## Phase III WIP BMPs: Drivers for Implementation between 2019 – 2025

#### <u>Agriculture</u>

- Cover Crop (Wheat Early Aerial)
- Cover Crop (Wheat Normal Distilled)
- Cover Crop (Wheat Normal Other)
- Cover Crop with Fall Nutrients (Rye Normal Drilled)
- Cover Crop (Rye Normal Drilled)
- Cover Crop (Rye Normal Other)
- Animal Waste Management Systems
- Manure Transport
- Soil Conservation and Water Quality Plans
- Grass Buffers
- Grass Buffer-Streamside with Exclusion Fencing
- Forest Buffers
- Forest Buffer Streamside with Exclusion Fencing
- Nutrient Management Core Nitrogen
- Nutrient Management Nitrogen Rate
- Nutrient Management Nitrogen Timing
- Tillage Management-Continuous High Residue
- Denitrifying Ditch Bioreactors

#### **Urban/Suburban Stormwater**

- Stormwater Performance Standard Runoff Reduction
- Urban Stream Restoration
- Bioretention/raingardens A/B soils, no underdrain
- Infiltration Practices w/o Sand, Veg. A/B soils, no underdrain

#### Other

- Wetland Restoration Floodplain
- Forest Harvesting Practices

#### **VIRGINIA**

#### Agriculture

- Cover Crops
- Nutrient Management (Core, and enhanced Rate, Placement and Timing)
- Animal Waste Management System
- Livestock Exclusion
- Tillage Management
- Soil Conservation and Water Quality Plans
- Forest Buffer

- Denitrifying Bioreactors
- Precision Intensive Rotational/Prescribed Grazing
- Grass Buffer

### **Developed**

- Infiltration Practices
- Wet Ponds and Wetlands
- Urban Nutrient Management
- Dry Extended Detention Ponds
- Filtering Practices
- Bioretention/raingardens

#### Other

- Forest Harvesting Practices
- Oyster Practices (Restoration & aquaculture)
- Stream Restoration
- Shoreline Management (Living Shorelines)

## West Virginia

#### Agriculture

• Non-Urban Stream Restoration

### Urban/Suburban Stormwater

• Stormwater Performance Standard- Treatment

#### Additional Questions / comments:

- For manure transport and soil conservation and water quality plans: These two may be drivers for implementation but are they important to assess relative to climate change?
- Should the investigators assess all the varieties of cover crops and tillage types or can there be a more generalized look that captures most or all?

## **District of Columbia**

### **Urban/Suburban Stormwater**

- Urban tree Planting
- Urban Nutrient Management

## Maryland

#### **Urban/Suburban Stormwater**

• Stormwater Performance Standard – Stormwater Treatment

• Filtering Practices w/Sand, Veg. – A/B soils, underdrain

### <u>Other</u>

• All types of Stream Restoration

# Pennsylvania

### **Agriculture**

- Nutrient Management Core Phosphorus
- Non- Urban Stream Restoration

## **New York**

No additional BMPs; priorities covered in Phase III WIP BMP list above.

## **Delaware**

No additional BMPs; priorities covered in Phase III WIP BMP list above (Cover crops (wheat), Grass buffers, Nutrient management Core N, Wetland rehab/enhancement and restoration).