



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O01R-01-BAC

South Fork Holston River and Tributaries

Location: This segment includes the mainstem South Fork Holston River from the headwaters downstream to the South Holston Lake backwaters, Bishop Branch from the confluence with South Fork Holston River upstream to the confluence with Parker Branch, Grosses Creek from the headwaters downstream to the confluence with South Fork Holston River and Slemp Creek from the headwaters downstream to the confluence with the South Fork Holston River.

City / County: Smyth Co. Washington Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Fecal Coliform / 5A

The AWQM station located at 6CSFH075.61 had a 21% exceedance of the E.coli water quality standard, 6CSFH110.45 had a 25% exceedance, 6CSFH097.42 had a 23% exceedance of the E. coli water quality standard and station 6CSFH093.01 had a 33% exceedance of the bacteria standard. Station 6CGRC000.68 had a 58% exceedance of the E. coli water quality standard, station 6CBSB000.10 had a 58% exceedance and 6CSLM000.87 had a 66% exceedance of the E. coli water quality standard.

South Fork Holston River and Tributaries	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			45.12

South Fork Holston River and Tributaries	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			15.72

Sources:

Grazing in Riparian or
Shoreline Zones

Livestock (Grazing or
Feeding Operations)

Rural (Residential Areas)

Source Unknown

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O01R-02-PH

Hurricane Creek Tributary

Location: This is an unnamed tributary of Hurricane Creek in Smyth County north of the Appalachian Trail.

City / County: Smyth Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

DELISTED-NATURAL CONDITIONS: CAUSE CATEGORY 5C; pH measurements at station 6CXEE000.72 failed to meet the pH water quality standard.

Hurricane Creek Tributary

Aquatic Life

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

pH - Total Impaired Size by Water Type:

1.12

Sources:

Natural Sources



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O02R-01-HG

South Fork Holston River

Location: This segment extends from the Grosses Creek confluence downstream to Rush Creek.

City / County: Washington Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

Two samples at station 6CSFH0088.91 exceeded the Mercury screening values in 2007.

South Fork Holston River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Fish Consumption			
Mercury in Fish Tissue - Total Impaired Size by Water Type:			6.14

Sources:

Atmospheric Deposition -
Toxics



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O02R-03-HG Beaverdam Creek

Location: This segment extends from the Tennessee state line upstream to its confluence with the South Fork Holston River.

City / County: Washington Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

The Virginia Department of Health's level of concern was exceeded for Mercury in one fish tissue sample and the Department of Environmental Quality's screening value for Mercury was exceeded in an additional sample.

Beaverdam Creek

Fish Consumption

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type:

2.01

Sources:

Atmospheric Deposition -
Toxics



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O02R-05-BAC Whitetop Laurel Creek

Location: Mainstem from Pennington Branch confluence upstream of Konnarock, downstream to the Green Cove Creek confluence.

City / County: Washington Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6CWLC011.55 had a 16% exceedance of the E. coli water quality standard.

Whitetop Laurel Creek

Recreation

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Escherichia coli - Total Impaired Size by Water Type:

3.80

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O03R-01-BEN **Middle Fork Holston River**

Location: This segment includes the Middle Fork Holston River from the headwaters downstream to the Dutton Branch confluence.

City / County: Smyth Co. Wythe Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Probabilistic Monitoring station 6CMFH055.88 was impaired based on the VSCI scores.

Middle Fork Holston River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			3.42

Sources:

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O03R-02-BAC **Bear Creek**

Location: Middle Fork Holston River tributary, west of Atkins, parallel to Route 622.

City / County: Smyth Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

AWQM station at 6CBER000.17 had a 33% exceedance of the E. coli water quality standard.

Bear Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			6.51

Sources:

Rural (Residential Areas) Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O03R-03-BAC Staley Creek

Location: This segment is a Middle Fork Holston River tributary, parallel to Route 16, south of Marion to the National Forest border.

City / County: Smyth Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

AWQM station at 6CSTA000.05 has a 63% exceedance of the E. coli water quality standard.

Staley Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			6.59

Sources:

Rural (Residential Areas)



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O04L-01-HG Hungry Mother Lake

Location: This segment includes Hungry Mother Lake from its headwaters to the dam.

City / County: Smyth Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

Mercury exceeded DEQ's screening value in four fish samples at station 6CHUN005.24

Hungry Mother Lake	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Fish Consumption			
Mercury in Fish Tissue - Total Impaired Size by Water Type:			103.23

Sources:

Atmospheric Deposition -
Toxics



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O04R-01-BAC **Hungry Mother Creek**

Location: This segment extends from the reservoir downstream to the Middle Fork Holston River confluence.

City / County: Smyth Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Station 6CHUN001.34 had a 33% exceedance of the E.coli water quality standard.

Hungry Mother Creek

Recreation

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Escherichia coli - Total Impaired Size by Water Type:

4.83

Sources:

Rural (Residential Areas)



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O04R-03-BAC Laurel Springs Creek

Location: This segment flows north from Adwolf to the Middle Fork Holston River.

City / County: Smyth Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station, 6CLRL000.35, had a 50% exceedance of the E.coli water quality standard.

Laurel Springs Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			2.12

Sources:

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: **O04R-04-BAC** **Walker Creek**

Location: This segment flows from the headwaters downstream to the Middle Fork Holston River near the intersection of route 659 and route 645.

City / County: Smyth Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station, 6CWAL000.09, had a 66% exceedance of the E.coli water quality standard.

Walker Creek

Recreation

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Escherichia coli - Total Impaired Size by Water Type:

13.52

Sources:

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O04R-05-BAC

Sulphur Spring Branch and Tributaries

Location: This segment is a Middle Fork Holston River tributary north of Chilhowie that runs parallel to Route 107 to the intersection with Route 617.

City / County: Smyth Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6CSUL000.09 has a 75% exceedance of the E. coli water quality standard.

Sulphur Spring Branch and Tributaries

Recreation

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Escherichia coli - Total Impaired Size by Water Type:

11.28

Sources:

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O05R-02-BAC Greenway Creek

Location: This segment includes the mainstem from the headwaters downstream to the confluence with the Middle Fork Holston River.

City / County: Washington Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station 6CGRW000.09 had a 83% exceedance of the E.coli water quality standard.

Greenway Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			5.02

Sources:

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O05R-02-BEN Greenway Creek

Location: This segment includes the mainstem from the headwaters downstream to the confluence with the Middle Fork Holston River.

City / County: Washington Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological station located at 6CGRW002.31 was impaired based on VSCI scores.

Greenway Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			5.02

Sources:

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O06L-01-HG

South Holston Reservoir

Location: The TVA dam is located in Tennessee and Virginia. It is operated to generate hydroelectric power, flood control and provide recreational opportunities.

City / County: Washington Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

Four fish tissue samples exceeded the Virginia Department of Health's level of concern for Mercury and 7 samples exceeded the Department of Environmental Quality's screening value for Mercury.

South Holston Reservoir

Fish Consumption

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type:

1,699.33

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O06L-01-PCB

South Holston Reservoir

Location: The TVA dam is located in Tennessee and Virginia. It is operated to generate hydroelectric power, flood control and provide recreational opportunities.

City / County: Washington Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

Two fish tissue samples from channel catfish exceeded the Department of Environmental Quality's screening value for polychlorinated biphenyls (PCBs).

South Holston Reservoir

Fish Consumption

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

PCB in Fish Tissue - Total Impaired Size by Water Type:

1,699.33

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O06R-01-PCB Wolf Creek

Location: This segment extends from the Town Creek confluence downstream to the lake backwaters.

City / County: Washington Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

This segment was listed based on the Virginia Department of Health's fish consumption advisory for polychlorinated biphenyls.

Wolf Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Fish Consumption			
PCB in Fish Tissue - Total Impaired Size by Water Type:			6.67

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O06R-02-BAC Fifteen Mile Creek

Location: This segment extends from the headwaters downstream to the confluence with the South Holston Reservoir.

City / County: Washington Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Station 6CFIF000.96 had a 33% exceedance of the E.coli water quality standard and station 6CFIF006.16 had a 33% exceedance of the E. coli water quality standard.

Fifteen Mile Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			12.93

Sources:

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O06R-03-BAC **Spring Creek**

Location: This segment extends from the South Holston Reservoir backwaters upstream to the headwaters.

City / County: Washington Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6CSPR001.18 had a 41% exceedance of the E.coli water quality standard.

Spring Creek Recreation	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			4.43

Sources:

Rural (Residential Areas) Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O07R-01-PCB

Beaver Creek and Little Creek

Location: This segment includes the headwaters of Beaver Creek downstream to the Tennessee political boundary and Little Creek from the headwaters downstream to the Tennessee political boundary in the City of Bristol.

City / County: Bristol City Washington Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

Fish tissue stations (6CBEV015.27 and 6CLTL000.26) found polychlorinated biphenyls (PCB's) in carp and stonerollers above DEQ's screening value.

Beaver Creek and Little Creek

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Fish Consumption

PCB in Fish Tissue - Total Impaired Size by Water Type:

17.35

Sources:

Inappropriate Waste
Disposal



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O07R-04-BAC Sinking Creek

Location: This segment includes the headwaters downstream to the Tennessee state line, east of the City of Bristol.

City / County: Washington Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6ASNK006.68 has a 16% exceedance of the E. coli water quality standard.

Sinking Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			3.79

Sources:

Rural (Residential Areas) Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: **O07R-05-BAC** **Stoffel Creek**

Location: This segment is located northwest of the City of Bristol, near the Three Springs community.

City / County: Bristol City Washington Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6CSTO000.86 has a 25% exceedance of the E. coli water quality standard.

Stoffel Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			5.22

Sources:

Rural (Residential Areas) Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: **O08R-01-BAC** **Boozy Creek**

Location: This is a South Fork Holston Lake tributary to Tennessee, parallel to Route 618.

City / County: Scott Co. Washington Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6CBOO002.71 has a 50% exceedance of the E. coli water quality standard.

Boozy Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			2.53

Sources:

Rural (Residential Areas) Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O10R-01-PCB North Fork Holston River

Location: This segment begins in Saltville at river mile 85.40 and extends to the Route 80 bridge. Historically there has been an error in the segments that are included in this impairment due to a discrepancy in the VDH website.

City / County: Scott Co. Smyth Co. Washington Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

The Virginia Department of Health added polychlorinated biphenyls (PCBs) to the fish consumption ban in 12/13/2004. Stations 6CNFH059.65 and 6CNFH039.18 revealed PCBs in the sediment.

North Fork Holston River

Fish Consumption

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

PCB in Fish Tissue - Total Impaired Size by Water Type:

15.27

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O10R-05-BEN Laurel Creek

Location: This segment includes the headwaters within Jefferson National Forest in Bland County downstream to the confluence with Roaring Fork.

City / County: Bland Co. Tazewell Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological stations located at 6CLAE018.29 was impaired based on the VSCI.

Laurel Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			2.65

Sources:

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O10R-05-TEMP Laurel Creek

Location: This segment includes the mainstem from the Little Tumbling Creek confluence downstream to the confluence with the North Fork Holston River.

City / County: Smyth Co. Tazewell Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Temperature, water / 5A

The AWQM station located at 6CLAE000.62 had a 20% exceedance of the temperature water quality standard.

Laurel Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Temperature, water - Total Impaired Size by Water Type:			6.48

Sources:

Silviculture Activities Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O11L-01-TEMP Hidden Valley Lake

Location: This is a warm water fishery owned by the Department of Game and Inland Fisheries.

City / County: Washington Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Temperature, water / 5C

Station 6CBRU010.91 had a 22% exceedance of the water quality standard for temperature.

Hidden Valley Lake	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Temperature, water - Total Impaired Size by Water Type:		61.10	

Sources:

- Natural Conditions - Water
- Quality Standards Use
- Attainability Analyses
- Needed



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O11L-02-PH Laurel Bed Lake

Location: Laurel Bed Lake is a DGIF owned cool water fishery, located in Clinch Mountain Wildlife Management Area.

City / County: Russell Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

A station located at 6CLAU001.84 had a 18% exceedance of the pH water quality criteria.

Laurel Bed Lake Aquatic Life	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
pH - Total Impaired Size by Water Type:		359.43	

Sources:

- Natural Conditions - Water
- Quality Standards Use
- Attainability Analyses
- Needed



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O11L-02-TEMP Laurel Bed Lake

Location: This lake is owned by the Department of Game and Inland Fisheries and lies within Clinch Mountain Wildlife Management Area.

City / County: Russell Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Temperature, water / 5C

Station 6CLAU001.84 had a 14% exceedance of the water quality standard for temperature.

Laurel Bed Lake

Aquatic Life

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Temperature, water - Total Impaired Size by Water Type:

359.43

Sources:

- Natural Conditions - Water
- Quality Standards Use
- Attainability Analyses
- Needed



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: O12R-03-BEN Greendale Creek

Location: This segment extends from the North Fork Holston River confluence upstream 4.1 miles.

City / County: Washington Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological station located at 6CGRN003.29 was impaired based on VSCI scores of 53 and 54 in 2007.

Greendale Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			5.03

Sources:

Rural (Residential Areas)



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P01L-03-HG Lake Witten

Location: This Lake is located in Cavitts Creek Park in Tazewell County.

City / County: Tazewell Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

Two largemouth fish tissue samples collected in May 2007 exceeded the Virginia Department of Health's level of concern for Mercury (Hg).

Lake Witten

Fish Consumption

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type:

53.17

Sources:

Atmospheric Deposition -
Toxics

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P01R-02-BEN **Plum Creek**

Location: This segment extends from the headwaters of Plum Creek downstream to the confluence with the Clinch River.

City / County: Tazewell Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological station located at 6BPLU002.15 was impaired based on a VSCI score of 41.

Plum Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			2.88

Sources:

Loss of Riparian Habitat Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P01R-03-BAC

South Fork Clinch River and Cavitts Creek

Location: This segment includes the South Fork Clinch River and its tributaries from the Tazewell raw water intake upstream 5 miles and Cavitts Creek from the Johnson Branch confluence downstream to the confluence with the Clinch River at Riverjack.

City / County: Tazewell Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6BSFK000.77 had a 41% exceedance of the E.coli water quality standard and station 6BCAV000.02 had a 25% exceedance of the E.coli water quality standard.

South Fork Clinch River and Cavitts Creek

Recreation

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Escherichia coli - Total Impaired Size by Water Type:

6.57

Sources:

Rural (Residential Areas)

Source Unknown

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P03R-01-BEN Clinch River Tributaries

Location: This segment extends from confluence with Clinch River upstream to the Left Fork Coal Creek confluence, Big Creek from the confluence with West Fork downstream to the confluence with the Clinch River, Mudlick Creek from the confluence with Zeke Creek downstream to the confluence with the Clinch River, and Town Hill Creek from the confluence with Little Town Hill Creek downstream to the confluence with the Clinch River.

City / County: Tazewell Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Probabilistic Monitoring station at 6BCOL001.93, 6BBIG000.99, 6BMCK000.04, and 6BTHC000.06 were impaired based on the VSCI scores. The biological monitoring station at 6BSFK000.62 was impaired based on VSCI scores of 58 and 59.

Clinch River Tributaries	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			11.04

Sources:

- | | | | |
|----------------|--|---------------------------|-------------------------|
| Coal Mining | Grazing in Riparian or Shoreline Zones | Rural (Residential Areas) | Silviculture Activities |
| Source Unknown | Unrestricted Cattle Access | | |



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P03R-02-HG **Clinch River**

Location: This segment begins just upstream of the Town Hill confluence and continues downstream to the Mill Creek confluence.

City / County: Tazewell Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

Three fish samples collected in 2007 exceeded the Department of Environmental Quality's screening value for Mercury.

Clinch River Fish Consumption	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Mercury in Fish Tissue - Total Impaired Size by Water Type:			5.55

Sources:

Atmospheric Deposition -
Toxics



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P04R-03-BEN Mill Creek

Location: From the Clinch River confluence near West Raven upstream to the confluence of Right Fork Mill Creek.

City / County: Russell Co. Tazewell Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological monitoring station located at 6BMLG000.55 was impaired based on VSCI scores.

Mill Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			3.22

Sources:

Rural (Residential Areas)



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P05R-07-BEN Laurel Creek

Location: This segment is a Little River tributary from south of Wardell parallel to Route 609.

City / County: Russell Co. Tazewell Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Is this a mistake? Need to ask biologist. Benthic special study station located at 6BLUC000.73 was impaired based on the VSCI scores.

Laurel Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			3.41

Sources:

Rural (Residential Areas)



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P06R-02-BAC Little Cedar Creek

Location: This segment includes Little Cedar Creek from the western edge of Lebanon to the confluence with Big Cedar Creek.

City / County: Russell Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6BLTL001.11 had a 72% exceedance rate of the E. coli water quality standard.

Little Cedar Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			2.19

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P07R-01-BEN Clinch River Tributaries

Location: Thompson Creek from the confluence of an unnamed tributary east of Coulwood upstream 3.25 miles. Mill Creek from the headwaters to the confluence with the Clinch River near Carbo.

City / County: Russell Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological station located at 6BTMP006.26 was impaired based on a VSCI score of 55. The biological station located at 6BMIF003.28 was impaired based on a VSCI score of 53.

Clinch River Tributaries	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			5.24

Sources:

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P09L-01-HG Bark Camp Lake

Location: This lake is also known as Corder Bottom Lake, located in Scott County.

City / County: Scott Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

Three fish samples exceeded the Department of Environmental Quality's screening value for Mercury.

Bark Camp Lake Fish Consumption	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Mercury in Fish Tissue - Total Impaired Size by Water Type:			41.06

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P09R-01-BAC Clinch River

Location: This segment includes the mainstem of the Clinch River from the Guest River confluence downstream to Little Stony Creek and from Little Stony Creek downstream to the Staunton Creek confluence, and from the Dumps Creek confluence downstream of the Lick Creek confluence, and from Lick Creek at St. Paul downstream to PWS segment.

City / County: Russell Co. Scott Co. Wise Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Fecal Coliform / 5A

The AWQM station located at 6BCLN237.09 had a 17% exceedance of the bacteria water quality standard. Station 6BCLN242.00 had a 33% exceedance, station 6BCLN246.30 had a 25% exceedance, and station 6BCLN249.62 had a 25% exceedance of the bacteria water quality standard.

Clinch River Recreation	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			33.68

Clinch River Recreation	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Fecal Coliform - Total Impaired Size by Water Type:			5.99

Sources:

Rural (Residential Areas) Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P09R-03-BAC

Staunton Creek & Fall Creek

Location: This segment includes both Staunton and Fall Creek from their headwaters to their confluences with the Clinch River.

City / County: Scott Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6BFLC000.52 had a 34% exceedance of the E.coli water quality standard and station 6BSUT004.66 had a 41% exceedance of the E.coli standard.

Staunton Creek & Fall Creek

Recreation

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Escherichia coli - Total Impaired Size by Water Type:

12.74

Sources:

Rural (Residential Areas)

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P09R-05-BAC **Russell Creek**

Location: This segment includes the headwaters of Russell Creek downstream to the confluence with the Clinch River.

City / County: Russell Co. Scott Co. Wise Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6BRUS001.25 had a 18% exceedance of the E.coli water quality standard.

Russell Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			5.23

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P09R-06-BAC **Bull Run**

Location: From the Clinch River confluence at Carfax upstream to Bull Run Church.

City / County: Wise Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

WQS for e.coli was exceeded in 18% of samples @ 6BBUL000.06.

Bull Run	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			3.99

Sources:

Rural (Residential Areas)



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P11R-03-BAC

Guest River and Bear Creek

Location: This segment extends from the Guest River mainstem at the confluence with Crab Orchard Creek downstream to the confluence with the Clinch River and Bear Creek from the confluence with Yellow Creek confluence downstream to the Guest River confluence and also includes Glade Creek and Yellow Creek.

City / County: Norton City Scott Co. Wise Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Fecal Coliform / 5A

DEQ AWQM station 6BBER001.14 had a 30% exceedance of the E.coli water quality standard and station 6BGUE000.23 had an 13% exceedance, station 6BGLA000.18 had a 66% exceedance, and station 6BYLO001.50 had a 41% exceedance of the E. coli water quality standard.

Guest River and Bear Creek

Recreation

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Escherichia coli - Total Impaired Size by Water Type:

42.58

Guest River and Bear Creek

Recreation

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Fecal Coliform - Total Impaired Size by Water Type:

4.15

Sources:

Rural (Residential Areas)

Sewage Discharges in
Unsewered Areas



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P11R-03-PCB

Guest River and Bear Creek

Location: This segment begins at the confluence with Parson's Branch and continues downstream to the confluence with the Clinch River and Bear Creek from the Yellow Creek confluence downstream to the Guest River confluence.

City / County: Norton City Wise Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

Sediment and Fish Tissue stations located at 6BGUE020.37, 6BGUE014.49 and 6BGUE009.33 indicated levels of polychlorinated biphenyls (PCBs) in carp that exceeded DEQ's screening value for PCBs. Sediment and Fish Tissue stations located at 6BGUE001.14 and 6BGUE006.45 found PCB levels that exceeded the Virginia Department of health's level of concern. PCBs were detected in carp and sediment at station 6BBER001.14.

Guest River and Bear Creek

Fish Consumption

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

PCB in Fish Tissue - Total Impaired Size by Water Type:

25.96

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P12R-01-BEN Bark Camp Branch

Location: This segment begins at the headwaters, includes the tributary, and continues downstream to the Stony Creek confluence.

City / County: Scott Co. Wise Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

DEQ biological station 6BBAR000.97 was impaired based on the VSCI score. United States Forest Service (USFS) monitoring station 9150 indicated slight impairment.

Bark Camp Branch

Aquatic Life

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

3.07

Sources:

Atmospheric Deposition -
Acidity



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P12R-01-PH Bark Camp Branch

Location: This segment begins at the headwaters, includes the tributary, and continues downstream to the Stony Creek confluence.

City / County: Scott Co. Wise Co.

Use(s): Aquatic Life

Cause(s) /
VA Category: pH / 5A

The biological station 6BBAR000.97 found that pH did not meet water quality standards.

Bark Camp Branch	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
pH - Total Impaired Size by Water Type:			3.07

Sources:

Atmospheric Deposition -
Acidity



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P12R-02-BEN Devil Fork

Location: This segment begins at the headwaters of Devil Fork and continues downstream to the confluence with Straight Fork.

City / County: Scott Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

DEQ biological station 6BDEV000.07 was impaired based on the VSCI score of 34 and United States Forest Service monitoring station 9131 was also impaired.

Devil Fork	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			4.40

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P12R-02-pH **Devil Fork**

Location: Devil Fork is a tributary to Straight Fork in Jefferson National Forest, north of Stone Mountain.

City / County: Scott Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5A

The DEQ Biological monitoring station 6BDEV000.07 found that pH did not meet water quality standards.

Devil Fork	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
pH - Total Impaired Size by Water Type:			4.40

Sources:

Atmospheric Deposition - Source Unknown
Acidity



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P13R-02-PCB Stock Creek

Location: From stream mile 4.56 downstream to the Clinch River confluence at Clinchport.

City / County: Scott Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

AWQM and sediment/fish tissue station located at 6BSTO004.56 had one fish that exceeded the DEQ screening value for Hg.

	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Stock Creek			
Fish Consumption			
PCB in Fish Tissue - Total Impaired Size by Water Type:			4.78

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P13R-03-BAC

Clinch River, Cove Creek and Stock Creek

Location: This segment includes the mainstem Clinch River from Copper Creek upstream to the Cove Creek confluence, Lower Cove Creek from its confluence with Millstone Branch to the Clinch River, and Stock Creek from the impoundment east of Sunbright downstream to the Clinch River confluence.

City / County: Scott Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6BCOV001.68 had a 25% exceedance of the E.coli standard and station 6BSTO000.45 had a 33% exceedance and station 6BSTO004.56 has a 17% exceedance, and station 6BCLN213.02 had a 25% exceedance of the E. coli water quality standard.

Clinch River, Cove Creek and Stock Creek

Recreation

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Escherichia coli - Total Impaired Size by Water Type:

35.08

Sources:

Sewage Discharges in
Unsewered Areas

Source Unknown

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P14R-01-BAC

Copper Creek, Moll Creek and Valley Creek

Location: This segment extends from just above Dickensonville downstream to the Obeyes Creek confluence, the lower most segment of Valley Creek that confluences with Copper Creek and Moll Creek from the headwaters to the confluence with Copper Creek and tributaries.

City / County: Russell Co. Scott Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6BCOP047.75 had a 41% exceedance of the E.coli water quality standard, station 6BCOP052.77 had a 50% exceedance, 6BCOP023.91 had a 16% exceedance, 6BVAL000.25 had a 50% exceedance and 6BMOL000.03 had a 41% exceedance of the E. coli water quality standard.

Copper Creek, Moll Creek and Valley Creek

Recreation

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Escherichia coli - Total Impaired Size by Water Type:

58.70

Sources:

Grazing in Riparian or
Shoreline Zones

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P14R-02-BEN Blackoak Branch Tributary

Location: This segment is north of Spivey Mill parallel to Route 665.

City / County: Scott Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological station located at 6BXGD000.01 was impaired based on the VSCI scores.

Blackoak Branch Tributary	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			0.76

Sources:

Livestock (Grazing or
Feeding Operations)



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P15R-00-BAC North Fork Clinch River

Location: This segment begins at the Fraley Branch confluence and extends downstream to the Tennessee political boundary and includes Drakes Branch, a North Fork Clinch River tributary near Pattonville.

City / County: Lee Co. Scott Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Fecal Coliform / 5A

The AWQM station located at 6BNFC010.65 had a 41% exceedance of the E.coli water quality standard, station 6BNFC018.68 had a 33% exceedance, station 6BNFC003.80 had a 41% exceedance, and station 6BDAK001.71 had a 25% exceedance of the E. coli water quality standard.

North Fork Clinch River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			19.66

North Fork Clinch River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			5.80

Sources:

Rural (Residential Areas)

Sewage Discharges in
Unsewered Areas

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P16R-01-BAC Blackwater Creek

Location: This segment includes the Blackwater Creek mainstem from the East Fork Blackwater Creek confluence downstream to the Tennessee political boundary.

City / County: Lee Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Fecal Coliform / 5A

The AWQM station located at 6BBKW005.82 had a 41% exceedance of the E.coli water quality standard.

	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Blackwater Creek Recreation			
Escherichia coli - Total Impaired Size by Water Type:			2.09

	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Blackwater Creek Recreation			
Fecal Coliform - Total Impaired Size by Water Type:			2.09

Sources:

Septage Disposal

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P17R-00-PH Dark Hollow

Location: This segment is a Powell River tributary south of Appalachia.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5A

The biological monitoring station located at 6BDAR000.26 resulted in low VSCI scores. 2 of 2 pH measurements failed to meet water quality standards.

Dark Hollow

Aquatic Life

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

pH - Total Impaired Size by Water Type:

1.40

Sources:

Atmospheric Deposition -
Acidity



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P17R-07-BEN **Pigeon Creek and Looney Creek**

Location: This segment includes from the headwaters of Pigeon Creek downstream to the confluence with the Powell River and Looney Creek from the headwaters on Looney Ridge downstream to the confluence with Pigeon Creek.

City / County: Norton City Wise Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Biological monitoring stations located at 6BPIG003.55 AND 6BPIG005.20 were impaired based on the VSCI scores. Non agency biological data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

Pigeon Creek and Looney Creek

Aquatic Life

	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
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Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

11.96

Sources:

Coal Mining Rural (Residential Areas) Surface Mining



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P17R-09-BEN Roaring Fork and Potcamp Fork

Location: This segment includes from the headwaters above the Roaring Fork community to the Powell River confluence at Kent Junction, parallel to Route 603, including Potcamp Fork and Canepatch Creek.

City / County: Norton City Wise Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological monitoring station located at 6BRIN001.84 was impaired based on VSCI scores and non agency biological monitoring data provided by Appalachian Technical Services indicates impairment on Potcamp Fork and Canepatch Creek.

Roaring Fork and Potcamp Fork

Aquatic Life

	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
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			26.77
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Sources:

Surface Mining



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P17R-11-BEN Powell River

Location: This segment includes the mainstem Powell River from the Benges Branch confluence upstream of Josephine downstream to the Roaring Fork confluence and from the Benges Branch confluence upstream to the Buckeye Branch confluence.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Non agency biological data provided by Appalachian Technical Services indicates impaired VSCI scores.

Powell River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			5.46

Sources:

Surface Mining



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P18L-01-HG Big Cherry Reservoir

Location: This reservoir is located east of East Stone Gap on Powell Mountain.

City / County: Wise Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

Two largemouth bass samples exceeded the Virginia Department of Health's level of concern for Mercury.

Big Cherry Reservoir Fish Consumption	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Mercury in Fish Tissue - Total Impaired Size by Water Type:		104.00	

Sources:

Atmospheric Deposition -
Toxics



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P18L-01-PH Big Cherry Reservoir

Location: This reservoir is located east of East Stone Gap on Powell Mountain.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

Category 5C: Monitoring station 6BPLL012.79 had a 56% exceedance of the pH water quality criteria and station 6BPLL012.99 had a 79% exceedance of the pH criteria.

Big Cherry Reservoir

Aquatic Life

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

pH - Total Impaired Size by Water Type:

104.00

Sources:

- Natural Conditions - Water
- Quality Standards Use
- Attainability Analyses
- Needed



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P18R-03-BAC **South Fork Powell River**

Location: This segment includes the mainstem from the confluence of Beaverdam Creek, north of East Stone Gap, downstream to the confluence with the Powell River at Three Forks in Big Stone Gap.

City / County: Wise Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

AWQM station at 6BPLL000.27 had a 22% exceedance of the E. coli water quality standard, station 6BPLL002.55 has a 33% exceedance of the E. coli water quality standard. AWQM station 6BPLL004.24 had a 50% exceedance of the E. coli water quality standard.

South Fork Powell River

Recreation

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Escherichia coli - Total Impaired Size by Water Type:

5.80

Sources:

Sewage Discharges in
Unsewered Areas

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P19R-01-BAC Mud Creek

Location: This segment includes the mainstem from the Highway 58 crossing downstream to the Powell River confluence.

City / County: Lee Co. Wise Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

AWQM station located at 6BMDC000.33 had a 25% exceedance of the E.coli water quality standard.

Mud Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			1.81
Escherichia coli - Total Impaired Size by Water Type:			1.81

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P20L-01-HG **Lake Keokee**

Location: This lake is located south of Exeter on Stone Mountain.

City / County: Lee Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

A largemouth bass sample exceeded the Virginia Department of Health level of concern for Mercury and one fish tissue sampled exceeded the Department of Environmental Quality's screening value for Mercury.

Lake Keokee

Fish Consumption

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type:

96.21

Sources:

Atmospheric Deposition -
Toxics



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P20R-01-TEMP North Fork Powell River

Location: This segment includes the mainstem from Wolf Harbour Branch downstream to the confluence of Straight Creek near Puckett.

City / County: Lee Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Temperature, water / 5A

Class V water quality standard for temperature was exceeded in 36% of the samples at the AWQM station located at 6BPWL006.59.

North Fork Powell River

Aquatic Life

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Temperature, water - Total Impaired Size by Water Type:

2.98

Sources:

Silviculture Activities

Surface Mining



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P20R-03-BAC Reeds Creek

Location: This segment includes Reeds Creek from the Meadow Fork confluence downstream to the Jones Creek confluence parallel to Route 628.

City / County: Lee Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6BREE000.22 had a 27% exceedance of the E. coli water quality standard.

Reeds Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			0.93

Sources:

Rural (Residential Areas)



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P21R-02-BAC Hardy Creek

Location: This segment includes the Hardy Creek mainstem and its tributaries.

City / County: Lee Co.

Use(s): Recreation

Cause(s) /
VA Category: Escherichia coli / 5A

The AWQM station located at 6BHAR000.34 had a 27% exceedance of the bacteria water quality standard.

Hardy Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			12.52

Sources:

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P21R-03-BAC

Powell River and Town Creek

Location: This segment includes the mainstem of Town Creek, just south of Jonesville to the confluence with Batie Creek.

City / County: Lee Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6BTOW001.32 had a 18% exceedance of the E.coli standard.

Powell River and Town Creek

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Recreation

Escherichia coli - Total Impaired Size by Water Type:

6.42

Sources:

Rural (Residential Areas)

Sewage Discharges in
Unsewered Areas

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P21R-04-BAC Dry Creek

Location: From the Trading Creek confluence, along Route 656, downstream to the confluence with Hardy Creek near Route 650.

City / County: Lee Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6BDBR001.69 had a 18% exceedance of the E. coli water quality standard.

Dry Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			8.87

Sources:

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P21R-06-BAC **Station Creek**

Location: This segment is located north of Wallen Ridge, parallel to U.S. 58, to the confluence with the Powell River at the Poteet Ferry Bridge.

City / County: Lee Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6BSTN000.14 has a 45% exceedance of the E. coli water quality standard.

Station Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			2.31

Sources:

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P22R-01-BAC **Wallen Creek**

Location: This segment includes from the headwaters on Powell Mountain downstream, parallel to Route 612, to the Route 70 crossing.

City / County: Lee Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

DELISTED 2014: VAS-P22R_WAL01A00. The AWQM station located at 6BWAL000.12 had less than 10.5% exceedance of the E.coli water quality standard. Station 6BWAL026.64 had a 36% exceedance of the E. coli water quality standard.

Wallen Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			42.75

Sources:

Rural (Residential Areas) Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P22R-01-TEMP Wallen Creek

Location: North of Powell Mountain, from headwaters through Sticklelyville, downstream to Rasnic Hollow.

City / County: Lee Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Temperature, water / 5A

Class V water quality standard for temperature was exceeded in 18% of the samples at the AWQM station located at 6BWAL026.64.

Wallen Creek

Aquatic Life

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Temperature, water - Total Impaired Size by Water Type:

42.75

Sources:

Grazing in Riparian or
Shoreline Zones

Loss of Riparian Habitat

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P23R-02-BAC Martin Creek

Location: This segment includes the headwaters and extends downstream to the Tennessee political boundary.

City / County: Lee Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6BMTN003.56 had a 45% exceedance of the E.coli water quality standard.

Martin Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			9.67

Sources:

Sewage Discharges in
Unsewered Areas

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P23R-03-BAC Fourmile Creek

Location: This segment includes from the headwaters, south of Ingles Chapel, parallel to Route 744 and flows south into Tennessee.

City / County: Lee Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6BFOU003.59 had a 50% exceedance of the E. coli water quality standard.

Fourmile Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			2.36

Sources:

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: P24R-01-BAC **Indian Creek**

Location: This segment includes the mainstem from the confluence of Machine Branch downstream to the Tennessee political boundary and the mainstem from Ketron Mill to just south of Elydale School

City / County: Lee Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6BIND009.12 had a 50% exceedance of the E.coli water quality standard. Non agency bacteria monitoring data provided by the Department of Conservation and Recreation at Wilderness Road State Park had a 66% exceedance of the E. coli water quality standard.

Indian Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			12.62

Sources:

Sewage Discharges in
Unsewered Areas

Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q03R-02-PCB **Knox Creek and Tributaries**

Location: This segment includes the mainstem from the headwaters to the Kentucky political boundary. It also includes all tributaries to Knox Creek that were included in the December 2005 Virginia Department of Health (VDH) Fish Consumption Ban update including Guess Fork, Big Butt Branch and tributaries, Long Bottom Branch and Pawpaw Creek.

City / County: Buchanan Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

Fish Tissue stations located at 6AKOX023.25, 6AKOX020.36, 6AKOX019.30, 6AKOX017.97, 6AKOX014.37, 6AKOX012.06, 6AKOX010.98, 6AKOX008.14 indicated an exceedance of the DEQ screening value for polychlorinated biphenyls (PCBs) and the VDH human health criteria for PCBs.

Knox Creek and Tributaries

Fish Consumption

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

PCB in Fish Tissue - Total Impaired Size by Water Type:

200.77

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q03R-03-BAC Pawpaw Creek and Jacobs Fork

Location: This segment includes the Pawpaw Creek mainstem from the Kentucky political boundary to the confluence with Knox Creek and Jacobs Fork.

City / County: Buchanan Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station 6AJBF010.88 had a 50% exceedance of the E.coli water quality standard and 6APPW000.03 had a 41% exceedance of the E.coli water quality standard.

Pawpaw Creek and Jacobs Fork

Recreation

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Escherichia coli - Total Impaired Size by Water Type:

6.57

Sources:

Rural (Residential Areas)

Sewage Discharges in
Unsewered Areas



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q05R-00-TEMP Dismal Creek

Location: This segment includes Dismal Creek from the confluence of Long Branch to the confluence with Levisa Fork.

City / County: Buchanan Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Temperature, water / 5A

The AWQM station located at 6ADIS001.24 had a 20% exceedance of the temperature water quality standard for WQS Class V waters.

Dismal Creek

Aquatic Life

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Temperature, water - Total Impaired Size by Water Type:

5.38

Sources:

Loss of Riparian Habitat

Silviculture Activities



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q05R-01-BAC Dismal Creek

Location: This segment includes the mainstem of Dismal Creek from the confluence of Long Branch downstream, parallel to Route 638 to the confluence with the Levisa Fork.

City / County: Buchanan Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

AWQM station 6ADIS001.24 has a 11% and 6ADIS014.33 had 18% exceedance of the E. coli water quality standard.

Dismal Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			17.83

Sources:

Sewage Discharges in
Unsewered Areas



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q08R-01-BAC **Bull Creek, Poplar Creek, and Home Creek**

Location: This segment includes the Bull Creek mainstem and tributaries, including Convict Hollow, Belcher Branch, Deel Fork, Cove Hollow. This segment also includes Poplar Creek at the confluence with Knotty Poplar Fork and continues downstream to the confluence with Levisa Fork. This segment also includes Home Creek, a tributary to the Levisa Fork.

City / County: Buchanan Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6ABLC000.85 had a 27% exceedance of the E.coli water quality standard and station 6APLR000.06 had a 25% exceedance of the E.coli standard. Station 6AHME000.42 has a 16% exceedance of the E. coli water quality standard.

Bull Creek, Poplar Creek, and Home Creek

Recreation

	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
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Escherichia coli - Total Impaired Size by Water Type:

36.46

Sources:

Inappropriate Waste
Disposal

Sewage Discharges in
Unsewered Areas



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q08R-02-BEN Home Creek

Location: This segment is a Levisa Fork tributary south of Big Rock, upstream to the Spencer Fork confluence, parallel to Route 650.

City / County: Buchanan Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Biological monitoring station at 6AHME002.16 was impaired based on VSCI scores. Non agency biological monitoring data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

Home Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			5.59

Sources:

Coal Mining

Surface Mining



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q08R-05-BEN Conaway Creek and Tributaries

Location: This segment includes the headwaters of Conaway Creek upstream to the Caney Fork confluence. This segment also includes State Line Branch, a tributary at the Kentucky state line.

City / County: Buchanan Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Non agency biological monitoring data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

Conaway Creek and Tributaries

Aquatic Life

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

10.95

Sources:

Surface Mining



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q09R-01-BAC **Russell Fork**

Location: This segment includes the unassessed stream segments in the headwaters of Russell Fork downstream to the confluence of Pawpaw Creek, Hurricane Creek from the confluence of Carver Branch downstream to the confluence with Russell Fork and Indian Creek from Duty downstream to the confluence with Russell Fork.

City / County: Buchanan Co. Dickenson Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6ARSS047.10 had a 22% exceedance of the E.coli water quality standard, station 6ARSS041.08 had a 33% exceedance of the E.coli water quality standard, 6AHRC000.05 had a 36% exceedance of the E. coli water quality standard and 6AIND000.52 had a 33% exceedance of the E. coli water quality standard.

Russell Fork	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			24.21

Sources:

Sewage Discharges in
Unsewered Areas



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q09R-01-BEN Indian Creek

Location: A Russell Fork tributary from the Cane Creek confluence at Duty, parallel to Route 602 downstream to the Russell Fork confluence at the Buchanan/Dickenson County line.

City / County: Buchanan Co. Dickenson Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Probabilistic monitoring station located at 6AIND000.52 was impaired based on the VSCI scores.

Indian Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			2.69

Sources:

Rural (Residential Areas)



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q09R-02-BEN Sullivan Branch

Location: This segment begins at the headwaters of Sullivan Branch and continues downstream to the confluence with Indian Creek.

City / County: Buchanan Co. Dickenson Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological station located at 6ASLV000.85 was impaired based on the VSCI scores.

Sullivan Branch	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			1.62

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q10R-01-BEN Fryingpan Creek

Location: From headwaters on Sandy Ridge near Carrie downstream to the Priest Fork confluence.

City / County: Dickenson Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The probabilistic monitoring station indicate impairment based on VSCI scores.

Fryingpan Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			9.45

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q11R-02-BAC

McClure River and Tributaries

Location: This segment begins at the Buffalo Creek confluence and continues downstream to the Road Branch confluence and Buffalo Creek from the headwaters downstream to the confluence with McClure River and includes Roaring Fork

City / County: Dickenson Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The station identified as BC on Buffalo Creek had a 50% exceedance of the E.coli water quality standard and station 6AMCR007.46 had a 16% exceedance and station 6AMCR014.69 had a 60% exceedance and station 6AROR-RF-MRRP had a 22% exceedance of the E. coli water quality standard.

McClure River and Tributaries

Recreation

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Escherichia coli - Total Impaired Size by Water Type:

28.40

Sources:

Rural (Residential Areas)



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q11R-02-BEN

McClure River and Tributaries

Location: This segment includes the McClure River upstream of Caney Creek confluence to the Buffalo Creek confluence. This segment also includes Wakenva Branch.

City / County: Dickenson Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological station located at 6AMCR014.13 was impaired based on the VSCI scores. Non agency biological monitoring data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

McClure River and Tributaries

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Aquatic Life

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

1.80

Sources:

Surface Mining



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q11R-04-BEN Cowan Rose Branch

Location: This segment includes Cowan Rose Branch, a tributary to Open Fork west of Carrico Ridge.

City / County: Dickenson Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Non agency biological monitoring data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

Cowan Rose Branch

Aquatic Life

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

3.30

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q11R-05-BEN Dismal Fork

Location: This segment includes Dismal Fork, a Neece Creek tributary between Brushy Ridge and Dismal Ridge.

City / County: Dickenson Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Non agency biological monitoring data indicated impairment based on VSCI scores.

Dismal Fork	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			4.51

Sources:

Surface Mining



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q12R-01-BAC **Russell Prater Creek**

Location: This segment extends from the headwaters at Poplar Gap downstream to the confluence with Russell Fork.

City / County: Buchanan Co. Dickenson Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6ARPC000.40 had a 22% exceedance of the E.coli water quality standard.

Russell Prater Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			11.72

Sources:

Rural (Residential Areas)



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q12R-04-BAC Russell Fork

Location: Mainstem from the Barts Lick Creek confluence near Bartlick, upstream to the McClure River confluence in Haysi.

City / County: Dickenson Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6ARSS024.30 has an 17% exceedance of the E. coli water quality standard. USGS E. coli samples collected also exceeded the WQS.

Russell Fork

Recreation

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Escherichia coli - Total Impaired Size by Water Type:

3.82

Sources:

Rural (Residential Areas)



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q12R-05-BEN Middle Fork (Hunts Creek)

Location: This segment is located parallel to Route 631 near Breaks.

City / County: Buchanan Co. Dickenson Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Non agency biological monitoring data provided by Appalachian Technical Services indicated impairment based on VSCI scores.

Middle Fork (Hunts Creek)	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			2.93

Sources:

Surface Mining



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q13L-01-HG

John Flannagan Reservoir

Location: This reservoir is located Northeast of Clintwood near the Kentucky state line.

City / County: Dickenson Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

Fish tissue sampling done in 2008 found one largemouth bass that exceeded the Virginia Department of Health's level of concern and one exceeded the DEQ screening value for Mercury.

John Flannagan Reservoir

Fish Consumption

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type:

1,177.22

Sources:

Atmospheric Deposition -
Toxics



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q13R-02-TEMP North Fork Pound River

Location: This segment extends from the PWS segment at the intake in the North Fork Pound Reservoir, upstream five miles on all tributaries.

City / County: Dickenson Co. Wise Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Temperature, water / 5C

Station 6APNK000.08 had a 33% exceedance of the water quality standard for temperature.

North Fork Pound River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Temperature, water - Total Impaired Size by Water Type:			10.12

Sources:

- Natural Conditions - Water
- Quality Standards Use
- Attainability Analyses
- Needed



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q13R-03-BAC Pound River

Location: This segment of the Pound River extends from the Georges Fork confluence downstream to the lake backwaters at Jerry Branch.

City / County: Dickenson Co. Wise Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6APNR023.86 had a 18% and 6APNR028.76 and 30% exceedance of the E.coli water quality standard.

Pound River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			16.94

Sources:

Sewage Discharges in
Unsewered Areas



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q13R-03-TEMP North Fork Pound River

Location: This segment includes the mainstem, south of Horse Gap from the dam of North Fork Pound Lake, downstream to the confluence with the Pound River.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Temperature, water / 5C

Station 6APNK000.08 had a 21% exceedance and 6APNK001.10 has 30% exceedance of the water quality standard for temperature.

North Fork Pound River

Aquatic Life

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Temperature, water - Total Impaired Size by Water Type:

1.29

Sources:

- Natural Conditions - Water
- Quality Standards Use
- Attainability Analyses
- Needed



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q13R-04-BEN Indian Creek

Location: Pound River tributary south of the Town of Pound upstream to Barn Branch confluence.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Benthic studies in the spring and fall 2010 indicated impairment. SOS monitoring at 6BIAC-Indian Creek-SOS in 2007 detected an unacceptable benthic community.

Indian Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			2.98

Sources:

Rural (Residential Areas)



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q13R-06-BEN Pound River

Location: This segment includes the Pound River from Georges Fork confluence upstream to the confluence of the North Fork and South Fork Pound Rivers.

City / County: Dickenson Co. Wise Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological station located at 6APNR034.58 was impaired based on VSCI scores.

Pound River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			16.94

Sources:

Coal Mining



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q13R-07-BEN Bear Pen Branch

Location: Bear Pen Branch from the confluence with Childress Branch downstream to the confluence with the Pound River.

City / County: Dickenson Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Benthic station 6ABEP000.08 was impaired based on VSCI scores.

Bear Pen Branch	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			0.85

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q13R-08-BEN North Fork Pound River tributaries

Location: This segment includes the PWS segment from the raw water intake in the North Fork Powell Reservoir, upstream five miles on all tributaries, including Bad Creek, Rumley Branch and an unnamed tributary near Laurel Fork.

City / County: Dickenson Co. Wise Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Biological monitoring station 6APNK000.08 was impaired based on VSCI scores.

North Fork Pound River tributaries

Aquatic Life

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

10.12

Sources:

Coal Mining



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q13R-09-BAC Big Branch

Location: This segment includes Big Branch, a tributary to the South Fork Pound River off Route 671.

City / County: Dickenson Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

Citizen monitoring station 6A-BIGBR-NF-MRRP has a 40% exceedance of the E. coli water quality standard.

Big Branch Recreation	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			1.46

Sources:

Rural (Residential Areas) Unrestricted Cattle Access



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q13R-09-BEN North Fork Pound River

Location: This segment includes the headwaters of the North Fork Pound River north of Flat Gap, including Bear Fork, downstream to Bad Creek confluence at Gilley.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Biological Monitoring station at 6APNK008.28 was impaired based on VSCI scores.

North Fork Pound River

Aquatic Life

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

4.26

Sources:

Coal Mining



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q13R-10-BAC South Fork Pound River

Location: This segment includes the mainstem from the Gladly Fork confluence downstream to the confluence with the Pound River and the mainstem from Donald Branch downstream to an unnamed tributary just upstream of Rat Creek.

City / County: Wise Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The citizen monitoring station located at 6APNS-RM-MRRP had a 80% exceedance of the E. coli water quality standard AWQM station 6APNS003.38 had a 25% exceedance of the E. coli water quality standard.

South Fork Pound River

Recreation

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Escherichia coli - Total Impaired Size by Water Type:

5.80

Sources:

Rural (Residential Areas)



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q14R-01-BAC Cranesnest River

Location: This segment extends from the headwaters downstream to the confluence with Bartley Branch at the backwaters of the Flannagan Reservoir.

City / County: Dickenson Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The AWQM station located at 6ACNR021.72 had a 27% exceedance of the E.coli water quality standard and station 6ACNR009.17 had a 24% exceedance of the E.coli standard.

Cranesnest River	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Recreation			
Escherichia coli - Total Impaired Size by Water Type:			20.45

Sources:

Sewage Discharges in
Unsewered Areas



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q14R-01-BEN **Birchfield Creek and Cranesnest River**

Location: This segment includes the mainstem of the Cranesnest River from the headwaters downstream to the Honeycamp Branch confluence and Birchfield Creek from the confluence with Happy Hollow downstream to the Cranesnest River.

City / County: Dickenson Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

Benthic stations 66ACNR017.24, 6ACNR018.89 and 6ABLD000.90 were impaired based on VSCI scores.

Birchfield Creek and Cranesnest River

Aquatic Life

Estuary
(Sq. Miles)

Reservoir
(Acres)

River
(Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

15.45

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: **Q14R-02-BEN** **Dotson Creek**

Location: A Birchfield Creek tributary parallel to Route 636.

City / County: Wise Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The biological monitoring station at 6ADOT000.46 was impaired based on VSCI scores.

Dotson Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			3.81

Sources:

Source Unknown



Fact Sheets for Impaired (Category 5) Waters in 2014

Tennessee and Big Sandy River Basins

Cause Group Code: Q14R-03-BEN Left Fork Rush Creek

Location: Cranesnest River tributaries from the Pound River confluence upstream to the Tempest Branch confluence.

City / County: Dickenson Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The probabilistic monitoring station located at 6ARLF000.06 indicated impairment based on VSCI scores.

Left Fork Rush Creek	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Aquatic Life			
Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:			2.41

Sources:

Source Unknown