Resiliency Grant Application - Borough of Pennington

Appendix B: Regional Team (Local Governmental Entity) Application Documents Region Team (Local Governmental Entity) Member Application Form

Region: Delaware River–Sourland Mountain Region ("DRSMR") Prime (Lead Entity): City of Lambertville Regional Team Members: Lambertville, Stockton, West Amwell, Delaware Township, East Amwell, Hopewell Township, Hopewell Borough, and Pennington Borough Community-Based Organizations: The Sourland Conservancy and The Watershed Institute

Regional Team members will participate in various ways throughout the 18-24 month project period, including regularly attending meetings, providing feedback on plans and materials, and promoting and attending outreach events. Each Regional Team member (e.g. municipality, county, regional planning entity, utility authority, etc.) must complete the following questionnaire.

1. Regional Team Member Organization Name: Borough of Pennington
2. Primary Point of Contact (name and email address): James M. Davy, Mayor – jdavy@penningtonboro.org
3. Secondary Point of Contact (name and email address): GP Caminiti, Borough Administrator – administrator@penningtonboro.org; Robin Tillou, Deputy Clerk/Land Use Administrator - planning@penningtonboro.org
4. Tertiary Point of Contacts: Lubna Muneer, Chief Financial Officer; Robert Ingram, Emergency Management Coordinator - assistant@penningtonfire.org

Additional Borough resources supporting this application: James Kyle, Borough Planner; Chairperson Kieran John and the Pennington Borough Environmental Commission

Demonstration of Capacity

4. **Do you have the staffing capacity to participate as well as log hours and submit invoices and receipts to the Prime? (Yes/No)**

Yes, the Borough of Pennington has adequate staffing to participate in the Regional Team's Resilient NJ Regional Assistance Program application and implementation. Borough Administrator GP Caminiti will manage timekeeping, invoicing, and reporting to the Prime, with Mayor James M. Davy serving as the Borough's Steering Committee representative. Borough Planner James Kyle and Emergency Management Coordinator Robert Ingram will provide technical and operational continuity with the Borough's recently adopted Master Plan, its Climate Change-Related Hazard Vulnerability Assessment (CCRHVA), and its ongoing emergency management coordination with regional partners.

5. **How do you anticipate working with your fellow Regional Team partners, including the Prime and CBOs? Include in your response ways you have worked together in the past or plans for how you will work together through this effort.**

The Borough of Pennington is looking forward to working with the members of the DRSMR Regional Team. We have worked closely with one of our CBO partners, The Watershed Institute, which prepared an Impervious Surface Assessment and Reduction Plan and site-specific green infrastructure designs for the Borough in 2020-2021.

There has also been collaboration between the Borough, Lambertville, and a number of other regional municipalities in developing a Watershed Management Plan required by NJDEP. In 2025, Borough Council authorized Pennington's participation in a Stony Brook Watershed Improvement Plan (WIP), sharing technical data collection with Lambertville and other partners toward state stormwater discharge requirements. This work is expected to conclude in Fall 2026, ahead of state reporting deadlines, and will feed directly into the DRSMR's regional resilience action plan.

The Borough also coordinates emergency management directly with Hopewell Township and Hopewell Borough through the shared Hopewell Valley Regional Office of Emergency Management (OEM), covering public alerting, evacuation planning, and cooling/warming center designation. Emergency Management Coordinator Robert Ingram participates in this regional OEM structure and will serve as an ongoing point of coordination between the Borough and its DRSMR partners, particularly Hopewell Township, on emergency preparedness and response planning.

Demonstration of Need

6. **Please check the boxes of the climate hazards that impact your jurisdiction. Provide a short description of the impacts your jurisdiction is experiencing related to the following climate and natural hazards:**

☒ Extreme Heat ☐ Sea-level Rise ☒ Flooding (from precipitation, stormwater, coastal or riverine) ☒ Hurricanes or other extreme storm events ☒ Wildfire ☒ Other – Explain

Extreme Heat: Extreme heat is a public health threat in Pennington, particularly for children, the elderly, those with pre-existing health conditions, and residents without adequate cooling. Summer 2022 land surface temperature mapping shows the Route 31 corridor, the Pennington School campus, and the town center reaching 113-162°F, driven by the urban heat island effect. The Borough's tree-planting benefit score of 2.3 out of 5 indicates meaningful opportunity for canopy-based mitigation, and extreme heat compounds drought stress on the Borough's water supply.

Flooding: Flooding is the Borough's most frequent and impactful climate hazard. Pennington sits at the confluence of Stony Brook and Lewis Brook, with significant impervious surface and aging stormwater infrastructure. Recurring flood locations include the Route 31/West Delaware Avenue intersection, the Broemel Place railroad underpass, North Main Street at Brookside Avenue, East Franklin and Eglantine Streets and multiple private properties along tributaries to Lewis Brook. Flooding damages property, roadway infrastructure, and the existing stormwater conveyance system, and has repeatedly closed roads used by emergency responders.

Hurricanes or other extreme storm events: The Borough was significantly impacted by Tropical Storm Ida in 2021, which flooded eight locations along Lewis Brook and Stony Brook, rendered multiple roadways impassable, and required police rescue of three stranded motorists at Route 31 and West Delaware Avenue. Ida also caused major flooding at the Stony Brook Regional Sewerage Authority's Pennington Treatment Plant, which treats all of the Borough's wastewater despite being located outside Borough limits. Severe winter weather similarly threatens the electric grid, roadway safety, and the ability of first responders to reach residents.

Wildfire: While Pennington's overall wildfire risk is low, the Borough is not risk-free. In March 2025, a wildfire in adjacent Hopewell Township burned 293 acres over two days. Pennington also experienced an 81-day drought from September to November 2024, with 77 consecutive days without rain, leaving foliage and grasses dry and elevating fire risk.

Other – Infestation and invasive species: Bacterial Leaf Scorch has killed or weakened 50-60 large Pin Oak trees beyond the capacity of Public Works to remove, and Emerald Ash Borer has damaged the Borough's ash tree population. Falling trees and limbs threaten infrastructure and residents, and fallen debris clogs streams and culverts, aggravating flooding.

7. **Please describe how climate and natural hazards cause disruption to the daily lives and activities of the residents in your jurisdiction or service area.**

Climate and natural hazards disrupt the daily lives of Pennington residents in multiple ways. Extreme heat can prevent elderly residents from leaving their homes, risking insufficient food, water, and missed health care, while outdoor workers face dehydration and heat stroke risk. Flooding at the Route 31/West Delaware Avenue intersection and the Broemel Place underpass regularly closes roadways relied on by residents and emergency responders alike; during Ida, several roadways became impassable, which could have severely hindered emergency vehicle access to the Borough had an unrelated emergency occurred simultaneously. The Borough's EMS facility on Broemel Place floods during heavy rain, preventing ambulance egress precisely when service may be needed most, and lacks backup power. Downed trees and limbs from severe weather and from disease-weakened Pin Oaks and ash trees threaten roadways, property, and utility service.

8. **Please describe any populations, neighborhoods, or other areas of your jurisdiction that are particularly vulnerable to climate hazards.**

The post office, Cambridge School, Straube Center, and portions of Heritage townhouses and Pennington Point are mapped as "extreme" heat zones. Residents relying on the Broemel Place EMS facility face elevated risk given its flood exposure and lack of backup power. Elderly residents, served by the Hopewell Valley Senior Center and Borough Library, both identified heat-relief sites, face heightened sensitivity to heat and storm-related disruption. Special attention is given to these populations during severe weather events through the shared Hopewell Valley OEM, coordinated in part by Emergency Management Coordinator Robert Ingram. The Borough's build-out plan anticipates approximately 360 new housing units, including 82 affordable units, across 11 redevelopment sites by 2035; three of these sites fall within the

Borough's highest heat-island zones, underscoring the need to integrate resilience measures into this development now.

Additionally, the Borough identified 34 critical facilities in the action plan of the Mercer County Hazard Mitigation Plan (HMP). The CCRHVA identifies 16 of these as critical facilities that may be vulnerable to natural hazards, or that are especially important for safety, quality of life, and evacuation purposes. Six of these are critical transportation infrastructure, and four are drinking supply and wastewater utilities. (*CCRHVA*)

In the recently updated Utility Element of the Borough's Master Plan the following is noted:

> *"The average daily flow in 1996 was 0.315 MGD. This flow included the actual wastewater flow plus surface water inflow, which is the flow of stormwater and elevated groundwater into the wastewater system. In the third quarter of 1996, the average daily flow at the plant exceeded the permitted plant capacity, and the SBRSA notified the Borough of the excursion. The Borough was aware of the magnitude of the surface water inflow since the mid1990's and was already part way through a seven-step surface water inflow reduction program. In 1997, the average daily flow was reduced to 0.274 MGD because of the surface water inflow program, including the mainline grouting and the sump pump program, and to a reduction in rainfall over the region. The surface water inflow program continued and included mainline repairs and continued enforcement of the rule against sump pumps being connected to the wastewater system. The current average daily flow of 0.238 MGD speaks to the success of the Public Works surface water inflow program. However, the increasing age of the sewer system coupled with an increase in extreme rainfall events means that the Borough must continue to address surface water inflow."*

The Utilities Element also highlights Drinking Water Availability: "During heavy precipitation and flooding events, inflow and infiltration issues result in higher rates of wastewater, which has the potential to lead to sewage overflows and other related problems." *(CCRHVA)*

9. **List any plans your jurisdiction has developed related to climate resilience or preparing a climate change related hazard vulnerability assessment (NJ Municipal Land Use Law). Other examples include a wildfire plan, updated stormwater ordinances, updated master plan specific actions to address flooding or extreme heat, etc.**

Pennington Borough has already adopted a community-generated **Climate Change-Related Hazard Vulnerability Assessment (CCRHVA)**, as part of the Land Use Plan element of its Master Plan, on May 13, 2026, in compliance with N.J.S.A. 40:55D-28. It is noted that the CCRHVA would benefit from a State consulting review. The Borough has also adopted continually updated Stormwater Control and Flood Damage Prevention ordinances per NJDEP requirements; maintains a Municipal Stormwater Management Plan and a Community Forestry Management Plan; commissioned a 2020 Impervious Surface Assessment and Reduction Plan from The Watershed Institute; and adopted an Amended 2025 Fourth Round Housing Plan that includes new zoning provisions (HMU, MU, and ADUs) designed with resilience and housing

affordability in mind. The Borough participates in the Mercer County Hazard Mitigation Plan through its municipal annex, and is currently participating in the Stony Brook Watershed Improvement Plan (WIP) alongside Lambertville and other regional partners.

10. **How do you feel about your jurisdiction's ability to plan for and respond to hazard events? Is your capacity strained? Are you more prepared for one hazard than another? Why are you in need of additional technical assistance? Are there any resilience plans or projects you are interested in but unable to pursue given limited resources? Please explain.**

Pennington's OEM coordination, led locally by Emergency Management Coordinator Robert Ingram in partnership with Hopewell Township and Hopewell Borough, is well versed in handling average hazard occurrences. However, the Borough's adaptive capacity is rated only "Moderate" across nearly every hazard category in the Mercer County Hazard Mitigation Plan, meaning systems exist but need improvement; Pennington is better prepared for severe winter weather, rated "Strong," than for flooding, hurricanes, or disease outbreak. As a small municipality with a limited tax base and small staff, several high-priority actions identified in the Borough's own CCRHVA remain unfunded, including a hydrology and hydraulic study of the watersheds feeding Borough tributaries, backup power for Well 7, and floodproofing and backup power for the Broemel Place EMS facility. The Borough would also like to pursue a resilience hub feasibility study for Borough Hall and the library and a structured hazardous-tree removal program for its remaining Pin Oaks, but lacks the engineering and planning budget to move these from recommendation to implementation. The Borough requires additional technical assistance, of exactly the kind a DEP-procured Consultant Team would provide, to move from an adopted assessment to funded, implemented action.

11. **Are there any other climate resilience projects or related work that are planned or have been implemented in your jurisdiction that you would like to share? These projects can be ongoing or completed.**

Completed: repetitive flood loss mitigation; a disaster debris management plan; a portable backup generator for municipal Well 9; a 600,000-gallon backup water storage tank adjacent to Borough Hall; and backup power installed at Borough Hall, a designated cooling center, and at the Main/Delaware and Route 31/West Delaware traffic signals. In progress: a community energy plan focused on efficiency and renewable energy; stormwater management upgrades; public education and outreach on hazard risk; and efforts to reduce inflow and infiltration in the Borough's wastewater system. Ongoing regionally: the Stony Brook Watershed Improvement Plan with Lambertville and other DRSMR partners, expected to conclude Fall 2026.

Regional Description

12. **What makes your jurisdiction unique regarding its vulnerability and risk to climate hazards? Examples include major tourist destinations, shipping hubs, historic structures or features, threatened & endangered species habitats, agricultural areas, etc.**

Pennington Borough is the most compact and densely built jurisdiction in the DRSMR, at just 0.97 square miles, with almost no remaining vacant land (0.85 acres, or 0.14% of Borough area). This means nearly all future development must occur through redevelopment of existing sites, several of which lie in areas already exposed to flooding or heat-island effects. The Borough's historic Crossroads Historic District adds a preservation dimension shared with other DRSMR communities, as storms and flooding threaten historic structures whose character the Borough is committed to maintaining. Pennington also hosts regionally significant infrastructure, including its water supply wells and the CSX rail line and bridges, while depending on a wastewater treatment plant located in a neighboring municipality, illustrating how closely the Borough's resilience is bound to decisions made by its DRSMR partners, particularly Hopewell Township. As the Region's most urbanized member, Pennington's participation broadens the DRSMR's ability to address both dense, built-out flood chokepoints and the more rural watershed and wildfire concerns shared by its neighbors, as a connected system.

In Pennington, risks to the elderly is a top issue. It is noted that approximately 25% of the population is 65 years of age or older. Mercer County is 15%, NJ is 16.2%.

Vulnerability becomes sharper with the impact of Hopewell Township development Immediately abutting the Borough upstream of Lewis Brook with increased run-off rates; new planning and zoning development adjacent to tributaries to Lewis Brook (proposed warehouse in Hopewell Township, for example); Stormwater Management on open spaces east of the SBRSA and Lewis Brook; bridge replacements at critical flood sites in the Borough: Eglantine & Franklin, King George and E Delaware

Impact of CSX infrastructure maintenance (or deferred maintenance) and costs burdens to the Borough: Broemel bridge frequently floods.

13. Is your jurisdiction in a special planning region?

☐ Pinelands ☐ Highlands ☐ Meadowlands ☒ Other – Explain

The Borough of Pennington is not located in a special planning region. The Borough lies within the Stony Brook Watershed and is directly adjacent to the Sourland Mountain region, both of which shape its shared hazard exposure with DRSMR partners and its rationale for pursuing regional, rather than solely municipal, resilience planning.