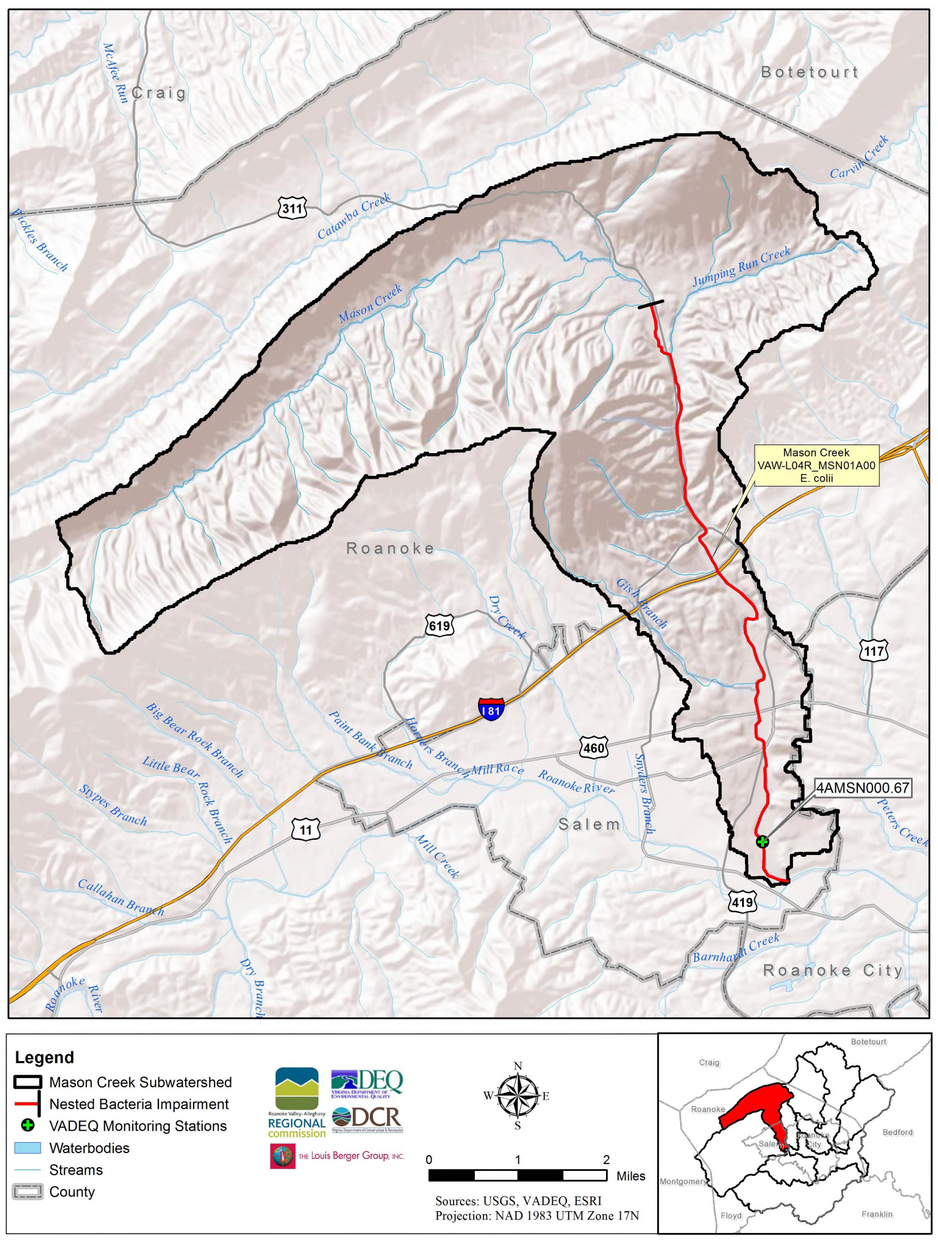
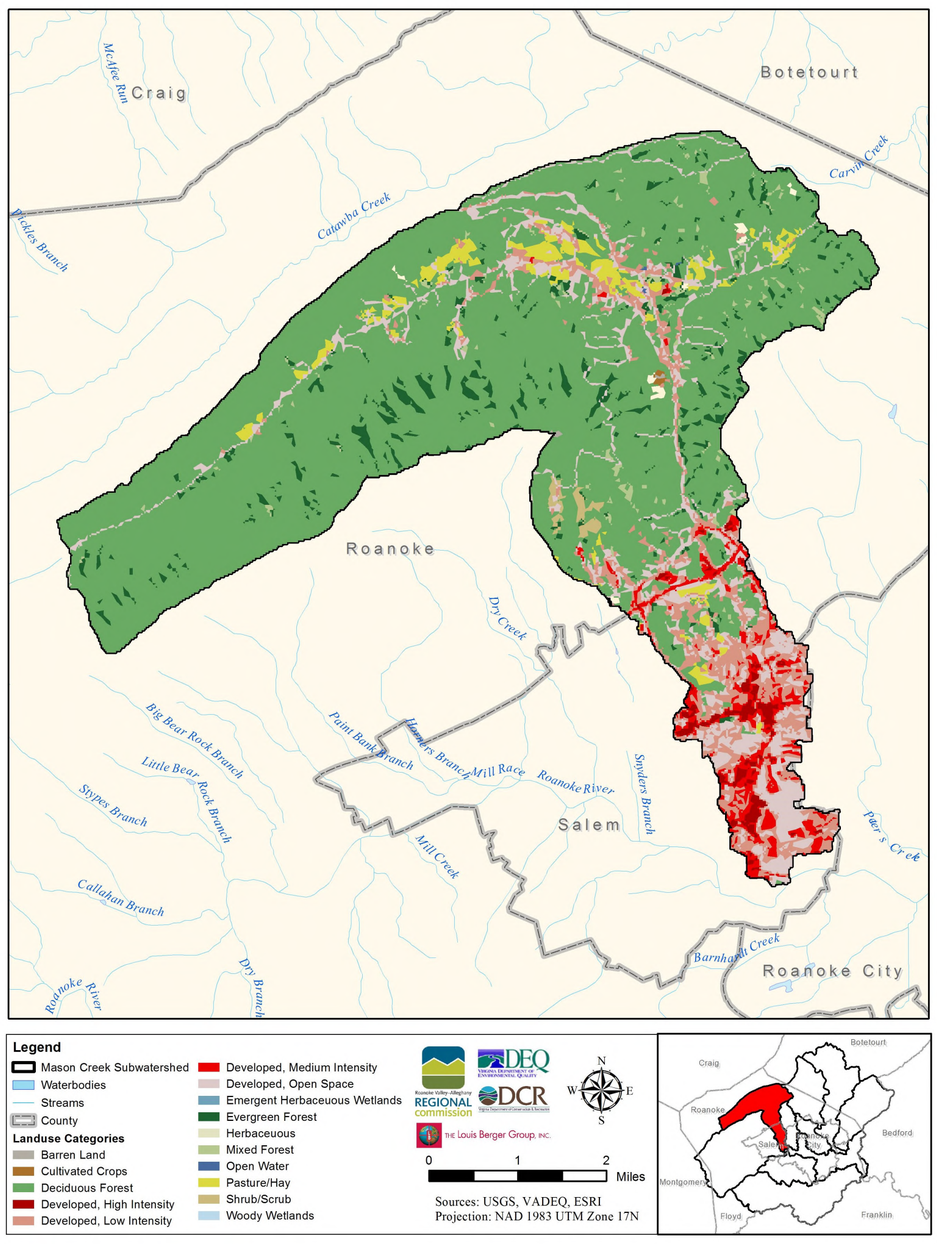
Mason Creek Subwatershed





Impairment Summary

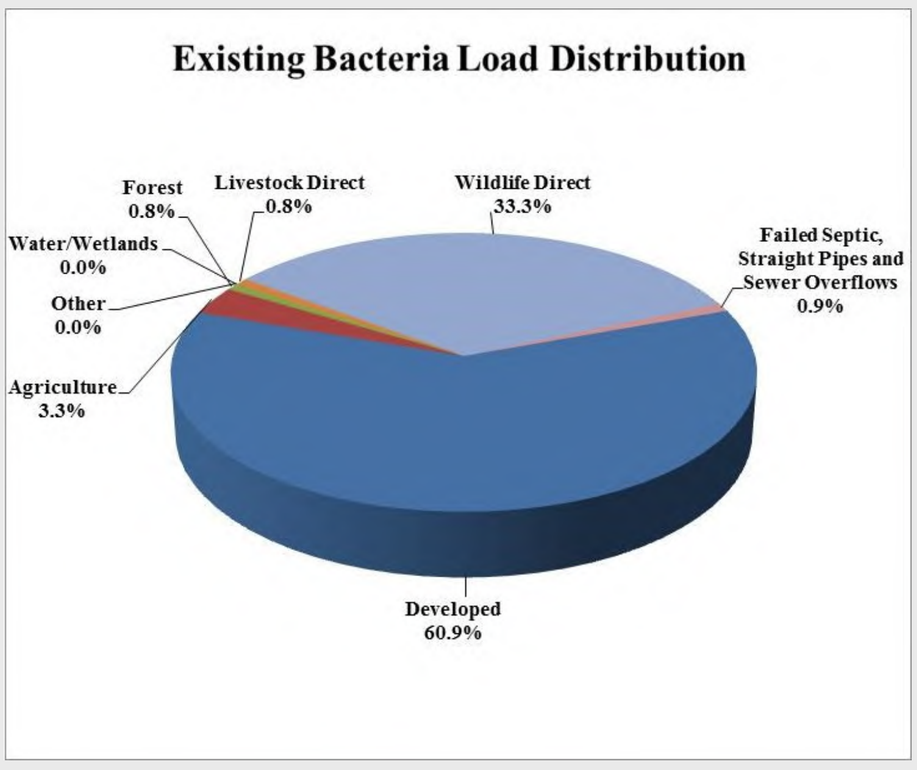
Assessment Unit	Stream Name	Length (miles)	Boundaries	Cause
VAW-L04R_MSN01A00	Mason Creek	7.56	Mason Creek mainstem from its confluence with the Roanoke River upstream to near the Mason Cove Community.	Escherichia coli

Land Use Distribution (NLCD 2006)

Land Use Category	Area	
	Acres	Percent
Developed	3,767.6	20.0%
Agriculture	531.8	2.8%
Forest	14,411.5	76.5%
Water/Wetlands	3.7	0.0%
Other	131.6	0.7%
Total	18,846.1	100.0%

Existing and Allocated Bacteria Loads

Land Use/Source	Total Annual *E. coli* Loads (billion coliform forming units/year)		Percent Reduction (%)
	Existing Load	Allocation Load	
Land Based Non-point			
Developed	21,739.3	247.8	98.9%
Agriculture	1,172173.0	12.9	98.9%
Forest	271.2	3.0	98.9%
Water/Wetlands	<0.1	<0.1	0.0%
Other	0.7	<0.1	98.9%
Direct Non-point			
Livestock Direct	290.3	0.0	100.0%
Wildlife Direct	11,906.0	4,155.2	65.1%
Failed Septic, Straight Pipes and Sewer Overflows	334.1	0.0	100.0%
Point Source	0.0	0.0	-
Total	**35,714.6**	**4,418.9**	**87.6%**



Existing Best Management Practices Agricultural and Stormwater

Agricultural Best Management Practice	Count	Area Treated	Streamlength Protected (ft)
No Known Agricultural Best Management Practices			

Stormwater Best Management Practice	Count	Reported Area Treated* (acres)
Detention	27	218.8
Extended Detention	1	4.5
Infiltration	1	1.3
Porous Pavement	1	No Data
Underground Storage	1	10.7

*Not all Best Management Practices reported area treated

The municipalities are in the process of creating Best Management Practices inventories, so not all Best Management Practices present in the watershed may be reported.

Potential Implementation Actions to Reduce Bacteria

- Existing Best Management Practice Retrofits
- Low Impact Development Stormwater Controls
- Riparian Buffer Creation/Expansion
- Septic System Repair/Replacement
- Pet Waste Disposal and Education Programs