1%	42,583 9%	89,718 19%
Stable	44 50%	49 52%	70 54%	88 68%	72 55%	78 60%	44 33%	149,360 91%	204,223 51%	356,097 85%	449,631 98%	436,533 95%	346,863 75%	299,940 64%%
Degrade	18 20%	23 24%	15 12%	8 6%	39 30%	5 4%	37 28%	6,609 4%	15,251 4%	6,759 2%	670 ---	19,455 4%	71,208 15%	75.880 16%
Unknown			5 4%	1 1%	4 3%	12 9%	16 12%			4,2430 1%	6 ---	129 ---	849 2%	2,288 0.5%
Assessed for Trends	89	95	130	128	131	131	132	165,056	397,259	460,588	460,561	460,642	460,642	467,787

Table 11-12. Utah Reservoir / Lake Monitoring List and TSI Evaluation.								
Lake / Reservoir	TSI Index 1989-90	1991-92	1993-94	1995-96	1997-99	1999-01	2002-03	Surface Area
Anderson Meadow Reservoir	52.69	50.18	43.87	46.99	44.28	35.50	46.85	8
Ashley Twin Lakes			41.52		39.16	35.01	NA	27
Baker Dam Reservoir	62.33	50.42	46.25	50.90	50.67	41.71	50.29	63
Barney Lake		61.46	60.70	62.56	50.23	50.17	46.88	19
Bear Lake	37.57	32.36	32.73	29.62	34.45	45.05	29.53	69,760
Beaver Meadow Reservoir			45.98	44.28	49.44	47.44	36.31	5
Big East Lake	52.42	48.32	41.48	40.58	42.11	47.72	NA	23
Big Sand Wash Reservoir	46.11	45.28	38.97	39.02	41.48	48.43	32.71	390
Birch Creek Reservoir #2	52.35	47.4	49.07	36.59	45.12	44.32	53.01	63
Blanding Reservoir #4	48.4		46.74	35.83	39.80	29.85	37.16	32
Bridger Lake		46.72	51.82	46.94	46.12	44.82	43.07	21
Brough Reservoir			44.74	41.64	41.23	NA	48.64	150
Browne Lake	40.27	45.31	47.02	50.2	50.95	NA	51.08	54
Butterfly Lake	40.71	35.99	77.79	37.14	44.19	33.50	38.05	5
Calder Reservoir		54.14	59.49	59.54	58.85	57.78	54.51	99
Causey Reservoir	43.23	38.79	43.41	38.15	33.64	NA	NA	142
China Lake		45.59	34.87	45.09	48.51	43.83	44.72	47
Cleveland Reservoir	41.66	51.61	42.75	35.57	46.87	46.87	39.35	185
Cook Lake	44.01	48.18	44.42	46.38	ND	49.36	NA	9
Cutler Reservoir							54.52	7,184
Currant Creek Reservoir	44.15	42.03	38.26	40.72	44.03	45.18	31.95	305
Dark Canyon Lake			40.2		ND	NA	NA	6
Deer Creek Reservoir	47.79	47.04	43.14	42.58	43.64	42.24	38.76	2,965
DMAD Reservoir	65.29	57.34	60.55	56.99	56.34	52.55	50.36	1,199
Donkey Reservoir	48.64	44.57	44.16	41.82	42.29	40.19	34.98	40
Duck Fork Reservoir		39.75	28.05	37.51	42.89	39.96	NA	47
East Canyon Reservoir	48.7	52.82	49.59	48.42	43.72	46.48	46.24	173
East Park Reservoir		48.35	41.41	45.98	47.18	44.48	37.04	684
Echo Reservoir		39.07	41.8	45.16	39.19	50.67	51.14	1,394
Electric Lake Reservoir	39.43	49.74	43.92	40.23	44.13	48.19	40.34	425
Fairview Reservoir	52.72	38.92	39.25	33.76	38.43	33.44	42.67	105
Ferron Reservoir	43.37	39.86	35.47	31.82	39.92	40.41	45.2	55
Fish Lake	41.26	40.26	33.59	34.39	34.49	35.77	35.92	2500
Flaming Gorge Reservoir	42.75		36.47	37.32	39.61	31.93	35.82	42,020
Forsyth Reservoir	61.88	52.76	56.87	49	55.33	50.75	46.4	158
Grantsville Reservoir	43.63	49.09	46.47	41.11	49.56	45.28	40.91	88
Gunlock Reservoir	42.47	42.31	47.41	42.61	40.15	38.81	42.65	266
Gunnison Bend Reservoir	63.04	62.38	55.04	54.03	58.08	53.56	57.2	706
Gunnison Reservoir	61.41	63.96	56.81	55.24	47.71	54.27	48.5	1,287
Hoop Lake	57.44	49.8	59.27	49.34	47.48	NA	39.12	162

Table 11-12. Utah Reservoir / Lake Monitoring List and TSI Evaluation.								
	TSI Index							Surface
Lake / Reservoir	1989-90	1991-92	1993-94	1995-96	1997-99	1999-01	2002-03	Area
Hoover Lake	40.22	38.72	36.26	35.72	39.50	41.81	49.2	17
Huntington Lake North	37.39	44.81	37.63	35.34	43.61	46.04	30.92	225
Huntington Reservoir		46.5	43.78	32.64	40.39	36.32	40.99	115
Hyrum Reservoir	45.84	43.07	44.03	43.59	45.96	47.81	45.82	438
Joes Valley Reservoir	30.85	34.55	32.35	37.05	43.72	40.64	34.91	1183
Johnson Reservoir	63.77	68.04	65.18	63.63	58.38	60.42	64.47	285
Jordanelle Reservoir			44.64	43.68	43.12	40.56	42.6	3068
Kens Lake	56.81	44.01	45.01	36.31	38.83	42.51	40.7	86
Kents Lake		69.06	67.12	63.92	58.13	77.95	63.2	26
Kolob Reservoir	41.53	47.82	45.06	43.52	35.30	34.82	31.7	335
Koosharem Reservoir	73.87	55.4	65.86	56.97	64.73	56.53	51.64	310
Labaron Reservoir		51.05	65.47	60.04	46.87	56.23	46.94	24
Lake Mary	42.18	51.43	33.5	41.74	32.32	39.16	38.32	23
Lake Powell	42.47	36.58	35.13	35.07	E 35.10	NA	39.5	162,760
Little Creek Reservoir	45.14	37.51	40.41	36.39	42.04	30.06	NA	65
Little Dell Reservoir			36.84	33.35	42.00	NA	NA	249
Lloyds Reservoir	49.11	42.58	47.02	35.64	38.24	35.99	32.62	104
Long Park Reservoir		44.84	45.49	41.99	DRY	DRY	34.43	60
Lost Creek Reservoir	39.53	46.18	35.17	39.26	36.97	29.56	36.93	52
Lower Bowns Reservoir	50.05	41.31	47.18	48.35	40.72	40.21	44.01	90
Lower Box Reservoir		77.07	74.78	73.03	64.57	66.29	64.12	50
Lower Gooseberry Reservoir	45.69	44.26	40.82	40.31	46.12	45.08	37.51	57
Lyman Lake		37.74	31.21	34.92	32.96	31.82	47.88	27
Manning Meadow Reservoir		54.37	50.17	49.58	52.78	NA	51.83	59
Mantua Reservoir	54.93	58.05	59.56	55.13	48.21	45.21	38.71	554
Marsh Lake	28.14	34.36	30.42	30.9	37.46	40.51	31.27	38
Marshall Lake	36.27	29.51	31.77	31.27	38.83	27.56	31.08	18
Matt Warner Reservoir		53.35	61.26	55.76	57.28	52.63	54.44	433
Meeks Cabin Reservoir	47.13	42.42	40.19	39.89	44.13	45.93	32.03	477
Mill Hollow Reservoir	47.24	47.79	47.42	46.63	56.95	55.27	45.41	15
Mill Meadow Reservoir	67.06	69.15	55.75	59.74	50.48	55.66	46.26	156
Millers Flat Reservoir		40.84	42.35	32.74	37.92	32.46	NA	65
Millsite Reservoir	35.07	41.46	35.19	37.42	45.85	55.81	30.97	435
Minersville Reservoir	59.98	56.23	66.48	56.29	56.33	53.20	50.78	990
Mirror Lake	38.23	39.95	31.69	37.91	42.78	40.77	38.3	50
Mona Reservoir		66.1	57.58	44.4	49.08	39.77	52.95	1,110
Moon Lake	46.79	38.08	37.42	41.15	43.93	42.53	32.8	768
Monticello Lake		46.71	45.46	45.08	36.12	38.92	NA	3
Navajo Lake	34.03	35.41	39.71	41.15	39.93	42.58	36.08	714
New Castle Reservoir	48.12	53.92	41.78	47.5	54.15	47.22	58.62	163

Table 11-12. Utah Reservoir / Lake Monitoring List and TSI Evaluation.								
	TSI Index							Surface
Lake / Reservoir	1989-90	1991-92	1993-94	1995-96	1997-99	1999-01	2002-03	Area
Newton Reservoir	53.81	60.67	60.82	47.96	51.68	42.50	58.94	350
Nine Mile Reservoir	45.2	59.42	53.1	44.72	52.49	M	53.13	197
Oak Park Reservoir	48.61	47.89	42.44	44.79	45.46	46.26	42.08	382
Otter Creek Reservoir	57.44	43.54	55.23	59.19	55.59	55.15	61.12	2520
Palisade Reservoir	45.73	58.86	39.61	38.17	40.42	40.72	48.41	66
Panguitch Lake	54.25	50.56	52.67	49.56	50.81	61.63	45.91	1248
Paradise Park Lake		40.49	36.97	38.66	44.06	48.12	37.95	143
Pelican Lake	44.5	38.71	47.06	41.24	38.17	34.72	46.42	1,680
Pine Lake	44.14	34.48	19.66	30.64	42.04	53.1	39.42	77
Pineview Reservoir		58.31	39.97	42.5	46.58	41.30	52.04	2,874
Piute Reservoir	57.18	54.45	45.54	47.99	55.31	56.48	51.47	2,508
Porcupine Reservoir	38.05	40.09	38.44	37.45	46.23	42.87	40.29	190
Posey Lake	46.29	45.82	38.82	32.59	42.87	42.87	32.81	20
Puffer Lake	49.1	36.16	38.44	38.8	49.62	49.62	39.77	65
Quail Creek Reservoir	38.38	40.35	26.15	29.56	34.83	37.91	29.8	590
Recapture Creek Reservoir	45.61	49.16	44.5	35.56	40.64	39.75	34.43	265
Red Creek Reservoir (Iron)		53.14	57.3	40.22	52.81	47.57	51.2	39
Red Creek Reservoir		57.73	54.12	53.55	36.72	41.99	44.78	142
Red Fleet Reservoir	42.35	40.47	41.02	45.98	40.24	NA	37.89	520
Redmond Reservoir	68.68	75.03	70.71	67.34	63.44	69.88	64.63	160
Rexs Reservoir		45.8	50.21	48.29	43.17	49.49	NA	46
Rockport Reservoir	43.88	42.98	41.78	45.48	40.76	30.85	47.93	1,189
Rush Lake	60.83	78.55	72.37	60.64	64.29	61.82	64.95	80
Salem Pond	45.89	50	39.81	45.89	44.76	M	42.1	11
Scofield Reservoir	62.69	55.77	53.22	41.69	45.08	45.95	44.06	2,815
Scout Lake		58.05	38.43	31.75	38.70	34.30	44.75	18
Settlement Canyon Reservoir	39.65	47.94	40.84	42.54	47.43	36.25	43.52	315
Sevier Bridge Reservoir	54.4	63.95	52.19	48.24	48.66	44.35	56.38	10,905
Sheep Creek Reservoir		45.87	46.1	40.85	37.79	31.37	43.91	86
Silver Lake Flat Reservoir					41.94	NA	NA	54
Smith and Morehouse Reservoir	44.34	45.96	34.39	37.31	38.13	40.30	43.03	197
Spirit Lake	44.43	45.18	50.21	40.81	48.05	46.04	45.57	41
Stansbury Lake	55.77	57.22	58.31	49.55	49.27	49.41	60.07	120
Starvation Reservoir	54.86	41.45	36.66	40.14	39.16	39.10	42.51	2,760
Stateline Reservoir	46.29	39.66	41.41	40.74	41.79	45.21	33.18	288
Steinaker Reservoir	35.01	40.33	33.72	34.82	38.24	37.37	36.7	829
Strawberry Reservoir	55.6	53.47	48.43	45.68	45.87	48.18	43.99	17,160
Three Creeks Reservoir		50.83	57.32	54.09	49.92	42.37	63.07	57
Tibble Fork Reservoir	28.48	42.92	44.39	41.77	38.32	39.85	36.13	13
Tony Grove Lake	40.76	33.52	35.26	33.89	41.93	40.47	35.96	25

Table 11-12. Utah Reservoir / Lake Monitoring List and TSI Evaluation.								
	TSI Index							Surface
Lake / Reservoir	1989-90	1991-92	1993-94	1995-96	1997-99	1999-01	2002-03	Area
Trial Lake	42.92	37.95	39.51	35.22	43.21	48.27	46.03	98
Tropic Reservoir	47.71	36.75	39.12	29.08	38.33	35.67	30.16	180
Upper Enterprise Reservoir	73.65	58.37	54.18	54.41	44.15	44.15	53.13	200
Upper Stillwater Reservoir	39.21	38.93	25.21	35.16	38.17	39.76	32.62	252
Utah Lake	69.35	67.67	67.59	64.00	67.90	70.08	69.19	96,900
Wall Lake		31.83	39.18	28.98	37.94	26.55	40.21	61
Washington Lake		41.59	40.73	39.55	39.78	31.12	39.44	94
Whitney Reservoir	40.11	56.88	37.21	40.63	37.72	NA	NA	188
Wide Hollow Reservoir	46.33	43.91	47.59	40.58	40.62	DRY	DRY	145
Willard Reservoir		62.84	47.68	52.66	47.43	45.92	55.86	10,000
Woodruff Creek Reservoir	40.92	48.6	43.14	42.37	45.11	NA	31.88	90
Yankee Meadows Reservoir		50.19	54.09	52.84	49.40	56.48	53.55	5

Assessment Categories

The use of assessment categories that more accurately reflect the need and progress of TMDL development has been initiated for the 2004 303(d) list and the305(b) assessment report. Tables 11-13 through 11-17 list these categories for Utah's lakes and reservoirs. As stated above, several of Utah's lakes and reservoirs are borderline between fully and partially supporting their beneficial uses. As such, we made the decision to require the results of two consecutive assessment cycles as either fully or partially supporting in order to list or delist a lake/reservoir as supporting beneficial uses. Sub-category 5-D (Table 11.17) was added to track such lakes or reservoirs in this process.

Figure 11-1 is a map of the beneficial use assessment categories excluding Category 3, lakes not assesssed. Table 11-16 list the lake and reservoir acreage that was not assess for this reporting cycle.

	Table 11-13. Category 1 - All Designated Uses Are Met.			
			Beneficial	
Watershed	Assessment		Use	
Management	Unit	Lake	Classes	Lake
Unit	ID	Name	Assessed	Acres
Colorado River Southeast	UT-L-14070006-001	Lake Powell	1C,2A,2B,3B,4	162,700

Table 11-14. Category 4A - All TMDLs Completed and Approved for Assessment Unit.								
Watershed	Assessment	Assessment	Beneficial	Pollutant	Beneficial		Date	
Management	Unit	Unit	Use	TMDL	Use	Lake	TMDL	
Unit	ID	Name	Class	Completed	Support	Acreage	Approved	Comments
Bear River	UT-L-16010203-005	Hyrum Reservoir	3A	TP,DO	PS	438	9/9/02	
Cedar / Beaver	UT-L-16030007-011	Minersville Reservoir	3A	TP,DO	PS	990	9/1/00	

Table 11-14. Category 4A - All TMDLs Completed and Approved for Assessment Unit.								
Watershed Management Unit	**Assessment Unit ID**	**Assessment Unit Name**	**Beneficial Use Class**	**Pollutant TMDL Completed**	**Beneficial Use Support**	**Lake Acreage**	**Date TMDL Approved**	**Comments**
Cedar / Beaver	UT-L-16030007-022	Kents Lake	3A	TP,DO	PS	26	9/1/2000	
Cedar / Beaver	UT-L-16030007-027	LaBaron Lake	3A	DO	NS	24	9/1/00	
Cedar / Beaver	UT-L-16030007-028	Puffer Lake	3A	DO	PS	65	9/1/00	
Colorado River Southeast	UT-L-14030005-004	Kens Lake	3A	Temperature*	PS	86		Site Specific Temperature applied
Colorado River West	UT-L-14060007-005	Scofield Reservoir	3A	TP,DO	PS	2,815	9/1/00	
Colorado River West	UT-L-14070003-010	Johnson Valley Reservoir	3A	DO	PS	285	9/27/02	
Colorado River West	UT-L-14070003-015	Mill Meadow Reservoir	3A	TP	PS	156	9/27/02	
Colorado River West	UT-L-14070003-019	Forsyth Reservoir	3A	TP,DO	PS	158	9/27/02	
Jordan River / Utah Lake	UT-L-16020203-001	Deer Creek Reservoir	3A	DO,TEMP	PS	2,965	9/9/02	Delisted for Temperature 5/2/03
Uinta	UT-L-14040106-019	Browne Lake	3A	DO	PS	54	2/19/03	
Weber River	UT-L-16020102-020	East Canyon	3A	TP,DO	NS	173	9/27/02	

Table 11-15. Category 5A - Lakes Needing Total Maximum Daily Load Analysis.								
Watershed Management Unit	Assessment Unit ID	Assessment Unit Description	Beneficial Use Class	Lake Acreage	Beneficial Use Support	Pollutant	Priority	Targeted For TMDL
Bear River	UT-L-16010202-002	Cutler Reservoir	3B	7,184	PS	TP,DO		4/1/06
Bear River	UT-L-16010202-013	Newton Reservoir	3A	350	NS	TP,DO	High	4/1/04
Bear River	UT-L-16010203-009	Porcupine Reservoir	3A	190	PS	Temp*		4/1/08
Bear River	UT-L-16010204-033	Mantua Reservoir	0	554	PS	Temp*		
Bear River	UT-L-16010203-012	Tony Grove Lake	3A	25	PS	TP,DO,pH		4/1/06
Cedar/Beaver	UT-L-16030006-019	Red Creek Reservoir (Iron Co)	3A	39	NS	DO		4/1/08
Colorado River Southeast	UT-L-14080201-007	Recapture Reservoir	3A	17	PS	DO		4/1/08
Colorado River West	UT-L-14060007-004	Lower Gooseberry Reservoir	3A	57	PS	DO,pH		4/8/08
Jordan River / Utah Lake	UT-L-16020203-004	Mill Hollow Reservoir	3A	15	PS	TP,pH		4/1/08
Jordan River / Utah Lake	UT-L-16020201-004	Utah Lake	3B	96,900	PS	TP,TDS		4/7/06
Jordan River / Utah Lake	UT-L-16020202-002	Big East Lake	3A	23	PS	DO		4/1/08
Lower Colorado River	UT-L-15010008-001	Gunlock Reservoir	3B	266	NS	TP,DO	High	4/1/04
Lower Colorado River	UT-L-15010008-008	Baker Dam Reservoir	3A	63	PS	TP,DO, Temp*	High	4/1/04
Sevier River	UT-L-16030001-001	Navajo Lake	3A	714	PS	DO	High	4/1/04
Sevier River	UT-L-16030001-006	Panguitch Lake	3A	1,248	PS	TP,DO	High	4/1/04
Sevier River	UT-L-16030001-011	Piute Reservoir	3A	2,508	PS	TP,Temp*		4/1/08
Sevier River	UT-L-16030002-004	Otter Creek Reservoir	3A	2,520	PS	TP,Temp*		4/5/06
Sevier River	UT-L-16030002-005	Lower Box Creek	3A	50	PS	TP,DO		4/1/06
Sevier River	UT-L-16030002-011	Koosharem Reservoir	3A	310	PS	TP		4/4/06
Sevier River	UT-L-16030003-006	Manning Meadow Reservoir	3A	59	PS	TP,DO		4/7/10
Sevier River	UT-L-16030004-001	Ninemile Reservoir	3A	197	NS	TP,DO		4/1/08
Sevier River	UT-L-16030004-005	Palisade Lake	3A	66	PS	Temp*		4/1/08
Sevier River	UT-L-16030006-008	Newcastle Reservoir	3A	163	PS	TP,DO		4/1/08
Sevier River	UT-L-16030006-017	Yankee Meadow Reservoir	3A	53	PS	DO		4/1/08
Uinta	UT-L-14040106-033	Matt Warner Reservoir	3A	433	PS	Temp*		4/1/06
Uinta	UT-L-14040106-034	Calder Reservoir	3A	99	NS	TP,DO		4/2/06
Uinta	UT-L-14040107-003	Marsh Lake	3A	38	PS	DO		4/1/06
Uinta	UT-L-14040107-004	Bridger Lake	3A	288	PS	DO		4/7/06
Uinta	UT-L-14040107-006	China Lake	3A	47	PS	DO,Temp*		4/1/06

Table 11-15. Category 5A - Lakes Needing Total Maximum Daily Load Analysis.								
Watershed Management Unit	Assessment Unit ID	Assessment Unit Description	Beneficial Use Class	Lake Acreage	Beneficial Use Support	Pollutant	Priority	Targeted For TMDL
Uinta	UT-L-14060001-001	Pelican Lake	3B	1,680	NS	pH,		4/1/12
Uinta	UT-L-14060001-002	Brough Reservoir	3A	128	PS	DO,Temp*		4/8/08
Uinta	UT-L-14060002-004	Steinaker Reservoir	3A	829	PS	Temp*, DO(added)		4/1/08
Uinta	UT-L-14060002-006	Red Fleet Reservoir	3A	520	PS	DO,Temp*		4/1/08
Uinta	UT-L-14060003-002	Lyman Lake	3A	27	PS	DO		4/7/06
Uinta	UT-L-14060004-001	Strawberry Reservoir	3A	17,160	PS	TP, DO		4/6/06
Weber River	UT-L-16020101-001	Echo Reservoir	3A	1,394	PS	TP,DO		4/3/06
Weber River	UT-L-16020101-001	Pineview	3A	2,874	PS	Temp*		

* Assessment currently being performed to determine whether temperature impairment is natural.

Table 11-16. Category 5B - Lake and Reservoir Approved TMDLs for Some But Not All Pollutants, Assessment Units Meeting Standards.								
Watershed Management Unit	Assessment Unit ID	Assessment Unit Name	Assessment Unit Description	Assessment Use Class	Lake Acress	Beneficial Use Support	Pollutant	Justification for Change
Some But Not All TMDLs Completed								
Bear River	UT-L-16010204-033	Mantua Reservoir	Mantua Reservoir	3A	554	PS	TP,DO,pH	TMDL approved 9/1/2000
Weber River	UT-L-16020102-014	Pineview Reservoir	Pineview Reservoir	3A	2,874	PS	TP,DO	TMDL approved 12/9/02
Assessment Unit Meeting Standards								
Uinta	UT-L-14060003-006	Mirror Lake	Mirror Lake	3A	50	PS	DO	See Accompanying Report

Table 11-17. Category 5D - Lakes Not Fully Supporting Beneficial Uses for 2004 but Will Not Be Listed until Two Consecutive Assessment Cycles Demonstrate Impairment.							
Watershed Assessment Unit	Assessment Unit ID	Lake Name	Beneficial Use Class	Lake Acreage	Beneficial Use Support	Pollutant	Comments
Cedar / Beaver River	UT-L-16030006-002	Upper Enterprise Reservoir	3A	200	NS	Temp*, DO	Severe drawdown
Colorado River West	UT-L-14070003-044	Lower Bowns Reservoir	3A	90	PS	pH	
Dolorado River West	UT-L-14070005-011	Wide Hollow Reservoir	3A	145	NS	Temp*, pH	Severe drawdown
Lower Colorado River	UT-L-15010008-018	Kolob Reservoir	3A	335	PS	DO	
Lower Colorado River	UT-L-16020203-005	Washington Lake	3A	94	PS	DO	
Sevier River	UT-L-16030003-012	Redmond Lake	3A	160	NS	Temperature	Severe drawdown

Table 11-18. Lake Beneficial Use Assessment by Category - Lake Acreage.		
Category	Definition	Lake Acreage
1	All designated uses assigned to an assessment unit were assessed and are fully supported.	162,700
2	Some of the designated uses are fully supported, but there is insufficient data to determine beneficial use support for the remaining designated uses.	156,919
3	Insufficient or no data and information to determine if any designated use is attained	13,851
4A	TMDL has been completed for all pollutants	8,235
4B	Other pollution control requirements are reasonably expected to result in attainment of the water quality standard in the near future	0
4C	The impairment is not caused by a pollutant, e.g. habitat alteration	0
5A	Assessment unit is impaired by a pollutant and a TMDL is needed.	135,710

Table 11-18. Lake Beneficial Use Assessment by Category - Lake Acreage.		
Category	**Definition**	**Lake Acreage**
5B	AUs are listed in this category to identify those pollutants for which a TMDL has been approved, but TMDLs are still required for other pollutants identified, water quality standards are now being met, new delineation of assessment unit, changes in beneficial use classification result in meeting standards, change in listing methods results in meeting standards or change in water quality standards and standards now being met.	3,478
5D	The assessment has identified impairment during one of the even or odd year monitoring cycles. If the AU is assessed as impaired during the next assessment period, it will be listed in Category 5A, TMDL required.	1,204

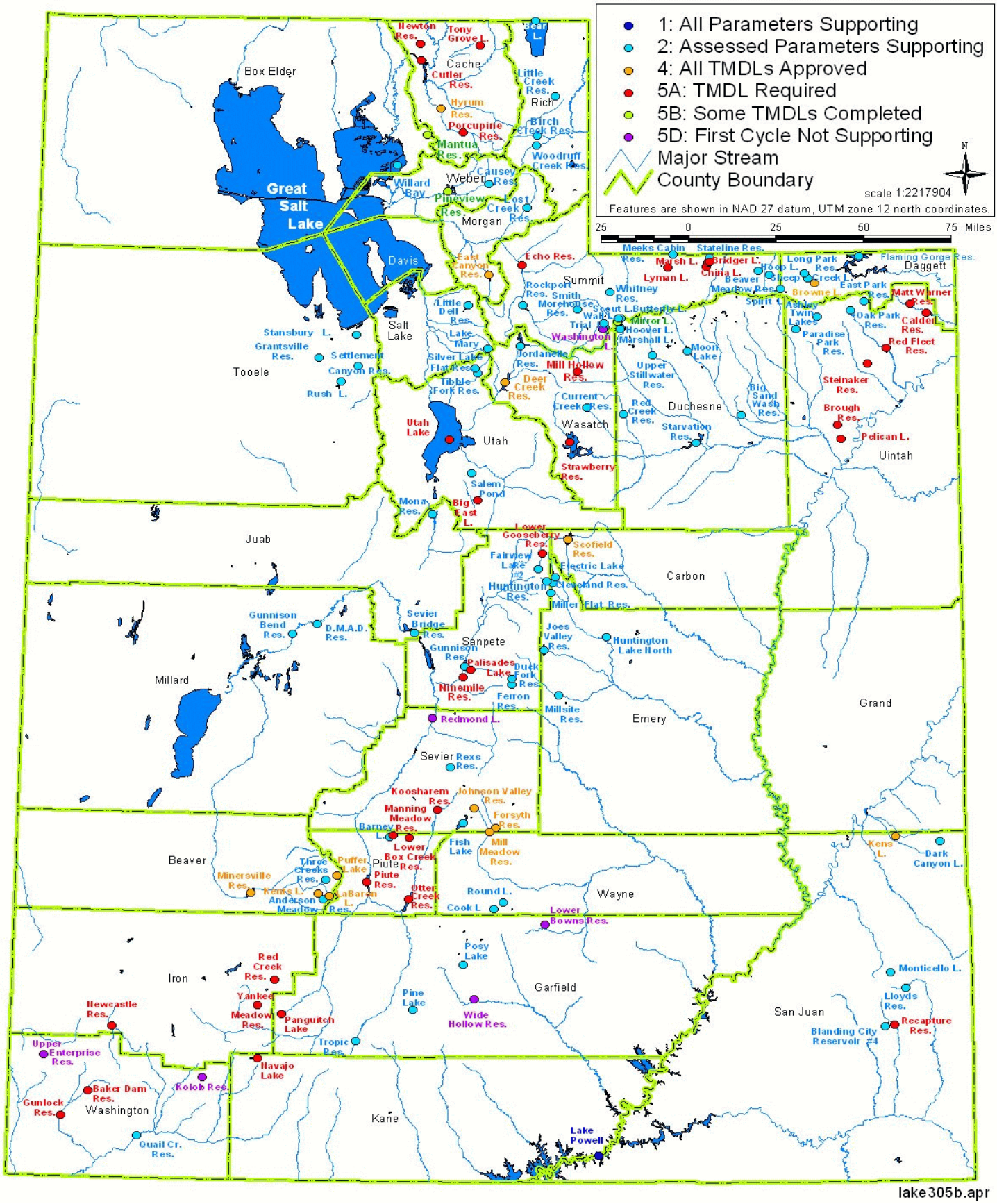

Figure 11-1. Lake and reservoir assessment by categories excluding Category 3.

Chapter 12. References

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Appendix B - Beneficial Use Assessment By Categories.

Table B-1. Category 1 - All Stream Designated Uses Were Assessed and Are Supported

Watershed Management Unit	Assessment Unit ID	Assessment Unit Name	Assessment Unit Description	Beneficial Use Classes Assessed	Beneficial Use Support	Stream Miles
Bear River	UT16010202-005	Summit Creek	Summit Creek and tributaries from confluence with Bear River to headwaters	2B,3A,4	FS	10.10
Bear River	UT16010202-007	Cherry Creek	Cherry Creek and tributaries from confluence w/ Cub to headwaters	2B,3B,4	FS	8.4
Bear River	UT16010203-006	Logan River-2	Logan River and tributaries from mouth of Logan Canyon to headwaters except Blacksmith Fork	2B,3A,3D,4	FS	106.30
Bear River	UT16010203-012	East Fork Little Bear River	Little Bear River from confluence Little Bear River to Porcupine Reservoir	2B,3A,3D,4	FS	4.30
Bear River	UT16010203-013	South Fork Little Bear River	South Fork Little Bear River and tributaries from confluence with Little Bear River to headwaters except Davenport Creek	2B,3A,3D,4	FS	14.10
Bear River	UT16010203-014	East Fork Little Bear River-1	East Fork Little Bear River and tributaries from confluence with Little Bear River to Porcupine Reservoir	2B,3A,3D,4	FS	16.69
Bear River	UT16010203-015	Davenport Creek	Davenport Creek and tributaries from confluence w/ South Fork Little Bear River to headwaters	2B,3A,3D,4	FS	37.60
Bear River	UT16010203-017	East Fork Little Bear River-2	East Fork Little Bear River and tributaries from Porcupine Reservoir to headwaters	2B,3A,3D,4	FS	23.45
Bear River	UT16010203-018	Black Smiths Fork-2	Blacksmith Fork and tributaries from Left Hand Fork to headwaters	2B,3A,4	FS	84.21
Bear River	UT16010203-019	Left Hand Fork Blacksmiths Fork	Left Hand Fork of Blacksmiths Fork from conluence with Blacksmiths to headwaters and tribs	2B,3A,4	FS	34.58
Bear River	UT16010203-020	Black Smiths Fork-1	Blacksmith Fork from confluence with Logan River to Left Hand Fork Blacksmiths fork	2B,3A,3D,4	FS	13.59
Jordan River/ Utah Lake	UT16020204-013	Parley Canyon Creek-2	Parley's Canyon Creek and tributaies from Mountain Dell Reservoir to headwaters	1C,2B,3A	FS	13.3
Jordan River/ Utah Lake	UT16020204-018	Mill Creek-3	Mill Creek and tributaries from USFS Boundary to headwaters	1C,2B,3A	FS	14.4
Jordan River/ Utah Lake	UT16020204-020	Big Cottonwood Creek-2	Big Cottonwood Creek and tributaries from Big Cottonwood WTP to headwaters	1C,2B,3A	FS	33.9

Table B-2. Category 2 - Some Stream Designated Uses Are Supported; Insufficient Data to Assess Other Designated Uses							
Watershed Management Unit	Assessment Unit ID	Assessment Unit Name	Assessment Unit Description	Beneficial Use Classes Assessed	Beneficial Use Classes Not Assessed	Stream Miles	Comments
Bear River	UT16010101-002	Six Mile Creek	Six Mile Creek from reservoir to headwaters	3A,4	2B	20.48	
Bear River	UT16010101-004	North Fork Creek	North Fork Creek and tributaries from confluence w/Bear River to headwaters	3A,4	2B	17.5	
Bear River	UT16010101-005	Otter Creek	Otter Creek and tributaries from Bear River to headwaters	3A,4	2B	28.42	
Bear River	UT16010101-007	Big Creek	Big Creek and tributaries from Bear River to headwaters	3A,4	2B	26.8	
Bear River	UT16010101-008	North Woodruff	Tributaries to Bear River between Woodruff and Big Creek	3A,4	2B	0.01	
Bear River	UT16010101-010	Birch Creek	Birch Creek and tributaries from confluence W/Woodruff Creek to headwaters	3A,4	2B	18.16	
Bear River	UT16010101-011	Woodruff Creek - 1	Woodruff Creek from confl/w Bear River to Birch Creek confluence	3A,4	2B	8.66	
Bear River	UT16010101-013	Woodruff Creek - 4	Wood Creek and tributaries from Woodruff Creek Res to headwaters	3A,4	2B	27.15	
Bear River	UT16010101-014	Woodruff Creek - 3	Tributaries to Woodruff Creek Reservoir	3A,4	2B	0	
Bear River	UT16010101-015	Woodruff Creek - 2	Woodruff Creek and tributaries from Birch Creek confluence to Woodruff Creek Reservoir	3A,4	2B	4.51	
Bear River	UT16010101-021	Bear River-6	Bear River from Utah-Wyoming border to Hayden Fork - Stillwater Fork confluence	3A,4	2B	15.53	
Bear River	UT16010101-022	Mill Creek	Mill Creek and tributaries from Utah-Wyoming border to headwaters	3A,4	2B	54.03	
Bear River	UT16010101-023	West Fork Bear River	West Fork Bear River and tributaries from Utah-Wyoming border to headwaters.	3A,4	2B	65.56	1014
Bear River	UT16010101-024	Hayden Fork	Hayden Fork and tributaries from confluence w/Stillwater Creek to headwaters	3A,4	2B	18.09	

Table B-2. Category 2 - Some Stream Designated Uses Are Supported; Insufficient Data to Assess Other Designated Uses							
Watershed Management Unit	Assessment Unit ID	Assessment Unit Name	Assessment Unit Description	Beneficial Use Classes Assessed	Beneficial Use Classes Not Assessed	Stream Miles	Comments
Bear River	UT16010101-025	Stillwater Fork	Stillwater Fork and tributaries from confluence W/Hayden Fork to headwaters	3A,4	2B	29.5	
Bear River	UT16010101-026	East Fork Bear River	East Fork Bear River from confluence w/Hayden Fork to headwaters	3A,4	2B	33.08	
Bear River	UT16010101-027	Bear River East	Tributaries to Bear River from Woodruff to near Sage Creek Junction-East	3A,4	2B	0	
Bear River	UT16010201-001	Bear River Lake West	Tributaries on West Side of Bear River Lake	3A,4	2B	0.01	
Bear River	UT16010201-002	Laketown	Laketown and Big Creek and other tributaries from Bear River Lake to headwaters	3A,4	2B	6.51	
Bear River	UT16010201-003	South Eden	South Eden Creek from Bear River Lake to headwaters	3A,4	2B	3.45	
Bear River	UT16010201-004	North Eden	North Eden Creek and tributaries from Bear River Lake to headwaters	3A,4	2B	12.04	
Bear River	UT16010202-013	Clarkston Creek	Clarkston Creek and tributaries from Newton Reservoir to Utah/Idaho State Line	3A,4	2B	60.1	
Bear River	UT16010203-011	Little Bear River-2	Hyrum Reservoir to East Fork Little Bear River confluence	3A,4	2B	6.80	Class 3A now supported, model indicated phosphorus goal met, fisheries survey indicated viable population
Bear River	UT16010203-016	Porcupine Creek	Porcupine Creek and tributaries from Porcupine Reservoir to headwaters	3A,3B,3D,4	2B	1.5	
Bear River	UT16010204-006	Malad River	Malad River from confluence with Bear River to Utah/Idaho stateline.	2B,3C	2B	49.8	
Bear River	UT16010204-010	Malad River Tributaries	Tributaries to Malad River	2B,3C	2B	7.73	
Bear River	UT16010101-003	Little Creek	Little Creek and tributaries from Bear River to headwaters	3A,4	2B	6.6	
Cedar/Beaver	UT16030006-001	Coal Creek	Coal Creek and tributaries	3A,4	2B	39.5	

Table B-2. Category 2 - Some Stream Designated Uses Are Supported; Insufficient Data to Assess Other Designated Uses							
Watershed Management Unit	Assessment Unit ID	Assessment Unit Name	Assessment Unit Description	Beneficial Use Classes Assessed	Beneficial Use Classes Not Assessed	Stream Miles	Comments
Cedar/Beaver	UT16030007-003	Beaver Creek-3	Beaver River and tribs from USFS boundary to headwaters	3A,4	2B	136.4	
Colorado River Southeast	UT14030002-001	LaSal Creek	LaSal Creek and tributaries from Utah-Colorado stateline to headwaters	3A,4	2B	18.02	Temperature violations were natural because of extreme drought
Colorado River Southeast	UT14030004-001	Dolores River	Dolores River and tributaries (except Granite Creek) from confluence with Colorado River to headwaters	3C,4	2B	61.7	TDS violations were natural because of extreme drought.
Colorado River Southeast	UT14030004-002	Granite Creek	Granite Creek and tributaries from cofluence with Dolores River to Colorado State line	3C,4	2B	9.5	
Colorado River Southeast	UT14030005-002	Indian Creek-2	Indian Creek from Newspaper Rock north boundary to headwaters	1C,3A,4	2B	15.51	
Colorado River Southeast	UT14030005-003	Colorado River-3	Colorado River from Green River confluence to Moab	1C,3B,4	2B	62.67	
Colorado River Southeast	UT14030005-004	Colorado River-4	Colorado River from Moab to HUC unit (14030005)boundary	1C,3B,4	2B	35.73	
Colorado River Southeast	UT14030005-006	Mill Creek-2	Mill Creek and tributaries from U.S.F.S. boundary to headwaters	3A,4	2B	29.63	
Colorado River Southeast	UT14070001-003	Colorado River-2	Colorado River from Dirty Devil confluence to Green River confluence	1C,3B,4	2B	45.9	
Colorado River Southeast	UT14080201-002	Cottonwood Wash-1	Cottonwood Wash and tributaries from confluence with San Juan River to Westwater Creek confluence	1C,3B,4	2B	0.01	
Colorado River Southeast	UT14080201-005	Recapture Creek-1	Recapture Creek and tributaries from confluence with San Juan River to Westwater Creek confluence	1C,3B,4	2B	0.1	
Colorado River Southeast	UT14080201-009	San Juan River-2	San Juan River from HUC boundary (14080205) to Navajo Indian Reservation	1C,3B,4	2B	31.11	
Colorado River Southeast	UT14080203-001	Verdure Creek-1	Verdure Creek from confluence w/Montezuma Creek to U.S.191	1C,3B,4	2B	4.82	
Colorado River Southeast	UT14080203-002	Verdure Creek-2	Verdure Creek from U.S. 191 to headwaters	3A,4	2B	10.44	

Table B-2. Category 2 - Some Stream Designated Uses Are Supported; Insufficient Data to Assess Other Designated Uses							
Watershed Management Unit	Assessment Unit ID	Assessment Unit Name	Assessment Unit Description	Beneficial Use Classes Assessed	Beneficial Use Classes Not Assessed	Stream Miles	Comments
Colorado River Southeast	UT14080203-003	Montezuma Creek-2	.Montezuma Creek and tributaries from Verdure Creek confluence to U.S. 191	1C,3B,4	2B	12.15	
Colorado River Southeast	UT14080203-005	Montezuma Creek-1	Montezuma Creek from U.S. 191 to headwaters	1C,3B,4	2B	0.22	
Colorado River Southeast	UT14080205-001	San Juan River-1	San Juan River from Lake Powell to HUC boundary (14080201)	1C,3B,4	2B	87.73	
Colorado River West	UT14060007-001	White River	White River from confluence w/Price River to Headwaters	1C,3A,4	2B	32.74	
Colorado River West	UT14060007-002	Scofield Reservoir Tribs	Tributaries to Scofield Reservoir	1C,3A,4	2B	77.71	
Colorado River West	UT14060007-003	Price River-1	Price River and tributaries from Price City Water Treatment intake to Scofield Reservoir	1C,3A,4	2B	78.81	
Colorado River West	UT14060007-005	Price River-2	Price River and tributaries from Carbon Canal Diversion to Price City WTP intake	3A,4	2B	9.22	
Colorado River West	UT14060008-001	Green River-4	Green River from San Rafael confuence to Price River confluence	1C,3B,4	2B	42.11	
Colorado River West	UT14060008-002	Green River-5	Green River from confluence w/Colorado River to San Rafael confluence.	1C,3B,4	2B	97.18	
Colorado River West	UT14060009-001	Huntington Creek-1	Tributaries to Electric Lake	1C,3A,4	2B	36.56	
Colorado River West	UT14060009-002	LF Huntington Creek	Left Fork Huntington Creek and tributaries from confluence w/Huntington Creek to headwaters	1C,3A,4	2B	52.68	
Colorado River West	UT14060009-003	Huntington Creek-3	Huntington Creek and tributaries from USFS boundary to headwaters	1C,3A,4	2B	46.83	
Colorado River West	UT14060009-005	Lowery Water	Lowery Water and tribs from Joes Valley Reservoir to headwaters	3A,4	2B	46.83	
Colorado River West	UT14060009-006	Joes Valley	All tributaries to Joe's Valley res. Except Lowry Creek	1C,3A,4	2B	32.57	
Colorado River West	UT14060009-007	Upper Cottonwood Creek	Cottonwood Creek and tributaries from USFS boundary to headwaters and Joes Valley Reservoir	1C,3A,4	2B	17.96	
Colorado River West	UT14060009-009	Upper Ferron Creek	Ferron Creek and tributaries from Millsite Reservoir to headwaters	1C,3A,4	2B	83.52	

Table B-2. Category 2 - Some Stream Designated Uses Are Supported; Insufficient Data to Assess Other Designated Uses							
Watershed Management Unit	Assessment Unit ID	Assessment Unit Name	Assessment Unit Description	Beneficial Use Classes Assessed	Beneficial Use Classes Not Assessed	Stream Miles	Comments
Colorado River West	UT14060009-012	Lower Ferron Creek	Ferron Creek from confluence w/San Rafael River to Millsite Reservoir	3C,4	2B	24.57	
Colorado River West	UT14070002-001	Upper Muddy	Muddy Creek from U-10 to headwaters	3A,4	2B	78.64	
Colorado River West	UT14070002-002	Upper Quitchipah Creek	Quitchipah Creek from U-10 to headwaters	3A,4	2B	29.02	
Colorado River West	UT14070002-003	Saleratus Creek	Saleratus Creek and tributaries from U-10 xing to headwaters	3A,4	2B	13.74	
Colorado River West	UT14070003-001	Johnson Valley	Tributaries to Johnson Valley Reservoir and Fish Lake	3A,4	2B	15.5	
Colorado River West	UT14070003-002	UM Creek	Um Creek and other tributaries to Forsyth Reservoir	1C,3A,4	2B	21.81	
Colorado River West	UT14070003-004	Fremont River-1	Fremont River and tributaries from Mill Meadow Reservoir to Johnson Valley Reservoir	1C,3A,4	2B	7.71	
Colorado River West	UT14070003-007	Donkey Creek	Donkey Creek & other tribs between Pine Creek and Pleasant above USFS boundary	1C,3A,4	2B	21.4	
Colorado River West	UT14070003-008	Fremont River-3	Fremont River and tributaries from east boundary of Capitol Reef National Park to Bicknell	1C,3A,4	2B	82.88	
Colorado River West	UT14070003-009	Pleasant Creek-1	Pleasent Creek and tributaris from east boundary of Capitol Reef National Monument to headwaters	3A	2B	43.74	
Colorado River West	UT14070003-015	Fish Lake	Tributaries to Fish Lake	1C,3A,4	2B	2.21	
Colorado River West	UT14070004-001	Dirty Devil	Dirty Devil from confluence w/Colorado River to Fremont River	3C	2B	79.09	
Colorado River West	UT14070005-003	North Creek	North Creek from confluence w/Escalante River to headwaters	3A,4	2B	41.5	
Colorado River West	UT14070005-004	Pine Creek	Pine Creek and tributaries from confluence w/Escalante River to headwaters	3A,4	2B	25.7	
Colorado River West	UT14070005-007	Calf Creek	Calf Creek from cnflunce w/Escalante River to headwaters	3A,4	2B	8.13	
Colorado River West	UT14070005-008	Deer Creek	Deer Creek and tributaries from cnfluence w/Escalante River to headwaters	3A,4	2B	56.89	

Table B-2. Category 2 - Some Stream Designated Uses Are Supported; Insufficient Data to Assess Other Designated Uses							
				Beneficial	Beneficial		
Watershed Management Unit	Assessment Unit ID	Assessment Unit Name	Assessment Unit Description	Use Classes Assessed	Use Classes Not Assessed	Stream Miles	Comments
Colorado River West	UT14070005-010	The Gulch	The Gulch from confluence w/Escalante River to headwaters	3C	2B	37.61	
Colorado River West	UT14070005-011	Lower Escalante	Escalante River and some tributaris from Boulder Creek confl to Birch Creek confluence	1C,3B,4	2B	66.18	
Colorado River West	UT14070005-018	Boulder Creek	Boulder Creek from cnfluence w/Escalante River to headwates	3A,4	2B	51.81	
Jordan River/ Utah Lake	UT16020201-004	Salt Creek-1	Salt Creek from mouth of Canyon to USFS Boundary	3A,4	2B	5.00	
Jordan River/ Utah Lake	UT16020201-005	Salt Creek-2	Salt Creek and tribs from USFS Boundary to headwaters	3A,4	2B	22.60	
Jordan River/ Utah Lake	UT16020201-006	Hop Creek	Hop Creek and tributaries from confluence w/ Salt Creek to headwaters	3A,4	2B	21.90	
Jordan River/ Utah Lake	UT16020202-001	Spanish Fork River-1	Spanish Fork River from Utah Lake to Moark Diversion	3B,3D,4	2B	14.60	
Jordan River/ Utah Lake	UT16020202-002	Spanish Fork River-2	Spanish Fork River from Moark Diversion to Thistle Creek confluence	3A,4	2B	8.00	
Jordan River/ Utah Lake	UT16020202-003	Hobble Creek-1	Hobble Creek from Utah Lake to Left Fork Hobble Creek	3A,4	2B	10.00	
Jordan River/ Utah Lake	UT16020202-004	Hobble Creek-2	Left Fork Hobble Creek and tributaries from confluence w\ Right Fork to headwater	3A,4	2B	28.40	
Jordan River/ Utah Lake	UT16020202-005	Hobble Creek-3	Right Fork Hobble Creek and tributaries from confluence w\ Left Fork to headwaters	3A,4	2B	18.20	
Jordan River/ Utah Lake	UT16020202-007	Diamond Fork-2	Diamond Fork Creek from Sixth Water Creek confluence to Hawthorne Campground.	3A,4	2B	5.00	
Jordan River/ Utah Lake	UT16020202-008	Diamond Fork-3	Diamond Fork Creek and tributaries from Hawthorne Campground to headwaters-	3A,4	2B	22.10	
Jordan River/ Utah Lake	UT16020202-010	Third Water Creek	Third Water Creek and tributaries from confluence w/ Sixth Water Creek to headwaters	3A,4	2B	19.59	

Table B-2. Category 2 - Some Stream Designated Uses Are Supported; Insufficient Data to Assess Other Designated Uses							
				Beneficial	Beneficial		
Watershed	Assessment	Assessment	Assessment	Use	Use		
Management	Unit	Unit	Unit	Classes	Classes	Stream	
Unit	ID	Name	Description	Assessed	Not Assessed	Miles	Comments
Jordan River/ Utah Lake	UT16020202-011	Cottonwood Creek	Cottonwood Creek and tributaries from confluence w/Sixth Water Creek to headwaters	3A,4	2B	14.30	
Jordan River/ Utah Lake	UT16020202-013	Soldier Creek-2	Soldier Creek and tributaries from confluence of Starvation Creek to headwaters	3A,4	2B	6.40	
Jordan River/ Utah Lake	UT16020202-015	Tie Fork	Tie Fork and tributaries from confluence w/ Soldier Creek to headwaters	3A,4	2B	15.40	
Jordan River/ Utah Lake	UT16020202-016	Lake Fork	Lake Fork and tributaries from USFS Boundary to headwaters	3A,4	2B	22.30	
Jordan River/ Utah Lake	UT16020202-017	Dairy Fork	Dairy Fork and tributaries from confluence w/ Soldier Creek to headwaters	3A,4	2B	5.60	
Jordan River/ Utah Lake	UT16020202-019	Clear Creek	Clear Creek and tributaries from confluence w/ Soldier Creek to headwaters	3A,4	2B	12.60	
Jordan River/ Utah Lake	UT16020202-020	Starvation Creek	Starvation Creek and tributaries from confluence w/ Soldier Creek to headwaters	3A,4	2B	19.50	
Jordan River/ Utah Lake	UT16020202-022	Thistle Creek-1	Thistle Creek from confluence w\ Soldier Creek to USFS Forest Boundary	3A,4	2B	18.30	
Jordan River/ Utah Lake	UT16020202-023	Thistle Creek-2	Thistle Creek and tributaries from USFS Boundary to headwaters	3A,4	2B	16.70	
Jordan River/ Utah Lake	UT16020202-024	Bennie Creek	Bennie Creek and tributaries from confluence w/ Thistle Creek to headwaters	3A,4	2B	13.30	
Jordan River/ Utah Lake	UT16020202-025	Nebo Creek	Nebo Creek and tributaries from confluence with Thistle Creek to headwaters	3A,4	2B	36.50	
Jordan River/ Utah Lake	UT16020202-027	Beer Creek	Beer Creek and tributararies from confluence w/ Spring Creek to headwaters	3A,4	2B	11.40	
Jordan River/ Utah Lake	UT16020202-028	Peteetneet Creek	Peteetneet Creek and tributaries from i Maple Dell Campground to headwaters	3A,4	2B	18.50	
Jordan River/ Utah Lake	UT16020202-029	Summit Creek	Summit Creek and tributaries from Old Forest Service Boundary to headwaters	3A,4	2B	10.20	
Jordan River/ Utah Lake	UT16020202-030	Benjamin Slough	From confluence w/Utah Lake to Beer Creek confluence	3A,4	2B	5.20	

Table B-2. Category 2 - Some Stream Designated Uses Are Supported; Insufficient Data to Assess Other Designated Uses							
Watershed Management Unit	Assessment Unit ID	Assessment Unit Name	Assessment Unit Description	Beneficial Use Classes Assessed	Beneficial Use Classes Not Assessed	Stream Miles	Comments
Jordan River/ Utah Lake	UT16020203-001	Provo River-1	Provo River from Utah Lake to Murdock Diversion	3A,4	2B	10.30	
Jordan River/ Utah Lake	UT16020203-002	Provo River-2	Provo River from Murdock Diversion to Olmstead Diversion	1C,3A,4	2B	3.70	
Jordan River/ Utah Lake	UT16020203-003	Provo River-3	Provo River from Olmstead Diversion to Deer Creek Res.	1C,3A,4	2B	6.00	
Jordan River/ Utah Lake	UT16020203-004	Provo River-4	Provo River from Deer Creek Reservoir to Jordanelle Reservoir	1C,3A,4	2B	10.20	
Jordan River/ Utah Lake	UT16020203-005	Provo River-5	Provo River from Jordanelle Reservoir to Woodland	1C,3A,4	2B	8.70	
Jordan River/ Utah Lake	UT16020203-006	Provo River-6	Provo River and triutatries from Woodland to headwaters	1C,3A,4	2B	75.10	
Jordan River/ Utah Lake	UT16020203-007	South Fork Provo River	Lower South Fork Provo River and tributaries from confluence w/ Provo River to headwaters	1C,3A,4	2B	20.40	
Jordan River/ Utah Lake	UT16020203-008	North Fork Provo River	North Fork Provo River and tributaries from confluence w/ Provo River to headwaters	1C,3A,4	2B	9.00	
Jordan River/ Utah Lake	UT16020203-009	Main Creek-1	Main Creek and tributaries from Deer Creek Res to Round Valley	1C,3A,4	2B	6.20	
Jordan River/ Utah Lake	UT16020203-010	Main Creek-2	Main Creek and tributaries from Round Valley to headwaters	1C,3A,4	2B	32.10	
Jordan River/ Utah Lake	UT16020203-011	Daniels Creek-1	Daniels Creek from confluence w/ Deer Creek Reservoir to Whiskey Springs	1C,3A,4	2B	10.00	
Jordan River/ Utah Lake	UT16020203-012	Daniels Creek-2	Daniels Creek from Whiskey Springs to headwaters	1C,3A,4	2B	15.90	
Jordan River/ Utah Lake	UT16020203-013	Provo Deer Creek	Provo Deer Creek and tributaries from confluence w/ Provo River to headwaters	1C,3A,4	2B	19.10	
Jordan River/ Utah Lake	UT16020203-014	Snake Creek-1	Snake Creek from confluence w/ Provo River to WMSP Golf Course	1C,3A,4	2B	4.10	
Jordan River/ Utah Lake	UT16020203-015	Snake Creek-2	Snake Creek and tributaries from WMSP to headwaters	1C,3A,4	2B	17.60	

Table B-2. Category 2 - Some Stream Designated Uses Are Supported; Insufficient Data to Assess Other Designated Uses							
Watershed Management Unit	Assessment Unit ID	Assessment Unit Name	Assessment Unit Description	Beneficial Use Classes Assessed	Beneficial Use Classes Not Assessed	Stream Miles	Comments
Jordan River/ Utah Lake	UT16020203-017	Little South Fork Provo	Little South Fork Provo River and tributaries from confluence w/ Provo River to headwaters	1C,3A,4	2B	22.40	
Jordan River/ Utah Lake	UT16020203-018	South Fork Provo	Upper South Fork Provo River and tributaries from confluence w/ Provo River to headwaters	1C,3A,4	2B	28.50	
Jordan River/ Utah Lake	UT16020203-019	Lake Creek-2	Lake Creek and tribuaries above Timber Creek confluence to headwaters	1C,3A,4	2B	17.70	
Jordan River/Utah Lake	UT160202003-029	Mill Race Creek-1	Mill Race Creek from HUC boundary (16020203) and tributaries to headwaters	3B,4	2B	2.51	
Jordan River/ Utah Lake	UT16020204-003	Jordan River-3	Jordan River from North Temple to 2100 S	3B,4	2B	4.30	
Jordan River/ Utah Lake	UT16020204-004	Jordan River-4	Jordan River from 2100 S to 6400 S	3B,4	2B	8.50	
Jordan River/ Utah Lake	UT16020204-005	Jordan River-5	Jordan River from 6400 S to 7800 S	3A,4	2B	2.00	
Jordan River/ Utah Lake	UT16020204-006	Jordan River-6	Jordan River from 7800 S to Bluffdale	3A,4	2B	10.20	
Jordan River/ Utah Lake	UT16020204-008	Jordan River-8	Jordan River from Narrows to Utah Lake	1C,3A,4	2B	10.90	
Jordan River/ Utah Lake	UT16020204-010	City Creek-2	City Creek and tributaries from filtration plant to headwaters	1C,3A	2B	4.50	
Jordan River/ Utah Lake	UT16020204-011	Red Butte Creek	Red Butte Creek and tributaries from Red Butte Reservoir to headwaters	1C,3A	2B	4.54	
Jordan River/ Utah Lake	UT16020204-014	Mountain Dale-1	Mountain Dale Creek from Mountain Dell Res to Little Dell Reservoir	1C,3A	2B	0.76	
Jordan River/ Utah Lake	UT16020204-015	Mountain Dale-2	Mountain Dale Creek and tributaries from to Little Dell Reservoir headwaters.	1C,3A	2B	8.08	
Jordan River/ Utah Lake	UT16020204-019	Big Cottonwood Creek-1	Big Cottonwood Creek and tributaries from Jordan River to Big Cottonwood WTP	3B,4	2B	9.50	
Jordan River/ Utah Lake	UT16020204-021	Little Cottonwood Creek-1	Little Cottonwood Creek and tributaries from confluence Jordan River to Metropolitan WTP	3A,4	2B	9.70	
Jordan River/ Utah Lake	UT16020204-024	Butterfield Creek	Butterfield Creek and tributaries from confluence w/Jordan River to headwaters	3D,4	2B	1.80	
Jordan River/ Utah Lake	UT16020204-026	Mill Creek-1	Mill Creek from conluence w/Jordan River to I-15	3C,4	2B	1.11	

Table B-2. Category 2 - Some Stream Designated Uses Are Supported; Insufficient Data to Assess Other Designated Uses							
				Beneficial	Beneficial		
Watershed	Assessment	Assessment	Assessment	Use	Use		
Management	Unit	Unit	Unit	Classes	Classes	Stream	
Unit	ID	Name	Description	Assessed	Not Assessed	Miles	Comments
Lower Colorado	UT15010003-001	Cottonwood Canyon	from Utah/Arizona Stateline to headwaters	3D,4	2B	8.54	
Lower Colorado	UT15010003-002	Kanab Creek-1	Kanab Creek and tributaries from state line to the confluence with Fourmile Hollow near the White Cliffs.	3C	2B,4	17.6	
Lower Colorado	UT15010003-005	Johnson Wash-2	Johnson Wash and tributaries from Red Wash confluence to headwaters	4	2B,3A	25.55	
Lower Colorado	UT15010008-002	Santa Clara-2	Santa Clara River and tributaries from Gunlock Reservoir to Baker Dam Reservoir (included Maogatsue Creek and tributaries to USFS boundary.	1C,3A,4	2B	20.20	
Lower Colorado	UT15010008-003	Santa Clara-3	Santa Clara River and tributaries from Baker Dam Reservoir to headwaters	3A,4	2B	20.34	
Lower Colorado	UT15010008-006	Leeds Creek	Leeds Creek and tributaries from confluence w/Quail Creek to headwaters	1C,3A,4	2B	6.08	
Lower Colorado	UT15010008-009	Ash Creek-3	Ash Creek and tributaries from Ash Creek Reservoir to headwaters	3A,4	2B	35.63	
Lower Colorado	UT15010008-010	Laverkin Creek	Laverkin Creek and tributaries from confluence w/Virgin River to headwaters (excludes Ash Creek)	3B,4	2B	45.51	
Lower Colorado	UT15010008-011	Virgin River-3	Virgin River and tributaries from Quail Creek Diversion to North Creek confluence	1C,3B,4	2B	28.76	
Lower Colorado	UT15010008-012	Virgin River-4	Virgin River and tributaries from North Creek confluence to North Fork Virgin River	1C,3C,4	2B	22.4	
Lower Colorado	UT15010008-015	North Fork Virgin River-1	North Fork Virgin River and tributaries from confluence w/East Fork Virgin River to Kolob Creek confluence	1C,3A,4	2B	42.92	
Lower Colorado	UT15010008-018	East Fork Virgin-1	East Fork of Virgin River and tributaries from confluence w/North Fork Virgin River to Carmel Junction	1C,3A,4	2B	41.13	
Lower Colorado	UT15010008-019	East Fork Virgin-2	East Fork Virgin River and tributaries from Carmel Junction to Glendale	3A,4	2B	21.1	
Lower Colorado	UT15010008-020	East Fork Virgin-3	East Fork Virgin River and tributaries from Glendale to headwaters	3A,4	2B	18.3	

Table B-2. Category 2 - Some Stream Designated Uses Are Supported; Insufficient Data to Assess Other Designated Uses							
				Beneficial	Beneficial		
Watershed	Assessment	Assessment	Assessment	Use	Use		
Management	Unit	Unit	Unit	Classes	Classes	Stream	
Unit	ID	Name	Description	Assessed	Not Assessed	Miles	Comments
Sevier River	UT16030001-002	Sevier River-4	Sevier River and tributaries tribs: from Piute Reservoir to Circleville Irrigation Diversion, excluding East Fork Sevier River and tributaries	3A,4	2B	15.68	
Sevier River	UT16030001-004	Bear River Creek	Bear River Creek and tributaries from confluence w/Sevier River to headwaters	3A,4	2B	5.57	Temperature violations were natural because of extreme drought
Sevier River	UT16030001-009	Mammoth Creek	Mammoth Creek and tributaries from confluence w/Sevier River to headwaters	3A,4	2B	43.32	
Sevier River	UT16030001-011	Asay Creek	Asay Creek and tributaries from confluence w/ Sevier River to Headwaters	3A,4	2B	39.00	
Sevier River	UT16030001-014	Threemile Creek	West side tributaries to Sevier River from Horse Valley Diversion upstream to Long Canal excluding Panquitch and Bear River Creeks and their tributaries.	3A,4	2B	19.8	Temperature violations were natural because of extreme drougtht
Sevier River	UT16030002-006	East Fork Sevier River-3	East Fork Sevier River and tributaries from Antimony Creek confluence to Deer Creek confluence	3A,4	2B	20.83	
Sevier River	UT16030002-009	East Fork Sevier River-2	East Fork Sevier River and tributaraies from Deer Creek confluence to Tropic Reservoir	3A,4	2B	126.06	
Sevier River	UT16030002-010	East Fork Sevier River-1	East Fork Sevier River and tributaries from Tropic Reservoir to headwaters	3A,4	2B	31.30	
Sevier River	UT16030003-006	Salina Creek-2	Salina Creek and tributaries from USFS boundary to headwaters	3A,4	2B	139.65	
Sevier River	UT16030003-007	Beaver Creek-1	Beaver Creek and other west side tributaries to Sevier River below USFS boundary from Clear Creek upstream to HUC boundary	3A,4	2B	7.03	
Sevier River	UT16030003-008	Lost Creek-2	Lost Creek and tributaries from ~6 miles upstream to USFS boundary	3A,4	2B	5.21	
Sevier River	UT16030003-010	Lost Creek-3	Lost Creek and tributaries USFS boundary to headwaters	3A,4	2B	24.30	

Table B-2. Category 2 - Some Stream Designated Uses Are Supported; Insufficient Data to Assess Other Designated Uses							
Watershed Management Unit	Assessment Unit ID	Assessment Unit Name	Assessment Unit Description	Beneficial Use Classes Assessed	Beneficial Use Classes Not Assessed	Stream Miles	Comments
Sevier River	UT16030003-014	Sevier River-14	East side tributaries of Sevier River from Rocky Ford Reservoir upstream to Annabelle Diversion and below USFS boundary	3A,4	2B	18.00	
Sevier River	UT16030003-015	Sevier River-13	Sevier River from Rocky Ford Reservoir upstream to Annabelle Diversion	3A,4	2B	27.10	
Sevier River	UT16030003-017	Sevier River-6	Sevier River from Clear Creek confluence to HUC unit boundary	3A,4	2B	27.12	
Sevier River	UT16030003-018	Clear Creek	Clear Creek and tributaries from confluence w/Sevier River to headwaters	3A,4	2B	100.22	
Sevier River	UT16030003-020	Beaver Creek-2	Beaver Creek and other westside tributaries to Sevier River above USFS boundary from Clear Creek upstream to HUC boundary	3A,4	2B	16.46	
Sevier River	UT16030004-002	Twelve Mile Creek	Twelve Mile Creek and tributaries from USFS boundary to headwaters	3A,4	2B	43.64	
Sevier River	UT16030004-003	Six Mile Creek	Six Mile Creek and tributaries from confluence w/San Pitch River to headwaters	3A,4	2B	27.01	
Sevier River	UT16030004-004	South Creek	South Creek (Manti Creek) and tributaries from USFS boundary to headwaters	3A,4	2B	24.14	
Sevier River	UT16030004-007	Ephraim Creek	Ephraim Creek and tributaries from USFS boundary to headwaters	3A,4	2B	13.18	
Sevier River	UT16030004-008	Pleasant Creek	Pleasant Creek and tributaries from confluence w/San Pitch River to headwaters	3A,4	2B	49.92	
Sevier River	UT16030004-009	San Pitch-5	San Pitch River and tributaries from beneficial U132 to Pleasant Creek confluence, excluding Cedar Creek, Oak Creek, Pleasant Cree and Cottowood Creek.	3A,4	2B	58.22	
Sevier River	UT16030004-010	Oak Creek-1	Oak Creek and tributaries from confluence w/ San Pitch River to headwaters	3A,4	2B	34.75	

Table B-2. Category 2 - Some Stream Designated Uses Are Supported; Insufficient Data to Assess Other Designated Uses							
Watershed Management Unit	Assessment Unit ID	Assessment Unit Name	Assessment Unit Description	Beneficial Use Classes Assessed	Beneficial Use Classes Not Assessed	Stream Miles	Comments
Sevier River	UT16030004-012	Upper Oak Creek	Oak Creek and tributaraies from confluence w/San Pitch River to headdwaters (near Fairview)	3A,4	2B	6.85	
Sevier River	UT16030004-013	Cottonwood Creek-SP	Cottonwood Creek and tributaries from confluence w/San Pitch River to headwaters	3A,4	2B	9.33	
Sevier River	UT16030005-019	Chalk Creek-2	Chalk Creek and Pine Creek (Millard County) and tributaries from USFS boundary to headwaters	3A,4	2B	33.40	
Sevier River	UT16030005-020	Chicken Creek-1	Chicken Creek and tributaries from Levan to heawaters	3A,4	2B	24.16	
Sevier River	UT16030005-021	Corn Creek	Corn Creek and tributaries from mouth to headwaters	3A,4	2B	45.85	
Sevier River	UT16030005-023	Meadow Creek	Meadow Creek and tributaries from mouth to headwaters (Juab County)	3A,4	2B	17.99	
Uinta	UT14040106-001	Dahlgreen Creek	Dahlgreen Creek and tributaries from Utah-Wyoming state line to headwaters.	3A,4	2B	8.54	
Uinta	UT14040106-002	Henrys Fork River	Henrys Fork River and tributaries from Utah-Wyoming state line to headwaters.	3A,4	2B	35.54	
Uinta	UT14040106-003	West Fork Beaver Creek	West Fork Beaver Creek$ Spring Creek$ Poison Creek and tributaries from Utah-Wyoming state line to headwaters.	3A,4	2B	26.72	
Uinta	UT14040106-004	Middle Fork Beaver Creek	Middle Fork Beaver Creek and tributaries from Utah-Wyoming state line to headwaters.	3A,4	2B	30.06	
Uinta	UT14040106-005	Burnt Fork Creek	Burnt Fork Creek and tributaries from Utah-Wyoming state line to headwaters.	3A,4	2B	36.52	
Uinta	UT14040106-007	Sheep Creek	Sheep Creek and tributaries from Flaming Gorge Reservoir to headwataers.	3A,4	2B	70	

Table B-2. Category 2 - Some Stream Designated Uses Are Supported; Insufficient Data to Assess Other Designated Uses							
Watershed Management Unit	Assessment Unit ID	Assessment Unit Name	Assessment Unit Description	Beneficial Use Classes Assessed	Beneficial Use Classes Not Assessed	Stream Miles	Comments
Uinta	UT14040106-018	Red Creek	Red Creek and tributaries from confluence Green River to headwaters.	3C,4	2B	13.95	
Uinta	UT14040106-022	Sears Creek	Sears Creek and tributaries from confluence Green River to headwaters.	3A	2B	6.99	
Uinta	UT14040107-001	Blacks Fork	Blacks Fork River and tributaries from Utah-Wyoming state line to headwaters; all other streams from eastern boundary of Bla	3A,4	2B	132.3	
Uinta	UT14040107-002	Archie Creek	Archie Creek and tributaries from from Utah-Wyoming state line to headwaters	3A,4	2B	4.72	
Uinta	UT14040107-003	West Fork Smiths Fork	West Fork Smiths Fork and tributaries from Utah-Wyoming state line to headwaters.	3A,4	2B	19.32	
Uinta	UT14040107-004	Gilbert Creek	Gilbert Creek and tributaries from Utah-Wyoming state line to headwaters.	3A,4	2B	6.68	
Uinta	UT14040107-005	East Fork Smiths Fork	East Fork Smiths Fork and tributaries from Utah-Wyoming state line to headwaters.	3A,4	2B	48.43	
Uinta	UT14040108-002	Little West Fork	Little West Forkfrom Utah-Wyoming stateline to headwaters.	3A,4	2B	3.8	
Uinta	UT14050007-001	White River	White River from confluence Green River to Utah-Colorado state line.	3B,4	2B	74.67	
Uinta	UT14060001-004	Green River-2	Green River from Utah-Colorado state line to Duchesne River confluence.	1C,3B,4	2B	90.27	
Uinta	UT14060002-002	Middle Ashley Creek	Ashley Creek and tributaries from Vernal sewage lagoons to Dry Fork confluence.	3B,4	2B	12.28	
Uinta	UT14060002-005	Upper Little Brush Creek	Little Brush Creek and tributaries from mouth of Little Brush Creek Gorge to	3B,4	2B	34.4	

Table B-2. Category 2 - Some Stream Designated Uses Are Supported; Insufficient Data to Assess Other Designated Uses							
				Beneficial	Beneficial		
Watershed	Assessment	Assessment	Assessment	Use	Use		
Management	Unit	Unit	Unit	Classes	Classes	Stream	
Unit	ID	Name	Description	Assessed	Not Assessed	Miles	Comments
			headwaters.				
Uinta	UT14060002-006	Big Brush Creek	Big Brush Creek and tributaries from Red Fleet Reservoir to headwaters.	1C,3A,4	2B	38.75	
Uinta	UT14060002-007	Upper Ashley Creek	Ashley Creek and tributaries from confluence of Dry Fork to headwaters (exclude Dry Fork).	1C,3A,4	2B	61.73	
Uinta	UT14060002-008	Dry Fork Creek	Dry Fork Creek and tributaries from confluence Ashley Creek to headwaters.	1C,3A,4	2B	47.45	
Uinta	UT14060003-006	Duchesne River-3	Duchesne River from from Myton to Strawberry River confluence.	1C,3A,4	2B	39.97	
Uinta	UT14060003-011	Lower Whiterocks River	Whiterocks River from confluence Uintah River to Tridell Water Treatment Plant.	1C,3A,4	2B	23.82	
Uinta	UT14060003-013	Upper Whiterocks River	Whiterocks River and tributaries from Tridell Water Treatment Plant to headwaters.	1C,3A,4	2B	76.23	
Uinta	UT14060003-016	Lower Rock Creek	Rock Creek and tributaries from confluence Duchesne River to USFS boundary.	1C,3A,4	2B	29.21	
Uinta	UT14060003-017	Duchesne River-4	Duchesne River from from Strawberry River confluence to West Fork Duchesne confluence.	1C,3A,4	2B	67.28	
Uinta	UT14060003-018	West Fork Duchesne	West Fork Duchesne River and tributaries from confluence Duchesne River to headwaters.	1C,3A,4	2B	67.26	
Uinta	UT14060003-019	North Fork Duchesne	North Fork Duchesne River and tributaries from confluence Duchesne River to headwaters.	1C,3A,4	2B	58.87	
Uinta	UT14060003-020	Upper Rock Creek	Rock Creek and tributaries from from USNF boundary to headwaters.	1C,3A,4	2B	99.18	
Uinta	UT14060003-021	Tributaries to Moon Lake	Tributaries to Moon Lake.	1C,3A,4	2B	122.3	

Table B-2. Category 2 - Some Stream Designated Uses Are Supported; Insufficient Data to Assess Other Designated Uses							
				Beneficial	Beneficial		
Watershed	Assessment	Assessment	Assessment	Use	Use		
Management	Unit	Unit	Unit	Classes	Classes	Stream	
Unit	ID	Name	Description	Assessed	Not Assessed	Miles	Comments
Uinta	UT14060003-022	Lake Fork-3	Lake Fork River and tributaries from Yellowstone River confluence to Moon Lake.	1C,3A,4	2B	35.35	
Uinta	UT14060003-023	Upper Yellowstone	Yellowstone River and tributaries from from USNF boundary to headwaters.	1C,3A,4	2B	110.5	
Uinta	UT14060003-024	Uinta River-4	Uinta River and tributaries from from USFS boundary to headwaters.	3A,4	2B	85.7	
Uinta	UT14060004-001	Strawberry River-1	Strawberry River from confluence Duchesne River to Starvation Dam.	1C,3A,4	2B	6.03	
Uinta	UT14060004-004	Stawberry River-2	Stawberry River and tributaries from Starvation Reservoir to Avintaquin Creek confluence.	1C,3A,4	2B	16.09	
Uinta	UT14060004-005	Avintaquin Creek	Avintaquin Creek and tributaries from confluence Strawberry River to headwaters.	1C,3A,4	2B	54.37	
Uinta	UT14060004-006	Lower Red Creek	Red Creek and tributaries from confluence Strawberry River to Currant Creek Confluence.	1C,3A,4	2B	4.74	
Uinta	UT14060004-007	Middle Red Creek	Red Creek and tributaries from confluence Current Creek to Red Creek Reservoir.	1C,3A,4	2B	15.55	
Uinta	UT14060004-009	Lower Currant Creek	Current Creek and tributaries from Red Creek confluence to Current Creek Reservoir.	1C,3A,4	2B	60.12	
Uinta	UT14060004-010	Strawberry River-3	Strawberry River from Current Creek confluence to Soldier Creek Dam.	1C,3A,4	2B	20.18	
Uinta	UT14060004-013	Strawberry-4	Tributaries to Strawberry Reservoir except Strawberry River	1C,3A,4	2B	97.64	
Uinta	UT14060004-014	Upper Strawberry	Strawberry River and tributaries from Strawberry Reservoir to headwaters.	1C,3A,4	2B	37.4	

Table B-2. Category 2 - Some Stream Designated Uses Are Supported; Insufficient Data to Assess Other Designated Uses							
Watershed Management Unit	Assessment Unit ID	Assessment Unit Name	Assessment Unit Description	Beneficial Use Classes Assessed	Beneficial Use Classes Not Assessed	Stream Miles	Comments
Uinta	UT14060004-015	Upper Currant Creek	Tributaries to Current Creek Reservoir.	1C,3A,4	2B	58.98	
Uinta	UT14060005-006	Lower Range Creek	Range Creek and tributaries from confluence Green River to ranch diversion.	3A,4	2B	9.51	
Uinta	UT14060005-009	Green River-3	Green River from from cataloguing unit boundary to Duchesne River Confluence.	1C,3B,4	2B	111.9	
Weber River	UT16020101-001	Lost Creek	confluence w/ Weber River to Lost CreekReservoir	1C,3A,4	2B	28.2	
Weber River	UT16020101-002	Francis Creek	Lost Creek Reservoir to headwater-tribs	1C,3A,4	2B	4.4	
Weber River	UT16020101-003	Lost Creek-2	Lost Creek Reservoir to headwaters-tribs	1C,3A,4	2B	67.5	
Weber River	UT16020101-004	Weber River-7	segment between confluence Lost Creek and Echo Reservoir	1C,3A,4	2B	10.5	
Weber River	UT16020101-015	East Fork Chalk Creek	confluence w/ Chalk Creek to headwater-tribs	1C,3A,4	2B	28.3	
Weber River	UT16020101-017	Weber River-8	Echo Reservoir to Rockport Reservoir	1C,3A,4	2B	10.7	
Weber River	UT16020101-022	Fort Creek	confluence w/ Weber River to headwaters-tribs	1C,3A,4	2B	10.2	
Weber River	UT16020101-023	Weber River-9	Rockport Reservoir to Weber River-Provo Canal	1C,3A,4	2B	17.7	
Weber River	UT16020101-024	Weber River-10	Weber River-Provo Canal to Smith-Morehouse confluence-tribs	1C,3A,4	2B	45.5	
Weber River	UT16020101-025	Weber River-11	Smith Morehouse confluence to Holiday Park-tribs	1C,3A,4	2B	29.8	
Weber River	UT16020101-026	Smith Morehouse River-1	confluence w/ Weber River to Smith MorehouseReservoir	1C,3A,4	2B	4.5	
Weber River	UT16020101-027	Smith Morehouse River-2	Smith Morehouse Reservoir to headwaters-tribs	1C,3A,4	2B	29.8	
Weber River	UT16020101-028	Weber River-12	Holiday Park to headwaters-tribs	1C,3A,4	2B	25.5	
Weber River	UT16020101-029	Beaver Creek-1	confluence with Weber River to Kamas	1C,3A,4	2B	16.4	
Weber River	UT16020101-030	Beaver Creek-2	Beaver Creek from Kamas to headwaters	1C,3A,4	2B	23.4	

Table B-2. Category 2 - Some Stream Designated Uses Are Supported; Insufficient Data to Assess Other Designated Uses							
Watershed Management Unit	Assessment Unit ID	Assessment Unit Name	Assessment Unit Description	Beneficial Use Classes Assessed	Beneficial Use Classes Not Assessed	Stream Miles	Comments
Weber River	UT16020102-001	Weber River-1	Great Salt Lake to Slaterville Diversion	3C,3D,4	2B	18.8	
Weber River	UT16020102-002	Weber River-3	Weber River from Ogden River confluence to Cottonwood Creek confluence	3A,4	2B	23.8	
Weber River	UT16020102-003	Four Mile Creek	from confluence w/ Weber River to headwaters	3A,4	2B	6.08	
Weber River	UT16020102-005	Ogden River-1	confluence w/ Weber River to Pineview Reservoir	3A,4	2B	5.2	
Weber River	UT16020102-007	Weber River-2	Slaterville Diversion to Ogden River confluence	3A,4	2B	20.4	
Weber River	UT16020102-008	Wheeler Creek	confluence w/Ogden River to headwaters-tribs	1C,3A,4	2B	13.1	
Weber River	UT16020102-009	Middle Fork Ogden River	Pineview Reservoir to headwaters-tribs	1C,3A,4	2B	20.6	
Weber River	UT16020102-010	South Fork Ogden River-1	Pineview Reservoir to Causey Reservoir-tribs	1C,3A,4	2B	5.7	
Weber River	UT16020102-011	Beaver Creek	Beaver Creek and tribs from confluence South Fork Ogden to headwaters	1C,3A,4	2B	18.86	
Weber River	UT16020102-012	South Fork Ogden River	Causey Reservoir to headwaters-tribs	1C,3A,4	2B	29.4	
Weber River	UT16020102-020	Weber River-4	Cottonwood Creek confluence to Stoddard Diversion	3A,4	2B	12.96	
Weber River	UT16020102-022	Weber River-6	segment between East Canyon Creek confluence and Lost Creek confluence	1C,3A,4	2B	14.7	pH was a first occurance with historical data showing no other occurrences. Not listed on 2002 303(d) list and approval given not to list and do TMDL until further data collected.
Weber River	UT16020102-023	Hardscrabble Creek	confluence w/ East Canyon Creek to headwaters-tribs	1C,3A,4	2B	22.7	
Weber River	UT16020102-024	East Canyon Creek -1	confluence w/ Weber River to East Canyon Dam	1C,3A,4	2B	13.8	
Weber River	UT16020102-027	Kimball Creek	confluence East Canyon Creek including McLeod Creek to headwaters-tribs	1C,3A,4	2B	5.2	

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Watershed Management Unit	Assessment Unit ID	Assessment Unit Name	Assessment Unit Description	Beneficial Use Classes Assessed	Beneficial Use Classes Not Assessed	Stream Miles	Comments
Weber River	UT16020102-030	North Fork Kays Creek	USFS Boundary to headwaters-tribs	3A,4	2B	0.71	
Weber River	UT16020102-031	Kays Creek	Farmington Bay to USFS boundary-tribs	3B,4	2B	10.71	
Weber River	UT16020102-032	South and Middle Fork Kays Creek	USFS Boundary to headwaters-tribs	1C,3A,4	2B	1.95	
Weber River	UT16020102-038	Farmington Creek-2	USFS Boundary to headwaters-tribs	1C,3A,4	2B	6.26	
Weber River	UT16020102-045	Stone Creek-2	USFS Boundary to headwaters-tribs	1C,3A,4	2B	3.72	
Weber River	UT16020102-046	Stone Creek-1	Great Salt Lake to USFS Boundary	3A,4	2B	0.37	
Weber River	UT16020102-048	Weber River-5	Weber River from Stoddard Diversion to East Canyon Creek confluence	1C,3A,4	2B	1.47	
Weber River	UT16020102-049	Mill Creek-2	from USFS boundary to headwaters	1C,3A,4	2B	6.1	

Table B-3. Category 3 - Insufficient Data to Determine Whether Any Stream Beneficial Uses Are Met					
				Beneficial	
				Use	
Watershed	Assessment	Assessment	Assessment	Classes	
Management	Unit	Unit	Unit	Not	Stream
Unit	ID	Name	Description	Assessed	Miles
Bear River	UT16010101-001	Bear River West	Tributaries West of Bear River from Six Mile Creek North	2B,3A,4	4.89
Bear River	UT16010101-017	Dry Creek	Dry Creek and tributaries from confl. w/ Saleratus Creek to headwaters	2B,3A,4	2.77
Bear River	UT16010101-018	Sutton Creek	Sutton Creek and tributaries from Utah-Wyoming border to headwaters	2B,3A,4	13.1
Bear River	UT16010101-019	Yellow Creek Tributaries	Yellow Creek and tributaries from Utah-Wyoming border to headwaters	2B,3A,4	11.7
Bear River	UT16010101-028	Yellow Creek	Tributaries to Yellow Creek from Utah-Wyoming border to headwaters	2B,3A,4	16.2
Bear River	UT16010202-006	City Creek	confluence w/Bear River to headwaters and other streams in waterbody	2B,3B,3D,4	7.29
Bear River	UT16010202-014	Unknown Creek	Small streams that flow into Idaho east of Clarkston Creek	2B,3A,4	
Bear River	UT16010203-001	Cutler West	Westside tributaries to Cutler Reservoir	2B,3A,3D,4	4.47
Bear River	UT16010203-002	Swift Slough	From confluence w/ Cutler Reservoir to headwaters	2B,3A,3D,4	10.2
Bear River	UT16010203-007	Little Bear River-3	Westside tributaries to Little Bear River from Cutler Reservoir to Hyrum Reservoir	2B,3A,3D,4	6.42
Bear River	UT16010204-001	Box Elder Creek-1	Box Elder Creek from the confluence with Black Slough to Brigham City Reservoir (the Mayor's Pond)	2B, 3C, 4	2.8
Bear River	UT16010204-002	Lower Bear River East	Tributaries on East Side of Bear River from Malad confluence south	2B,3B,3D,4	6.51
Bear River	UT16010204-004	Lower Bear River West	Tributaries on West Side of Bear River from Malad confluence south	2B,3B,3D,4	18.1
Bear River	UT16010204-005	Box Elder Creek-2	Box Elder Creek from Brigham City Reservoir (the Mayor's Pond) to headwaters	2B, 3A, 4	6.7
Bear River	UT16010204-007	Middle Bear River East	Tributaries on East Side of Bear River from Malad confluence north to HUC boundary	2B,3B,3D,4	17.7
Bear River	UT16010204-009	Middle Bear River West	Tributaries on West Side of Bear River from Malad confluence north to HUC boundary	2B,3B,3D,4	3.16
Cedar/Beaver	UT16030007-001	Beaver River-1	Beaver River Below Minersville Reservoir	2B,3A,4	6.19
Colorado River Southeast	UT14030001-001	Cottonwood Wash	Cottonwood Wash from confluence of Colorado River to headwaters	1C,2B,3A,4	20.9
Colorado River Southeast	UT14030001-002	Little Dolores River	Little Dolores River from confluence with Colorado River to Colorado stateline	1C,2B,3A,4	0.01
Colorado River Southeast	UT14030001-003	Westwater Creek	Westwater Creek &tribs from confluence with Colorado River to headwaters	1C,2B,3A,4	0.01
Colorado River Southeast	UT14030002-002	Roc Creek	Roc Creek and tributaries from Utah-Colorado stateline to headwaters	2B,3A,4	20.3
Colorado River Southeast	UT14030005-001	Kane Spring Wash	Kane Spring Wash from confluence w/Colorado River to headwaters	2B,3C,4	48.8
Colorado River Southeast	UT14030005-007	Salt Wash	Salt Wash & tribs from confluence with Colorado River to headwaters	1C,2B,3B,4	22.9
Colorado River Southeast	UT14030005-008	Negro Bill	Negro Bill Creek from confluence with Colorado River to headwater	1C,2B,3B,4	10.1
Colorado River Southeast	UT14070007-004	Cottonwood Creek	Cottonwood Creek from confluence w/Paria River to headwaters	2B,3C,4	6.47
Colorado River Southeast	UT14080201-001	Butler Wash	Butler Wash from confluence w/San Juan River to headwaters	2B,3A,4	7.66
Colorado River Southeast	UT14080201-003	Recapture Creek-2	Recapture Creek & tribs from U.S.F.S. boundary to headwaters	1C,2B,3B,4	3.99

Table B-3. Category 3 - Insufficient Data to Determine Whether Any Stream Beneficial Uses Are Met					
				Beneficial	
				Use	
Watershed	Assessment	Assessment	Assessment	Classes	
Management	Unit	Unit	Unit	Not	Stream
Unit	ID	Name	Description	Assessed	Miles
Colorado River Southeast	UT14080201-010	San Juan River-3	San Juan River from McElmo Creek confluence to Navajo Indian Reservation	1C,2B,3B,4	33.7
Colorado River Southeast	UT14080202-001	McElmo Creek	McElmo Creek from confluence with San Juan River to Colorado Stateline	1C,2B,3B,4	24.1
Colorado River Southeast	UT14080203-004	South Creek	South Creek from confluence with Montezuma creek to headwaters - tribs	1C,2B,3A,4	9.35
Colorado River Southeast	UT14080203-006	Spring Creek	Spring Creek & tribs from confluence w/Vega Creek to headwaters	2B,3B,4	6.3
Colorado River Southeast	UT14080203-007	Montezuma Creek-3	Montezuma Creek and all other tributaries not listed before from U.S. 191 to headwaters	1C,2B,3B,4	7.1
Colorado River Southeast	UT14080204-001	Chinle Creek	Chinle Creek from confluence with San Juan River to headwaters	1C,2B,3B,4	35.3
Colorado River West	UT14060007-004	Willow Creek	Willow Creek and tribs from cnfl w/Price River to headwaters	2B,3A,4	43.7
Colorado River West	UT14060007-008	Coal Creek	Coal Creek and tribs from confluence w/Price River to headwaters	2B,3C,4	29.7
Colorado River West	UT14060007-009	Soldier Creek	Soldier Creek and tribs from confluence w/Price River to headwaters	2B,3C,4	22
Colorado River West	UT14060007-010	Miller Creek	Miller Creek and tribs from confluence w/Price River to headwaters	2B,3C,4	28.6
Colorado River West	UT14060007-011	Desert Seep Wash	Desert Seep Wash from confluence w/Price River to headwaters	2B,3C,4	29
Colorado River West	UT14060007-012	Lower Grassy Trail Creek	Grassy Trail Creek from confluence w/ Price River to Grassy Trail Creek Reservoir	2B,3C,4	1.8
Colorado River West	UT14070001-001	Halls Creek	Halls Creek & tribs from Lake powell to headwaters	2B,3A,4	18.8
Colorado River West	UT14070001-002	Bullfrog Creek	Bullfrog Cr. from Lake Powell to headwaters	2B,3A,4	30.1
Colorado River West	UT14070001-093	North Wash	North Wash from confluence with Lake Powell to headwaters	2B,2B,3B,4	16.8
Colorado River West	UT14070001-094	Trachyte Creek	Trachyte Creek from Lake Powell to headwaters	2B,2B,3B,4	8.31
Colorado River West	UT14070002-004	Upper Ivie Creek	Ivie Cr. And some tribs from U-10 xing to headwaters	2B,3A,4	24.5
Colorado River West	UT14070002-005	Last Chance Creek	Last Chance Cr. And tribs from cnfl Ivie Cr. to headwaters	2B,3A,4	3.93
Colorado River West	UT14070003-006	Pine Creek	Pine Creek & tribs from cnfl w/ Fremont R. to headwaters	2B,3A,4	1.59
Colorado River West	UT14070003-010	Pleasant Creek-2	Pleaseant Creek and tributaries from cnfl w/Fremont to east boundary of Capitol Reef National Monument	2B,3C	10.2
Colorado River West	UT14070003-011	Oak Creek	Oak Creek tribs from east boundary of Capitol Reef National Park to headwaters	1C,2B,3A,4	19.2
Colorado River West	UT14070003-012	Sandy Creek	Sandy Creek from cnfl w/Freemont R. to east boundary of Capitol Reef Nat. Monument & headwaters	2B,3C,4	27.1
Colorado River West	UT14070003-013	Henry Mountains	Henry Mountain Streams	2B,3C,4	35.8
Colorado River West	UT14070005-006	Sand Creek	Sand Creek and tributaries from confluence w/Escalante River to headwaters	2B,3A,4	32.9
Colorado River West	UT14070005-013	Escalante Tribs	Tribs to Escalante R. not previously described from Boulder Creek to Birch Creek	2B,3A,4	0.01

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				Beneficial	
				Use	
Watershed	Assessment	Assessment	Assessment	Classes	
Management	Unit	Unit	Unit	Not	Stream
Unit	ID	Name	Description	Assessed	Miles
	UT14070005-015	Lower Alvey Wash	Alvey wash & tribs from confl w/Escalante R. to Harris Wash	2B,3C,4	8.89
Colorado River West	UT14070005-016	Wolverine Cr	Wolverine Creek & tribs from confl w/Escalante River to headwaters.	1C,2B,3C,4	2.89
Colorado River West	UT14070005-079	Coyote Wash	Coyote Wash from confluence w/Escalante River to headwaters	1C,2B,3B,4	0.07
Colorado River West	UT14070006-001	Wahweap Creek	Wahweap Creek 2 trib from Lake Powell to headwaters	2B,3A,4	2.04
Colorado River West	UT14070006-004	Chance Creek	Chance Creek & tribs from Lake Powell to headwaters	2B,3A,4	16.7
Colorado River West	UT14070006-005	Croton	Croton Canyon & tribs from Lake Powell to headwaters	2B,3A,4	2.41
Colorado River West	UT14070006-007	Lake Powell Tribs-4	Tribs South of Lake Powell from Arizona stateline to HUC (14070006) boundary	2B,3A,4	2.51
Colorado River West	UT14070007-002	Paria River-2	Paria River from Cottonwood Creek confluence to start of Paria	2B,3C,4	31.6
Colorado River West	UT14070007-004	Cottonwood Creek	Cottonwood Creek from confluence w/Paria River to headwaters	2B,3C,4	6.47
Jordan River/ Utah Lake	UT16020202-014	Sheep Creek	Sheep Creek and tributaries from confluence w/ Soldier Creek to headwaters	2B,3A,4	6
Jordan River/ Utah Lake	UT16020202-018	Mill Fork	Mill Fork and tributaries from confluence w/Soldier Creek to headwaters	2B,3A,4	9.38
Jordan River/ Utah Lake	UT16020202-021	Indian Creek	Indian Creek and tributaries from confluence w/Soldier Creek to headwaters	2B,3A,4	3.15
Jordan River/ Utah Lake	UT16020202-031	Moark	Tributaries east of Spanish Fork River from Moark, Diversion to Diamond Fork confluence	2B,3A,4	5.5
Jordan River/ Utah Lake	UT16020202-032	Thistle Creek-5	Tributaries to Thistle Creek between Bennie Creek and Nebo Creek confluences	2B,3A,4	0.1
Jordan River/ Utah Lake	UT16020202-033	Soldier Creek-3	Perennial tributaries to Soldier Creek between Tie Fork and Sheep Creek confluence	2B,3A,4	0.11
Jordan River/ Utah Lake	UT16020202-034	Soldier Creek-4	Tributaries on south side of Soldier Creek from confluence with Thistle Creek to Dairy Fork confluence	2B,3A,4	3.69
Jordan River/ Utah Lake	UT16020202-035	Dry Creek-1	Dry Creek and tributaries from Utah Lake (Provo Bay) to I-15	2B,3A,4	5.22
Jordan River/ Utah Lake	UT16020202-036	Dry Creek-2	Dry Creek and tributaries from I-15 to headwaters	2B,3A,4	4.97
Jordan River/ Utah Lake	Ut16020202-037	Thistle Creek-3	East side tributaries to Thistle Creek from confluence with Soldier Creek upstream to confluence with Little Clear Creek	2B,3A,4	10.7
Jordan River/ Utah Lake	UT16020203-016	McHenry Creek	McHenry Creek from Jordanelle Reservoir to headwaters	1C,2B,3A,4	2.45
Jordan River/ Utah Lake	UT16020203-021	Upper Falls Drainage	Upper Falls above Bridal Veil Falls	1C,2B,3A	1.12
Jordan River/ Utah Lake	UT16020203-024	Rock Canyon	Rock Canyon and tributaries from mouth to headwaters.	1C,2B,3A	0.01
Jordan River/ Utah Lake	UT16020203-026	Heber Valley	Tributaries on east side of Provo River from Daniels Creek to Little South Fork except Lake Creek	1C,2B,3A,4	34.9

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Watershed	Assessment	Assessment	Assessment	Classes	
Management	Unit	Unit	Unit	Not	Stream
Unit	ID	Name	Description	Assessed	Miles
Jordan River/ Utah Lake	UT16020203-028	Provo Tribs-Heber	Tributaries on sest side of Provo River from Deer Creek Dam to Jordanelle Dam except Snake Creek	1C,2B,3A,4	13.9
Jordan River/ Utah Lake	UT16020204-009	City Creek-1	City Creek and tribs from Memory Park to SLC WTP	2B,3A	4.23
Jordan River/ Utah Lake	UT16020204-017	Mill Creek-2	Mill Creek and tributaries from I-15 to Forest Service Boundary	2B,3A,4	7.37
Jordan River/ Utah Lake	UT16020204-023	Bingham Creek	Bingham Creek and tributaries from confluence w/ Jordan River to headwaters	2B,3D,4	5.36
Jordan River/ Utah Lake	UT16020204-027	Coon Creek	Perennial portion of Coon Creek	2B,3B,3D,4	0.09
Jordan River/ Utah Lake	UT16020204-028	Barneys Canyon Creek	Barney Canyon Creek and tributares from xxx to headwaters	2B,3B,3D,4	0.01
Jordan River/ Utah Lake	UT16020204-029	Rose Creek	Rose Creek and tributaries from confluence w/Jordan River to headwaters	2B,3B,3D,4	4.09
Lower Colorado	UT15010003-003	Kanab Creek-2	Kanab Creek and tributaries from the confluence with Fourmile Hollow near the White Cliffs to Reservoir Canyon	2B,3C,4	5.81
Lower Colorado	UT15010003-004	Johnson Wash-1	Johnson Wash and tributaries from stateline to Redwash confluence	2B,3C,4	11.96
Lower Colorado	UT15010003-006	Kanab Creek-3	Kanab Creek from Reservoir Canyon to headwaters.	1C,2B,3A,4	0.03
Lower Colorado	UT15010008-005	Quail Creek	Quail Creek and tributaries from Quail Creek Reservoir to headwaters.	1C,2B,3A,4	5.46
Lower Colorado	UT15010008-007	Ash Creek-1	Ash Creek and tributaries from confluence w/Laverkin Creek to springs near Toquerville.	2B,3A,4	0.01
Lower Colorado	UT15010008-008	Ash Creek-2	Ash Creek and tributaries from springs near Toquerville to Ash Creek Reservoir	2B,3A,4	0.01
Lower Colorado	UT15010008-013	North Fork-2	North Fork Virgin River and tributaries from Deep Creek confluence to headwaters	2B,3A,4	34.8
Lower Colorado	UT15010008-016	Kolob Creek	Kolob Creek and tributaries from confluence with North Fork Virgin River to headwaters	2B,3A,4	15.7
Lower Colorado	UT15010008-017	Deep Creek	Deep Creek and tributaries from confluence w/North Fork Virgin River to headwaters	2B,3A,4	60.4
Sevier River	UT16030001-001	Piute West	USFS lands west of Piute Reservoir and south of HUC boundary 16030003	2B,3A,4	7.2
Sevier River	UT16030001-006	Panguitch Creek-2	Panguitch Creek and tributaries from confluence w/Sevier River to Panguitch Reservoir	2B,3A,4	29.1
Sevier River	UT16030001-008	Panguitch Creek-1	Panguitch Creek and tributaries and all other tributaries to Panguitch Reservoir to headwaters.	2B,3A,4	23.2
Sevier River	UT16030001-010	Duck Creek	Duck Creek and tributaries from mouth to headwaters	1C,2B,3A,4	2.8

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				Beneficial	
				Use	
Watershed	Assessment	Assessment	Assessment	Classes	
Management	Unit	Unit	Unit	Not	Stream
Unit	ID	Name	Description	Assessed	Miles
Sevier River	UT16030001-013	Piute	Tributaries to Piute Reservior	2B,3A,4	4.1
Sevier River	UT16030002-007	Deer Creek	Deer Creek and tributaries from confluence w/East Fork Sevier River to headwaters	2B,3A,4	17.4
Sevier River	UT16030002-008	Antimony Creek	Antimony Creek and tributaries from confluence w/Sevier River to headwaters	2B,3A,4	26.2
Sevier River	UT16030003-001	Sevier River-19	Tributaries on West side of Sevier River from Sevier River Bridge Dam to Salina Creek confluence	2B,3B,4	1.1
Sevier River	UT16030003-002	Willow Creek	Willow Creek and tributaries from USFS boundary to headwaters	2B,3A,4	14.5
Sevier River	UT16030003-004	Sevier River-16	East and west side tributaries from Salina Creek confluence to Rocky Ford Resevoir (excludes Lost Creek)	2B,3A,4	0.7
Sevier River	UT16030003-009	Sevier River-11	West side tributaries to Sesvier River below USFS boundary from the Annebelle Diversion upstream to Sevier River confluence with Clear Creek	2B,3A,4	0
Sevier River	UT16030003-011	Sevier River-8	All tributaries on west side of Sevier River from approximately due West of Salina Creek confluence within USFS boundary upstream to Clear Creek confluence	2B,3B,4	12.8
Sevier River	UT16030003-013	Monroe Creek	All tributaries on the east side of Sevier River above USFS boundary from Mill Creek/Water Creek area upstream to Durkee Creek	2B,3A,4	56.6
Sevier River	UT16030003-016	Sevier River-10	East side tributaries below USFS boudary to Sevier River from Anabelle Diversion upsteam to Clear Creek confluence.	2B,3A,4	0.4
Sevier River	UT16030003-019	Sevier River-9	Sevier River from annabelle Diversion to Clear Creek confluence	2B,3A,4	11.4
Sevier River	UT16030003-021	Manning Creek	Manning Creek and tributaries from confluence with Sevier River to headwaters	2B,3A,4	13.8
Sevier River	UT16030003-022	Sevier River-5	Tributaries on east side of Sevier River from Manning Creek confluence to HUC unit boundary	2B,3A,4	12.5
Sevier River	UT16030003-023	Sevier River-18	East side tributaries to Sevier River from Sevier River Bridge Dam to Salina Creek confluence excluding San Pitch River	2B,3A,4	25.4
Sevier River	UT16030003-024	Sevier River-15	Sevier River form confluence with Salina Creek upstream to Rocky Ford Reservoir	2B,3B,4	12.6
Sevier River	UT16030003-025	Sevier River-13	West side tributaries to Sevier River from Rocky Ford Reservoir upstream to Annabelle Diversion and below USFS boundary	2B,3B,4	4.4
Sevier River	UT16030003-026	Sevier River-7	West side tributaries of the Sevier River from the Clear Creek confluence upstream to the HUC unit boundary	2B,3A,4	0

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				Beneficial	
				Use	
Watershed	Assessment	Assessment	Assessment	Classes	
Management	Unit	Unit	Unit	Not	Stream
Unit	ID	Name	Description	Assessed	Miles
Sevier River	UT16030005-001	Judd Creek	Judd Creek-tribs: from mouth to headwaters	2B,3A,4	0.01
Sevier River	UT16030005-002	Cherry Creek	Cherry Creek-tribs: from mouth to headwaters	2B,3A,4	0.01
Sevier River	UT16030005-003	Tanner Creek	Tanner Creek-tribs: from mouth to headwaters	2B,3A,4	0.01
Sevier River	UT16030005-004	Oak Creek-O1	Oak Creek-tribs: Oak Creek-tribs: from mouth to USFS boundary (near Oak City)	2B,3B,4	0.01
Sevier River	UT16030005-005	Fool Creek-1	Fool Creek-tribs: from mouth to USFS boundary	2B,3B,4	0.01
Sevier River	UT16030005-006	Fish Lake-Sevier River	All waters on Fishlake National Forest lands which are west of Interstate 15	2B,3A,4	8.2
Sevier River	UT16030005-007	Sevier River-21	Northside tributaries to Sevier River from DMAD Reservoir upstream to Sevier River Bridge Reservoir (Yuba Dam), except Tanner Creek, Chicken Creek, their tributaries, and waters upstream from the USFS boundary	2B,3A,4	10.1
Sevier River	UT16030005-008	Sevier River-27	South side tributaries to Sevier River from DMAD Reservir upstream to Yuba Dam, excludingall waters above USFS boundary	2B,3B,4	2.7
Sevier River	UT16030005-011	Chicken Creek-3	All streams south of Chicken Creek to USFS boundary that flow towards Sevier River	2B,3A,4	23.6
Sevier River	UT16030005-012	Ivie Creek	Ivie Creek from Scipio Dam to headwaters	2B,3A,4	14.3
Sevier River	UT16030005-013	Goose Creek-1	Goose Creek and tributaries from mouth to USFS boudary	2B,3B,4	6.5
Sevier River	UT16030005-014	Goose Creek-2	Goose Creek and tributaries from USFS boundary to headwaters	2B,3A,4	0.7
Sevier River	UT16030005-015	Pioneer Creek-1	Pioneer Creek and tributaries from mouth to USFS boundary	2B,3B,4	3.4
Sevier River	UT16030005-016	Pioneer Creek-2	Pioneer Creek and tributaries from USFS boundary to headwaters	2B,3A,4	4.3
Sevier River	UT16030005-017	Sevier River-23	South side tributaries to Sevier River frm Gunnision bend reservir upstream to DMAD Reservoir	2B,3A,4	0.1
Sevier River	UT16030005-018	Chalk Creek-1	Chalk Creek and Pine Creek (Millard County) and tributaries from mouth to USFS boundary	2B,3A,4	0
Sevier River	UT16030005-024	Round Valley Creek	Round Valley Creek from mouth upstream to Scipio Reservoir	2B,3A,4	0
Sevier River	UT16030005-029	Sevier River-26	North side tributaries to Sevier River from Gunnison Bend Reservoir to DMAD Reservoir	2B,3C,4	0.1
Uinta	UT14040106-011	Eagle Creek	Eagle Creek and tributaries from Flaming Gorge Reservoir to headwaters.	2B,3A,4	8.86
Uinta	UT14040106-006	Birch Creek-tribs	Birch Creek and tributaries from Utah-Wyoming state line to headwaters.	2B,3A,4	14.9

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				Beneficial	
				Use	
Watershed	Assessment	Assessment	Assessment	Classes	
Management	Unit	Unit	Unit	Not	Stream
Unit	ID	Name	Description	Assessed	Miles
Uinta	UT14040106-008	Green River-1 Tribs	Tributaries to Green River from Utah-Colorado state line to Flaming Gorge Reservoir.	2B,3A,4	21.3
Uinta	UT14040106-009	Birch Spring Draw	Birch Spring Draw and tributaries from Flaming Gorge Reservoir to headwaters.	2B,3C,4	17.7
Uinta	UT14040106-010	Carter Creek	Carter Creek and tributaries from Flaming Gorge Reservoir to headwaters.	2B,3A,4	89.9
Uinta	UT14040106-012	Flaming Gorge Reservoir	All tributaries to Flaming Gorge Res. not listed separately	2B,3A	12
Uinta	UT14040106-013	Spring Creek	Spring Creek	2B,3A	4.65
Uinta	UT14040106-014	Cart Creek	Cart Creek and tributaries.	2B,3A,4	17
Uinta	UT14040106-015	Gorge Creek	Gorge Creek and tributaries from confluence Green River to headwaters.	2B,3A	8.39
Uinta	UT14040106-016	Davenport Creek	Davenport Creek and Tribs from confluence with the Green River to	2B,3A	4.14
Uinta	UT14040106-017	Goslin Creek	Goslin Creek and tributaries from confluence Green River to headwaters.	2B,3A	3.72
Uinta	UT14040106-019	Green River-1	Green River from Utah-Colorado state line to Flaming Gorge Reservoir.	2B,3A,4	29.4
Uinta	UT14040106-020	Jackson Creek	Jackson Creek and tributaries from confluence Green River to headwaters.	2B,3A	11.2
Uinta	UT14040106-021	Pot Creek	Pot Creek and tributaries from Crouse Dam to headwaters.	2B,3A,4	22
Uinta	UT14040106-023	Lower Pot Creek	Pot Creek- below reservoirs to Utah-Colorado stateline.	2B,3A	0.01
Uinta	UT14040106-024	Willow Creek	Willow Creek and tributaries from from confluence Green River to headwaters (Dagget Co.).	2B,3A,4	16.2
Uinta	UT14040106-025	O-Wi-Yu-Kuts Creek	O-Wi-Yu-Kuts Creek and tributaries from confluence Willow Creek to Utah-Colorado state line.	2B,3A	2.12
Uinta	UT14040106-026	Tolivers Creek	Tolivers Creek and tributaries	2B,3A	4.22
Uinta	UT14040106-027	Beaver Creek	Beaver Creek-tribs (east of Willow Creek near 3 corners) from Colorado state line to Colorado state line	2B,3A	1.26
Uinta	UT14050007-002	Lower Bitter Creek	Bitter Creek and tributaries from confluence White River to start of perennial stream (excluding Sweetwater Creek).	2B,3A,4	0.01

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				Beneficial	
				Use	
Watershed	Assessment	Assessment	Assessment	Classes	
Management	Unit	Unit	Unit	Not	Stream
Unit	ID	Name	Description	Assessed	Miles
Uinta	UT14050007-003	Evacuation Creek	Evacuation Creek and tributaries from confluence White River to headwaters.	2B,3B,4	0.01
Uinta	UT14050007-004	Sweetwater Creek	Sweetwater Creek and tributaries from confluence Bitter Creek to headwaters.	2B,3A,4	3.95
Uinta	UT14050007-005	Upper Bitter Creek	Bitter Creek and tributaries from upper portion that is perennial.	2B,3A,4	24.8
Uinta	UT14060001-001	Green River-2 Tribs	Green River tributaries: Duchesne River confluence to Utah-Colorado state line	1C,2B,3B,4	11.9
Uinta	UT14060001-002	Jones Hole Creek	Jones Hole Creek and tributaries from confluence Green River to headwaters.	2B,3A	5.95
Uinta	UT14060001-003	Diamond Gulch	Diamond Gulch: near Jones Hole Creek to headwaters.	2B,3A,4	33.2
Uinta	UT14060002-004	Lower Little Brush Creek	Little Brush Creek and tributaries from confluence Big Brush Creek to mouth of Little Brush Creek Gorge.	2B,3B,4	7.96
Uinta	UT14060003-014	Pole Creek	Pole Creek	2B,3A,4	34.9
Uinta	UT14060004-003	Starvation Tribs	Tributaries to Starvation Reservoir except Strawberry River	1C,2B,3A,4	0
Uinta	UT14060004-008	Upper Red Creek	Tributaries to Red Creek Reservoir.	1C,2B,3A,4	15.9
Uinta	UT14060004-011	Timber Canyon Creek	Timber Canyon Creek and tributaries from confluence Strawberry River to headwaters.	1C,2B,3A,4	15.7
Uinta	UT14060004-012	Willow Creek	Willow Creek and tributaries from confluence Strawberry River to headwaters.	1C,2B,3A,4	17.2
Uinta	UT14060005-001	Green River-3 Tribs	Green River tributaries: from cataloguing unit boundary to Duchesne River Confluence.	1C,2B,3B,4	2.64
Uinta	UT14060005-004	Upper Range Creek	Range Creek and tributaries from Range Creek Pumping Station to headwaters.	1C,2B,3A,4	6.38
Uinta	UT14060005-005	Middle Range Creek	Range Creek and tributaries from from ranch diversion to Range Creek Pumping Station.	1C,2B,3A,4	19.4
Uinta	UT14060005-007	Florence Creek	Florence Creek and tributaries from confluence Green River to headwaters.	1C,2B,3B,4	16.6
Uinta	UT14060005-008	Rock Creek	Rock Creek and tributaries from from confluence with Green River to headwaters	2B,3A,4	0.01

Table B-3. Category 3 - Insufficient Data to Determine Whether Any Stream Beneficial Uses Are Met					
				Beneficial	
				Use	
Watershed	Assessment	Assessment	Assessment	Classes	
Management	Unit	Unit	Unit	Not	Stream
Unit	ID	Name	Description	Assessed	Miles
Uinta	UT14060006-002	Upper Willow Creek	Willow Creek and tributaries near Meadow Creek confluence to headwaters.	2B,3A,4	123
Uinta	UT14060006-003	Hill Creek	Hill Creek and tributaries from confluence Willow Creek to headwaters.	2B,3A,4	82
Weber River	UT16020101-005	Main Canyon	Main Canyon Creek and other tribs to Weber River	1C,2B,3A,4	9.51
Weber River	UT16020101-008	Carruth Creek	Carruth and Lewis Canyon Creek from confluence w/Echo Reservoir to headwaters	1C,2B,3A,4	7.7
Weber River	UT16020101-009	Grass Creek	confluence w/Echo Reservoir to headwaters-tribs	1C,2B,3A,4	8.22
Weber River	UT16020101-019	Upper Weber River Tribs-3	Tribs on east side of Weber River between Echo Res and Fort Creek confluence	1C,2B,3A,4	18.6
Weber River	UT16020101-021	Upper Weber River Tribs-4	Tribs on west side of Weber River between Silver Cr confluence and Beaver Cr confluence	1C,2B,3A,4	6.52
Weber River	UT16020102-004	Burch Creek-2	Burch Creek from Harrison Blvd to headwaters-tribs	1C,2B,3A	3.63
Weber River	UT16020102-006	North Fork Ogden River	North Fork Ogden River and tributaries from Pineview Reservoir to headwaters.	1C,2B,3A,4	37.8
Weber River	UT16020102-013	Strong Canyons Creek	Strongs Canyon Creek from USFS boundary to headwaters-tribs	1C,2B,3A,4	1.31
Weber River	UT16020102-014	Burch Creek-1	Burch Creek from confluence w/ Weber River to Harrison Blvd	2B,3A,4	3.39
Weber River	UT16020102-015	Spring Creek	Spring Creek from USFS boundary to headwaters-tribs	1C,2B,3A,4	2.34
Weber River	UT16020102-017	Lower Weber River Tribs-1	Tributaries to Cottonwood Creek and Weber River on north side	2B,3A,4	24.6
Weber River	UT16020102-018	Cottonwood Creek	from confluence with Weber River to headwaters-tribs	2B,3A,4	7.69
Weber River	UT16020102-019	Lower Weber River Tribs-4	Tributaries to Weber River from Cottonwood Creek to Stoddard Diversion - east side	2B,3A,4	2.93
Weber River	UT16020102-021	Lower Weber River Tribs-3	Tributaries to Weber River from Cottonwood Creek to Stoddard Diversion - west side	2B,3A,4	22.6
Weber River	UT16020102-025	East Canyon Creek-3	Tributaries to East Canyon Reservoir, other than East Canyon Creek	1C,2B,3A,4	3.05
Weber River	UT16020102-036	Baer Creek-3	Baer Creek and tribs from US 89 to headwaters	1C,2B,3A,4	2.88
Weber River	UT16020102-042	Ricks Creek	Ricks Creek and tribs from I-15 to headwaters	1C,2B,3A,4	2.16
Weber River	UT16020102-044	Parrish Creek	Parrish and Duel Creeks and tribs frm Davis Aqeduct to headwaters	2B,3A,4	3.74
Weber River	UT16020102-047	Barton Creek	Barton Creek from USFS Boundary to headwaters	2B,3A,4	2.56
Weber River	UT16020102-055	Lower Weber River Tribs-5	tribs to Weber River from Stoddard Diversion to East Canyon Creek-west side	1C,2B,3A,4	24.9
Statewide		Undefined			1,245
					3644.26

Table B-4. Category 4A - All TMDLs Completed and Approved for Stream Assessment Unit.									
Watershed	**Assessment**	**Assessment**	**Assessment**	**Beneficial**		**Beneficial**	**Pollutant**	**Date**	
Management	**Unit**	**Unit**	**Unit**	**Use**	**Stream**	**Use**	**TMDL**	**TMDL**	
Unit	**ID**	**Name**	**Description**	**Class**	**Miles**	**Support**	**Completed**	**Approved**	**Comments**
Bear River	UT16010202-002	Newton Creek	Newton Creek from confluence w/Cutler Reservoir to Newton Reservoir	3A	6.30	PS	Total Phosphorus	23-Oct-97	
Bear River	UT16010202-004	Bear River-3	Cutler Reservoir to Idaho Stateline	3A	26.80	PS	Total Phosphorus	23-Oct-97	
Bear River	UT16010202-010	Cub River	Confluence w/ Bear River to Utah-Idaho Stateline-tribs	3B	13.80	PS	Total Phosphorus	23-Oct-97	
Bear River	UT16010202-008	High Creek	confluence w/ Cub River to headwaters-tribs	3A	20.70	PS	Total Phosphorus	23-Oct-97	
Bear River	UT16010202-009	Spring Creek Tribs-L	Tributaries to Spring Creek (Lewiston) from confluence to Utah Idaho border	3A	3.00	PS	Total Phosphorus	23-Oct-97	
Bear River	UT16010203-005	Logan River-1	Cutler Reservoir to Mouth of Logan Canyon	3A	14.40	PS	Total Phosphorus	23-Oct-97	
Bear River	UT16010204-008	Bear River-2	Malad River confluence to Cutler Reservoir	3B	38.60	PS	Total Phosphorus	9-Sep-02	
Bear River	UT16010204-003	Bear River-1	Great Salt Lake to Malad River confluence	4	32.10	PS	Total Phosphorus	23-Oct-97	TDS standard exceeded, but was caused by natural drought conditions.
Bear River	UT16010203-008	Spring Creek	Spring Creek and tributaries from Little Bear River to headwaters	3A	7.30	PS	Dissolved Oxygen	9-Sep-02	
Bear River	UT16010203-008	Spring Creek	Spring Creek and tributaries from Little Bear River to headwaters	3A	7.30	PS	Total Phosphorus	9-Sep-02	
Bear River	UT16010203-008	Spring Creek	Spring Creek and tributaries from Little Bear River to headwaters	3A	7.30	PS	Temperature	9-Sep-02	
Bear River	UT16010203-008	Spring Creek	Spring Creek and tributaries from Little Bear River to headwaters	3A	7.30	PS	Unionized Ammonia	9-Sep-02	
Bear River	UT16010203-008	Spring Creek	Spring Creek and tributaries from Little Bear River to headwaters	3A	7.30	PS	Pathogens	9-Sep-02	
Bear River	UT16010203-009	Little Bear River-1	Little Bear River from Cutler Reservoir to Hyrum Reservoir	3A	16.68	PS	Total Phosphorus	8/12/1997 5/23/00	Not listed for temperature because of severe drought, natural cause
Cedar/Beaver	UT16030007-002	Beaver River-2	Beaver River and tribs from Minersville Reservoir to USFS boundary	3A	50.56	PS	Total Phosphorus	5/23/00 9/1/00	

Table B-4. Category 4A - All TMDLs Completed and Approved for Stream Assessment Unit.									
Watershed	Assessment	Assessment	Assessment	Beneficial		Beneficial	Pollutant	Date	
Management	Unit	Unit	Unit	Use	Stream	Use	TMDL	TMDL	
Unit	ID	Name	Description	Class	Miles	Support	Completed	Approved	Comments
Cedar/Beaver	UT16030007-002	Beaver River-2	Beaver River and tribs from Minersville Reservoir to USFS boundary	3A	50.56	PS	Temperature	5/23/00 9/1/00	
Cedar/Beaver	UT16030007-002	Beaver River-2	Beaver River and tribs from Minersville Reservoir to USFS boundary	2B,3A,4	50.56	PS	pH		pH is linked to total phosphorus and algal blooms for which a TMDL has been approved, implementation plans will address pH issue
Colorado River Southeast	UT14030005-005	Mill Creek-1	Mill Creek and tributaries from confluence with Colorado River to U.S.F.S. boundary	3A	31.8	PS	Salinity/TDS/chlorides	9-Sep-02	**TMDL approved 9/9/2002, Dissolved oxygen was not listed this cycle because one flow was essentially a no flow, and DO was associated with high temperatures. Implementation plans for temperature will solve DO concerns.**
Colorado River Southeast	UT14030005-010	Onion Creek	Onion Creek and tributaries from confluence with Colorado River to headwaters	3B	10.17	3B	Temperature	9-Sep-02	
Colorado River Southeast	UT14030005-010	Onion Creek	Onion Creek and tributaries from confluence with Colorado River to headwaters	4	10.17	4	TDS	9-Sep-02	
Colorado River Southeast	UT14030005-011	Pack Creek	Pack Creek and tributaries except Mill Creek from confluence w/ Colorado River to USFS boundary	3A	15.21	PS	Temperature	9-Sep-02	In addition to approved TMDL, intensive Survey 2002-2003; temperature supporting
Colorado River Southeast	UT14030005-011	Pack Creek	Pack Creek and tributaries except Mill Creek from confluence w/ Colorado River to USFS boundary	4	15.21	PS	Salinity/TDS/chlorides	9-Sep-02	
Colorado River Southeast	UT14080201-006	Cottonwood Wash-2	Cottonwood Wash from Westwater confluence to U.S.F.S. boundary	1C	4.62	NS	Gross Alpha	9-Sep-02	
Colorado River Southeast	UT14080201-007	Cottonwood Wash-3	Cottonwood Wash and tributaries within U.S.F.S. boundary	1C	17.17	NS	Gross Alpha	9-Sep-02	
Colorado River West	UT14070003-003	Lower Um Creek	UM Creek and tributaries from Mill Meadow to Forsythe Reservoir	3A	0.81	PS	Organic enrichment/Low DO	27-Sep-02	

Table B-4. Category 4A - All TMDLs Completed and Approved for Stream Assessment Unit.									
Watershed Management Unit	Assessment Unit ID	Assessment Unit Name	Assessment Unit Description	Beneficial Use Class	Stream Miles	Beneficial Use Support	Pollutant TMDL Completed	Date TMDL Approved	Comments
Colorado River West	UT14070003-005	Fremont River-2	Fremont River near Bicknell to U.S. FS boundary	3A	29.35	PS	Organic enrichment/Low DO	27-Sep-02	
Colorado River West	UT14070003-005	Fremont River-2	Fremont River near Bicknell to U.S. FS boundary	3A	29.35	PS	Total Phosphorus	27-Sep-02	
Colorado River West	UT14070003-014	Fremont River-4	Fremont River and tributaries from confluence w/Dirty Devil to east boundary of Capitol Reef NP	4	58.98	PS	Salinity/TDS/chlorides	27-Sep-02	
Jordan River/Utah Lake	UT16020204-022	Little Cottonwood Creek-2	Little Cottonwood Creek and tributaries from Metropolitan WTP to headwaters	3A	21.49	NS	Zinc	2-Oct-02	
Sevier River	UT16030002-001	Otter Creek-4	Otter Creek and tributaries from Koosharem Reservoir to headwaters	3A	18.28	PS	Total Phosphorus	23-Sep-97	
Sevier River	UT16030002-001	Otter Creek-4	Otter Creek and tributaries from Koosharem Reservoir to headwaters	3A	18.28	PS	Sediment	23-Sep-97	
Sevier River	UT16030002-002	Otter Creek-1	Otter Creek and tributaries Otter Creek Reservoir to Koosharem Reservior, except Box and Greenwitch Creeks.	3A	56.06	PS	Total Phosphorus	23-Sep-97	
Sevier River	UT16030002-002	Otter Creek-1	Otter Creek and tributaries Otter Creek Reservoir to Koosharem Reservior, except Box and Greenwitch Creeks.	3A	56.06	PS	Sediment	23-Sep-97	
Sevier River	UT16030002-003	Otter Creek-3	Greenwitch Creek and tributaries confluence w/Otter Creek to headwaters	3A	23.48	PS	Total Phosphorus	23-Sep-97	
Sevier River	UT16030002-003	Otter Creek-3	Greenwitch Creek and tributaries confluence w/Otter Creek to headwaters	3A	23.48	PS	Sediment	23-Sep-97	
Sevier River	UT16030002-004	Otter Creek-2	Box Creek and tributaries from confluence w/Otter Creek to headwaters	3A	19.28	PS	Total Phosphorus	23-Sep-97	
Sevier River	UT16030002-004	Otter Creek-2	Box Creek and tributaries from confluence w/Otter Creek to headwaters	3A	19.28	PS	Sediment	23-Sep-97	

Table B-4. Category 4A - All TMDLs Completed and Approved for Stream Assessment Unit.									
Watershed Management Unit	Assessment Unit ID	Assessment Unit Name	Assessment Unit Description	Beneficial Use Class	Stream Miles	Beneficial Use Support	Pollutant TMDL Completed	Date TMDL Approved	Comments
Sevier River	UT16030004-001	San Pitch-1	San Pitch River and tributaries from confluence w/Sevier River to tailwater of Gunnison Reservoir (excluding all of Six Mile Creek & Twelve Mile Creek above USFS boundary)	4	15.80	NS	Total Dissolved Solids	18-Nov-03	
Sevier River	UT16030004-005	San Pitch-2	San Pitch River and tributaries from Gunnison Reservoir to U132 crossing below USFS boundary	4	59.50	NS	Total Dissolved Solids	18-Nov-03	
Sevier River	UT16030004-011	San Pitch-4	Silver Creek and tributaries from confluence with San Pitch to headwaters	4	10.60	NS	Total Dissolved Solids	18-Nov-03	
Uinta	UT14060003-004	Uinta River-2	Uinta River and tributaries from the confluence with Dry Gulch to U.S. Highway 40	4	3.16	NS	Total Dissolved Solids	7-Oct-02	
Uinta	UT14060003-009	Dry Gulch Creek	Dry Gulch Creek and tributaries from confluence Duchesne River to headwaters.	4	88.14	NS	Total Dissolved Solids	7-Oct-02	
Uinta	UT14060003-012	Deep Creek	Deep Creek and tributaries from confluence Uintah River to headwaters.	4	24.84	PS	Total Dissolved Solids	7-Oct-02	
Weber River	UT16020101-010	Chalk Creek-1	confluence w/ Weber River to South Fork confluence	3A	7.67	PS	Total Phosphorus	23-Oct-97	
Weber River	UT16020101-010	Chalk Creek-1	confluence w/ Weber River to South Fork confluence	3A	7.67	PS	Sediment	23-Oct-97	
Weber River	UT16020101-011	South Fork Chalk Creek	confluence w/ Chalk Creek to headwaters and tributaries	3A	47.1	PS	Total Phosphorus	23-Oct-97	
Weber River	UT16020101-011	South Fork Chalk Creek	confluence w/ Chalk Creek to headwaters and tributaries	3A	47.1	PS	Sediment	23-Oct-97	
Weber River	UT16020101-012	Chalk Creek-2	South Fork confluence to Huff Creek confluence	3A	4.49	PS	Total Phosphorus	23-Oct-97	
Weber River	UT16020101-012	Chalk Creek-2	South Fork confluence to Huff Creek confluence	3A	4.49	PS	Sediment	23-Oct-97	
Weber River	UT16020101-013	Huff Creek	confluence w/ Chalk Creek to headwaters and tributaries	3A	16.39	PS	Sediment	23-Oct-97	
Weber River	UT16020101-014	Chalk Creek-3	Huff Creek confluence to East Fork confluence and tributaries	3A	13.73	PS	Sediment	23-Oct-97	

Table B-4. Category 4A - All TMDLs Completed and Approved for Stream Assessment Unit.									
Watershed	**Assessment**	**Assessment**	**Assessment**	**Beneficial**		**Beneficial**	**Pollutant**	**Date**	
Management	**Unit**	**Unit**	**Unit**	**Use**	**Stream**	**Use**	**TMDL**	**TMDL**	
Unit	**ID**	**Name**	**Description**	**Class**	**Miles**	**Support**	**Completed**	**Approved**	**Comments**
Weber River	UT16020101-016	Chalk Creek-4	East Fork Chalk Creek confluence to headwaters and tributaries	3A	47.3	PS	Sediment	23-Oct-97	
Weber River	UT16020102-026	East Canyon Creek-2	East Canyon Creek from East Canyon Reservoir to headwaters and tributaries	3A	34.66	NS	Organic enrichment/Low DO	23-May-00	
Weber River	UT16020102-026	East Canyon Creek-2	East Canyon Creek from East Canyon Reservoir to headwaters and tributaries	3A	34.66	NS	Total Phosphorus	1-Sep-00	

Table B-5. Category 4C - Stream Assessment Units Impaired by Pollution for Which a TMDL Is Not Required							
Watershed Management Unit	**Assessment Unit ID**	**Assessment Unit Name**	**Assessment Unit Decription**	**Beneficial Use Class**	**Stream Miles**	**Beneficial Use Support**	**Pollution**
Cedar/Beaver	UT16030007-002	Beaver River-2	Beaver River and tribs from Minersville Reservoir to USFS boundary	3A	38.60	PS	Other Habitat Alterations
Cedar/Beaver	UT16030007-002	Beaver River-2	Beaver River and tribs from Minersville Reservoir to USFS boundary	3A	38.60	PS	Noxious Aquatic Plants
Jordan River / Utah Lake	UT16020202-006	Diamond Fork-1	Diamond Fork Creek from and tributaries from confluence w/ Spanish Fork River to Sixth Water confluence	3A	20.00	PS	Flow alteration
Jordan River / Utah Lake	UT16020202-006	Diamond Fork-1	Diamond Fork Creek from and tributaries from confluence w/ Spanish Fork River to Sixth Water confluence	3A	20.00	PS	Other habitat alterations
Jordan River / Utah Lake	UT16020202-009	Sixth Water Creek	Sixth Water Creek and tributaries except Fifth Water and First Water Creeks and tributaries from confluence w/ Diamond Fork Creek to headwaters	3A	12.40	PS	Flow alteration
Jordan River / Utah Lake	UT16020202-009	Sixth Water Creek	Sixth Water Creek and tributaries except Fifth Water and First Water Creeks and tributaries from confluence w/ Diamond Fork Creek to headwaters	3A	12.40	PS	Other habitat alterations
Jordan River / Utah Lake	UT16020204-025	Parley Canyon Creek-1	Parley's Canyon Creek and tributaries from 1300 East to Mountain Dell Reservoir	3A	11.4	PS	Other habitat alterations
Sevier River	UT16030001-005	Sevier River-3	Sevier River and tributaries from Circleville Irrigation Diversion to Horse Valley Diversion	3A	20.38	PS	Other habitat alterations
Sevier River	UT16030001-007	Sevier River-2	Sevier River and tributaries from Horse Valley Bridge Diversion upstream to Long Canal excluding Panguitch Creek, Bear River Creek and their tributaries	3A	65.70	PS	Other habitat alterations
Sevier River	UT16030002-001	Otter Creek-4	Otter Creek and tributaries from Koosharem Reservoir to headwaters	3A	18.28	PS	Other habitat alterations
Sevier River	UT16030002-002	Otter Creek-1	Otter Creek and tributaries Otter Creek Reservoir to Koosharem Reservoir, except Box and Greenwitch Creeks.	3A	56.06	PS	Other habitat alterations
Sevier River	UT16030002-003	Otter Creek-3	Greenwitch Creek and tributaries confluence w/Otter Creek to headwaters	3A	23.48	PS	Other habitat alterations
Sevier River	UT16030002-004	Otter Creek-2	Box Creek and tributaries from confluence w/Otter Creek to headwaters	3A	19.28	PS	Other habitat alterations
Sevier River	UT16030003-012	Sevier River-17	Sevier River from Yuba Dam upstream to confluence with Salina Creek	3B	43.64	PS	Other habitat alterations

Table B-5. Category 4C - Stream Assessment Units Impaired by Pollution for Which a TMDL Is Not Required							
Watershed Management Unit	**Assessment Unit ID**	**Assessment Unit Name**	**Assessment Unit Decription**	**Beneficial Use Class**	**Stream Miles**	**Beneficial Use Support**	**Pollution**
Sevier River	UT16030005-025	Sevier River-20	Sevier River from U-132 at ther northern most point of the Sevier River (near Dog Valley Wash confluence) upstream to Yuba Dam.	3B	33.38	PS	Other habitat alterations
Sevier River	UT16030005-026	Sevier River-22	Sevier River from DMAD Reservoir upstram to U-132 crossing at the northern most point of the Sevier River (near Dog Valley Wash)	3B	41.45	PS	Other habitat alterations
Sevier River	UT16030005-027	Sevier River-24	Sevier River from Gunnison bend Reservoir to DMAD Reservoir	3B	18.73	PS	Other habitat alterations
Uinta	UT14060003-004	Uinta River-2	Uinta River and tributaries from the confluence with Dry Gulch to U.S. Highway 40	3B	3.16	PS	Other habitat alterations
Uinta	UT14060003-010	Uinta River-3	Uinta River and tributaries from U.S. Highway 40 to USFS boundary (excluding Whiterocks River and Deep Creek and their tributaries).	3A	64.18	PS	Flow alteration
Uinta	UT14060003-010	Uinta River-3	Uinta River and tributaries from U.S. Highway 40 to USFS boundary (excluding Whiterocks River and Deep Creek and their tributaries).	3A	64.18	PS	Other habitat alterations
Uinta	UT14060005-002 UT14060003-015	Lake Fork-2	Lake Fork River and tributaries from Pigeon Creek confluence to Yellowstone River confluence (includes Yellowstone River and	3A	31.64	PS	Other habitat alterations
Weber River	UT16020101-010	Chalk Creek-1	confluence w/ Weber River to South Fork confluence	3A	7.4	PS	Other habitat alterations
Weber River	UT16020101-011	South Fork Chalk Creek	confluence w/ Chalk Creek to headwaters and tributaries	3A	47.1	PS	Other habitat alterations
Weber River	UT16020101-012	Chalk Creek-2	South Fork confluence to Huff Creek confluence	3A	4.49	PS	Other habitat alterations
Weber River	UT16020101-013	Huff Creek	Huff Creek confluence to East Fork confluence and tributaries	3A	16.39	PS	Other habitat alterations
Weber River	UT16020101-014	Chalk Creek-3	Huff Creek confluence to East Fork confluence and tributaries	3A	13.73	PS	Other habitat alterations
Weber River	UT16020101-016	Chalk Creek-4	East Fork Chalk Creek confluence to headwaters and tributaries	3A	47.3	PS	Other habitat alterations

TABLE B-6. CATEGORY 5A - STREAM ASSESSMENT UNITS NEEDING TMDLS										
Assessment	ASSESSMENT	ASSESSMENT	ASSESSMENT							
Unit	UNIT	UNIT	UNIT	USE		USE		PROBABLE		TMDL
Name	ID	ID	DESCRIPTION	CLASS	MILES	SUPPORT	POLLUTANT	SOURCE	PRIOTIY	SCHEDULED
Bear River	UT16010101-006	Bear River-4	Bear River from Woodruff Creek to Utah-Wyoming border	3A	54.8	PS	Dissolved Oxygen	Source Unknown	High	Yes
Bear River	UT16010101-009	Bear River-5	Bear River from Utah-Wyoming border to Woodruff Creek confluence	3A	11.8	PS	Dissolved Oxygen	Source Unknown		
Bear River	UT16010101-016	Saleratus Creek	Saleratus Creek and tributaries from confluence with Woodruff Creek to headwaters	3A	23.4	PS	Dissolved Oxygen	Source Unknown	High	Yes
Colorado River Southeast	UT14010005-001	Colorado River-6	Colorado River from HUC 14010005/14030001 boundary to Colorado State Line	3B	3.84	NS	Selenium	Sources outside State Jurisdiction or Borders	Low	Sources Outside of State Borders
Colorado River Southeast	UT14030001-005	Colorado River-5	Colorado River from Dolores River confluence to HUC 14010005 boundary	3B	33.8	NS	Selenium	Sources outside State Jurisdiction or Borders	Low	Sources Outside of State Borders
Colorado River Southeast	UT14030005-009	Castle Creek	Castle Creek and tributareis from confluence with Colorado River to	3B	18.2	PS	Salinity/TDS/chlorides	Agriculture		
Colorado River Southeast	UT14030005-009	Castle Creek	Castle Creek and tributareis from confluence with Colorado River to headwaters	3B	18.2	PS	Salinity/TDS/chlorides	Natural Sources		
Colorado River West	UT14060007-007	Price River-3	Price River and tributaries from Coal Creek confluence to Carbon Canal Diversion	4	16.6	PS	Salinity/TDS/chlorides	Agriculture		
Colorado River West	UT14060007-007	Price River-3	Price River and tributaries from Coal Creek confluence to Carbon Canal Diversion	4	16.6	PS	Salinity/TDS/chlorides	Natural Sources		
Colorado River West	UT14060007-014	Price River-4	Price River and tributaries from near Woodside to Soldier Creek confluence	4	67.8	NS	Salinity/TDS/chlorides	Agriculture		
Colorado River West	UT14060007-014	Price River-4	Price River and tributaries from near Woodside to Soldier Creek confluence	4	67.8	NS	Salinity/TDS/chlorides	Natural Sources		
Colorado River West	UT14060007-015	Price River-5	Price River and tributaries from confluence w/Green River to near Woodside	4	24.5	NS	Salinity/TDS/chlorides	Agriculture		
Colorado River West	UT14060007-015	Price River-5	Price River and tributaries from confluence w/Green River to near Woodside	4	24.5	NS	Salinity/TDS/chlorides	Natural Sources		
Colorado River West	UT14060007-015	Price River-5	Price River and tributaries from confluence w/Green River to near Woodside	4	24.5	NS	Salinity/TDS/chlorides	Source Unknown		

TABLE B-6. CATEGORY 5A - STREAM ASSESSMENT UNITS NEEDING TMDLS										
Assessment Unit Name	ASSESSMENT UNIT ID	ASSESSMENT UNIT ID	ASSESSMENT UNIT DESCRIPTION	USE CLASS	MILES	USE SUPPORT	POLLUTANT	PROBABLE SOURCE	PRIOTIY	TMDL SCHEDULED
Colorado River West	UT14060009-004	Huntington Creek-2	Huntington Creek and tributaries from Highway 10 crossing to USFS boundary	4	19.2	NS	Salinity/TDS/chlorides	Agriculture		
Colorado River West	UT14060009-004	Huntington Creek-2	Huntington Creek and tributaries from Highway 10 crossing to USFS boundary	4	19.2	NS	Salinity/TDS/chlorides	Natural Sources		
Colorado River West	UT14060009-010	Huntington Creek-1	Huntington Creek from confluence with San Rafael River to Highway 10	4	25.8	NS	Salinity/TDS/chlorides	Agriculture		
Colorado River West	UT14060009-010	Huntington Creek-1	Huntington Creek from confluence with San Rafael River to Highway 10	4	25.8	NS	Salinity/TDS/chlorides	Natural Sources		
Colorado River West	UT14060009-011	Lower Cottonwood Creek	Cottonwood Creek from confluence w/Huntington Creek to Highway 57	4	17.8	NS	Salinity/TDS/chlorides	Agriculture		
Colorado River West	UT14060009-011	Lower Cottonwood Creek	Cottonwood Creek from confluence w/Huntington Creek to Highway 57	4	17.8	NS	Salinity/TDS/chlorides	Natural Sources		
Colorado River West	UT14060009-013	Upper San Rafael	San Rafael River from Buckhorn Crossing to confluence Huntington and Cottonwood Creeks	4	23.3	NS	Salinity/TDS/chlorides	Agriculture		
Colorado River West	UT14060009-013	Upper San Rafael	San Rafael River from Buckhorn Crossing to confluence Huntington and Cottonwood Creeks	4	23.3	NS	Salinity/TDS/chlorides	Natural Sources		
Colorado River West	UT14060009-014	Lower San Rafael	San Rafael from confluence w/ Green River to Buckhorn Crossing	4	82.8	NS	Salinity/TDS/chlorides	Agriculture		
Colorado River West	UT14060009-014	Lower San Rafael	San Rafael from confluence w/ Green River to Buckhorn Crossing	4	82.8	NS	Salinity/TDS/chlorides	Natural Sources		
Colorado River West	UT14070002-006	Middle Muddy	Muddy Creek and tributaries from Quitchipah Creek confluence to U-10 xing	4	20.1	NS	Salinity/TDS/chlorides	Agriculture		
Colorado River West	UT14070002-006	Middle Muddy	Muddy Creek and tributaries from Quitchipah Creek confluence to U-10 xing	4	20.1	NS	Salinity/TDS/chlorides	Natural Sources		
Colorado River West	UT14070002-007	Lower Quitchipah Creek	Quitchipah Creek from confluence of Ivie Cr. to U-10 xing	4	9.95	NS	Salinity/TDS/chlorides	Agriculture		
Colorado River West	UT14070002-007	Lower Quitchipah Creek	Quitchipah Creek from confluence of Ivie Cr. to U-10 xing	4	9.95	NS	Salinity/TDS/chlorides	Natural Sources		
Colorado River West	UT14070002-008	Lower Ivie Creek	Ivie Creek and tributaries from confluence w/Muddy River to U-10 highway	4	14	NS	Salinity/TDS/chlorides	Agriculture		

TABLE B-6. CATEGORY 5A - STREAM ASSESSMENT UNITS NEEDING TMDLS										
Assessment Unit Name	ASSESSMENT UNIT ID	ASSESSMENT UNIT ID	ASSESSMENT UNIT DESCRIPTION	USE CLASS	MILES	USE SUPPORT	POLLUTANT	PROBABLE SOURCE	PRIOTIY	TMDL SCHEDULED
Colorado River West	UT14070002-008	Lower Ivie Creek	Ivie Creek and tributaries from confluence w/Muddy River to U-10 highway	4	14	NS	Salinity/TDS/chlorides	Natural Sources		
Colorado River West	UT14070002-009	Lower Muddy Creek	Muddy Creek from confluence w/Freemont River to Ivie Creek confluence	3C	84.8	PS	Selenium	Agriculture		
Colorado River West	UT14070002-009	Lower Muddy Creek	Muddy Creek from confluence w/Freemont River to Ivie Creek confluence	3C	84.8	PS	Selenium	Natural		
Colorado River West	UT14070002-009	Lower Muddy Creek	Muddy Creek from confluence w/Freemont River to Ivie Creek confluence	4	84.8	NS	Salinity/TDS/chlorides	Agriculture		
Colorado River West	UT14070002-009	Lower Muddy Creek	Muddy Creek from confluence w/Freemont River to Ivie Creek confluence	4	84.8	NS	Salinity/TDS/chlorides	Natural Sources		
Colorado River West	UT14070005-012	Upper Escalante	Escalante River and some tributaries from Boulder Creek confluence to Birch Creek confluence	3A	26.8	PS	Temperatures	Source Unknown	High	Yes
Colorado River West	UT14070007-001	Paria River-1	Paria River from start of Paria River Gorge to headwaters	4	16.8	NS	Salinity/TDS/chlorides	Agriculture	High	Yes
Colorado River West	UT14070007-001	Paria River-1	Paria River from start of Paria River Gorge to headwaters	4	16.8	NS	Salinity/TDS/chlorides	Natural Sources	High	Yes
Colorado River West	UT14070007-005	Paria River-3	Paria River and tributaryies from Arizona-Utah state line to Cottonwood Creek confluence	4	9.23	NS	Salinity/TDS/chlorides	Natural Sources	High	Yes
Jordan River / Utah Lake	UT16020201-001	American Fork River-1	American Fork River and tributaries from Diversion at mouth of Canyon to Tibble Fork Res	2B	14.2	PS	pH	Source Unknown		
Jordan River / Utah Lake	UT16020201-001	American Fork River-1	American Fork River and tributaries from Diversion at mouth of Canyon to Tibble Fork Res	3A	14.2	PS	pH	Source Unknown		
Jordan River / Utah Lake	UT16020201-001	American Fork River-1	American Fork River and tributaries from Diversion at mouth of Canyon to Tibble Fork Res	4	14.2	PS	pH	Source Unknown		
Jordan River / Utah Lake	UT16020201-003	Currant Creek	Current Creek from mouth of Goshen Canyon to Mona Reservoir	3A	3.44	PS	Temperatures	Source Unknown		

TABLE B-6. CATEGORY 5A - STREAM ASSESSMENT UNITS NEEDING TMDLS										
Assessment Unit Name	ASSESSMENT UNIT ID	ASSESSMENT UNIT ID	ASSESSMENT UNIT DESCRIPTION	USE CLASS	MILES	USE SUPPORT	POLLUTANT	PROBABLE SOURCE	PRIOTIY	TMDL SCHEDULED
Jordan River / Utah Lake	UT16020202-012	Soldier Creek-1	Soldier Creek from confluence with Thistle Creek to confluence of Starvation Creek	3A	18.5	PS	Sediment	Agriculture	High	Yes
Jordan River / Utah Lake	UT16020202-012	Soldier Creek-1	Soldier Creek from confluence with Thistle Creek to confluence of Starvation Creek	3A	18.5	PS	Sediment	Hydromodification		
Jordan River / Utah Lake	UT16020202-012	Soldier Creek-1	Soldier Creek from confluence with Thistle Creek to confluence of Starvation Creek	3A	18.5	PS	Total Phosphorus	Agriculture	High	Yes
Jordan River / Utah Lake	UT16020202-026	Spring Creek	Spring Creek and tributaries from confluence w/ Beer Creek to headwaters	3A	11.1	NS	Temperatures	Source Unknown		
Jordan River / Utah Lake	UT16020204-001	Jordan River-1	Jordan River / Utah Lake River from Farmington Bay upstsream 6.1 miles	4	7.6	NS	Salinity/TDS/chlorides	Industrial Point Sources		
Jordan River / Utah Lake	UT16020204-001	Jordan River-1	Jordan River / Utah Lake River from Farmington Bay upstsream 6.1 miles	4	7.6	NS	Salinity/TDS/chlorides	Municipal Point Sources		
Jordan River / Utah Lake	UT16020204-001	Jordan River-1	Jordan River / Utah Lake River from Farmington Bay upstsream 6.1 miles	4	7.6	NS	Salinity/TDS/chlorides	Urban Runoff/Storm Sewers		
Jordan River / Utah Lake	UT16020204-001	Jordan River-1	Jordan River / Utah Lake River from Farmington Bay upstsream 6.1 miles	3B	7.6	NS	Dissolved Oxygen	Urban Runoff/Storm Sewers		
Jordan River / Utah Lake	UT16020204-001	Jordan River-1	Jordan River / Utah Lake River from Farmington Bay upstsream 6.1 miles	3B	7.6	NS	Dissolved Oxygen	Industrial Point Sources		
Jordan River / Utah Lake	UT16020204-001	Jordan River-1	Jordan River / Utah Lake River from Farmington Bay upstsream 6.1 miles	3B	7.6	NS	Dissolved Oxygen	Municipal Point Sources		
Jordan River / Utah Lake	UT16020204-002	Jordan River-2	Jordan River / Utah Lake River from 6.3 miles upstream to North Temple	3B	4.46	PS	Dissolved Oxygen	Industrial Point Sources		
Jordan River / Utah Lake	UT16020204-002	Jordan River-2	Jordan River / Utah Lake River from 6.3 miles upstream to North Temple	3B	4.46	PS	Dissolved Oxygen	Municipal Point Sources		
Jordan River / Utah Lake	UT16020204-002	Jordan River-2	Jordan River / Utah Lake River from 6.3 miles upstream to North Temple	3B	4.46	PS	Dissolved Oxygen	Urban Runoff/Storm Sewers		
Jordan River / Utah Lake	UT16020204-007	Jordan River-7	Jordan River / Utah Lake River from Bluffdale to Narrows	3A	4.13	PS	Temperatures	Source Unknown		
Jordan River / Utah Lake	UT16020204-012	Emigration Creek	Emigration Creek and tributaries from Foothill BLVD to headwaters	2B	4.29	PS	Pathogens	Natural Sources		
Jordan River / Utah Lake	UT16020204-012	Emigration Creek	Emigration Creek and tributaries from Foothill BLVD to headwaters	2B	4.29	PS	Pathogens	Urban Runoff/Storm Sewers		
Lower Colorado	UT15010008-001	Santa Clara-1	Santa Clara River: from confluence w/Virgin River to Gunlock Reservoir	4	23.7	NS	Salinity/TDS/chlorides	Agriculture		

TABLE B-6. CATEGORY 5A - STREAM ASSESSMENT UNITS NEEDING TMDLS										
Assessment Unit Name	ASSESSMENT UNIT ID	ASSESSMENT UNIT ID	ASSESSMENT UNIT DESCRIPTION	USE CLASS	MILES	USE SUPPORT	POLLUTANT	PROBABLE SOURCE	PRIOTIY	TMDL SCHEDULED
Lower Colorado	UT15010008-001	Santa Clara-1	Santa Clara River: from confluence w/Virgin River to Gunlock Reservoir	4	23.7	NS	Salinity/TDS/chlorides	Hydromodification		
Lower Colorado	UT15010008-001	Santa Clara-1	Santa Clara River: from confluence w/Virgin River to Gunlock Reservoir	4	23.7	NS	Salinity/TDS/chlorides	Natural Sources		
Lower Colorado	UT15010008-001	Santa Clara-1	Santa Clara River: from confluence w/Virgin River to Gunlock Reservoir	4	23.7	NS	Salinity/TDS/chlorides	Urban Runoff/Storm Sewers		
Lower Colorado	UT15010008-001	Santa Clara-1	Santa Clara River: from confluence w/Virgin River to Gunlock Reservoir	3B	23.7	NS	Selenium	Natural Sources		
Lower Colorado	UT15010008-001	Santa Clara-1	Santa Clara River: from confluence w/Virgin River to Gunlock Reservoir	3B	23.7	NS	Selenium	Hydromodification		
Lower Colorado	UT15010008-001	Santa Clara-1	Santa Clara River: from confluence w/Virgin River to Gunlock Reservoir	3B	23.7	NS	Selenium	Agriculture		
Lower Colorado	UT15010008-004	Virgin River-2	Virgin River and tributaries from Santa Clara River confluence to Quail Creek diversion (excludes Quail Creek and Leads Creek)	4	40.9	NS	Salinity/TDS/chlorides	Agriculture		
Lower Colorado	UT15010008-004	Virgin River-2	Virgin River and tributaries from Santa Clara River confluence to Quail Creek diversion (excludes Quail Creek and Leads Creek)	4	40.9	NS	Salinity/TDS/chlorides	Natural Sources		
Lower Colorado	UT15010008-014	North Creek	North Creek and tributaries from confluence with Virgin River to headwaters	4	32.7	NS	Salinity/TDS/chlorides	Agriculture		
Lower Colorado	UT15010008-014	North Creek	North Creek and tributaries from confluence with Virgin River to headwaters	4	32.7	NS	Salinity/TDS/chlorides	Natural Sources		
Lower Colorado	UT15010010-001	Virgin River-1	Virgin River from state line to Santa Clara Confluence	4	15.2	NS	Salinity/TDS/chlorides	Agriculture		
Lower Colorado	UT15010010-001	Virgin River-1	Virgin River from state line to Santa Clara Confluence	4	15.2	NS	Salinity/TDS/chlorides	Natural Sources		
Sevier River	UT16030001-005	Sevier River-3	Sevier River and tributaries from Circleville Irrigation Diversion to Horse Valley Diversion	3A	20.4	PS	Sediment	Agriculture		
Sevier River	UT16030001-005	Sevier River-3	Sevier River and tributaries from Circleville Irrigation Diversion to Horse Valley Diversion	3A	20.4	PS	Sediment	Habitat Modification (other than Hydromodification)		

TABLE B-6. CATEGORY 5A - STREAM ASSESSMENT UNITS NEEDING TMDLS										
Assessment	ASSESSMENT	ASSESSMENT	ASSESSMENT							
Unit	UNIT	UNIT	UNIT	USE		USE		PROBABLE		TMDL
Name	ID	ID	DESCRIPTION	CLASS	MILES	SUPPORT	POLLUTANT	SOURCE	PRIOTIY	SCHEDULED
Sevier River	UT16030001-005	Sevier River-3	Sevier River and tributaries from Circleville Irrigation Diversion to Horse Valley Diversion	3A	20.4	PS	Sediment	Hydromodification		
Sevier River	UT16030001-005	Sevier River-3	Sevier River and tributaries from Circleville Irrigation Diversion to Horse Valley Diversion	3A	20.4	PS	Total Phosphorus	Agriculture		
Sevier River	UT16030001-005	Sevier River-3	Sevier River and tributaries from Circleville Irrigation Diversion to Horse Valley Diversion	3A	20.4	PS	Total Phosphorus	Aquaculture		
Sevier River	UT16030001-005	Sevier River-3	Sevier River and tributaries from Circleville Irrigation Diversion to Horse Valley Diversion	3A	20.4	PS	Total Phosphorus	Habitat Modification (other than Hydromodification)		
Sevier River	UT16030001-005	Sevier River-3	Sevier River and tributaries from Circleville Irrigation Diversion to Horse Valley Diversion	3A	20.4	PS	Total Phosphorus	Hydromodification		
Sevier River	UT16030001-007	Sevier River-2	Sevier River and tributaries from Horse Valley Bridge Diversion upstream to Long Canal excluding Panguitch Creek% Bear River Creek and their tributaries	3A	65.7	PS	Sediment	Agriculture		
Sevier River	UT16030001-007	Sevier River-2	Sevier River and tributaries from Horse Valley Bridge Diversion upstream to Long Canal excluding Panguitch Creek% Bear River Creek and their tributaries	3A	65.7	PS	Sediment	Habitat Modification (other than Hydromodification)		
Sevier River	UT16030001-007	Sevier River-2	Sevier River and tributaries from Horse Valley Bridge Diversion upstream to Long Canal excluding Panguitch Creek% Bear River Creek and their tributaries	3A	65.7	PS	Sediment	Hydromodification		
Sevier River	UT16030001-007	Sevier River-2	Sevier River and tributaries from Horse Valley Bridge Diversion upstream to Long Canal excluding Panguitch Creek% Bear River Creek and their tributaries	3A	65.7	PS	Total Phosphorus	Agriculture		
Sevier River	UT16030001-007	Sevier River-2	Sevier River and tributaries from Horse Valley Bridge Diversion upstream to Long Canal excluding Panguitch Creek% Bear River Creek and their tributaries	3A	65.7	PS	Total Phosphorus	Habitat Modification (other than Hydromodification)		

TABLE B-6. CATEGORY 5A - STREAM ASSESSMENT UNITS NEEDING TMDLS										
Assessment Unit Name	ASSESSMENT UNIT ID	ASSESSMENT UNIT ID	ASSESSMENT UNIT DESCRIPTION	USE CLASS	MILES	USE SUPPORT	POLLUTANT	PROBABLE SOURCE	PRIOTIY	TMDL SCHEDULED
Sevier River	UT16030001-007	Sevier River-2	Sevier River and tributaries from Horse Valley Bridge Diversion upstream to Long Canal excluding Panguitch Creek% Bear River Creek and their tributaries	3A	65.7	PS	Total Phosphorus	Hydromodification		
Sevier River	UT16030001-007	Sevier River-2	Sevier River and tributaries from Horse Valley Bridge Diversion upstream to Long Canal excluding Panguitch Creek% Bear River Creek and their tributaries	3A	65.7	PS	Total Phosphorus	Aquaculture		
Sevier River	UT16030001-012	Sevier River-1	Sevier River and tributaries from Long Canal to Mammouth Creek confluence	3A	27.1	PS	Sediment	Agriculture		
Sevier River	UT16030001-012	Sevier River-1	Sevier River and tributaries from Long Canal to Mammouth Creek confluence	3A	27.1	PS	Sediment	Habitat Modification (other than Hydromodification)		
Sevier River	UT16030001-012	Sevier River-1	Sevier River and tributaries from Long Canal to Mammouth Creek confluence	3A	27.1	PS	Sediment	Hydromodification		
Sevier River	UT16030001-012	Sevier River-1	Sevier River and tributaries from Long Canal to Mammouth Creek confluence	3A	27.1	PS	Total Phosphorus	Agriculture		
Sevier River	UT16030001-012	Sevier River-1	Sevier River and tributaries from Long Canal to Mammouth Creek confluence	3A	27.1	PS	Total Phosphorus	Habitat Modification (other than Hydromodification)		
Sevier River	UT16030001-012	Sevier River-1	Sevier River and tributaries from Long Canal to Mammouth Creek confluence	3A	27.1	PS	Total Phosphorus	Hydromodification		
Sevier River	UT16030001-012	Sevier River-1	Sevier River and tributaries from Long Canal to Mammouth Creek confluence	3A	27.1	PS	Total Phosphorus	Aquaculture		
Sevier River	UT16030002-005	East Fork Sevier River-4	East Fork Sevier River and tributaries from confluence with Sevier River upstream to Antimony Creek confluence% excluding Otter Creek and tributaries.	3A	25.3	PS	Total Phosphorus	Agriculture	High	Yes
Sevier River	UT16030002-005	East Fork Sevier River-4	East Fork Sevier River and tributaries from confluence with Sevier River upstream to Antimony Creek confluence% excluding Otter Creek and tributaries.	3A	25.3	PS	Total Phosphorus	Habitat Modification (other than Hydromodification)	High	Yes

TABLE B-6. CATEGORY 5A - STREAM ASSESSMENT UNITS NEEDING TMDLS										
Assessment	ASSESSMENT	ASSESSMENT	ASSESSMENT							
Unit	UNIT	UNIT	UNIT	USE		USE		PROBABLE		TMDL
Name	ID	ID	DESCRIPTION	CLASS	MILES	SUPPORT	POLLUTANT	SOURCE	PRIOTIY	SCHEDULED
Sevier River	UT16030003-003	Salina Creek-1	Salina Creek and tributaries from confluence w/Sevier River to USFS boundary	4	4.2	NS	Salinity/TDS/chlorides	Agriculture		
Sevier River	UT16030003-003	Salina Creek-1	Salina Creek and tributaries from confluence w/Sevier River to USFS boundary	4	4.2	NS	Salinity/TDS/chlorides	Hydromodification		
Sevier River	UT16030003-003	Salina Creek-1	Salina Creek and tributaries from confluence w/Sevier River to USFS boundary	4	4.2	NS	Salinity/TDS/chlorides	Natural Sources		
Sevier River	UT16030003-005	Lost Creek-1	Lost Creek and tributaries from confluence w/Sevier River upstream ~ 6 miles	4	5.7	NS	Salinity/TDS/chlorides	Hydromodification		
Sevier River	UT16030003-005	Lost Creek-1	Lost Creek and tributaries from confluence w/Sevier River upstream ~ 6 miles	4	5.7	NS	Salinity/TDS/chlorides	Natural Sources		
Sevier River	UT16030003-012	Sevier River-17	Sevier River from Yuba Dam upstream to confluence with Salina Creek	3B	43.6	PS	Sediment	Hydromodification		
Sevier River	UT16030003-012	Sevier River-17	Sevier River from Yuba Dam upstream to confluence with Salina Creek	3B	43.6	PS	Sediment	Natural Sources		
Sevier River	UT16030003-012	Sevier River-17	Sevier River from Yuba Dam upstream to confluence with Salina Creek	3B	43.6	PS	Sediment	Agriculture		
Sevier River	UT16030003-012	Sevier River-17	Sevier River from Yuba Dam upstream to confluence with Salina Creek	3B	43.6	PS	Total Phosphorus	Agriculture		
Sevier River	UT16030003-012	Sevier River-17	Sevier River from Yuba Dam upstream to confluence with Salina Creek	3B	43.6	PS	Total Phosphorus	Natural Sources		
Sevier River	UT16030003-012	Sevier River-17	Sevier River from Yuba Dam upstream to confluence with Salina Creek	4	43.6	NS	Salinity/TDS/chlorides	Agriculture		
Sevier River	UT16030003-012	Sevier River-17	Sevier River from Yuba Dam upstream to confluence with Salina Creek	4	43.6	NS	Salinity/TDS/chlorides	Natural Sources		
Sevier River	UT16030003-027	Peterson Creek	Petersen Creek and tributaries from confluence with Sevier River to USFS boundary	4	8.5	NS	Salinity/TDS/chlorides	Agriculture		
Sevier River	UT16030003-027	Peterson Creek	Petersen Creek and tributaries from confluence with Sevier River to USFS boundary	4	8.5	NS	Salinity/TDS/chlorides	Natural Sources		
Sevier River	UT16030005-022	Chicken Creek-2	Chicken Creek and tributaries from confluence w/Sevier River to Levan	4	4.7	NS	Salinity/TDS/chlorides	Hydromodification		

TABLE B-6. CATEGORY 5A - STREAM ASSESSMENT UNITS NEEDING TMDLS										
Assessment	ASSESSMENT	ASSESSMENT	ASSESSMENT							
Unit	UNIT	UNIT	UNIT	USE		USE		PROBABLE		TMDL
Name	ID	ID	DESCRIPTION	CLASS	MILES	SUPPORT	POLLUTANT	SOURCE	PRIOTIY	SCHEDULED
Sevier River	UT16030005-022	Chicken Creek-2	Chicken Creek and tributaries from confluence w/Sevier River to Levan	4	4.7	NS	Salinity/TDS/chlorides	Natural Sources		
Sevier River	UT16030005-025	Sevier River-20	Sevier River from U-132 at ther northern most point of the Sevier River (near Dog Valley Wash confluence) upstream to Yuba Dam.	3B	33.4	PS	Sediment	Agriculture		
Sevier River	UT16030005-025	Sevier River-20	Sevier River from U-132 at ther northern most point of the Sevier River (near Dog Valley Wash confluence) upstream to Yuba Dam.	3B	33.4	PS	Sediment	Hydromodification		
Sevier River	UT16030005-025	Sevier River-20	Sevier River from U-132 at ther northern most point of the Sevier River (near Dog Valley Wash confluence) upstream to Yuba Dam.	3B	33.4	PS	Sediment	Natural Sources		
Sevier River	UT16030005-025	Sevier River-20	Sevier River from U-132 at ther northern most point of the Sevier River (near Dog Valley Wash confluence) upstream to Yuba Dam.	3B	33.4	PS	Total Phosphorus	Agriculture		
Sevier River	UT16030005-026	Sevier River-22	Sevier River from DMAD Reservoir upstram to U-132 crossing at the northern most point of the Sevier River (near Dog Valley Wash)	4	41.5	PS	Salinity/TDS/chlorides	Natural Sources		
Sevier River	UT16030005-026	Sevier River-22	Sevier River from DMAD Reservoir upstram to U-132 crossing at the northern most point of the Sevier River (near Dog Valley Wash)	4	41.5	PS	Salinity/TDS/chlorides	Agriculture		
Sevier River	UT16030005-026	Sevier River-22	Sevier River from DMAD Reservoir upstram to U-132 crossing at the northern most point of the Sevier River (near Dog Valley Wash)	3B	41.5	PS	Sediment	Agriculture		
Sevier River	UT16030005-026	Sevier River-22	Sevier River from DMAD Reservoir upstram to U-132 crossing at the northern most point of the Sevier River (near Dog Valley Wash)	3B	41.5	PS	Sediment	Hydromodification		
Sevier River	UT16030005-026	Sevier River-22	Sevier River from DMAD Reservoir upstram to U-132 crossing at the northern most point of the Sevier River (near Dog Valley Wash)	3B	41.5	PS	Sediment	Natural Sources		

TABLE B-6. CATEGORY 5A - STREAM ASSESSMENT UNITS NEEDING TMDLS										
Assessment Unit Name	ASSESSMENT UNIT ID	ASSESSMENT UNIT ID	ASSESSMENT UNIT DESCRIPTION	USE CLASS	MILES	USE SUPPORT	POLLUTANT	PROBABLE SOURCE	PRIOTIY	TMDL SCHEDULED
Sevier River	UT16030005-026	Sevier River-22	Sevier River from DMAD Reservoir upstram to U-132 crossing at the northern most point of the Sevier River (near Dog Valley Wash)	3B	41.5	PS	Total Phosphorus	Agriculture		
Sevier River	UT16030005-026	Sevier River-22	Sevier River from DMAD Reservoir upstram to U-132 crossing at the northern most point of the Sevier River (near Dog Valley Wash)	3B	41.5	PS	Total Phosphorus	Natural Sources		
Sevier River	UT16030005-027	Sevier River-24	Sevier River from Gunnison bend Reservoir to DMAD Reservoir	3B	18.7	PS	Sediment	Agriculture		
Sevier River	UT16030005-027	Sevier River-24	Sevier River from Gunnison bend Reservoir to DMAD Reservoir	3B	18.7	PS	Sediment	Natural Sources		
Sevier River	UT16030005-027	Sevier River-24	Sevier River from Gunnison bend Reservoir to DMAD Reservoir	3B	18.7	PS	Total Phosphorus	Agriculture		
Sevier River	UT16030005-027	Sevier River-24	Sevier River from Gunnison bend Reservoir to DMAD Reservoir	4	18.7	NS	Salinity/TDS/chlorides	Agriculture		
Sevier River	UT16030005-027	Sevier River-24	Sevier River from Gunnison bend Reservoir to DMAD Reservoir	4	18.7	NS	Salinity/TDS/chlorides	Hydromodification		
Sevier River	UT16030005-027	Sevier River-24	Sevier River from Gunnison bend Reservoir to DMAD Reservoir	4	18.7	NS	Salinity/TDS/chlorides	Natural Sources		
Sevier River	UT16030005-028	Sevier River-25	Sevier River from Crear Lake to Gunnison Bend Reservoir	4	18	NS	Salinity/TDS/chlorides	Agriculture		
Sevier River	UT16030005-028	Sevier River-25	Sevier River from Crear Lake to Gunnison Bend Reservoir	4	18	NS	Salinity/TDS/chlorides	Hydromodification		
Sevier River	UT16030005-028	Sevier River-25	Sevier River from Crear Lake to Gunnison Bend Reservoir	4	18	NS	Salinity/TDS/chlorides	Natural Sources		
Uinta	UT14060002-001	Lower Ashley Creek	Ashley Creek and tributaries from confluece Green River Vernal Sewage Lagoons.	4	8.09	NS	Salinity/TDS/chlorides	Agriculture		
Uinta	UT14060002-001	Lower Ashley Creek	Ashley Creek and tributaries from confluece Green River Vernal Sewage Lagoons.	4	8.09	NS	Salinity/TDS/chlorides	Industrial Point Sources		
Uinta	UT14060002-001	Lower Ashley Creek	Ashley Creek and tributaries from confluece Green River Vernal Sewage Lagoons.	4	8.09	NS	Salinity/TDS/chlorides	Municipal Point Sources		
Uinta	UT14060002-001	Lower Ashley Creek	Ashley Creek and tributaries from confluece Green River Vernal Sewage Lagoons.	4	8.09	NS	Salinity/TDS/chlorides	Natural Sources		

TABLE B-6. CATEGORY 5A - STREAM ASSESSMENT UNITS NEEDING TMDLS										
Assessment	ASSESSMENT	ASSESSMENT	ASSESSMENT							
Unit	UNIT	UNIT	UNIT	USE		USE		PROBABLE		TMDL
Name	ID	ID	DESCRIPTION	CLASS	MILES	SUPPORT	POLLUTANT	SOURCE	PRIOTIY	SCHEDULED
Uinta	UT14060002-001	Lower Ashley Creek	Ashley Creek and tributaries from confluece Green River Vernal Sewage Lagoons.	3B	8.09	NS	Selenium	Agriculture		
Uinta	UT14060002-001	Lower Ashley Creek	Ashley Creek and tributaries from confluece Green River Vernal Sewage Lagoons.	3B	8.09	NS	Selenium	Municipal Point Sources		
Uinta	UT14060002-001	Lower Ashley Creek	Ashley Creek and tributaries from confluece Green River Vernal Sewage Lagoons.	3B	8.09	NS	Selenium	Natural Sources		
Uinta	UT14060002-003	Brush Creek	Brush Creek and tributaries from confluence Green River to Red Fleet Dam from not including Little Brush Creek.	3B	23.86	PS	Selenium	Agriculture		
Uinta	UT14060002-003	Brush Creek	Brush Creek and tributaries from confluence Green River to Red Fleet Dam from not including Little Brush Creek.	3B	23.86	PS	Selenium	Natural Sources		
Uinta	UT14060003-001	Duchesne River-1	Duchesne River and tributaries from confluence Green River to Randlett.	4	19.5	PS	Salinity/TDS/chlorides	Agriculture		
Uinta	UT14060003-001	Duchesne River-1	Duchesne River and tributaries from confluence Green River to Randlett.	4	19.5	PS	Salinity/TDS/chlorides	Natural Sources		
Uinta	UT14060003-002	Duchesne River-2	Duchesne River from Randlett to Myton.	4	31.6	PS	Salinity/TDS/chlorides	Agriculture		
Uinta	UT14060003-002	Duchesne River-2	Duchesne River from Randlett to Myton.	4	31.6	PS	Salinity/TDS/chlorides	Natural Sources		
Uinta	UT14060003-005	Antelope Creek	Antelope Creek and tributaries confluence Duchesne River to headwaters.	4	31.5	NS	Salinity/TDS/chlorides	Agriculture		
Uinta	UT14060003-005	Antelope Creek	Antelope Creek and tributaries confluence Duchesne River to headwaters.	4	31.5	NS	Salinity/TDS/chlorides	Habitat Modification (other than Hydromodification)		
Uinta	UT14060003-005	Antelope Creek	Antelope Creek and tributaries confluence Duchesne River to headwaters.	4	31.5	NS	Salinity/TDS/chlorides	Natural Sources		
Uinta	UT14060003-008	Lake Fork-1	Lake Fork River and tributaries confluence Duchesne River to Pigeon Water Creek confluence.	3A	19.7	PS	Sediment	Agriculture		

TABLE B-6. CATEGORY 5A - STREAM ASSESSMENT UNITS NEEDING TMDLS										
Assessment	ASSESSMENT	ASSESSMENT	ASSESSMENT							
Unit	UNIT	UNIT	UNIT	USE		USE		PROBABLE		TMDL
Name	ID	ID	DESCRIPTION	CLASS	MILES	SUPPORT	POLLUTANT	SOURCE	PRIOTIY	SCHEDULED
Uinta	UT14060003-008	Lake Fork-1	Lake Fork River and tributaries confluence Duchesne River to Pigeon Water Creek confluence.	3A	19.7	PS	Sediment	Habitat Modification (other than Hydromodification)		
Uinta	UT14060003-008	Lake Fork-1	Lake Fork River and tributaries confluence Duchesne River to Pigeon Water Creek confluence.	3A	19.7	PS	Sediment	Hydromodification		
Uinta	UT14060003-008	Lake Fork-1	Lake Fork River and tributaries confluence Duchesne River to Pigeon Water Creek confluence.	4	19.7	PS	Salinity/TDS/chlorides	Agriculture		
Uinta	UT14060003-008	Lake Fork-1	Lake Fork River and tributaries confluence Duchesne River to Pigeon Water Creek confluence.	4	19.7	PS	Salinity/TDS/chlorides	Natural Sources		
Uinta	UT14060004-002	Indian Canyon Creek	Indian Canyon Creek and tributaries confluence Strawberry River to headwaters.	4	44	NS	Salinity/TDS/chlorides	Agriculture		
Uinta	UT14060004-002	Indian Canyon Creek	Indian Canyon Creek and tributaries confluence Strawberry River to headwaters.	4	44	NS	Salinity/TDS/chlorides	Habitat Modification (other than Hydromodification)		
Uinta	UT14060004-002	Indian Canyon Creek	Indian Canyon Creek and tributaries confluence Strawberry River to headwaters.	4	44	NS	Salinity/TDS/chlorides	Natural Sources		
Uinta	UT14060005-002	Pariette Draw Creek	Pariette Draw Creek and tributaries confluence Green River to headwaters.	4	54.5	NS	Boron	Agriculture		
Uinta	UT14060005-002	Pariette Draw Creek	Pariette Draw Creek and tributaries confluence Green River to headwaters.	4	54.5	NS	Boron	Natural Sources		
Uinta	UT14060005-002	Pariette Draw Creek	Pariette Draw Creek and tributaries confluence Green River to headwaters.	4	54.5	NS	Salinity/TDS/chlorides	Agriculture		
Uinta	UT14060005-002	Pariette Draw Creek	Pariette Draw Creek and tributaries confluence Green River to headwaters.	4	54.5	NS	Salinity/TDS/chlorides	Natural Sources		
Uinta	UT14060005-002	Pariette Draw Creek	Pariette Draw Creek and tributaries confluence Green River to headwaters.	3A	54.5	NS	Selenium	Agriculture		
Uinta	UT14060005-002	Pariette Draw Creek	Pariette Draw Creek and tributaries confluence Green River to headwaters.	3A	54.5	NS	Selenium	Natural Sources		
Uinta	UT14060005-003	Ninemile	Nine Mile Creek and tributaris from confluence Green River to headwaters	3A	119	PS	Temperature	Agriculture		

TABLE B-6. CATEGORY 5A - STREAM ASSESSMENT UNITS NEEDING TMDLS										
Assessment Unit Name	ASSESSMENT UNIT ID	ASSESSMENT UNIT ID	ASSESSMENT UNIT DESCRIPTION	USE CLASS	MILES	USE SUPPORT	POLLUTANT	PROBABLE SOURCE	PRIOTIY	TMDL SCHEDULED
Uinta	UT14060005-003	Ninemile	Nine Mile Creek and tributaris from confluence Green River to headwaters	3A	119	PS	Temperature	Habitat Modification (other than Hydromodification)		
Uinta	UT14060006-001	Willow Creek	Willow Creek and tributaries confluence Green River to Meadow Creek confluence (excluding Hill Creek).	4	57.2	PS	Salinity/TDS/chlorides	Agriculture		
Uinta	UT14060006-001	Willow Creek	Willow Creek and tributaries confluence Green River to Meadow Creek confluence (excluding Hill Creek).	4	57.2	PS	Salinity/TDS/chlorides	Habitat Modification (other than Hydromodification)		
Uinta	UT14060006-001	Willow Creek	Willow Creek and tributaries confluence Green River to Meadow Creek confluence (excluding Hill Creek).	4	57.2	PS	Salinity/TDS/chlorides	Natural Sources		
Weber River	UT16020101-007	Echo Creek	Echo Creek and tributaries from confluence w/ Weber River to headwaters	3A	44.2	PS	Sediment	Agriculture	High	Yes
Weber River	UT16020101-007	Echo Creek	Echo Creek and tributaries from confluence w/ Weber River to headwaters	3A	44.2	PS	Sediment	Hydromodification	High	Yes
Weber River	UT16020101-020	Silver Creek	Silver Creek from confluence w/Weber River to headwaters-tribs	3A	21.4	NS	Cadmium	Resource Extraction		
Weber River	UT16020101-020	Silver Creek	Silver Creek from confluence w/Weber River to headwaters-tribs	3A	21.4	NS	Zinc	Resource Extraction		

Table B-7 . Category 5B -Request for Removal of Stream Assessment Units Meeting Standards, Having Approved TMDLs for Some But Not All Pollutants, or Assessment Unit Delineation Change That Resulted In New Assessment .									
Watershed Management Unit	**Assessment Unit ID**	**Assessment Unit Name**	**Assessment Unit Description**	**Beneficial Use Class**	**Stream Miles**	**Beneficial Use Support**	**Pollutant or Pollution**	**Evaluation Information**	**Date**
			Assessment Unit Having Some Approved TMDLS						
Uinta	UT14060003-003	Uinta River-1	Uinta River and tributaries from the Duchesne river confluence to the Dry Gulch confluence	4	8.82	NS	Total Dissolved Solids	Approved TMDL	7-Oct-02
			Assessment Units Currently Meeting Standards						
Lower Colorado	UT15010008-001	Santa Clara-1	Santa Clara River: from confluence w/Virgin River to Gunlock Reservoir	3A	23.49	FS	Temperature	Most recent survey (2001-2002), temperature was meeting standard	
Colorado River Southeast	UT14080203-008	North Creek	North Creek and tributaries from confluence w/Montezuma Creek to headwaters	2B,3A,4	12.72	FS	pH	Most recent survey (2002-2003), pH was meeting standard	
Colorado River Southeast	UT14030005-002	Indian Creek-2	Indian Creek from Newspaper Rock north boundary to headwaters	3A	14.72	FS	pH	Most recent survey (2002-2003), pH was meeting standard	
Uinta	UT14060003-008	Lake Fork-1	Lake Fork River and tributaries from confluence Duchesne River to Pigeon Water Creek confluence.	4	22.36	FS	Temperature	Most recent survey (2000-2001), temperature was meeting standard.	
Jordan River / Utah Lake	UT16020201-002	American Fork River-2	American Fork River and tributaries from Tibble Fork Dam to headwaters	3A	30.80	FS	Arsenic	Health advisory for arsenic in fish tissue was removed from this assessment unit.	
Lower Colorado	UT15010010-002	Beaver Dam Wash	Beaver Dam Wash from Matoqua to headwaters	3B	8.51	FS	Temperature	Study by DWQ in 2001, classification changed from 3A to 3B, meets temperature standard	
Colorado River Southeast	UT14080201-004	Johnson Creek	Johnson Creek and tributaries from confluence with Recapture Creek to headwaters	2B,1C,3A,4	3.9	FS	pH	Survey of 2002-2003, pH meeting standard, not listed for temperature because extreme drought was a natural event. Temperature violations evaluated as natural because of extreme drought.	

Table B-7 . Category 5B -Request for Removal of Stream Assessment Units Meeting Standards, Having Approved TMDLs for Some But Not All Pollutants, or Assessment Unit Delineation Change That Resulted In New Assessment .									
Watershed Management Unit	**Assessment Unit ID**	**Assessment Unit Name**	**Assessment Unit Description**	**Beneficial Use Class**	**Stream Miles**	**Beneficial Use Support**	**Pollutant or Pollution**	**Evaluation Information**	**Date**
Colorado River West	UT14060007-013	Upper Grassy Trail Creek	Grassy Trail Creek from confluence w/ Price River to Grassy Trail Creek Reservoir	2B,3C,4	13.52	FS	pH	Assessment of 2002-2003, pH meeting standards.	
Colorado River West	UT14060007-015	Price River-5	Price River and tributaries from confluence w/Green River to Woodside	3C	25.53	FS	Iron	Data used to list were not adequate to list for iron	
Colorado River	UT14060007-015	Price River-5	Price River and tributaries from confluence w/Green River to Woodside	3C	25.53	FS	Dissolved Oxygen	Most recent assessment, DO was meeting standard	
			Assessment Unit Delineation Changed						
Lower Colorado	UT15010003-003	Kanab Creek-2	Kanab Creek from highway 189 to headwaters	3A	6.9	NA	Temperature	Assessment Unit was incorrectly delineated for 2002 303(d) list. Assessment Unit re-delineated and was not assessed because of lack of data.	
Colorado River West	UT14060007-006	Gordon Creek	Gordan Creek and tributaries from confluence w/Price River to headwaters	4	51.07	NA	Total Dissolved Solids	Monitoring site was on a small tributary to Gordon Creek for years, not enough data at new site to make assessment	

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