




Appendix D

Structural BMP Prioritization Matrix Pomperaug River Watershed Based Plan

BMP Prioritization Matrix for Potential Areas of Concern
Pomperaug River Watershed Based Plan

New Site ID (Impaired Segment)	Location Description	Bacteria Sources	Potential Best Management Practices (BMPs)	Other Recommendations and Notes	Relative BMP Pollutant (Bacteria) Removal	Relative Cost	Maintenance Requirements	Field Visit Conducted	BMP Concept Development	Photo
POMPERAUG RIVER SUBWATERSHED										
Equestrian 1 (Pomperaug-01 and Transylvania Brook)	East Flat Hill Road, Southbury	Horse manure in paddocks Two drainage paths - one flows through Audubon old pasture, excellent buffer; another flows out drainage ditch to Transylvania Brook.	<ul style="list-style-type: none"> • Bioretention in drainage ditch adjacent to Audubon Property • Filter berm at bottom of paddock • Improved buffer around intermittent streams on equestrian property or reconfigured paddocks/runs/training areas • Move drainage away from the center of paddocks/pasture 	<ul style="list-style-type: none"> • Outreach for manure management best practices • Connecticut Horse Environmental Awareness Program (HEAP) and Connecticut Horse Farm of Environmental Distinction Program 	Medium (bioretention) High (filter berm/buffer)	Medium Medium	Medium Low	Yes	YES - LARGE	
Public School 1, Golf 1, Golf 2, Golf 3 (Pomperaug-03)	Old Field Road & Poverty Road, Southbury	Geese observed at both golf courses and in field adjacent to river at elementary school.	<ul style="list-style-type: none"> • Increase vegetated buffer around water hazards and adjacent to streams/river • Implement other waterfowl deterrent strategies 		Medium (buffer) Low (other deterrent strategies)	Low Medium	Low High	Yes	YES - SMALL	
Residential Neighborhood 3 (Pomperaug-03)	Flood Bridge / River Hill neighborhood, Southbury	Failing or malfunctioning septic systems. Stormwater runoff.	<ul style="list-style-type: none"> • Sanitary/septic survey of Branch Road/Riverhill Road neighborhood • Infiltration in ROW or underground • Inspect Flood Bridge Road houses along riverbank for proper septic system sizing and function 		Medium (IDDE/Septic investigation) High (infiltration BMP)	Medium High	N/A High	Yes	YES - LARGE Combine with Residential Neighborhood 2	
Residential Neighborhood 4 (Pomperaug-03)	River Trail, Spring Road, Middle Road ("Cedarlands"), Southbury	Failing or malfunctioning septic systems. Raw sewage odor noted during stream walk near River Trail.	<ul style="list-style-type: none"> • Investigate septic odor • Encourage septic system inspections • Educate homeowners and homebuyers about proper use and maintenance of septic systems • IDDE investigation of drainage discharging at Cedarland Park 		High	Low	Low	Yes		
Residential Neighborhood 1 (Pomperaug-01)	Western side of Pomperaug River outlet to the Housatonic, North of River Road	Stormwater runoff	<ul style="list-style-type: none"> • Infiltration below roadway, especially cul-de-sac at Pascoe Drive and Pomperaug Trail and at Pascoe Drive and Berkshire Road intersection • Increase buffer along river • More frequent catch basin cleaning 		High	High	High	Yes	YES - LARGE	
Residential Neighborhood 1 (Pomperaug-01)	Western side of Pomperaug River outlet to the Housatonic, North of River Road	Failing or malfunctioning septic systems	<ul style="list-style-type: none"> • Advanced subsurface sewage disposal systems (sand filter or similar) in riverside lots • Inspect septic systems for failure • Ledge/bedrock could be a constraint • Educate homeowners and homebuyers about proper use and maintenance of septic systems 		High	High	High	Yes		
Residential Neighborhood 2 (Pomperaug-01)	Eastern side of Pomperaug River outlet to the Housatonic, North of River Road	Stormwater runoff	<ul style="list-style-type: none"> • Underground infiltration (limited space in ROW) 	<ul style="list-style-type: none"> • Septic system inspection and outreach • Turf management • Grass clippings - outreach or establish collection for disposal 	High	High	High	Yes	YES - LARGE Combine with Residential Neighborhood 3	


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Mixed Residential / Commercial Complex 1 (Pomperaug-03)	Heritage Road, Southbury	Stormwater runoff	<ul style="list-style-type: none"> Underground infiltration in ROW Bioretention cells where feasible Pervious pavement at older parking lots (e.g. Meeting House) needing maintenance 	<ul style="list-style-type: none"> Heritage Village should be included as a priority area in the Town of Southbury's MS4 Stormwater Management Program, including IDDE program implementation Conduct a stormwater BMP retrofit inventory/feasibility study for Heritage Village, which would support Southbury's efforts to reduce and disconnect DCIA as required by the MS4 Permit 	High	High	High	Yes	YES - LARGE	
Wastewater Treatment Facility 1 (Pomperaug-03)	Heritage Road, Southbury	Wastewater treatment plant	<ul style="list-style-type: none"> Conduct additional ambient water quality monitoring at new sampling locations to determine extent of impairment and possible source(s) of bacteria 		N/A	Low	N/A	Yes		
Commercial Complex 1 (tributary to Pomperaug-03)	East side of intersection of Route 6 and Main Street South, Southbury (South of Bullet Hill Brook)	Stormwater runoff, waste management, past septic issues	<ul style="list-style-type: none"> Incorporate LID retrofits into site redevelopment Underground infiltration, permeable pavement Inspect septic systems for failure (due to size this falls under DPH or DEEP jurisdiction) 	<ul style="list-style-type: none"> Cover dumpsters with roof Review stormwater control plan, if exists Heavily channelized stream Conduct survey for potential illicit discharges from businesses in plaza 	High	High	High	Yes		
Business District 1 (Pomperaug-03)	Main Street South Corridor, Southbury (particularly concentrated at Municipal Complex west of the intersection with Peter Road)	Stormwater runoff	<ul style="list-style-type: none"> Develop and implement GI/LID "master plan" for Main Street South corridor LID retrofits of municipal and commercial properties and within the municipal ROW between Route 6/Southbury Plaza and South Britain Road (Route 172) Potential municipal sites include: <ul style="list-style-type: none"> Southbury Police, Fire, and DPW Southbury Town Hall Southbury Park and Recreation Rochambeau Middle School Pomperaug Elementary School Southbury Library Municipal ROW Numerous commercial redevelopment sites along the corridor 		High	High	High	Yes		
Health Care 2 (tributary to Pomperaug-03)	Intersection of Main Street South and Garage Road	Dry weather discharge (pavement stained)	<ul style="list-style-type: none"> Follow up sampling of dry weather discharge and removal of any illicit connections found 		Medium	Low	Low	Yes		

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Equestrian 2	Pomperaug River Crossing on Route 172, South Britain	Equestrian facility, manure piles, paddock	<ul style="list-style-type: none"> Move manure piles to alternative site with filter berms or drainage away from Pomperaug Filter berms or increased buffer to pond Bank stabilization and buffer improvement along river edge Evaluate need for farm pond Move and regrade paddock/training areas to improve buffer 	<ul style="list-style-type: none"> Manure management in place Most paddocks drain away from Pomperaug and toward a pond with algal mats that drains to Pomperaug Farm to the north allows cows/cattle access to tributary. Add buffer and fencing around stream. Outreach for manure management best practices Connecticut Horse Environmental Awareness Program (HEAP) and Connecticut Horse Farm of Environmental Distinction Program 	High	Medium	Low	Yes	YES - SMALL	
Equestrian 4	Intersection of Route 67 and Crook Horn Drive	Manure in open dumpsters	<ul style="list-style-type: none"> Cover dumpsters or ensure drainage away from river 	<ul style="list-style-type: none"> Outreach for manure management best practices 	High	Low	Low	Yes		
State Facility 1	Garage Road, Southbury	Stormwater runoff, potential illicit discharges (buried stream)	<ul style="list-style-type: none"> Good housekeeping/pollution prevention Infiltration where possible 					No		
Town Park 2	Judson Avenue / Jack's Bridge Road, Woodbury	Pet and wildlife waste	<ul style="list-style-type: none"> Pet waste management Increase buffer width 					No	YES - SMALL	
Earthworks / Quarry 1	Route 67, Southbury	Sedimentation ponds, dynamic river channel, non-bacterial	<ul style="list-style-type: none"> N/A 					No		
Town Park 1		Pet and wildlife waste	<ul style="list-style-type: none"> Pet waste management 					No		
Dog Park 1	Route 67 along the north bank of the Pomperaug River, Southbury	Pet waste, bank erosion	<ul style="list-style-type: none"> Increase buffer width, already slated for bank stabilization project 					No	YES - SMALL	
Residential Complex 2	Main Street South, Woodbury just north of the Southbury Town Line	Concerns about large residential septic system	<ul style="list-style-type: none"> Inspect septic system for proper function 					No		

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Equestrian 3	Route 67 along South Branch of Bullet Hill Brook	Stream running through paddock	<ul style="list-style-type: none"> Encourage sufficient buffer Animal exclusion fencing 					No		
Residential Complex 3	Route 6 across intersection from South Pomperaug Avenue, Middle Quarter, Woodbury	Past septic issues	<ul style="list-style-type: none"> Inspect septic system for proper function 					No		
Commercial Complex 2	West side of Route 6; south of intersection with Route 64, Middle Quarter Woodbury	Historical groundwater contamination Septic failure issues	<ul style="list-style-type: none"> Inspect septic system for proper function 					No		
Health Care 1	North of intersection of Route 172 and Main Street South, Southbury adjacent to Pomperaug River	Past septic issues	<ul style="list-style-type: none"> Inspect septic system for proper function 					No		
WEEKEEPEEMEE RIVER SUBWATERSHED										
Cropland / Livestock 1 (Weekepeemee-01)	Intersection of Chohees Trail & Weekepeemee Road	Run-off from livestock pasture and feeding paddocks. Livestock access to intermittent stream. Row crops.	<ul style="list-style-type: none"> Filter berms along pasture and Weekepeemee Increased vegetated buffer width Infiltration BMP on north farm next to road Remove stream access through buffer and/or fencing 	<ul style="list-style-type: none"> Fencing in good repair, encourage maintenance Encourage effective manure application (e.g., not before rain storm) 	High	Medium	Low	Yes	YES - SMALL	



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Equestrian 5 (Weekepeemee-01)	Weekepeemee Road Woodbury, just south of the Bethlehem town line	Livestock (horses, goats, alpaca) manure	<ul style="list-style-type: none"> Filter berms along intermittent stream Increase buffer width 	<ul style="list-style-type: none"> Fencing in good repair, encourage maintenance Outreach for manure management best practices 	High	Medium	Low	Yes		
Cropland 1 (Weekepeemee-01)	Weekepeemee Road South of Peter Road, Woodbury	Row crops	<ul style="list-style-type: none"> Increase buffer width 	Timing relevant to application of manure / fertilizer on the fields	High	Medium	Low	Yes		
Livestock (Weekepeemee-01)	Weekepeemee Road South of Peter Road, Woodbury	Livestock (few head);	<ul style="list-style-type: none"> Filter berms along Weekepeemee Increase buffer width 	<ul style="list-style-type: none"> Encourage effective manure application (e.g., not before rain storm) Outreach for manure management best practices 	High	Medium	Low	Yes	YES - SMALL	
Cropland 2 (tributary to Weekepeemee-01)	North of Peter Road, adjacent to Carmel Hill Brook	Row crops / vegetable	<ul style="list-style-type: none"> Increase buffer width 		High	Medium	Low	Yes		
Livestock 3	Guilds Hollow Road	Livestock grazing and feed lot	<ul style="list-style-type: none"> Filter berm along Dowd Brook 	<ul style="list-style-type: none"> Feeding appears to occur in a local depression, ensure that it does not drain under road 	High	Medium	Low	Yes	YES - SMALL	
Cropland / Livestock 2	Thomson Road, Bethlehem	Livestock access to tributary	<ul style="list-style-type: none"> Increased buffer and fencing or filter berms 	<ul style="list-style-type: none"> Evaluate manure storage Outreach for manure management best practices 	High	Low	Low	Yes	YES - SMALL	




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Livestock 2	Robert Leather Road, Bethlehem	Convent with active farm operation. Past grant recipient for cattle management to get cows out of a wetland area.	<ul style="list-style-type: none"> Encourage effective manure management 					Yes		
Earthworks 2 (Weekepeemee-01)	North of Crane Hollow Road, east of Weekepeemee River	Earth excavation and school bus yard	<ul style="list-style-type: none"> Encourage effective sediment and erosion controls, runoff infiltration 					No		
Residential Neighborhood 6	Kasson Grove, Bethlehem	Lake side housing community -- old seasonal camps, many now year round residences	<ul style="list-style-type: none"> Inspect septic system for proper function and sizing 					No		
Residential Neighborhood 5	Lake Drive	Lake side housing community -- old seasonal camps, many now year round residences	<ul style="list-style-type: none"> Inspect septic system for proper function and sizing 					No		
Dairy Farm 1	West of Todd Hill Road, north of intersection with Wood Creek Road, Bethlehem	Manure storage	<ul style="list-style-type: none"> Encourage effective manure management 	<ul style="list-style-type: none"> Evaluate manure storage Outreach for manure management best practices 				No		





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Equestrian 6	east of Todd Hill Road, south of Bergman Hill Road, Bethlehem	Manure storage	<ul style="list-style-type: none"> Encourage effective manure management 	<ul style="list-style-type: none"> Evaluate manure storage Outreach for manure management best practices 				No		
Equestrian 7	Middle Road Turnpike, Woodbury	Horse access to tributary stream	<ul style="list-style-type: none"> Filter berms and/or increased buffer in pasture Reconfigure paddocks to avoid stream 	<ul style="list-style-type: none"> Some buffer exists in parts of pasture land Outreach for manure management best practices Connecticut Horse Environmental Awareness Program (HEAP) and Connecticut Horse Farm of Environmental Distinction Program 	High	Medium	Low	Yes	YES - SMALL	
Dairy Farm 2	Artillery Road, Woodbury	Livestock access to tributary. Incomplete coverage of manure storage.	<ul style="list-style-type: none"> Filter berms or fencing and increased buffer around stream to prevent livestock access Reconfigure manure composting to divert runoff away from catch basins Consider covered manure storage or manure composting 		High	Medium	Low	Yes		



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Residential Neighborhood 7	Quassapaug Road at Soucy Road, Woodbury	Impacts to wetland areas Historic (chronic) septic failures	<ul style="list-style-type: none"> • Ensure wetland limits have been respected • Septic inspections 					No		
Livestock 4	Hard Hill Road South, approximately 1/4 mile north of intersection with Nonnewaug Road, Bethlehem	Livestock paddock near farm pond Possible junkyard	<ul style="list-style-type: none"> • Encourage adequate buffer to water body • Ensure proper waste storage and disposal 					No		
Plant Nursery 1	North of Washington Road (Route 47 Bridge), Woodbury	Fertilizer and pesticide applications	<ul style="list-style-type: none"> • Encourage effective application (and storage) strategies and timing 					No		



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Livestock 7	West side of Flanders Road near intersection with Church Hill Road, Woodbury	Cattle	<ul style="list-style-type: none"> Encourage effective manure management 	<ul style="list-style-type: none"> Outreach for manure management best practices 				No		
Livestock 6	West side of Flanders Road near intersection with Church Hill Road, Woodbury	Cattle, chickens, pigs, etc	<ul style="list-style-type: none"> Encourage effective manure management 	<ul style="list-style-type: none"> Outreach for manure management best practices 				No		
Livestock 5	Route 6 near Guernseytown Road on the Woodbury/Watertown townline	Cattle, chickens, pigs, etc	<ul style="list-style-type: none"> Encourage effective manure management 	<ul style="list-style-type: none"> Outreach for manure management best practices 				No		
Cropland 3	East of Main Street North (Route 6), north of Scratchville Road along Nonnewaug River	Cornfield – application of manure as fertilizer	<ul style="list-style-type: none"> Encourage effective application strategies and timing Enhance width of riparian buffer 					No		

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EAST SPRING BROOK SUBWATERSHED										
Equestrian 7	Route 61, Morris north of fairgrounds	Manure storage	<ul style="list-style-type: none"> Increase buffer to stream 	<ul style="list-style-type: none"> Manure management measures appear to be in place Outreach for manure management best practices Connecticut Horse Environmental Awareness Program (HEAP) and Connecticut Horse Farm of Environmental Distinction Program 	High	Low	Low	Yes		
Fish Hatchery 1	Nonnewaug Road, Bethlehem	Nutrients	<ul style="list-style-type: none"> If still active, encourage effective waste management, possibly through multi-trophic aquaculture 					No		
Dairy Farm 3	Magnolia Hill Road and Hard Hill Road South, Bethlehem	Livestock access to tributary. Manure storage	<ul style="list-style-type: none"> Filter berms or fencing and increased buffer around stream to prevent livestock access Evaluate manure storage practices 	<ul style="list-style-type: none"> Outreach for manure management best practices 				No		
TRANSYLVANIA BROOK SUBWATERSHED										
State Facility 2	Route 172, Southbury north of South Britain Historic District	Ag easement, including leases to local farming operations	<ul style="list-style-type: none"> Encourage effective manure management and timing for spread of fertilizer/manure on cropland areas 	Outreach for manure management best practices				No		
State Facility 2	Route 172, Southbury north of South Britain Historic District	Waterfowl	<ul style="list-style-type: none"> Establish / increase riparian buffer width to filter runoff from fields where geese graze 	Pond infested with water chestnut				No	YES - SMALL	

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Dairy Farm 4	Spruce Brook Road, Southbury	Manure storage	<ul style="list-style-type: none"> Encourage effective manure management 	<ul style="list-style-type: none"> Outreach for manure management best practices 				No		
HESSEKEY BROOK SUBWATERSHED										
Residential Complex 4	Transylvania Road & Woodlake Road	Private sewage treatment plant	<ul style="list-style-type: none"> Ensure correct sizing and effective monitoring for failures 					No		
Dairy Farm 5	north of intersection of Grassy Hill Road and North Road, Woodbury	Manure storage / Cattle pastured on slope draining to pond with minimal buffer width	<ul style="list-style-type: none"> Filter berms or fencing and increased buffer around stream to prevent livestock access 	<ul style="list-style-type: none"> Outreach for manure management best practices 				No		