ESCHERICHIA COLI (*E. coli*) BACTERIA TOTAL MAXIMUM DAILY LOAD (TMDL) FOR PEG MUNKY RUN CREEK, DEUEL, BROOKINGS, HAMLIN COUNTIES, SOUTH DAKOTA

Watershed Protection Program

Division of Resource Conservation and Forestry

South Dakota Department of Agriculture and Natural Resources

May 2026

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INTRODUCTION

Peg Munky Run segment 01 (Big Sioux River to S17, T113N, R50W) or **SD-BS-R-PEG_MUNKY_RUN_01** is identified as impaired for the limited contact recreation designated use due to *E. coli* in South Dakota's most recent 303(d) list documented in the 2026 Integrated Report (IR) and is considered high priority for total maximum daily load (TMDL) development (SD DANR, 2024). Peg Munky Run was first listed as impaired for *E. coli* in 2022. Data shown in Appendix B demonstrates exceedances of the limited contact recreation water quality criteria since 2019.

Peg Munky Run segment 01 is located in eastern South Dakota and flows from its head waters 6.49 miles into the Big Sioux River segment 04 North of the City of Bruce, South Dakota. SD-BS-R-PEG_MUNKY_RUN_01 falls entirely within state jurisdiction (Figure 1 & Figure 2). The HUC12 watershed (101702021103) has an area of 22,530 acres.

Figure 1. Location of Peg Munky Run and its watershed in South Dakota.

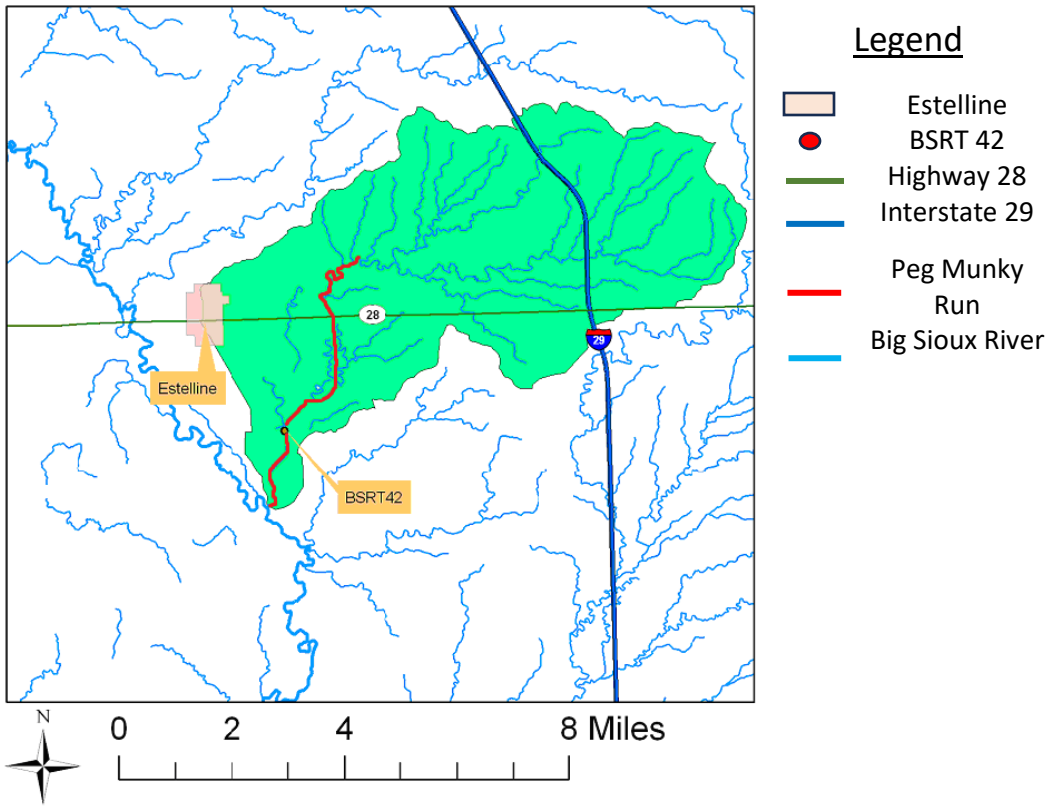

Figure 2. Peg Munky Run Watershed.

This TMDL builds on analyses conducted for the previous fecal coliform TMDL (FECAL COLIFORM BACTERIA TOTAL MAXIMUM DAILY LOAD EVALUATION FOR PEG MUNKY RUN CREEK, DEUEL, BROOKINGS, AND HAMLIN COUNTIES, SOUTH DAKOTA; SD DANR, 2011), TMDL Action: 41071. Ultimately, it translates the fecal coliform loading capacity to the *E. coli* standard before allocating the *E. coli* TMDL.

The South Dakota Department of Agriculture and Natural Resources (SDDANR) adopted a conversion process to translate existing fecal coliform TMDLs and allocations to *E. coli* to satisfy Clean Water Act section 303(d) requirements. The 2020 bacteria TMDL translation included *E. coli* TMDLs for four impaired waterbodies. The conversion process and resulting *E. coli* TMDLs were formally approved by the United States Environmental Protection Agency (EPA) November 8, 2020, and reissued following the correction of a minor clerical error on June 6, 2022 (SD DANR, 2022).

The intent of this document is to use the relationships identified in the 2020 bacteria TMDL translation to convert fecal coliform loading for Peg Munky Run segment 01 to *E. coli*. However, rather than translating allocations, this document is a standalone E*. coli* TMDL and presents new *E. coli* calculations to address several typographical errors identified in the fecal coliform TMDL.

WATER QUALITY STANDARDS AND TMDL TARGETS

Peg Munky Run has been assigned beneficial uses by the state of South Dakota Surface Water Quality Standards regulations. Along with these assigned uses are narrative and numeric criteria that define the desired water quality of this stream. These criteria must be maintained for the stream to satisfy its assigned beneficial uses, which are listed below:

- Warmwater marginal fish life propagation
- Limited contact recreation
- Fish and wildlife propagation, recreation and stock watering
- Irrigation

Individual parameters determine the support of beneficial uses. Use support for limited contact recreation involved monitoring the levels of *E. coli* bacteria from May 1 through September 30, the recreation season. Limited contact waters must be maintained suitable for boating, fishing, and other water related recreation that does not involve immersion.

Administrative Rules of South Dakota Article 74:51 contains numeric and narrative standards to be applied to the surface waters (i.e. streams, rivers) of the state. To assess the status of the beneficial uses for this stream, water samples were obtained using SD DANR standard operating procedures and the results were compared to the applicable water quality criteria.

South Dakota *E. coli* criteria for immersion (ARSD 74:51:01:50) and limited contact recreation (ARSD 74:51:01:51) consist of a single sample maximum (SSM) and a monthly geometric mean (GM) both of which include distinct numeric limits. The SSM requires that no single daily sample exceed the associated numeric limit. The monthly GM also must not be exceeded and is calculated based on a minimum of 5 samples collected during separate 24-hr periods over a 30-day period. The limited contact recreation SSM and GM criteria for *E. coli* are presented in Table 1.

There are two numeric *E. coli* criteria for TMDL target consideration. Impaired waters require TMDL development based on the most protective criteria. Selecting the most protective numeric target for TMDL development ensures attainment with the water quality criteria. Appendix A of the 2020 bacteria TMDL translation outlines that the GM and SSM *E. coli* criteria are equally protective (SD DANR, 2022). Because assessment data were insufficient to calculate a monthly GM, the SSM *E. coli* criterion of ≤1,178 was selected as the TMDL numeric target. In addition to the daily load, the geometric mean criteria must be attained on a longer (i.e., monthly) basis.

Table 1. Designated recreation uses and associated bacteria criteria designated to Peg Munky Run.

Impaired Stream Segment AUID	Designated Recreation Use	E. *coli* Geomean CFU/100 mL	*E. coli* SSM CFU/ 100mL
SD-BS-R-PEG_MUNKY_RUN_01	Limited Contact Recreation	≤630	*≤1,178

*Refers to numeric criteria used for TMDL development

This TMDL document is consistent with South Dakota antidegradation policies (ARSD 74:51:01:34) because it provides recommendations and establishes pollutant limits at water quality levels necessary to meet criteria and fully support existing beneficial uses.

SOURCE ASSESSMENT

Pollutant sources are generally defined as two categories: point sources and nonpoint sources. The U.S. Environmental Protection Agency (EPA) defines point source pollution as " any discernible, confined and discreate conveyance, such as pipe, ditch, channel, tunnel, conduit, discrete fissure, or container. It also includes vessels or other floating crafts from which pollutants are or may be discharged. Nonpoint

sources are associated with diffuse pollutant loading to a waterbody and are often linked to runoff from agriculture, urban, or forestry activities, as well as streambank erosion and groundwater seepage that can occur from these activities.

POINT SOURCES

There were no National Pollutant Discharge Elimination System (NPDES) permitted facilities identified in this watershed. All potential point sources of *E. coli* bacteria are documented below to provide a watershed scale account of the systems' operational characteristics (discharge permits, etc.), potential impact, and Waste Load Allocation (WLA) consideration.

Concentrated Animal Feeding Operations (CAFOs)

A recent search found that there are two CAFO facilities located in the Peg Munky Run Segment 01 watershed, as shown in Table 2.

Table 2. Concentrated Animal Feeding Operations in Peg Munky Run Watershed.

Name of Facility	Type of Operation	SD General Permit #
Plainview Dairy, LLC	Dairy Cattle (Housed Lot)	SDG-100325
Global Dairy, LLC	Dairy Cattle (Housed Lot)	SDG-100322

All CAFO's are required to maintain compliance with provisions of the Water Pollution Control Act (SDCL 34A-2). SDCL 34A-2-36.2 requires each concentrated animals feeding operations, as defined by Title 40 Codified Federal Regulations Part 122.23 Dated January 1, 2007, to operate under a general or individual water pollution control permit issued pursuant to 34A-2-36. The general permit ensures that all CAFO's in SD have permit coverage regardless of if they meet conditions for coverage a NPDES permit.

All facilities with a general permit number that starts with SDG-01* are covered under the 2003 General Water Pollution Control Permit for Concentrated Animal Feeding Operations, which requires housed lots to have no discharge of solid or liquid manure to waters of the state, and allows open lots to only have a discharge of manure or process wastewaters from properly designed, constructed, operated and maintained manure management systems in the event of 25- years, 24-hour or 100-year, 24-hour storm event if they meet the permit conditions. The general permit was reissued and became effective on April 15, 2017. All CAFO's with coverage under the 2003 general permit have a deadline to apply for coverage under the 2017 general permit.

All facilities with a general permit number that starts with SDG-1* are covered under the 2017 General Water Pollution Control Permit for Concentrated Animal Feeding Operations. The 2017 general permit allows no discharge of manure or process wastewater from operations with state permit coverage or NPDES permit coverage for new source swine, poultry, and veal operations, and other housed lots with covered manure containment systems. Operations also have the option to apply for a state issued NPDES permit. Operations covered by the 2017 general permit or NPDES permit for open or housed lots with uncovered manure containment systems can only discharge manure or process wastewater from properly designed, constructed, operated and maintained manure management systems in the event of 25-year, 24-hour storm event if they meet the permit conditions. Both the 2003 and 2017 general

permits have nutrient management planning requirements based on EPA's regulations and the South Dakota Natural Resources Conservation Services 590 Nutrient Management Technical Standard to ensure the nutrients are applied at agronomic rates with management practices to minimize the runoff of nutrients. Additionally, the general permits include design standards, operation, maintenance, inspection, record keeping, and reporting requirements. (https://danr.sd.gov/Agriculture/Livestock/FeedlotPermit/default.aspx)

As long as CAFOs comply with the general permit requirements ensuring their discharges are unlikely and indirect loading events, the TMDL assumes their *E. coli* contribution is minimal, and unless found otherwise, no additional permit conditions are required by this TMDL. No WLA is included in this TMDL for CAFOs.

Construction Storm Water Permits

Construction activities have the potential to produce pollutants that may contaminate stormwater runoff. Currently there are six construction permits that are ongoing in the watershed (Appendix B). Construction stormwater permits are denoted by the prefix SDR10xxxx. The status of these construction projects is considered to be active by DANR until the permitted party opts to close the permit. Stormwater construction activities must have coverage and comply with South Dakota's *General Permit Authorizing Stormwater Discharges Associated with Construction Activities* ensuring that discharges are minimal. The permits also stipulate that they do not contribute to violations of surface water quality criteria. A Stormwater Pollution Protection Plan (SWPPP) is required for all permitted construction and industrial stormwater sites. The SWPPP is a written document that outlines how contractors will ensure stormwater runoff leaving the site will not become contaminated with pollutants. A WLA is not assigned since these permits are not expected to be a source of bacteria pollution.

NONPOINT SOURCES

Non-point source pollution, unlike pollution from municipalities and NPDES, comes from many diffuse sources. Potential non-point sources of *E.coli* bacteria include loadings from surface runoff, wildlife, livestock, and leaking septic tanks. The nonpoint source assessment for Peg Munky Run segment 01 is documented here. The Earth Resources Observation and Science (EROS) Center National Land Cover Database (NLCD) was used for collecting land use data. A review of the 2021 NLCD layer shows very little change from the 2011 NLCD layer (Table 3). In the 2021 layer, cropland is 65.61%, range/grassland is 29.45%, building/farmstead is 4.94% (Table 3). Specific sources are discussed below.

Table 3. Land Use Data

Landuse	2011 Fecal TMDL	2011 NLCD	2021 NLCD
Cropland	77%	64.58%	65.61%
Range/Grassland	21%	28.91%	29.45%
Building/Farmstead	2%	6.51%	4.94%

WILDLIFE

Wildlife deposits their feces onto land surfaces and in some cases directly into the water. The bacterial load from naturally occurring wildlife is assumed to be background. In addition, any strategy employed to control this source would likely have a negligible impact on attaining water quality standards.

AGRICULTURE

Agriculture animals are the source of several types of non-point source pollution. Manure from livestock is a potential source of *E. coli* to the stream. For the Peg Munky Run watershed, the livestock are predominately hogs and beef cattle. Livestock can contribute *E. coli* bacteria either directly into the stream or by defecating while grazing on rangelands which gets washed off during precipitation events. Table 4 identifies the sources of bacteria production in the watershed. The summary is based on several assumptions. Feedlot numbers were calculated as the sum of all dairy cows, hogs, and the National Agricultural Statistics Survey (NASS) estimate of beef feeding areas. All remaining livestock were assumed to be on grass.

Table 4. *E.coli* source allocation for Peg Munky Run.

Source	Percentage
Feedlots	13%
Livestock on Grass	87%
Wildlife	< 0.01%

LINKAGE ANALYSIS

A robust linkage analysis was conducted for the previous fecal coliform TMDL (SD DANR, 2011). Although performed for fecal coliform, this analysis also represents *E. coli* conditions in the watershed, as watershed characteristics including flow dynamics and pollutant source loading have not changed considerably over time. In addition, Appendix A contains *E. coli* data that has been sampled for Peg Munky Run segment 01 since 2019, showing that the waterbody has consistently demonstrated impairment for *E. coli.* Peg Munky Run segment 01 was first listed as impaired for *E. coli* in 2022.

Water quality data was collected at one project monitoring site (NCENBSRT 42) located southeast of Estelline, SD. Data were analyzed at the State Health Lab located in Pierre, South Dakota. Quality Assurance/Quality Control samples were collected on 10% of the samples according to South Dakota's EPA approved Non-point Source Quality Assurance/Quality Control Plan.

The linkage analysis presented in the fecal coliform TMDL is based on a Load Duration Curve (LDC) approach that results in a flow-variable target that considers the entire flow regime. The LDC is a dynamic expression of the allowable load at the fecal coliform SSM criteria of 2000 CFU/100mL for a given flow. This method shows that while a TMDL may be expressed as a single point it can also be thought of as a continuum of points representing the criterion value and various flow values. To aid in interpretation and implementation of the TMDL, the LDC flows were grouped into five flow zones representing different hydrologic conditions: high flows (0-10 percent), moist conditions (10-40 percent), mid-range (40-60 percent), dry conditions (60-90 percent) and low flows (90-100 percent). Load duration curves were calculated using the following equation:

(flow) × (conversion factor) × (state criteria) = quantity/day or daily load

This curve represents the threshold of the allowable load of fecal coliform (Figure 3).

Sample Data

Paired flow-fecal coliform samples from 2001, 2002, 2006, 2007, and 2008 were used to represent existing conditions. Table 5 shows Peg Munky Run Creek fecal coliform bacteria sample data. The table below is sorted by flow to align with the flow zones. A total of 31 samples were available for the LDC analysis (Figure 3; Table 5). Ten samples exceeded the chronic standard and six samples exceeded the acute standard (Table 5); these are shown above the chronic and acute allowable loading lines in Figure 3.

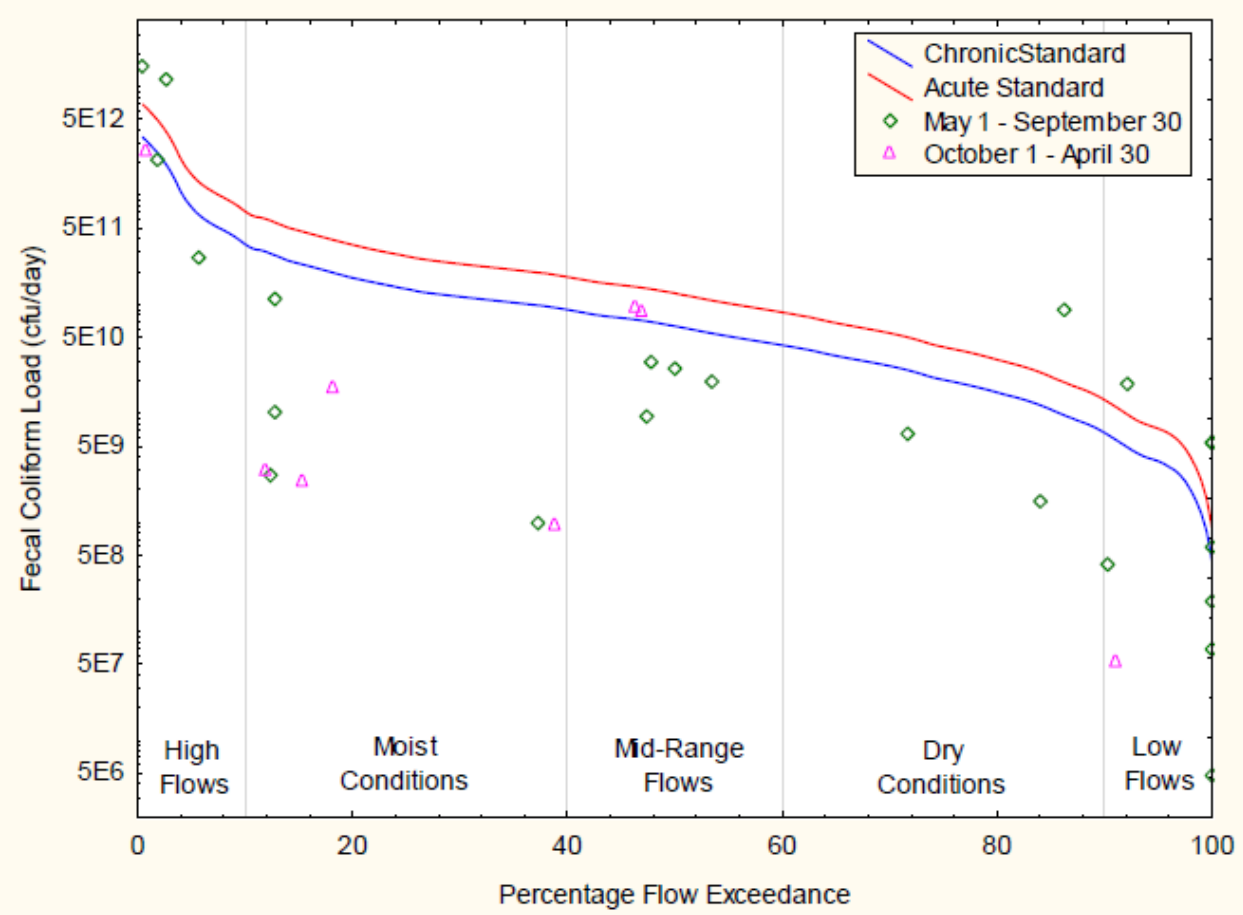

Figure 3. Peg Munky Run Creek fecal coliform bacteria load duration curve (SD DANR, 2011).

Table 5. Fecal Coliform Existing Loads by Flow Zone.

Flow Range	Date	Fecal Coliform Bacteria (cfu/100 ml)	Flow(cfs)	Load (CFU/day)
High Flows	04/23/2007	610	221.04	3.30E+12
>15cfs	06/14/2001	**3800**	167.41	1.56E+13
95th= 210.3	06/12/2008	*1000*	85.83	2.10E+12
	06/07/2006	**8700**	65.79	1.40E+13
	06/18/2007	480	23.11	2.71E+11
Moist Conditions	04/08/2002	10	12.31	3.01E+09
15-3.7	05/14/2008	10	11.06	2.71E+09
95th = 11.87	05/02/2006	40	10.87	1.06E+10
	05/08/2002	420	10.74	1.10E+11
	04/16/2007	10	9.68	2.37E+09
	04/29/2002	90	7.63	1.68E+10
	05/08/2008	10	4.04	9.89E+08
	04/09/2008	10	3.78	9.24E+08
Mid-Range Flows	10/09/2007	*1300*	2.90	9.22E+10
3.41-1.77	10/09/2007	*1200*	2.90	8.51E+10
95th = 2.90	05/21/2008	130	2.90	9.22E+09
	06/04/2008	430	2.87	3.02E+10
	05/21/2007	400	2.56	2.51E+10
	07/02/2008	360	2.23	1.96E+10
Dry Conditions	05/29/2008	260	1.04	6.61E+09
1.7-0.3	06/25/2008	130	0.48	1.53E+09
95th = 0.98	07/20/2001	**10000**	0.37	9.05E+10
Low Flows	07/09/2008	60	0.28	4.11E+08
<0.3	04/06/2006	10	0.19	4.65E+07
95th = 0.24	06/11/2002	**4700**	0.16	1.84E+10
	07/12/2006	390	0.02	1.91E+08
	07/16/2007	10	0.02	4.89E+06
	07/16/2007	**10800**	0.02	5.28E+09
	07/16/2007	**10800**	0.02	5.28E+09
	07/16/2008	140	0.02	6.85E+07
	07/23/2008	*1200*	0.02	5.87E+08

red = < value

TMDL AND ALLOCATIONS

As noted above, a load duration curve method was used to develop the bacteria loading capacity using the equation below for different hydrologic zones calculated based on discharge data recorded in the Peg Munky Run segment and the fecal coliform SSM target of 2000 CFU/100mL. The allowable fecal coliform load at the 95th percentile of each hydrologic zone from Figure 3 and Table 5 from FC TMDL represent the TMDL for fecal coliform (shown in the second column of Table 6).

(flow) × (conversion factor) × (state water quality criteria) = loading capacity or allowable daily load

The *E. coli* loading capacity for each hydrologic zone was calculated by multiplying the fecal coliform values by the ratio 0.589 (EC:FC) for the SSM (Table 7), documented in the translation TMDL (SD DANR, 2022). In addition, the fecal coliform existing load from the Peg Munky Run 01 fecal coliform TMDL, calculated as the 95th percentile existing load in each flow regime (Table 5), was converted to *E. coli* using the ratio (EC:FC) for the SSM (Table 6). The percent reduction was then calculated as the converted *E. coli* current load minus the *E. coli* converted TMDL divided by the converted *E. coli* current load (Table 6).

Table 6. Bacteria loading capacity for Peg Munky Run segment 01 for limited contact recreation.

Flow Zone	Fecal Coliform TMDL (CFU/day)	Existing Fecal Coliform Load (CFU/day)*	*E. coli* TMDL (CFU/day)	Existing *E. coli* Load (CFU/day)	% Reduction
High	1.03E+13	1.53E+13	6.07E+12	9.01E+12	33%
Moist	5.81E+11	7.76E+10	3.42E+11	4.57E+10	0%
Mid-Range	1.42E+11	9.05E+10	8.36E+10	5.33E+10	0%
Dry	4.81E+10	8.21E+10	2.83E+10	4.84E+10	41%
Low	1.19E+10	1.32E+10	7.01E+09	7.77E+09	10%

Table 7. Applicable bacteria criteria and ratio for the limited contact recreation use.

Fecal coliform criteria	*E. coli* criteria	EC:FC ratio
GM 1000	GM 630	0.63
SSM 2000	SSM 1178	0.589

The *E. coil* loading capacity was allocated among the point and nonpoint sources as described in the sections below, while also including a margin of safety (MOS) (Table 8).

Table 8. E. coli TMDL and allocations for Peg Munky Run segment 01.

Flow Zone	*E. coli* TMDL (CFU/day)	WLA (CFU/day)	LA (CFU/day)	MOS (CFU/day)
High	6.07E+12	0.00E+00	5.46E+12	6.07E+11
Moist	3.42E+11	0.00E+00	3.08E+11	3.42E+10
Mid-Range	8.36E+10	0.00E+00	7.53E+10	8.36E+09
Dry	2.83E+10	0.00E+00	2.55E+10	2.83E+09
Low	7.01E+09	0.00E+00	6.31E+09	7.01E+08

Waste Load Allocations (WLAs)

As stated in the point source section of this document, there were no NPDES facilities that discharge into this stream segment. Therefore, this waterbody did not need a Waste Load Allocation (WLA).

Load Allocations (LAs)

Load allocations account for the portion of the TMDL assigned to non-point sources. Natural background (wildlife) constitutes less than one percent of the total. The remainder of the LA is assigned to the land uses likely to contribute to *E. coli* bacteria loads at rates above natural backgrounds. This includes cropland, pastureland, and residential areas if applicable. The LA was calculated using the following equation: (TMDL)-(MOS) -(WLA)= LA.

Margin of Safety (MOS)

The margin of safety (MOS) is a portion of the loading capacity that is set aside to prevent exceedance of a water quality standard as a means to account for the uncertainty involved in developing a TMDL. A margin of safety provided by (1) using implicit assumptions in the calculation of the loading capacity of the waterbody and/or (2) by establishing explicit allocations. An explicit approach was used within the load duration curve framework to establish a MOS for all flow zones in this TMDL. This explicit MOS was calculated as 10 percent of the loading capacity to account for uncertainties associated with flow estimates and nonpoint sources.

SEASONAL VARIATION

Different seasons of the year can yield differences in water quality due to changes in precipitation and agricultural practices. When rainfall occurs, *E. coli* bacteria that have built up on the land surface under dry conditions are washed off and deposited into lakes, rivers and wetlands. In addition, the load duration curve process itself demonstrates variability in seasonal conditions by presenting water quality data associated with their associated flow conditions, which vary seasonally.

CRITICAL CONDITIONS

The critical condition for *E.coli* loadings in any watershed depends on the presence of point sources and land use within the watershed. Under dry conditions, non-point sources typically become the dominant contributors, especially when followed by a rainfall event. During rainfall, *E.coli* bacteria that has accumulated on the land surface can be washed into streams, leading to wet weather exceedances. In the case of Peg Munky Run, exceedances occur primarily during the dry and low flow zones, which is consistent with the earlier statement.

FOLLOW-UP MONITORING

Monitoring and evaluation efforts will be targeted toward the effectiveness of implemented best management practices (BMPs). Sample sites will be based on BMP site selection and include the parameter of *E. coli* bacteria. Once the implementation project is complete, post-implementation monitoring will be necessary to assure that the TMDL has been reached and improvement to the beneficial uses occurs. This will be achieved by recurrent water quality sampling at the original monitoring sites.

IMPLEMENTATION PLAN

The TMDL analysis was performed using the best data available to specify the *E. coli* reductions necessary to achieve water quality criteria. The intent of meeting the criteria is to support the designated use classification of this stream, and to follow the most stringent downstream use as well. A detailed implementation plan is not included in this TMDL, but implementation is expected through existing programs involving local entities and landowners to help minimize *E. coli* bacteria loading.

The South Dakota DANR partners with East Dakota Water Development District, implementing the Big Sioux River Watershed Project with the use of CWA Section 319 funds to help landowners implement BMPs within the Big Sioux River Watershed. Peg Munky Run Segment 01 is in this project area, and the project is working to reduce *E. coli* loading to the stream.

PUBLIC COMMENT

This TMDL was made available for public comment in accordance with section 303(d) requirements. A public notice letter was published in --------- to announce the availability for public comment. The TMDL document and comment process was made available on the South Dakota Department of Agriculture and Natural Resources webpage at https://danr.sd.gov/public/default.aspx. The public comment period began xx/xx/xxxx and ended xx/xx/xxxx. No comments were received during the public comment period.

LITERATURE CITED

Earth Resources Observation and Science (EROS) Center, 2023. National Land Cover Database (NLCD) 2021: Conterminous U.S. Land Cover. https://www.usgs.gov/media/images/national-land-cover-database-nlcd-2021-conterminous-us-land-cover

Earth Resources Observation and Science (EROS) Center, 2023. National Land Cover Database (NLCD) 2011: Conterminous U.S. Land Cover. https://www.mrlc.gov/data?f%5B0%5D=project_tax_term_term_parents_tax_term_name%3AAnnual%20NLCD

SD DANR, 2011. FECAL COLIFORM BACTERIA TOTAL MAXIMUM DAILY LOAD EVALUATION FOR PEG MUNKY RUN CREEK, DEUEL, BROOKINGS, AND HAMLIN COUNTIES, SOUTH DAKOTA. South Dakota Department of Agriculture and Natural Resources, Pierre, SD. https://danr.sd.gov/Conservation/WatershedProtection/TMDL/docs/TableDocs/tmdl_pegmunkyruncreekfecal0811.pdf

SD DANR, 2022. *Escherichia coli* Total Maximum Daily Loads (TMDLs) Conversion with Existing Fecal Coliform TMDLs for Impaired Streams Designated Recreation Uses in South Dakota, Pierre, SD. https://danr.sd.gov/Conservation/WatershedProtection/TMDL/docs/TableDocs/tmdl_statewidetranslation_ecoli.pdf

SD DANR, 2026. The 2026 South Dakota Integrated Report for Surface Water Quality Assessment. South Dakota Department of Agriculture and Natural Resources, Pierre, SD. https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/waterqualitystandards/integratedreports.aspx/1000

APPENDIX A: E.COLI DATA

SampleDate	*E.coli (CFU/100mL)*
05/21/2019	41
06/03/2019	52.9
06/17/2019	2420
07/01/2019	12000
07/15/2019	12000
08/21/2019	461
09/16/2019	816
09/23/2019	517
10/07/2019	411
06/08/2020	268
06/22/2020	980
07/06/2020	2420
07/20/2020	2720
08/03/2020	459
08/17/2020	123
09/08/2020	727
09/21/2020	178
10/19/2020	326
04/19/2021	219
05/03/2021	26.9
05/25/2021	1120
06/07/2021	122
08/02/2021	1550

APPENDIX B: CONSTRUCTION STORMWATER PERMITS

Facility Name	NPDES ID	Street Address	FRS ID	DFR URL
PCN 04HM	SDR10P5I6	SD28 - FROM ESTELLINE TO SD15	110071911428	https://echo.epa.gov/detailed-facility-report?fid=SDR10P5I6&sys=ICP
PCN 05Q7	SDR10P5R9	SD28 - FROM ESTELLINE TO SD15	110071911428	https://echo.epa.gov/detailed-facility-report?fid=SDR10P5R9&sys=ICP
SD HIGHWAY 28 BORROW PIT 1	SDR10P5JI	SD HIGHWAY 28	110071961359	https://echo.epa.gov/detailed-facility-report?fid=SDR10P5JI&sys=ICP
SD HIGHWAY 28 STOCKPILE SITE 1	SDR10P5JH	SD HIGHWAY 28/467TH AVE INTERSECTION	110071961576	https://echo.epa.gov/detailed-facility-report?fid=SDR10P5JH&sys=ICP
SD HIGHWAY 28 STOCKPILE SITE 2	SDR10P5JJ	SD HIGHWAY 28	110071961359	https://echo.epa.gov/detailed-facility-report?fid=SDR10P5JJ&sys=ICP
SD HIGHWAY 28 STOCKPILE SITE 3	SDR10P5JK	SD HIGHWAY 28	110071960979	https://echo.epa.gov/detailed-facility-report?fid=SDR10P5JK&sys=ICP

APPENDIX C: PUBLIC COMMENTS

APPENDIX D: EPA FINAL APPROVAL