Pre-2017

- Development of Source-Sector Verification Guidance
- Establishment of P6 land use categories and relative land use loading rates
- Established BMP Interpretation Decisions Policy
- In 2015 established governance policy adding local governments to the voting membership of the workgroup
- Stream sediment source modeling
- CMAC BMP
- Development of stormwater sector research priorities for STAC
- Historic BMP Cleanup
- E3 scenario development

2017

Jurisdiction and Local Implementation Support

- Connecting state partners with resources to better understand practices and decisions - BMP Fact sheets; Webinars on tracking, reporting and verification. And creation of Urban BMP Users Guide for MOST Center, used by local elected officials. Stream Restoration FAQ document

Evaluation of New restoration Approaches:

- Roadside Ditch Management, Agricultural Stormwater BMPs, Performance Enhancements for BMPs, MTD Evaluation

Model Support

- Implications of model changes to the urban stormwater sector, facilitated sector review of the P6 model, discussion of sediment delivery and land us, E3 scenario development

2017/18

Jurisdiction and Local Implementation Support

- Webinar on P6 model updates for local govs; facilitated engagement in P3 WIP development between locals and state.
- Training on CAST designed for local govs.
- 5 more webinars on BMP tracking, reporting and implementation
- Direct support as member of PA's Phase 3 WIP planning workgroup
- 3 more fact sheets
- Development of strategies for advancing implementation on non-MS4 lands
- 1:1 listening sessions with state stormwater agency staff in PA and VA
- Assisted PA DEP in developing state verification guidance

BMP Review

- Conservation Landscaping
- Developed technical appendices for Ag stormwater BMP

Modeling

- Changes to stream restoration and sediment delivery simulations in P6
- Updates to fertilizer application methodology

2018

Local Implementation Support

- Developed CAST “How-To Guide” for local govs
- Developed report on bacteria management for stormwater - this was led by a team of USWG members.
- 5 more meetings of PA’s stormwater WIP workgroup

BMP Review

- Began work on revisiting SR protocols
- Worked on team from DOEE on re-visiting the runoff reduction method
- Facilitated updates to Shoreline Management BMP default reductions

Modeling

- Technical appendix for the conservation landscape BMP
- More presentations on the modeled load results with emphasis on implications for non-ms4 areas

2018/19

Local Implementation Support

- One on one calls with states to address questions
- More direct PA support for WIP and verification program development
- Collaboration on advancement of urban forestry - cross-sector meetings, webinars, and work with local leadership workgroup - fact sheet developed for forestry colleagues.
- Development and promotion of asset management strategies for stormwater agencies focused on improving tracking, reporting and verification

Emerging Concerns

- USWG begins collecting research on climate projections and implications for stormwater management
- Collaboration with Toxics Workgroup to enhance implementation of toxic reduction strategies via the stormwater sector

2019

Local Implementation Support

- Completion of Stream Restoration Verification guidance
- Significant urban forestry support - collaboration on 4 webinars, fact sheet, and 2 in-person meetings
- New fact sheet on conservation landscaping
- Developed scope of work for Bay-wide IDF curve tool

BMPs

- Completion of Outfall and Gully Stabilization Report

Modeling:

- Technical Appendix for Conservation landscaping BMP
- Developed a draft memo summarizing the changes to how stream restoration and sediment delivery are simulated in the Phase 6 Model for state and local partners
- Reviewed the Modeling Workgroup's 2019 climate change assessment documentation. The focus of the review was on decisions related to precipitation trends and the impact on stormwater management design.

2019/2020

Local Implementation Support

- Worked with VA DEQ on review of their updated MS4 guidance
- Facilitated research presentations from USGS, F&M, and Cornell on water quality monitoring data, legacy sediment removal, and downscaled climate projections and each of the implications for local stormwater management

BMPs

- Completed re-visitation of Protocol 1 of Stream Restoration BMP
- Re-structuring of impervious cover removal BMP

2021

Local Implementation Support

- Direct support to MD, NY, DC and NGO partners on updating state stream restoration guidance to reflect new protocols, provide review of statistical sampling approach to stormwater BMP verification and update guidance on street sweeping verification procedures.
- Research presentations from USGS and VT on stream health conditions and climate impacts on BMPs

BMPs

- Completed updates to floodplain restoration protocols of Stream Restoration BMP
- Worked with Agriculture workgroup on new stream restoration practices and implications for ag sector
- Reviewed and supported the FWG's GIT funding proposal on identifying challenges to protecting and enhancing riparian trees during the design and construction of stream restoration practices

Modeling

- Participation in BMP Verification Ad-Hoc Committee
- Worked with CAST team to build a tool for calculating new SR Protocol reductions

2021/22

- Steering committee for the development of a STAC Workshop proposal on Rising Watershed and Bay Water Temperatures—Ecological Implications and Management Responses.
- Research presentation on optimization models
- CSN is working with the Land Use Workgroup to help facilitate USWG member review of the new high resolution land use data set.
- conducted a literature review on the potential impacts of climate change on stormwater BMP pollutant removal efficiencies. CSN also outlined a series of potential design adaptations that could be explored to mitigate those impacts, or provide enhanced pollutant removal

2022

- Research from Fairfax County on a framework for conveying stream restoration as a holistic and progressive process by visualizing costs and benefits and areas where functional improvement can be made as a result of restoration.
- Research from the Plastics Pollution Action Team on their new monitoring and science strategy for trash and microplastics
- Developed comprehensive Unified Guide to Stream Restoration
- CSN arranged a presentation for the USWG on CAST21. The presentation covered updates states can make to data for the upcoming progress year assessment.
- Updated BMP Fact Sheets
- Began revisiting UNM
- CSN worked with the Land Use Workgroup to gather input from the USWG on the importance of high-resolution land use data for implementation efforts. Feedback was provided to the LUWG in support of their request for continued funding for high-res data collection
- CSN worked with CBPO staff to schedule presentations on the proposed changes in urban fertilizer application methodologies in CAST-21. CSN presented the USWG deliberations at a March WQGIT meeting
- CSN worked with leadership from the Modeling Workgroup to discuss the development of a scope for one of the USWG climate resilient priorities. The proposed priority involves modeling to estimate the impact of future hydrology on simulated urban BMPs to estimate how removal efficiencies will respond, along with the estimates of uncertainty
- CSN also coordinated with MWG leadership to understand the needs and timeline for providing new information on urban nutrient sources and simulation for Phase 7 Model development.

2023

- Coagulant Enhanced Stormwater Ponds - report and Technical Appendix
- Biochar
- UNM Task Force

- Coordinate with MWG leadership to understand the needs and timeline for providing new information on urban nutrient sources and simulation for Phase 7 Model development

2024

- Beyond Bean Counting Scope
- CSN worked in collaboration with the Land Use workgroup to facilitate the collection of spatial data for Phase 7 development from stormwater stakeholders. This data includes the most up-to-date MS4 boundary data, and discussion of new methods for improving the septic system methodology
- Solar Land Use Loading Rate Development
- Launch of full UNM Panel
- Cost profile data for coagulant ponds in CAST
- Facilitation of development of resilient stormwater implementation scope
- Worked with leadership from the Modeling WG and Climate Resilience WG to host a joint meeting to discuss and provide feedback on the Climate 3.0 STAC workshop and 2027-28 Climate Assessment. In addition to organizing the agenda and materials, CSN also served as a discussion facilitator during the afternoon portion of the meeting
- worked with WWTWG leadership to get USWG review and feedback on the proposed changes to septic methodology.

2025

- Additional coordination as it was held as a joint meeting with the Wastewater Treatment Workgroup to discuss the proposed SSO/exfiltration methodology.
- MS4 data layer
- UNM Panel
- Beyond Bean Counting