

## CHAPTER 10: ELEMENT H. - PERFORMANCE

Below is a list of long range goals for target pollutant loads, level, or value of remediation systems installed for 10 identified indicators in the Deer Creek Watershed (See also Chapter 3). Due to the nature of urban streams, reaching state standards for chloride, E. Coli and other pollutants must of necessity be long range, and make take 20 or more years to achieve.

Indicator	Present pollutant load, baseline level, or benchmark value	Target Load, Level or Value
Chloride	Avg. mean chloride 407 milligrams/liter Deer Creek @ Maplewood	The total chloride plus sulfate concentration shall not exceed the estimated natural background concentration by more than twenty percent (20%) at the 60Q10 low flow.
E.Coli	Recreational season 2016 Deer Creek Geometric Mean 1849 count/100mL. Recreational season 2016 Black Creek Geometric Mean 2183 count/100mL.	During the recreational season not to exceed geometric mean of 206 cfu/dL- State of Missouri standard for whole body contact.
Volume as a surrogate for TSS	TSS increases with flow rates, and at first flush	Capture 1st 1.14 in rainfall onsite (90% of storms)-MSD standard
Phosphorus	DCWA testing, avg phosphate = .55 mg/liter	Suggested EPA Region 7 Benchmark = .075 mg/L
# of rainscaping projects installed	412 projects completed as of December 31, 2020	585 projects completed by December 31, 2025
Tons of organic debris, leaf litter & trash removed from or prevented from entering creek	9 tons trash removed in 2019	At least 5000 lbs. trash, leaf litter and/or organic debris removed or prevented from entering creek annually.
Linear feet of restored riparian corridor	TBD	4 linear miles of riparian corridor restored.

As outlined in Chapter 9 on interim milestones, below is a list of short term goals that can be achieved over the next 5 years. This will move us towards accomplishing our longer term water pollution target loads. After each goal below is a list of specific, measurable, time-sensitive performance criteria by which we can measure our progress towards the goals.

**Goal:** *Capture the first 1.14 inch of rainfall in rainscaping projects to reduce E.coli and nutrient loads in streams*

**Performance Criteria**

1. Fifteen Orientation/Training sessions will have been completed for the Rainscaping Cost Share Program by 2025.
2. A database of names and contact information for all residential landowners who live in each subwatershed will be completed by April 2021.
3. A rainscaping cost-share application review and evaluation session will be have been scheduled and completed every May annually from 2021-2025.
4. At least 25 rainscaping projects will have been ground-truthed each June or October from 2021-2025.
5. Ten to fifteen additional rainscaping signs will be distributed and displayed by willing homeowners each September from 2021-2025.
6. At least one rainscaping training session for professionals will be conducted each year from 2021-2025.

**Goal:** *Eliminate 100% of combined sewer overflows by 2030, 85% of sanitary sewer overflows by 2023 and 100% of sanitary sewer overflows by 2033 to reduce E.coli and nutrient loads in streams (MSD)*

**Performance Criteria**

1. See Appendix 9-A Implementation Plan-deercr-and-blackcr-final for details.

**Goal:** *Finalize EPA accepted watershed plan updates in 2022 and in 2027*

**Performance Criteria**

1. The first draft of an updated watershed plan will have been submitted to MoDNR by January 2021.
2. The second draft of an updated watershed plan will have been submitted to MoDNR by July 2021.
3. The final draft for an updated watershed plan will have been submitted to MoDNR by January 2022.
4. Modeled load reduction data for installed rainscaping projects will have been submitted to MoDNR annually from 2021-2025.
5. The Deer Creek Technical Advisory Group, Deer Creek Steering Committee, and Deer Creek Community Leaders Task Force will have met annually from 2021-2025.

**Goal:** *At least 5000 pounds of trash, leaf litter and/or organic debris removed or prevented from entering creek annually.*

**Performance Criteria**

1. At least 5 volunteer trash clean ups in the watershed will have been conducted by 2025.
2. At least one “water goat” trash collector will have been installed in Deer Creek or one of its tributaries by 2022.

3. At least one municipality in the watershed has completed a model leaf litter reduction outreach program by 2024.

**Goal:** *At least 4 linear miles of riparian corridor permanently removed from development and appropriately landscaped to reduce impacts on erosion, sedimentation and creek widening by 2030.*

**Performance Criteria**

1. The purchase and set-aside of development rights for the Brentwood wetland property at Kirkham and Marshal will have been completed by December 2021.
2. A planting plan design for a wetland arboretum for the Brentwood wetland property will have been completed by December 2023.
3. The planting plan will have been implemented for the Brentwood wetland property by December 2025.
4. At least 10 invasive species removal efforts in riparian corridors will have been completed by December 2025.
5. At least 5 tree planting projects will have been completed by December 2025.
6. At least 5 invasive species removal training sessions will have been completed by December 2025.

**Goal:** *Reach EPA standard for chloride levels in Deer Creek by 2040.*

**Performance Criteria**

1. Salt usage data information will have been updated annually.
2. The content for a workshop on road salt applicators and maintenance crews on private developments will have been developed by February 2023.
3. A training workshop for road salt applicators and maintenance crews on private developments will have been implemented by September 2024.
4. At least five articles on the hazards of excessive salt use in Deer Creek Watershed Alliance will have appeared in the Deer Creek Watershed email newsletter by December 2015.