

**Safeguarding Tomorrow Through Ongoing Risk Management
(STORM)
Revolving Loan Fund**

**Proposed Priority System, Intended Use Plan, and Project Proposal List
for
Federal Fiscal Year 2024 / State Fiscal Year 2025**

**New Jersey
Community Hazard Assistance Mitigation Program
(NJ CHAMP)
Financing Program**



New Jersey Office of Emergency Management

April 2024

This page has been intentionally left blank

Table of Contents

1. INTRODUCTION	1
1.1. Status of the New Jersey Community Hazard Assistance Mitigation Program (NJ CHAMP) Safeguarding Tomorrow Revolving Loan Fund.....	1
1.2. Updates for Federal Fiscal Year 2024 NJ CHAMP Safeguarding Tomorrow RLF	2
2. USES OF THE NJ CHAMP SAFEGUARDING TOMORROW RLF	2
2.1. NJ CHAMP Objectives	2
2.2. NJ CHAMP Goals	3
2.2.1. Connection to Other Hazard Mitigation Plans & Goals.....	3
2.2.2. NJ CHAMP Mitigation and Resiliency Goals.....	3
2.2.3. Entity’s Safeguarding Tomorrow Revolving Loan Fund Short-Term Goals.....	3
2.2.4. Entity’s Safeguarding Tomorrow Revolving Loan Fund Long-Term Goals.....	4
2.3. NJ CHAMP Priorities.....	5
2.3.1. Increase Resilience and Reduce Risk	5
2.3.1.1. Hazard Mitigation	5
2.3.1.2. Zoning and Land-Use Planning	5
2.3.1.3. Building Code Adoption and Enforcement.....	5
2.3.1.4. Cost Share	6
2.3.2. Partnerships	6
2.3.3. Regional Impacts	6
2.3.4. Major Economic Sectors and National Infrastructure.....	6
3. Criteria and Method for Distribution of Funds	6
3.1. Loan Management Information	6
3.2. Criteria and Method for Loan Distribution.....	7
3.2.1. Creating a Project Proposal List	8
3.2.1.1. Prioritization Methodology	8
3.2.1.2. Tie-Breaking Procedure.....	8
4. Financial Management	8
4.1. Financial Status of the NJ CHAMP Safeguarding Tomorrow Revolving Loan Fund.....	8
4.1.1. Financial Status of the NJ CHAMP Loan Fund	9
4.1.1.1. Financial Status of the NJ CHAMP Loan Fund for Fiscal Year 2023.....	9
4.1.1.2. Financial Status of the NJ CHAMP Loan Fund for Fiscal Year 2024.....	9
4.2. Financial Terms of Loans.....	9
4.2.1. Standard Loans	10
4.2.2. Loans for Low-Income Geographic Areas or Underserved Communities	10
4.3. Loan Disbursements	10
5. Entity Program Management.....	11
5.1. Technical Assistance	11

5.2. Local Capacity Development.....	11
5.3. Environmental and Historic Preservation Compliance.....	11
5.4. Public Meetings and Comment Activities	11
6. Audits and Reporting.....	12
6.1. Compliance with Federal Reporting Requirements	12
6.2. Publication of Information.....	12
6.3. Loan Recipient Auditing and Reporting.....	12
APPENDICES	14
APPENDIX A	16
APPENDIX A.1 Loan Application Process	18
APPENDIX A.2 Financial Planning Methodology: I-Bank Credit Policy	24
APPENDIX A.3 Financial Planning Methodology: I-Bank Investment Policy.....	26
APPENDIX B.....	28
APPENDIX B.1 Loan Distribution Methodology	30
APPENDIX C.....	34
APPENDIX C.1 Project Proposal List Prioritization Methodology.....	36
APPENDIX C.2 Project Proposal List.....	40

1. INTRODUCTION

1.1. Status of the New Jersey Community Hazard Assistance Mitigation Program (NJ CHAMP) Safeguarding Tomorrow Revolving Loan Fund

The Intended Use Plan (“IUP” or “Report”) must be developed and undergo a public participation process prior to applying to the Federal Emergency Management Agency (“FEMA”) to qualify for Safeguarding Tomorrow Through Ongoing Risk Management (“STORM”) grant funds. The Office of Emergency Management in the Division of State Police in the Department of Law and Public Safety of the State of New Jersey (“NJOEM”) submits this IUP in support of its application for STORM funds for federal fiscal year (“FY”)2024/State Fiscal Year (“SFY”)2025 (July 1, 2024, to June 30, 2025) as part of the application by the State of New Jersey (the “State”) to FEMA’s FY2024 Notice of Funding Opportunity (“NOFO”) for STORM grant funds. The New Jersey Infrastructure Trust Act, N.J.S.A. § 58:11B-1 et seq. (the “Act”) established the Community Hazard Assistance Mitigation Program (“NJ CHAMP”) to fund hazard mitigation and resilience projects undertaken by the State, local government units, and nonprofit organizations in accordance with the provisions of the STORM Act. The Act authorizes the New Jersey Infrastructure Bank (“I-Bank”) to co-administer NJ CHAMP with NJOEM which will act as the State’s grantee recipient for STORM funds. STORM grant funds will be utilized to administer a revolving loan fund (“RLF”), to provide below market rate financing to communities for projects that address climate risks.

NJOEM is responsible for developing the prioritization system in consultation with the New Jersey Department of Environmental Protection (“NJDEP”) regarding the development of climate change priorities. The IUP’s proposed Priority Methodology and Project Proposal List (“PPL”) (**Appendices C.1 and C.2**, respectively) prioritize projects sponsored by local communities and utilities or any other entity eligible to receive funds pursuant to the STORM program (together “Local Government Units,” or “LGUs”). This year, NJ CHAMP program eligibility is limited to project sponsors that are seeking FEMA grant funds through the FEMA Hazard Mitigation Planning Process in New Jersey. STORM funds will supplement any other FEMA grant funds (e.g., Hazard Mitigation Assistance (“HMA”) grants, Hazard Mitigation Grant Program (“HMGP”)) these projects receive to finance their projects. To ensure equity among Program participants, the Program incorporates the Centers for Disease Control and Prevention (“CDC”) Social Vulnerability Index (“SVI”) CDC SVI into its prioritization metrics. This Report discusses the objectives of the SFY2025 NJ CHAMP program, the ranking prioritization methodology, and general financing and loan disbursement terms.

As the entity responsible for the financial administration of NJ CHAMP, the I-Bank anticipates there will be opportunities to co-fund projects by leveraging STORM funds with other State revolving loan fund programs administered by the I-Bank, including funds from the capitalization grants from the U.S. Environmental Protection Agency (“USEPA”) State Revolving Fund (“SRF”) Program that the I-Bank co-administers in partnership with NJDEP for clean water and drinking water infrastructure projects (“Water Bank”), and the funds of the State’s Transportation Bank, in partnership with the New Jersey Department of Transportation (“NJDOT”) for surface transportation projects (“Transportation Bank”). In the event that funds from more than one financing program would be used to finance a single project, the eligibility, technical requirements, and financial flow of funds would be distinct. The Act requires that the funds in each of the I-Bank’s separate programs must be segregated, specifically proscribing combining or commingling funds across programs, and prohibiting the use of a specific financing program’s funds for non-program costs or disbursements. Therefore, the financial administration of the NJ CHAMP fund will not be “combined” with the administration of any other revolving loan fund. Instead, NJ CHAMP will be administered “in parallel” with other revolving loan programs of the I-Bank. As with its current financing programs, in the event a project is co-funded with multiple sources of funds from separate financing programs, the I-Bank makes, and the borrower receives, a separate loan agreement from each financing

program that provides funds. Repayments for those loans are directed to separate accounts (a repayment account at a bond series trustee if the loan is included in a collateralized bond pool, or a separate custodial account for the specific financing program if the financing is through a direct (i.e., non-leveraged) loan. In this manner, all loan repayments, excluding repayments used to make principal and interest payments on program bond funds, but including interest earned on those funds, are maintained within a specific RLF program (in this case, NJ CHAMP).

Pursuant to the Act, NJOEM is charged with development of the project priority list for funding for each fiscal year. NJOEM bases the NJ CHAMP prioritization system on the State's Hazard Mitigation Plan ("HMP") which captures historic disaster experiences and reflects the natural and human-caused hazards New Jersey faces, based on science and research. The State HMP is reviewed, updated, and submitted to FEMA for approval at least once every five years. FEMA last approved the State HMP in FY2019. FEMA's approval for the upcoming State HMP is anticipated to be received no later than April 2024.

1.2. Updates for Federal Fiscal Year 2024 NJ CHAMP Safeguarding Tomorrow RLF

The I-Bank and NJOEM formally established NJ CHAMP via statute in 2023. The NJOEM is the party responsible for developing the PPL and the I-Bank is responsible for developing and managing the financing structures. The NJ CHAMP fund has been established at the I-Bank's custodial bank and has been prefunded with match funds. The Program has identified eligible projects, has established an online application system, and has begun outreach to potential project sponsors to ensure the full allocation of existing funds. See Sections 1.1, 2.2.3, 2.2.4, 3.2, 4.1, 4.2 and 5.4 for additional details.

For FY2024, NJ CHAMP will continue to provide programmatic outreach to LGUs on the HMP to identify projects across the State eligible and interested in financing through the NJ CHAMP program. Since the submission of the IUP for the FY2023 capitalization grant, the State has appropriated to NJ CHAMP: i) \$500,000 to be utilized for operating and administrative costs, and ii) State match funds of \$646,297 for additional NJ CHAMP loan funds. In addition, federal STORM Act funds in the amount of \$6,462,963 has been awarded to the State. Pursuant to the requirements of the STORM Act, NJ CHAMP loan interest rates will continue to be set at one percent (1%).

NJOEM and the I-Bank are committed to the long-term success of NJ CHAMP. As such, the co-administration of NJ CHAMP continues to be staffed and resourced to provide the critical knowledge necessary to manage the operation and finances of the Program.

2. USES OF THE NJ CHAMP SAFEGUARDING TOMORROW RLF

2.1. NJ CHAMP Objectives

The objective of NJ CHAMP is to provide low-cost financing for local projects that support and are in conformance with the State's initiatives to reduce future losses from hazards.

The goals of the Program align with the goals of the State's HMP, specifically:

- (i) Protect life;
- (ii) Protect property;
- (iii) Increase public readiness and awareness;
- (iv) Develop and maintain an understanding of risks from hazards;
- (v) Provide an additional financing source to complement existing FEMA programs and alleviate the funding gap of those program for disadvantaged and socially vulnerable communities;
- (vi) Enhance state and local mitigation capabilities to reduce hazard vulnerabilities; and
- (vii) Support continuity of operations both pre-, during, and post-hazard events.

NJ CHAMP will provide loans and financial support as early as the design phase of a project in the form of short-term and long-term loans, or some combination thereof, for hazard mitigation projects that reduce the risk from natural hazards. The prioritization of projects, including those sponsored by communities most in need, in the early years of the NJ CHAMP Program will follow the prioritization methodology of the State HMP.

2.2. NJ CHAMP Goals

2.2.1. Connection to Other Hazard Mitigation Plans & Goals

New Jersey's intent is to utilize NJ CHAMP to supplement and complement state and federal hazard mitigation/risk reduction funding. Projects considered for funding will achieve goals consistent with the goals and actions identified in the State HMP. NJOEM will review proposed projects in relation to goals and objectives established in the relevant hazard mitigation plans. In the early years, pending the establishment of the funding level from FEMA, the NJ CHAMP PPL is composed of projects identified and publicly vetted through the FEMA Hazard Mitigation Planning Process in New Jersey. For copies of available NJ State HMPs, see: <https://nj.gov/njoem/mitigation/hazard-mitigation-plans.shtml>.

2.2.2. NJ CHAMP Mitigation and Resiliency Goals

Resilience projects financed by NJ CHAMP will assist participating borrowers by reducing disaster recovery costs, reducing payments associated with FEMA's Public Assistance ("PA") Program, reducing insurance payments / premiums, and lessening the disruption to critical facilities caused by natural disasters, etc. Additional goals and objectives are identified in the State and local HMPs.

2.2.3. Entity's Safeguarding Tomorrow Revolving Loan Fund Short-Term Goals

NJ CHAMP's short-term goals are to i) identify projects in the State utilizing FEMA grant funds that need additional funding, ii) efficiently disburse funds to those projects, and iii) ensure that low-income geographic areas and underserved communities are prioritized to receive NJ CHAMP funds.

NJ CHAMP will identify eligible resilience projects requiring additional financing beyond that which is received from FEMA's HMA grant programs and distribute funds in the early stages of a project. The I-Bank and NJOEM will coordinate to publicize NJ CHAMP to inform potential recipients of the Program's nature and benefits. In addition, the I-Bank and NJOEM are designing policies and procedures that ensure the sustainability and revolving nature of the STORM RLF funds in the State.

After loan closing, funds are disbursed to project sponsors, based on costs incurred, as evidenced by requisitions submitted for review and approval. In this manner, staff will closely monitor the integrity and compliance of funds drawn and ensure projects are completed in a timely manner avoiding waste, fraud, and abuse. The requisition process is designed based on the successful Water Bank and Transportation Bank requisition processes administered by the I-Bank, which includes oversight of federal compliance requirements during construction. In these existing programs, funds are disbursed on an expedited basis upon receipt of invoice based on a rapid requisition approval process relieving project sponsors from utilizing cash-on-hand or expensive working capital lines of credit to pay contractors and vendors.

NJOEM has identified projects on the PPL that qualify for STORM Act funds, and which align with the State's HMP. The prioritization methodology established for the State HMP was developed in compliance with federal requirements (FEMA, etc.) as well as through the collaborative process facilitated by the State Hazard Mitigation Team ("SHMT").

NJOEM and the I-Bank will leverage the identification and outreach initiatives in the existing programs at both the I-Bank and NJOEM, to coordinate with low-income geographic areas and underserved communities. The Program will cross reference these high priority communities on the PPL and make efforts to reach out directly to these communities to ensure their success in this Program.

2.2.4. Entity's Safeguarding Tomorrow Revolving Loan Fund Long-Term Goals

NJ CHAMP long-term goals are to establish a viable revolving loan fund that coordinates well with existing financing programs and establishes rigorous policies and procedures.

NJ CHAMP funds are statutorily committed to the Program and may not be commingled with other program funds or used for any other purpose except for NJ CHAMP. In addition, NJ CHAMP will maintain sustainability in perpetuity by offering its funds as low-rate loans, repayments of which will be repaid into the NJ CHAMP loan fund. As funds are repaid, the monies will be invested in short-term investments until such time that these monies are relent. All interest earnings will be made available for new NJ CHAMP loans. The Program will charge participating borrowers a small administrative fee to recoup its operating and administrative costs (to offset the use of STORM funds available for administrative costs). Finally, borrowers must satisfy the I-Bank Credit Policy (see **Appendix A.2**). The objective of the Credit Policy is to avoid credit-based losses and protect Program funds for future use.

Initially, NJ CHAMP will require an upfront investment. The State has committed \$500,000 to the I-Bank for start-up legal and operating expenses. As the program grows, more loans will produce more income to support the Program to self-sufficiency and produce a loan/expense ratio that allows for a perpetual program.

As it does in its other federal revolving fund program, the I-Bank will reconcile NJ CHAMP accounts with monthly bank statements and will utilize its asset-liability model to monitor the sources and uses of all funds in the Program. This ensures the accuracy of the Program's fund balance in real time to safeguard NJ CHAMP from overextension and human input errors.

The I-Bank's statute requires two annual reports that list a prioritization methodology linked to the State's HMP (which includes a public notice process), as well as a description of the terms under which the projects which qualify for funding will be financed. Terms include rates, fees, maximum maturities, etc. This statutory construct mirrors the requirements of the I-Bank's other infrastructure financing programs.

The I-Bank has a long history of successfully complying with State and federal requirements (over three decades of SRF activity, 10-plus years involvement with the Robert T. Stafford Disaster Relief and Emergency Management Act, and very recently, the USEPA's Water Infrastructure Finance and Innovation Act ("WIFIA") program). The I -Bank will manage any required single audit of the Program and build covenant obligations into the program loan documents to ensure recipients of funds establish and maintain compliance with federal requirements. The aforementioned requisition process will incorporate a review of compliance with any federal technical requirement.

NJOEM will utilize the existing planning process to identify potential projects and determine the most appropriate funding options for a project, including NJ CHAMP funds. In addition, the I-Bank's existing Water Bank and Transportation Bank programs) hold annual seminars and staff attend multiple conferences marketing these programs which will provide co-funding and co-marketing opportunities for the Program. Note that the Water Bank has a 10-year history of co-funding projects with FEMA funds, and along with Texas, was a catalyst and supporter of the [Memorandum of Agreement Between the U.S.](#)

[Department of Homeland Security/FEMA and the USEPA](#) (as updated in 2023) by and between these two federal agencies.

Through existing planning, as well as ongoing efforts being developed, NJOEM will identify and conduct outreach to underserved and socially vulnerable populations.

The I-Bank has developed and currently utilizes cashflow models for its existing financing programs and will do the same for NJ CHAMP. These cashflow models provide critical information regarding sources and uses of funds, forecasted available funds for project financing, program parameters, and/or coverage ratios in the event funds are leveraged to ensure the Program does not overextend/ double count its available loan funds.

Similar to the State’s co-funded Statewide Assistance Infrastructure Loan (“SAIL”) Disaster Program (utilizing FEMA PA/HMGP, and USEPA funds), NJ CHAMP will ensure that all federal requirements will be met during design and construction phases, and no funds will be disbursed for repayment of expenses that are not compliant with all federal and state laws and regulations. NJOEM and the I-Bank will work with engineers to confirm that a project’s technical requirements are met. Participants are not authorized to solicit bids without program certification of such compliance. The I-Bank also reviews all project expense line items and reimburses participants for only those expenses that have been prequalified and authorized.

2.3. NJ CHAMP Priorities

2.3.1. Increase Resilience and Reduce Risk

The intent of NJ CHAMP is to supplement and complement existing FEMA funding opportunities at the State level. Resilience and risk reduction activities will be identified and selected through the HMP process.

2.3.1.1. Hazard Mitigation

Hazard mitigation planning in New Jersey is a priority. Building upon New Jersey’s success in meeting the federal requirements of other FEMA-funded programs, STORM Act funds will be targeted towards mitigation and risk reduction activities as identified within the State’s multi-jurisdictional/multi-hazard HMP. The I-Bank has a strong history of making loans to local communities for infrastructure projects, including hazard mitigation and resilience projects. Together the NJOEM and the I-Bank are well equipped and experienced to provide funding for the projects targeted through the STORM RLF program.

2.3.1.2. Zoning and Land-Use Planning

Zoning and land use planning are well established within New Jersey. STORM Act funding may be utilized for these activities to elevate the portfolio. We do not believe this is a major issue at this time, and we do not believe there will be high demand in the State for this form of activity.

2.3.1.3. Building Code Adoption and Enforcement

Building code adoption and enforcement continues to be well-funded in New Jersey through other sources. For example, FEMA authorized a \$2 million set aside to each state during the FY2023 Building Resilient Infrastructure and Communities (“BRIC”) Building Code Activities. Ten municipalities applied for a portion of this funding. Building code adoption and enforcement projects are not currently a priority for NJ CHAMP, nor is NJ CHAMP an appropriate funding source for this activity in New Jersey relative to the prioritized projects on the PPL. We do not believe this is a major unfunded issue at this time.

2.3.1.4. Cost Share

Federal grants, including FEMA's STORM RLF and HMA grants, typically require a local cost share (i.e., for 90/10 cost share programs, there is a need to help the recipients meet the 10% match). To assist Program participants with their HMA match requirement, NJ CHAMP may provide STORM RLF funds as the match component to each participant's HMA grant.

2.3.2. Partnerships

NJ CHAMP does not anticipate having the resources to fund partnership projects in its early years, given the limited amount of funds anticipated to be available to states through the new STORM RLF program, and the complexities involving two or more communities.

2.3.3. Regional Impacts

Hazard mitigation activities in New Jersey have undertaken a regional approach to risk reduction in the past. NJOEM has encouraged regional hazard mitigation efforts in the past and will continue to do so with STORM Act funding through the Program's proposed ranking methodology.

2.3.4. Major Economic Sectors and National Infrastructure

NJOEM and the I-Bank each have a long history of implementing new programs that support and finance pre- and post-disaster resilience projects. Each has a proven track record of managing and funding resilience projects from application and design through to completion and long-term financing (e.g., BRIC, SHMT, SAIL, SRF).

Resilience projects are, by their nature, efficient drivers of economic activity, both in the construction industry as well as the business environments they support. Given New Jersey's geographic location on the east coast corridor, and its importance as a commerce and transportation link with national ports and airports, NJ CHAMP's hazard mitigation / resilience projects will have an economic impact at the State and national level. The State's Hazard Mitigation Plan dictates and prioritizes those projects and sectors / communities which the State deems are most at risk and of greatest importance (i.e., cost of life and property). For copies of available NJ State HMPs, see: <https://nj.gov/njoem/mitigation/hazard-mitigation-plans.shtml>.

3. CRITERIA AND METHOD FOR DISTRIBUTION OF FUNDS

3.1. Loan Management Information

Availability of funds for NJ CHAMP is limited to funds received as grants from this revolving loan program, funds appropriated by the State for match, all repayments, fees, and interest earned on loans and unutilized funds in the State's loan account. To date, NJ CHAMP was appropriated and has received \$646,297 as match funds from the State to be disbursed as loans.

The loan application process (see **Appendix A.1** for the complete loan application process, including project certification and credit requirements) will mirror the I-Bank's application process for its Water and Transportation Bank programs. Specifically, participants are required to provide initial information on the project including location, project size (i.e., estimated dollar amount), project construction schedule, and scope of work, as well information on the recipient, including but not limited to their federal tax ID number, population served by the asset to be financed, a completed financial addendum form, credit information, and eventually, confirmation of compliance with the State's public bond law process.

The I-Bank provides flexible financing, similar to a line of credit loan, in each of its financing programs up to and including project construction completion. The I-Bank utilizes separate funds provided for each of

its financing programs for these loans. Providing loan funds on a requisition basis through construction completion allows maximum flexibility for both cost overrun and cost underrun adjustments. Project sponsors will not be required to make repayments until construction completion.

The I-Bank uses a cash flow model to manage future loan projects (see Section 2.2.4). In addition, the I-Bank ensures that the Program's funds are properly managed and used for eligible purposes by implementing covenants in its loan agreements. Such covenants include borrower guarantees of repayment obligations as well as remedies in the event of default. Loan covenants also provide restrictions on the project itself, ensuring that it is properly maintained and utilized for its intended purpose. The I-Bank has almost four decades of experience lending to municipalities and LGUs without a single default in its bond program.

In the short-term, NJ CHAMP anticipates committing approximately \$7 million of its STORM RLF grant and State match funds to eligible projects by December 31, 2024. In the mid- and long-term, and depending on future STORM RLF grant funds from FEMA, NJOEM and the I-Bank expect to expand NJ CHAMP and leverage the Program to serve multiple coastal and riparian communities with hazard mitigation needs. **This last projection is dependent on the amendment of the STORM RLF Act to allow flexible interest rates from private bond investors.**

3.2. Criteria and Method for Loan Distribution

The I-Bank and NJOEM are both experienced and adept at assisting program participants with navigating federal application and reporting requirements. Additionally, both administrators work with engineering, bond counsel and construction industry members in the State to facilitate a streamlined application and construction process for program participants. Resilience project participants may lack the necessary technical, financial, and/or managerial skill sets for the compliance requirements pertaining to the application, remediation, and construction processes.

As part of their coordination of the State's HMP, NJOEM has developed and implemented checklists for project compliance with FEMA regulations that would be applicable to NJ CHAMP. NJOEM has a history of strong working relationships already built into their process with local communities, health departments, inspector offices, etc. throughout the State.

Similar to the Water Bank's SAIL disaster relief program that the I-Bank manages in cooperation with NJOEM, NJ CHAMP will provide oversight on projects to ensure participants which may lack the technical, managerial, and/or financial capacity are in compliance with federal and state laws. Also similar to the SAIL disaster relief program, no FEMA funds will be disbursed to any project until such compliance is confirmed. Again, as in the discussion with requisitions (see Section 2.2.3), the I-Bank will disburse funds to participants as expenses are incurred once all supporting documentation of such expenses has been provided to the I-Bank.

The ranking methodology is consistent and based upon the social vulnerability criteria established through the FEMA hazard mitigation planning process. In its early years, given the limited amount of funds available, the Program intends to issue all loans with consistent terms to each participating borrower. Prioritized borrowers / projects will receive the available funds within the financing program.

For the complete loan distribution methodology refer to **Appendix B.1.**

3.2.1. Creating a Project Proposal List

Refer to the Project Proposal List in **Appendix C.2**.

3.2.1.1. Prioritization Methodology

NJ CHAMP utilizes a ranking system to determine the priority order of projects to be financed. NJ CHAMP's ranking methodology prioritizes projects that are located in areas designated as a Disadvantaged Community as defined by the CDC SVI. NJ CHAMP also prioritizes projects that are located in low-income geographic areas as defined in 42 U.S.C. § 5135 (m)(6). See **Appendix C.1** for the complete ranking system utilized by NJ CHAMP.

3.2.1.2. Tie-Breaking Procedure

If there are insufficient funds to fund all projects in a given fiscal year and two or more applications with equal ratings request a short-term loan closing, the first criterion (i.e., the Project is located in an area designated as a Disadvantaged Community as defined by the CDC SVI) will function as the primary tiebreaker and projects having the greatest CDC SVI score will be given. The second criterion (i.e., the Project is located in a low-income geographic area as defined in 42 U.S.C. § 5135 (m)(6)) will serve as a secondary tiebreaker, as needed. The final tiebreaker will be the number of documented insurance and/or FEMA claims concerning the Project area, as needed.

4. FINANCIAL MANAGEMENT

4.1. Financial Status of the NJ CHAMP Safeguarding Tomorrow Revolving Loan Fund

The I-Bank will oversee the credit, legal and financing requirements and processes for all NJ CHAMP borrowers. The I-Bank will also manage the receipt, disbursement and reporting of all funds received and or associated with the loan fund. The I-Bank has 38 years of experience managing revolving loan programs in New Jersey.

The Program loan fund will be comprised of FEMA's STORM RLF capitalization grant funds and State match funds. The I-Bank also received a small appropriation from the State for Program administrative expenses. In addition, the I-Bank also anticipates earning interest on all funds sitting in the loan fund. Any interest earned on the loan fund will remain in the fund for future loans. Fees received from NJ CHAMP borrowers will be allocated to operating expenses. Loan repayments will be deposited back into the Program loan fund. NJ CHAMP funds shall be invested pursuant to the I-Bank's Investment Policy (see **Appendix A.3**), in short-term investments until such time that the funds are utilized for new loans/project expense disbursement. Loan repayments are redeployed to the next qualified, ranked project.

NJOEM has a long withstanding history of overseeing projects receiving FEMA funding and has proven measures in place to ensure oversight. These same measures will be utilized.

The I-Bank will not combine other revolving loan funds with NJ CHAMP loan funds. The I-Bank statute requires the I-Bank to manage each of its financing program's sources of funds separately. However, NJ CHAMP projects may be co-funded with the I-Bank's SRF or Transportation Bank revolving loan programs. In such instances NJ participants will receive separate loans from each financing program.

The I-Bank has received \$500,000 from the State to cover its first few years of administrative and operating costs. To the extent that the State's initial commitment of \$500,000 is insufficient to cover the I-Bank's administrative expenses, the parties will look to the revolving loan funds' grant monies to make

up the difference to the extent permitted under the law. At this point, it is not anticipated that any funds greater than two percent (2%) of the revolving loan funds may be needed to supplement internal funds.

4.1.1. Financial Status of the NJ CHAMP Loan Fund

4.1.1.1. Financial Status of the NJ CHAMP Loan Fund for Fiscal Year 2023

Available loan funds for FFY2023 NJ CHAMP total \$7,109,260 including the FFY2023 capitalization grant of \$6,462,963, and match Funds of \$646,297. In addition, the State appropriated \$500,000 to the I-Bank for operating and administrative expenses. During FFY2023 the I-Bank used a portion of these appropriated funds for operating and administrative costs and will use the remainder of the appropriated funds for operating and administrative expenses over the next 18 months. See Table 1 & Table 2 in Section 4.1.1.2 below, for a breakdown of the NJ CHAMP Loan Fund and administrative fund sources and uses.

4.1.1.2. Financial Status of the NJ CHAMP Loan Fund for Fiscal Year 2024

The sources of funds for NJ CHAMP in FY2024 include the FY2023 capitalization grant, the FY2023 non-federal Match funds and State appropriated funds. During FY2024 NJ CHAMP Loan Funds are expected to be used for operating and administrative costs, with the remainder for financing capital projects. See Table 1 & Table 2 below, for a breakdown of NJ CHAMP Loan Fund sources and uses.

Table 1: NJ CHAMP Loan and Administrative Funds Sources

<i>Sources</i>	<i>Previous Fiscal Year 2023</i>	<i>Current Fiscal Year 2024</i>
Loan Fund Capitalization Grant	\$6,462,963	\$6,462,963 (carryover)
Loan Fund State Match	\$646,297	\$646,297 (carryover)
Total for Loan Fund	\$7,109,260	\$7,109,260
Administrative Fund	\$500,000	\$463,659 (carryover)

Table 2: NJ CHAMP Loan and Administrative Funds Uses

<i>Uses</i>	<i>Previous Fiscal Year 2023</i>	<i>Current Fiscal Year 2024</i>
Loan Fund	\$0	\$7,109,260 (anticipated)
Administrative Fund	\$36,341	\$240,000 (anticipated)

4.2. Financial Terms of Loans

Each NJ CHAMP participant may receive a loan as early as the project’s planning and design, and construction phases with a five-year draw period, wherein interest will accrue at one percent (1%). The loan will convert from a line of credit loan during the draw period to a fixed rate, fixed maturity loan at the earlier of project completion or at the end of the draw period (the “Effective Date”). Each loan will have a maturity of up to 30 years (depending on borrower type). Interest and principal will not be payable until the Effective Date. Projects that remain incomplete at the end of the draw period may be eligible to receive additional time to draw down any unspent proceeds, however repayments will not be deferred.

Each borrower is required by statute to provide the I-Bank with a pledge on its repayment obligation in the form of a bond guarantee. The I-Bank requires such bonds be backed by either a general obligation pledge (for public entities) or a revenue pledge (for non-public entities).

Financing through NJ CHAMP will have the following terms:

- **Maturity** - NJ CHAMP maturity terms for local government units will be limited to the lesser of the project's useful life as certified by the borrower's engineer or:
 - 1) Ten (10) years for loans of \$150,000 less than or equal to \$500,000;
 - 2) Fifteen (15) years for loans greater than \$500,000 and less than or equal to \$1,000,000;or
 - 3) Maximum allowable limit permitted by the STORM Act for loans greater than \$1,000,000.

- **Interest Rate** - Pursuant to the STORM Act:
 - All NJ CHAMP loans will be charged one percent (1%) interest.

- **Fees** - Similar to the I-Bank's two other financing programs:
 - **Application Fee**: 2% of the project cost amount with half (1%) due up front (incorporated in loan amount – i.e., no cash outflow for borrower at time of closing). Balance to be paid at the Effective Date (i.e., the lesser of construction completion or 5 years).

 - **Annual Loan servicing fee**: 0.17% of total amount of Program funds provided per annum. Program fees will be used to fund NJ CHAMP administrative and operating costs. Any excess fees may be used to fund future loans.

- **Repayments**: Borrowers will begin NJ CHAMP loan repayments within one year of project completion or five years, whichever occurs first. Additionally, as above, loans made to municipal and county local government units are secured by the full faith and credit thereof, secured by their ad valorem taxing power. In accordance with the STORM Act, borrower's repayments will be deposited back into the NJ CHAMP loan fund to be used for future loans.

4.2.1. Standard Loans

See Section 4.2 above for loan terms.

The I-Bank requires repayment pledges in the form of a bond backed by a public entity's ad valorem taxing authority or a non-public entity's general revenue pledge.

4.2.2. Loans for Low-Income Geographic Areas or Underserved Communities

As described in Section 3.2 and Section 4.2, in its early years, given the limited amount of funds available and the low-interest rate limitations imposed by the STORM Act, NJ CHAMP intends to issue loans with consistent terms to each participating borrower. Underserved communities and those in low-income geographic areas are prioritized pursuant to the ranking methodology provided by NJOEM.

4.3. Loan Disbursements

Given its experience and success with its two other successful existing loan programs, the I-Bank anticipates that all available STORM capital funds which NJ CHAMP receives in its early years of operations will be committed to the Program's highest ranked projects as direct loans within the first 12 to 15 months upon receipt of such grant funds. Based on historical data regarding construction duration, Water Bank projects typically take 2 to 5 years for project completion and Transportation Bank projects typically take

1 to 3 years for project completion, the I-Bank expects NJ CHAMP resilience projects to have similar durations based on project type.

The I-Bank would like to be able to finance more Program projects by leveraging STORM Act funds through a bond program. The STORM Act's cap on interest rates that States may charge on STORM funds makes this structure impossible. An amendment to the STORM Act to permit higher interest rates would allow States to introduce private loan funds. Assuming such an amendment is enacted and once a critical mass of assets has been achieved, the I-Bank would look to leverage Program funds at a 2:1 ratio (i.e., 200% utilization) to increase the lending capacity of NJ CHAMP.

The I-Bank has a 37-year history of working with local governments to make loans for critical infrastructure with and without a dedicated revenue source. The I-Bank has made approximately \$9 billion of loans over this time to over 400 counties, municipalities, and water systems in New Jersey under two separate revolving loan programs (i.e., a water program with rate-based revenue sources, and a transportation program back by general budget sources). As such, the I-Bank is well-versed in local revenue streams, tax-exempt credits, and the State's rules and regulations for local government units to issue and repay bonds. In addition, the I-Bank has strict statutory and credit requirements for a project sponsor's qualification pursuant to its Enabling Act and Credit Policy, respectively. In its 37-year history of issuing loans to public entities, the I-Bank has never had a default in its bond program.

5. ENTITY PROGRAM MANAGEMENT

5.1. Technical Assistance

In the early years, NJ CHAMP is based on current HMP needs. Due to the limited amount of funds anticipated to be available to states through this new program, NJ CHAMP will not be offering technical assistance, although Program staff at the NJOEM and the I-Bank will assist NJ CHAMP participants with application requirements just as each party currently does in their existing programs.

5.2. Local Capacity Development

NJOEM currently utilizes HMA funds to obligate capacity building projects. However, should a need emerge through project identification and community outreach, NJ CHAMP will evaluate the best method to meet the need.

5.3. Environmental and Historic Preservation Compliance

Projects that may impact the environment, including, but not limited to, the construction of communication towers, modification or renovation of existing buildings, structures, and facilities, or new construction including replacement of facilities, must participate in the EHP review process. Project types that do not require EHP reviews include mitigation planning, building code adoption and enforcement, and zoning and land-use planning. Because NJ CHAMP will be funding the local match share of only those prioritized projects which have been identified by FEMA to receive a FEMA grant, NJ CHAMP will rely on FEMA's Environmental and Historic Preservation ("EHP") reviews.

5.4. Public Meetings and Comment Activities

The proposed IUP setting the project priorities and project priority list underwent a public participation process by publication and notice of this IUP and the project priority list from March 18, 2024 through April 26, 2024. No comments were received on either the IUP or the project priority list. However, NJOEM has engaged in conversation with Project Sponsor on the existing PPL and has incorporated their comments and feedback in our selection process. NJOEM has utilized media, notices on the NJOEM webpage, direct communication with stakeholders, and messaging through the New Jersey League of

Municipalities in their periodic newsletter sent to all municipalities in the State to amplify the programmatic messaging; however, minimal comments have been received.

The client base for both NJOEM and the I-Bank consists of local governments. Leveraging existing communication structures at the I-Bank and NJOEM is the primary source for outreach (e.g., websites, conferences, seminars, mailing lists, bulletins, social media, and blog posts). With this broad customer base of local governments, NJ CHAMP's co-administrators have a state-wide reach and the capability to get the word out, although potential funding amounts do limit the level of resources available for allocation to this process. Current relationships with municipal and construction associations within the State (e.g., League of Municipalities, Council of Mayors, Utility & Transportation Contractors Association) facilitate expanded outreach for future marketing and project ideas.

6. AUDITS AND REPORTING

6.1. Compliance with Federal Reporting Requirements

Ensuring transparency and accountability, all program materials are posted on the I-Bank's [website](#). The I-Bank's current financial auditor (CliftonLarsonAllen LLP), which performs a comprehensive audit for the I-Bank and its existing financing programs, including a single audit and the Clean Water / Drinking Water audit for the Water Bank program, will conduct an independent audit of the Program to ensure financial integrity for the Annual and Biennial Audits. The I-Bank Board's audit and governance committee is responsible for the procurement and oversight of I-Bank audits and reviews the financial audit report for each year directly with the I-Bank's auditor.

We commit to entering project and benefits data into the FEMA Non-Disaster Grants system ("ND Grants") and financial data in the Payment and Reporting System to support the evaluation of the NJOEM and I-Bank's Program. Among other parameters, FEMA will use the data from the audits and reporting to evaluate how the entity loan funds:

- Efficiently administer the fund
- Provide project benefits to local communities
- Promote equity

We will enter project benefits data into ND Grants by the end of the quarter in which the capitalization grant is received. After the period of performance, we will enter required project benefits data into FEMA's ND Grants by the end of the fiscal year for this Intended Use Plan.

6.2. Publication of Information

The I-Bank shall publicly acknowledge, through a dedicated page for the Program on its [website](#), the type and location of each project financed as well as the dollar amount received from NJ CHAMP, and the project's expected funding schedule and completion date. It is expected that the Program's individual project information will be updated quarterly.

6.3. Loan Recipient Auditing and Reporting

NJ CHAMP will be managed in a manner that mirrors the I-Bank's Water and Transportation Bank Programs with respect to project review and requisition payments. Borrowers will receive a loan based on a consulting engineer's project cost estimate for the duration of planning, design, and construction of the project. NJ CHAMP loan funds are not disbursed to any borrower unless and until a borrower submits invoices accompanied by supporting documentation that such costs were incurred (i.e., a borrower need not pay the expense, but must incur the expense, and forward the invoice and supporting paperwork to

the I-Bank) and the invoices relate to an activity that complies with Program requirements. If a Borrower misuses the Program or looks to receive funds for an ineligible cost or non-approved change order, the I-Bank does not release loan funds to the borrower for those expenses. In this way, NJ CHAMP maintains tight control over the performance of each project and each borrower's use of STORM RLF funds.

APPENDICES

This page has been intentionally left blank

APPENDIX A

This page has been intentionally left blank

APPENDIX A.1

Loan Application Process

This page has been intentionally left blank

Loan Application Process

A separate application is required for each NJ CHAMP Project. Loan applications are accepted at any time throughout the year, and to that end, readiness is a central component of Project prioritization. Applications are not accepted after construction advertisement. The Program's funding commitment arises at the time of loan closing, subject to the project sponsor's receipt of an I-Bank authorization to award a construction contract related to that loan. Generally, the loan application process is as follows:

1. The Project Sponsor's submission of the following:
 - Project Description form; with Environmental Letter of Interest / Historic Preservation Documentation (as applicable);
 - Loan Application;
 - Engineering design and specifications;
 - Applicable permits;
 - An executed engineering or construction contract (or draft thereof); and
 - A completed FAF.
2. The I-Bank's issuance of:
 - Creditworthiness Approval;
 - Authorization to Advertise Construction;
 - Applicable Contract Award Authorization; and
 - Applicable Contract Certification.
3. The NJ Division of Local Government Services issuance of:
 - Approval of the Project Sponsor's Note or Bond issued to the I-Bank (as applicable).
4. FEMA issuance of:
 - Environmental (National Environmental Policy Act ("NEPA") determination (as applicable); and
 - Historic Preservation determination (as applicable).
5. Execution of a Loan Agreement.¹

Conference Calls / Meetings

Upon receipt of a Project's initial application, conference calls or meetings will be held with a project sponsor and its professional advisors to provide the project sponsor with an overview of the application process as it relates to its specific Project. A project sponsor is provided with guidance as to what, if any, submissions are required to document a project's potential impact upon the environment and historic properties (if applicable). In addition, a project sponsor is provided with other information to further reduce confusion, application-related costs and delays.

A project sponsor is also provided guidance as to the submission of the engineering contract (draft or executed) and FAF in preparation for loan closing to ensure Program funding is in place to pay for professional services throughout the project application process.

¹. While loans are made for the total estimated project cost, funding commitments are limited to the approved (certified) contract, typically commencing with the engineering contract, and ending with the final construction contract.

Environmental Planning/Historic Preservation

NJ CHAMP intends to fund the local match share of only those projects which are receiving a FEMA grant. As such, NJ CHAMP will rely on FEMA's Environmental and Historic Preservation ("EHP") reviews.

Projects that may impact the environment, including, but not limited to, the construction of communication towers, modification or renovation of existing buildings, structures, and facilities, or new construction including replacement of facilities, must participate in the EHP review process. Project types that do not require EHP reviews include mitigation planning, building code adoption and enforcement, and zoning and land-use planning.

Engineering

Program approval of engineering contracts (if financed through the Program), construction plans and construction contract specifications, as well as construction contract award is required as part of all NJ CHAMP applications.

Project sponsors are initially required to submit draft contract documents, including:

- Certification that the project sponsor has not and shall not enter into any contract with any person debarred/suspended from government contracting;
- Certification that the project sponsor and its contractors shall comply with discrimination and affirmative action provisions of N.J.S.A. 10:2-1 through 10:2-4;
- Disclosure of Investment Activities in Iran form; and
- Certification of Non-Involvement in Prohibited Activities in Russia or Belarus form.

Project sponsors are also required to submit draft documents (e.g., Plans & Specifications) produced by a licensed professional engineer including but not limited to the following:

- A set of detailed plan drawings including site plan/section/elevation views;
- Current NJ prevailing wage rates;
- Bonding (performance, payment, maintenance as applicable) (N.J.S.A. 40A:2-1 et seq. and N.J.S.A. 40A:3-1 et seq.);
- Competition, brand name or equal unless otherwise justified (N.J.S.A. 40A:11-13(d));
- Equal Employment Opportunity certification form;
- Affidavit of Non-Collusion form;
- Certification of Non-Segregated Facilities form;
- Disclosure of Investment Activities in Iran form; and
- Certification of Non-Involvement in Prohibited Activities in Russia or Belarus form.

NJ CHAMP retains the right to elicit additional information from the project sponsor in conducting its review of either a project's potential environmental impacts or engineering compliance with governing regulations.

Prevailing Wage/Permitting

NJ CHAMP borrowers are required to pay not less than the prevailing wage rate to workers employed in the performance of any construction contract pursuant to P.L.1963, c.150 (C.34:11-56.25 et seq.) and P.L.1985, c.334 s.26 (N.J.S.A. 58:11b-26(b)), as applicable. Project sponsors are furnished with relevant provisions to be inserted in contract specifications during the application process.

NJ CHAMP borrowers are required to satisfy relevant NJ State permits.

Construction Contract Advertisement/Award

Upon the I-Bank's approval of the application and technical submissions for each contract as compliant with NJ CHAMP requirements, the I-Bank will authorize the borrower to advertise and award the contract in accordance with the provisions of New Jersey's Local Public Contracts Law N.J.S.A. 40A:11-1 et seq. Borrowers shall submit construction bids, an official action authorizing the construction award, and an executed construction contract within 24 months of loan closing and within 120 days of issuance of the I-Bank's Authorization to Advertise. Failure to award construction in a manner compliant with the provisions of this paragraph shall result in the immediate revocation of the Authorization to Advertise, require the immediate repayment of the loan with reference to the stated contract and render the contract ineligible for I-Bank funding. If a project is compliant with the requirements of, and has received approval for assistance from, another FEMA Grant program, the I-Bank will rely on the previously obtained approvals, as applicable, in lieu of the review requirements listed in this section above.

I-Bank Project Certification – For a Project to receive NJ CHAMP financing, the I-Bank must certify that a Project's component contracts satisfy NJ CHAMP program requirements in compliance with the STORM Act (e.g., engineering contract certification is a determination that costs associated with a Project's environmental planning and/or engineering design are eligible for financing, and construction contract certification is a determination by the NJ CHAMP program staff that construction costs are eligible for financing).

Credit Approval – All Borrowers that receive a form of loan financing from the I-Bank are required to satisfy the I-Bank's Credit Policy. In brief, all project sponsors are required to have no less than an investment grade rating (e.g., at least BBB+, Baa1, or BBB+) or two investment grade ratings if the lower of the two ratings is BBB/Baa2/BBB, or BBB-/Baa3/BBB-from Fitch Ratings, Moody's Investors Service or Standard & Poor's Ratings, respectively. There are limited exceptions to this requirement listed in the Credit Policy (e.g., the ability of a borrower to supply the I-Bank with a Municipal Qualified Bond Act bond pursuant to State Law wherein the NJ State Treasurer pays the borrower's debt service directly to the bond Trustee from State Aid that the borrower would otherwise receive from the State Treasurer). In addition, each project sponsor is required to secure its note or bond to the I-Bank with a General Obligation tax pledge.

this page has been intentionally left blank

APPENDIX A.2

Financial Planning Methodology:

I-Bank Credit Policy

This page has been intentionally left blank

NEW JERSEY INFRASTRUCTURE BANK



CREDIT POLICY

Revised – June 2023

POLICY AND PROCEDURE

NO. 1.21

SUBJECT: Credit Policy

REVISION HISTORY:	Adopted:	1/10/2013	Effective:	1/29/2013
	Revised:	10/17/2013	Effective:	10/31/2013
	Revised:	2/20/2014	Effective:	3/7/2014
	Revised:	6/12/2014	Effective:	6/30/2014
	Revised:	1/15/2015	Effective:	2/2/2015
	Revised:	6/9/2016	Effective:	6/24/2016
	Revised:	6/18/2018	Effective:	7/3/2018
	Revised:	3/20/2020	Effective:	4/3/2020
	Revised:	8/13/2020	Effective:	9/25/2020
	Revised:	8/8/2022	Effective:	9/23/2022
	Revised:	10/13/2022	Effective:	10/28/2022
	Revised:	6/8/2023	Effective:	6/26/2023

PURPOSE: To define and clarify the credit worthiness standards required for participation in the New Jersey Environmental Infrastructure Financing Program (“Water Bank”) and the New Jersey Transportation Infrastructure Financing Program (“Transportation Bank”) (each a “Financing Program” and together the “Financing Programs”).

Credit Worthiness Policy for Loans of the New Jersey Infrastructure Bank

The I-Bank prides itself on staying true to its core mission:

- Promoting and facilitating the construction of:
 - Water quality and public health infrastructure projects throughout the State by providing low-cost funding to local government units and drinking water systems;
 - Local transportation infrastructure projects throughout the State by providing low interest loans to local government units; and
- Fulfilling a fiduciary responsibility to ensure that the credit standards of the Water Bank and Transportation Bank provide the highest levels of protection of capital, thereby allowing future generations to borrow funds through each Financing Program at the lowest and most efficient costs available.

In simplest terms, the Water Bank and Transportation Bank are each pools of subsidized loans dedicated to financing improvements to New Jersey’s water quality and transportation infrastructure, respectively. Central to the I-Bank’s continued success is the dedication of infrastructure project funding in perpetuity through a revolving fund structure. When participating borrowers in the Water Bank and Transportation Bank (“Borrowers”) repay the State-funded component of their loans, these funds are re-lent to other Borrowers to finance new projects, hence, the revolving fund moniker.

In the event a Borrower defaults on its repayment obligation to the Water Bank or the Transportation Bank, the consequences of the default are: 1) the loss of funds reduces the total amount of revolving loan funds available for future borrowers; and 2) the default negatively impacts the credit rating of bonds issued by the Water Bank or the Transportation Bank, as the case may be, thereby increasing the cost of financing for other Borrowers. Accordingly, the I-Bank maintains Borrower credit eligibility requirements as a precondition to qualification for a loan through either Financing Program. The Water Bank and Transportation Bank are not meant to be lenders of last resort. This Credit Policy protects each Financing Program as a sustainable source of low-cost infrastructure financing for current and future Borrowers.

Since the I-Bank’s inception, the Water Bank has provided \$7.2 billion in zero percent and low interest rate long-term loans to local communities through a combination of federal and State funds and I-Bank bond proceeds, resulting in an estimated interest cost savings of over \$2.6 billion to these local communities. The Water Bank has made an additional \$1.1 billion of short-term construction loans to projects that will receive long-term financing from the Water Bank upon completion of construction. New Jersey’s rate payers and taxpayers are the direct beneficiaries of the Water Bank’s multiple cost savings, subsidies, and administrative benefits. The Transportation Bank, which was organized in 2018, and which has either allocated or issued short-term loan funds totaling \$76.3 million for project design and construction to date, was established to offer similar savings and benefits to local communities.

In this Credit Policy, the I-Bank addresses the requirement of credit worthiness through the analysis of risk that each loan applicant (“Applicant”) presents. This risk analysis considers the

probability that a Borrower will not fulfill its annual debt service repayment obligation on its loan on time and in full, as well as how each loan is secured to minimize any corresponding loss. This Credit Policy articulates the I-Bank's credit requirements to address the complex range of projects and Applicants that are reviewed by the Water Bank and the Transportation Bank.

To apply this Credit Policy in a manner that is practical, transparent and fair to each Applicant, the Credit Policy considers (i) each Applicant's ability to repay its loan as demonstrated (in almost all cases) by an investment grade credit rating from Fitch Ratings, Inc., Moody's Investors Service or S&P Global Ratings, and (ii) the type of collateral that each Applicant will pledge as security for its loan, most typically, any of (a) a General Obligation ("G.O.") Bond pursuant to the terms of which a municipal or county Borrower has unconditionally and irrevocably pledged its full faith and credit and covenanted to exercise its unlimited *ad valorem* taxing powers to secure its payment obligations, (b) a G.O. pledge by the underlying county or municipality(ies) being served by the Borrower's system pursuant to the terms of a service agreement, or (c) in the case of certain Water Bank Loans only, a Revenue Bond, that is an obligation secured by the gross receipts of the water system or overall general revenues of the Borrower.

This Credit Policy segregates Applicants by Borrower-type (County, Municipality, Authority, or Private Water System), by collateral-type (G.O. Bond or Revenue Bond) and by Financing Program (Water Bank or Transportation Bank). Given the early stages of the Transportation Bank, this Credit Policy limits qualified Applicants to the Transportation Bank to municipalities and counties providing an investment grade rated G.O. pledge and qualifying regional transportation Authorities that secure and provide an investment grade rated G.O. pledge from the underlying County or municipality. Given the more secure and stable nature of cash flow streams from water-related projects relative to transportation projects, the Credit Policy provides more latitude for Applicants to the Water Bank by qualifying certain higher-risk Applicants, including Revenue Bond Applicants and non-rated de-minimis borrowers. In recognizing the value of an investment grade G.O. pledge, and in order to ensure that all future, qualified Applicants receive fair access to the Financing Program's subsidized zero percent and low interest loans (*a benefit that has saved the average Borrower more than 25% of its aggregate Financing Program loan principal amount*), this Credit Policy requires more collateral from certain, higher-risk Water Bank Applicants. In this way, the Water Bank is less prone to future default and loss risks.

If you have any questions regarding this Credit Policy, please do not hesitate to contact either the I-Bank or our legal or financial advisors. We look forward to providing you the top-rated and efficient service that has always been the hallmark of the I-Bank Financing Programs.

Respectfully,



David E. Zimmer, CFA
Executive Director
June 26, 2023

TABLE OF CONTENTS

- I. STATUTORY AUTHORITY..... 1
- II. OBJECTIVE 2
- III. RECENT HISTORY..... 2
- IV. RISK PARAMETERS..... 3
- V. DEFINITIONS 4
- VI. LOAN APPLICANTS..... 12
 - 1. GENERAL APPLICABILITY PROVISIONS 12
 - 2. CREDIT ELIGIBILITY REQUIREMENTS..... 15
 - I. WATER BANK OR TRANSPORTATION BANK CREDIT ELIGIBILITY REQUIREMENTS..... 16
 - A. PLEDGED G.O., provided that the Applicant is a Municipality/County 16
 - i. I-Bank Investment Grade Rated 16
 - ii. I-Bank Non-Investment Grade Rated..... 16
 - iii. Non-Rated..... 17
 - B. PLEDGED G.O., *provided that the Applicant is an Authority* 17
 - i. I-Bank Investment Grade Rated 17
 - ii. I-Bank Non-Investment Grade Rated..... 17
 - iii. Non-Rated..... 17
 - II. WATER BANK CREDIT ELIGIBILITY REQUIREMENTS 17
 - A. PLEDGED G.O., *for a Redevelopment Project sponsored by a Local Government Unit*..... 17
 - i. I-Bank Investment Grade Rated 17
 - ii. I-Bank Non-Investment Grade Rated LGU Sponsor 18
 - iii. Non-Rated LGU Sponsor 18
 - B. REVENUE BOND, *provided that the Applicant is a(n)* 18
 - a. Authority and is 18
 - i. I-Bank Investment Grade Rated 18
 - ii. I-Bank Non-Investment Grade Rated..... 19
 - iii. Non-Rated..... 19
 - b. Privately-Owned Water System and is..... 19
 - i. I-Bank Investment Grade Rated 19
 - ii. I-Bank Non-Investment Grade Rated..... 20
 - iii. Non-Rated..... 20

C.	PLEGGED G.O. or REVENUE BOND, <i>De-minimis Loan Applicant, provided that the Applicant ...</i>	20
i.	I-Bank Investment Grade Rated.....	20
ii.	I-Bank Non-Investment Grade Rated.....	20
iii.	Non-Rated.....	21
D.	SAIL Loans.....	21
E.	Declaration of a State of Emergency.....	21
APPENDIX	22
ATTACHMENTS	24

New Jersey Infrastructure Bank Credit Policy Statement

Revised June 26, 2023

I. STATUTORY AUTHORITY

The I-Bank, originally organized in August of 1986 as the “New Jersey Wastewater Treatment Trust”, is a public body corporate and politic with corporate succession, constituted as an instrumentality of the State, exercising public and essential government functions, and organized and existing under and pursuant to N.J.S.A. 58:11B-1 et seq. (as amended from time to time, the “I-Bank Act”). Since 1987, the I-Bank and the State have provided loan financing for acquiring, constructing, improving, or installing wastewater treatment projects for wastewater treatment systems undertaken by local government units in the State. In 1998, the I-Bank Act was amended, thereby expanding the program to finance the costs of drinking water supply projects undertaken by local government units, private entities, and nonprofit entities.

On October 14, 2016, the I-Bank Act was further amended pursuant to Public Law 2016, Chapter 56 (the “Amending Statute”), changing the name of the I-Bank to the “New Jersey Infrastructure Bank” and expanding its statutory authority. More specifically, the I-Bank’s statutory authority was expanded to make loans and provide other assistance to local government units to finance the cost of certain transportation infrastructure projects, as defined in the I-Bank Act. The Amending Statute became effective on January 16, 2018, pursuant to Public Law 2017, Chapter 327.

The I-Bank is structured organizationally as two distinct operating departments:

- (i) one department, the NJ Environmental Infrastructure Trust (“NJEIT”), partners with the NJ Department of Environmental Protection (“NJDEP”) (the I-Bank and the NJDEP, defined herein as Financing Program Principals) for the purpose of jointly operating and administering the New Jersey Environmental Infrastructure Financing Program, known as the New Jersey Water Bank (the “Water Bank”), and
- (ii) a second department, the NJ Transportation Infrastructure Bank, partners with the NJ Department of Transportation (“NJDOT”) for the purpose of jointly operating and administering the New Jersey Transportation Infrastructure Financing Program, known as the New Jersey Transportation Bank (the “Transportation Bank”).

The I-Bank is responsible for ensuring that I-Bank Loans in the Water Bank and the Transportation Bank are administered efficiently and fairly to all *qualified* Applicants in a fiscally responsible manner that safeguards the I-Bank’s future ability to make infrastructure loans in the most cost-efficient manner.¹

¹ Note: Capitalized terms used herein shall have the meaning ascribed to such terms in Article V hereof, unless otherwise noted.

II. OBJECTIVE

The I-Bank maintains minimum credit worthiness standards, compliance with which is a pre-condition to an Applicant's qualification to receive a Water Bank or Transportation Bank Loan. These credit worthiness standards help to ensure that (i) loans made through the Water Bank and the Transportation Bank are repaid on-time and in full, thereby enabling the I-Bank to relend these funds on a revolving basis to other Borrowers in the State, (ii) publicly issued I-Bank Environmental Infrastructure bonds maintain a AAA/Aaa/Aaa Credit Rating from the three Nationally Recognized Rating Agencies ("NRRAs") and, as a result, the I-Bank is able to issue its bonds at the lowest absolute rate for the benefit of all current and future Water Bank Borrowers, and (iii) publicly issued Transportation Infrastructure bonds receive the highest possible rating, given the size of the pool, from the three NRRAs and, as a result, the I-Bank is able to issue its bonds at a low rate for the benefit of all current and future Transportation Bank Borrowers.

Recognizing that one of the I-Bank's hallmarks has always been equal and shared access for all qualified Applicants to the I-Bank's low financing costs offered through the Water Bank and the Transportation Bank, the I-Bank was neither created to be, nor intended to perform as, the lender of last resort for every Applicant seeking financing for environmental infrastructure or transportation infrastructure projects in the State. Consequently, the purpose of this Credit Policy is to further define the financial conditions and requirements that must be satisfied by each Applicant so that all lending decisions and actions by the I-Bank continue to be consistent, transparent and, ultimately, fiscally prudent.

The creditworthiness standards and requirements established by this Credit Policy (including, without limitation, the Credit Eligibility Requirements contained in Section VI:2 hereof), as this Credit Policy may be amended further by the I-Bank from time to time, have been accepted and approved by the State Treasurer for application by the I-Bank to all financings provided by the State through the Water Bank Financing Program, including, without limitation, any loan made by the State through the NJDEP. Such acceptance and approval by the State Treasurer is evidenced by the letter of the State Treasurer, dated August 10, 2020, which is attached hereto as Appendix 1.

III. RECENT HISTORY

The Water Bank: The Water Bank Financing Program has been subject to a number of policy revisions and product innovations since its inception more than 35 years ago. These revisions and innovations include: the introduction of a water supply system or drinking water ("DW") component (1998), the introduction of the Master Program Trust Account ("MPTA"), which serves as Water Bank Loan coverage or a reserve fund that is capitalized with Fund Loan repayments owed to the State and that acts as additional collateral support for the I-Bank's Environmental Infrastructure Loan Program outstanding bonds (1995), the clarification and revision of the State's credit policy (2001), the Direct Loan Program (2001), introduction of the Financing Program's Enterprise Application Software system (2012), the Small System (NANO) Loan Program (2012), the Supplemental Financing Program (2012), the I-Bank's initial Credit

Policy (2013), the SAIL Disaster Relief Loan Program (2013), the multi-year Short-Term Construction Loan Program (2015), the rolling application process (2016) and the articulation of the State's credit policy with respect to the State loan component of Water Bank Loans (2020).

Over 90% of the loans made by the Water Bank's Financing Program Principals to date are secured either by (i) a general obligation ("G.O.") bond issued by a taxing entity (a Municipality or county) and secured by a pledge of its full faith and credit or (ii) a Revenue Bond issued by an Authority and ultimately secured by a G.O. pledge of the full faith and credit of the municipal Participants served by that Authority. The Authority pledges to the Financing Program Principals, through its indenture or bond resolution, all payments payable to the Authority by the Participants pursuant to the Service Agreement. When applicable, these G.O. pledges obligate the Municipalities and/or counties to raise *ad valorem* taxes "without limitation as to rate or amount" in order to either (i) satisfy their debt service obligation to the Financing Program Principals or (ii) satisfy any payment obligations pursuant to the Service Agreement in order for the Authority to repay its debt service obligations to the Financing Program Principals.

The remainder of the outstanding Water Bank loans made by the I-Bank and/or the NJDEP (i.e., less than 10%) are secured by a Revenue Bond. Revenue Bonds are not secured by a G.O. pledge of one or more Municipalities or Counties. As such, these Revenue Bonds may pose greater repayment default AND loss risk to the Water Bank. While the I-Bank's publicly held bonds have never suffered a payment default, it is critical to establish and maintain policies that identify and safeguard against the risk of default and loss in the future.

The Transportation Bank: The SFY2019 Financing Program was the first full year of operation for the Transportation Bank. The Transportation Bank offers program loans to qualified Borrowers at extremely low interest rates to significantly reduce Borrower financing costs relative to independent financing.

IV. RISK PARAMETERS

This Credit Policy segregates default risk by Borrower-type and by credit pledge-type. In the event of a potential bankruptcy, Borrowers which are Municipalities, Counties or local Authorities must obtain the approval of the Local Finance Board within the Department of Community Affairs ("DCA") before they are legally able to commence bankruptcy proceedings. Given (i) the G.O. pledge that secures the I-Bank Loan and (ii) the additional legal hurdle and corresponding oversight from the State associated with bankruptcy proceedings, these entities have a greater hurdle, and therefore, a lower likelihood of experiencing default than their non-governmental/non-G.O. counterparts. In addition, the strength of a Borrower's security for its respective loan(s) has a limiting effect on both its probability of default as well as the magnitude of any principal or interest repayment loss should that Borrower default on its repayment obligation to the I-Bank. As such, any Borrower that can be compelled to raise, or compel a Participating municipality to raise, *ad valorem* taxes through its pledge of either a direct or

indirect G.O. will be less likely to default and, in the unlikely Event of Default, will be less likely to cause a loss on its repayment obligations to the I-Bank. With this in mind, this Credit Policy divides Water Bank Borrowers and Transportation Bank Borrowers into the following categories:

1. **Water Bank and Transportation Bank**
 - a. G.O. Pledge:
 - i. Municipality/County
 - ii. Authority
2. **Water Bank only**
 - a. G.O. Pledge
 - i. Redevelopment Project sponsored by an LGU
 - b. Revenue Pledge:
 - i. Authority
 - ii. Corporate/Private-ly-Owned Water System
 - c. *De-minimis* Borrowers
 - d. SAIL Loans

(See Section VI for further discussion of risk categories and corresponding criteria.)

V. DEFINITIONS

“Aggregate Annual Debt Service” means, with respect to any given Applicant, the total of the annual debt service payments for both direct and indirect (i.e., as a result of such Applicant’s participation in an Authority) obligations of the Applicant to either the Water Bank or Transportation Bank, as applicable, due and payable, or in the instance of a Short-Term Loan, estimated to be payable on a long-term basis, each State Fiscal Year to the I-Bank with respect to all outstanding Water Bank Loans or all outstanding Transportation Bank Loans when aggregated, or to the State with respect to all outstanding Fund Loans when aggregated. Note, the Aggregate Annual Debt Service calculation facilitates the determination of *De-minimis* status.

“Applicant” means an entity having submitted, pursuant to the I-Bank Act and applicable regulations, project information and/or a Letter of Intent or Short-Term Financial Addendum Form or an application for the financing of a project through the Water Bank or Transportation Bank.

“Authority” means a State authority, a municipal, county or regional sewerage or utility authority, a municipal sewerage district, an improvement authority, or any other political subdivision of the State, *other than* a Municipality or county, that is authorized to construct, operate and maintain a wastewater treatment system or a public water supply system, or to construct, rehabilitate, operate or maintain water supply facilities or otherwise provide water for human consumption, or a regional transportation authority, or any other political subdivision of the State authorized to construct, operate, and maintain public highways or transportation projects.

“Borrower” means any entity that has any Water Bank or Transportation Bank loans outstanding with either the State and/or the I-Bank.

“Credit Eligibility Requirements” means those standards set forth in Section VI:2 below pursuant to an Applicant’s borrower-type and security pledge.

“Credit Rating” means an assessment by one or more of the three NRRAs of the credit worthiness (i) of an Applicant and the Applicant’s ability to repay principal and interest on its bonds, or (ii) of a Nationally Chartered Bank or a State Chartered Bank and its ability to satisfy its liabilities.

“De-minimis Loan Applicant” means an Applicant with respect to which the *Pro-Forma* Water Bank Aggregate Annual Debt Service owed to the I-Bank, or the State is less than \$50,000. De-minimis Applicants must be an LGU or HOA that services multiple units and must provide the I-Bank with all information necessary for review at least 4 months prior to the date of loan closing.

“Direct Loan Closing” means the date on which a Borrower delivers to the I-Bank and State (if applicable), and the I-Bank and State accepts from such Borrower, a note or other obligation evidencing an I-Bank Loan and Fund Loan to such Borrower pursuant to the direct loan program of the Water Bank or Transportation Bank, established pursuant to the I-Bank Act and one or more resolutions of the I-Bank.

“Escrow Closing” means the date on which the I-Bank, the State (if applicable), a Borrower and an escrow agent appointed by the I-Bank each enter into an escrow agreement, pursuant to which (i) the I-Bank and the State each commit to make a loan to the Borrower with respect to a particular Environmental Infrastructure Project under the Water Bank or the I-Bank commits to make a loan to the Borrower with respect to a particular Transportation Infrastructure Project under the Transportation Bank; (ii) the Borrower commits to accept a loan from each of the I-Bank and the State with respect to such Environmental Infrastructure Project or the Borrower commits to accept a loan from the I-Bank with respect to such Transportation Infrastructure Project; and (iii) the I-Bank Loan Agreement and I-Bank Loan Bond for both Water and Transportation Infrastructure Projects and the Fund Loan Agreement and Fund Loan Bond for Water Bank Projects, together with certain other documents and legal opinions, are deposited into escrow, to be released by the escrow agent upon the issuance by the I-Bank of its bonds.

“Environmental Infrastructure Project” means the acquisition, construction, improvement, repair or reconstruction of all or part of any structure, facility or equipment, or real or personal property necessary for or ancillary to any (i) wastewater treatment system project, including any stormwater management or combined sewer overflow abatement projects, or (ii) water supply project, as authorized pursuant to P.L.1985, c.334 (C.58:11B-1 et seq.) or P.L.1997, c.224 (C.58:11B-10.1 et al.), including any water resources project, as authorized pursuant to P.L.2003, c.162.

“Event of Default” means any occurrence or event defined as an Event of Default pursuant to an I-Bank Loan Agreement or a Fund Loan Agreement.

“Financial Due Diligence Meeting” means a meeting convened by the I-Bank to discuss elements of an Applicant’s financial health, including, without limitation, the sources of funding for an Applicant’s Environmental or Transportation Infrastructure Project, the current Credit Rating, the potential impact of such an Environmental or Transportation Infrastructure Project on the Applicant’s Credit Rating, and other matters deemed necessary or appropriate by the I-Bank to aid it in assessing (i) an Applicant’s compliance with this Credit Policy and (ii) its financial eligibility to receive and repay an I-Bank Loan and Fund Loan. Financial Due Diligence Meetings may include the following representatives:

- Representatives of the NRRAs that rated the Applicant’s outstanding debt;
- The Applicant’s chief financial officer, highest elected official, and business administrator;
- One or more representatives of the developer of the Environmental or Transportation Infrastructure Project, if applicable, possessing knowledge and authority to provide detailed information regarding the Environmental or Transportation Infrastructure Project and its regulatory and financial details;
- A representative of each of the non-I-Bank entities, including other State Agencies, if any, providing funding for any aspect of the Environmental or Transportation Infrastructure Project;
- A representative of each entity that may provide a guarantee for the financing of the Environmental or Transportation Infrastructure Project, if applicable;
- Two representatives of the I-Bank’s senior management;
- A representative of any entity that may serve as signatory to an I-Bank Loan Agreement or Fund Loan Agreement, or another form of contractual obligation in connection with the financing of the Environmental or Transportation Infrastructure Project; and
- Such other individuals deemed necessary or appropriate by the I-Bank to aid in conducting financial due diligence including, without limitation, representatives from the New Jersey Department of Community Affairs and/or the New Jersey Board of Public Utilities.

“Financing Program Principals” means the I-Bank and the State, collectively, as parties to the Water Bank.

“Finding of Unacceptable Credit Risk” means a finding, evidenced in a written instrument by the I-Bank and delivered thereby to the Applicant, stating that one or more of the following has occurred: (i) the I-Bank has determined that the Applicant fails to meet the Credit Eligibility Requirements, (ii) a Material Event pursuant to either clause (i) or clause (ii) of the definition thereof has occurred within the immediately preceding sixty (60) months, or (iii) the I-Bank identifies credit, liquidity or operational risks with respect to the Applicant that have occurred within the immediately preceding twelve (12) months, which risks may include, without limitation, the occurrence of any Material Event pursuant to clause (iii) through clause (x) of the definition thereof, provided further that, with respect to clause (ii) and clause (iii) hereof, such occurrences are determined by the I-Bank (and evidenced in the written findings of the I-Bank that are delivered to the Applicant) to constitute unacceptable risks to the Water Bank or Transportation Bank.

“Fund Loan” means a loan provided by the State, acting by and through the NJDEP, to a Borrower for the financing as part of the Water Bank of all or a portion of an Environmental Infrastructure Project pursuant to the Federal Clean Water Act or the Federal Drinking Water Act.

“Fund Loan Agreement” means an agreement, by and between the State, acting by and through the NJDEP, and a Borrower, pursuant to which the State extends a Fund Loan to a Borrower in connection with the financing of all or a portion of an Environmental Infrastructure Project, and the Borrower agrees to certain terms and conditions, including, without limitation, the construction of the Environmental Infrastructure Project and the repayment of the Fund Loan.

“Fund Loan Bond” means a senior lien bond issued by a Borrower to the State, acting by and through the NJDEP, in order to evidence and secure the Fund Loan repayment obligations of such Borrower to the State, all in connection with the financing of all or a portion of an Environmental Infrastructure Project. The State may, in its discretion, accept a Junior Lien Bond, in compliance with the provisions of Section VI.1. hereof, in lieu of a senior lien bond.

“I-Bank Investment Grade Rated” means an Applicant with either (i) at least one current rating assigned by an NRRRA that is BBB+ (S&P and Fitch) or Baa1 (Moody’s) or better, or (ii) at least two current ratings assigned by NRRAs that are BBB- (S&P and Fitch) or Baa3 (Moody’s) or better, as well as for both (i) and (ii) no Non-Investment Grade Rated Credit Ratings from any of the NRRAs.

“I-Bank Loan” means a loan made by the I-Bank to a Borrower for the financing, as part of the Water Bank or Transportation Bank, of all or a portion of an Environmental Infrastructure Project or Transportation Infrastructure Project pursuant to N.J.S.A. 58:11B-1 et seq.

“I-Bank Loan Agreement” means an agreement, by and between the I-Bank and a Borrower, pursuant to which the I-Bank extends an I-Bank Loan to a Borrower in connection with the financing of all or a portion of an Environmental Infrastructure Project or Transportation Infrastructure Project, and the Borrower agrees to certain terms and conditions, including, without limitation, the construction of the Environmental Infrastructure Project or the Transportation Infrastructure Project and the repayment of the I-Bank Loan on-time and in-full.

“I-Bank Loan Bond” means a senior lien bond issued by a Borrower to the I-Bank in order to evidence and secure the I-Bank Loan repayment obligations of such Borrower to the I-Bank, all in connection with the long-term financing of all or a portion of an Environmental Infrastructure Project or Transportation Infrastructure Project pursuant to N.J.S.A. 58:11B-1 et seq. The I-Bank may, in its discretion, accept a Junior Lien Bond, in compliance with the provisions of Section VI.1. hereof, in lieu of a senior lien bond.

“I-Bank Non-Investment Grade Rated” means an Applicant that possesses either (i) a Credit Rating assigned by an NRRRA that is lower than BBB- (S&P and Fitch) or Baa3 (Moody’s), or (ii) only one Credit rating and the rating assigned by an NRRRA is lower than BBB+ (S&P and Fitch) or Baa1 (Moody’s).

“Internal Revenue Code” means the Internal Revenue Code of 1986, as amended, and the regulations promulgated pursuant thereto.

“Letter of Credit” or “LOC” means an irrevocable Letter of Credit issued by a Nationally Chartered Bank or a State Chartered Bank that secures the payment of the principal and/or interest on (as

applicable) the I-Bank Loan Bond and Fund Loan Bond issued to the I-Bank and the State, respectively, by the Applicant that procured such LOC.

“Loan Loss Reserve Fund” or “LLR” means a fund established by the I-Bank, pursuant to N.J.S.A. 58:11B-1 et seq., for the deposit of the annual Risk Premium as defined herein. Risk Premium payments will be deposited by the I-Bank into the LLR and shall secure repayments owed only on those Water Bank or Transportation Bank loans in connection with which Risk Premium payments are required.

“Local Government Unit” or “LGU” means (i) a State Authority, county, Municipality, municipal, county or regional sewerage or utility Authority, municipal sewerage district, joint meeting, improvement Authority, or any other political subdivision of the State authorized pursuant to law to construct, operate and maintain wastewater treatment systems, or (ii) a State Authority, district water supply commission, county, Municipality, municipal, county or regional utilities Authority, municipal water district, joint meeting or any other political subdivision of the State authorized pursuant to law to operate or maintain a public water supply system or to construct, rehabilitate, operate or maintain water supply facilities or otherwise provide water for human consumption; or (iii) a county, municipality, municipal, county or regional transportation authority, or any other political subdivision of the State authorized to construct, operate, and maintain public highways or transportation projects as defined pursuant to this section.

“LGU Sponsor” means a Local Government Unit whose participation in an I-Bank Loan Agreement and/or a Fund Loan Agreement, or any other form of contractual obligation, is necessary to satisfy Water Bank or Transportation Bank requirements, including, but not limited to, compliance with this Credit Policy for the purpose of assisting a third party in securing access to funding from the Water Bank for an Environmental Infrastructure Project or Transportation Bank for a Transportation Infrastructure Project of mutual benefit to such Local Government Unit and such third party.

“Material Event” means, with respect to a given Applicant, a determination by the I-Bank, evidenced in a written instrument by the I-Bank and delivered thereby to the Applicant, that any one or more of the following has occurred: (i) an Event of Default under (1) an outstanding short-term loan from the I-Bank, (2) an outstanding I-Bank Loan Agreement and/or (3) an outstanding Fund Loan Agreement, in each case, to which the Applicant is a party, has occurred, which Event of Default is neither promptly cured by the Applicant nor the subject of lender forbearance and, therefore, has been determined by the I-Bank to be continuing; (ii) the filing by the Applicant of a bankruptcy petition or the administration of the Applicant pursuant to the provisions of any applicable bankruptcy statute or the inability or failure of the Applicant to timely pay its debts or obligations as they become due; (iii) the Applicant’s receipt of notice of a criminal complaint, criminal investigation or indictment pertaining to the Applicant or any of its officers or directors; (iv) a material change in financial position demonstrating a material adverse effect upon the Applicant’s financial position within the last two fiscal years; (v) any written documentation that is produced by the NJDEP, NJDOT or the I-Bank which identifies (1) material mismanagement by the Applicant of (a) any of its Environmental or Transportation infrastructure facilities, or (b) the proposed Environmental or Transportation Infrastructure Project to be financed through the I-

Bank, in which the Applicant has been unable to cure such material mismanagement or (2) failure of such Applicant to properly satisfy its repayment obligations with respect to any outstanding Water Bank or Transportation Bank Loans, including, without limitation, late principal and/or interest payments three or more times within a three year period or (3) failure of such Applicant to properly and promptly apply unexpended proceeds of any outstanding Water Bank or Transportation Bank Loans pursuant to the terms of the applicable agreement; (vi) material misrepresentations by the Applicant in any Water Bank or Transportation Bank application documents or written submissions; (vii) failure by the Applicant to submit timely written responses to requests for information presented to the Applicant by the I-Bank and/or the NJDEP/NJDOT; (viii) failure by the Applicant to satisfactorily complete in a fully compliant and timely manner all filings or other submissions with the LFB or any other overseeing State agency that are required pursuant to any applicable statute, regulation, ordinance, resolution or policy; (ix) being placed under oversight by the LFB or any overseeing State agency; or (x) the declaration of a State of Emergency by the Governor of the State, either State-wide or within the county in which the Applicant is located, which Material Event shall continue for so long as such declared State of Emergency remains in effect.

“Municipality” means any city, borough, town, township, or village situated within the boundaries of the State of New Jersey.

“Nationally Chartered Bank” means a banking institution chartered and supervised by the Office of the Comptroller of the Currency, an agency in the U.S. Treasury Department, pursuant to the National Bank Act, 12 U.S.C. § 21 *et seq.*

“Nationally Recognized Rating Agency” or “NRRRA” means any of Fitch Ratings, Inc. (“Fitch”), Moody’s Investors Service (“Moody’s”) or S&P Global Ratings (“S&P”).

“NJDEP” means the New Jersey Department of Environmental Protection.

“NJDOT” means the New Jersey Department of Transportation.

“New Jersey Infrastructure Bank” or “I-Bank” means a body corporate and politic organized under the laws of the State of New Jersey pursuant to N.J.S.A. 58:11B-1 *et seq.*

“Non-Rated” means an entity, which does not possess a current Credit Rating or ratings assessment from any of the three NRRAs.

“Participant” means one or more Municipalities and/or Authorities that have entered into a Service Agreement in which they have pledged their G.O. to a Special Obligation Entity.

“Preliminary Financial Information” means certain written information produced by an Applicant and delivered to the I-Bank pursuant to a written request submitted by the I-Bank, all in furtherance of the assessment by the I-Bank of the Applicant’s compliance with this Credit Policy.

“Privately-Owned Water System” means a drinking water system required to comply with New Jersey State primary drinking water regulations for which a Public Water System Identification number (“PWSID”) exists.

“Pro-forma Aggregate Annual Debt Service” means, with respect to any given Applicant for both direct and indirect obligations to the Water Bank or Transportation Bank separately, the sum of (i) the Aggregate Annual Debt Service and (ii) the additional annual debt service payments due and payable each State Fiscal Year with respect to the I-Bank Loan and Fund Loan for which the Applicant is then applying to the Water Bank or Transportation Bank.

“Qualified Bonds” means any bond issued by a Municipality pursuant to the provisions of the Qualified Bond Act, N.J.S.A. 40A:3-1 *et seq.*, which Act provides supplemental collateral as security for bonds issued thereunder in furtherance of satisfaction of the Credit Eligibility Requirements as set forth herein.

“Qualified Bond Debt Service Coverage Ratio” means the annual debt service to be paid by a municipality each fiscal year on any of its outstanding and authorized Qualified Bonds divided by the annual funds available for these payments pursuant to the Qualified Bond Act.

“Ratings” means:

Investment Grade Rating of the three major rating agencies	I-Bank Rank			
	Moody's	S&P	Fitch	
Best Quality	Aaa	AAA	AAA	12
High Quality	Aa1	AA+	AA+	11
	Aa2	AA	AA	10
	Aa3	AA-	AA-	9
Upper Medium Grade	A1	A+	A+	8
	A2	A	A	7
	A3	A-	A-	6
Medium Grade	Baa1	BBB+	BBB+	5
	Baa2	BBB	BBB	4
	Baa3	BBB-	BBB-	3
Non-Investment Grade	Ba1	BB+	BB+	2
	Ba2	BB	BB	1
	Below Ba2	Below BB	Below BB	0

“Redevelopment Project” a project where a government unit serves as the applicant on behalf of, or in conjunction with, a private entity for the water quality component costs of a remediation or redevelopment project to statutorily qualify for NJEIFP loans and one or more of the following fact scenarios exists: (i) such government unit secures its repayment obligations pursuant to the provisions of the Redevelopment Area Bond Financing Law; (ii) the redeveloper’s contractor administers or oversees all or a portion of project construction; or (iii) the borrowed funds are provided by the government unit to a redeveloper or its agent to fund all or a portion of the project’s expenses (“Conduit Borrower”).

“Revenue Bond” means a bond supported by the revenue from the general revenues of the Applicant or specifically sponsored project.

“Risk Premium” means an annual premium imposed by the I-Bank on Borrowers providing Revenue Bonds to the I-Bank in an amount equal to 1% of the outstanding aggregate principal amount of the I-Bank Loan and the Fund Loan, provided, however, such amount shall be subject to the limitations imposed by the Internal Revenue Code as such limitations shall be interpreted and applied by the I-Bank following consultation with counsel.

“SAIL Loan” a short-term or temporary loan to repair environmental infrastructure that was damaged during a declared disaster or to improve the resiliency of such infrastructure that otherwise would have been damaged in future disasters pursuant to N.J.S.A. 58:11B-9.5.

“Service Agreement” means an agreement wherein a Special Obligation Entity agrees to provide wastewater treatment service or drinking water to one or more Participants in exchange for monetary compensation.

“Short-Term Loan Closing” means the date on which a Borrower delivers to the I-Bank, and the I-Bank accepts from such Borrower, a note or other obligation evidencing a short-term or temporary loan made by the I-Bank to such Borrower pursuant to the short-term loan program of the Water Bank, established pursuant to N.J.S.A. 9(d) and one or more resolutions of the I-Bank, or the short-term loan program of the Transportation Bank, established pursuant to N.J.S.A. 58:11B-9(g) and one or more resolutions of the I-Bank.

“Special Obligation Entity” means an Authority, a nonprofit entity, a private entity, or any other Applicant or Borrower with respect to which the obligation to repay the I-Bank Loan and the Fund Loan is not secured by the irrevocable pledge of such Applicant or Borrower to exercise its unlimited taxing powers for the timely payment thereof.

“State” means the State of New Jersey.

“State Chartered Bank” means a banking institution chartered and supervised by the New Jersey Department of Banking and Insurance pursuant to the laws of the State, including, without limitation, N.J.S.A. 17:9A-1 *et seq.*

“State Fiscal Year” or “SFY” means the period beginning on the first day of July of each calendar year and ending on the thirtieth of June of the next succeeding calendar year, such period of time being established as the fiscal year of the State pursuant to N.J.S.A. 52:5-1. Each State Fiscal Year shall be designated by the calendar year in which such State Fiscal Year concludes.

“Transportation Bank” means the New Jersey Transportation Infrastructure Financing Program implemented by the NJDOT and the I-Bank in partnership to provide loans to Borrowers for Transportation Infrastructure Projects pursuant to N.J.S.A. 58:11B-1 *et seq.*

“Transportation Infrastructure Project” means capital projects for public highways, approach roadways and other necessary land side improvements, ramps, signal systems, roadbeds, transit lanes or rights of way, pedestrian walkways and bridges connecting to passenger stations and servicing facilities, bridges, and grade crossings as authorized pursuant to P.L.1985, c.334 (C.58:11B-1 *et seq.*).

“Water Bank” means the New Jersey Environmental Infrastructure Financing Program implemented by the NJDEP and the I-Bank in partnership to provide loans to Borrowers for Environmental Infrastructure Projects pursuant to N.J.S.A. 58:11B-1 *et seq.*, the Federal Clean Water Act, and the Federal Drinking Water Act.

VI. LOAN APPLICANTS

1. GENERAL APPLICABILITY PROVISIONS

Introduction: Except as may be provided in one or more Addenda attached hereto, Applicants must meet the Credit Eligibility Requirements of this Credit Policy as set forth in Section VI:2 below in order to evidence and secure (i) an I-Bank Loan repayment obligation or (ii) a Fund Loan repayment obligation, in either case, through the issuance of privately negotiated bonds. Such Credit Eligibility Requirements shall apply to all Applicants seeking an I-Bank Loan and/or a Fund Loan. In assessing compliance by an Applicant with the Credit Eligibility Requirements, the I-Bank will consider credit, liquidity, and operational risk as well as any other factors deemed necessary and appropriate by the I-Bank to (i) evaluate the risk of repayment default and (ii) in order to determine that there are no existing Material Events.

Credit Ratings: For the purposes of this Credit Policy, Applicant Credit Ratings may be either a public rating or a ratings assessment. All public ratings must be currently under surveillance at the time of loan closing by the NRRRA that issued such public rating, and Borrowers with \$2 million or greater in outstanding principal amount of loans from the I-Bank in all I-Bank financing programs must maintain and update annually the rating until the maturity of such loans or until the remaining outstanding principal amount of such loans is less than \$2 million. The I-Bank may require an Applicant to have a rating re-affirmed if a Material Event has occurred since the last review by the Rating Agency. Any Applicant relying on a ratings assessment must have received such ratings assessment from a NRRRA within twelve months prior to the I-Bank’s determination of the Applicant’s compliance with the I-Bank’s Credit Eligibility Requirements. Separately, the unenhanced rating (i.e., giving no consideration to enhancement from, among other sources,

the State's "Chapter 72 School Bond Reserve Program") of a school district which shares the same geographical limits as the Applicant may be cited and relied upon by a Municipality(ies) not possessing a Credit Rating or ratings assessment and which is providing either a direct or indirect obligation in order to evidence and secure its own I-Bank Loan repayment obligation or the repayment obligation of an Authority. In the case of an applicant that has entered into either a tri-party agreement or guarantee agreement, in a form acceptable to the I-Bank, that establishes a Municipal, County, or other LGU guaranty or a corporate parent guaranty, such credit support may be cited and relied upon for the purposes of evaluation as to creditworthiness pursuant to the criteria set forth within.

Portfolio Limitations: The I-Bank retains the right to reject outright any Applicant for which the resulting I-Bank Loan Bond is a Revenue Bond, the aggregate principal amount of which will serve to increase the projected I-Bank Revenue Bond principal exposure to an amount that exceeds 10% of the projected principal amount of publicly issued I-Bank Environmental Infrastructure bonds. Further, the I-Bank retains the right to require a rating from a NRRRA for a *De-minimis* Loan Applicant for which the resulting I-Bank Loan Bond is a Revenue Bond, the aggregate principal amount of which will serve to increase the I-Bank's projected exposure to *De-minimis* Loan Borrowers to an amount that exceeds \$10 million.

Miscellaneous:

- i. Any supplemental collateral relied upon by an Applicant for purposes of satisfying the Credit Eligibility Requirements must comply fully with the terms of this Credit Policy but, in no event, shall such supplemental collateral be rated less than Baa3 by Moody's or BBB- by Fitch or S&P.
- ii. The principal amount of each loan, other than a loan for asset management planning, must be no less than \$150,000.
- iii. In assessing an Applicant's compliance with the Credit Eligibility Requirements of this Credit Policy, the I-Bank, at its sole discretion, may require the Applicant to participate in a Financial Due Diligence Meeting, regardless of the Applicant's Credit Rating. The Applicant shall submit Preliminary Financial Information to the I-Bank no later than fifteen (15) business days following receipt of such written request from the I-Bank.

De-minimis Loan Requirement: For all *De-minimis* Loan Applicants, the Applicant shall provide to the I-Bank, in the case of an Applicant providing a direct or indirect G.O. pledge, evidence of either approval from the Local Finance Bond to incur debt through the I-Bank and/or NJDEP for the requested Loan amount or in the case of a Revenue Bond Applicant, evidence from the Board of Directors, or other governing body, of the Applicant, a resolution pursuant to which such governing body acknowledges and agrees to:

- i. The projected debt service repayment obligation of the Applicant over the course of the proposed I-Bank Loan and Fund Loan.
- ii. With respect to any Applicant that is a Local Government Unit, a contractual obligation to provide an annual certification of an authorized officer of the Applicant that the Applicant has timely provided to the Division of Local Government Services within the New Jersey Department of Community Affairs (the "DLGS") a balanced budget for the forthcoming

fiscal year, and that such budget has been approved by the Director of the DLGS, all in accordance with the Local Budget Law or the Local Authorities Fiscal Control Law, as applicable.

- iii. A contractual obligation, to be set forth in the I-Bank Loan Agreement and Fund Loan Agreement of the Applicant that obligates the Applicant each year, a Program Loan is outstanding, to fix the rates it charges its service customers in an amount at least equivalent to pay all outstanding debt service, operation & maintenance charges, and further, to pay any other expenses necessary to operate the Applicant's system in compliance with applicable laws and regulations. The Applicant will further covenant to provide to the I-Bank and the State a certification of an authorized officer of the Applicant, on an annual basis at the conclusion of each fiscal year of the Applicant, to the effect that the Authority has for such fiscal year, complied with the rate covenant set forth above. Failure to provide such certification, upon the expiration of a thirty-day notice and cure period, shall be an Event of Default pursuant to each the I-Bank Loan Agreement and the Fund Loan Agreement, and shall give rise to a right of acceleration of the Program Loans by the I-Bank and the State, respectively.
- iv. In addition, the Applicant shall be subject to a covenant obligation to provide written notice to the I-Bank and the NJDEP within 30 days of the occurrence of any Event of Default, pursuant to and as defined in its indenture of trust or bond resolution, or any event that with the passage of time and/or the giving of notice shall constitute an Event of Default.

Junior Lien Bond Policy: Neither the Water Bank nor the Transportation Bank require debt service reserve funds of I-Bank Investment Grade Rated Authorities to act as security for the I-Bank Loan Bond or the Fund Loan Bond issued by such Authority. Furthermore, if such reserve funds are required by the Authorities' own indenture of trust or bond resolution, neither the Water Bank nor the Transportation Bank will make I-Bank Loan proceeds or Fund Loan proceeds available to Authorities to fund such debt service reserve funds. However, the Water Bank or Transportation Bank will accept from such Authorities a junior-lien bond as evidence of and security for the I-Bank Loan and Fund Loan repayment obligations of such Authority. While this junior-lien bond is subordinated to any senior-lien debt of that Authority, the Water Bank and the Transportation Bank each protect themselves from repayment default and loss by requiring each Authority to comply with the following: (i) compliance with Credit Eligibility Requirements; (ii) a Service Agreement that is secured by the full faith and credit of one or more Participants; and (iii) a contractual obligation set forth in the indenture of trust or bond resolution of the Authority that obligates the Authority to raise the rates it charges its service customers by an amount at least equivalent to pay all outstanding debt service (including debt service with respect to the Junior-Lien I-Bank Loan Bond and the Junior-Lien Fund Loan Bond), operation and maintenance charges, and further, to pay any other expenses necessary to operate the Authority in compliance with applicable laws and regulations. In addition, the Authority shall be subject to a covenant obligation to provide written notice to the I-Bank, and the NJDEP when applicable, immediately upon the occurrence of any Event of Default, pursuant to and as defined in its indenture of trust or bond resolution, or any event that with the passage of time and/or the giving of notice shall constitute an Event of Default. The failure by the Authority to satisfy the obligation set forth in

(iii), above, shall constitute an Event of Default, pursuant to and as defined in its I-Bank Loan Agreement and its Fund Loan Agreement.

A Finding of Unacceptable Credit Risk / Notification of Ineligibility: Any Finding of Unacceptable Credit Risk shall exist when evidenced in a written instrument by the I-Bank and delivered to the Applicant and shall render the Applicant ineligible to receive an I-Bank Loan from the Water Bank or Transportation Bank for such Financing Program year (i.e., the then-current State Fiscal Year). If such determination is made by the I-Bank in the manner set forth herein, the status of an Applicant's eligibility may be re-evaluated by the I-Bank, if an Applicant (i) provides additional security for their loans (including, without limitation, their I-Bank Loan and their Fund Loan) through mechanisms, such as Qualified Bonds, as shall be identified by the I-Bank and/or (ii) submits to enhanced due diligence review by the I-Bank, which may require the production by such Applicant of such financial and other data as shall be identified and required by the I-Bank and/or (iii) if, after providing their Rating Agency(s) a copy of the written notice of a Finding of Unacceptable Credit Risk from the I-Bank, has a rating re-affirmed since the last review by the Rating Agency(s).

Report of a Material Event to the Board: At the meeting of the Board that is scheduled to occur immediately subsequent to the execution and delivery of any loan instruments relating to a loan made to a Borrower by the I-Bank, in connection with which the Executive Director of the I-Bank has determined, and provided the requisite written instrument to the Borrower with respect to, the occurrence of a Material Event (as defined and provided herein) with respect to such Borrower, the Executive Director of the I-Bank shall provide a report to the Board of Directors of the I-Bank concerning details of such transaction and the Material Event that was identified by the Executive Director of the I-Bank. Such report shall include, with respect to such Borrower that was a recipient of such loan, (i) the identity of the Borrower, (ii) a summary of the project(s) for which financing was provided, (iii) the nature of the Material Event at issue, and (iv) a discussion of the Borrower's compliance with the Credit Eligibility Requirements.

Action by the I-Bank Pursuant to the Credit Policy: Any determination or action authorized or required to be undertaken by the I-Bank pursuant to the terms and provisions of this Credit Policy may be undertaken or performed by any authorized officer designated as such by the Board of Directors of the I-Bank through formal action, including but not limited to I-Bank Board Resolution No. 11-10 (Delegation to the Executive Director of the I-Bank to Evaluate and Bypass Applications for Loans) enacted on April 7, 2011.

2. CREDIT ELIGIBILITY REQUIREMENTS

Applicants shall satisfy the I-Bank's Credit Eligibility Requirements. A determination as to compliance with the Credit Eligibility Requirements shall be made by the I-Bank at the earlier of the time of the Environmental Infrastructure Project's or Transportation Infrastructure Project's:

- i. Short-Term Loan Closing, including, without limitation, the Disaster Relief Emergency Loan Financing Program (SAIL), or
- ii. Escrow Closing, or

- iii. Direct Loan Program Closing, or
- iv. Notice from the I-Bank of a Finding of Unacceptable Credit Risk.

If a Borrower (i) does not satisfy the Credit Eligibility Requirements as set forth in this Credit Policy, as determined by the I-Bank, and (ii) is eligible pursuant to the Appropriations Act for a New Jersey Environmental Infrastructure Financing Program Fund Loan for 100 percent of the cost of its project, upon determination of (i) and (ii) above, the I-Bank shall, in consultation with the Director of DLGS, provide a credit report relating to the Borrower to the NJDEP Commissioner, or his/her designee, in order that he/she may make a determination as to whether to provide a 100 percent Fund Loan to the Borrower, notwithstanding the failure of such Borrower to satisfy the Credit Eligibility Requirements set forth herein, as determined by the I-Bank.

If a Borrower satisfies the Credit Eligibility Requirements, as determined by the I-Bank, at the time of Short-Term Loan Closing and is downgraded thereafter, but prior to the closing of its Long-Term Loan, to a level at which it would be required under this Credit Policy to provide additional collateral, the Borrower will be required to provide such additional collateral as security for its Long-Term Loan at the time of the closing thereof. If the Borrower is unable to satisfy such additional collateral requirements, the I-Bank may provide long-term funding, to the extent available, from outside of the regular program, such as through a separate bond series.

Excepting the existence of a Material Event(s) or the implementation of temporary additional credit guidelines, the Credit Eligibility Requirements are waived for supplemental and residual loans that serve to supplement Water Bank or Transportation Bank funding previously provided via an outstanding I-Bank Loan and/or an outstanding Fund Loan. Supplemental and residual loans require, at a minimum, the same collateral and funding terms as the original I-Bank Loan and/or Fund Loan. However, if a Borrower is downgraded prior to the closing of the supplemental or residual loan to a level whereby it otherwise would be required under this Credit Policy to provide additional collateral, the Borrower will be required to provide such additional collateral for its supplemental or residual loan. If the Borrower is unable to meet such additional collateral requirements, the I-Bank may provide supplemental or residual loan funding, to the extent available, from outside of the regular program, such as through a separate bond series.

I. WATER BANK OR TRANSPORTATION BANK CREDIT ELIGIBILITY REQUIREMENTS

A. PLEDGED G.O., *provided that the Applicant is a Municipality/County* which is:

- i. **I-Bank Investment Grade Rated:** No additional requirements.
- ii. **I-Bank Non-Investment Grade Rated:** For an Applicant that is a Municipality, credit support is provided in the form of (i) a Qualified Bond, and (ii) a covenant obligation on the part of the Applicant to satisfy upon issuance of such Qualified Bond, the Qualified Bond Debt Service Coverage Ratio at $\leq 80\%$ and to immediately notify the I-Bank if, and when, the Applicant's Qualified Bond Debt Service Coverage Ratio exceeds 80% until the maturity of the I-Bank Loan Bond and Fund Loan Bond;

- iii. **Non-Rated:** A Credit Rating is obtained by the Municipality or the county from any of the three NRRAs and the applicable requirements relating to such Credit Rating as outlined in either Sections VI:2.1-A(i) or VI:2.1-A(ii) are satisfied.

A Municipality or a county failing to meet any one of the above criteria is ineligible to receive an I-Bank Loan and/or a Fund Loan under this provision.

B. PLEDGED G.O., provided that the Applicant is an Authority which is:

- i. **I-Bank Investment Grade Rated:** No additional requirements.
- ii. **I-Bank Non-Investment Grade Rated:** A Letter(s) of Credit issued by a Nationally Chartered Bank or State Chartered Bank:
 - a) with a Credit Rating(s) of no less than A+ (Fitch or S&P) or A1 (Moody's) and no Non-Investment Grade Credit Rating(s) from any of the three NRRAs; **and**
 - b) which Letter(s) of Credit shall be maintained at least at A+ (Fitch or S&P) or A1 (Moody's), or be replaced by the Borrower with a Letter of Credit from a Nationally Chartered Bank or State Chartered Bank which satisfies the preceding paragraph (i); **and**
 - c) licensed to do business in the State of New Jersey; **and**
 - d) which secures the payment of the principal of and interest on (as applicable) the I-Bank Loan Bond and the Fund Loan Bond issued to the I-Bank and the State, respectively, by such Borrower for the term of the I-Bank Loan and Fund Loan.
- iii. **Non-Rated:**
 - a) A Credit Rating is obtained from any of the three NRRAs and the applicable requirements relating to such Credit Ratings as outlined in either Sections VI:2.1-B(i) or VI:2.1-B(ii) are satisfied; **or**
 - b) The Authority has only one Participant and the Participant has an Investment Grade Rating.

An Authority failing to meet any one of the above criteria is ineligible to receive an I-Bank Loan and/or a Fund Loan under this provision.

II. WATER BANK CREDIT ELIGIBILITY REQUIREMENTS

A. PLEDGED G.O., for a Redevelopment Project sponsored by a Local Government Unit which is:

- i. **I-Bank Investment Grade Rated:**
 - a) A Financial Due Diligence Meeting is required to discuss the financial impact upon the LGU Sponsor of the proposed additional debt (note: if the NRRRA that has rated the LGU Sponsor does not attend the Financial Due Diligence Meeting, the LGU Sponsor shall present to the I-Bank a certification from an Authorized Official of the LGU Sponsor that the NRRRA

- has been informed in writing of the proposed financing and has chosen not to attend); ***and***
- b) Additional requirements as appropriate are agreed upon to secure the LGU Sponsor including, but not limited to:
 - i. PILOT payments,
 - ii. Statutory rights pursuant to the Redevelopment Area Bond Financing Law,
 - iii. Reserve funds, and
 - iv. Corporate guarantees.
 - ii. **I-Bank Non-Investment Grade Rated LGU Sponsor:**
 - a) A Letter(s) of Credit issued by a Nationally Chartered Bank or State Chartered Bank:
 - i. with a Credit Rating(s) of no less than A+ (Fitch or S&P) or A1 (Moody's) and no Non-Investment Grade Credit Rating(s) from any of the three NRRAs; ***and***
 - ii. which Letter(s) of Credit shall be maintained at least at A+ (Fitch or S&P) or A1 (Moody's), or be replaced by the Borrower with a Letter of Credit from a Nationally Chartered Bank or State Chartered Bank which satisfies the preceding paragraph (i); ***and***
 - iii. licensed to do business in the State of New Jersey; ***and***
 - iv. which secures the payment of the principal of and interest on (as applicable) the I-Bank Loan Bond and the Fund Loan Bond issued to the I-Bank and the State, respectively, by such Borrower for the term of the I-Bank Loan and Fund Loan; ***and***
 - b) All requirements as set forth in Section VI:2.II-A(i) must be satisfied.
 - iii. **Non-Rated LGU Sponsor:** A Credit Rating is obtained from any of the three Nationally Recognized Rating Agencies and the applicable requirements based on the ratings as outlined in either Sections VI:2.II-A(i) or VI:2.II-A(ii) are satisfied.

A redevelopment project failing to meet any one of the above criteria is ineligible to receive an I-Bank Loan and/or a Fund Loan under this provision.

B. REVENUE BOND, *provided that the Applicant is a(n):*

a. Authority and is:

i. I-Bank Investment Grade Rated:

- a) The indenture of trust or bond resolution pursuant to which the Authority issues its I-Bank Loan Bond and Fund Loan Bond shall include:
 - i. A debt service coverage ratio covenant; ***and***
 - ii. A rate covenant; ***and***
 - iii. A debt incurrence test,
 each deemed by the I-Bank to be acceptable; ***and***
- b) For any time during the life of the Loan that a Credit Rating has been assigned to the Authority by any NRRAs of less than A- or A3, the annual Risk Premium will be imposed by the I-Bank; provided, however, such

amount shall be subject to the limitations imposed by the Internal Revenue Code as such limitations shall be interpreted and applied by the I-Bank following consultation with counsel. The payments will be deposited by the I-Bank into the LLR. This Provision will be enacted beginning with Water Bank Loans made in SFY2014.

ii. I-Bank Non-Investment Grade Rated:

- a) A Letter(s) of Credit issued by a Nationally Chartered Bank or State Chartered Bank:
 - i. with a Credit Rating(s) of no less than A+ (Fitch or S&P) or A1 (Moody's) and no Non-Investment Grade Credit Rating(s) from any of the three NRRAs; ***and***
 - ii. which Letter(s) of Credit shall be maintained at least at A+ (Fitch or S&P) or A1 (Moody's), or be replaced by the Borrower with a Letter of Credit from a Nationally Chartered Bank or State Chartered Bank which satisfies the preceding paragraph (i); ***and***
 - iii. licensed to do business in the State of New Jersey; ***and***
 - iv. which secures the payment of the principal of and interest on (as applicable) the I-Bank Loan Bond and the Fund Loan Bond issued to the I-Bank and the State, respectively, by such Borrower for the term of the I-Bank Loan and Fund Loan; ***and***
- b) The indenture of trust or bond resolution pursuant to which the Authority issues its I-Bank Loan Bond and Fund Loan Bond shall include (i) a debt service coverage ratio covenant, (ii) a rate covenant and (iii) a debt incurrence test, each deemed to be acceptable by the I-Bank;

- iii. Non-Rated:** A Credit Rating is obtained from any of the three Nationally Recognized Rating Agencies and the applicable requirements relating to such Credit Ratings as outlined in either Sections VI:2.II-B.a(i) or VI:2.II-B.a(ii) are satisfied.

An Authority failing to meet any one of the above criteria is ineligible to receive an I-Bank Loan and/or a Fund Loan under this provision.

b. Privately-Owned Water System and is:

i. I-Bank Investment Grade Rated:

- a) The indenture of trust pursuant to which the Privately-Owned Water System issues its I-Bank Loan Bond and Fund Loan Bond shall include
 - i. A debt service coverage ratio covenant; ***and***
 - ii. A rate covenant; ***and***
 - iii. A debt incurrence test,each deemed by the I-Bank to be acceptable; ***and***
- b) For any time during the life of the Loan that a Credit Rating has been assigned to the Privately-Owned Water System by a Nationally Recognized Rating Agency of less than A- or A3, the annual Risk Premium will be imposed by the I-Bank; provided, however, such amount shall be subject

to the limitations imposed by the Internal Revenue Code as such limitations shall be interpreted and applied by the I-Bank following consultation with counsel. The Risk Premium payments will be deposited by the I-Bank into the LLR. This Provision will be enacted beginning with Loans made in SFY 2014.

ii. I-Bank Non-Investment Grade Rated:

a) A Letter(s) of Credit issued by a Nationally Chartered Bank or State Chartered Bank:

i. with a Credit Rating(s) of no less than A+ (Fitch or S&P) or A1 (Moody's) and no Non-Investment Grade Credit Rating(s) from any of the three NRRAs; ***and***

ii. which Letter(s) of Credit shall be maintained at least at A+ (Fitch or S&P) or A1 (Moody's), or be replaced by the Borrower with a Letter of Credit from a Nationally Chartered Bank or State Chartered Bank which satisfies the preceding paragraph (i); ***and***

iii. licensed to do business in the State of New Jersey; ***and***

i. which secures the payment of the principal of and interest on (as applicable) the I-Bank Loan Bond and the Fund Loan Bond issued to the I-Bank and the State, respectively, by such Borrower for the term of the I-Bank Loan and Fund Loan; ***and***

b) The indenture of trust pursuant to which the Privately-Owned Water System issues its I-Bank Loan Bond and Fund Loan Bond shall include (i) a debt service coverage ratio covenant, (ii) a rate covenant and (iii) a debt incurrence test, each deemed to be acceptable by the I-Bank;

iii. Non-Rated: A Credit Rating is obtained from any of the three Nationally Recognized Rating Agencies and the applicable requirements relating to such Credit Ratings as outlined in either Sections VI:2.II-B.b(i) or VI:2.II-B.b(ii) are satisfied.

A Privately-Owned Water System failing to meet any one of the above criteria is ineligible to receive an I-Bank Loan and/or a Fund Loan under this provision.

C. PLEDGED G.O. or REVENUE BOND, *De-minimis Loan Applicant, provided that the Applicant is:*

i. **I-Bank Investment Grade Rated:** No additional requirements. The I-Bank reserves the right to require the Borrower to establish a debt service reserve account as collateral for the I-Bank Loan and Fund Loan. Funds for a debt service reserve fund may not be borrowed.

ii. **I-Bank Non-Investment Grade Rated:** A Letter(s) of Credit issued by a Nationally Chartered Bank or State Chartered Bank:

a) with a Credit Rating(s) of no less than A+ (Fitch or S&P) or A1 (Moody's) and no Non-Investment Grade Credit Rating(s) from any of the three NRRAs; ***and***

b) which Letter(s) of Credit shall be maintained at least at A+ (Fitch or S&P)

or A1 (Moody's), or be replaced by the Borrower with a Letter of Credit from a Nationally Chartered Bank or State Chartered Bank which satisfies the preceding paragraph (i); ***and***

c) licensed to do business in the State of New Jersey; ***and***

d) which secures the payment of the principal of and interest on (as applicable) the I-Bank Loan Bond and the Fund Loan Bond issued to the I-Bank and the State, respectively, by such Borrower for the term of the I-Bank Loan and Fund Loan.

- iii. **Non-Rated:** An Applicant meeting the established financial criteria, as set forth by the I-Bank from time to time and publicly disseminated (*See Attachment 1*), shall be eligible to receive an I-Bank Loan and Fund loan subject to the requirements as outlined in Section VI:2.II-C(i) above. Additionally, such Applicant shall provide proof of authorization to enter into the Loan Agreements with the NJDEP and the I-Bank from its governing body, such as a Board of Directors. Any Applicant not meeting the established financial criteria, as set forth by the I-Bank, is subject to the requirements as outlined in Section VI:2.II-C(ii) above.

A *De-minimis* Loan Applicant failing to meet any one of the above criteria is ineligible to receive an I-Bank Loan and/or a Fund Loan under this provision.

D. SAIL Loans: Notwithstanding anything in this Credit Policy to the contrary, except as stated below, in the event that an Applicant providing a General Obligation pledge seeks financing through the SAIL Program and at least 50% of the loan amount has been obligated by and is anticipated to be reimbursed by FEMA or other similar Federal grant program, such Applicant shall be deemed compliant with the Credit Eligibility Requirements of the Credit Policy.

E. Declaration of a State of Emergency: Upon the declaration of a State of Emergency by the Governor, and as long as such State of Emergency continues, the I-Bank Executive Director may declare a Statewide Material Event that applies to all Applicants. During such a State of Emergency, the Executive Director of the I-Bank may implement additional credit guidelines that are applicable to all Applicants. For the avoidance of doubt, all Applicants, including Applicants seeking financing through the SAIL Program, must satisfy these additional credit guidelines to qualify for a loan (including, without limitation, an I-Bank Loan and/or a Fund Loan) from either of the Financing Programs during the declared State of Emergency

APPENDIX

APPENDIX 1

Letter from State Treasurer Maher Muoio



State of New Jersey
OFFICE OF THE STATE TREASURER
PO Box 002
TRENTON, NJ 08625-0002

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

ELIZABETH MAHER MUOIO
State Treasurer

October 1, 2020

Mr. David E. Zimmer, CFA, Executive Director
New Jersey Infrastructure Bank
3131 Princeton Pike, Office, Bldg. 4, Suite 216
Lawrenceville, NJ 08648

Dear Mr. Zimmer:

In connection with loans ("Fund Loans") to be made by the State of New Jersey (the "State"), acting by and through the New Jersey Department of Environmental Protection (the "DEP"), pursuant to the New Jersey Environmental Infrastructure Financing Program (the "NJ Water Bank"), jointly administered by the New Jersey Infrastructure Bank (the "I-Bank") and the DEP, it shall be the policy of the State to evaluate applicants for eligibility to receive a Fund Loan in accordance with the Credit Policy initially adopted by the Board of Directors of the I-Bank on January 10, 2013, as the same has been amended most recently on March 20, 2020 and may be amended by the Board of Directors of the I-Bank from time to time. The foregoing Credit Policy shall apply to all Fund Loans and all applicants, regardless of whether a companion loan is made by the I-Bank to any such applicant for the same project scope. This letter amends and supersedes any previous correspondence to you of prior State Treasurers regarding this subject.

Sincerely,

A handwritten signature in blue ink, appearing to read "E. Muoio".

Elizabeth Maher Muoio
State Treasurer

ATTACHMENTS

Attachment 1

Deminimis Credit Metrics Criteria Municipality -- General Obligation Pledge

Water Utility Fund Primary Factors (Required)

Debt Service Coverage Ratio	≥ 1.1
Liabilities to Asset Ratio	$\leq 65\%$
Quick Ratio	> 1.0

Secondary Factors (3 of 5 Required)

Fund Balance (Reserve) as % of Revenue	$\geq 10\%$ for last three years
Long Term Debt per customer Year 1 - Pro Forma	$\leq \$1,500$
Long Term Debt per customer Year 5 - Pro Forma	$\leq \$1,500$
Account Growth	\geq Stable
Water Charge as % of Median Household Income	$< .75\%$
Water and Sewer Charge as % of Median Household Income	$< 1.5\%$

Additional Factors (Considered)

Demographics:	
Median Household Income Relative to County	
Median Home Value relative to County	
Town Metrics	
NJ fund Balance as percentage of Muni Revenue	$\geq 10\%$ for last three years
Total Full Value per Capita	$\geq \$100,000$
County Credit Ratings	
Number of Households Served	

This page left intentionally blank

Deminimis Credit Metrics Criteria Utility Authority -- No General Obligation Pledge

Primary Factors (Required)

Debt Service Coverage Ratio	≥ 1.25
Liabilities to Asset Ratio	$< 65\%$
Quick Ratio	> 1.0
Board Resolution Acknowledging and Agreeing to Loan Terms, Program Requirements and Repayment Obligations	Passed Prior to any Program Financing

Secondary Factors (3 of 5 Required)

Cashflow	Positive for prior two years
Long Term Debt per customer Year 1	$\leq \$1,500$
Long Term Debt per customer Year 5	$\leq \$1,500$
Account Growth	\geq Stable
Water Charge as % of Median Household Income	$< .75\%$
Water and Sewer Charge as % of Median Household Income	$< 1.5\%$

Additional Factors (Considered)

Demographics:
Median Household Income
Median Home Value
Town and County Credit Ratings
Number of Households Served

Deminimis Credit Metrics Criteria Small Systems/HOA's No General Obligation Pledge

Primary Factors (Required)

Debt Service Coverage Ratio	≥1.5%
Liabilities to Asset Ratio	≤ 65%
Quick Ratio	> 1.1
Board Resolution Acknowledging and Agreeing to Loan Terms, Program Requirements and Repayment Obligations	Passed Prior to any Program Financing
Reserves - separate line item for reserve contributions	Minimum at least 10% of gross expenses
Delinquent HOA Dues/Policy	No more than 10% of total units can be in arrears, past 30 days for fee payments, a copy of delinquent dues collection policy and procedure must be submitted
Special Assessment	(If Yes) Certified explanation is required

Secondary Factors (3 of 5 Required)

Cashflow	Positive for prior two years
Long Term Debt per customer Year 1	≤ \$1,500
Long Term Debt per customer Year 5	≤ \$1,500
Account Growth	≥ Stable
Water Charge as % of Median Household Income	< .75 %
Water and Sewer Charge as % of Median Household Income	< 1.5%

Additional Factors (Considered)

Demographics:
Median Household Income Relative to County
Median Home Value relative to County
Town and County Credit Ratings
Number of Households Served

Attachment 2

Definitions for Municipalities (G.O. Pledge)

“DEBT SERVICE COVERAGE RATIO” (DSCR) - measures the ability of a System to pay current debt obligations plus pro forma. DSCR is net operating income expressed as a percentage of debt obligations due within one year, including interest, principal, sinking-fund and lease payments. The higher the ratio, the greater the ability of a system to pay its creditors. These figures are located on the applicant’s Statement of Operations & Changes in Fund Balance.

DSCR is calculated as follows:

$$\text{DSCR} = \text{Net Operating Income} / \text{Annual Debt Service}$$

Net Operating Income = Gross Revenues less Operating Expenses.

Annual Debt Service = Principal, Interest and Lease payments due per year.

Gross Revenues = Annual revenues including all taxes collected, operating service fees, connection charges, wholesale supply charges, consulting fees, etc.

Operating Expenses = Total annual expenditures including all Operations & Maintenance (n.b. excludes capital replacement expenditures).

“LIABILITIES TO ASSET RATIO” means a municipality’s liabilities divided by its total assets as listed in the Statement of Assets, Liabilities, Reserves & Fund Balance of the Current Fund. A measure of leverage which indicates the degree to which a municipality’s assets are financed through borrowing and other obligations. A ratio closer to 0.0 indicates a low level of municipal assets are financed through long-term obligations.

“QUICK RATIO” (Q.R.) equals current assets divided by current liabilities as listed in the most recent Statement of Assets, Liabilities, Reserves & Fund Balance of the applicant’s Current Fund. The Q.R. is a measure of liquidity and indicates the ability of the municipality to pay all current liabilities, meet short-term expenses and emergencies.

QR is calculated as follows:

$$\text{Q.R.} = \text{Current Assets} / \text{Current Liabilities}$$

“FUND BALANCE” means the difference between a governmental fund’s current assets (i.e., cash, short-term investments, inventories, receivables, and other unrestricted assets expected to be available to finance operations in the immediate future) and its current liabilities. A positive difference of current assets minus current liabilities gives an indication of the resources immediately available to finance ongoing operations. The Fund Balance is located on the applicant’s Statement of Operations & Changes in Fund Balance.

“FUND BALANCE AS % OF REVENUE” means a Municipality’s Fund Balance as a percentage of the Total (annual) Revenues within the Current Fund located on the applicant’s Statement of Operations & Changes in Fund Balance. This ratio measures the ability of a municipality to supplement annual revenues without increasing rates.

Fund Bal/Revenue is calculated as follows:

$$= \text{Fund Balance} / \text{Total Revenues}$$

“LONG-TERM DEBT PER CUSTOMER” means the ratio of total bonded debt of the municipality divided by the number of (commercial, non-profits, households) customers located within the municipality as of the most recent U.S. Census.

“ACCOUNT GROWTH” related to service area demographics is growth in a municipality’s residential, commercial, industrial, and government customer bases as well as its customer concentration. Stable growth is considered 3% per annum or less and moderate/rapid growth exceeds 3% per year.

“WATER CHARGE AS % OF MEDIAN HOUSEHOLD INCOME” the percentage of average annual household water charges of the system divided by the Median Household Income as of the latest U.S. Census figures. This figure is calculated in the Applicant’s Environmental Decision Document (EDD) issued by NJDEP.

“WATER AND SEWER CHARGE AS % OF MEDIAN HOUSEHOLD INCOME” the percentage of average annual household water and sewer charges of the system divided by the Median Household Income as of the latest U.S. Census figures. This figure is provided by the Applicant and calculated in the Applicant’s Environmental Decision Document (EDD), issued by NJDEP.

“MEDIAN HOUSEHOLD INCOME RELATIVE TO COUNTY” means the applicant’s Median Household Income divided by the County Median Household Income according to the latest U.S. Census figures.

“MEDIAN HOME VALUE RELATIVE TO COUNTY” means the Municipality’s Median Home Value divided by the County Median Home Value according to the latest U.S. Census figures.

“TOTAL FULL VALUE PER CAPITA” means an applicant’s full property value (the value of all taxable property as calculated by the tax assessor) divided by the population of the municipality as of the latest U.S. Census figures.

“COUNTY CREDIT RATING” means an assessment issued by one or more of the three Nationally Recognized Rating Agencies relating to the credit worthiness of the County in which the Applicant is located indicating the County’s ability to repay principal and interest on its bonds in full and on time.

“NUMBER OF HOUSEHOLDS SERVED” means the number of households in the Municipality served by the specific Applicants water or water and sewer system.

Attachment 3

Definitions for Utility Authorities (No G.O. Pledge)

“DEBT SERVICE COVERAGE RATIO” (DSCR) - measures the ability of a System to pay current debt obligations. DSCR is net operating income expressed as a percentage of debt obligations due within one year, including interest, principal, sinking-fund and lease payments. The higher the ratio, the greater the ability of a system to pay its creditors. These figures are located on the applicant’s Statement of Operations & Changes in Fund Balance.

DSCR is calculated as follows:

$$\text{DSCR} = \text{Net Operating Income} / \text{Annual Debt Service}$$

Net Operating Income = Gross Revenues less Operating Expenses.

Annual Debt Service = Principal, Interest and Lease payments due per year.

Gross Revenues = Annual revenues including operating service fees, connection charges, wholesale supply charges, consulting fees etc.

Operating Expenses = Total annual expenditures including all Operations & Maintenance (excludes capital replacement expenditures).

“LIABILITIES TO ASSET RATIO” means a Utility Authority’s liabilities divided by its total assets as listed in the Statement of Net Position. A measure of leverage which indicates the degree to which a Utility Authority’s assets are financed through borrowing and other obligations. A ratio closer to 0.0 indicates a low level of the authority’s assets are financed through long-term obligations.

“QUICK RATIO” (Q.R.) equals current assets divided by current liabilities as listed in the most recent Statement of Assets, Liabilities, Reserves & Fund Balance of the applicant’s Current Fund. The ability of the utility authority to pay all current liabilities, meet short-term expenses and emergencies, measures liquidity.

QR is calculated as follows:

$$\text{Q.R.} = \text{Current Assets} / \text{Current Liabilities}$$

“NET POSITION” means the difference between (1) assets and deferred outflows of resources, and (2) liabilities and deferred inflows of resources. Governments display net position in three components; (i) net investment in capital assets, (ii) restricted, and (iii) unrestricted. Net Position can be located in the applicant’s Statement of Net Position.

“NET POSITION AS % OF REVENUE” means a Utility Authority’s Net Position as a percentage of the Current Fund Total Revenues located on the applicant’s Statement of Revenues, Expenses & Changes in Net Position.

“CASH FLOW” means Incomings and outgoings of cash, representing the operating activities of an organization, the difference in amount of cash available at the beginning of a period (opening balance) and the amount at the end of that period (closing balance). It is called positive if the closing balance is higher than the opening balance, otherwise called negative. Cash flow is increased by (1) selling more

goods or services, (2) selling an asset, (3) reducing costs, (4) increasing the selling price, (5) collecting faster, (6) paying slower, (7) bringing in more equity, or (8) taking a loan.

“NUMBER OF HOUSEHOLDS SERVED” means the number of households in the Authority’s service area served by the specific applicant’s water or water and sewer system.

“LONG-TERM DEBT PER CUSTOMER” means the ratio of total bonded debt of the utility divided by the number of (commercial, non-profits, households) customers located within the utility’s service area as of the most recent U.S. Census.

“ACCOUNT GROWTH” related to service area demographics is growth in a utility’s residential, commercial, industrial, and government customer bases as well as its customer concentration. Stable growth is considered 3% per annum or less and moderate/rapid growth exceeds 3% per year.

“WATER CHARGE AS % OF MEDIAN HOUSEHOLD INCOME” the percentage average annual household water charges of the system divided by the Median Household Income as of the latest U.S. Census figures. This figure is calculated in the Applicant’s Environmental Decision Document (EDD) issued by NJDEP.

“WATER AND SEWER CHARGE AS % OF MEDIAN HOUSEHOLD INCOME” the percentage average annual household water and sewer charges of the system divided by the Median Household Income as of the latest U.S. Census figures. This figure is calculated in the Applicant’s Environmental Decision Document (EDD) issued by NJDEP.

“MEDIAN HOUSEHOLD INCOME” (MHI) means the calculation computed by the U.S. Census Bureau - Income of Households - This includes the income of the householder and all other individuals 15 years old and over in the household, whether they are related to the householder or not. Because many households consist of only one-person, average household income is usually less than average family income. The median divides the income distribution into two equal parts: one-half of the cases falling below the median income and one-half above the median. For households and families, the median income is based on the distribution of the total number of households and families including those with no income. The median income for individuals is based on individuals 15 years old and over with income. Median income for households, families, and individuals is computed on the basis of a standard distribution.

“MEDIAN HOME VALUE” (MHV) means that one half of all homes were worth more and one-half were worth less. The midway point of all the houses/units sold at market **price** (or sold amount) over a set period (monthly, yearly, quarterly, etc.). (See US Census Reports).

“TOWN AND COUNTY CREDIT RATING” means an assessment issued by one or more of the three Nationally Recognized Rating Agencies relating to the credit worthiness of the Town and County in which the Applicant is located indicating the Town’s and County’s ability to repay principal and interest on its bonds in full and on time.

Attachment 4

Definitions for Small Systems/HOAs (No G.O. Pledge)

“DEBT SERVICE COVERAGE RATIO” (DSCR) - measures the ability of a Homeowner’s Association (HOA) to pay current debt obligations. DSCR is net operating income expressed as a percentage of debt obligations due within one year, including interest, principal, sinking-fund and lease payments. The higher the ratio, the greater the ability of a system to pay its creditors. These figures are located on the applicant’s Statement of Operations & Changes in Fund Balance.

DSCR is calculated as follows:

$$\text{DSCR} = \text{Net Operating Income} / \text{Annual Debt Service}$$

Net Operating Income = Gross Revenues less Operating Expenses.

Annual Debt Service = Principal, Interest and Lease payments due per year

Gross Revenues = Annual fees assessed and collected plus any other miscellaneous charges.

Operating Expenses = Total annual expenditures including all Operations & Maintenance (n.b. excludes capital replacement expenditures).

“LIABILITIES TO ASSET RATIO” means a HOA’s liabilities divided by its total assets as listed in the Statement of Net Position. A measure of leverage which indicates the degree to which a HOA’s assets are financed through borrowing and other obligations. A ratio closer to 0.0 indicates a low level of the HOA’s assets are financed through long-term obligations.

“QUICK RATIO” (Q.R.) equals current assets divided by current liabilities as listed in the most recent Statement of Assets, Liabilities, Reserves & Fund Balance of the applicant’s Current Fund. The ability of the HOA to pay all current liabilities, meet short-term expenses and emergencies, measures liquidity.

QR is calculated as follows:

$$\text{Q.R.} = \text{Current Assets} / \text{Current Liabilities}$$

“RESERVES” means the funds that are earmarked by an Applicant from its operations set aside for future use, such as for the payment of likely-to-be-incurred bad debts.

“BOARD RESOLUTION ACKNOWLEDGING AND AGREEING TO LOAN TERMS, PROGRAM REQUIREMENTS AND REPAYMENT OBLIGATIONS” means a formally adopted resolution of the Applicant’s governing body acknowledging and agreeing to the loan terms and program requirements of the NJEIFP and obligating the HOA members to the repayment of any liability on time and in full.

“DELINQUENT HOA DUES/POLICY” means the Small System/HOA Board approved delinquency policy for collection of unpaid dues/assessments. A sound policy will include due date, grace period, late fee amount and/or penalty amount, timing of collection letters (often on 30-60-90-day schedule, when the matter will be turned over to the association attorney, when a lien will be filed of record, when foreclosure will begin.

“DELINQUENT ACCOUNT BALANCE” means the number of HOA units in arrears (both # and dollar amount), or past 30 days due for fee payments or assessments. At any point over the past 2 years, no more than 10% of the total HOA units can be in arrears, past 30 days for fee payments or assessments.

“SPECIAL ASSESSMENT” means an amount of money that a condominium trust/homeowner’s association (HOA) needs in order to pay for a project or outstanding debt that was not part of the annual budget/assessment. The trustees of the condominium/HOA levy the special assessment against all unit owners and require them to pay their fractional interest of the money being requested. The payment of the special assessment is divided by each unit owner’s interest in the common area. The amount may be requested immediately from each unit owner or may be broken into installments depending on how the trustees have decided to handle it.

“CASH FLOW” means Incomings and outgoings of cash, representing the operating activities of an organization, the difference in amount of cash available at the beginning of a period (opening balance) and the amount at the end of that period (closing balance). It is called positive if the closing balance is higher than the opening balance, otherwise called negative. Cash flow is increased by (1) selling more goods or services, (2) selling an asset, (3) reducing costs, (4) increasing the selling price, (5) collecting faster, (6) paying slower, (7) bringing in more equity, or (8) taking a loan.

“NUMBER OF HOUSEHOLDS SERVED” means the number of households in the small system’s service area served by the specific Applicants water or water and sewer system.

“LONG-TERM DEBT PER CUSTOMER” means the ratio of total debt of the HOA divided by the number of households being serviced by the system.

“ACCOUNT GROWTH” related to service area demographics is growth in a utility’s residential, commercial, industrial, and government customer bases as well as its customer concentration. Stable growth is considered 3% per annum or less and moderate/rapid growth exceeds 3% per year.

“WATER CHARGE AS % OF MEDIAN HOUSEHOLD INCOME” the percentage average annual household water charges of the system divided by the Median Household Income as of the latest U.S. Census figures. This figure is calculated in the Applicant’s Environmental Decision Document (EDD) issued by NJDEP.

“WATER AND SEWER CHARGE AS % OF MEDIAN HOUSEHOLD INCOME” the percentage average annual household water and sewer charges of the system divided by the Median Household Income as of the latest U.S. Census figures. This figure is calculated in the Applicant’s Environmental Decision Document (EDD) issued by NJDEP.

“MEDIAN HOUSEHOLD INCOME” (MHI) means the calculation computed by the U.S. Census Bureau - Income of Households - This includes the income of the householder and all other individuals 15 years old and over in the household, whether they are related to the householder or not. Because many households consist of only one-person, average household income is usually less than average family income. The median divides the income distribution into two equal parts with 50% of the cases falling below the median income and 50% above the median. For households and families, the median income is based on the distribution of the total number of households and families, including those with no income. The median income for individuals is based on individuals 15 years old and over with income. Median income for households, families, and individuals is computed on the basis of a standard distribution.

“MEDIAN HOME VALUE” (MHV) means that one half of all homes were worth more and one-half were worth less. The midway point of all the houses/units sold at market **price** (or sold amount) over a set period (monthly, yearly, quarterly, etc.). (See US Census Reports).

“TOWN AND COUNTY CREDIT RATING” means an assessment issued by one or more of the three Nationally Recognized Rating Agencies relating to the credit worthiness of the Town and County in which the Applicant is located indicating the Town’s and County’s ability to repay principal and interest on its bonds in full and on time.

Addendum #1

To the Credit Policy of the New Jersey Infrastructure Bank

1. Transportation Bank BIL Match Project Credit Rating Waiver

Effective Date: Section 1 of this Addendum pertaining to the BIL Match Program shall be in full force and effect until such time as funds are no longer available through the Infrastructure Investment and Jobs Act (“IIJA”), also referred to as the Bipartisan Infrastructure Law (“BIL”) signed into law by President Biden on November 15, 2021 (“BIL”) to Transportation Bank project sponsors.

Waiver Eligibility: This credit rating waiver is available to Local Government Unit Project Sponsors of Transportation Projects in disadvantaged communities that would otherwise not have access to Transportation Bank Funds (e.g., communities that have a non-investment grade rating and/or cannot provide satisfactory QBA) and have received a commitment of competitive grant funds from the United States Department of Transportation through BIL (a “BIL Grant”). In order for the I-Bank to determine eligibility, all Borrowers must obtain a credit rating from an NRRRA or, if applicable, undergo the de-minimis credit review process as defined in Attachments 1 through 4 of the I-Bank’s Credit Policy. This credit waiver shall only pertain to BIL Match Fund Loans. Any additional project loan funds must satisfy all conditions in the I-Bank’s Credit Policy.

Maximum Allowable Transportation Bank Funding per Project: The federal match required of the local government unit to receive the BIL grant, to the extent funds are available and in priority order. (*n.b., The annual program amount set aside for the BIL Match Program is established in the Transportation Bank Financial Plan each year.*)

Waiver: For Borrowers with eligible Transportation Bank loans as defined above, section VI of the I-Bank Credit Policy in its entirety shall be waived at the time of short-term and long-term loan closing.

2. Water Bank 100% PF Credit Rating Waiver

Effective Date: Section 2 of this Addendum pertaining to Water Bank 100% PF projects shall be in full force and effect in any State Fiscal Program Year in which 100% PF Loans are made available to Water Bank Borrowers.

Waiver Eligibility: This credit rating waiver is available to Project Sponsors of Water Bank Projects that would otherwise not have access to Water Bank Funds (e.g., communities that have a non-investment grade rating and/or cannot provide satisfactory QBA) anticipated to receive long-term funding solely through a Fund Loan for the total project costs (inclusive of all Program fees) which will receive 100% Principal Forgiveness. Any additional project costs requiring a loan not subject to principal forgiveness must satisfy all conditions in the I-Bank’s Credit Policy or otherwise receive approval from the NJDEP Commissioner for a 100% Fund Loan pursuant to section VI.2.

Maximum Allowable Water Bank Funding per Project: Total project costs eligible for Principal Forgiveness (inclusive of all Program fees). (*n.b., The annual program amounts set aside for 100% PF loans is established in the Water Bank Financial Plan each year.*)

Waiver: For Borrowers with eligible Water Bank loans as defined above, the I-Bank Credit Policy in its entirety shall be waived at the time of short-term and long-term loan closing.

APPENDIX A.3

Financial Planning Methodology:

I-Bank Investment Policy

This page has been intentionally left blank

NEW JERSEY INFRASTRUCTURE BANK



INVESTMENT POLICY

**Amended & Restated
April 2020**

POLICY AND PROCEDURE

NO. 1.22

SUBJECT: Investment Policy

REVISION HISTORY:	Adopted:	12/03/2005	Effective:	12/23/2005
	Revised:	07/12/2007	Effective:	07/27/2007
	Revised:	09/12/2013	Effective:	09/27/2013
	Revised:	03/09/2017	Effective:	03/24/2017
	Revised:	02/08/2018	Effective:	02/26/2018
	Revised	03/20/2020	Effective:	04/03/2020
	Revised	04/09/2020	Effective:	04/27/2020

PURPOSE: To define and clarify (i) the investment standards required and allowable of all fiduciaries with regards to the funds under the control of the NJIB, and, (ii) the procedures to be followed to ensure compliance with clause (i).

Table of Contents

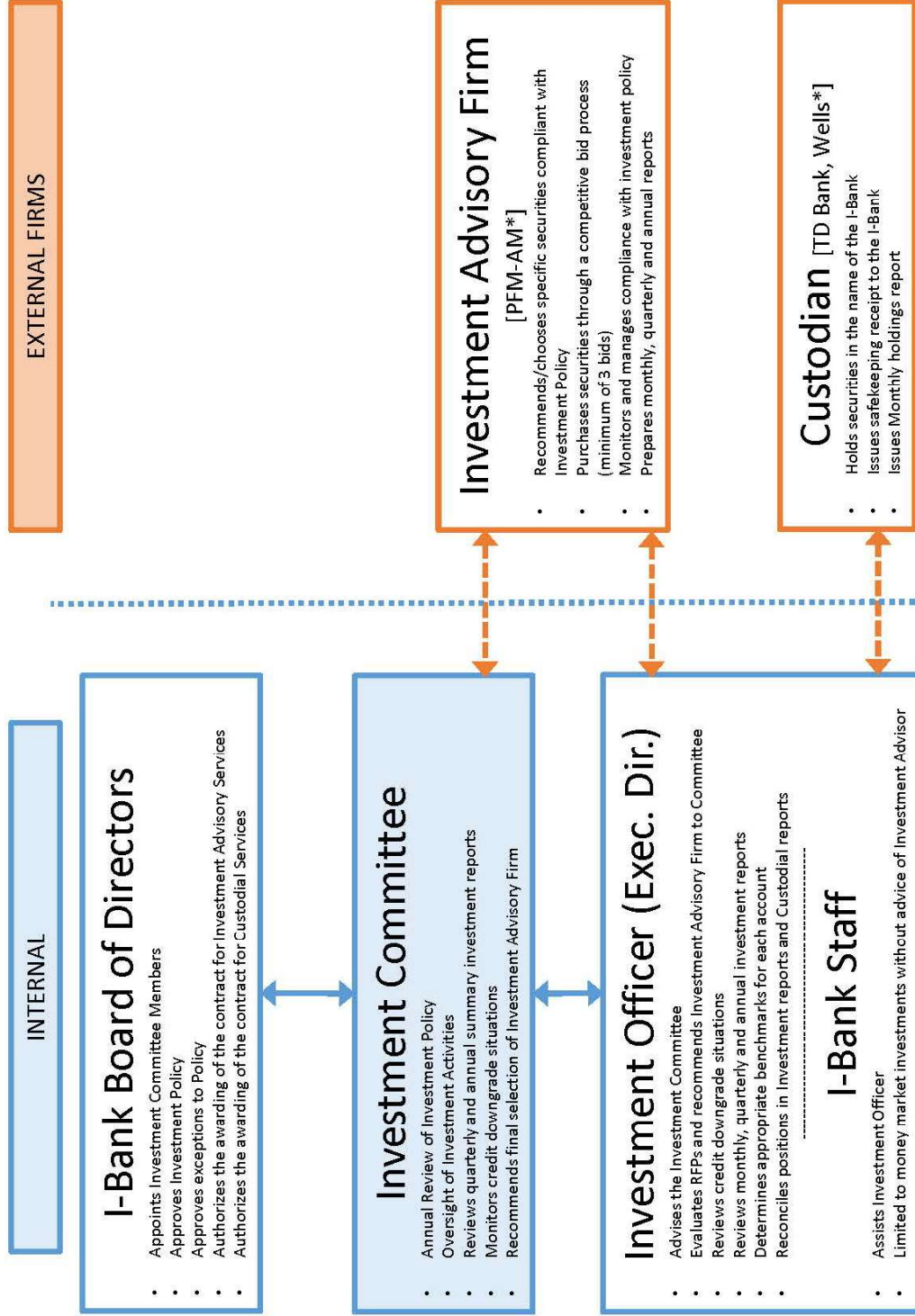
DIAGRAMS

1. Responsibilities – I-Bank Cash-on-Hand	3
2. Responsibilities – Bond Proceeds	4

TEXT

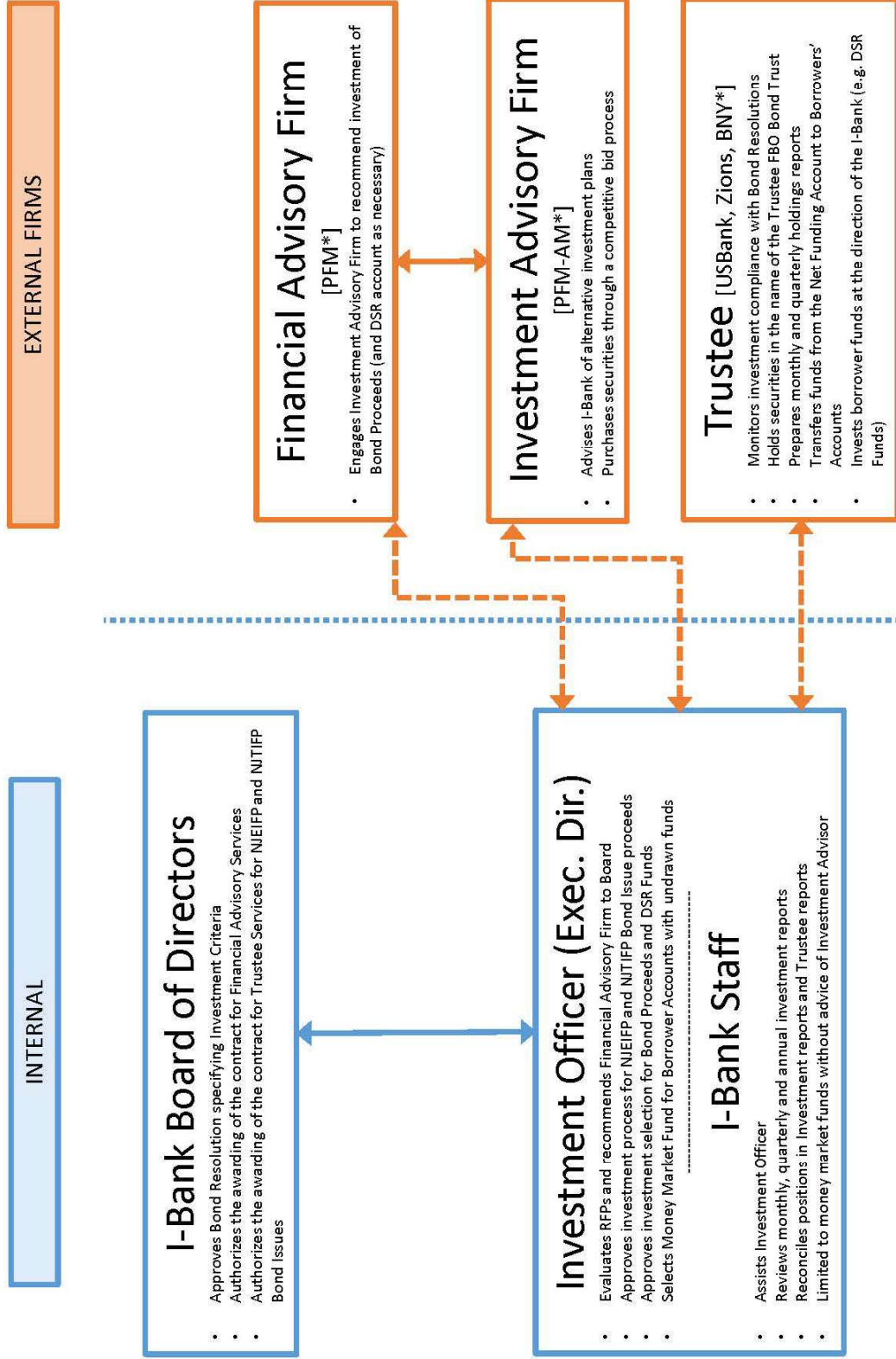
I. Purpose.....	5
II. Scope	5
III. Investment Objectives	5
1. Safety of Principal.....	5
2. Maintenance of Liquidity	6
3. Return on Investment	7
IV. Internal Procedure and Governance	7
1. Investment Committee	7
2. Delegation of Authority.....	7
3. Competitive Selection of Investment Advisory Firm	7
V. Standards of Care.....	8
1. Standards of Prudence	8
2. Ethics and Conflict of Interest.....	9
VI. Authorized Investments and Asset Classes.....	9
1. Government Investments	10
2. Money Market and Money Market-like Investments.....	11
3. Corporate Securities.....	12
VII. Policy Considerations.....	13
1. Credit Downgrade	13
2. Exemptions	13
3. Authorized Financial Institutions.....	13
4. Sale of Securities.....	14
5. Competitive Selection of Investment Instruments	14
VIII. Safekeeping and Custody.....	14
IX. Performance Standards	14
X. Reporting.....	15
XI. Exceptions to this Policy; Inconsistent Provisions	15
XII. Investment Policy Adoption	15
XIII. Exhibit A: Defined Terms.....	15

1. Responsibilities – I-Bank CASH-on-Hand



* [External firms] which are currently under contract. Continued service subject to competitive bid procurement.

2. Responsibilities - Bond Proceeds



* [External firms] which are currently under contract. Continued service subject to competitive bid procurement.

I. Purpose

The purpose of this Investment Policy Statement (“Policy”) is to set forth the investment and operational policies for the management of the Investment Activities (“Activities”) on behalf of the New Jersey Infrastructure Bank (“I-Bank”).

The underlying policies are designed to ensure that the Activities are consistent with the I-Bank’s overall financial needs and result in compliance with the Policy, the prudent management of invested funds, the timely availability of operating, administrative, and capital funds, all while generating a sound Investment Return.

Capitalized terms used herein and not otherwise defined herein shall have the meanings ascribed thereto in “Investment Policy Defined Terms” attached hereto as Exhibit A.

II. Scope

This Policy governs the overall administration and investment management of all funds available for investment (“Investment Portfolio”) by or on behalf of the I-Bank, including, without limitation, the Proceeds of bonds or notes issued by the I-Bank, funds utilized for Debt Service Reserve purposes, funds of the State of New Jersey, funds appropriated to the New Jersey Department of Environmental Protection (“DEP”) and funds appropriated to the New Jersey Department of Transportation (“DOT”). This Policy may only be superseded by and shall be subject to the terms and provisions of (i) bond resolutions duly adopted by the I-Bank and specific to bonds or notes issued by the I-Bank and the Proceeds of such bonds or notes, and (ii) the New Jersey State Investment Code for funds of the I-Bank, the State, the DEP or the DOT. This Policy shall apply to Investment Portfolio funds from the time of receipt until such time that the funds are no longer held by or on behalf of, or are the responsibility of, the I-Bank. The guidance set forth herein is to be strictly followed by all those responsible for any aspect of the Activities and management or administration of the Investment Portfolio, including I-Bank staff, I-Bank Board members, I-Bank’s executive personnel, and, when applicable, the I-Bank’s outside Investment Advisory Firm.

III. Investment Objectives

The primary objective of the I-Banks’s Activities, in order of priority, shall be (i) safety of Principal, (ii) Liquidity, and (iii) yield/Investment Return.

1. Safety of Principal

Safety of Principal is the foremost objective of the Activities. The objective is to mitigate both credit risk and interest rate risk.

a. Credit Risk

The I-Bank will seek to minimize credit risk, defined as the risk of an adverse change in market value or loss of Principal due to either (i) the actual or perceived failure of the Issuer of any security held in the I-Bank’s portfolio, or (ii) the actual or perceived failure

of an Investment Intermediary performing investments services to the I-Bank by:

- Limiting investments to the types of securities listed in Section VI of this Policy;
- Pre-qualifying the Financial Institutions, Brokers/Dealers, intermediaries, and advisors with which the I-Bank will do business (See Section VII.3 of this Policy for specific criteria);
- Diversifying the Investment Portfolio so that the impact of potential losses from any single asset class or Issuer will be minimized;
- Limiting Counterparty Risk by following the provisions in Section VII.3 of this Policy, maintaining an approved list of pre-approved counterparties, and having programs in place to monitor those pre-approved counterparties. The I-Bank may rely on outside Investment Advisory Firm(s) for maintaining the list of pre-qualified counterparties and having adequate Due Diligence programs in place; and
- Limiting the Trading Exposure or the amount of trades outstanding with any one counterparty at any given time. Except for Activities associated with bond sale Proceeds, neither the I-Bank nor any of its representatives shall execute and have outstanding investment trades with one counterparty at any given time, whereby the Principal amount represented by such trades exceeds 20% of all Investable Funds thereby minimizing the risk of loss or litigation to the Investment Portfolio should the counterparty be unable to fulfill its obligation for any reason.

b. Interest Rate Risk

The I-Bank will seek to minimize interest rate risk, the risk that the market value of securities in the portfolio will fall due to rising interest rates, by:

- Structuring the Investment Portfolio so that security maturity dates meet cash requirements for ongoing operations, and that Durations are managed in-line with the liability nature of each individual fund, thereby avoiding the need to sell securities prior to Maturity.
- Limiting the Duration of each individual account to between 85% and 110% of the Duration of the identified Benchmark for each account. Such Durations shall be identified each quarter and investment compliance of this requirement shall be stated in the I-Bank's quarterly performance reports.

2. Maintenance of Liquidity

The Investment Portfolio shall be structured to meet all operating requirements that may be reasonably anticipated. This shall be accomplished by structuring the Investment Portfolio so that securities mature concurrent with cash needs to meet anticipated demands (Static Liquidity). Furthermore, since all possible cash demands cannot be anticipated, the portfolio should consist of securities with active secondary or resale markets (Dynamic Liquidity).

Monthly cash flow analyses will be conducted by the Investment Officer, with the assistance of the Investment Advisory Firm to ensure that the Investment Portfolio is positioned to provide sufficient Liquidity.

3. Return on Investment

The Investment Portfolio shall be designed with the objective of attaining an optimized market Rate of Return throughout budgetary and economic cycles, taking into account the investment risk constraints and Liquidity needs of the I-Bank. Return on Investment is of secondary importance compared to the safety and Liquidity objectives described above.

IV. Internal Procedure and Governance

1. Investment Committee

Duly appointed members of the NJIB Board of Directors (“Board”) shall be appointed by Board resolution to serve as the I-Bank’s Investment Committee (“Investment Committee”). The Investment Committee shall meet at a minimum of once a year to review the progress of the Activities. By adoption of this Policy, the Board hereby grants oversight of the Activities to the Investment Committee. The Investment Committee may, at its discretion, refer any matter to the Board for discussion and action.

This Policy shall be reviewed at least annually by the Investment Committee and the Investment Officer (as hereinafter defined) to ensure its (i) consistency with the overall objectives of the I-Bank and the Activities (ii) compliance with applicable law, as well as (iii) relevance to financial and economic trends. Any modifications to this Policy will be recommended by the Investment Officer to the Committee and approved by the Board.

2. Delegation of Authority

Management responsibility for the Activities is delegated by the Board to the I-Bank’s Executive Director (herein referred to as the “Investment Officer”), with support from the Assistant Director of the I-Bank and the Chief Financial Officer of the I-Bank, and under the general direction of the Investment Committee. The Investment Officer shall act in accordance with established written procedures and internal controls for the operation of the Activities in a manner consistent with this Policy. If so affirmed by the Investment Committee and in accordance to the Investment Advisory Firm selection process as detailed in Section IV.3 of this Policy, the Investment Officer may delegate certain investment management responsibilities to an outside Investment Advisory Firm. The Investment Advisory Firm must abide by all terms of this Policy as stipulated in the terms of the contract for Investment Services agreed to by the Investment Advisory Firm and the I-Bank.

3. Competitive Selection of Investment Advisory Firm

It may be the policy of the I-Bank to delegate certain investment management responsibilities to a qualified institution through a formal and competitive Investment Advisory Firm selection process.

The I-Bank shall solicit bids through a Request for Proposal (“RFP”) and evaluate all received responses. An Evaluation Committee, made up of no fewer than three (3) staff members of the I-Bank, including the Investment Officer, (the “Evaluation Committee”) shall review the proposals submitted in response to the RFP. Through the Evaluation

Committee, the Investment Officer shall make recommendations to the Investment Committee, which will then evaluate these recommendations and make a final recommendation to the Board. Proposals will be evaluated based on the major evaluation criteria set forth in the Procurement Policy and considering the following factors:

- The proposed cost for services and the methodology stated for setting Investment Advisory Firm compensation;
- The Investment Advisory Firm’s experience and capability to efficiently manage funds, maintain accounts and records, and provide all required services;
- The experience and qualifications of the Investment Advisory Firm’s team proposed for the Activity;
- The sufficiency of the Investment Advisory Firm’s assets to assume and execute required responsibilities;
- The Investment Advisory Firm’s reputation as a respected, nationally known, experienced investment management firm;
- Investment Services available and offered by the Investment Advisory Firm; and
- The Investment Advisory Firm’s online capabilities and functionality available to the I-Bank.

V. Standards of Care

1. Standards of Prudence

There are currently two commonly accepted standards of care in the United States with respect to the general management of investment funds; (i) Prudent Person Rule and (ii) Prudent Expert Rule:

- (i) Prudent Person Rule directs fiduciaries as follows - “Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived.” (*Harvard College v. Armory (1830) MA*).
- (ii) Prudent Expert Rule directs fiduciaries as follows – A portfolio shall be managed “with the care, skill, prudence, and diligence, under the circumstances then prevailing, that a prudent man acting in like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims by diversifying the investments of the funds, so as to minimize the risk, considering the probable income as well as the probable safety of their capital.” (*Employee Retirement Income Security Act (ERISA), Section 404(a)(1)(B)*).

(n.b. The main difference between these standards is the “familiar with such matters” clause, which suggests a higher level of standard required by the “Expert” and the acceptance of a portfolio approach to investments under the Expert Rule which allows for greater flexibility involving individual investment decisions).

Management of the I-Bank's investment Activities, responsibilities and action, as outlined in this Policy, by the I-Bank Board, Investment Committee, Investment Officer, and staff regarding funds available for investment on the I-Bank's behalf shall be subject to the "Prudent Person" standard. Further, the Investment Officer and staff, acting in accordance with this Policy and exercising Due Diligence, shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided that any deviations from the Policy are reported to the Committee in a timely fashion.

While the Prudent Person Rule is the standard of prudence to be used by investment officials who are officers or employees of the I-Bank, any person or firm, including, without limitation, the Investment Advisory Firm, hired or retained to invest, monitor, or advise the I-Bank concerning the Investment Portfolio and the Activities shall be held to the higher standard of "Prudent Expert".

2. Ethics and Conflict of Interest

Any person involved in the investment process and the Activities, either employed by the I-Bank, or hired as an advisor to the I-Bank, including, without limitation, the Investment Advisory Firm (including any individual employed thereby who is assigned by such employer to provide services to the I-Bank, on behalf of such employer, in connection with this Policy), shall refrain from personal business activity that could conflict with the proper execution and management of the Activities, or that could impair their ability to make impartial decisions. These persons shall not:

- 1) Accept any money, loan, gift, favor, service, or business or professional opportunity that could influence them in the performance of their official duties with respect to the Activities;
- 2) Accept any business or professional opportunity when they know there is a reasonable likelihood that the opportunity is being afforded to influence them in the performance of their official duties;
- 3) Enter into any personal investment transactions with the same individual with whom business is conducted on behalf of the I-Bank; or
- 4) Disclose or use confidential information that is not generally available to the public for their own or another person's financial benefit.

The responsibilities of I-Bank employees pursuant to the State of New Jersey Conflict of Interest's standards and Rules of Professional Conduct are neither superseded nor limited by this Policy.

VI. Authorized Investments and Asset Classes

The I-Bank is permitted to invest in those investment securities and vehicles that are specifically listed below, provided, however, that, at the time any investment is made, (i) such investment shall be (a) permitted pursuant to the rules and regulations of the New Jersey State Investment Council or (b) approved by the Director of the Division of Investment in the Department of the Treasury upon a finding that such investments are consistent with the corporate purposes of the I-Bank, and (ii) if and to the extent the amounts being invested

constitute Proceeds of bonds or notes of the I-Bank, such investment shall be permitted pursuant to the terms and provisions of the duly adopted bond resolution of the I-Bank pursuant to which such bonds or notes were issued.

Investments made without the advice of the Investment Advisor should be limited to, permissible money market funds.

Credit criteria listed in this section refer to the credit of the issuing organization at the time the security is purchased. Only credit ratings of Nationally Recognized Statistical Rating Organizations (“NRSRO”) will be observed and considered, including Standard & Poor’s, Moody’s Investor Service, and Fitch Ratings Service. Ratings are provided by category. For example, the second highest rating category will include bonds rated AA+, AA and AA- for Standard & Poor’s and Fitch Ratings and Aa1, Aa2 and Aa3 for Moody’s Investors Service.

Investment Portfolio percentage restrictions by security type and Issuer are applicable only on the date of purchase of the investment and are based on market value at the Investment Portfolio fund level as defined by the State’s Investment Policy. All Funds related to each specific program of the NJIB shall be treated as separate investment portfolio funds pursuant to the State’s Investment Policy and held in segregated accounts at one or more Custodial Banks.

1. Government Investments

- 1) Direct Obligations of the United States of America and securities fully and unconditionally guaranteed as to the Timely Payment of Principal and interest by the United States of America, provided that the Full Faith and Credit of the United States of America must be pledged to any such Direct Obligation or guarantee (“Direct Obligations”).
 - a. Sector Limit: the I-Bank may hold 100% of the Investment Portfolio in this asset class.
 - b. Maturity Limit: no greater than twenty (20) years at time of purchase.
- 2) Any obligation that a Federal Agency or a Federal Instrumentality has issued in accordance with an act of Congress.
 - a. Sector Limit: the I-Bank may hold up to 75% of the Investment Portfolio in this asset class.
 - Mortgage-Backed Securities shall make up no more than 10% of the Investment Portfolio.
 - b. Issuer Limit: no single Issuer shall exceed 35% of the Investment Portfolio.
 - c. Maturity Limit: no greater than ten (10) years at time of purchase, unless the security type is a Callable or Mortgage-Backed Security. Callable Federal Agency Securities shall be further limited to a five (5) year Maturity limit at the time of purchase. Mortgage-Backed Securities shall have a maximum Duration no greater than five (5) years at the time of purchase.
- 3) Municipal Obligations. Taxable and tax-exempt securities issued only by states and state agencies in the United States may be purchased if the following conditions are

met:

- a. Sector Limit: up to 30% of the Investment Portfolio may be invested in Municipal Obligations as described above.
 - b. Issuer Limit: no single Issuer shall exceed 5% of the Investment Portfolio.
 - c. Maturity Limit: no greater than five (5) years at the time of purchase.
 - d. Credit Quality: the Issuer has a long-term debt rating in one of the two highest categories by at least two NRSROs and is rated not lower than AA (or its equivalent) by any one NRSRO, or a minimum short-term rating in the top category by at least two NRSROs, depending on whether the security is issued with short-term or long-term ratings.
- 4) Municipal Obligations of Local Units, Subject to Limited Circumstances. Such municipal obligations as are described in Addendum #1 hereto, as and to the extent permitted therein.

2. Money Market and Money Market-like Investments

- 1) Deposits with the State of New Jersey Cash Management Fund established pursuant to section 1 of P.L. 1977, c.281 (C.52: 18A-90.4), if the following conditions are met:
 - a. Sector Limit: up to 100% of the Investment Portfolio may be invested in this asset class.
- 2) Money Market Mutual Funds may be purchased, if the following conditions are met:
 - Fund must be registered with the U.S. Securities and Exchange Commission (“SEC”) as a Money Market Mutual Fund, comply with SEC Rule 2a-7, and maintain a stable Net Asset Value (“NAV”);
 - Investment is permitted in Treasury-Only, Government and “Prime” funds;
 - Fund sponsor must be domiciled in the United States of America; and
 - Before investing in any fund, the most current prospectus must be obtained and reviewed by the Investment Officer or the Investment Advisory Firm.
 - a. Sector Limit: up to 100% of the Investment Portfolio may be invested in this asset class.
 - b. Fund Limit: The I-Bank may hold 100% of the Investment Portfolio in Treasury-only or Federal Government-only funds. No other single fund shall exceed 50% of the Investment Portfolio.
 - c. Credit Quality: the fund is rated in the top Money Market Mutual Fund category by any one NRSRO.
- 3) Agreements for the repurchase of fully Collateralized securities, if:
 - The Custody of Collateral is transferred to a Third Party;
 - The Maturity of the agreement is not more than 30 days;
 - The underlying securities are purchased through a Public Depository as defined in section 1 of P.L. 1970, c.236 (C.17:9-41);
 - A Master Repurchase Agreement providing for the custody and security of collateral is executed; and
 - The Fair Market Value of the securities in relation to the amount of the

repurchase obligation, including Principal and interest, must be equal to at least 102%.

- a. Sector Limit: up to 10% of the Investment Portfolio may be invested in this asset class.
- b. Issuer Limit: no single Issuer shall exceed 10% of the Investment Portfolio. For purposes of clarity, other than short-term, Repurchase Agreements described in this Section (VI.2), Guaranteed Investment Contracts (GICs), Forward Delivery Agreements and other such Structured Investment Products are prohibited investments unless agreed to on a case-by-case basis by a vote of the full Board.

3. Corporate Securities

Corporate Debt instruments, including Commercial Paper, Corporate Notes, Certificates of Deposit, Bank Deposit Notes, and Bankers' Acceptances. In aggregate, these instruments are limited by Sector and Issuer as follows:

- Sector Limit: in the aggregate, up to 50% of the Investment Portfolio may be invested in Corporate Debt instruments of the types listed below;
- Industry Limit: in aggregate, no greater than 25% of the Investment Portfolio may be invested in Corporate Debt Issuers that are categorized by industry type as "Financials"; and
- Issuer Limit: no single Corporate Debt Issuer shall exceed 5% of the Investment Portfolio.

- 1) **Bankers' Acceptances.** Bankers' Acceptances issued by a domestic bank or a Federally Chartered Domestic Office of a foreign bank, which are eligible for purchase by the Federal Reserve System may be purchased for the Investment Portfolio if the following conditions are met:

- Maturity Limit: no greater than one hundred-eighty days (180) days; and
- Credit Quality: the issuing corporation, or its guarantor, has a short-term debt rating in the highest category by at least two NRSROs.

- 2) **Commercial Paper.** Unsecured short-term debt of U.S. domiciled corporations may be purchased for the Investment Portfolio if the following conditions are met:

- Maturity Limit: no greater than two hundred-seventy (270) days; and
- Credit Quality: the issuing corporation, or its guarantor, has a short-term debt rating in the highest category by at least two NRSROs.

- 3) **Certificates of Deposit and Bank Deposit Notes.** Deposit obligations of domestic banks and Federally Chartered Domestic Offices of foreign banks may be purchased for the Investment Portfolio if the following conditions are met:

- Maturity Limit: no greater than one (1) year at the time of purchase; and
- Credit Quality: the issuing corporation, or its guarantor, has a short-term debt rating in the highest category by at least two NRSROs or a long-term debt rating in the highest two categories by at least two NRSROs and is rated not lower than A (or its equivalent) by any one NRSRO.

- 4) **Corporate Notes.** Senior debt obligations issued by corporations organized and operating under the laws of the United States may be purchased if the following conditions are met:
- Maturity Limit: no greater than five (5) years at the time of purchase; and
 - Credit Quality: the issuing corporation has a long-term debt rating in one of the three highest categories by at least two NRSROs and is rated not lower than A (or its equivalent) by any one NRSRO.

VII. Policy Considerations

1. Credit Downgrade

If a security(ies) in the Investment Portfolio is downgraded to a level below the quality required by this Policy, the Investment Officer shall consult with the Investment Advisory Firm to review the credit situation of the security(ies). Upon completion of such review, the Investment Officer shall make a determination as to whether to sell or retain such security(ies) in the Investment Portfolio and provide a written report to the Committee, informing the Committee of the situation, the investment decision, and the justification for a such a decision.

If a decision is made to retain a downgraded security in the Investment Portfolio, its presence in the Investment Portfolio will be monitored and reported monthly, in writing, to the Investment Officer and the Committee.

2. Exemptions

If the Investment Portfolio falls out of compliance with this Policy, the Investment Advisory Firm shall notify the Investment Officer and present a plan of action, the objective of which will be to bring the Investment Portfolio back into compliance with the Policy. The Investment Officer shall provide regular written reports with respect to such developments to the Committee for as long as the Investment Portfolio is non-compliant with this Policy.

3. Authorized Financial Institutions

All transactions of individual investments shall be executed with qualified Broker/Dealers that meet all of the following criteria:

- a. Primary Dealers and regional Dealers that qualify under Securities and Exchange Commission Rule 15c3-1 (uniform net capital rule);
- b. Capital of at least \$25,000,000;
- c. Registered as a Dealer under the Securities Exchange Act of 1934;
- d. Member of the Financial Industry Regulatory Authority (FINRA);
- e. Registered to sell securities in the State of New Jersey; and
- f. Engaged in the business of effecting transactions in authorized investments of this Policy for at least five (5) consecutive years.

The I-Bank may delegate the selection of qualified Broker/Dealers to its Investment Advisory Firm.

4. Sale of Securities

From time to time, securities held in the Investment Portfolio may be traded for other similar securities to improve yield, Maturity, and/or credit risk. For these transactions, a loss may be incurred for accounting purposes, provided any of the following occurs with respect to the replacement security:

- a. Yield has been increased;
- b. Maturity has been adjusted in anticipation of interest rate changes; or
- c. Quality of the investment has been improved.

5. Competitive Selection of Investment Instruments

It will be the policy of I-Bank to transact all security purchases/sales only with qualified institutions through a formal and competitive process requiring the solicitation and evaluation of at least three bids/offers. The I-bank will accept the offer which (a) provides the highest Rate of Return within the Maturity required; and (b) optimizes the investment objective of the overall Investment Portfolio. When selling a security, the I-bank, or when designated, the Investment Advisory Firm on behalf of the I-Bank, will select the bid that generates the highest sale price. A report of all bid results shall be electronically transmitted or faxed, by the Investment Advisory Firm, the Financial Advisor or other Financial Intermediary who was responsible for managing the bid process, to the Investment Officer for additional record keeping at the I-Bank. Records of all transactions shall be stored electronically and made available by the Investment Officer to any member of the Committee upon request.

VIII. Safekeeping and Custody

All investment securities purchased for the Investment Portfolio or held as collateral on deposits or investments shall be held by the I-bank or by a third-party Custodial Agent who may not otherwise be a counterparty to the investment transaction. All securities in the Investment Portfolio shall be held in the name of the I-Bank.

Further, all investment transactions will be conducted on a Delivery vs. Payment (DVP) basis. DVP is a means of limiting risk in financial transactions, whereby payment is made through a third-party intermediary simultaneously as securities are delivered and accepted. The Custodial Agent shall issue a safekeeping receipt to the I-Bank listing the specific instrument, Rate, Maturity, and other pertinent information. On a monthly basis, the Custodial Agent will also provide reports that list all securities held for the I-Bank, including the book and market values of holdings as of month-end. The I-Bank will reconcile its account holdings monthly with its custodian's records.

IX. Performance Standards

The Investment Portfolio shall be structured and managed with the objective of obtaining a market Rate of Return throughout budgetary and economic cycles, commensurate with the investment risk constraints and cashflow needs of the I-Bank. Appropriate Benchmarks shall

be selected for comparison to the various accounts that make up the Investment Portfolio and identified in all quarterly performance reports to the Committee.

X. Reporting

The Investment Officer shall prepare or have prepared an investment report on a monthly basis. The report will include the following:

- a. Listing of individual securities held at the end of the reporting period.
- b. Listing of investments by Maturity date.
- c. Percentage of the total portfolio that each type of investment represents.
- d. Average Weighted Yield to Maturity of investments.

Additionally, on at least a quarterly basis, the Investment Officer shall prepare or have prepared a written investment report that, in addition to the above requirements, includes a management summary that provides analysis of the status of the current Investment Portfolio and transactions made over the last quarter. The Investment Officer shall provide the quarterly overview report to the Committee. The report will show the investments held in, and performance for, the Investment Portfolio and individual accounts, and shall include a comparison to the relevant Benchmarks for each account, for the current quarter and year-to-date period.

XI. Exceptions to this Policy; Inconsistent Provisions

(1) In the event of purchases or sales of municipal obligations of Local Units pursuant to Section (VI)(1)(4) of this Policy and Addendum #1, those requirements of this Policy as identified in Addendum #1 hereto shall not apply to such purchases as and to the extent provided in Addendum #1 hereto.

(2) Exceptions to this Policy are prohibited without the prior written approval of the I-Bank Board.

XII. Investment Policy Adoption

This Policy is adopted by the Board of Directors of the I-Bank this 9th day of April 2020.

XIII. Exhibit A: Defined Terms

Advisory Firm: A firm that provides professional investment or financial advice to an organization or an individual for a fee. The primary purpose of an Advisory Firm in this case, is to provide subject matter expertise as well as access to industry-specific specialists and advisors.

Average Weighted: To aggregate data into an average, based on the relative value weights of each data point. For example, to calculate the average interest rate of a group of securities,

it is useful to calculate the average on a weighted basis, with the yield of each security being given a weighting based on the dollar value of that security as a percentage of the dollar value of all the securities.

Bankers Acceptances: A type of investment that is used to facilitate trade transactions between two entities, especially useful in trading international goods. Bankers' Acceptances are used as a short-term investment instrument and are usually traded at a discount from face value on the basis of the credit quality of the guaranteeing bank. Typically issued with maturities less than one year; may be rated with a short-term rating by any NRSRO (see subsequent definition).

Bank Deposit Notes: A debt security issued by a bank and backed by federal deposit insurance up to the FDIC insurance coverage amount (the current standard deposit insurance amount is \$250,000 per depositor, per insured bank, for each account ownership category).

Benchmark: An Investment Portfolio whose overall performance is used as a market index for measuring the comparative performance of a managed Investment Portfolio. A performance Benchmark should represent a close correlation to the investment guidelines and risk tolerance of the managed Investment Portfolio.

Bond Proceeds: The total monies paid to the Issuer by the purchasers of a new issue of bonds.

Broker/Dealers: A person or firm transacting securities business with customers. A Broker acts as an agent between buyers and sellers and receives a commission for these services. Dealers trade financial assets from their own Investment Portfolios, placing their own capital at risk in the trade. A Dealer takes risk by owning an inventory of securities, whereas a Broker merely matches up buyers and sellers.

Callable Bond/Security: Securities which contain an option that provides the Issuer the right to redeem the securities prior to the stated original Maturity, at a predetermined price and time.

Certificates of Deposit (CDs): Obligations issued by a bank or thrift institution, generally offering a fixed Rate of Return for a specified period of time. CDs may be rated with a short-term or long-term rating, depending on the original Maturity date and may be backed by FDIC insurance coverage.

Collateralized: Process by which a borrower pledged securities, property, or other deposits for securing the repayment of a loan and/or security.

Commercial Paper: Short-Term unsecured Corporate (promissory) Notes, issued at a discount with a redemption value at Maturity equal to par or face value. Maximum Maturity is typically 270 days; may be rated with a short-term rating by an NRSRO.

Corporate Notes/Debt: Unsecured debt instruments issued by a corporation with a Maturity of greater than one year; may be rated with a long-term rating by an NRSRO.

Counterparty Risk: The risk that the other party to a transaction will fail in its related obligations. For example, in the case of buying a security, the risk that the Broker/Dealer will not deliver the security to an entity's custodian on the agreed-upon date.

Custody of Collateral: Collateral (including but not limited to cash, Government securities, securities, real estate, commodities, and assets) held by a Custodial Agent.

Credit Downgrade: A reduction in the rating assigned to an Issuer. A rating agency downgrades the debt of a company or governmental entity when its ability to meet its financial obligations deteriorates or is expected to deteriorate.

Custodial Agent: A Financial Institution that holds a customer's securities, in the customer's name, to minimize the risk of their theft or loss. Service normally includes the holding and reporting of the customer's securities and values, the collection and disbursement of income/coupon payments and maturities received.

Debt Service Reserve Fund: An account usually funded in whole or in part with Bond Proceeds. This account is set aside in reserve to pay debt service if revenue sources are insufficient to pay debt service.

Delivery vs. Payment (DVP): Settlement procedure in which securities are delivered simultaneously upon the transfer of cash payment for said securities. Most security transactions are performed via DVP as a protection for both parties to a transaction.

Direct Obligation: A security issued under obligation of the U.S. Government, backed by the Full Faith and Credit of the Federal Government.

Due Diligence: Exercising proper care when presenting or acting on a potential investment, idea, or strategy, with a goal of avoiding or preventing unanticipated harm.

Duration: A measurement of interest rate sensitivity, which shows the effective Maturity of a fixed income obligation, using the average of the time to each revenue stream (coupon or Principal payment) made on the obligation on a weighted basis. The greater the Duration of an obligation, the greater the percentage price sensitivity/volatility with respect to changes in interest rates.

Dynamic Liquidity: Obligations having active secondary or resale markets.

Fair Market Value: The price that a given asset or security is expected to sell for in the market, at a specific point in time.

Federal Agency: Government sponsored/owned entity created by the U.S. Congress, generally for the purpose of acting as a Financial Intermediary by borrowing in the

marketplace (issuing bonds and notes) and directing Proceeds to specific areas of the economy. The most common federal agencies are GNMA, FNMA, FHLMC, FHLB, FFCB, and TVA.

Federal Instrumentality: An entity that serves a public purpose and is closely tied to federal and/or state government.

Federal Reserve System: The independent central bank system of the United States that establishes and conducts the nation's monetary policy. The Federal Reserve System is made up of twelve Federal Reserve District Banks, their branches, and many national and state banks throughout the nation. It is headed by the seven-member Board of Governors known as the "Federal Reserve Board" and led by its Chairman.

Federally Chartered Domestic Office: Financial Institutions authorized and regulated by the federal government rather than the state government.

Financial Institutions: An entity that focuses its business on transacting in the financial markets, such as investments, loans and deposits. Conventionally, Financial Institutions are composed of organizations such as banks, Broker/Dealers, custodians, insurance companies, and trust companies.

Financials: Issuers that focus their business on providing financial services, such as banks and trust companies.

FINRA: Financial Industry Regulatory Authority, a private corporation that acts as a self-regulatory organization (SRO), performing financial regulation of member brokerage firms and exchange markets. FINRA is the successor to the National Association of Securities Dealers, Inc. (NASD).

Forward Delivery Agreements: An agreement for the delivery of an underlying asset at a date agreed upon in a forward contract. At the Forward Delivery date, one party will supply the underlying asset and the other will purchase the asset at a price agreed upon at the onset of the contract or trade date.

Full Faith and Credit: The unconditional guarantee that accompanies the interest and Principal of obligations issued by in this case, either the United States of America or U.S. Municipalities.

Guaranteed Investment Contracts (GICs): Insurance contracts that guarantee the repayment of Principal and a fixed or floating interest rate for a predetermined period.

Government MM: A Money Market Mutual Fund that invests in high-quality, short-term Money Market instruments that consist of U.S. Government obligations and Repurchase Agreements Collateralized by U.S. Government obligations.

Intermediary: An entity that acts as a Broker between two parties in a financial transaction.

Investable Funds: The aggregate amount of funds available for investment.

Investment Committee: The Committee, made up of certain members of I-Bank Board of Directors, according to the I-bank's Investment Policy which oversees the investment and operational policies and Activities for I-Bank investment program.

Investment Portfolio: All funds available for investment on I-Bank behalf.

Investment Return: Investment performance measured over a period of time that includes income received and any realized and unrealized gains or losses. Realized gains are captured when a security is sold, whereas unrealized gains are estimated gains on paper for current holdings and are thus not yet realized.

Investment Services: Those services offered by an investment advisor related to the prudent management of the I-Bank's Investment Portfolio.

Issuer: An entity that develops, registers, and sells securities for financing its operations. Issuers are legally responsible for the obligations of the issue and for reporting financial conditions, material developments and any other operational Activities required by the regulations of their jurisdictions.

Liquidity: The relative ease of converting an asset into cash; also, a relative measure of cash and near-cash items in a portfolio of assets.

Local Unit: A New Jersey county or municipality.

Long-Term Debt Rating: An NRSRO's forward-looking opinion of the general creditworthiness of an Issuer over a period exceeding the next 365 days.

Master Repurchase Agreement: An agreement that is used to govern and document Repurchase Agreements (see subsequent definition) and protect the interest of parties in a Repurchase Agreement transaction.

Maturity: Date on which the final Principal payment of a financial obligation is to be paid and the obligation satisfied in full.

Maturity Limit: A limit to the length of time until financial obligations reach Maturity, set forth by an entities' investment policy.

Money Market Funds: A type of mutual fund generally believed to provide daily Liquidity, which invests solely in short-term market instruments, generally having maturities less than one year such as: U.S. Treasury bills, Commercial Paper, Bankers' Acceptances, and Repurchase Agreements.

Mortgage-Backed Securities: Mortgage-Backed Securities represent an ownership interest in a pool of mortgage loans made by Financial Institutions, to finance the borrower's

purchase of a home or other real estate. The majority of Mortgage-Backed Securities are issued by Federal Agencies, including GNMA, FNMA and FHLMC. Mortgage- Backed Securities carry specific reinvestment risks as Principal and interest payments are uncertain and dependent on the timing of payments on underlying mortgages as determined and paid by the mortgage borrowers (homeowners). Expected payment streams are sometimes “prepaid,” when homeowners refinance or sell their properties.

Municipal Obligations: A security issued by a state, municipality, or county to finance its capital expenditures.

Net Asset Value (NAV): The market value of one share of an investment company, such as a Money Market Mutual Fund.

New Jersey State Investment Code: Regulations, including those of the New Jersey State Investment Council, governing the permitted investments as well as the limitations of investments in various assets and securities for public entities operating in New Jersey.

NRSRO: Nationally Recognized Statistical Rating Organization, an organization of which the SEC has deemed to have a strong national presence in the United States of America. Examples include: Fitch, Moody’s, and S&P.

Prime MM: A Money Market Mutual Fund that invests in high-quality, short-term Money Market instruments that consist of U.S. Government obligations, Repurchase Agreements, and Corporate Debt instruments.

Principal: The face value of a financial instrument on which interest accrues, or the original investment amount.

Prudent Person: A legal adage restricting a fiduciary’s discretion in a client’s account by directing that “Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived.” (*Harvard College v. Armory (1830) MA*).

Prudent Expert: A measure contained in Section 404(a)(1)(B) of the Employee Retirement Income Security Act (ERISA) that requires the fiduciary of a defined contribution retirement plan to use the care, skill, prudence, and diligence, under the circumstances then prevailing, that a prudent man acting in like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims by diversifying the investments of the funds, so as to minimize the risk, considering the probable income as well as the probable safety of their capital.” The “familiar with such matters” language has been interpreted to mean “expert”. This language creates an important distinction from the earlier Prudent Person guideline, in that it holds fiduciaries to a stricter standard of care and action. In addition, the Prudent Expert identification of a portfolio approach suggests that individual

security decisions, taken out of context of an entire portfolio, may be imprudent.

Public Depository: A public entity that accepts deposits of cash for safekeeping of behalf of the depositor.

Rate: Amount of expected earnings/(payments) received/(owed) from/(on) an investment/(liability), expressed as a percentage of the funds that were invested/(borrowed).

Repurchase Agreement: A short-term investment vehicle in which an investor agrees to buy securities from a counterparty and simultaneously agrees to resell the securities back to the counterparty at an agreed upon time and for an agreed upon price. The difference between the purchase price and the sale price represents interest earned on the Agreement.

Return on Investment (ROI): The economic benefit of investing. ROI is calculated by first subtracting the cost of the investment from the gains of the investment, then dividing the difference by the cost of the investment. (See below.)

$$\frac{[(\text{Gain from Investment}) - (\text{Cost of Investment})]}{(\text{Cost of investment})}$$

SEC Rule 2a-7: Rule 2a-7 of the Investment Company Act of 1940, which restricts the quality, Maturity, and diversity of investments by Money Market Funds.

Sector Limit: The maximum amount of money that an entity can invest in any one asset class. Sectors are widely defined as U.S. Treasuries, federal agencies, Corporates, Municipals, and Money Market Funds.

Short-Term Debt Rating: Short-Term Debt Rating looks at the probability of an entity defaulting or being unable to repay a financial obligation within a one-year time frame. In contrast, a Long-Term Debt Rating evaluates the same probability beyond the one-year time horizon.

State of New Jersey Cash Management Fund: An NAV money-market-like investment fund, administered and managed by the New Jersey Department of Treasury, which provides a legal depository for State, municipal or school district funds.

Static Liquidity: Structuring an Investment Portfolio such that securities will mature, and investment funds will be available in cash form concurrent with the expected cash demands/Liquidity needs of the investor.

Structured Investment Products: Investment products designed to specifically meet an investor's financial needs, typically derived from a security, portfolio of securities, index, commodity, or debt issuances.

Third Party: An individual or entity that is involved in a transaction but is not one of the principals.

Timely Payment: A payment that has been paid on or before the due date, to ensure there is no default or accrual of any interest or penalties.

Trading Exposure: The dollar amount of outstanding trades with a single counterparty, expressed as a percentage of Investable Funds of the I-Bank. The I-Bank has established a limit such that the amount of outstanding trades with any one counterparty shall not exceed 20% of Investable Funds of the I-Bank and thereby has mitigated the risk that the default of any single trading counterparty cause irreparable harm to the I-Bank's Investment Portfolio.

Treasury Securities: Collective term used to describe debt instruments backed by the U.S. Government and issued through the U.S. Department of the Treasury. Includes Treasury bills, Treasury notes, and Treasury bonds.

Treasury-only MM: A Money Market Mutual Fund that invests in nothing but short-term U.S. Treasury Securities and other securities that are 100% backed by U.S. Treasuries.

Yield to Maturity: Calculated Return on Investment (ROI), assuming all cash flows from the security are reinvested at the same original yield. There are different day count conventions for calculating YTM for various types of securities.

ADDENDUM #1

TO THE INVESTMENT POLICY OF THE NEW JERSEY INFRASTRUCTURE BANK

Local Unit BAN Investment Policy

- I. **Policy:** In addition to those investment securities and vehicles that are specifically identified in Section VI of the Investment Policy, the I-Bank may, upon the occurrence of a state-wide emergency as formally declared by the Governor of the State of New Jersey, invest in tax-exempt and taxable bond anticipation notes issued pursuant to the Local Bond Law (each, a “BAN” or “BANs” and, collectively, the “BANs”), that are issued by New Jersey counties and municipalities (each, a “Local Issuer” or a “Local Unit”), as such BANs are more thoroughly defined in Section I(1), below, subject to satisfaction of each of the following conditions set forth in Section I, below, as well as the closing requirements set forth in Section II, below:
 1. **Qualifying BANs:** The BANs that may be the subject of an investment by the I-Bank, pursuant to the terms hereof, shall be limited to those BANs that are both (i) issued as a “roll-over” or a “renewal” by a Local Unit of its previously-issued BAN that has reached its maturity date, and (ii) the subject of a “Failed Sale” as defined in Section I(9) hereof;
 2. **Investment Council Regulations:** Such investments by the I-Bank in BANs issued by Local Issuers shall be (i) permitted pursuant to the rules and regulations of the New Jersey State Investment Council or (ii) approved by the Director of the Division of Investment in the Department of the Treasury upon a finding that such investments are consistent with the corporate purposes of the I-Bank;
 3. **Available Liquidity:** The Investment Officer, in consultation with (i) the Advisory Firm that serves as the financial advisor to the I-Bank with respect to the particular I-Bank Financing Program from which the funds to be invested are derived (the “Financial Advisor”), and (ii) a representative of the New Jersey Department of the Treasury shall make a determination as to the availability of liquidity in the I-Bank’s funds for purposes of investing in BANs, as provided herein;
 4. **Sector Limit:** No more than 40% of the Investment Portfolio may be invested in BANs, as provided herein; and for purposes of calculating this percentage, all funds related to each Financing Program of the I-Bank shall be treated as a separate portfolio investment fund, pursuant to the Investment Policy of the State of New Jersey;
 5. **Issuer Limit:** No single Local Issuer shall exceed the greater of \$5,000,000 or 5.00% of the Investment Portfolio; and for purposes of calculating this percentage, all

funds related to each Financing Program of the I-Bank shall be treated as a separate portfolio investment fund, pursuant to the Investment Policy of the State of New Jersey

6. **Maturity Limit:** No greater than ninety (90) days from the date of issuance of the BAN, provided that the date of issuance succeeds the sale date by ten (10) business days or less; and if the date of issuance succeeds the sale date by more than ten (10) business days, the maturity limit shall be no greater than ninety (90) days from the sale date of the BAN;
7. **Credit Quality:** The Local Issuer (i) has at least one long-term debt rating from any one of the three major recognized NRSROs, and (ii) no such rating by any one NRSRO is lower than A- (or its equivalent); the BANs that are the subject of investment by the I-Bank do not require a rating by an NRSRO;
8. **Interest Rate:** The interest rate shall be determined pursuant to negotiation between the Investment Officer, in consultation with the Financial Advisor, on behalf of the I-Bank, and the Local Issuer;
9. **Prior Marketing Efforts:** The Local Unit must demonstrate, to the satisfaction of the Investment Officer, with respect to its BAN that is being evaluated for investment by the I-Bank, the occurrence of one or more of the following circumstances: (i) the Local Unit previously undertook a competitive sale of such BANs and either (A) no qualifying bids were submitted or (B) each qualifying bid proposed an interest rate that exceeded 250 basis points greater in spread than the most recent similar maturity BAN sale(s) in the State, as determined by the I-Bank in its sole discretion; or (ii) the Local Unit previously undertook a private sale of its BANs and serially engaged in discussions with no less than three different potential purchasers of its BANs (in each case, either (A) a prior purchaser of one or more BANs previously issued by such Local Unit or (B) an institution that is a regular purchaser within the municipal BAN private purchase market within the State), and (1) each of such institutions declined to purchase by private sale the Local Unit's BANs, or (2) those institutions that offered to purchase by private sale the Local Unit's BANs proposed an interest rate that exceeded 250 basis points greater in spread than the most recent similar maturity BAN sale(s) in the State, as determined by the I-Bank in its sole discretion; the occurrence of any one of the foregoing circumstances shall be referred to herein as a "Failed Sale";
10. **Application of the Investment Policy and Exceptions Thereto:** The provisions of the Investment Policy shall otherwise apply to the purchase by the I-Bank of Local Unit BANs, as described in this Addendum #1, with the exception of those sections of the Investment Policy that shall not apply to such purchases as and to the extent that the requirements set forth in such sections are inconsistent with accepted market practices for the purchase and sale of BANs via a private sale between a Local Unit

issuer of BANs and the I-Bank as a private purchaser thereof, which sections of the Investment Policy shall include, without limitation:

- (i) Section VII(1) (“Credit Downgrade”);
- (ii) Section VII(3) (“Authorized Financial Institutions”);
- (iii) Section VII(5) (“Competitive Selection of Investment Instruments”);
- (iv) Section VIII (“Safekeeping and Custody”); and
- (v) any provision of the Investment Policy (including, without limitation, the provisions of Section VI of the Investment Policy) that would otherwise establish a role for the Investment Advisor with respect to the investment by the I-Bank in BANs pursuant to the terms of this Addendum #1.

If there is a conflict between the terms of the Investment Policy and the terms of this Addendum #1, the terms of this Addendum #1 shall prevail.

II. **Execution; Closing:** Prior to an investment by the I-Bank, pursuant to its Local Unit BAN Investment Policy as set forth in this Addendum #1, of any funds held by the I-Bank, the following conditions precedent shall be satisfied:

1. Submission by the Local Unit applicant of an application in a form developed by Investment Officer on behalf of the I-Bank (the “Investment Application”).
2. Submission by the Local Unit applicant of a certification demonstrating compliance with the provisions of Section (I)(9) hereof relating to the prior marketing efforts of the Local Unit and the occurrence of a Failed Sale. Such certification of the Local Unit applicant shall be in a form deemed acceptable by the Investment Officer, shall be signed by an authorized officer of the Local Unit, and, in the case of clause (ii) of Section I(9), above, shall identify by name (including contact information) each of the three potential purchasers with which it has engaged in discussion. Such certification shall form a part of the Investment Application.
3. Submission by the Local Unit applicant of a certification (i) stating that the proceeds of its BANs will not fund any project that constitutes a private business use for purposes of the Internal Revenue Code of 1986, as amended, and the regulations promulgated pursuant thereto (the “Code”), and (ii) addressing any other factual questions that may be identified by Bond Counsel to the I-Bank for purposes of compliance with the Code. Such certification of the Local Unit shall be in a form deemed acceptable by the Investment Officer, shall be signed by an authorized officer of the Local Unit, and shall form a part of the Investment Application.
4. Satisfaction by the Local Unit applicant of (i) the BAN maturity limitation set forth in Section I(6), above, and (ii) the creditworthiness standards of the I-Bank applicable to the Local Unit applicant as set forth in Section I(7), above.

5. Receipt by the I-Bank of the approving opinion of bond counsel to the Local Unit (or a reliance letter with respect thereto) with respect to the BANs issued by such Local Unit and sold to the I-Bank, in a form deemed acceptable by the Investment Officer following consultation with Bond Counsel to the I-Bank and the Office of the Attorney General of the State.
6. Receipt by the I-Bank of such other certifications and closing deliverables as may be deemed necessary or appropriate by the Investment Officer following consultation with Bond Counsel to the I-Bank and the Office of the Attorney General of the State.

III. **Sale of Investment:** Those BANs that are the subject of investment by the I-Bank pursuant to the provisions of Section I and II, hereof, may be sold by the Finance Officer on behalf of the I-Bank, at the following times and in the following manner:

1. **Sale, Generally:** Such BANs may be sold, at the discretion of the Investment Officer, at any time prior to the maturity thereof, regardless of whether the state-wide emergency, as formally declared by the Governor of the State of New Jersey (as provided in Section I hereof), continues or has concluded. In engaging in any such sale of BANs, the Investment Officer shall act in furtherance of the introduction of liquidity into the BAN market within the State pursuant to the objectives of this Addendum #1, provided that such efforts do not conflict with the best investment interests of the I-Bank and the preservation of I-Bank funds invested in such BANs.
2. **Sale of BANs Individually or via Collective Portfolio:** The Finance Officer, pursuant to his or her discretion, may sell all or selected BANs held by the I-Bank (i) individually to one or more purchasers thereof or (ii) as a collective portfolio of all or a portion of its BANs to a single purchaser of such portfolio. The particular BANs selected for sale by the Finance Officer may be identified and chosen by the Finance Officer pursuant to his or her discretion.
3. **Sale by Negotiation:** The purchaser of any individual BAN or a collective portfolio of BANs, as applicable, shall be selected by the Finance Officer by negotiation pursuant to his or her discretion, but subject to the demonstration by such purchaser of one or more of the following selection parameters: (i) the purchaser possesses experience with municipal and county BAN markets; (ii) if applicable, the purchaser presents to the I-Bank novel concepts for the purchase of a collective portfolio of all or a portion of the BANs held by the I-Bank; (iii) the purchaser possesses sufficient capital for purposes of the proposed transaction with the I-Bank; and (iv) the purchaser presents pricing terms that serve the New Jersey BAN market liquidity objectives of the I-Bank pursuant to this Addendum #1.
4. **Necessity of Sale by Negotiation:** It is hereby deemed necessary that a purchaser of BANs pursuant to the terms hereof be selected by the Finance Officer by negotiation pursuant to his or her discretion, but subject to the above selection parameters, due to the following New Jersey BAN market considerations: (i) the need for the I-Bank to

- act in an expeditious and timely fashion in response to New Jersey BAN market developments, including, in particular, illiquidity developments in such market; (ii) the state-wide emergency, as formally declared by the Governor of the State of New Jersey (as provided in Section I hereof) that has resulted in illiquidity in the New Jersey BAN market, and the need for expeditious and timely action by the I-Bank, pursuant to the terms of this Addendum #1, as a response to such emergency; and (iii) the limited and fluid market for New Jersey BANs.
5. **Portfolio Rating:** In the case of the sale by the I-Bank of a collective portfolio of BANs, the Finance Officer, pursuant to his or her discretion, may obtain a rating of such portfolio from any one of the three major recognized NRSROs, to the extent such rating(s) will enhance the marketability of such portfolio.
 6. **Closing:** The sale of BANs pursuant to the provisions hereof shall satisfy such closing conditions precedent as shall be established by the Finance Officer, pursuant to his or her discretion, following consultation with Bond Counsel to the I-Bank and the Office of the Attorney General of the State.
 7. **Application of the Investment Policy and Exceptions Thereto:** The provisions of the Investment Policy shall otherwise apply to the sale by the I-Bank of BANs, as described in this Section III, with the exception of those sections of the Investment Policy that shall not apply to such sales as and to the extent that the requirements set forth in such sections are inconsistent with accepted market practices for the sale of BANs via a negotiated sale by the I-Bank to the purchasers described herein, which sections of the Investment Policy shall include, without limitation:
 - (i) Section VII(1) (“Credit Downgrade”);
 - (ii) Section VII(3) (“Authorized Financial Institutions”);
 - (iii) Section VII(5) (“Competitive Selection of Investment Instruments”);
 - (iv) Section VIII (“Safekeeping and Custody”); and
 - (v) any provision of the Investment Policy (including, without limitation, the provisions of Section VI of the Investment Policy) that would otherwise establish a role for the Investment Advisor with respect to the sale by the I-Bank of BANs pursuant to the terms of this Section III.

If there is a conflict between the terms of the Investment Policy and the terms of this Section III, the terms of this Section III shall prevail.

APPENDIX B

This page has been intentionally left blank

APPENDIX B.1

Loan Distribution Methodology

This page has been intentionally left blank

Loan Distribution Methodology

NJ CHAMP will offer loans at a one percent (1%) interest rate designed to significantly reduce the financing cost for a Borrower participating in the Program relative to the financing cost associated with independent financing by that Borrower.

Each Project financed through NJ CHAMP will receive a loan to finance the cost of engineering work and construction, as well as certain soft costs. Borrowers are not obligated to make repayments until the Effective Date, generally at construction completion, at which time the loan amount and schedule of repayment is set. This structure offers: (i) low-cost capital (through a flexible loan) from Project design through construction completion; (ii) generally, no debt service repayment until after construction completion; (iii) a loan maturity that is the lesser of the Project's useful life (as certified by the Project Sponsor's engineer) or 10, 15 or 20 years (30 years for low-income geographic areas as defined at 42 U.S.C. § 5135(m)(5)); and (iv) significantly lower interest rates on loans compared to independent financing by the Project Sponsor.

Project Sponsors may close on a loan for the entire eligible cost of the project after the I-Bank has certified at least one of the Project's contract(s) (e.g., engineering, construction management, or construction). Funds become available to the Project Sponsor for eligible Project costs upon loan closing and each individual contract certification and are disbursed upon the I-Bank's receipt and approval of requisitions and contractor invoices. Loan interest rates will be charged at a fixed rate of one percent (1%), consistent with the requirements of the STORM Act. The Borrower is generally not obligated to repay principal or interest during the term of the design and construction phases of the loan. Interest charges are accrued and may be capitalized for the term of the loan for up to six months after construction completion. The loan draw period is generally termed out at the earlier of construction completion or five (5) years. Payments of principal, interest, and fees commence after the Effective Date of the Loan.

Assuming the Project Sponsor has the requisite approvals in place, loans are available within as little as three (3) weeks of receiving (i) I-Bank contract certification, (ii) approval by the Director of Local Government Services, and (iii) satisfaction of NJ CHAMP's creditworthiness standards defined in the I-Bank Credit Policy. Loan maturity has a maximum term equal to 10, 15 or 20 years (30 years for low-income geographic areas as defined at 42 U.S.C. § 5135(m)(5)), as determined by the size of the Loan.

This page has been intentionally left blank

APPENDIX C

This page has been intentionally left blank

APPENDIX C.1

Project Proposal List Prioritization Methodology

This page has been intentionally left blank

Project Proposal List Prioritization Methodology

The following information illustrates the ranking and scoring system utilized by NJ CHAMP to evaluate each project financing application for prioritization.

#	Criteria	Potential Total Points
1	Project is located in an area designated as a Disadvantaged Community as defined by the Centers for Disease Control and Prevention (CDC) Social Vulnerability Index (SVI). Note: Areas with a CDC SVI greater than or equal to 0.60, as well as geographic areas within Tribal jurisdictions are considered disadvantaged.	25
2	Project is located in a low-income geographic area as defined in 42 U.S.C. § 5135 (m)(6).	25
3	Risk Reduction/Resilience Effectiveness – the project will reduce risk and increase resilience. Point Breakdown: 1. Creates a safer community by reducing loss of life and property (10); 2. Enables individuals to recover more rapidly from floods and other disasters (5); 3. Lessens the financial impact on the Treasury, States, Tribes, and communities (5)	20
4	Repetitive loss – project will mitigate repetitive losses related to two (2) or more documented insurance and/or FEMA claims	20
5	Repetitive loss – project will mitigate repetitive losses related to one (1) documented insurance and/or FEMA claim	10
6	Climate Change and Other Future Conditions - the project will enhance climate adaptation and resilience and be responsive to the effects of climate change ¹ (such as sea level rise ²) and/or other future conditions (population/demographic/land use, etc.)	10
7	Project aligns with the statutory objectives of the State’s current Hazard Mitigation Plan.	10
8	Incorporation of nature-based solutions for hazard mitigation. For more information on potential nature-based solutions, please reference Building Community Resilience with Nature-Based Solutions: A Guide for Local Communities .	5
9	Designation as an Economically Disadvantaged Rural Community (as defined in 42 U.S.C. § 5133(a) as a small, impoverished community), or a federally recognized Tribal government, or any community with a CDC SVI of 0.80 or higher.	5
10	Project addresses multiple hazards or related to a larger and/or externally funded Hazard Mitigation project.	5

¹. Climate change is defined as “Changes in average weather conditions that persist over multiple decades or longer. Climate change encompasses both increases and decreases in temperature, as well as shifts in precipitation, changing risk of certain types of severe weather events, and changes to other features of the climate system.” ([Fourth National Climate Assessment](#) applies definition set forth in the U.S. Global Change Research Program [glossary](#))

². May use any valid source that is based on recognized sea level rise estimation methods for sea level rise. Several federal government sources are available for relative sea level rise data along coastal areas. Some of these sources include, but are not limited to National Oceanic and Atmospheric Administration Center for Operational Oceanographic Products and Services’ Mean Annual SLR Trend Data (<https://tidesandcurrents.noaa.gov/sltrends/sltrends.html>) and U.S. Army Corps of Engineers Sea-Level Change Curve Calculator (Version 2022.72) (https://cwbi-app.sec.usace.army.mil/rcslc/slcc_calc.html).

This page has been intentionally left blank

APPENDIX C.2

Project Proposal List

Project ID Number	Loan Recipient	Benefiting Community(ies)	Benefiting Census Tracts	County(ies)	Project Title	Project Description	Projected Loan Amount
Unique Identifier for the proposed project as determined by the entity.	Name of the eligible proposed loan recipient.	Community(ies) experiencing hazard mitigation benefits. Please include any tribal governments or authorized tribal organization if applicable.	Census tracts where the project will mitigate natural hazards. Please use the 11-digit census tract code. Directions can be found in the Data Dictionary sheet.	County(ies) experiencing hazard mitigation benefits.	Unique name of the project.	<p>Provide a paragraph describing the following elements of the project:</p> <ul style="list-style-type: none"> How the project will reduce risk or increase resilience Major items in the scope of work The infrastructure being protected How the project will reduce risk to life and property Other items describing how the project mitigates natural hazards. A description of how the project conforms to the Hazard Mitigation Plan of the applicant and the local government 	The dollar amount of the proposed loan. If the loan amount equals or exceeds the statutory maximum loan amount of \$5 million, the cell will turn red.
	Boro of Highlands	Highlands, Middletown	Middletown : 8009; Boro of Highlands : 8001.01, 8001.02	Monmouth	Highlands & Monmouth Hills Flood Mitigation and Green Infrastructure Project	<p>Monmouth Hills Headwalls at critical points along the existing rip-rap swales that flank the unpaved roads will be installed, taking stormwater and redirecting it from the roadways into two (2) bio-swales to be lined with Flexamat Plus reinforcement. The swales will contain clay-core and concrete check dams at roughly 100' intervals which will create a series of bio-retention ponds to increase water quality and infiltration. Basin 1 will utilize the same stormwater interception method to pipe water into the basin, where 2' tall concrete check dams will create multiple bio-swales within the basin area, before discharging downstream into the existing Monmouth Hills stormwater infrastructure. During high intensity storms where runoff overtops all of the check dams located along the Flexamat swales, the water will be collected at the base of the hill by infiltration Basins 2 and 3. As the basins become full, water will leave via outlet control structures. Water entering the outlet control structure of Basin 2 will be directed into the existing stormwater infrastructure along Rt 36. The water entering the outlet control structure of Basin 3 will be piped across Waterwitch Ave, where it will enter a stilling basin to settle out suspended solids before it outlets to an additional bio-retention swale, leading into a 180,000 C.F. capacity underground stormwater storage system at Kawooskian Field. Route 36 During high intensity storms, the 180,000 C.F. underground storage system to be installed at Kawooskian Field will discharge stormwater into an outlet control structure where it will be piped across Rt 36 to connect with the existing 30" stormwater pipe running down Waterwitch Ave into the Borough. The connection will be constructed by Horizontal Directional Drilling (HDD) a bore hole at depths well underneath the existing network of sanitary lines, storm sewer pipes, and other utilities present under the road to install a 36" Polypropylene pipe. The 36" pipe will be connected to the storm system via a modified double 'B'-2' inlet. Snug Harbor A regional stormwater pump station will be constructed and installed at Snug Harbor, adjacent to Bay Ave, inside the top end of the man-made canal. The pump station is to be pre-cast vertical column and is to include triplex pumps to accommodate for 72,000-gpm flow (140-cfs). This will require thirty (30) new inlets and associated pipe work to carry the flood waters to the station. The pre-cast pump station will be set on timber pilings and have a single 36" PVC discharge pipe to the Shrewsbury River. The inefficient impractical man-made canal, along Snug Harbor Dr, out to the river will be eliminated. After demolishing the old timber failing bulkhead, and filling-in the entire canal, man-made constructed wetlands, or a Tall Grass Swale with a sand filtration system if wetlands species cannot be attainable, will be built. The goal is to create the largest area of low-lying tall grass area, roughly 18' below the surrounding asphalt drives and parking lots, to create a surface water cleansing feature. This tall grass area will also gain Green Infrastructure Status for 'Carbon Reduction.' This will require the disconnecting nine (9) outfall pipes that discharge into the canal and the installation of a network of fittings and 24" Polypropylene pipes connecting all outletting pipes together with one discharge in the Shrewsbury River. This pipe system will discharge down at the River, and during a high tide storm, this water will backflow into the new Storm Pump Station, rather than back up and flow into the streets. At Final Engineering, a DIVERSIONARY DESIGN SCHEME will be implemented that will allow surface water flows from the community and Huddy Park to 'free flow' past the Pump Station, down a new 24" culvert, out through a new Duck Bill Check Valve, into the river. Once the diversions breach a specific crest height, at the diversionary box, the stormwater will begin filling up the pump station and effectively start the Pumping Process. A total of thirty (30) new type 'B', 'Double-B' and 'E' inlets will accommodate for roughly 200-cfs of vertical inflow into the pipe network, thus providing ample flow to a new triplex pumping station. The new inlets are to be installed at the low points along Bay Ave which will increase the capacity into the gravity system to feed the pump station and adequately pump out all the collected stormwater. All electrical components will be housed in a structure that is above the 500-year flood elevation to ensure all electrical components that are not wet-landproofed/designed for submersion stay intact during a flooding event. A generator would be installed inside the elevated pump house and would be natural gas so that liquid fuel is not required during a storm/power outage, designed to allow for pumps to be operational during a power outage event. Valley Street The force main will be upgraded by removing the existing force main that is buried in sand and installing a new force main that is substantially raised above the sand line so that there is free discharge. The force main will be supported with piles since it will be along the tidal shoreline. A drainage system that will run from east to west along Bay Ave from Valley St to Atlantic St will be installed. This system will then connect to the existing system, allowing a more efficient collection and conveyance of runoff to the pump station. Drainage structures along this roadway will allow for runoff to be collected more locally and therefore will alleviate the high flow and flooding that accumulates at the low point of Bay Ave and Valley St intersection. North Street The existing North St Pump Station will be upgraded to a duplex station with new composite bulkheading to reduce flooding along North St (this watershed takes flood waters from as far away as Veterans Park). A total length of roughly 120-linear feet of old bulkheading will be replaced with composite materials to establish a 'top of bulkhead' elevation of 8.00 in this area, creating a minimum bulkhead elevation of 8.00 in the consistent with neighboring private properties. The old pump station is a single pump on two floats. The old electric service and floats have been completely removed and replaced with a new 600-amp 480-volt service in an electrical hut at Elevation 15.00. More inlets will be added at the low point along Bay Ave which will increase the capacity into the gravity system to feed the pump station and adequately pump out all the collected storm water. Surface waters coming down Miller St, Monmouth Hills, and Rt 36 must be collected via fourteen (14) new type 'B' inlets along Bay Ave and Miller St and must be piped to the upgraded station. The station will be designed to accommodate for roughly 30,000 to 40,000-gpm (80 to 110-cfs). The pump station would likely use a duplex vertical column pump with two (2) 18" discharge lines, overlaid, to the river. The capacity, overall structure size, pump size, and discharge pipe size would be determined during the design phase by the calculated runoff area and flow that is collected by the storm system. The existing pipes running along North Street is back-pitched, roughly 4" in the wrong direction. This pipe will need to be removed and upgraded with a 36" diameter pipe at a positive slope, down to the newer, deeper pump station, so any stormwater collected will maintain positive fall to the station. A new auxiliary generator will be installed as well, at Elev 15, attached to the new pile supported structure in place today. It is critical for the bulkhead in this area to be aligned at a higher elevation. The current bulkhead is very low in elevation compared to the surrounding bulkheading. For this reason, and to aid in the actual operation of the system, CED recommends installing new bulkhead along this property and the adjacent to meet the top elevation of all other bulkheading along this waterway.</p>	\$4,011,320.00
	Jersey City	Jersey City	61.01	Hudson	McGovern Park Resilience Project [Drainage Improvements / Green Infrastructure]	<p>The proposed project mitigates stormwater flooding in the Greenville neighborhood of Jersey City, New Jersey. The City of Jersey City (City) has a long history of flooding issues and combined sewer overflows. The City was severely damaged during Hurricane Sandy and Ida. Sandy caused evacuations of low-lying areas, \$11.5 million in housing related claims, and over \$12 million in lost tax rates. FEMA has issued disaster or emergency declarations for Hudson County for fourteen flood-related disasters from 1954 to 2019 for disasters classified as one or a combination of the following disaster types: hurricane, tropical storm, Nor'easter, snowstorm, severe storms, flooding, inland and coastal flooding, coastal storm, high tides, heavy rain, and severe storms. According to NOAA, 123 freshwater flooding events were reported in Hudson County between 01/01/1950 and 08/31/2021. The mitigation project is located at McGovern Park, sitting one block (0.2 mi) from the Newark Bay waterfront. This area is currently served by two existing sewers. The area closest to McGovern Park, located on Sycamore Road between Briarwood Road and Delmar Road, is connected to the combined sewer system by a 15" pipe which drains to a 66" combined sewer pipe and then to a 96" combined sewer pipe that terminates at a combined sewer overflow outfall on Mina Drive, and the area to the north of the park drains directly to the 96" combined sewer on Mina Drive via a 21" combined sewer pipe. The upstream end of the 96" combined sewer receives flow from a large portion of the Greenville neighborhood, extending North to Bartholdi Avenue and East to Old Bergen. Jersey City's combined sewer system collects both sewage and surface water and can be easily overwhelmed during a rain event, resulting in these two sources combining and being discharged into nearby waterways. This negatively impacts waterways and poses public health risks. The combined sewer overflows (CSOs) can also result in flooding of basements. More frequent extreme precipitation due to climate change, combined with low-lying areas and increased development, will only exacerbate this issue throughout Jersey City, and place residents and critical facilities at higher levels of risk. This project seeks to reduce the risk of flooding in Jersey City through the use of green infrastructure. The project will install a stormwater park with precast storage systems placed below ground that can store large volume of water cost effectively. The sub-surface storage systems will provide at least 30,500 cubic feet of storage. This proposal for a resilience project at McGovern Park was born partially out of the Resilient Northeastern NJ Initiative. Resilient Northeastern NJ is a regional resilience planning initiative that is developing a resilience action plan for the cities of Jersey City, Newark, Hoboken, and Bayonne, with project partners Hudson County, Ironbound Community Corporation, and HOPES CAP. The initiative has a heavy focus on community engagement, and three region-wide community meetings and various partner meetings, cross-region stakeholder meetings, and other individual interviews have been conducted as of the time of this application. Feedback was also collected through surveys, social media, email, and voicemail. The proposed McGovern Park project directly responds to feedback from community members through Resilient Northeastern NJ about the desire to see stormwater management integrated into public spaces such as parks, so that parks can be multi-purpose community assets. The project will also alleviate combined sewer overflows, which are a water quality and public health concern for many community members, and also the focus of the Jersey City Municipal Utilities Authority (JCMUA) Long-Term Control Plan (LTCP) for combined sewer overflows. Furthermore, the project aligns with other planning initiatives, including the 2020 Hudson County Hazard Mitigation Plan (HMP) and the Jersey City Adaptation Master Plan; the HMP identified resilience parks as a priority for the City of Jersey City, and the Country Village neighborhood in which the McGovern Park is located is a priority area identified in the Jersey City Adaptation Master Plan. Refer to attachment "JC McGovern Park BRIC Evaluation Criteria" for further details on how the project aligns with BRIC FY22 qualitative and technical criteria.</p>	\$1,211,569.61
	Borough of Seaside Park	Borough of Seaside Park	7280.02, 7280.01	Ocean	Seaside Park Wave Energy Dissipation/Erosion Control Project	<p>This project will consist of a 6.0-foot NAVD 1988 elevation dune crest that will be 4 feet above the Bayview Avenue street elevation and 50 feet in toe to toe width starting at Bayview Avenue's western curb line. This dune will blend in with the remnant dunes at both ends of the segment. Then a sand beach above mean high water will extend into the bay for 30 additional feet to a new mean high-water line followed by a 1:10 slope down to the existing bay floor at that point. The dune will be comprised of 25,800 cubic yards of imported sand. Public access will be afforded by pedestrian walkways over the dunes onto the beach. Each public access entrance will be constructed using roll-out beach access walkover matting. This bayshore segment is entirely municipally owned and will remain perpetually in public ownership with access allowed at all times. No fixed structural development will be anticipated on the restored beach or dunes. Traditional dune vegetation will be planted and protected from trespass with 4,125 linear feet of dune fencing. Offshore in shallow water that dominates this part of Barnegat Bay, a staggered orientation series of HESCO steel baskets filled with ballast stone and face-lined with oyster cultch is proposed to be installed along the segment as two back to back rows of baskets 10 feet wide by 30 feet long oriented to generally face the northwest wave approach direction and a second single row of HESCO baskets in parallel formation to the front rows, but set back landward by 50 feet. There will be 100-foot gaps between the sets of baskets to allow some wave passage and allow fish and horseshoe crabs or diamondback terrapins access to the sand beach habitat. This "breakwater" will submerge at high tide and be exposed at low tide. Oysters will set on both faces, the ends and the top surfaces of the reef gaps and eventually weld the entire array into a single mass of organisms in each of the basket units. Installation would be from a barge using a small crane to fill and place each basket unit into the formation fronting the Bayshore. The proposed reef baskets will be protected by 8" diameter, 10' long wood pilings marked with reflective markings to warn boaters in the area. Included in this project is the replacement of all type "E" inlets and the extension and replacement of all stormwater outfalls using 12" diameter Ductile Iron Pipe, these outfalls will be equipped with 12" inline check valves. In addition, the outfalls will be supported using outfall pipe support assemblies.</p>	\$687,430.00
	Town of Rochelle Park	Township of Rochelle Park	500	Bergen	Township of Rochelle Park - Reconstruction of Sanitary Sewer Pump Station	<p>The current pump station is located within the floodway of the Saddle River, during extreme storm events the pump station is subject to the possibility of severe flooding. The pump station is a critical facility of the Township of Rochelle Park. Failure of the pump station would have catastrophic consequences to the Township of Rochelle Park, it's residents and the environment. In advance of these flooding events the Township's Department of Public Works (DPW) forces attempt to protect the facility from flooding by constructing temporary protective earthen berms around the facility. During these events the pump station is not able to manage the flow directed to it due to a dramatic increase in flow, due to the pumping capacity of the station and due to the increase in infiltration into the system. In addition, the Township has had the occasion where the pumps fail due to flooding of the station. During these times the Township is forced to discharge raw untreated sanitary sewer flow directly into the Saddle River. The pumps and the pump station are approximately 60 years old and have reached the end of their useful life. A realistic issue that could occur is that the pump station fails due to flood damage and the station becomes surcharged. The surcharging of the station could eventually lead to a severe back up in the sanitary sewer system resulting in the back-flow of raw sewerage into residential homes and businesses. Attached, please find a copy of the Engineering Report – Berdan Street Sanitary Sewer Improvements, prepared by Boswell Engineering, dated April, 2020. The Township continues to invest capital into their sanitary sewer system to improve the functionality of the system. Yearly, the Township spends hundreds of linear feet of sanitary sewer pipe to reduce the amount of storm and ground water infiltration entering the sanitary sewer system. The Township must replace the existing pump station with a new facility. The new facility will be designed and constructed in accordance with ASCE 24-14, or latest edition, NJAC 7:34A-23 (Technical Requirements for Treatment Works Approval Applications), and all State and local building codes which will require the replacement of the old outdated pumps with new, more efficient pumps that can meet the demand required. Based on the anticipated flow directed to the pump station, see Berdan Street Sanitary Sewer Report attached, two (2) full time pumps cycling on and off will be required. The project will require the installation of a SCADA System which will collect and analyze data from the pump station equipment so the pump station can be operated correctly. In addition, the new pump station will be constructed outside of the floodway and will be located above the 500-year flood elevation of the Saddle River. The pump station will also have to be equipped with an emergency backup generator to run the pumps and controls in the event of a power outage. All improvements will conform with all applicable federal, state and local floodplain and land use laws and regulations including 44 CFR 60.3. These improvements will resolve the matter of severe flooding of the pump station. These improvements will also eliminate the need to discharge raw sewerage into the Saddle River during flooding and surcharge times. The Community Lifelines that this project will protect are water and the health of it's residents and the environment. This sub-application contains information responsive to FEMA-identified deficiencies in previous years' submission, particularly the Benefit-Cost Analysis (BCA).</p>	\$648,786.50
	Bergen County Utilities Authority	City of Hackensack	231, 232.01, 232.02, 233.01, 233.03, 233.04, 234.01, 234.02, 235.01, 235.02, 236.02, 236.01	Bergen	Bergen County Utilities Authority - Flood Mitigation of Pink Street Pump Station	<p>The Bergen County Utilities Authority provides wastewater treatment services to the 52 towns in Bergen County, NJ. As part of their wastewater collection and transmission network, they have several pump stations that convey wastewater to the treatment plant. The Pink Street pump station serves the Hackensack community and is located near the Hackensack River, with a portion of the property situated in both the 100- and 500-year flood zones. The pump station is located in an area of medium to high social vulnerability (Census Tract 34003023601 Bergen County, New Jersey, overall SVI 0.7218). The facility is vulnerable to flooding given its location and has previously experienced electrical and motor damage, as well as impacts to the outside transformer and generators during Hurricane Sandy. Sea level rise as a result of climate change poses a significant flood risk to the local station. To properly mitigate risk for future flooding at the Pink Street Pump Station, the pump station site will be protected by dry floodproofing with stormwater pump station. Pursuant to BRIC regulations, all activities proposed and completed will be in compliance with the federal, state, tribal, and local floodplain and land use laws and regulations included in 44 CFR § 60.3. The site would be protected by a 314 foot long, 5.5 foot high free standing floodwall around the perimeter of the pump station to meet the goal design elevation of 14 feet NAVD88. The proposed floodwall is a reinforced freestanding concrete T-wall, with a concrete footing and augercast supporting piles. The T' floodwall will have an approximate thickness of 12-inches with the concrete footing to be 8' in width and 3' in depth. Of the 8 foot wide footing, the protected side of the floodwall will have a 2' wide base, and the flood side of the floodwall will have a 5' wide base. The footing will be supported on continuous reinforced concrete pile cap. The extent, dimensions, and depth of the piles will be determined and presented in a geotechnical investigation and report to be conducted in the future. With the floodwall in place the pump station would be protected from flood waters entering the dry pit through the louvers and possibly disabling the pumps, uplifting the fuel oil tank that supplies oil to the emergency generator or short circuiting the transformer. To access the site, a sliding flood gate will be incorporated into the design of the floodwall. Special detailing will be provided at the flood gates by providing concrete piers and enlarged pile caps capable of resisting the summation of the vertical and lateral reactions of the gates. The freestanding wall would also maintain the existing building façade to support aesthetics of the space. The flood wall will be protected from vehicular traffic in the parking lot by a series of bollards lining the exterior of the flood wall. The open area between the pump station and the flood wall will be protected by installing a storm pump, which will direct standing rainwater and groundwater seepage away from the base of the pump station and entry points of the building. The storm water pump station will consist of a concrete wet well, with a submersible flood pump, electrical platform, and all associated electrical equipment, piping and appurtenances. The rainwater sump pump is included for normal rain events and will be directed to nearby storm sewers outside the extents of the floodwall. The flood pump will become operational at a set elevation and is designed to pump directly over the adjacent floodwall into the external floodwaters. Pumps will be accessible through hatchways in the wet well top slab. The flood pump station will not have an installed spare. BCUA existing SCADA system will be modified to monitor critical elements such as the storm water pump. This approach would protect the existing structure as noted previously while ensuring the facility maintains full operation to critical business during flood hazard events. The design takes into consideration applicable local building codes. Hackensack, NJ is subject to New Jersey's Uniform Construction Code and has therefore adopted the State's building code, International Building Code 2018 with NJ edits, which applies to both commercial and residential properties. The building code has a BECEs classification of 3. Permits applicable to the construction of the floodwall at the Pink Street Pump Station include: Soil Erosion and Sediment Control Certification: (N.J.A.C. 7:290-1.1) – Soil Erosion and Sediment Control Plan Certification from the Bergen County Soil Erosion District is required if the anticipated land disturbance of the project exceeds 5,000 square feet. The project will benefit multiple community lifelines, including food, water and shelter and safety and security. The project will provide direct benefits to the community by reducing loss of wastewater service and protecting the wastewater pump from hazards. Additionally, the project will provide community safety as the mitigation measures will reduce the likelihood of flooding and sewer backups in the community served by the Joint Meeting pump station. By mitigating the pump station against flooding, the pump station can continue to provide wastewater services to the community and reduce the risk of flooding and sewer backups. All activities under this project will be in conformance with all applicable federal, state, tribal, and local floodplain and land use laws and regulations including 44 CFR § 60.3 (floodplain management criteria). See the attached Preliminary Engineering Report for a more detailed explanation of the scope of work.</p>	\$437,813.12
	Township of Brick	Township of Brick	7392, 7143	Ocean	Township of Brick Roadway Elevation Project	<p>Brick township has a recurrent flooding problem. There are several roadways within the Normandy Beach, Shore Acres and Seawood Harbor that are below the moderate flood elevation of 2.4 feet (NAVD88) which makes them impassable during high tide and severe storm events. To address the situation, the Township proposes to raise the elevation of the existing roadways to a minimum elevation of 2.4 feet. To accomplish this additional fill and asphalt pavement will need to be provided over and adjacent to the existing roadway to increase the elevation of the road. Along the roadway, additional adjustments are also required to include berm construction, raising of utility lines, removal and replacement of power and telephone lines, curb, driveway, lawn, and decorative stone. The project also includes improvements to the existing storm sewer system to include the installation of outfall check valves on thirty-four (34) discharge pipes within these communities and upgrades to a number of associated storm drain pipes. Please refer to the Project Narrative attachment for further details for each location (Normandy Beach, Shore Acres, and Seawood Harbor).</p>	\$1,997,769.04

Project Type	If "Other" for the project type, please manually enter the hazard(s)	What hazard is this project mitigating?	If "Other" for the hazard mitigated, please manually enter the hazard(s)	What community lifeline does the project stabilize?	If this loan will be used towards the non-federal cost share for a grant under another HMA grant program, which HMA grant program will it support?	Has the project already started?	Does the project include any work that will be subject to Environmental Planning and Historic Preservation (EHP) review?	For non-revenue generating projects, please identify the local government's revenue stream to support projects.	Is the community a low-income geographic area as defined in 42 U.S.C. 5135 § (m)(6)
Select a dropdown project type that best aligns with the proposed project. If not listed, input a project type manually.	Some projects may be comprehensive and incorporate multiple project types. Insert the project types in the cell below.	Select a hazard from the dropdown. If not listed, input a project type manually.	Some projects may be mitigating multiple hazards. Insert the hazards in the cell below.	Select a community lifeline from the dropdown.	Select a HMA program from the dropdown.	Projects where actual physical activity, such as groundbreaking, construction, or demolition has commenced prior to completion of EHP review, are ineligible. Select from the dropdown.	Projects that require EHP review include any ground disturbing studies or construction projects including but not limited to retrofits, acquisition of flood-prone properties, hazardous fuels reduction, and flood risk reduction projects.	Loan recipients are required to establish a dedicated source of revenue for repayment of the loan per 42 U.S.C. 5135 § (f)(1)(A)(ii).	Loan recipients that are low-income geographic areas can receive different loan terms. The data dictionary sheet has a link for calculation guidance.
Stormwater Management - Diversions		flooding	severe storms, including hurricanes, tornados, wind storms, cyclones, and severe winter storms	Safety and Security	BRC/FMA	No	Yes		No
Floodwater Storage and Diversion		flooding	severe storms, including hurricanes, tornados, wind storms, cyclones, and severe winter storms	Food, Water, Shelter	BRC/FMA	No	Yes		Yes
Infrastructure Protective Measures		storm surges	flooding	Transportation	BRC/FMA	No	Yes		No
Water and Sanitary Sewer System Protective Measures		flooding	severe storms, including hurricanes, tornados, wind storms, cyclones, and severe winter storms	Food, Water, Shelter	BRC/FMA	No	Yes		No
Flood Control - Floodwall		flooding	severe storms, including hurricanes, tornados, wind storms, cyclones, and severe winter storms	Food, Water, Shelter	BRC/FMA	No	Yes		Yes: 235.01, 236.02
Infrastructure Protective Measures		flooding	severe storms, including hurricanes, tornados, wind storms, cyclones, and severe winter storms	Safety and Security	BRC/FMA	No	Yes		No

Project ID Number	Loan Recipient	Benefiting Community(ies)	Benefiting Census Tracts	County(ies)	Project Title	Project Description	Projected Loan Amount
Unique Identifier for the proposed project as determined by the entity.	Name of the eligible proposed loan recipient.	Community(ies) experiencing hazard mitigation benefits. Please include any tribal governments or authorized tribal organization if applicable.	Census tracts where the project will mitigate natural hazards. Please use the 11-digit census tract code. Directions can be found in the Data Dictionary sheet.	County(ies) experiencing hazard mitigation benefits.	Unique name of the project.	<p>Provide a paragraph describing the following elements of the project:</p> <ul style="list-style-type: none"> How the project will reduce risk or increase resilience Major items in the scope of work The infrastructure being protected How the project will reduce risk to life and property Other items describing how the project mitigates natural hazards. <p>A description of how the project conforms to the Hazard Mitigation Plan of the applicant and the local government</p>	The dollar amount of the proposed loan. If the loan amount equals or exceeds the statutory maximum loan amount of \$5 million, the cell will turn red.
	City of North Wildwood	City of North Wildwood	213	Cape May	Wildwood Bayside Community Flood Mitigation	The City of North Wildwood is applying for a FEMA Grant to construct an elevated living shoreline that will provide much needed protection to residents and businesses in the southwest portion of the City. The North Wildwood Bayside Community Flood Mitigation Project will include a land berm along the bayfront from West 20th Avenue (39.000443, -74.810330) to West 26th Avenue (38.99737, -74.814491). Also, the project includes a land berm at the end of West 16th Avenue from (39.003896, -74.809127) to (39.003800, -74.809261) and West 17th Avenue from (39.003484, -74.809958) to (39.003413, -74.810086) as shown on the attached Plan (NWW-C-002_Plans 2021 FEMA Grant Application). The City is drafting an ordinance that will require private property owners to build bulkheads and berms to provide complete perimeter protection. The City anticipates introducing this ordinance on January 18, 2022 with adoption on February 15, 2022. This project will include cooperation with the NJDOT Office of Maritime Resources. The City has met with NJDOT on several occasions and most recently on October 14, 2021 (the agenda for this meeting is attached). NJDOT Office of Maritime Resources is committed to this project. As noted on Appendix D – Required Material Calculations is attached. The material will be dredged by NJDOT from Beach Creek 1, Beach Creek 2, and Otten's Canal and Lagoon and placed in transported by NJDOT. These areas will be dredged in order to keep a navigable depth as required of NJDOT. The dredge materials would be pumped into geo bags and then covered with clean fill and Native vegetation. A total of 69,300 cy of material is needed to construct the living shoreline, and of which 31,957 will be dredge material and the remainder will be clean fill. The entire dredging and dredge placement operation will be complete and funded by NJDOT. A map of the areas to be dredged by NJDOT is attached as well. Dredging will not occur in wetlands and will only occur in State maintained waterways. Berm encroachment in wetlands areas will be limited and actions will be taken to minimize disturbance and native vegetation will be added. The berms will be completed to a final elevation of 8.00 NAVD88 and will be 15 feet at the base with a 2:1 slope as shown in the attached plans. There are minimal trees in the area and actions will be taken to limit disturbance of the few trees that may exist. At this elevation it will provide protection from water levels up to a 50-year storm, according to the most recent FEMA flood data released in 2017 as provided in the attached engineer's report. The goal of this project is to create a barrier between the back bay and the southern portion of the City of North Wildwood. The project is feasible and can be completed once permits are obtained and funding is available. Through cooperation between the city, the NJDOT, and private property owners, elevating the barrier will reduce damage from extreme high tides during storm events. The protection will prevent flood waters from damaging property and reduce flooding in the roadways. The roadways are used for travel and include infrastructure such as sanitary sewer that could be damaged during a flooding event. Residents in this area use the roadway for access to the County designated emergency access route along New Jersey Avenue. The proposed improvement includes a vegetated elevated shoreline along the bayfront for stormwater protection. The shoreline is a green approach than a typical hard shoreline such as a bulkhead. This will allow for native vegetation and no impervious material. The innovative technique used in this project includes the use of geo bags to contain the dredge material and stabilize the berm. This technique has been used with much success along the ocean front. In addition, this project will reuse dredge material, a public policy direction that has only recently been embraced by the NJDEP and NJDOT as a means to advance resiliency.	\$880,001.88
	Township of Berkeley	Township of Berkeley	7280.01	Ocean	Berkeley Township Flood Mitigation Assistance (Application 2)	There are two (2) houses applying for the grant. 131 22nd Avenue and 203 Sprague Avenue. The structure elevations will consist of the elevation of the existing structures on pilings to a minimum first floor elevation of two (2) feet above the base flood elevation per FEMA's Emergency freeboard requirements. The methodology is to raise the structures above the base flood elevation as indicated on the most restrictive map plus two (2) feet of freeboard to the lowest structural member as required for Coastal Flood Zones. The existing structures will be elevated within the existing footprint and should provide flood protection for up to 30 years. This activity will also include engineering design, architectural/structural plans, soil analysis, survey, new elevation certificate, plot plans, site preparation, and material disposal. Please note, the Township of Berkeley's requirement for freeboard is to elevate the structure above the base flood elevation as indicated on the most restrictive map plus one (1) foot of freeboard, but the FEMA grants will require the structures to abide by FEMA's Emergency freeboard requirements of two (2) feet above the base flood elevation.	\$73,326.00
	Borough of Millstone	Borough of Millstone	538.01	Somerset	FMA 2021 - Elevation of one flood-prone structure in the Borough of Millstone	The Borough of Millstone is vulnerable to riverine flooding. Flooding is typically the direct result of thunderstorms, heavy rains, tropical storms, and hurricanes. Most recently, Millstone Borough and its residents were devastated by Hurricane Ida, which resulted in substantially damaged homes and displaced residents requiring the need for federal disaster assistance for individuals and families including rental assistance, essential home repairs, personal property losses, and other serious disaster-related needs. The proposed project is to request FEMA FMA funding to elevate one NFIP-insured property and determined to be substantially damaged by the Borough. Refer to the attached RL and SRL information provided by FEMA Region 2 (Somerset Repetitive Loss Record 12.15.21.xlsx). The detailed scope of work, schedule and cost estimate are attached to this application (Attachment C - SOW_Millstone2021FMA.pdf). The property owner has provided the following documentation (attached): 1) Proof of NFIP flood insurance; 2) signed Notice of Voluntary Interest; 3) 4 photos of their structure (one of each side); and 4) signed FEMA's Declaration and Release. Property Address: 1429 Millstone River Rd. Millstone NJ / Somerset	\$72,038.75
	Borough of Manville	Borough of Manville	514, 515, 516	Somerset	Manville Borough: Acquisition of 100 Residential Structures (Substantially Damaged)	The remnants of Hurricane Ida flooded the Borough of Manville to record levels in all three floodplains (Raritan River, Millstone River, and Royce Brook) on September 2, 2021. In accordance with the NFIP responsibilities, the Borough began the process of substantial damage assessments. By the end of October over 200 substantial damage letters were issued to residential property owners. Of these approximately 100 are NFIP policy holders (based on October 2020 data). Many are also Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties (prior to Ida claims). This proposed activity will result in mitigation of these properties, most of which will be acquired and demolished. A few have begun the process of elevating and have initiated their ICC claims; this application proposed to assist them with covering their expenses beyond what ICC covers. It is further understood that FEMA forms typically required as part of this application process are not included. It is anticipated that these forms will be obtained during grant management. The Borough understands that FEMA is not intended to be a post-disaster grant program. However, the timing of the grant cycle fit with the post Ida flood work. The vast majority of flood victims wish to be bought out, and we plan to begin gathering documentation during pre-award. Also, we believe we will have new NFIP claims data in the next few months and can refine our list by then	\$7,290,000.00
	Borough of Longport	Brigantine, Cape May, Downe, Longport, Margate, Ventnor	Brigantine : 101.01, 101.02, 101.04, 101.05; Cape May : 220; Downe : 103.02; Longport : 135; Margate : 130, 131.01, 131.02; Ventnor : 132.01, 132.02, 133.01, 133.02	Atlantic	South Jersey Home Elevations	This application includes properties located in Brigantine (B) Cape May City (CMC), Ventnor (V), Margate (M), Longport (L) and Downe Township (D). A total of 21 applications of which three meet the definition of Severe Repetitive Loss and seven meet the definition of FMA - Repetitive Loss Properties. There are also three alternative properties provided. In addition, there were thirty alternative properties approved in the 2019 FEMA FMA application and if these properties cannot be funded through the 2019 application, they will be funded potentially through this 2020 FEMA FMA application. The property owners will be fully responsible for the project, hiring of the contractor and for paying any local matching costs. The Borough of Longport will hire professionals for grant management using the Management Fee to cover these costs. All elevations will fully comply with the City's Flood Protection Ordinance, NFIP Standards in 44 CFR Part 60, and in ASCE 24-14 or the latest edition. All permitting, design, and construction will be the responsibility of the property owner. All homes will be elevated to at least BFE +1 foot, and most will be lifted higher in full compliance with the local flood plain ordinance.	\$671,492.25
	City of Ocean City	Ocean City, Sea Isle City, Stone Harbor, Upper, West Wildwood	Ocean City : 201.01, 201.02, 202.01, 202.03, 202.06, 202.05; Sea Isle City : 208; Stone Harbor : 209.01; Upper : 203.01; 203.02, 204; West Wildwood : 214	Cape May	Elevation of 18 Residential Structures in Ocean City, Sea Isle City, Stone Harbor, Upper Township, and West Wildwood	Ocean City, on the behalf of the participating municipalities of Ocean City, Sea Isle City, Stone Harbor, Upper Township, and West Wildwood is applying for FEMA FMA grant funding to elevate 12 NFIP-insured properties located in the municipalities of: Ocean City, Sea Isle City, Stone Harbor, Upper Township, and West Wildwood. These residential flood-prone properties are in the SFHA, as depicted on the 2017 Effective FIRMs. Of the 12 properties, based on information provided by FEMA in October 2020, 4 properties are identified as NFIP/FMA SRL properties, 4 properties are identified as NFIP RL properties, and all are insured by the NFIP. More than three-quarters of the proposed properties in this application are SRL or RL identified properties by the NFIP. Out of the 12 properties, based on the FY 2020 FMA Grant Program fact sheet definition of RL and SRL properties, 4 properties are identified as FMA SRL. The regional collaborative partnership between the communities to mitigate repetitive loss structures in their respective municipalities displays the ongoing commitment to address repetitive loss properties and mitigate existing properties from becoming severe or repetitive loss identified properties. New Jersey requires, at a minimum, that structures be elevated to the current regulatory NFIP BFE plus one foot. Each home will be elevated to the most restrictive FEMA maps. The FEMA Effective FIRM maps dated 10/05/2017 were used for establishing BFEs for Cape May County. The following are the codified local elevation requirements for the subject communities, based on the BFE's established in the 2017 FEMA Effective FIRMs for Cape May County, unless otherwise noted: - Ocean City - 2' above BFE - Sea Isle City - A Zones elevation of 11'; V Zones elevation of 14' • Stone Harbor - 2' above BFE or 11' (whichever is highest) • Upper Township - 2' above the BFE • West Wildwood - 1' above the BFE Any encroachments, including fill, new construction, and substantial improvements, will not result in any increase in flood levels. All elevations will be designed in accordance with the NFIP standards in 44 CFR Part 60 and in accordance with ASCE 24-14, or latest edition, or its equivalent as minimum design criteria as stated in the 2015 HMA Guidance Addendum. Ocean City will be the sub-applicant for the proposed project and shall hire a Project Management Coordinator to manage and oversee the project tasks, and to assist homeowners. Each homeowner will individually manage the elevation of their home, including hiring and payment of all contractors. The homeowners will be reimbursed based on documentation of allowable expenses. Ocean City, with the assistance of the Project Management Coordinator and participating municipalities, will coordinate and submit reimbursement requests to the State for all eligible costs and liaise with homeowners throughout this process. Additionally, the homeowners agree to maintain a flood insurance policy for the lifetime of the structure. The property will have a deed restriction stating that flood insurance coverage must be maintained during the life of the property regardless of transfer of ownership of such property. Cost estimates for this project were derived from recent residential elevations in Cape May County and an itemized estimate (from 2019) provided by a contractor with extensive experience with completing home elevations. Those costs were then escalated by 3.4% to account for CPI inflation.	\$394,869.00
					Project Scoping Climate Risk Assessment for the "LAND" bundle (Holland and Lincoln Tunnels)		
	Borough of Seaside Heights	SEASIDE HEIGHTS, BOROUGH OF	7280.02	Ocean	Flood Mitigation Project Scoping	The Borough experiences regular flooding due to moon tides combined with above average rainfall intensities, low elevation, and ineffective stormwater infrastructure. The focus will be placed on the flooding that occurs on the bay side of the Borough, where other contributors to the flooding problem include the potential for sea level rise and severe storms which are expected in frequency and intensity due to climate change. The specific area identified is adjacent to the Sunset Beach public recreation area along Bayside Terrace and Hering Avenue. The Borough has communicated this issue to professional engineers, shared information, and discussed rough cost estimates during a Borough "tour" of areas susceptible to flooding but did not reach the project phase due to insufficient data and high potential cost. These issues, along with the immense amount of rainfall received on the barrier island during major storms, continually threaten safety with flooding roadways and property. Maintaining access for emergency vehicles and passable evacuation routes during a natural disaster is also a major concern. Applying for and receiving funding from FEMA will provide the necessary monetary support that is needed to contract the technical data studies and analysis to address the flooding and build resiliency for the Borough. The Borough will be exploring green infrastructure with the intent of utilizing nature-based solutions where possible that will improve the resiliency, reduce risk posed by future disasters, and provide enhancements to the ecosystem. The following scope activities are proposed: Engineers Report, Survey, GIS Mapping, Hydrologic and Hydraulic Studies, Calculations of Disturbance, Drainage, Permitting and EHP, Design Plans and Specs, Detailed Cost Estimates, Project Schedule, Facility Maintenance Schedule, Stormwater Calculations, Alternatives Analysis, BCA, Public Outreach, Grant Application	\$45,000.00
	Town of Kearny Town Hall	KEARNY, TOWN OF	127	Hudson	Garfield and John Hay Pump Stations Project Scoping	The stormwater runoff for the various storm frequencies (CN97) for the Garfield Avenue Pumping Station and John Hay Avenue Pumping Station Drainage Areas, along with the known hydrologic attributes, are summarized in the attached figure titled "Combined Stormwater Pumping Station Attributes". Absence of Gravity Outlet for Stormwater The Garfield Avenue and John Hay Avenue drainage basins do not have a gravity-driven discharge system to open waters. The absence of a gravity-driven drainage systems creates significant ponding and flooding during storm events on the site. As a result, this area remains flooded until the waters in the drainage areas are eventually handled by the two small stormwater pumping stations. Unique Drainage Conditions Due to the lack of a gravity outlet for drainage in these drainage areas, all stormwater must be pumped from both drainage basins. Plate 5.1 (Required versus Available Hydraulic Capacity) illustrates physical attributes that create the key negative condition that is the major contributor of the flooding in both the Garfield Avenue and John Hay Avenue Drainage Areas. Additionally, the required hydraulic capacity for the various storm frequencies is shown along with the available hydraulic capacities of both pumping stations (all pumps in operation). Plate 5.1 shows a section through the Garfield Drainage Basin that appears on the upper portion of Plates 2.6 and 2.7. This section displays the potential stormwater impoundment created by the western portion of the Town (Ivy Street and Schuyler Avenue) and the eastern railroad berm. Plates 2.6 and 2.7 further illustrate the confined area for the existing stormwater pumping station Garfield Avenue and John Hay Avenue (also see Plate 2.8, Oblique View); thus, the limitation on the Garfield Avenue and John Hay Avenue Drainage Systems is further intensified. The Town is proposing the following project scoping activities to complete a detailed evaluation of the existing stormwater collection system for the Garfield Avenue and John Hay Avenue Pumping Station drainage areas and determine necessary improvements to the two drainage areas, which we anticipate will result in a complete mitigation project application for future funding opportunities: Proposed Project Scoping Activity #1: Hydrology Study The following tasks are associated with the hydrological study for the Garfield Avenue and John Hay Avenue Pumping Station Improvements project: - Capacity analysis of the existing conveyance system for the Garfield Avenue and John Hay Avenue drainage area. - Influence of topography analysis for the Garfield Avenue and John Hay Avenue drainage area. - Proposed Stormwater Management Design using the SCS Method and methods contained in the USDA Soil Conservation Service Publication TR-55 Methodology. - Analysis of proposed conveyance system improvements within the Garfield Avenue and John Hay Avenue drainage area utilizing AutoCAD Civil 3D Hydroflow Storm Sewers Extension for the design storm. - Proposed Water Quality Design to reduce the post-construction load of total suspended solids (TSS) in stormwater runoff generated from the water quality design storm by 80%. - Incorporation of Army Corps Hec-Ras Analysis and Modeling Software to determine permitted pump size without negative impacts to existing properties. - Pre- to Post cross-sectional analysis of additional flow into existing channels that convey flow from both the Garfield Avenue and John Hay Avenue Pumping Stations. Proposed Project Scoping Activity #2: Environmental Assessment The following tasks are associated with the environmental assessment for the Garfield Avenue and John Hay Avenue Pumping Station Improvements project: - Description of the proposed project describing objectives. - Description of the environment covering vegetation, wildlife, geology, topography and soils, water resources and hydrology, historic and archeological resources, transportation and access to the site, and adjacent land uses / description of the surrounding neighborhood. - Environmental Impact Analysis of proposed project discussing the affected resources and significance of each impact, short-term and long-term impacts, overall use of the site over time, identification of adjacent environmental features that may be impacted, required permits, and sea level rise impacts. The Town will also complete an analysis of alternatives (as further detailed in the section below under "What alternatives will be considered?"). Evaluation of alternatives will include: - analysis of the hydraulic performance of the existing stormwater collection system; - conceptual design of a stormwater pumping station for viable alternative locations; - analysis of the hydraulic performance of the existing 10-foot discharge channel to determine the available conveyance capacity. The proposed scope of work also includes the Grant Management Activities associated with this project, including communication and coordination with the State and FEMA regarding all grant terms and conditions, all quarterly and other compliance reporting as required by the State and FEMA, maintaining appropriate tracking, records, and documentation to prepare and submit Requests for Reimbursement and project closeout at the time of project completion, and any/other grant management activities as required by the State and FEMA.	\$46,413.00
	Two Rivers Water Reclamation Authority	EATONTOWN, BOROUGH OF; FAIR HAVEN, BOROUGH OF; LITTLE SILVER, BOROUGH OF; MONMOUTH BEACH, BOROUGH OF; OCEANPORT, BOROUGH OF; RED BANK, BOROUGH OF; RUMSON, BOROUGH OF; SEA BRIGHT, BOROUGH OF; SHREWSBURY, BOROUGH OF; SHREWSBURY, TOWNSHIP OF; TINTON FALLS, BOROUGH OF; WEST LONG BRANCH, BOROUGH OF	Eatontown : 8057, 8122, 8050.01; Fairhaven : 8037; Little Silver : 8042; Monmouth Beach : 8041; Oceanport : 8053; Redbank : 8034, 8035, 8036.01, 8036.02; Rumson : 8038, 8039; Seabright : 8121; Shrewsbury : 8123; Shrewsbury Twp : 8123; Tinton Falls : 8126, 8046, 8048.01, 8048.02; West Long Branch : 8062.01, 8062.02	Monmouth	EPS and Outfall Replacement Project Scoping	Hazen and Sawyer will work with the TRWRA to execute an alternatives analysis and design scope of work for the preferred EPS and outfall route alternative. The scope of work will include an initial stage alternatives analysis, selection of a preferred alternative and basis of design for the preferred alternative. Design support services will also be conducted including field surveying, geotechnical investigation, condition assessment, utility investigations, permits and investigations of existing and additional requirements. Design will include hydraulic analysis, preparation of drawings and specifications for construction, construction cost estimating and scheduling. The design will demonstrate the capacity needed and the means to provide the additional capacity and mitigate potential flooding risk. The work will conclude with bid-ready documents as part of a design-bid-build procurement.	\$5,570,000.00

Project Type	If "Other" for the project type, please manually enter the hazard(s)	What hazard is this project mitigating?	If "Other" for the hazard mitigated, please manually enter the hazard(s)	What community lifeline does the project stabilize?	If this loan will be used towards the non-federal cost share for a grant under another HMA grant program, which HMA grant program will it support?	Has the project already started?	Does the project include any work that will be subject to Environmental Planning and Historic Preservation (EHP) review?	For non-revenue generating projects, please identify the local government's revenue stream to support projects.	Is the community a low-income geographic area as defined in 42 U.S.C. 5135 § (m)(6)
Select a dropdown project type that best aligns with the proposed project. If not listed, input a project type manually.	Some projects may be comprehensive and incorporate multiple project types. Insert the project types in the cell below.	Select a hazard from the dropdown. If not listed, input a project type manually.	Some projects may be mitigating multiple hazards. Insert the hazards in the cell below.	Select a community lifeline from the dropdown.	Select a HMA program from the dropdown.	Projects where actual physical activity, such as groundbreaking, construction, or demolition has commenced prior to completion of EHP review, are ineligible. Select from the dropdown.	Projects that require EHP review include any ground disturbing studies or construction projects including but not limited to retrofits, acquisition of flood-prone properties, hazardous fuels reduction, and flood risk reduction projects.	Loan recipients are required to establish a dedicated source of revenue for repayment of the loan per 42 U.S.C. 5135 § (f)(1)(A)(ii).	Loan recipients that are low-income geographic areas can receive different loan terms. The data dictionary sheet has a link for calculation guidance.
Flood Control - Berm, Levee, or Dike		flooding	severe storms, including hurricanes, tornados, wind storms, cyclones, and severe winter storms	Food, Water, Shelter	BRC/FMA	No	Yes		No
Elevation of Private Structures - Coastal		flooding	severe storms, including hurricanes, tornados, wind storms, cyclones, and severe winter storms	Food, Water, Shelter	BRC/FMA	No	Yes		No
Elevation of Private Structures - Riverine		flooding	severe storms, including hurricanes, tornados, wind storms, cyclones, and severe winter storms	Food, Water, Shelter	FMA	No	Yes		No
Elevation of Private Structures - Riverine		flooding	severe storms, including hurricanes, tornados, wind storms, cyclones, and severe winter storms	Food, Water, Shelter	BRC/FMA	No	Yes		No
Elevation of Private Structures - Coastal		flooding	severe storms, including hurricanes, tornados, wind storms, cyclones, and severe winter storms	Food, Water, Shelter	BRC/FMA	No	Yes		Brigantine : No; Cape May : No; Downe : Yes; Longport: No; Margate: No; Ventnor: No
Elevation of Private Structures - Riverine		flooding	severe storms, including hurricanes, tornados, wind storms, cyclones, and severe winter storms	Food, Water, Shelter	BRC/FMA	No	Yes		No
Feasibility, Engineering and Design Studies		flooding	severe storms, including hurricanes, tornados, wind storms, cyclones, and severe winter storms	Safety and Security	BRC/FMA	No	No		No
Feasibility, Engineering and Design Studies		flooding	severe storms, including hurricanes, tornados, wind storms, cyclones, and severe winter storms	Food, Water, Shelter	BRC/FMA	No	No		No
Feasibility, Engineering and Design Studies		flooding	severe storms, including hurricanes, tornados, wind storms, cyclones, and severe winter storms	Health and Medical	BRC/FMA	No	No		Census Tract 8057, 8034: Yes; All others: No

Project Type	If "Other" for the project type, please manually enter the hazard(s)	What hazard is this project mitigating?	If "Other" for the hazard mitigated, please manually enter the hazard(s)	What community lifeline does the project stabilize?	If this loan will be used towards the non-federal cost share for a grant under another HMA grant program, which HMA grant program will it support?	Has the project already started?	Does the project include any work that will be subject to Environmental Planning and Historic Preservation (EHP) review?	For non-revenue generating projects, please identify the local government's revenue stream to support projects.	Is the community a low-income geographic area as defined in 42 U.S.C. 5135 § (m)(6)
Select a dropdown project type that best aligns with the proposed project. If not listed, input a project type manually.	Some projects may be comprehensive and incorporate multiple project types. Insert the project types in the cell below.	Select a hazard from the dropdown. If not listed, input a project type manually.	Some projects may be mitigating multiple hazards. Insert the hazards in the cell below.	Select a community lifeline from the dropdown.	Select a HMA program from the dropdown.	Projects where actual physical activity, such as groundbreaking, construction, or demolition has commenced prior to completion of EHP review, are ineligible. Select from the dropdown.	Projects that require EHP review include any ground disturbing studies or construction projects including but not limited to repairs, acquisition of flood-prone properties, hazardous fuels reduction, and flood risk reduction projects.	Loan recipients are required to establish a dedicated source of revenue for repayments of the loan per 42 U.S.C. 5135 § (f)(1)(A)(ii).	Loan recipients that are low-income geographic areas can receive different loan terms. The data dictionary sheet has a link for calculation guidance.
Feasibility, Engineering and Design Studies		flooding	severe storms, including hurricanes, tornados, wind storms, cyclones, and severe winter storms	Safety and Security	BRC/FMA	No	No		No
Feasibility, Engineering and Design Studies		flooding	severe storms, including hurricanes, tornados, wind storms, cyclones, and severe winter storms	Transportation	BRC/FMA	No	No		0
Infrastructure Protective Measures		high water levels	flooding	Food, Water, Shelter	BRC/FMA	No	Yes		No
Infrastructure Protective Measures		flooding	severe storms, including hurricanes, tornados, wind storms, cyclones, and severe winter storms	Health and Medical	BRC/FMA	No	Yes		No
Floodwater Storage and Diversion		flooding	severe storms, including hurricanes, tornados, wind storms, cyclones, and severe winter storms	Safety and Security	BRC/FMA	No	Yes		No
Generator Permanent Permanent		Infrastructure failure	Severe storm	Energy Power grid	BRIC	No	No	Municipal Budget	No
Flood control Stormwater management Stormwater management Elevation		Flooding	Severe storm	Transportation Aviation	BRIC	No	Yes	the Port Authority of New York and New Jersey	Yes

Project ID Number	Loan Recipient	Benefiting Community(ies)	Benefiting Census Tracts	County(ies)	Project Title	Project Description	Projected Loan Amount
Unique Identifier for the proposed project as determined by the entity.	Name of the eligible proposed loan recipient.	Community(ies) experiencing hazard mitigation benefits. Please include any tribal governments or authorized tribal organization if applicable.	Census tracts where the project will mitigate natural hazards. Please use the 11-digit census tract code. Directions can be found in the Data Dictionary sheet.	County(ies) experiencing hazard mitigation benefits.	Unique name of the project.	<p>Provide a paragraph describing the following elements of the project:</p> <ul style="list-style-type: none"> How the project will reduce risk or increase resilience Major items in the scope of work The infrastructure being protected How the project will reduce risk to life and property Other items describing how the project mitigates natural hazards. A description of how the project conforms to the Hazard Mitigation Plan of the applicant and the local government 	The dollar amount of the proposed loan. If the loan amount equals or exceeds the statutory maximum loan amount of \$5 million, the cell will turn red.
	BOROUGH OF CARTERET	CARTERET, BOROUGH OF	36.01	Middlesex	BRIC 2023: Borough of Carteret - Community Health Center Elevation	The Borough of Carteret is requesting financial assistance through the Building Resilient Infrastructure and Communities (BRIC) program to elevate the old Rite Aid Building, therefore mitigating the risk of flooding. The old Rite Aid Building is located within the Noes Creek Special Flood Hazard Area and experiences flooding during heavy rain events. For example, during Hurricane Ida the building flooded with approximately 3.5 feet of water to elevation 10.5, which caused significant water damage to the structure. The flooding in this section of the community is also caused by the high tide impacts on creek levels, as well as storm surges, which are both tidally influenced and have increased in frequency over the years. The Borough plans to elevate the structure as a means of mitigating the impact of flooding. The building in question currently sits at two different elevations below the Base Flood Elevation (BFE). The Borough plans to elevate the building's first floor elevation to BFE+1 foot or 13.0. This will result in the elevation of the building floor by approximately 4.0' and would include a new roof for the structure to meet the interior ceiling height for the building. The Borough plans maintain flood insurance for the life of the structure, equal to an amount of the project cost or the maximum limit of coverage made available with respect to the mitigated property, whichever is less, as required by the conditions of the grant program. Once the structure has been elevated it will be developed into a Community Health Center that will be available for use by the people of Carteret. The proposed Community Health Center will increase access to crucial primary care by reducing barriers such as cost, lack of insurance, distance, and language for their patients. The future staff of this facility will reflect the ethnic and racial makeup of the community and will be able to accommodate the diverse needs of the people of Carteret.	\$760,269.25
	BRICK TOWNSHIP MUNICIPAL UTILITIES AUTHO	BRICK, TOWNSHIP OF	7134.01, 7134.02	Ocean	BRIC 2023: Brick Township MUA - Redundant Finished Water Transmission Main	Currently only a single 20" DIP finished water transmission main comes out of Finished Water Pump Station and runs approximately 500 feet until splits between 2 feeds to 2 different parts of the town. Per 2020 Brick Township Municipal Utilities Authority Risk and Resilience Assessment, a redundant feed is needed from the finished water pump station for emergencies so the water can continue to be supplied to the Brick Township residents in case the current feed is damaged. A secondary/redundant 20" DIP finished water transmission main is proposed out of the Finished Water Pump Station. The proposed secondary/redundant 20" DIP finished water transmission main will be connected from the pump gallery pipe feed inside Finished Water Pump Station, exist underground southeast out of the Finished Water Pump Station parallel to the existing feed, and continue northeast thru Brick Utilities' property to NISH Route 88, cross Route 88, continue southeast on Route 88 to Bursville Road (County Route No. 16), turn northwest at Bursville Road and continue on Bursville Road to point of connection to existing 12" water main at the intersection of Bursville Road and Patriot Ave. This transmission main will be installed at least 4 feet deep to the top of pipe, be installed within existing paved roadways or grass shoulder within existing roadway right-of-ways. The crossing at NISH Route 88 will be installed via jack-and-bore trenchless technique so not to interrupt critical traffic patterns. The remainder of installation may require one lane closures and detours will be set up on nearby local roadways. Once constructed, the transmission main will need to be pressure tested and bacteria tested prior to putting the main in service. The trenches where the transmission main is installed will need approximately 30 days settlement period after which the trenches will be milled 2 inches and final top course paving will be installed. The affected grass shoulder will be re-seeded.	\$550,000.00
	STAFFORD TOWNSHIP OF	STAFFORD, TOWNSHIP OF	7351.05	Ocean	BRIC 2022: Township of Stafford and OCUA - Erosion Control	The project will consist of building 935 linear feet of bulkhead along Stafford Township's Mill Creek Park and the Ocean County Utilities Authority (OCUA) property along Mill Creek Road. This bulkhead will serve as an erosion control barrier to protect against erosion and flood waters that come from Mill Creek. This erosion control project will help protect approximately 10,000 residents and the capital infrastructure that exists in this direct area. The Township owns and operates the roadway, Mill Creek Road, along with the water tower and sewer pump station that is located in the Mill Creek Park. This infrastructure services approximately 10,000 residents in the Beach Haven West section of the Township and the roadway, Mill Creek Road, is the only access in and out for over 3,000 properties in this section of the Township. If funded, the project would help maintain erosion control for this area and would provide a level of protection for the residents for access to over 3,000 homes and the protection of the critical infrastructure for this entire section of the Township. Along with the benefits to the Township, the grant would also help to preserve the OCUA sewer pump station. This pump station is used to pump sewage to the OCUA's processing plant and again helps to service the 10,000 residents that live in this area. This project has been worked on since 2020 and an Memorandum of Understanding is in place for the Township and OCUA to work together to protect this critical infrastructure for the greater community.	\$426,687.50
	BRICK TOWNSHIP MUNICIPAL UTILITIES AUTHO	BRICK, TOWNSHIP OF	7134.02, 7133	Ocean	BRIC 2023: Brick Township MUA - Parallel Force Main at Lanes Mill and Laurelbrook WWPS	It has been determined that two (2) wastewater pump stations (WWPS) are in need of redundant parallel force mains. The two WWPS are: Laurelbrook and Lanes Mill. Currently, a 10" DIP force main and 12" HDPE force main exists at Laurelbrook. The 12" HDPE force main was installed under a separate emergency contract in 2022, after the existing 10" DIP force main developed a leak. The leak was repaired and 12" HDPE was installed via horizontal directional drilling. Currently, the 12" HDPE is the operating force main and 10" DIP is back-up force main, condition of which is not fully known. A single 8" DIP force main exists at Lanes Mill. The 8" DIP was installed in 1976 via jack-and-bore method inside a 20" steel casing under the NJSH 444, Garden State Parkway, within New Jersey Turnpike Authority (NJTA) jurisdiction. This force main is approaching the end of its service life, and will need additional means of bypass in an emergency situation. An additional parallel force main is needed to be installed under Garden State Parkway via horizontal directional drill or jack-and-bore. The project consists of assessing and rehabilitating via slip lining the existing 10" DIP force main at Laurelbrook WWPS and installation of additional parallel force main at Lanes Mill WWPS, along with design, permitting, bidding and construction administration.	\$1,125,000.00
	TOWNSHIP OF NEPTUNE	NEPTUNE, TOWNSHIP OF	8080.01	Monmouth	BRIC 2023: Township of Neptune - South Riverside Flood Pumps	As seen in Attachment J, the proposed mitigation project is to install two (2) subsurface stormwater pump stations at two local low points within the Township, at the intersections of South Riverside Drive and Beverly Way, and at South Riverside Drive and Fairview Place. These areas lie within the Township right-of-way, adjacent to the Shark River, and receive a large volume of runoff during storm events due to the low elevation and location of outfall pipes and adjacent roads. The flooding causes damage to and closure of the roads frequently. The flooding in this area is not due to a lack of drainage as there are numerous catch basins that have been installed to capture the runoff and direct it toward the large nearby outfalls. The challenge the drainage system faces is that when the Shark River tide elevates above the outfall elevations and this coincides with a wet weather event, then the roads flood and emergency vehicles and traffic cannot make its way down South Riverside Drive. As previously stated, the roadways flood 2-3 times a month. This area experiences even worse damages when a Nor'Easter, heavy rain or other storm even (hurricane/tropical storm) passes through, which historically, according to Monmouth County Multijurisdictional Hazard Mitigation Plan, occur every 10 to 15 years. The stormwater pump stations would be designed to capture the large volume of runoff caused by interior flooding from behind the bulkhead at the furthest point downstream in the system and assist in pumping out the excess water through force mains when the outfalls are submerged or not opening due to inadequate pressure to open the tideflex valves. The project will also include new inline tideflex valves which will replace the duckbill valves. The electric panels that supply power to the pumps will be placed on existing platforms that have been designed to be above the 500-year storm elevation. The project will be designed in strict conformance with all applicable federal, state, and local floodplain and land use regulations including 44 CFR 60.3 (floodplain management criteria).	\$746,652.50
	TOWNSHIP OF WOODBRIDGE	WOODBRIDGE, TOWNSHIP OF	36.01, 37, 38.01, 38.02	Middlesex	BRIC 2022: Township of Woodbridge - Stafford Road Sanitary Sewer Upgrades	Woodbridge Township has experienced operational issues with the sanitary sewer in the vicinity of Stafford Road and Ravine Drive of the Colonial section of the Township. Sanitary sewer overflows during wet weather have been observed in this location. As a result of the remnants of Tropical Storm Ida in 2021, this area was directly effected by the inadequate conveyance capacity. In addition to the conveyance limitations, sewage backs up into the residential structure immediately downstream of this manhole has been a periodic problem. These collection system issues are likely a result of a combination of restricted downstream pipe capacity, high extraneous flow and the rim elevation of manhole with respect to the balance of the system. An evaluation was authorized to review the existing conditions, identify the problematic operational conditions, and develop potential remedial actions to alleviate or reduce the conditions. The Township partnered with various engineering firms to conduct the necessary tasks and identify recommendations to improve the sanitary sewer infrastructure. The sanitary sewer is 10 inch diameter gravity sewer which at its downstream terminus connects to the 48 inch diameter Merrill Park Trunk Sewer adjacent to the South Branch of the Rahway River. The sewer traverses Merrill Park, Amtrak / Conrail railway lines, Lincoln Highway (Route 27) to the upstream end of the study section on Stafford Road between Ravine Drive and Surrey Lane. Upstream gravity sewers, typically of 8 inch diameter, convey sewage to this 10 inch sewer from the upstream tributary area generally bounded by the Garden State Parkway, Inman Avenue and the Middlesex Turnpike. Reported operational difficulties in the study section include sewage backups into residences, conveyance limitations, and sanitary sewage overflows. The proposed project shall consist of flood damage-resistant materials, and shall have sufficient strength, rigidity, and durability to adequately resist all flood-related and other loads unless designed to break away or as permitted elsewhere with regard to ASCE 24-14, N.J. A.C. 7:13, and the Township's local flood-damage prevention ordinance. Structural and nonstructural construction materials, including connectors and fasteners, below the design flood elevation shall be capable of resisting damage, deterioration, corrosion, or decay because of direct and prolonged contact with floodwaters associated with design flood conditions. Structural steel shall conform to ASCE 24-14 standard specifications connectors, screws, bolts, nails, and other fasteners exposed to direct contact by floodwater, precipitation, or wind-driven water shall be stainless steel or equivalent corrosion resistant material, or hot-dip galvanized in accordance with ASTM standard specifications. The proposed Stafford Road Sanitary Sewer upgrade project seeks to address the inadequate conveyance capacity of dry and wet weather flows in relation to severe storm events and public health.	\$113,098.75
	CITY OF NORTHFIELD	NORTHFIELD, CITY OF	123.02	Atlantic	BRIC 2022 - City of Northfield - Madison Ave Stormwater Management	Constructing additional underground recharge system utilizing perforated ABS pipes and bed of stone.	\$45,500.00
	CITY OF NORTHFIELD	NORTHFIELD, CITY OF	124.02	Atlantic	BRIC 2022: City of Northfield - Revere Ave - Stormwater Management	Acquire additional property (currently vacant and covered with brush and trees) to allow for the construction of stormwater basin and conveyance system to eliminate the existing flooding.	\$41,250.00
	ATLANTIC HIGHLANDS BOROUGH OF	ATLANTIC HIGHLANDS, BOROUGH OF	8002	Monmouth	BRIC 2022: Atlantic Highlands - Upper Prospect Road Landslide Stabilization Project	Preliminary reconnaissance indicates that the existing roadway in the area of the retaining wall is constructed on a side hill bench embankment that is roughly parallel to the existing roadway contours. The wall maintains a grade separation between 3 and 7 feet and has a parapet approximately 2 feet high. It is approximately 200 feet long. The wall is a grouted concrete masonry construction and is deteriorated due to extensive erosion of the outer shell of the grouted masonry units primarily on the downhill side. The wall has a wide crack and portions of the wall have moved outward several inches. The existing topography was reviewed using imagery presented on Google Earth Pro for the purpose of this initial scope assessment. The roadway is approximately 22 feet wide and slopes downwards at a grade of approximately 9 percent connecting a residential development at the top of the slope with Ocean Boulevard. The road elevations range from approximate elevation 205 near Ocean Boulevard and 223 feet adjacent to the wall at the high end. The surface elevation near the top of Atlantic Highlands ridge is at elevation 240 feet and is approximately 155 feet measured uphill from the retaining wall. The elevation of Ocean Boulevard is approximately +190 feet. Ocean Boulevard is oriented roughly parallel to the retaining wall tangent section in the area of the project and is approximately 230 feet from the top of the ridge. The roadway is the only outlet to the residential area above the retaining wall. Maintenance of access must be considered both for residential traffic and for emergency vehicles during construction. In order to minimize the encroachment on the roadway during construction, the initial design assessment will need to consider location to the north of the existing wall and further down the slope. It is anticipated that utility systems within the roadway include water and gas services to the residential area and there are overhead wiring and poles for electric service and broadband that will need to be considered in plans for accommodation of utilities. The new retaining wall will provide and increased level of protection to the residents, surrounding roadways and existing utilities. There is currently a significant risk for failure of the existing retaining wall and an increased level of protection is crucial for the safety of the residents. The new retaining wall will not be a simple replacement of the existing failing retaining wall, the new wall will protect the residents against a falling roadway. In order to complete this project it is anticipated we will need to obtain NIDEP Permits for borings 50 ft or deeper along with street opening permits.	\$204,435.25
	TOWN OF SECAUCUS	SECAUCUS, TOWN OF	198, 199, 200, 201	Hudson	BRIC 2023: Secaucus - Huber Street Flood Wall Project	The proposed activity for the Town of Secaucus's project involves a phased approach. Phase one will include the preconstruction project development work including engineering and design, permitting, and community engagement. Phase two will include construction of the project, in which all construction activities will be in conformance to ASCE 24-14, or the latest available edition. It will be adapted based on the designs and outcomes of phase one and will be pursuant to FEMA approval to proceed. The project will be designed to protect 107 properties/84 buildings from flooding related to Mill Creek and the Hackensack River. Beyond the mobilization and excavation of the project area, the initial conceptual plans and cost estimate project the completion of a bathymetric survey, the design and installation of one tide gate, one flood gate (30' wide by 10' high), four pumps, one pump station control building, one pump intake structure, 130 cubic yards of concrete floodwall, 130 cubic yards of concrete footing, 960 linear feet of driven steel H-piles, 1,056 linear feet of furnished steel H-piles, 6,000 square feet of temporary sheeting, 1,800 square feet of permanent sheeting, one temporary cofferdam, one emergency generator, 26,000 pounds of epoxy-coated reinforcement steel, 6,600 cubic yards of soil aggregate, and the installation and modification of 480 feet of berm. The project will also consist of utility engineering, soil erosion and sediment control services, contract document development, bid and bid support services, evaluation of various pump station and tide gate criteria, SCADA development, geotechnical work, SWM plan and permit development, various permit acquisitions, various preparations for construction commencement, topsoiling, fertilizing and seeding, and straw mulching. The proposed project is intended to provide 100-year flood protection to 107 properties/84 buildings located in the residential neighborhood west of Mill Creek and the downtown Secaucus area, as well as to NJ Route 3. Easement costs are included in the cost estimate for phase one of the project and will cover any potential temporary access easements needed for construction or any permanent access easements to allow the Town to maintain the flood wall beyond construction. Access to the proposed flood wall location would entail access through properties that the Town does not currently own including the Mill Creek Mall property, Hackensack Meadows Commission property, and various residential properties. As depicted on the attached Concept Plan, the project includes the installation of a floodwall and flood gate to the east of Huber Street. The wall and gate are anticipated to be located from the west bank of Mill Creek to the east bank of Mill Creek (on the side of Mill Creek Mall). In addition, the existing eastern berm located along the south side of the properties that front on Huber Street will be raised and reinforced to provide for a 100-year level of protection for surface water and base level elevation. The location and elevation of the proposed improvement was determined based upon an evaluation of the following: 3c Flood Insurance Study, Hudson County, New Jersey (all jurisdictions), prepared by FEMA, dated August 16, 2006 3c Flood Insurance Rate Map (FIRM), Map Number 34003C0266H, Map Revised August 28, 2019 Please see attached for a copy of all studies and support documents. The Town understands that full engineering and design is still required to fully develop the project; therefore, it is proposing a phased project to fully complete pre-construction activities. Once the funding is in place, the engineering, and permitting phase (phase one), the project will be publicly bid in accordance with New Jersey State Bidding Laws. The Town will review the bids received and award the bid to the lowest responsible bidder. A pre-construction meeting will then be held with project stakeholders to begin phase two of the project. The entirety of the project will be subject to all applicable federal, state, tribal, and local floodplain and land use laws and regulations including 44 CFR Section 60.3. Please note that the cost estimates each have a 5% contingency line item, included to account for any unforeseen costs. Phase one direct expenses amount to \$56,350.00 and include all fees that are not encumbered by the design work, including the topographic and partial boundary survey, bathymetric survey, public outreach, contract documents, evaluation and criteria of a pump station and tide gate, and geotechnical work.	\$4,847,937.66
	EWING-LAWRENCE SEWERAGE AUTHORITY	EWING, TOWNSHIP OF LAWRENCE, TOWNSHIP OF	33.04, 33.01	Mercer Mercer	BRIC 2022: ELSA - Flood Mitigation of Fackler Road and Lower Ferry Pump Station	The Ewing-Lawrence Sewerage Authority provides wastewater treatment services to the towns of Ewing and Lawrence, NJ. As part of their wastewater collection and transmission network, they have several pump stations that convey wastewater to the treatment plant. Two of those pump stations, Fackler Road and Lower Ferry, flood frequently due to rain events, disrupting the wastewater conveyance process. This project will significantly reduce the risk of the pump stations becoming inoperable due to flooding and disrupting service to the area. The Fackler Road pump station is located at 95 Fackler Road, Lawrence Township, NJ. It is immediately adjacent to Shipetaukin Creek, which is tributary to the Delaware River. Several times per year, when the region experiences a large rain event, the creek overtops and causes the pump station to flood. The proposed activity to mitigate flooding at this site is construction of a new pump station, adjacent to the existing structure. The new station will be designed to be flood-proofed, and it will have submersible pumps in case of leakage. The equipment will be elevated above the design flood elevation of 86 feet NAVD83. The Lower Ferry Rd pump station, located next to 1 Lower Ferry Rd in Ewing Township, NJ, is a subgrade structure in the 100-year flood hazard area that experiences flooding when the nearby Delaware River floods. Water currently enters from wall penetrations, groundwater seepage, and sewer overflows. The flood waters have rendered the station inoperable at several times in recent years. The proposed activity at this site is the construction of a new pump station, located further north of the existing pump station and within the same easement. The new pump station will have a larger footprint than the existing to comply with current building codes and will still be subgrade with a similar layout to the existing. The building will be floodproofed and will include dry-pit submersible pumps. Other equipment, to the extent possible, will be elevated above the design flood elevation of 41 feet NAVD83. See the attached Preliminary Engineering Report for a more detailed explanation of the procedure used for determination of the design flood elevation at each site. See the attached Ewing and Lawrence Townships municipal codes for more information on the applicable design standards required for flood hazard reduction.	\$2,773,000.00
	TOWNSHIP OF MARLBORO	MARLBORO, TOWNSHIP OF	8095.03	Monmouth	BRIC 2022: Township of Marlboro - Nolan Road Streambank Stabilization	The project includes construction of a steel sheeting wall spanning approximately 650 linear feet in length along Nolan Road, west of Reids Hill Road. The sheeting will be installed between the roadway and Gravely Brook and is proposed to mitigate erosion that occurs along the edge of pavement abutting the stream bank. Currently, the erosion has scoured the bank abutting the edge of pavement. Continued scour threatens to compromise the roadway to the point of potential collapse. The project will also include the installation of guide rail along the project limits. A 24-hour detour shall be implemented as Nolan Road will need to be closed through the duration of the construction. The sheeting is required as high water runoff velocity and volume during large rainfall events causes erosion of the existing steep slope beyond the edge of pavement. This produces significant disintegration along the entire southern edge of the roadway within the specified limits. Currently, the Township DPW performs pothole repair which only provides a temporary mitigation to the erosion.	\$439,443.75
	BRICK TOWNSHIP MUNICIPAL UTILITIES AUTHO	BRICK, TOWNSHIP OF	7141, 7143, 7138,	Ocean	BRIC 2023: Brick Township MUA - Emergency Generator at 3 Pump Stations Upgrade Project	The project will consist of the replacement of the existing diesel generators and associated electrical components at the three Brick Utilities' wastewater pump stations: Drum Point, Bay Harbor and Riverside Dr with natural gas generators and associated electrical and natural gas piping. The project will include replacement of all electrical equipment from the MCC panels to the electrical service pole outside for the pump stations. The CT cabinet will need to be detached from the pump stations and several breakers are out of service. The Automatic Transfer Switch will also need to be replaced. The electrical requirements for each location will be reviewed in order to properly size a new natural gas generator. A natural gas line will have to be installed on each property. While the electrical components and/or generators are out of service, a temporary standby generator will be needed on site. The design will also incorporate the necessary interface with Brick Utilities' SCADA system and removal of the existing diesel fuel system. Currently, the size of the generator at Drum Point is 105 kW, at Bay Harbor is 155 kW, and at Riverside is 210 kW. The generators will be replaced with same kW size.	\$484,530.00

Project Type	If "Other" for the project type, please manually enter the hazard(s)	What hazard is this project mitigating?	If "Other" for the hazard mitigated, please manually enter the hazard(s)	What community lifeline does the project stabilize?	If this loan will be used towards the non-federal cost share for a grant under another HMA grant program, which HMA grant program will it support?	Has the project already started?	Does the project include any work that will be subject to Environmental Planning and Historic Preservation (EHP) review?	For non-revenue generating projects, please identify the local government's revenue stream to support projects.	Is the community a low-income geographic area as defined in 42 U.S.C. 5135 § (m)(6)
Select a dropdown project type that best aligns with the proposed project. If not listed, input a project type manually.	Some projects may be comprehensive and incorporate multiple project types. Insert the project types in the cell below.	Select a hazard from the dropdown. If not listed, input a project type manually.	Some projects may be mitigating multiple hazards. Insert the hazards in the cell below.	Select a community lifeline from the dropdown.	Select a HMA program from the dropdown.	Projects where actual physical activity, such as groundbreaking, construction, or demolition has commenced prior to completion of EHP review, are ineligible. Select from the dropdown.	Projects that require EHP review include any ground disturbing studies or construction projects including but not limited to repairs, acquisition of flood-prone properties, hazardous fuels reduction, and flood risk reduction projects.	Loan recipients are required to establish a dedicated source of revenue for repayment of the loan per 42 U.S.C. 5135 § (f)(1)-(4)(ii).	Loan recipients that are low-income geographic areas can receive different loan terms. The data dictionary sheet has a link for calculation guidance.
Elevation Floodproofing Dry floodproofing Floodproofing		Flooding		Health and medical Public health	BRIC	No	Yes	Funding Match from the Borough of Carteret	Yes
Utility and infrastructure protection Potable water Potable water		Infrastructure failure	Flooding	Food, water, shelter Water	BRIC	No	Yes	Capital Improvements Fund	No
Stabilization and restoration Shoreline and/or bank stabilization Shoreline and/or bank stabilization Flood control Flood diversion and/or bank stabilization Partnerships Other		Flooding	Infrastructure failure	Safety and security Government service	BRIC	No	Yes	Township of Stafford	No
Utility and infrastructure protection Wastewater and/or sanitary sewer system Wastewater and/or sanitary sewer system		Uncategorized	Infrastructure failure	Hazardous material Facilities	BRIC	No	Yes	Capital Improvements Fund	No
Flood control Stormwater management Stormwater management Utility and infrastructure protection Roadway		Flooding	Severe storm	Transportation Highway/roadway/motor vehicle	BRIC	No	Yes	Capital Funding	No
Utility and infrastructure protection Wastewater and/or sanitary sewer system Wastewater and/or sanitary sewer system Retrofit Other		Flooding	Severe storm	Hazardous material HAZMAT, pollutants, contaminants	BRIC	No	Yes	In Kind	Yes
Flood control Stormwater management Stormwater management		Severe storm	Flooding	Safety and security Community safety	BRIC	No	Yes	Municipal Budget	No
Acquisition Flood control Detention/retention basins		Flooding	Severe storm	Safety and security Community safety	BRIC	No	Yes	City Budget	No
Stabilization and restoration Landslide stabilization Landslide stabilization Utility and infrastructure protection Roadway		Infrastructure failure	Landslide/Debris flow	Safety and security Community safety	BRIC	No	Yes	Atlantic Highlands	
Flood control Floodwall Floodwall Flood control Flapgate/floodgates		Flooding	Severe storm	Safety and security Community safety	BRIC	No	Yes	Applicant	No
Mitigation reconstruction Floodproofing Dry floodproofing Utility and infrastructure protection		Flooding	Infrastructure failure	Food, water, shelter Water	BRIC	No	Yes	Local Match	No
Utility and infrastructure protection Roadway Roadway Stabilization and restoration Shoreline and/or bank stabilization		Infrastructure failure	Flooding	Transportation Highway/roadway/motor vehicle	BRIC	No	Yes	Township of Marlboro	No
Generator Permanent Permanent		Infrastructure failure	Flooding	Safety and security Government service	BRIC	No	Yes	Capital Improvements Fund	No

Project ID Number	Loan Recipient	Benefiting Community(ies)	Benefiting Census Tracts	County(ies)	Project Title	Project Description	Projected Loan Amount
Unique Identifier for the proposed project as determined by the entity.	Name of the eligible proposed loan recipient.	Community(ies) experiencing hazard mitigation benefits. Please include any tribal governments or authorized tribal organization if applicable.	Census tracts where the project will mitigate natural hazards. Please use the 11-digit census tract code. Directions can be found in the Data Dictionary sheet.	County(ies) experiencing hazard mitigation benefits.	Unique name of the project.	<p>Provide a paragraph describing the following elements of the project:</p> <ul style="list-style-type: none"> How the project will reduce risk or increase resilience Major items in the scope of work <ul style="list-style-type: none"> The infrastructure being protected How the project will reduce risk to life and property Other items describing how the project mitigates natural hazards. <p>A description of how the project conforms to the Hazard Mitigation Plan of the applicant and the local government</p>	The dollar amount of the proposed loan. If the loan amount equals or exceeds the statutory maximum loan amount of \$5 million, the cell will turn red.
	COUNTY OF MONMOUTH	<p>ABERDEEN, TOWNSHIP OF</p> <p>AVON-BY-THE-SEA, BOROUGH OF</p> <p>BELMAR, BOROUGH OF</p> <p>BRADLEY BEACH, BOROUGH OF</p> <p>HAZLET, TOWNSHIP OF</p> <p>KEANSBURG, BOROUGH OF</p> <p>LONG BRANCH, CITY OF</p> <p>MANASQUAN, BOROUGH OF</p> <p>MIDDLETOWN, TOWNSHIP OF</p> <p>MONMOUTH BEACH, BOROUGH OF</p> <p>NEPTUNE, TOWNSHIP OF</p> <p>OCEAN, TOWNSHIP OF</p> <p>OCEANPORT, BOROUGH OF</p> <p>RUMSON, BOROUGH OF</p> <p>SEA BRIGHT, BOROUGH OF</p> <p>SPRING LAKE, BOROUGH OF</p> <p>UNION BEACH, BOROUGH OF</p>		<p>Monmouth</p> <p>Monmouth</p> <p>Monmouth</p> <p>Monmouth</p> <p>Monmouth</p> <p>Monmouth</p> <p>Monmouth</p> <p>Monmouth</p> <p>Monmouth</p> <p>Monmouth</p> <p>Monmouth</p> <p>Monmouth</p> <p>Monmouth</p> <p>Monmouth</p> <p>Monmouth</p> <p>Monmouth</p> <p>Monmouth</p>	FMA FY22 Regional Shared Service Multi-Jurisdictional CRS/Floodplain Management Software	<p>Coastal communities in Monmouth County face an ominous threat in the coming decades as each one is on the front line in the fight against the effects of climate change. Inevitably, this will result in more frequent high-tide nuisance flooding, additional storm related flooding, and increase risk of damage associated with stronger coastal storms. Many small towns often struggle with appropriate staffing to effectively manage their floodplain programs never mind adding CRS to their list of non-mandated responsibilities. In a home rule state like New Jersey, the hazard mitigation benefits derived by size and scale put small coastal towns at a clear financial and technical disadvantage, yet in the aggregate they are home to tens of thousands of people, many of whom live in flood vulnerable locations. Of the sixteen towns that presently participate in Monmouth County's CRS assistance program, nine (9) have populations less than 10,000 people, and most of those are less than 6,000. In total, the seventeen coastal towns that will benefit from this proposal have a total year-round population of 248,403 people which represents almost 39% of the total Monmouth County population. During the summer and through most of hurricane season, the population in these communities swells with the influx of seasonal residents, out of town vacationers, and daily visitors to the Jersey Shore. CRS programs and floodplain management, at least in New Jersey, takes place at the municipal level; therefore, towns of various sizes, threats, and capabilities must determine if expending professional and financial resources (cost) is worth the hazard mitigation result (benefit) derived from these programs. Through a regional shared cost and shared service agreement, Monmouth County will continue to provide our CRS municipal partners with Forerunner, a suite of cloud-based floodplain management services and CRS maintenance tools to help narrow the resource gap that often impedes full municipal participation in such endeavors. Better tools that accurately intake, maintain, analyze, and disseminate information to professionals, first responders, and the public are necessary to protect life and property, preserve the local tax base, improve risk communication to the public, and promote continued private investment in communities. Working from the same technology platform, Monmouth County towns will be able assist and peer-mentor one another through through the learning process.</p>	\$149,900.00
	BAY HEAD BOROUGH OF	<p>BAY HEAD, BOROUGH OF</p> <p>LAVALLETT, BOROUGH OF</p> <p>MANTOLOKING, BOROUGH OF</p>	7392	<p>Ocean</p> <p>Ocean</p> <p>Ocean</p>	FMA 2022: Project Scoping - Bay Head - Flood and Environmental Damage Mitigation Project	<p>To answer the second question first: YES, this Project will result in preparing a final design and permit applications for constructing flood control measures in the Borough of Bay Head and tidal flow through Scow Ditch. It is expected the final engineering and environmental permit package from this project will be used as the basis to request future funding to gain permit approval and CONSTRUCT flood mitigation and environmental mitigation provisions. SCOPE OF WORK OF SCOPING PROJECT: The Bay Head Flood and Environmental Damage Mitigation Project is comprised of seven tasks: TASK 1: PROJECT INITIATION AND CONTRACTING: The first task is for Bay Head to gain funding authorization, set up project management controls and contract with a professional organization to prepare the engineering design and permit application. The contractor will similarly establish project controls, a detailed implementation plan and schedule for review and approval by the Borough of Bay Head. TASK 2: DETAILED DATA COLLECTION This task includes collecting detailed information necessary for comprehensive design and permit preparation. Such activities would include but are not limited to collecting and reviewing existing reports and studies, a topographic survey, soil sampling, soil characterization or foundation design, field observation, identification of environmentally sensitive areas like wetlands, identification of necessary permits to be prepared, collection of environmental data, reviewing watershed environmental studies, mapping infrastructure, etc. The data will be analyzed to facilitate detailed design development. TASK 3: DETAILED DESIGN PREPARATION This task includes all activities to perform the detailed analyses necessary to prepare the final, detailed design of the Living Shoreline. Tidal Flood Gate, and supporting/related structures/provisions/analyses. The location of the Living Shoreline and Tidal Flood Gate are shown in the attached Bay Head Project Specific Map. Initial concept of a portion of the Living Shoreline is shown in the attachment "Bay Head Living Shoreline Initial Concept." An initial concept of the Tidal Flood Control gate is shown in the attachment "Bay Head Tidal Flood Control Gate Initial Concept." For example, designing the Living Shoreline requires analysis to determine the necessary height of the shoreline, its slope, selection of plants and vegetation, shoreline stability, retention of flood waters, etc. An initial design has been identified, but detailed analyses are needed to prepare the final design. Erosion of the shoreline, for example, is now occurring which is contributing to the high levels of solids in the Lake as recently reported ("Twilight Lake Watershed Study Dec 2022"). It is important that erosion be understood to determine the best design detail of the Living Shoreline to mitigate erosion. The attachment "Living Shoreline Arrangement" is attached to provide an initial understanding of the Shoreline design, for which details will need to be prepared. Likewise, the Tidal Flood Gate on Scow Ditch design provision requires understanding the height of the gate, operational demands, stability of subsolo to handle the foundation of the gate, etc. The attachment "Tidal Flood Gate Arrangement" is attached to provide an initial understanding of the tidal gate, for which details will need to be prepared. Waters from Barnegat Bay are introducing over 95% of the high levels of nitrates and phosphates into Twilight Lake. Controlling this water flow through Scow Ditch is one method of mitigating the introduction of contaminants into Twilight Lake. Modeling of the flow is necessary to prepare structural stress demands on the gate and its related foundation, but also understanding introduction of contaminants. Modeling will be performed, as necessary, to assure hydraulic stress levels are known for proper gate selection and detailed gate design. Engineering and design activities will occur to prepare the calculations, layout, drafting and drawing development of the Living Shoreline, Tidal Flood Gate, and other designs necessary to control flood mitigation and the influx of contaminants into Twilight Lake. The detailed design will be sufficient to then proceed to gain funding and use the detailed design to construct the mitigating features. In this way, the final product will be a "SHOVEL READY DESIGN" to proceed to construction. TASK 4: ENVIRONMENTAL ASSESSMENT AND PERMIT PREPARATION This task includes the environmental assessment of implementing the mitigating designs. The area of Twilight Lake and Scow Ditch contain environmentally sensitive areas and it is important that the impact of implementing the Living Shoreline, Scow Ditch Flood Control Gate and supporting/related provisions be understood. This task will perform this analysis in sufficient detail to serve as the input to the preparation of permits for the project. All permits will be prepared and initial meetings with regulatory agencies will occur to discuss the project and the extent of permit applications. The deliverable of this task is detailed permits ready for submittal to regulatory agencies. TASK 5: BENEFIT COST ANALYSIS This task includes performing a benefit cost analysis (BCA) of implementing the Living Shoreline, Tidal Flood Control Gate and supporting/related mitigating provisions. This task will provide the input to a future FEMA application for funding the construction and implementation of the design provisions TASK 6: PROJECT MANAGEMENT, PUBLIC AND REGULATORY AGENCY MEETINGS This task includes those activities, administrative in nature, associated with project management cost and schedule controls, communications, monthly project meetings. TASK 7: DELIVERABLES This task includes the assembly, review and approval of all reports, work products, design details, drawings, calculations, power point presentations, cost benefit analyses, permits, etc. prepared for this project.</p>	\$271,750.00
	ATLANTIC CITY CITY HALL	ATLANTIC CITY, CITY OF	1, 2, 3, 4, 5, 11, 12, 13, 14, 15, 19, 23, 24, 25	Atlantic	FMA 2022: Project Scoping - Atlantic City - Ducktown/Chelsea Flood Mitigation Plan	<p>The City of Atlantic City will retain an experienced engineer to design this project in compliance with the local public contracts law. The project scoping study will be completed and an application for FEMA funding will be submitted. Once the project is funded it will be publicly bid. Project scoping will commence in the fall of 2023 assuming this FEMA grant agreement is fully executed. The project will be designed and constructed in accordance with ASCE-24-14 or the latest version, if applicable. The design and construction will be complete in full compliance with all applicable federal, state, and local floodplain and land use laws and regulations including 44 CFR 60.3 (floodplain management criteria).</p> <p>What is the scope of work of the proposal? Will it result in a complete project application for future funding opportunities?</p> <p>The Study Area encompasses both the Chelsea and Ducktown neighborhoods of Atlantic City. It is bounded by Georgia Avenue to the east, Arctic Avenue to the south, Albany Avenue to the west and the Bay to the north. The average SVI of all census tracts included in the benefiting area is 0.875, which indicates a level of vulnerability and a high priority for this FEMA grant. The scope of work includes: 1. Survey – An in-depth analysis of the neighborhood and bulkheads that are failing, too low, or need replacement, and the condition and elevation of structures and respective utilities in the area. A survey will include building and bulkhead locations, utilities, and tidal lines. In addition, a desktop review of tidal elevations, building elevation certificates and digital elevation models for the area will be conducted to get an accurate sense of the area of interest. 2. Schematic Design/Design Development – Upon the completion of the survey, provide a final recommendation for improvements, conceptual design, and an Engineer's Opinion of Probable Construction Costs. The engineering design will include, but not be limited to: • Cost estimate, limiting contingency cost to 5%. The cost estimate and any engineering document shall be signed and sealed by a licensed professional engineer. • Document the level of protection and useful life. • Conceptual engineering site plan. • Verification that the design is an independent solution. At a minimum, the design shall include: a scour analysis, wave forces on a vertical wall, wave runup, and overtopping calculations, admissible overtopping calculations, and overturn moment calculations. • Documentation that the project is technically feasible and will be effective in reducing the risk by reducing or eliminating damage to property and/or loss of life in the project area. Include engineering design parameters and references to the following: preliminary schematic or engineering drawings/design; applicable building codes; engineering practices and/or best practices; level of protection (e.g., life safety, 100-yr flood protection with freeboard, etc.). Include pre-and post-project hydrologic and hydraulic (H&H) data with water surface elevations for multiple recurrence intervals (RIs). A map of the sub-basin that is served by the project needs to be provided. • Verification that the project design will reduce risk to individuals and property from natural hazards. Identify the hazards that the project will address and the risks that will remain after project implementation. • Documentation regarding what alternatives were considered to address the risk and why was the proposed activity considered the best alternative. • Documentation to identify the means or the alternatives considered to eliminate or minimize impacts to floodplains (See the 8-step process found in 44 CFR Part 9.6.) to help FEMA evaluate the impact of the project. • Describe how the proposed project will be designed to anticipate future conditions including climate change. The "2020 New Jersey Scientific Report on Climate Change" will be used to guide the design and construction of this project. The Report is NIDEP's first scientific report on climate change and it identifies the best available science and existing data regarding the current and anticipated environmental effects of climate change globally, nationally, and regionally. The Report's findings include that by 2050, there is a 50% chance that sea-level rise will meet or exceed 1.4 feet. • Provide Annual Maintenance Costs along with a written justification. • Describe areas impacted by flooding that result in detours from County designated emergency access routes and municipal streets. • Describe areas where flooding in this area results in damage to water or sewer infrastructure. The approved design will be selected by city officials in consultation with its design professionals and will meet all regulations and guidelines from the NIDEP, U.S. Army Corps of Engineers and local permitting agencies. The selected design will also undergo a public approval process.</p>	\$59,587.50
	ATLANTIC CITY CITY HALL	ATLANTIC CITY, CITY OF	13	Atlantic	FMA 2022: Project Scoping - Atlantic City - Venice Park Flood Mitigation Plan	<p>The Venice Park neighborhood is a small, tight-knit community of 1,576 residents, or approximately 4% of Atlantic City's total population. The neighborhood's population has been shrinking since 2000, when it was home to 2,112 people. In 2010, the ACS estimated that the median household income in the neighborhood was \$45,966, which fell to \$37,566 in 2018. Meanwhile, residential sales in the Venice Park neighborhood have seen a 13.8% increase in median sales price between 2014 and 2019. Incomes in the neighborhood have not kept pace with housing costs, and nearly 71% of households in the neighborhood are considered housing cost-burdened, spending more than 30% of their monthly income on housing. The Venice Park Revitalization Plan is the culmination of a process that began in March 2019, when the Venice Park Civic Association (VPCA) requested help from New Jersey Community Capital's (NJCC) Community Strategies team to develop a plan to eliminate blight and revitalize abandoned and distressed properties in their neighborhood. The plan is intended to serve as a guiding document for the CRDA, VPCA, and their investors and partners to address abandoned and underutilized properties, as well as several additional issues that will both improve quality of life for current residents and make the neighborhood more desirable to current residents or newcomers who purchase the newly renovated homes. One of the three major recommendations of the Venice Park Revitalization Plan is: Flooding Remediation and Sustainability: There are systemic and structural issues that make flooding happen along the neighborhood's canals- impacting homes, infrastructure, and other low-lying areas. Repairing infrastructure as well as implementing practices to make Venice Park more resilient to flooding would go a long way toward mitigating these problems. Venice Park is one of the City seven repetitive loss areas. The Venice Park Neighborhood has 237 active NFIP policies and 48 repetitive loss or sewer repetitive loss properties.</p> <p>What is the scope of work of the proposal? Will it result in a complete project application for future funding opportunities?</p> <p>Venice Park is located to the northwest of the Penrose Canal and connected to the rest of the City by the N. Ohio Avenue Bridge and the Absecon Boulevard Bridge. The neighborhood is made up of two small land masses connected to each other by a second bridge along N. Ohio Avenue. The area between the Penrose Canal and the 2nd bridge is colloquially known as "Venice Park" while the area beyond the 2nd bridge is known as "The Lagoon". "The Lagoon" is home to both single-family, detached housing as well as multifamily, rental housing. The housing in the "Venice Park" section of the Neighborhood is almost exclusively single family, detached structures that began to be developed between 1900 and 1920; housing in "The Lagoon" was developed later. Participating Agencies: The City will proactively seek advice from and partnerships with the US Army Corps of Engineers, NIDEP, local non-profit agencies, the Venice Park Civic Association, and other stakeholders. Atlantic City will seek data from these agencies, organizations, and stakeholders to inform the design. Once a final design is reached, a stakeholder process will be conducted so that these partners have a chance to review and comment on the final design. Since the neighborhood has an active neighborhood civic association, their partnership will be used to gather community participation and input related to the project. The Venice Park Civic Association (VPCA), a 20+ year old association of homeowners and other stakeholders from the neighborhood, is the chief community organization in Venice Park. Since Superstorm Sandy, the VPCA has been working to address deteriorated, vacant, and abandoned properties. The VPCA has also done considerable advocacy on behalf of property owners whose state-granted aid has not been enough to help them rebuild and reoccupy their homes. 1. Survey – An in-depth analysis of the Venice Park neighborhood and bulkheads will be conducted by identifying drainage issues, areas of bulkheads that are failing, too low, or need replacement, and the condition and elevation of structures and respective utilities in the area. A survey will include building and bulkhead locations, utilities, and tidal lines. In addition, a desktop review of tidal elevations, building elevation certificates and digital elevation models for the area will be conducted to get an accurate sense of the area of interest. 2. Schematic Design/Design Development - Upon the completion of the survey, provide a final recommendation for improvements, conceptual design, and an Engineer's Opinion of Probable Construction Costs. The engineering design will include, but not be limited to: • Cost estimate, limiting contingency cost to 5%. The cost estimate and any engineering document shall be signed and sealed by a licensed professional engineer. • Document the level of protection and useful life. • Conceptual engineering site plan. • Verification that the design is an independent solution. At a minimum, the design shall include: a scour analysis, wave forces on a vertical wall, wave runup, and overtopping calculations, admissible overtopping calculations, and overturn moment calculations. • Documentation that the project is technically feasible and will be effective in reducing the risk by reducing or eliminating damage to property and/or loss of life in the project area. Include engineering design parameters and references to the following: preliminary schematic or engineering drawings/design; applicable building codes; engineering practices and/or best practices; level of protection (e.g., life safety, 100-yr flood protection with freeboard, etc.). Include pre-and post-project hydrologic and hydraulic (H&H) data with water surface elevations for multiple recurrence intervals (RIs). A map of the sub-basin that is served by the project needs to be provided. • Verification that the project design will reduce risk to individuals and property from natural hazards. Identify the hazards that the project will address and the risks that will remain after project implementation. • Documentation regarding what alternatives were considered to address the risk and why was the proposed activity considered the best alternative. • Documentation to identify the means or the alternatives considered to eliminate or minimize impacts to floodplains (See the 8-step process found in 44 CFR Part 9.6.) to help FEMA evaluate the impact of the project. • Describe how the proposed project will be designed to anticipate future conditions including climate change. The "2020 New Jersey Scientific Report on Climate Change" will be used to guide the design and construction of this project. The Report is NIDEP's first scientific report on climate change and it identifies the best available science and existing data regarding the current and anticipated environmental effects of climate change globally, nationally, and regionally. The Report's findings include that by 2050, there is a 50% chance that sea-level rise will meet or exceed 1.4 feet. • Provide Annual Maintenance Costs along with a written justification. • Describe areas impacted by flooding that result in detours from County designated emergency access routes and municipal streets. • Describe areas where flooding in this area results in damage to water or sewer infrastructure. The approved design will be selected by city officials in consultation with its design professionals and will meet all regulations and guidelines from the NIDEP, U.S. Army Corps of Engineers and local permitting agencies. The selected design will also undergo a public approval process.</p>	\$59,587.50
	BOROUGH OF WEST WILDWOOD	WEST WILDWOOD, BOROUGH OF	214	Cape May	FMA 2022: Project Scoping - Borough of West Wildwood - Flood Mitigation Project	<p>The Borough will retain an experienced engineer to evaluate flood issues throughout the 220 acres of the community. This project will be managed by Borough officials.</p> <p>What is the scope of work of the proposal? Will it result in a complete project application for future funding opportunities?</p> <p>The scope of work of this planning effort includes document review and data collection, surveying and mapping, flood planning, and meetings and public outreach. These tasks and sub-tasks will be performed with the objective of producing a Flood Planning Study Report. The Flood Planning Study Report will identify the Borough's existing flooding vulnerabilities, provide a comprehensive base map of relevant topographical features and flood pathways, discuss the future impact of sea level rise, identify regulatory and environmental impacts, and estimate the cost of the recommended mitigation projects. This planning effort and the resulting report will provide a fact-based foundation on which future planning and project implementation decisions can be made. Presented in the attached Narrative is the proposed approach and services to be provided in the development of the Flood Planning Study.</p>	\$54,022.50

Project Type	If "Other" for the project type, please manually enter the hazard(s)	What hazard is this project mitigating?	If "Other" for the hazard mitigated, please manually enter the hazard(s)	What community lifeline does the project stabilize?	If this loan will be used towards the non-federal cost share for a grant under another HMA grant program, which HMA grant program will it support?	Has the project already started?	Does the project include any work that will be subject to Environmental Planning and Historic Preservation (EHP) review?	For non-revenue generating projects, please identify the local government's revenue stream to support projects.	Is the community a low-income geographic area as defined in 42 U.S.C. 5135 § (m)(6)
Select a dropdown project type that best aligns with the proposed project. If not listed, input a project type manually.	Some projects may be comprehensive and incorporate multiple project types. Insert the project types in the cell below.	Select a hazard from the dropdown. If not listed, input a project type manually.	Some projects may be mitigating multiple hazards. Insert the hazards in the cell below.	Select a community lifeline from the dropdown.	Select a HMA program from the dropdown.	Projects where actual physical activity, such as groundbreaking, construction, or demolition has commenced prior to completion of EHP review, are ineligible. Select from the dropdown.	Projects that require EHP review include any ground disturbing studies or construction projects including but not limited to retrofits, acquisition of flood-prone properties, hazardous fuels reduction, and flood risk reduction projects.	Loan recipients are required to establish a dedicated source of revenue for repayment of the loan per 42 U.S.C. 5135 § (f)(3)(A)(ii).	Loan recipients that are low-income geographic areas can receive different loan terms. The data dictionary sheet has a link for calculation guidance.
Technical assistance Enhancing Local Floodplain Management					FMA	No	No	Monmouth County	
Develop or conduct engineering, environmental, feasibility and/or benefit cost analyses Other Other		Flooding	Severe storm	Safety and security Community safety	FMA	No	No	Borough of Bay Head-Matching Funds	No
Develop or conduct engineering, environmental, feasibility and/or benefit cost analyses Conduct meetings, outreach and coordination with subapplicants and community residents		Flooding	Severe storm	Safety and security Community safety	FMA	No	No	City Capital	Yes
Develop or conduct engineering, environmental, feasibility and/or benefit cost analyses Conduct meetings, outreach and coordination with subapplicants and community residents		Flooding	Severe storm	Safety and security Community safety	FMA	No	No	City Capital	Yes
Develop or conduct engineering, environmental, feasibility and/or benefit cost analyses Conduct meetings, outreach and coordination with subapplicants and community residents		Flooding	Severe storm	Safety and security Community safety	FMA	No	No	City Capital	No

Project ID Number	Loan Recipient	Benefiting Community(ies)	Benefiting Census Tracts	County(ies)	Project Title	Project Description	Projected Loan Amount
Unique Identifier for the proposed project as determined by the entity.	Name of the eligible proposed loan recipient.	Community(ies) experiencing hazard mitigation benefits. Please include any tribal governments or authorized tribal organization if applicable.	Census tracts where the project will mitigate natural hazards. Please use the 31-digit census tract code. Directions can be found in the Data Dictionary sheet.	County(ies) experiencing hazard mitigation benefits.	Unique name of the project.	<p>Provide a paragraph describing the following elements of the project:</p> <ul style="list-style-type: none"> How the project will reduce risk or increase resiliency Major items in the scope of work The infrastructure being protected How the project will reduce risk to life and property Other items describing how the project mitigates natural hazards. <p>* A description of how the project conforms to the Hazard Mitigation Plan of the applicant and the local government</p>	The dollar amount of the proposed loan. If the loan amount equals or exceeds the statutory maximum loan amount of \$5 million, the cell will turn red.
	STONE HARBOR BORO	STONE HARBOR, BOROUGH OF	209.01	Cape May	FMA 2022: Project Scoping - Stone Harbor - 81st Street Area Flood Mitigation Plan	<p>The Borough of Stone Harbor will retain an experienced engineer to design this project in compliance with the local public contracts law. The project scoping study will be completed and an application for FEMA funding will be submitted. Once the project is funded it will be publicly bid. Project scoping will commence in the fall of 2023 assuming this FEMA grant agreement is fully executed. The project will be designed and constructed in accordance with ASCE-24-14 or the latest version, if applicable. The design and construction will be complete in full compliance with all applicable federal, state, and local floodplain and land use laws and regulations including 44 CFR 60.3 (floodplain management criteria).</p> <p>What is the scope of work of the proposal? Will it result in a complete project application for future funding opportunities?</p> <p>The goal is to develop a proposed improvement for the project area that is a complete solution. As seen on the enclosed Existing Contour Map, areas along the bayfront in the 81st Street project area are lower than the properties within the Borough and elevations generally range from three (3) to seven (7) feet in the NAVD88 datum. The total drainage area is 94 acres and includes 402 NFIP policy holders and 41 repetitive loss properties, and we benefit from added protection by this project. This area has been historically subject to tidal flooding through low lying elevations relating to the storm sewer inlets, substandard bulkheads, boat ramps and other breaches in the bayside perimeter. The purpose of the project scoping is to provide recommendations to sustain actions to reduce or eliminate the risk to life and property from flooding and results of this grant will result in a complete project for FEMA construction funding. The work area and the limits of the survey and base mapping is shown on the aerial map titled Project Location Map/Area of Potential Work. Lastly, the recommendations contained in the USACOE New Jersey Back Bays Coastal Storm Risk Management Interim Report and Environment Scoping Document, dated March 2019 for the Southern Region will be complimented by the results of this planning study and provide an additional level of resiliency to the USACOE's proposed storm surge barriers and increased building elevations. Enclosed please find the following items pertaining to this project scoping grant initiative: 1. One (1) copy of the Existing Contour Map 2. One (1) copy of the Project Location Map/Area of Potential Work 3. One (1) set of site photos 4. One (1) copy of the Borough's Chapter 300 Flood Damage Prevention Ordinance 5. One (1) copy of the Borough's Chapter 200 Bulkhead Ordinance A. Scope of Work 1) Surveying and Base Mapping. Detailed surveying and base mapping will be provided to assess elevations along the bayfront, particularly bulkheads, street ends and backyards. Surveying will cover building and bulkhead locations, docks, piers, tide lines and potentially building heights. The survey will be completed by on-site personnel using a total robotic station and global positioning system (GPS) equipment. 2) Schematic Design/H & H Study/Design Development/Permitting. This phase will include the development of concepts, design, and permitting to address flooding in a defined project area. The selected engineer will develop design concepts, work with the Borough officials to select a design, and advance permitting to ensure that the project does not adversely affect natural resources and conforms to local, state, and federal regulations. Specifics of this phase includes: a. Detailed project description b. Details on how the mitigation activity will be implemented c. Description of how the project is technically feasible and will be effective in reducing the risk by reducing or eliminating damage to property and/or loss of life in the project area. The engineering design parameters and references will include the following: preliminary schematic or engineering drawings/design; applicable building codes; engineering practices and/or best practices; level of protection. d. Identification and justification of drainage area to be impacted by project e. Identification of project maintenance requirements and cost f. Included will be construction methodology with staging and access locations, if not restricted to existing impervious surfaces. Indications of the amount of land acreage anticipated to be disturbed during construction. g. Specification if work in water is occurring for any project component. If so, indicated will be location, type of disturbance, and approximate area of impact. h. Demonstration that this is a complete solution i. Identification of Permits Needed j. Discussion of Public Involvement k. Naming of Potential Partners l. Development of the BCA for this project will include a justification for each of the following aspects of the project within the H & H study: • Useful life of elements of the project and how it was derived • Annual Maintenance Cost • Total Project Cost – detailed Engineer's Construction Cost Estimate including design, permitting, and CM • The recurrence interval for this project • Loss of Function or A narrative explaining if this project is not built, whether the Borough loses access on any streets and the duration and ADT for the streets impacted. Also included in the narrative will be an explanation if the project is not built, whether or not the Borough loses potable water or other utilities. • Explanation of how this project is a complete solution for the impacted area. 3) Alternatives Analysis/Community Outreach 4) Construction Documents. This phase will include development of 60, 90, and 100 percent drawings for construction. Upon the Borough's selection of a final design, construction documents will be developed to bring the project developed in Phase 2 to a "shovel-ready" position so that it may be funded by future grant and financing programs.</p>	\$52,500.00
	STONE HARBOR BORO	STONE HARBOR, BOROUGH OF	209.01	Cape May	FMA 2022: Project Scoping - Stone Harbor - 93rd Street Area Flood Mitigation Plan	<p>The Borough of Stone Harbor will retain an experienced engineer to design this project in compliance with the local public contracts law. The project scoping study will be completed and an application for FEMA funding will be submitted. Once the project is funded it will be publicly bid. Project scoping will commence in the fall of 2023 assuming this FEMA grant agreement is fully executed. The project will be designed and constructed in accordance with ASCE-24-14 or the latest version, if applicable. The design and construction will be complete in full compliance with all applicable federal, state, and local floodplain and land use laws and regulations including 44 CFR 60.3 (floodplain management criteria).</p> <p>What is the scope of work of the proposal? Will it result in a complete project application for future funding opportunities?</p> <p>The goal is to develop a proposed improvement for the project area that is a complete solution. As seen on the enclosed Existing Contour Map, areas along the bayfront between 89th Street and 99th Street are lower than the properties within the Borough and elevations generally range from three (3) to seven (7) feet in the NAVD88 datum. The total drainage area is 120 acres and includes 51 repetitive loss properties that will benefit from added protection by this project. The Borough has been historically subject to tidal flooding through low lying elevations relating to the storm sewer inlets, substandard bulkheads, boat ramps and other breaches in the bayside perimeter. The purpose of the planning report is to provide recommendations to sustain actions to reduce or eliminate the risk to life and property from flooding and results of this grant will result in a complete project for FEMA construction funding. The work area and the limits of the survey and base mapping is shown on the aerial map titled Project Location Map/Area of Potential Work. Lastly, the recommendations contained in the USACOE New Jersey Back Bays Coastal Storm Risk Management Interim Report and Environment Scoping Document, dated March 2019 for the Southern Region will be complimented by the results of this planning study and provide an additional level of resiliency to the USACOE's proposed storm surge barriers and increased building elevations. Enclosed please find the following items pertaining to this planning grant initiative: 1. One (1) copy of the Existing Contour Map 2. One (1) copy of the Project Location Map/Area of Potential Work 3. One (1) set of site photos 4. One (1) copy of the Borough's Chapter 300 Flood Damage Prevention Ordinance 5. One (1) copy of the Borough's Chapter 200 Bulkhead Ordinance A. Detailed Description of Each Cost Line 1) Surveying and Base Mapping. Detailed surveying and base mapping will be provided to assess elevations along the bayfront, particularly bulkheads, street ends and backyards. Surveying will cover building and bulkhead locations, docks, piers, tide lines and potentially building heights. The survey will be completed by on-site personnel using a total robotic station and global positioning system (GPS) equipment. 2) Schematic Design/H & H Study/Design Development/Permitting. This phase will include the development of concepts, design, and permitting to address flooding in a defined project area. The selected engineer will develop design concepts, work with the Borough officials to select a design, and advance permitting to ensure that the project does not adversely affect natural resources and conforms to local, state, and federal regulations. Specifics of this phase includes: a. Detailed project description b. Details on how the mitigation activity will be implemented c. Description of how the project is technically feasible and will be effective in reducing the risk by reducing or eliminating damage to property and/or loss of life in the project area. The engineering design parameters and references will include the following: preliminary schematic or engineering drawings/design; applicable building codes; engineering practices and/or best practices; level of protection. d. Identification and justification of drainage area to be impacted by project e. Identification of project maintenance requirements and cost f. Included will be construction methodology with staging and access locations, if not restricted to existing impervious surfaces. Indications of the amount of land acreage anticipated to be disturbed during construction. g. Specification if work in water is occurring for any project component. If so, indicated will be location, type of disturbance, and approximate area of impact. h. Demonstration that this is a complete solution i. Identification of Permits Needed j. Discussion of Public Involvement k. Naming of Potential Partners l. Development of the BCA for this project will include a justification for each of the following aspects of the project within the H & H study: • Useful life of elements of the project and how it was derived • Annual Maintenance Cost • Total Project Cost – detailed Engineer's Construction Cost Estimate including design, permitting, and CM • The recurrence interval for this project • Loss of Function or A narrative explaining if this project is not built, whether the Borough loses access on any streets and the duration and ADT for the streets impacted. Also included in the narrative will be an explanation if the project is not built, whether or not the Borough loses potable water or other utilities. • Explanation of how this project is a complete solution for the impacted area. 3) Construction Documents. This phase will include development of 60, 90, and 100 percent drawings for construction. Upon the Borough's selection of a final design, construction documents will be developed to bring the project developed in Phase 2 to a "shovel-ready" position so that it may be funded by future grant and financing programs.</p>	\$157,500.00
	CITY OF SOMERS POINT	SOMERS POINT, CITY OF	127.01, 127.02, 128.01, 128.02	Atlantic	FMA 2022: Project Scoping - Somers Point - Gulph Mills Pump Station	<p>The City of Somers Point will retain an experienced engineer to design this project in compliance with the local public contracts law. The project scoping study will be completed and an application for FEMA funding will be submitted. Once the project is funded it will be publicly bid. Project scoping will commence in the fall of 2023 assuming this FEMA grant agreement is fully executed. The project will be designed and constructed in accordance with ASCE-24-14 or the latest version, if applicable. The design and construction will be complete in full compliance with all applicable federal, state, and local floodplain and land use laws and regulations including 44 CFR 60.3 (floodplain management criteria).</p> <p>What is the scope of work of the proposal? Will it result in a complete project application for future funding opportunities?</p> <p>The proposed project seeks to reduce the flood risks to 36 NFIP properties, thus protecting properties with a high likelihood of damage. Please find attached a Geo File which lists the NFIP insured properties that will benefit from this project. The goal of this project is to develop an improvement for the project area that is a complete solution. An existing 36-inch outfall adjacent to Gulph Mill Road drains this 71-acre drainage area. The current outfall is below Mean High Water (MHW) and therefore tidal water surcharges the system at high tide, positive discharge of the stormwater is not possible under current conditions. This Project Scoping will provide for the necessary study to develop a solution to this issue. The Scope work will include a topographic survey, wetlands delineation, H & H study, design of the pump station, permitting, and grant administration. The proposed project will reduce risk and increase resiliency, realize ancillary benefits, and leverage innovation. The project is located within the 100-year floodplain. The study area currently experiences regular flooding. There have been several public meetings regarding the All-Hazards Plan and other resiliency plans and many alternatives have been considered. The no action alternative would involve not upgrading the stormwater infrastructure. This is not a practical solution because the City would continue to experience flooding impacts and would continue to incur damage and maintenance costs. The proposed project was determined to be the most practicable alternative and is cost effective. The proposed project will anticipate future conditions including climate change and sea level rise. The "2020 New Jersey Scientific Report on Climate Change" will be used to guide the design and construction of this project. The report is NIDEP' first scientific report on climate change and it identifies the best available science and existing data regarding the current and anticipated environmental effects of climate change globally, nationally, and regionally. The Report's findings include that by 2050, there is a 50% chance that sea-level rise will meet or exceed 1.4 feet. The Jersey Shore has been witnessing a stabilization and in some areas a decrease in population.</p>	\$28,750.00
	BOROUGH OF LONGPORT	LONGPORT, BOROUGH OF	135	Atlantic	FMA 2022: Longport - Phase 2 Community Flood Mitigation - Winchester Avenue Resiliency Project	<p>This grant application is for Phase 2 of a flood mitigation project to improve the stormwater drainage infrastructure within the Winchester Avenue drainage area in the Borough of Longport. Phase 1 of the project has been funded by FEMA and includes upgrades to the existing stormwater pump station at 34th Avenue and the bay, construction of a new stormwater pump station at Winchester Avenue and 31st Avenue, and connection of the new pump stations to the existing storm sewer system. The Borough was awarded \$1,128,750.00 in FEMA funding for Phase 1 with a non-Federal share of \$376,250.00. The period of performance for Phase 1 began on March 23, 2022 and ends March 22, 2025. While Phase 1 will significantly increase the discharge capacity of the drainage system, the infrastructure can be further improved by increasing the capacity of the stormwater collection and conveyance system within the project area. Phase 2 of the project will build upon Phase 1 to further alleviate flooding within the project area. The proposed improvements under Phase 2 include replacement and installation of storm sewer infrastructure on Winchester Avenue, 31st Avenue, and 34th Avenue within the project area, including larger storm sewer pipes and new inlets. The upgraded infrastructure will substantially increase the capacity of the drainage system to convey stormwater to the new pump stations constructed under Phase 1. Additional improvements proposed as part of Phase 2 include replacement of the bulkhead at the 34th Avenue street end and roadway restoration as needed. It is estimated that the resulting project will more than double the flow capacity of the existing storm sewer infrastructure. Winchester Avenue is a minor arterial that runs from the Margate City Line to Sunset Avenue in Longport. Based on drainage investigations, nearly all the runoff from three major drainage areas run through the bay outfall system crossing Winchester Avenue. Winchester Avenue is significant in that it is the lowest of the adjacent two minor arterial roadways (Monmouth Avenue and Ventnor Avenue). Winchester Avenue provides that most effective drainage corridor within which to collect and distribute stormwater runoff for an area running from Sunset Avenue to the Margate City Line and from Atlantic Avenue to Monmouth Avenue consisting of approximately eight acres. The Winchester Avenue Resiliency Project will benefit an area bounded by generally Colledge Avenue, Ventnor Avenue, 30th Street, and the Bay. A total of 64.2 acres. There are 268 NFIP insured structures and 6 repetitive loss homes that will benefit from this project. The project will be designed and constructed in accordance with ASCE-24-14 or the latest version, if applicable. The design and construction will be complete in full compliance with all applicable federal, state, and local floodplain and land use laws and regulations including 44 CFR 60.3 (floodplain management criteria). We estimate that the existing storm sewer infrastructure has capacity to manage the following percentages of flow within the project area for each storm as indicated: 1-Year Storm - 30% of flow 2-Year Storm - 27% of flow 5-Year Storm - 20% of flow 10-Year Storm - 17% of flow 25-Year Storm - 14% of flow 50-Year Storm - 12% of flow Upon completion of the proposed storm sewer upgrades, we estimate that the new storm sewer infrastructure will have capacity to manage the following percentages of flow within the project area for each storm as indicated: 1-Year Storm - 74% of flow 2-Year Storm - 67% of flow 5-Year Storm - 50% of flow 10-Year Storm - 42% of flow 25-Year Storm - 35% of flow 50-Year Storm - 30% of flow Flooding within the project area will be reduced accordingly for each storm frequency.</p>	\$283,125.00
	CITY OF CAPE MAY	CAPE MAY, CITY OF	220	Cape May	FMA 2022: Cape May City - Seawall Flood Mitigation Project	<p>The primary benefit area is the neighborhood that abuts Beach Avenue. This area includes 266 NFIP insured properties and 36 repetitive loss properties. The USACE 2014 Federal Interest Determination Report analyzed installing a bulkhead at elevation +10 NAVD88 along the same run of the beach and stated, "This would create a continuous seawall/bulkhead structure along the ocean front of the City at a consistent elevation of approximately 10 feet NAVD88 that would help to prevent coastal flooding of streets and structures during hurricanes and nor'easters." The United States Army Corps of Engineers (USACE), the City, and the project team understand that this 4,200 ft stretch of the City's coastline needs to be elevated to provide a complete, unbroken coastal protection system. The proposed seawall cap at elevation +15 NAVD88 will close off the low point along the coast and achieve the City's goal to provide a complete shore protection system along its beachfront. The Beach Avenue Seawall Project follows a similar approach to the USACE seawall design. Since the existing seawall has shown it is structurally stable against storm wave loadings, and since historically the seawall directly, it was determined that the existing seawall is structurally sound and could be built off of to increase the seawall height. The existing stone seawall is used as a foundation for a new proposed reinforced concrete cap to provide increased shore protection and recreational development. The existing stone seawall is to be cleared of vegetation and old concrete gROUT to prepare it for the new concrete seawall cap installation. The main promenade/splashpad of the seawall is proposed to be 18'-6" to 20'-0" wide with a total square footage of 77,700sq. ft. (or 1.78 acre) of coastal promenade Open Space, reduce erosion and spread the wave loads over the entire existing seawall below. The promenade varies in thickness from 3'-0" to 4'-0" to account for elevation changes in the existing seawall. The promenade elevation is proposed at elevation +12.5 NAVD88 and is to be sloped seaward to allow any rainfall / ocean overtopping to run back towards the ocean through scuppers in the seating wall. The seating wall elevation +15 NAVD88 is designed to take the full force of breaking and broken ocean waves. The existing timber bulkhead that runs along Beach Avenue is to be replaced with a new timber bulkhead to grade and installing the new timber bulkhead directly in front of the old. This installation method will save time and costs and allows the elevation of the new bulkhead to maintain a maximum slope of 5 to 1 on the new stabilized slope along the road. The new timber bulkhead is proposed to be tied back to the new concrete cap to provide structural stability. Vegetated dune slopes will be created along each side of the seawall to stabilize the sand and to prevent erosion. Dune fencing will be installed along the seaward toe of the new dune to promote sand accretion and build the dune system even further as time passes. These dune design details are in accordance with the USACE Shore Protection Manual dune standards. The stabilized slopes not only help with beach erosion they also hide the main structure of the seawall cap, thus providing the community with a more aesthetically pleasing structure. See Appendix E for conceptual renderings. This will allow the seawall to provide increased protection from flooding while also adding to the social benefits of the community by providing open green space and encouraging the community to get out and be a part of nature and the beautiful New Jersey Shorelines. The elevation of the seawall is proposed to be elevation +15 ft NAVD88, this accounts for the existing FEMA VE EL. +11 flood zone as well as a 500-year storm of VE EL. +13 with an additional 2-feet of freeboard. Elevation +15 NAVD88 also provides for the estimated 1.9 feet of sea level rise in the next 50 years and will still have 2.1- feet of freeboard above a 100-year storm in the year 2070. The new seawall cap / seating wall is also designed to allow for future elevation increases to maintain the needed protection for the City in the future beyond 2070. This allows for the seawall to be elevated in the future to adapt to rising sea levels and to ensure the City remains protected against coastal flooding. All work required to build the new concrete cap will be restricted to staying over the existing seawall footprint. This will minimize and eliminate the majority of disturbances to the existing dune system. The staging and construction areas will be placed along Beach Avenue to facilitate the installation of the new seawall cap allowing all proposed improvements to be conducted from Beach Avenue or directly on top of the existing seawall. This project approach takes all environmental concerns addressed in the USACE Feasibility Report into account. The design allows for all disturbances to be limited to over top of the existing seawall footprint and toward Beach Avenue therefore making the project environmentally friendly to the maximum extent possible. This alternative also includes removing invasive Japanese Pine trees along the seawall which further instills the projects dedication to preserving the coastal dune system and working with nature instead of against. The project includes upgrading seven beach access points bringing them up to ADA standards allowing the whole public to be able to benefit from the promenade and access the Atlantic Ocean as they please. The existing bathrooms will be replaced with new facilities that are also ADA compliant. Bike racks, trash receptacles and rest stations are also proposed at each beach entrance again further adding to the public benefit of this project. There are truly very little to no cons to this alternative, along with all construction projects maintenance and protection of traffic will be required along Beach Avenue to block off the staging and construction access areas which can be a bother. This will be temporary and the benefits this project creates will extend out to 2070 and further. These are the same cons which are included with all projects. This alternative by far minimizes all ecological and social disturbances and provides the best configuration possible to provide the protection Cape May desperately needs.</p>	\$8,102,933.15

Project Type	If "Other" for the project type, please manually enter the hazard(s)	What hazard is this project mitigating?	If "Other" for the hazard mitigated, please manually enter the hazard(s)	What community lifeline does the project stabilize?	If this loan will be used towards the non-federal cost share for a grant under another HMA grant program, which HMA grant program will it support?	Has the project already started?	Does the project include any work that will be subject to Environmental Planning and Historic Preservation (EHP) review?	For non-revenue generating projects, please identify the local government's revenue stream to support projects.	Is the community a low-income geographic area as defined in 42 U.S.C. 5135 § (m)(6)
Select a dropdown project type that best aligns with the proposed project. If not listed, input a project type manually.	Some projects may be comprehensive and incorporate multiple project types. Insert the project types in the cell below.	Select a hazard from the dropdown. If not listed, input a project type manually.	Some projects may be mitigating multiple hazards. Insert the hazards in the cell below.	Select a community lifeline from the dropdown.	Select a HMA program from the dropdown.	Projects where actual physical activity, such as groundbreaking, construction, or demolition has commenced prior to completion of EHP review, are ineligible. Select from the dropdown.	Projects that require EHP review include any ground disturbing studies or construction projects including but not limited to retrofits, acquisition of flood-prone properties, hazardous fuels reduction, and flood risk reduction projects.	Loan recipients are required to establish a dedicated source of revenue for repayment of the loan per 42 U.S.C. 5135 § (f)(1)(A)(ii).	Loan recipients that are low-income geographic areas can receive different loan terms. The data dictionary sheet has a link for calculation guidance.
Develop or conduct engineering, environmental, feasibility and/or benefit cost analyses Conduct meetings, outreach and coordination with subapplicants and community residents		Flooding	Severe storm	Safety and security Community safety	FMA	No	No	City Capital	No
Develop or conduct engineering, environmental, feasibility and/or benefit cost analyses Conduct meetings, outreach and coordination with subapplicants and community residents		Flooding	Severe storm	Safety and security Community safety	FMA	No	No	Capital	No
Develop or conduct engineering, environmental, feasibility and/or benefit cost analyses Conduct meetings, outreach and coordination with subapplicants and community residents		Flooding	Severe storm	Safety and security Community safety	FMA	No	No	City Capital	No
Flood control Community flood control Community flood control		Flooding	Winter storm	Safety and security Community safety	FMA	No	Yes	Capital	No
Flood control Floodwall Floodwall		Flooding	Severe storm	Safety and security Community safety	FMA	No	Yes	City Capital	

Project ID Number	Loan Recipient	Benefiting Community(ies)	Benefiting Census Tracts	County(ies)	Project Title	Project Description	Projected Loan Amount
Unique Identifier for the proposed project as determined by the entity.	Name of the eligible proposed loan recipient.	Community(ies) experiencing hazard mitigation benefits. Please include any tribal governments or authorized tribal organization if applicable.	Census tracts where the project will mitigate natural hazards. Please use the 11 digit census tract code. Directions can be found in the Data Dictionary sheet.	County(ies) experiencing hazard mitigation benefits.	Unique name of the project.	<p>Provide a paragraph describing the following elements of the project:</p> <ul style="list-style-type: none"> How the project will reduce risk or increase resilience. Major items in the scope of work. The infrastructure being protected. How the project will reduce risk to life and property. Other items describing how the project mitigates natural hazards. <p>* A description of how the project conforms to the Hazard Mitigation Plan of the applicant and the local government.</p>	The dollar amount of the proposed loan. If the loan amount equals or exceeds the statutory maximum loan amount of \$5 million, the cell will turn red.
	BOROUGH OF WEST WILDWOOD	WEST WILDWOOD, BOROUGH OF	214	Cape May	FMA 2022: Borough of West Wildwood - Living Shoreline	The Borough of West Wildwood, NJ proposes a wave attenuation and flood protection project to restore the marsh barrier known as 26th Street. The 26th Street project is based on living shoreline principles. The proposed project will include six stone breakwaters with adjoining marsh and beach habitat in a tombolo formation. This variety of elevations behind the breakwaters will allow natural adaptation to occur and maximize success of plantings. Additionally, the combination of rock, sand and marsh will provide both ecosystem services and increased storm resilience. This project was initiated through a conceptual design study conducted by Steven's Institute of Technology in 2016 (Stevens 2016). A subsequent effort by CH2M developed a 30% design in 2017 based on the tradeoff analyses and recommendations from the conceptual study (CH2M 2017). The original design included six 150 ft breakwaters with 50 ft gaps in between them at varying distances from shore. However, the reports did not describe the wave attenuation performance of the living shoreline on the community. During the review of the living shoreline design, Mott MacDonald assessed the breakwater design, and potential flooding using the HEC-RAS software and water levels recorded during previous storms of record. A revised arrangement of the breakwaters was developed to provide a complete solution by directly reducing wave energy affecting the community in the most vulnerable areas. The new design also includes slightly wider gaps in accordance with general coastal engineering guidelines in the Coastal Engineering Manual (CEM). The proposed project provides a complete solution for the impacted area of West Wildwood for the damage mechanisms of wave impact, wave runup and wave overtopping. The series of breakwaters will trip the incident waves from Grassy Sound. Wave energy that is transmitted through the gaps and breakwaters will be attenuated by the 26th Street marsh barrier which will be enhanced by the addition of sediment and vegetation. Overland propagation of waves will further decrease the wave setup. Energy impacting the Poplar Street bulkheads will be greatly reduced, thus reducing wave impact damage, waves in the developed portion of the community and wave overtopping of the bulkheads. The useful life of a rubble-mound structure, designed using US Army Corps of Engineers standards and guidelines, is typically considered 50 years. The armor stone has been designed to be stable, however some damage (rock movement) is expected to occur over the life of the structure, therefore rehabilitation is anticipated in year 25. The proposed project provides a complete solution for the impacted area for the damage mechanisms of wave impact, wave runup and wave overtopping. The series of breakwaters will trip the incident waves from Grassy Sound. Wave energy that is transmitted through the gaps and breakwaters will be attenuated by the 26th Street marsh barrier which will be enhanced by the addition of sediment and vegetation. Overland propagation of waves will further decrease the wave setup. Energy impacting the Poplar Street bulkheads will be greatly reduced, thus reducing wave impact damage, waves in the developed portion of the community and wave overtopping of the bulkheads.	\$645,591.17
	CITY OF MARGATE CITY	ATLANTIC CITY, CITY OF BRIGANTINE, CITY OF CAPE MAY, CITY OF LONGPORT, BOROUGH OF MARGATE CITY, CITY OF SOMERS POINT, CITY OF VENTNOR CITY, CITY OF	AC : 1, 2, 3, 4, 5, 11, 12, 13, 14, 15, 19, 23, 24, 25; Brigantine : 101.01, 101.02, 101.04, 101.05; Cape May : 220; Longport : 135; Margate : 130, 131.01, 131.02; Somers Point : 127.01, 127.02, 128.01, 128.02; Ventnor : 132.01, 132.02, 133.01, 133.02	Atlantic Atlantic Cape May Atlantic Atlantic Atlantic Atlantic	FMA 2022: City of Margate - Regional Home Elevation Project	This application includes properties located in Brigantine, Cape May City, Ventnor, Margate, Longport, Atlantic City, and Somers Point. A total of 22 applications of which four meet the definition of Severe Repetitive Loss, six meet the definition of FMA - Repetitive Loss Properties. An additional property appears to meet the RL & FMA definition but is not listed on the RL list. 532 Coverly Drive in Brigantine has two claims totaling \$28,748 and the assessed value of the property was \$52,000 at the time of the claims. Hence, 11 of the 22 or 50% of the properties included in this application appear to be RL properties. There are also nine alternative properties. In addition, there were twenty-three alternative properties approved in the 2019 FEMA FMA application and if these properties cannot be funded through the 2019 application, they will be funded potentially through this 2022 FEMA FMA application. None of the 23 "2019 alternates" are included in the 2022 FEMA FMA application. All complete applications are included in this submission. SRL FEMA are the highest priority, followed by RL properties, and NFIP insured properties. The project is designed to comply with the FY 2021 FMA NOFO, Section V. Individual Flood Mitigation Projects, Priority b. Projects that will mitigate flood damage to at least 50 percent of structures included in the subapplication that meet the definition of a RL property: have incurred flood-related damage on two occasions, in which the cost of the repair, on the average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event. It is noted from the NOFO, that FEMA may rank subapplications lower where the average elevation federal cost share is greater than \$250,000 for all single dwelling units. This application is in full compliance with Priority b and includes: ≤ 50 percent of the structures meet the RL definition. ≤ 25 percent of the structures meet the RL definition. ≤ 25 percent of the structures meet the RL definition. The average elevation cost is less than \$250,000. The property owners are fully responsible for all aspects of these elevation projects. The property owners will be responsible for all compliance, permitting, construction, construction management, and project close out. The Borough will manage the grant and provide quarterly reports. All homes will be elevated to at least BFE+1 as required by the State of New Jersey. If the local ordinance requires a greater elevation, the property owner will be responsible to ensure that the structure is elevated in compliance with the local ordinance. The property owners are also fully responsible for hiring the contractor and for paying any local matching costs. The Borough of Longport will hire professionals for grant management using the Management Fee to cover these costs. All elevations will fully comply with the City's Flood Protection Ordinance, NFIP Standards in 44 CFR Part 60, and in ASCE 24-14 or the latest edition. All permitting, design, and construction will be the responsibility of the property owner. All homes will be elevated to at least BFE +1 foot, and most will be lifted higher in full compliance with the local flood plain ordinance.	\$758,175.00
	NEW MILFORD BORO OF	NEW MILFORD, BOROUGH OF	371, 372.01, 372.03, 372.04	Bergen	FMA 2022: Borough of New Milford, New Jersey - Elevations	The Borough of New Milford, Bergen County, New Jersey is applying for FEMA Flood Mitigation Assistance (FMA) grant funding to elevate 16 residential flood-prone properties located in the 1-percent annual chance floodplain, 7 of which are located in the floodway (as per the August 2019 FEMA effective FIRM panels #34003C0192H and #34003C0184H and the August 2019 FEMA effective DFIRM #34003C). The Borough of New Milford has demonstrated a long-term commitment to mitigating the flood hazard, already mitigating 41 properties through acquisition/demolition with a combination of FEMA, NJ State Blue Acres funding, and Bergen County NJ Open Space funding, thus freeing up critical resources to focus on maintaining and supporting community lifelines in a disaster. With these problematic homes elevated out of harm's way, first responders can better utilize a community lifeline framework; prioritizing and focusing their efforts on critical services and infrastructure, and thus stabilizing the community more quickly. The proposed scope of work, cost estimate and project schedule are provided below. In accordance with the Borough's Flood Ordinance, the NJ State Flood Hazard Area Control Act (N.J.A.C. 7:13-7.11), and FEMA requirements, all structures will be elevated 4 feet above the BFE to provide increased protection from flood and projected exacerbation of the flood and storm hazards from climate change. The best available data for the BFE utilized will be the most restrictive BFE, as determined by comparing FEMA's DFIRM, or NIDEP Design Flood. Any encroachments, including fill, new construction, and substantial improvements, will not result in any increase in flood levels. All elevations will be designed in accordance with the NFIP standards in 44 CFR Part 60 and in accordance with ASCE 24-14, or latest edition, or its equivalent as minimum design criteria as stated in the 2015 HMA Guidance Addendum. The property owners agree to maintain a flood insurance policy for the lifetime of the structure. The property will have a deed restriction stating that flood insurance coverage must be maintained during the life of the property regardless of transfer of ownership of such property. The Borough will coordinate and submit reimbursement requests to the State for all eligible costs and liaise with homeowners throughout this process. Please refer to the detailed scope of work and cost estimate from the Borough (8 "Scope of Work.pdf" and 9 "Cost Estimate.pdf"). These files detail the following for each structure in the application: 1) property owner name; 2) physical address; 3) estimated cost to elevate each structure; 4) name of flooding source; 5) number of feet the first floor is being raised; 6) BFE; 7) current elevation of the lowest finished floor; 8) proposed new elevation; and 9) type of existing foundation. Each structure will be elevated either on extended foundation walls or extending the walls of the home. All owners of the proposed properties provided the following attached to this application in the Project Site Inventory section of this grant application: 1) proof of NFIP flood insurance; 2) voluntary participation agreement with flood loss history and structural attributes; 3) four photographs of their structure (one each side); 4) signed Model Acknowledgement of Conditions form; 5) signed Declaration and Release form; and 6) signed Affidavit (Duplication of Benefits). There are no alternate properties proposed for this project.	\$406,708.40
	STAFFORD TOWNSHIP OF	STAFFORD, TOWNSHIP OF	7351.04	Ocean	FMA 2022: Township of Stafford, NJ - Elevations	The Township of Stafford, Ocean County, New Jersey is applying for FEMA Flood Mitigation Assistance (FMA) grant funding to elevate 10 residential flood-prone properties located in the 1-percent annual chance floodplain, in which all properties are located in the floodway (StaffordFMA2022_AerialMap_PrelimFloodDFIRM.jpg). The Township of Stafford has demonstrated a long-term commitment to elevating their most flood prone homes, thus freeing up critical resources to focus on maintaining and supporting community lifelines in a disaster. With these problematic homes elevated out of harm's way, first responders can better utilize a community lifeline framework; prioritizing and focusing their efforts on critical services and infrastructure, and thus stabilizing the community more quickly. The proposed scope of work, cost estimate and project schedule are provided below. The Township Flood Damage Prevention Ordinance states for the first floor to be 2 feet above the base flood elevation which is below the NIDEP standard. To be in accordance with the Flood Hazard Area Control Act Rules (N.J.A.C.) 7:13 all structures must be elevated three feet above the Base Flood Elevation (BFE) or one foot above the New Jersey Department of Environmental Protection (NJDEP) Design Flood. To provide additional freeboard, the Township is proposing to elevate these properties 2 feet above the base flood elevation plus an additional foot of freeboard for a total of 3 feet. The best available data for the BFE utilized will be the most restrictive BFE, as determined by comparing FEMA's Preliminary DFIRM, or NIDEP Design Flood. Any encroachments, including fill, new construction, and substantial improvements, will not result in any increase in flood levels. All elevations will be designed in accordance with the NFIP standards in 44 CFR Part 60 and in accordance with ASCE 24-14, or latest edition, or its equivalent as minimum design criteria as stated in the 2015 HMA Guidance Addendum. The property owners agree to maintain a flood insurance policy for the lifetime of the structure. The property will have a deed restriction stating that flood insurance coverage must be maintained during the life of the property regardless of transfer of ownership of such property. The Township will coordinate and submit reimbursement requests to the State for all eligible costs and liaise with homeowners throughout this process. Please refer to the detailed scope of work and cost estimate from the Township (Stafford_SOW_Memo.pdf and Cost Estimate.pdf). These files detail the following for each structure in the application: 1) property owner name; 2) physical address; 3) estimated cost to elevate each structure; 4) name of flooding source; 5) number of feet the first floor is being raised; 6) most restrictive BFE (from preliminary DFIRM or NIDEP Design Flood); 7) current elevation of the lowest finished floor; 8) proposed new elevation (based on preliminary DFIRM or NIDEP Design Flood); and 9) type of existing foundation. Each structure will be elevated either on extended foundation walls or extending the walls of the home. All owners of the proposed properties provided the following attached to this application in the Project Location section of this grant application: 1) proof of NFIP flood insurance; 2) voluntary participation agreement with flood loss history and structural; 3) four photographs of their structure (one each side); 4) signed Model Acknowledgement of Conditions form; 5) signed Declaration and Release form; and 6) signed Affidavit (Duplication of Benefits). There are no alternate properties proposed for this project.	\$633,108.98
	TOWNSHIP OF PEQUANNOCK MUNICIPAL BUILDING	PEQUANNOCK, TOWNSHIP OF	402, 403.02, 403.01	Morris	FMA 2022: Township of Pequannock, NJ - Elevations	The Township of Pequannock, Morris County, New Jersey is applying for FEMA Flood Mitigation Assistance (FMA) grant funding to elevate 7 residential flood-prone properties located in the 1-percent annual chance floodplain, none of which are located in the floodway (Pequannock_Aerial_PrelimDFIRM_AllProperties.jpg). The Township of Pequannock has demonstrated a long-term commitment to elevating their most flood prone homes, thus freeing up critical resources to focus on maintaining and supporting community lifelines in a disaster. With these problematic homes elevated out of harm's way, first responders can better utilize a community lifeline framework; prioritizing and focusing their efforts on critical services and infrastructure, and thus stabilizing the community more quickly. The proposed scope of work, cost estimate and project schedule are provided below. The Township Flood Damage Prevention Ordinance states for the first floor to be 3 feet above the base flood elevation which is in accordance with the NIDEP standard. To provide additional freeboard, the Township is proposing to elevate these properties 2 feet above the base flood elevation plus an additional foot of freeboard for a total of 3 feet. The best available data for the BFE utilized will be the most restrictive BFE, as determined by comparing FEMA's Preliminary DFIRM, or NIDEP Design Flood. Any encroachments, including fill, new construction, and substantial improvements, will not result in any increase in flood levels. All elevations will be designed in accordance with the NFIP standards in 44 CFR Part 60 and in accordance with ASCE 24-14, or latest edition, or its equivalent as minimum design criteria as stated in the 2015 HMA Guidance Addendum. The property owners agree to maintain a flood insurance policy for the lifetime of the structure. The property will have a deed restriction stating that flood insurance coverage must be maintained during the life of the property regardless of transfer of ownership of such property. The Township will be the sub-applicant for the proposed project. The Township's Flood Resilience Officer will manage and oversee the project tasks and assist homeowners through the elevation project. Each homeowner will individually manage the elevation of their home including hiring and payment of all contractors. The Township will coordinate and submit reimbursement requests to the State for all eligible costs and liaise with homeowners throughout this process. Please refer to the detailed scope of work and cost estimate from the Township (Pea_SOW_Memo.pdf and Cost Estimate.pdf). These files detail the following for each structure in the application: 1) property owner name; 2) physical address; 3) estimated cost to elevate each structure; 4) name of flooding source; 5) number of feet the first floor is being raised; 6) most restrictive BFE (from preliminary DFIRM or NIDEP Design Flood); 7) current elevation of the lowest finished floor; 8) proposed new elevation (based on preliminary DFIRM or NIDEP Design Flood); and 9) type of existing foundation. Each structure will be elevated either on extended foundation walls or extending the walls of the home. All owners of the proposed properties provided the following attached to this application in the Project Location section of this grant application: 1) proof of NFIP flood insurance; 2) voluntary participation agreement with flood loss history and structural; 3) four photographs of their structure (one each side); 4) signed Model Acknowledgement of Conditions form; 5) signed Declaration and Release form; and 6) signed Affidavit (Duplication of Benefits). There are no alternate properties proposed for this project.	\$25,723.46
	MILLBURN TOWNSHIP	MILLBURN, TOWNSHIP OF	200, 201, 202, 203	Essex	FMA 2022: Township of Millburn, New Jersey - Elevations	The Township of Millburn, Essex County, New Jersey is applying for FEMA Flood Mitigation Assistance (FMA) grant funding to elevate 3 residential flood-prone properties located in the 0.2-percent annual chance floodplain, none of these properties are located in the floodway (Millburn_Properties_FloodDFIRM.jpg). The Township of Millburn has demonstrated a long-term commitment to mitigating the most flood prone homes, thus freeing up critical resources to focus on maintaining and supporting community lifelines in a disaster. See presentation of their public meeting that summarizes their mitigation efforts to date (2022-09 FMAC Public Meeting.pptx.pdf). With these problematic homes elevated out of harm's way, our first responders can better utilize a lifeline framework; prioritizing and focusing their efforts on critical services and infrastructure, and thus stabilizing the community more quickly. The proposed scope of work, cost estimate and project schedule are provided below. The Township Flood Damage Prevention Ordinance states for the first floor to be 1 foot above the base flood elevation which is in accordance with the NIDEP standard. However, the New Jersey Department of Environmental Protection has announced an emergency rule that may amend the Flood Hazard Area Control Act Rules (N.J.A.C.) 7:13 (NIDEP Announces New Emergency Flood Hazard Area Regs.pdf, NIDEP Announces FMA Emergency Rulemaking.pdf). The emergency rules have not been officially adopted by NIDEP but are in discussion by the State to require the following the first floors of all buildings in fluvial (non-tidal) areas to meet the FEMA regulated 100-year elevation plus 3 feet, which is an increase in two feet compared to the current standards. To provide additional freeboard, the Township is proposing to elevate these properties 3 feet above the base flood elevation plus an additional foot of freeboard for a total of 4 feet or above the level of the 500-year flood. The scope of work and cost estimate for each property is estimated to elevate each home 4 feet above the BFE to provide increased protection from flood and projected exacerbation of the flood and storm hazards from climate change. The best available data for the BFE utilized will be the most restrictive BFE, as determined by comparing FEMA's DFIRM, or NIDEP Design Flood. Any encroachments, including fill, new construction, and substantial improvements, will not result in any increase in flood levels. All elevations will be designed in accordance with the NFIP standards in 44 CFR Part 60 and in accordance with ASCE 24-14, or latest edition, or its equivalent as minimum design criteria as stated in the 2015 HMA Guidance Addendum. The property owners agree to maintain a flood insurance policy for the lifetime of the structure. The property will have a deed restriction stating that flood insurance coverage must be maintained during the life of the property regardless of transfer of ownership of such property. The Township will be the sub-applicant for the proposed project. The Township's Administrator, assisted by the Township Engineer and Building Department, will manage and oversee the project tasks and assist homeowners through the elevation project. Each homeowner will individually manage the elevation of their home including hiring and payment of all contractors. The Township will coordinate and submit reimbursement requests to the State for all eligible costs and liaise with homeowners throughout this process. Please refer to the detailed scope of work and cost estimate from the Township (8 "Scope of Work.pdf" and 9 "Cost Estimate.pdf"). These files detail the following for each structure in the application: 1) property owner name; 2) physical address; 3) estimated cost to elevate each structure; 4) name of flooding source; 5) number of feet the first floor is being raised; 6) BFE; 7) current elevation of the lowest finished floor; 8) proposed new elevation; and 9) type of existing foundation. Each structure will be elevated either on extended foundation walls or extending the walls of the home. All owners of the proposed properties provided the following attached to this application in the Project Site Inventory section of this grant application: 1) proof of NFIP flood insurance; 2) voluntary participation agreement with flood loss history and structural attributes; 3) four photographs of their structure (one each side); 4) signed Model Acknowledgement of Conditions form; 5) signed Declaration and Release form; and 6) signed Affidavit (Duplication of Benefits). There are no alternate properties proposed for this project.	\$173,245.29
	TOWNSHIP OF BERKELEY	BERKELEY, TOWNSHIP OF	7311.01	Ocean	FMA 2022: Berkeley Township - Elevation of Three Structures (Application 4)	There are three (3) homeowners applying for the grant. 16 Cove Road West, 35 Cove Drive, and 2208 South Bayview Avenue: The structure elevations will consist of the elevation of the existing structures on pilings to a minimum first floor elevation of two (2) feet above the base flood elevation per FEMA's Emergency Freeboard requirements. The methodology is to raise the structures above the base flood elevation as indicated on the most restrictive map plus two (2) feet of freeboard to the lowest structural member as required for Coastal Flood Zones. The existing structures will be elevated within the existing footprint and should provide flood protection for up to 30 years. This activity will also include engineering design, architectural/structural plans, soil analysis, survey, new elevation certificate, plot plans, site preparation, and material disposal. Please note, the Township of Berkeley's requirement for freeboard is to elevate the structure above the base flood elevation as indicated on the most restrictive map plus one (1) foot of freeboard, but for the FMA grants we will require the structures to abide by FEMA's Emergency Freeboard requirements of two (2) feet above the base flood elevation.	\$129,554.00
	TOWNSHIP OF BERKELEY	BERKELEY, TOWNSHIP OF	7311.01, 7280.01, 7310.02	Ocean	FMA 2022: Berkeley Township - Elevation of Three Structures (Application 1)	There are three (3) homeowners applying for the grant. 11 Cove Drive, 109 24th Avenue and 220 Cypress Drive: The structure elevations will consist of the elevation of the existing structures on pilings to a minimum first floor elevation of two (2) feet above the base flood elevation per FEMA's Emergency Freeboard requirements. The methodology is to raise the structures above the base flood elevation as indicated on the most restrictive map plus two (2) feet of freeboard to the lowest structural member as required for Coastal Flood Zones. The existing structures will be elevated within the existing footprint and should provide flood protection for up to 30 years. This activity will also include engineering design, architectural/structural plans, soil analysis, survey, new elevation certificate, plot plans, site preparation, and material disposal. Please note, the Township of Berkeley's requirement for freeboard is to elevate the structure above the base flood elevation as indicated on the most restrictive map plus one (1) foot of freeboard, but for the FMA grants we will require the structures to abide by FEMA's Emergency Freeboard requirements of two (2) feet above the base flood elevation.	\$145,932.00
	TOWNSHIP OF BERKELEY	BERKELEY, TOWNSHIP OF	7280.02, 7280.01	Ocean	FMA 2022: Berkeley Township - Elevation of Two Structures (Application 3)	There are two (2) homeowners applying for the grant. 203 Sprague Avenue and 505 Sunset Drive South: The structure elevations will consist of the elevation of the existing structures on pilings to a minimum first floor elevation of two (2) feet above the base flood elevation per FEMA's Emergency Freeboard requirements. The methodology is to raise the structures above the base flood elevation as indicated on the most restrictive map plus two (2) feet of freeboard to the lowest structural member as required for Coastal Flood Zones. The existing structures will be elevated within the existing footprint and should provide flood protection for up to 30 years. This activity will also include engineering design, architectural/structural plans, soil analysis, survey, new elevation certificate, plot plans, site preparation, and material disposal. Please note, the Township of Berkeley's requirement for freeboard is to elevate the structure above the base flood elevation as indicated on the most restrictive map plus one (1) foot of freeboard, but for the FMA grants we will require the structures to abide by FEMA's Emergency Freeboard requirements of two (2) feet above the base flood elevation.	\$64,109.75
	TOWNSHIP OF BERKELEY	BERKELEY, TOWNSHIP OF	7310.02	Ocean	FMA 2022: Berkeley Township - Elevation of Two Structures (Application 2)	There are two (2) homeowners applying for the grant. 9 Albatross point and 248 Fernwood Drive: The structure elevations will consist of the elevation of the existing structures on pilings to a minimum first floor elevation of two (2) feet above the base flood elevation per FEMA's Emergency Freeboard requirements. The methodology is to raise the structures above the base flood elevation as indicated on the most restrictive map plus two (2) feet of freeboard to the lowest structural member as required for Coastal Flood Zones. The existing structures will be elevated within the existing footprint and should provide flood protection for up to 30 years. This activity will also include engineering design, architectural/structural plans, soil analysis, survey, new elevation certificate, plot plans, site preparation, and material disposal. Please note, the Township of Berkeley's requirement for freeboard is to elevate the structure above the base flood elevation as indicated on the most restrictive map plus one (1) foot of freeboard, but for the FMA grants we will require the structures to abide by FEMA's Emergency Freeboard requirements of two (2) feet above the base flood elevation.	\$86,071.00

Project Type	If "Other" for the project type, please manually enter the hazard(s)	What hazard is this project mitigating?	If "Other" for the hazard mitigated, please manually enter the hazard(s)	What community lifeline does the project stabilize?	If this loan will be used towards the non-federal cost share for a grant under another HMA grant program, which HMA grant program will it support?	Has the project already started?	Does the project include any work that will be subject to Environmental Planning and Historic Preservation (EHP) review?	For non-revenue generating projects, please identify the local government's revenue stream to support projects.	Is the community a low-income geographic area as defined in 42 U.S.C. 5135 § (m)(6)
Select a dropdown project type that best aligns with the proposed project. If not listed, input a project type manually.	Some projects may be comprehensive and incorporate multiple project types. Insert the project types in the cell below.	Select a hazard from the dropdown. If not listed, input a project type manually.	Some projects may be mitigating multiple hazards. Insert the hazards in the cell below.	Select a community lifeline from the dropdown.	Select a HMA program from the dropdown.	Projects where actual physical activity, such as groundbreaking, construction, or demolition has commenced prior to completion of EHP review, are ineligible. Select from the dropdown.	Projects that require EHP review include any ground disturbing studies or construction projects including but not limited to retrofits, acquisition of flood-prone properties, hazardous waste reduction, and flood risk reduction projects.	Loan recipients are required to establish a dedicated source of revenue for repayment of the loan per 42 U.S.C. 5135 § (f)(3)(A)(iv).	Loan recipients that are low-income geographic areas can receive different loan terms. The data dictionary sheet has a link for calculation guidance.
Flood control Low impact development/nature based solutions Low impact development/nature based solutions		Flooding	Severe storm	Safety and security Community safety	FMA	No	Yes	Capital	No
Elevation Planning related activities		Flooding	Severe storm	Food, water, shelter Shelter	FMA	No	Yes	Property Owners	AC: Yes; Brigantine: No; Cape May: No; Longport: No; Margate: No; Somers Point: No; Ventnor: No
Elevation		Flooding	Tropical cyclone (Hurricane/Typhoon)	Safety and security Community safety	FMA	No	Yes	Homeowner Cost Share	No
Elevation		Flooding	Tropical cyclone (Hurricane/Typhoon)	Safety and security Community safety	FMA	No	Yes	Local Agency Funding	No
Elevation		Flooding	Tropical cyclone (Hurricane/Typhoon)	Safety and security Community safety	FMA	No	Yes	Local Agency Funding	No
Elevation		Flooding	Tropical cyclone (Hurricane/Typhoon)	Safety and security Community safety	FMA	No	Yes	Local Agency Funding	No
Elevation		Flooding		Food, water, shelter Shelter	FMA	No	Yes	Local Agency Funding	No
Elevation		Flooding		Food, water, shelter Shelter	FMA	No	Yes	Local Agency Funding	No
Elevation		Flooding		Food, water, shelter Shelter	FMA	No	Yes	Local Agency Funding	No
Elevation		Flooding		Food, water, shelter Shelter	FMA	No	Yes	Local Agency Funding	No

Project ID Number	Loan Recipient	Benefiting Community(ies)	Benefiting Census Tracts	County(ies)	Project Title	Project Description	Projected Loan Amount
Unique Identifier for the proposed project as determined by the entity.	Name of the eligible proposed loan recipient.	Community(ies) experiencing hazard mitigation benefits. Please include any tribal governments or authorized tribal organization if applicable.	Census tracts where the project will mitigate natural hazards. Please use the 11-digit census tract code. Directions can be found in the Data Dictionary sheet.	County(ies) experiencing hazard mitigation benefits.	Unique name of the project.	<p>Provide a paragraph describing the following elements of the project:</p> <ul style="list-style-type: none"> How the project will reduce risk or increase resilience <ul style="list-style-type: none"> Major items in the scope of work The infrastructure being protected How the project will reduce risk to life and property <ul style="list-style-type: none"> Other items describing how the project mitigates natural hazards. <p>A description of how the project conforms to the Hazard Mitigation Plan of the applicant and the local government</p>	The dollar amount of the proposed loan. If the loan amount equals or exceeds the statutory maximum loan amount of \$5 million, the cell will turn red.
	CITY OF BRIGANTINE	BRIGANTINE, CITY OF	101.01, 101.02, 101.04, 101.05	Atlantic	FMA 2022: City of Brigantine - Back Bay Community Flood Mitigation Project	<p>The City of Brigantine is applying for mitigation funds to increase our storm readiness. The project entails the replacement of existing older bulkheads with new bulkheads to be constructed of non-polluting materials. The City wishes to raise the height of the bulkheads to Elevation 10.0 (1988) datum. The City of Brigantine also requests funds to remove existing pinch valves, which are older and do not function as designed. The City was originally designed, within the proposed project areas, to drain rain and storm events, allowing water to flow, from Ocean Ave (the easterly most roadway) to the bay (the westerly most roadway improvement), where the water flows into Bonita Tideway. The storm water is collected by stormwater inlets and piped into the bay via a storm water pipe network, controlled by a flood water control valve at the end of the pipe. The street ends along the bay are stabilized and protected by bulkhead systems which also hold back storm surges associated with tidal storm events and hurricanes. Each street end bulkhead is also penetrated by a storm water inlet and storm water outfall pipe. The storm water flows to the bay through the outfall pipe, which is controlled by older "pinch" valves. It our request, to be able to replace the older "pinch" valves, with the modern WAPRO (WASTOP) interior valves, as needed. A copy of the design brochure is shown in "Attachment No. 1." The existing bulkheads will be removed, and a new bulkhead constructed in the same place. There will be a tie back system installed on the landward side of the new bulkhead. The project will be designed and constructed in accordance with ASCE-24-14 or the latest version, if applicable. The design and construction will be complete in full compliance with all applicable federal, state, and local floodplain and land use laws and regulations including 44 CFR 60.3 (floodplain management criteria).</p> <p>Following is the location and estimated costs of each of the City's request for funding: 1. 6th Street south at the Boat Ramp -install new Storm Water Control Valve. \$82,500.00 2. Sheridan Square - Remove and Replace 80 LF of Existing Bulkhead, install new Storm Water Control Valve. \$274,780.00 3. 16th Street South - Remove and Replace 60 LF of Existing Bulkhead, install new Storm Water Control Valve. \$236,775.00 4. 17th Street South - Remove and Replace 60 LF of Existing Bulkhead, install new Storm Water Control Valve. \$236,775.00 5. 18th Street South - Remove and Replace 60 LF of Existing Bulkhead, install new Storm Water Control Valve. \$236,775.00 6. 19th Street South - Remove and Replace 60 LF of Existing Bulkhead, install new Storm Water Control Valve. \$236,775.00 7. 22nd Street South -install new Storm Water Control Valve. \$87,312.50 8. 32nd Street South - Remove and Replace 60 LF of Existing Bulkhead, install new Storm Water Control Valve. \$236,775.00.</p>	\$396,111.57
	CITY OF MARGATE CITY	MARGATE CITY, CITY OF	131.02	Atlantic	FMA 2022: Margate - Adams Avenue Community Flood Mitigation Project (Pump Station)	<p>The project includes the use of an existing wet well to construct a new stormwater pump station. The submersible stormwater pumps will be located on Adams Avenue near the intersection with Amherst Avenue. The maximum discharge capacity of the pumps is Pump 1: 5 CFS, Pump 2: 15 CFS, Pump 3: 25 CFS. A storm sewer interconnection to Washington Avenue will be installed to convey additional stormwater to the underground vault and reduce flooding in the areas of concern. It is estimated that the proposed pump station, with the storm sewer interconnection, can eliminate flooding in the area of concern during a 1-year rainfall event with a 4-foot tide. The proposed concept is intended to provide a feasible and cost-effective project without requiring significant utility relocations and other construction complexities. Three-phase power will need to be extended to the project area to power the proposed stormwater pumps. The drainage area of focus is the area of the City of Margate bounded by generally Coolidge Avenue to the west, Atlantic Avenue, and the beach to the south, Vendome Avenue and Union Avenue to the east, and Amherst Avenue to the north. The impacted drainage area contains 646 NFIP insured properties and 27 repetitive loss properties, mapping is attached. The project includes the use of an existing wet well to construct a new stormwater pump station which includes a concrete wet well, 3 submersible pumps, electric to the pumps, connection to existing piping, and installation of a check valve. A new outfall pipe will be constructed and will generate the bulkhead on Amherst Avenue at the park. If the vault is not structurally sound a new wet well will need to be constructed, this will be determined during design. The cost estimate used for this project assumes that replacement is not necessary and if funding is needed, the City will be responsible for this cost. The project will be designed and constructed in accordance with ASCE-24-14 or latest version, if applicable. The design and construction will be complete in full compliance with all applicable federal, state, and local floodplain and land use laws and regulations including 44 CFR 60.3 (floodplain management criteria). A total of 646 insured NFIP structures are in the project area that will be impacted by this mitigation project. The City will utilize innovative techniques to facilitate implementation. The City intends to repurpose an existing abandoned underground vault on Adams Avenue as a wet-well for the proposed stormwater pump station. The vault is estimated to be approximately 12-foot wide, 35-foot long, and 6-foot deep, with a 3-foot-tall manhole constructed on the top of the vault extending to street level. Submersible pumps will be used to prevent overheating. To keep the pumps submerged, the water level in the vault will not be pumped below a depth of 3 feet. The pump station would begin operation with the lowest rated pump and additional pumps will turn on as the inflow to the vault increases, with all pumps running in parallel once the inflow to the vault reaches the maximum rate. The directly impacted area is a 139-acre drainage area with 646 NFIP policies and 27 repetitive loss properties that will benefit from this project. Ventnor Avenue is a County Road, the County authorized emergency evacuation route, and is a major thoroughfare for residents and tourists connecting Longport and Margate to Atlantic City. This project will have a significant impact on NFIP policy holders and will reduce claims due to flooding.</p>	\$466,297.12
	CITY OF VENTNOR CITY FINANCE OFFICE	VENTNOR CITY, CITY OF	132.02, 133.02	Atlantic	FMA 2023: Ventnor City - Lower Ventnor Heights Community Flood Mitigation Project	<p>The lower Ventnor Heights area in the City of Ventnor is defined roughly by Calvert Avenue to the south and the surrounding waterways. This area suffers from frequent tidal and rainwater flooding events. The study includes 373 NFIP insured properties and 73 repetitive loss properties. The attached maps depict proof of flooding in the project area that supports the need for the two pump stations. Bayside tidal control is an essential aspect of flood mitigation in the City of Ventnor. When the tidal elevation is above the bay discharge outfalls, stormwater will not drain from the island. During a severe rain event with high tidal elevation, flooding will have damaging effects. Currently, stormwater management in the City utilizes gravity and force main systems. When the tidal elevations are high, the gravity systems are not effective. Pump stations are required to mitigate tidal and stormwater flooding. Pump stations would be designed to evacuate stormwater runoff from rain events. It is recommended that the City install two (2) bayside pump stations located at Derby Avenue and Surrey Avenue. Stormwater would discharge through force mains through existing bayside bulkheads. The design of the pump station will consider sea level rise and account for the higher water level as reported in the New Jersey's Rising Seas and Changing Coastal Storms, Rutgers University. The proposed Derby Avenue pump station is shown to be located in a section of the Sunset Harbor Condominium parking lot. The proposed Surrey Avenue pump station is shown to be located on a City lot adjacent to the City's existing pump station. The pump station would require new pipe systems to carry stormwater to its location and is designed to accommodate a 10-year storm. In accordance with ASCE 24-14, the installation of the pump station, as a critical facility, will be built to the 500-year level protection. The proposed pipe system and potential pump station location can be seen on the Overall Storm Improvements Map. The proposed project will provide a level protection that is significant to the City. The lowest breach point in the existing drainage system is at elevation 2.3, of which tidal elevations greater than 2.5 were observed 1,762 times over the past ten years. The proposed improvements will protect to a level of elevation 4.0 which tidal elevations of greater than 4.0 have only occurred 63 times in that same time period. This project is scalable in that the City and private property owners could increase bulkhead heights and fortify elevations around the study area through other methods, and the proposed pump stations would still be effective.</p>	\$1,845,650.74
	TOWNSHIP OF FREEHOLD	FREEHOLD, TOWNSHIP OF	8106	Monmouth	Freehold Township Water Treatment Plant Generator Project (FY2021 BRIC)	<p>In summary, the main Freehold Township water treatment plant located at 68 Jackson Mills Road serves a population of approximately 31,825 people in addition to ContraState Medical center, several assisted living facilities, government facilities, etc. Any power failure to this critical facility without sufficient back-up power would be devastating to the community. Freehold Township is proposing to purchase and install a new 1250 KW generator at the treatment plant. Currently two (2) separate generators exist which are required to run power to the existing water treatment plant and wells. The main generator (north side of the plant) which is proposed to be replaced by the new 1250 KW generator powers the treatment plant, three (3) of the five (5) existing wells and all associated chemical feeds. However this generator is beyond it's useful life and has required numerous repairs and long wait periods for replacement parts due to its age. The existing secondary generator (south side of the plant) supplies power to the remaining two (2) wells and some lighting within the treatment facility. In addition to the new 1250 KW generator, it is also proposed to retrofit the electric within the existing building so that the new generator supplies power to the entire facility including all components of the treatment facility, the building and all wells. The secondary generator will be used as an emergency secondary backup for partial plant capacity. A more detailed and technical description of the proposed scope of work is as follows: The water treatment plant utility service is 480/277Vac, 2200 amp connected to the 3000 amp rated service entrance switchboard. The switchboard consists of metering equipment and two service disconnects, one 1000 amp dedicated to the North Side Plant power feed and the second 1200 amp dedicated to the South Side Plant power feed. Each power side of the plant is provided with a dedicated generator set and automatic transfer switch. North side is provided with a 600KW, indoor mounted Cummins generator and 1200 amp rated ATS. The generator is deteriorating and needs to be replaced. The South Side is provided with an outdoor mounted 600KW rated Kohler generator and 1200 amp ATS. Both South Side generator and ATS are in good operating condition. The Township is proposing removal of the indoor North Side generator and installation of an outdoor generator, of an adequate size (estimated 1250 kW) to be capable of providing standby power to the entire treatment plant, including both North and South sides. It is also desired to utilize the existing South Side generator as a limited capacity standby power to the plant. The following is proposed: Provide and install a new 1250 kW, outdoor mounted generator adjacent to the existing 600 kW South side generator. Provide and install in proximity of the generators an outdoor 480/277Vac, 3000 amp rated switchboard consisting of 2200 amp trip rated new 1250 kW generator breaker, 1200 amp trip rated existing South Side 600 kW generator breaker, 1200 amp trip North Side standby power feeder breaker, and 1200 amp trip rated South Side standby power feeder breaker. The two generator breakers would be equipped with auxiliary contacts indicating its closed position and be kirk-key interlocked allowing only one generator being connected at any given time. The other two breakers would be connected to the corresponding North and South side existing automatic transfer switches. Both existing transfer switches would sense a power failure and send an engine start signal (dry contact) to both generators connected via corresponding circuit breaker status contact. Upon sensing utility power failure on each side of the plant, only one generator would automatically start based on its breaker closed position status. As a default condition, the new 1250 kW generator would be connected and called to run. If this generator is out of service, a manual intervention of the operating personnel would be required. Realizing limited capacity of the smaller 600 kW generator, the Operator would manually shed the loads (shut down non-essential loads first) and use the kirk-key, open the large generator breaker and close the limited capacity 600 kW generator breaker. This would allow initiation of an automatic start of the smaller generator. Going back to the original default condition would also require manual re-configuration (following the same procedure in reversed order).</p>	\$480,000.00
	TOWNSHIP OF ROCHELLE PARK	ROCHELLE PARK, TOWNSHIP OF	500	Bergen	FMA 2021 Township of Rochelle Park New Jersey - Elevations	<p>The Township of Rochelle Park, Bergen County, New Jersey is applying for FEMA Flood Mitigation Assistance (FMA) grant funding to elevate 13 residential flood-prone properties located in the 1-percent annual chance floodplain, four (4) of which are located in the floodway (RochelleParkFMA2021_AerialMap_FloodDFIRMWest.jpg and RochelleParkFMA2021_AerialMap_FloodDFIRMEast.jpg). The Township of Rochelle Park has demonstrated a long-term commitment to mitigating the flood hazard, already elevating 10 homes to date, thus freeing up critical resources to focus on maintaining and supporting community lifelines in a disaster. With these problematic homes elevated out of harm's way, first responders can better utilize a community lifeline framework; prioritizing and focusing their efforts on critical services and infrastructure, and thus stabilizing the community more quickly. The proposed scope of work, cost estimate and project schedule are provided below. In accordance with the Township's Flood Ordinance and the NJ State Flood Hazard Area Control Act (N.J.A.C. 7:13-7.11), all structures will be elevated at least one foot above the Base Flood Elevation (BFE) or one foot above the New Jersey Department of Environmental Protection (NJDEP) Design Flood. The scope of work and cost estimate for each property is estimated to elevate each home 3 feet above the BFE to provide increased protection from flood and projected exacerbation of the flood and storm hazards from climate change. The best available data for the BFE utilized will be the most restrictive BFE, as determined by comparing FEMA's DFIRM, or NJDEP Design Flood. Any encroachments, including fill, new construction, and substantial improvements, will not result in any increase in flood levels. All elevations will be designed in accordance with the NFIP standards in 44 CFR Part 60 and in accordance with ASCE 24-14, or latest edition, or its equivalent as minimum design criteria as stated in the 2015 HMA Guidance Addendum. The property owners agree to maintain a flood insurance policy for the lifetime of the structure. The property will have a deed restriction stating that flood insurance coverage must be maintained during the life of the property regardless of transfer of ownership of such property. The Township will be the sub-applicant for the proposed project. The Township's Administrator, assisted by the Construction Official, will manage and oversee the project tasks and assist homeowners through the elevation project. Each homeowner will individually manage the elevation of their home including hiring and payment of all contractors. The Township will coordinate and submit reimbursement requests to the State for all eligible costs and liaise with homeowners throughout this process. Please refer to the detailed scope of work and cost estimate from the Township (a "Scope of Work.pdf" and a "Cost Estimate.pdf"). These files detail the following for each structure in the application: 1) property owner name; 2) physical address; 3) estimated cost to elevate each structure; 4) name of flooding source; 5) number of feet first floor is being raised; 6) BFE; 7) current elevation of the lowest finished floor; 8) proposed new elevation; and 9) type of existing foundation. Each structure will be elevated either on extended foundation walls or extending the walls of the home. All owners of the proposed properties provided the following attached to this application in the Project Site Inventory section of this grant application: 1) proof of NFIP flood insurance; 2) voluntary participation agreement with flood loss history and structural attributes; 3) four photographs of their structure (one each side); 4) signed Model Acknowledgement of Conditions form; 5) signed Declaration and Release form; and 6) signed Affidavit (Duplication of Benefits). There are no alternate properties proposed for this project.</p>	\$322,789.00
	TOWNSHIP OF BERKELEY	BERKELEY, TOWNSHIP OF	7310.02	Ocean	FY 2021 Berkeley Township Flood Mitigation Assistance (Application 3)	<p>There are two (2) homeowners applying for the grant. 25 Laurel Avenue and 225 Maple Drive: The structure elevations will consist of the elevation of the existing structures on pilings to a minimum first floor elevation of two (2) feet above the base flood elevation per FEMA's Emergency freeboard requirements. The methodology is to raise that structures above the base flood elevation as indicated on the most restrictive map plus two (2) feet of free board to the lowest structural member as required for Coastal Flood Zones. The existing structures will be elevated within the existing footprint and should provide flood protection for up to 30 years. This activity will also include engineering design, architectural/structural plans, soil analysis, survey, new elevation certificate, plot plans, site preparation, and material disposal. Please note, the Township of Berkeley's requirement for freeboard is to elevate the structure above the base flood elevation as indicated on the most restrictive map plus one (1) foot of freeboard, but for the FMA grants we will require the structures to abide by FEMA's Emergency freeboard requirements of two (2) feet above the base flood elevation.</p>	\$51,354.51
	PORT AUTHORITY OF NEW YORK & NEW JERSEY	ESSEX COUNTY* NEWARK, CITY OF	9802	Essex Essex	FY21 BRIC - PANYNJ Elevation-Floodproofing of Building 111 Infrastructure Mitigation	<p>Building 111, constructed in 1997, is approximately 10,500 square feet and is located on the east side of Corbin Street between Marsh Street and Tyler Street. The majority of the building is a single open space housing all of the pumps, with separate control, electrical equipment, generator, and fuel tank rooms in the northeast corner of the building. The building is located in Zone AE, according to the FEMA's Flood Insurance Rate Map (FIRM) with a current FEMA BFE of 12.0'. The building is also located within the Limit of Moderate Wave Action (LIMWA) and is therefore considered a Coastal A Zone. To protect and provide resilience to the facility, the Port Authority has proposed a hazard mitigation approach that consists of elevation of all critical electrical and mechanical equipment within the Building 111 Domestic Water and Fire Pump Station. The Port Authority is pursuing this cost-effective infrastructure mitigation to reduce the risk of future flood damage to a critical facility, owned and operated by the agency and utilized by the Port Newark-Elizabeth Marine Terminal as the primary pump station for domestic water and fire suppression systems throughout the Marine Terminal. In order to meet the design flood elevation (DFE), a building addition adjacent to the existing electrical room to the east will be constructed to house a new electrical room with a higher ceiling. The existing emergency back-up generator will then be replaced and housed outside of the existing building on an elevated, enclosed platform. A backwater valve will be installed on the sanitary line to prevent backflow; and the existing booster, domestic, and fire pumps will be replaced in-kind with horizontal split case pumps. The pumps will be raised, and the local controls will be raised with elevated access platforms. The exterior transformer will be replaced with a submersible transformer. This facility was damaged during Superstorm Sandy and is currently a recipient of FEMA Public Assistance funding to repair storm damage. A FEMA Public Assistance grant has been developed to allow for in-kind replacement of damaged elements but, because certain components were damaged and others were not, Public Assistance funding cannot cover the full project cost. I.e. FEMA Public Assistance will not fund the repair, replacement, or mitigation of the undamaged elements. In order to ensure that the undamaged elements are equally protected from future flooding events, the BRIC program would serve as an ideal complement to the Public Assistance funding that is already in place. The mitigation approach contained in this proposed project intends to utilize a combination of Public Assistance funding and BRIC funding, working in concert, to replace and protect the vulnerable critical structure, facility, and systems and allow the Port Newark-Elizabeth Marine Terminal to maintain seamless and uninterrupted operations in the event of a future flood or storm surge incident. Structural elevation will raise the critical functions above the Design Flood Elevation. The Port Authority funding plan for this project consists of: a) Replacement of storm damage elements contained within the main building a) covered by FEMA Public Assistance b) Elevation of all critical electrical and mechanical equipment replacement and elevation of an emergency back-up generator on an elevated, enclosed platform outside of the existing building b) sought for coverage under BRIC c) Local cost share and any costs that exceed the funding allocations for BRIC and Public Assistance or are deemed ineligible a) covered by the Port Authority. The costs between base repair work and BRIC mitigation have been meticulously separated to ensure that there is no overlap and no risk of a duplication of benefits. A detailed scope of work for the elevation of critical mechanical and electrical equipment including the construction of the new, adjacent electrical room as well as the emergency generator on an elevated and enclosed platform is as follows, broken down by engineering discipline. Civil Utilities and MDT: a. Temporary utilities b. Maintenance of Traffic c. Laydown area maintenance Site Restoration: a. Concrete b. Asphalt c. Sidewalk Structural Platform: a. Addition: Platform system steel frame b. Addition: Platform system steel grating (22.6 lbs/sf) c. Addition: Railing for platforms d. Addition/Extension: Platform system steel frame e. Addition/Extension: Platform system steel grating (22.6 lbs/sf) f. Addition/Extension: Railing for platforms g. Generator: Platform system steel frame h. Generator: Platform system steel grating (22.6 lbs/sf) i. Generator: Railing for platforms Stairs: a. Addition: Stair system steel frame b. Addition: Stair system steel grating (22.6 lbs/sf) c. Addition: Railing for ramp and stairs d. Addition/Extension: Stair system steel frame e. Addition/Extension: Stair system steel grating (22.6 lbs/sf) f. Addition/Extension: Railing for ramp and stairs g. Generator: Stair system steel frame h. Generator: Stair system steel grating (22.6 lbs/sf) i. Generator: Railing for ramp and stairs Foundation & Roof: a. Building foundation (grade beams) b. Piles c. Building slab d. Building roof deck Architectural Masonry: a. Exterior Wall 4" 12x CMU 4" exterior veneer b. Exterior Wall 4" Brick 4" exterior veneer c. Patch lower opening Thermal and Moisture: a. Exterior Wall 4" 3 1/4 poly rigid insulation b. Slab perimeter - 2x exp polystyrene c. Roof 4" roofing, cover board & insulation d. Misc. flashing e. General sealant/caulking f. Expansion joint 4" wall to wall g. Expansion joint 4" roof to wall h. Exterior wall coping Doors: a. Exterior 4" swing door & hardware b. Interior 4" HM frame, door & hardware Finishes: a. Painting 4" interior walls b. Paint 4" exposed steel & roof deck c. Paint 4" interior door Process Mechanical Pumps: a. Patterson 4x4 MN 4" A domestic pump b. Piping modifications for raising pumps Mechanical HVAC: a. Remove generator louver b. Remove existing louvers c. Louvers 4" stormproof with damper d. damper motor e. Ductwork f. Unit heater Plumbing Sanitary: a. 6x sanitary main in-line backwater valve b. Install backwater valve Fire Protection: a. Portable fire extinguisher Electrical: a. Generator and Accessories b. 350KW, outdoor b. Lighting fixtures c. Remove existing emergency generator and turnover to PA</p>	\$856,723.80
	CITY OF SOMERS POINT	SOMERS POINT, CITY OF	127.01, 127.02, 128.01, 128.02	Atlantic	FY21 FMA Project Scoping for Somers Point Bayfront		\$48,625.00

Project Type	If "Other" for the project type, please manually enter the hazard(s)	What hazard is this project mitigating?	If "Other" for the hazard mitigated, please manually enter the hazard(s)	What community lifeline does the project stabilize?	If this loan will be used towards the non-federal cost share for a grant under another HMA grant program, which HMA grant program will it support?	Has the project already started?	Does the project include any work that will be subject to Environmental Planning and Historic Preservation (EHP) review?	For non-revenue generating projects, please identify the local government's revenue stream to support projects.	Is the community a low-income geographic area as defined in 42 U.S.C. 5135 § (m)(6)
Select a dropdown project type that best aligns with the proposed project. If not listed, input a project type manually.	Some projects may be comprehensive and incorporate multiple project types. Insert the project types in the cell below.	Select a hazard from the dropdown. If not listed, input a project type manually.	Some projects may be mitigating multiple hazards. Insert the hazards in the cell below.	Select a community lifeline from the dropdown.	Select a HMA program from the dropdown.	Projects where actual physical activity, such as groundbreaking, construction, or demolition has commenced prior to completion of EHP review, are ineligible. Select from the dropdown.	Projects that require EHP review include any ground disturbing studies or construction projects including but not limited to reentry, acquisition of flood prone properties, hazardous fuels reduction, and flood risk reduction projects.	Loan recipients are required to establish a dedicated source of revenue for repayment of the loan per 42 U.S.C. 5135 § (j)(1)(A)(ii).	Loan recipients that are low-income geographic areas can receive different loan terms. The data dictionary sheet has a link for calculation guidance.
Flood control Floodwall Floodwall		Flooding	Severe storm	Safety and security Community safety	FMA	No	Yes	City Capital	No
Flood control Stormwater management Stormwater management Utility and infrastructure protection Roadway		Severe storm	Flooding	Safety and security Community safety	FMA	No	Yes	City Capital	No
Flood control Community flood control Community flood control		Flooding	Severe storm	Safety and security Community safety	FMA	No	Yes	City Capital	No
Generator		Infrastructure Failure	Severe Storm	Food, Water Shelter	BRIC	No	No		No
Elevation		Flooding	Tropical cyclone (Hurricane/Typhoon)	Safety and security Community safety	FMA	No	Yes		No
Elevation		Flooding		Food, water, shelter	FMA	No	Yes	Homeowner Cost Share	No
Elevation Floodproofing Dry floodproofing		Flooding		Safety and security Fire service	BRIC	No	Yes	Local Agency Funding	N/A
Develop or conduct engineering, environmental, feasibility and/or benefit cost analyses Conduct meetings, outreach and coordination with subapplicants and community residents		Flooding	Severe storm	Safety and security Community safety	FMA	No	No	Staff Salary	No

Project ID Number	Loan Recipient	Benefiting Community(ies)	Benefiting Census Tracts	County(ies)	Project Title	Project Description	Projected Loan Amount
Unique Identifier for the proposed project as determined by the entity.	Name of the eligible proposed loan recipient.	Community(ies) experiencing hazard mitigation benefits. Please include any tribal governments or authorized tribal organization if applicable.	Census tracts where the project will mitigate natural hazards. Please use the 11-digit census tract code. Directions can be found in the Data Dictionary sheet.	County(ies) experiencing hazard mitigation benefits.	Unique name of the project.	<p>Provide a paragraph describing the following elements of the project:</p> <ul style="list-style-type: none"> How the project will reduce risk or increase resilience. Major items in the scope of work. The infrastructure being protected. How the project will reduce risk to life and property. Other items describing how the project mitigates natural hazards. <p>A description of how the project conforms to the Hazard Mitigation Plan of the applicant and the local government.</p>	The dollar amount of the proposed loan. If the loan amount equals or exceeds the statutory maximum loan amount of \$5 million, the cell will turn red.
	CITY OF NEWARK CITY HALL	NEWARK, CITY OF	71	Essex	FEMA BRIC FY21 Newark Ironbound Resilience Hub	<p>The City of Newark has a long history of flooding issues and combined sewer overflows. The City is subject to tidal flooding from Passaic River and Newark Bay. Newark was heavily impacted by Hurricane Sandy and Tropical Storm Ida. Ida brought a record-breaking amount of rainfall to the City, resulting in flooding, damage to homes, and vehicles abandoned to rising floodwaters. Ida highlighted the ongoing issue with the city's over capacitated sewer infrastructure. FEMA has issued disaster or emergency declarations for Essex County for forty-three flood-related disasters from 1954 to 2019 for disasters classified as one or a combination of the following disaster types: hurricane, tropical storm, Nor'easter, snowstorm, severe storms, flooding, inland and coastal flooding, coastal storm, high tides, heavy rain, and severe storms. Additionally, Newark has both separated and combined sewer systems, with a combined sewer system in the Ironbound neighborhood. The combination of low-lying areas, increasingly frequent and heavy precipitation events, rising sea levels, increased development, and overstressed sewer system results in frequent flooding. The Ironbound neighborhood, where this project is based, is subject to repetitive flooding, exacerbated by the combined sewer system and overabundance of impervious surface. Based on community reports, the Ironbound neighborhood experienced flooding four times in the spring and summer of 2021 alone due to heavy rainfall. Residents of the Ironbound neighborhood and the community-based organization Ironbound Community Corporation (ICC) have expressed significant concern about urban heat island effect and a lack of knowledge about resources and support pre-, during, and post-disaster. The proposed Ironbound Resilience Hub will help address these concerns for this vulnerable neighborhood, and this grant application is specifically pursuing the flood protection elements of the Resilience Hub. The scope of work below describes the hub and delineates the flood protection and power elements required to advance completion of the hub. Data on warming and urban heat island effect for Newark also point to the need for the Resilience Hub as a cooling center. Newark, New Jersey is the second-worst city in the United States for urban heat islands, according to Climate Central. Heat islands have negative impacts on public health as exposure to extreme heat can cause heat exhaustion or heat stroke. Increasing permeable surfaces through green infrastructure and developing a shelter for extreme weather events will allow for the City of Newark to reduce the negative health impacts of urban heat islands on the community. There are also environmental justice concerns in the area due to the persistent flooding, air quality issues, and presence of nearby contaminated sites. Ann Street School will provide the facility needs associated with the Ironbound Resilience Hub. The hub will provide a central collection and gathering point for dissemination of information and resources in the event of a disaster affecting the neighborhood, as well as emergency safe room / sheltering needs for extreme weather events, and will be fixed with a solar array and microgrid for power resilience. The project will leverage the planned solar array at Ann Street School (being progressed separately from this application) to provide backup power to the school through a solar inverter and this project will incorporate additional electrical infrastructure to enable the use of portable storage or electrical generation equipment during power outages for critical systems. Islanding would allow for the school to act as a self-sufficient energy island, independent of potential grid disruptions during extreme weather events. HVAC upgrades would be completed in one or more large spaces within the school (e.g., cafeteria, auditorium, or gymnasium) to provide the additional benefit of serving as a cooling center. The combined improvements would allow the school to be used as a resilience hub for neighboring residents during and after extreme climate events, while also providing students with the opportunity to learn more about sustainability and resilience. To address stormwater flooding, the project will use the large parking area adjacent to Ann Street School to provide subsurface stormwater storage. The project will also incorporate permeable pavement to collect street level stormwater into a high-level storm sewer system. The proposed project will mitigate flooding while also mitigating urban heat island effect and serving in a community capacity-building role. The Ironbound Resilience Hub will include porous pavement along Elm Road, new catch basins at the intersection of Elm Road and Lang Street, and a sub-surface stormwater storage system beneath the parking area at the Ann Street School. The proposed drainage improvements will increase stormwater infiltration and provide additional storage capacity to mitigate existing flood risk, while having ancillary water quality benefits from reduction of combined sewer overflows. The scope of this funding application fits within the broader strategy being developed through Resilient Northeastern New Jersey, a project administered by NJDEP Bureau of Climate Resilience Planning to address flood related hazards and provide a roadmap for reducing flood risk through collaboration and public input. This project aligns with Resilient Northeastern NJ's goal to address concerns raised by residents in the neighborhood and the associated technical analysis. Funding through the 2021 BRIC application cycle is specifically requested for stormwater flood protection to reduce flood damage and ensure safety for future phases of the initiative. The Ironbound Resilience Hub will offer multiple benefits to the community. The project will address stormwater flooding by using green infrastructure to capture stormwater and reduce the impact of flooding on roads and buildings in the project area. The project will also establish a shelter location at Ann Street School, which will itself offer multiple benefits to the students and the larger population of the Ironbound, including improved community safety. Air conditioning will be added to a multi-purpose room at the school to provide a cooling shelter to the neighborhood during extreme heat events. The shelter will be used during other extreme weather events as well. The hub will also serve as a space to provide students the opportunity to learn more about sustainability and resilience. By providing flood mitigation and backup power, the project will ensure continued operations at Ann Street School. Refer to the Benefit Cost Analysis Methodology for additional details regarding project benefits, including reduced road closures from flooding and reduced impacts to community facilities. Additionally, green infrastructure, like porous pavements provides a variety of environmental, community, and economic benefits.</p>	\$3,331,163.94
	BERGEN COUNTY UTILITIES AUTHORITY	RUTHERFORD, BOROUGH OF	514	Bergen	FEMA BRIC FY21 BCUA Flood Mitigation of Joint Meeting Pump Station	<p>The Bergen County Utilities Authority provides wastewater treatment services to the 52 towns in Bergen County, NJ. As part of their wastewater collection and transmission network, they have several pump stations that convey wastewater to the treatment plant. The Joint Meeting Pump Station is located at the foot of Highland Cross, west of the Veterans Boulevard intersection in Rutherford, New Jersey. A portion of the property situated in both the 100- and 500-year flood zones. The facility is vulnerable to flooding given its location and has previously experienced minor damage due to power loss and flooding from wastewater backup during Hurricane Sandy. Sea level rise as a result of climate change poses a significant flood risk to the pump station. To properly mitigate the Joint Meeting Pump Station, the structure will be protected with a 294 foot long free-standing flood wall with a stormwater pump station. In order to maintain complete operation during flood events, the constructed floodwall will be 5 feet tall in order to meet the goal design elevation of 15 feet NAVD88. As this pump station cannot be taken out of service, the proposed activity involves the construction of a new freestanding flood wall around the pump station, including the two fuel oil storage tanks, located adjacent to the east face of the pump station. The proposed floodwall is a reinforced freestanding concrete T-wall, with a concrete footing and augercast supporting piles. The 8'x8' floodwall will have an approximate thickness of 12-inches with the concrete footing to be 8' in width and 3' in depth. Of the 8-foot-wide footing, the protected side of the floodwall will have a 2' wide base, and the flood side of the floodwall will have a 5' wide base. The footing will be supported on continuous reinforced concrete pile cap. Located between the steel pipe piles and continuously along the length of the wall is a line of sheeting to act as seepage cutoff. Where necessary, the sheet pile will be replaced with jet grouting to cut around existing underground utilities which cannot be temporarily taken out of service. The extent, dimensions, and depth of the piles will be determined and presented in a geotechnical investigation and report to be conducted in the future. Hydrologic and Hydraulic (H&H) Modeling will be conducted to confirm the appropriate design flood elevation required for level of protection. The potential for sea level rise will be considered in this H&H assessment of the flood risk at the project site. The design takes into consideration applicable FEMA 543 Design Guide for Critical Facilities in the Floodplain, FEMA 15 Design Guidelines for Flood Damage Reduction, Local Officials Guide for Coastal Construction, American Society of Civil Engineers (ASCE) 7 Minimum Design Loads for Buildings and Other Structures, and ASCE 24 Flood Loads and Flood Resistant Design and Construction among other guidance and reports, as well as professional and expert engineer opinion along with applicable local building codes. Rutherford, NJ is subject to New Jersey's Uniform Construction Code and has therefore adopted the State's building code, International Building Code 2018 with NJ edits, which applies to both commercial and residential properties. The building code has a BEGS classification of 3. The design takes into consideration applicable local building codes. The Borough of Rutherford is subject to New Jersey's Uniform Construction Code and has therefore adopted the State's building code, International Building Code 2018 with NJ edits, which applies to both commercial and residential properties. In order to access the pump station, a sliding flood gate will be incorporated into the design of the floodwall. Special detailing will be provided at the flood gates by providing concrete piers and enlarged pile caps capable of resisting the summation of the vertical and lateral reactions of the gates. The freestanding wall would also maintain the existing building facade to support aesthetics of the space. The floodwall will be protected from vehicular traffic in the parking lot by a series of bollards lining the exterior of the flood wall. To protect the pump station from surge in the 36-inch influent sewer, the 36-inch sewer prior to the bar screen chamber will be modified with a throttling valve to control the flow. The open area between the pump station and the floodwall will be protected by installing a storm pump, which will direct standing rainwater and groundwater seepage away from the base of the pump station and entry points of the building. The storm water pump station will consist of a concrete wet well, with a submersible flood pump, electrical platform, and all associated electrical equipment, piping and appurtenances. The rainwater sump pump is included for normal rain events and will be directed to nearby storm sewers outside the extents of the floodwall. The flood pump will become operational at a set elevation and is designed to pump directly over the adjacent floodwall into the external floodwaters. Pumps will be accessible through hatchways in the wet well top slab. The flood pump station will not have an installed spare. BCUA existing SCADA system will be modified to monitor critical elements at the pump station and the storm water pump. In addition to the fuel oil storage tanks located along the perimeter of the pump station, the floodwall will protect mechanical equipment inside the pump station from flooding. Required permits associated with the construction and installation of the floodwall at the Joint Meeting Pump Station include: Soil Erosion and Sediment Control Certification: (N.J.A.C. 72-90-1.1) a Soil Erosion and Sediment Control Plan Certification from the Bergen County Soil Erosion District is required if the anticipated land disturbance of the project exceeds 5,000 square feet. NJDEP Flood Hazard Area Control Act Rules (N.J.A.C. 7:13-10, 11 and 12) - an Individual Permit will be required from the New Jersey Department of Environmental Protection (NJDEP) for the proposed improvements at the BCUA Treatment Facility. Proposed activities within the Flood Hazard Area are addressed through the use of NJDEP Flood Hazard Area (FHA) Control Act rules (N.J.A.C. 7:13 Subchapter 10 a) Individual Permit. The individual permit will be required for the construction of the proposed flood walls located in the 100 year floodplain at the Joint Meeting Pump Station. The project will benefit multiple community lifelines, including food, water and shelter and safety and security. The project will provide direct benefits to the community by reducing loss of wastewater service and protecting the wastewater pump from hazards. Additionally, the project will provide community safety as the mitigation measures will reduce the likelihood of flooding and sewer backups in the community served by the Joint Meeting pump station. By mitigating the pump station against flooding, the pump station can continue to provide wastewater services to the community and reduce the risk of flooding and sewer backups. See the attached Preliminary Engineering Report for a more detailed explanation of the scope of work.</p>	\$1,434,964.10
PDMC-PJ-02-NJ-2018-005	City of Hoboken	City of Hoboken	183.02, 184.02, 187.02	Hudson	PDM 2018 - NW Hoboken Resilient Infrastructure Project	<p>The project will accommodate 1.75 million gallons of stormwater from on-site and nearby properties throughout the H-6 and H-7 sewersheds that cover 25% of the City's land area. The result will be significant mitigation of fluvial and flash flooding the has significant economic, environmental, and social impacts on the Hoboken community. Hoboken is a coastal community located on the Hudson River. The community is a densely populated and heavily built urban environment, with more than 90% impervious land area and shallow bedrock depths. More than 70% of the City is in the floodplain. There is very limited open space and few opportunities for the proposed resilient infrastructure project in the northwest area of the City. Flooding cannot be entirely prevented in Hoboken, however, it can be substantially mitigated through innovative resiliency project such as Northwest Resiliency Park. The project will repurpose the site and allow for significant stormwater storage in a low-lying area of the City that is heavily impacted by frequent flood events. In addition to subsurface stormwater detention that allows for storage of 1-million gallons of stormwater inflow from surrounding sewersheds (delivered via new North Hudson Sewerage Authority stormwater infrastructure), the park has the ability to store 750,000 gallons at the surface level through green infrastructure and other stormwater management innovations. The development of Northwest Resiliency Park at the BASF site is outlined in the Delay, Store, Discharge (DSD) component of the Hudson River Rebuild Ny Design Project. All the proposed components of the DSD alternative provides significant flood risk reduction benefits during the 5-, 10-, 25-, 50- and 100-year rainfall recurrence interval events with low and high tides in Hudson River. In general, the percentage reduction in flooded areas are higher in the low tide event for the same rainfall recurrence interval event when compared with the high tide event. During a high tide event, all the outfalls are closed which prevents gravity flow of rainfall runoff from NHSA's surcharged storm sewer system into the Hudson River. The wet weather pumps are operational during the high tide event and thus the amount of flooded water that can be discharged into the Hudson River is restricted by the capacity of the pumps. In a low tide event, all the outfalls are open which would allow to discharge rainfall runoff directly to the Hudson River once NHSA's collection system reaches its capacity. Additionally, the pumps can be operational during the low tide event thus allowing to discharge additional volume of rainfall runoff into the Hudson River.</p>	\$13,938,559.00
PDMC-PJ-02-NJ-2018-016	Atlantic City	Atlantic City	1, 2, 3, 4, 5, 11, 12, 13, 14, 15, 19, 23, 24, 25	Atlantic	PDM 2018 - Flood Risk Reduction NEED TO FIND PAPER APPLICATION. NOT IN SHAREPOINT POP 12/31/24	<p>The proposed project will result in the replacement of existing bulkheads along Sunset Avenue between Kingston and Richmond Avenues with new bulkheads built to a higher elevation (minimum 8.5 feet NAVD88). The project scope of work includes design and construction inspection/material testing. The project will also entail the replacement of the sidewalk, curb, roadway, drainage, and concrete sub-base in the project area. The existing bulkheads are between 6 and 7 feet NAVD88 and despite repairs continue to deteriorate. The bulkheads are vulnerable to overtopping, which would undermine the bulkheads and threaten water infrastructure under the adjacent roadbed. The proposed project would enhance the level of protection from inundation by increasing bulkhead heights to approximately the 100-year flood level and preventing infrastructure failure by ensuring it is protected from wave action.</p>	\$1,198,696.33
PDMC-PJ-02-NJ-2019-002	Brick Township MUA	BRICK, TOWNSHIP OF LAKEWOOD, TOWNSHIP OF POINT PLEASANT, BOROUGH OF POINT PLEASANT BEACH, BOROUGH OF HOWELL, TOWNSHIP OF	Brick : 7130, 7131, 7132.01, 7132.02, 7132.03, 7133, 7134.01, 7134.02, 7135, 7136, 7137, 7138, 7139, 7140, 7141, 7142, 7143, 7392; Howell: 8111.01, 8111.02, 8112, 8113.01, 8113.03, 8113.04, 8114.01, 8114.02, 8115.01, 8115.02; Lakewood : 7150.01, 7150.02, 7152.01, 7152.02, 7153.01, 7153.03, 7153.04, 7154.01, 7154.03, 7154.04, 7155.01, 7155.02, 7155.03, 7156, 7157.01, 7157.02, 7158, 7159.01, 7159.02, 7160; Point Pleasant Beach : 7101.01, 7101.02; Point Pleasant Borough : 7111, 7112, 7113, 7114	Ocean	PDM 2019 - Brick Reservoir Resilient Infrastructure Improvements	<p>The proposed activity consists of hardening the upper portion of the slopes of the man-made raw water reservoir to prevent erosion when the water level is below the rip rap. This project was identified as the highest priority capital project in the 2019 Brick Township MUA (BTMUA) Water Supply Master Plan (WSMP). Hardening of the slopes will be accomplished by removal of most of the existing sand layer over the impervious liner, and the installation of a geotextile fabric with gravel and stone backfill to hold the fabric in place</p>	\$942,050.00

Project Type	If "Other" for the project type, please manually enter the hazard(s)	What hazard is this project mitigating?	If "Other" for the hazard mitigated, please manually enter the hazard(s)	What community lifeline does the project stabilize?	If this loan will be used towards the non-federal cost share for a grant under another HMA grant program, which HMA grant program will it support?	Has the project already started?	Does the project include any work that will be subject to Environmental Planning and Historic Preservation (EHP) review?	For non-revenue generating projects, please identify the local government's revenue stream to support projects.	Is the community a low-income geographic area as defined in 42 U.S.C. 5135 § (m)(6)
Select a dropdown project type that best aligns with the proposed project. If not listed, input a project type manually.	Some projects may be comprehensive and incorporate multiple project types. Insert the project types in the cell below.	Select a hazard from the dropdown. If not listed, input a project type manually.	Some projects may be mitigating multiple hazards. Insert the hazards in the cell below.	Select a community lifeline from the dropdown.	Select a HMA program from the dropdown.	Projects where actual physical activity, such as groundbreaking, construction, or demolition has commenced prior to completion of EHP review, are ineligible. Select from the dropdown.	Projects that require EHP review include any ground disturbing studies or construction projects including but not limited to retrofits, acquisition of flood-prone properties, hazardous waste reduction, and flood risk reduction projects.	Loan recipients are required to establish a dedicated source of revenue for repayment of the loan per 42 U.S.C. 5135 § (f)(3)(A)(ii).	Loan recipients that are low-income geographic areas can receive different loan terms. The data dictionary sheet has a link for calculation guidance.
Flood control Stormwater management Utility and infrastructure protection Wastewater and/or sanitary sewer system Saferoom/shelter Other		Flooding	Extreme temperature	Food, water, shelter Water	BRIC	No	Yes	Capital Funds	Yes
Floodproofing Dry floodproofing Utility and infrastructure protection Wastewater and/or sanitary sewer system		Flooding	Infrastructure failure	Food, water, shelter Water	BRIC	No	Yes		No
Stormwater Management		Flooding	Severe Storm	Safety and security Community safety	PDM	No	Yes	Local funds	No
Infrastructure Protective Measures		Flooding	Severe Storm	Safety and security Community safety	PDM	No	Yes	local funds	Yes, census tracts: 1, 3, 4, 5, 11, 13, 14, 15, 19, 23, 24, 25
Infrastructure Protective Measures		Flooding	Severe Storm	Safety and security Community safety	PDM	No	Yes	local funds	Yes- (all of Lakewood)

Project ID Number	Loan Recipient	Benefiting Community(ies)	Benefiting Census Tracts	County(ies)	Project Title	Project Description	Projected Loan Amount
Unique Identifier for the proposed project as determined by the entity.	Name of the eligible proposed loan recipient.	Community(ies) experiencing hazard mitigation benefits. Please include any tribal governments or authorized tribal organization if applicable.	Census tracts where the project will mitigate natural hazards. Please use the 11-digit census tract code. Directions can be found in the Data Dictionary sheet.	County(ies) experiencing hazard mitigation benefits.	Unique name of the project.	<p>Provide a paragraph describing the following elements of the project:</p> <ul style="list-style-type: none"> How the project will reduce risk or increase resilience Major items in the scope of work The infrastructure being protected How the project will reduce risk to life and property Other items describing how the project mitigates natural hazards. A description of how the project conforms to the Hazard Mitigation Plan of the applicant and the local government 	The dollar amount of the proposed loan. If the loan amount equals or exceeds the statutory maximum loan amount of \$5 million, the cell will turn red.
LPDM-PJ-02-NJ-2022-001	Atlantic County	Hamilton Twp, City of Estell Manor, Twp of Egg Harbor, Twp of Weymouth	Hamilton Twp : 114.01, 114.03, 114.04, 115; Estell Manor : 116; Egg Harbor Twp : 117.02, 117.03, 117.04, 118.03, 118.04, 118.05, 118.06, 118.07, 118.08, 120, 135; Weymouth : 116	Atlantic	PDM 2022 - Lake Lenape Dam Reconstruction	Lake Lenape, located in the Mays Landing section of Hamilton Township, is a nearly 2,000-acre facility that offers residents and visitors alike – regardless of age or ability – a wide variety of recreational opportunities that includes boating, birding, hiking, picnicking and camping, to name only a few. While Lake Lenape is a large and impressive oasis of open space in an otherwise well-developed community, the dam structure upon which the Lake depends is the Lake Lenape Dam. The Lake Lenape Dam is currently rated in POOR condition by NJ Dam Safety and is currently classified as a Class 1 High Hazard Potential Dam based on state classifications that consider a dam's size and potential flooding impacts. The Lake Lenape Dam is the only Major High Hazard Dam in Atlantic County. This mitigation project will reconstruct the existing Lake Lenape Dam spillway and low-level outlet structures with a labyrinth weir spillway. The adjacent powerhouse will be rehabilitated first to accommodate the passage of water during the spillway reconstruction. This construction project is currently underway, consisting of the removal of the existing wooden gates, replacing same with new steel slide gates, and removing and disposing of the existing powerhouse turbines. The powerhouse project is not part of this request. This mitigation project is expected to be completed in six stages. After mobilization and the installation of the silt fence, Stage 1 will install the micropile foundations for the temporary fish ladder as well as the fish ladder itself. In Stage 2, the upstream and downstream temporary cofferdams and turbidity barriers will be installed, the concrete section of the existing fish ladder will be relocated atop the downstream platform/apron, and the temporary support for the existing sheet pile walls will be installed. During Stage 3, the existing spillway structures and downstream platform/apron will be demolished and the new spillway will be constructed upon a new foundation. Stage 4 involves the construction of the restored fish ladder, the restoration of the disturbed portions of dam embankment and riprap both upstream and downstream, the removal of the upstream and downstream cofferdams and turbidity barriers, and the opening of the restored fish ladder to flow. Stage 5 will be entirely comprised of embankment grouting. Finally, Stage 6 will finish the site: constructing the asphalt driveway, installing fencing, installing the flapgate on the west embankment, removing the silt fence, and demobilization. The new spillway will tie into existing embankment dams to the west and east of the existing spillway. Lake Lenape's impoundment will not change in size, and the flows out of the dam will also not change as the flow will continue at the eastern gate. As the remainder of this application will attest, this mitigation activity is essential to the continued successful operations of numerous businesses throughout the Mays Landing Historic District, the unabated delivery of countywide services in Atlantic County, the uninterrupted utilization of Lake Lenape, and the survival of numerous downstream residents.	\$1,914,607.24
LPDM-PJ-02-NJ-2022-003	Keyport Borough	Borough of Keyport	8019, 8020	Monmouth	PDM 2022 - Fireman's Park Flood Mitigation Initiative	The area to the west of American Legion Drive, known as Fireman's Park, is comprised of Lots 20 through 22 in Block 21.02 and is owned by the Borough. Further to the west of Fireman's Park are several privately owned lots, Lots 15 through 19 in Block 21.02. The existing bulkhead through this area is a timber bulkhead supported by timber face piles and is a tan elevation that is submerged by the Bay during full moon high tide events and nor'easters. To the south of this bulkhead is a large asphalt commercial area which is utilized by users of the downtown central business district and also serves as overflow parking for Borough Hall, which is located on West Front Street. This commercial area and American Legion Drive are also at an elevation where during high tide and nor'easters a majority of the parking lot is unusable and American Legion Drive impassable due to the standing water. The intent of the project included with the grant application is to install permanent flood protection measures at the project area that will ensure the area is capable of being utilized to the maximum extent possible while reducing flood damage to the Borough as well as adjacent commercial properties. The project proposes to demolish the existing timber bulkhead and boardwalk. Beginning at the western end of the Waterfront Park concrete promenade, it will extend new bulkhead, concrete promenade, railing, and lighting to the west along the waterside frontages of lots 20, 21, and 22 on Block 21.02. The new bulkhead and promenade would be raised to elevation 8.0 and 7.5, respectively to match the existing and bring the promenade out of the range of tidal flooding. These higher elevations will improve drainage within the lot and American Legion Drive and will prevent Bay water from entering these areas through the existing drainage system through the installation of tide flex valves and improvement of the existing outfall pipes penetrating the bulkhead. Also, it should be noted that the proposed improvements will also mitigate the effects of sea level rise scenarios predicted by NOAA. Enclosed mapping demonstrates the areas of inundation for increases in mean higher high water elevation of up to three feet. Furthermore, the project site is shown to be within an area subject to NOAA's lowest 2050 sea level rise global scenario, representing a 0.3 foot increase in the SFHA.	\$1,533,150.00
LPDM-PJ-02-NJ-2022-002	North Caldwell	Borough of North Caldwell	216.02	Essex	PDM 2022 - North Caldwell Harden Water Tower	The proposed project will include risk reduction activities which were identified as priority Mitigation Initiatives for the Borough of North Caldwell in the 2020-2025 Essex County All Hazard Mitigation Plan (ECHMP). Local priorities include water tower infrastructure security, telecommunications improvements, and the installation of a generator immediately adjacent to the Skyline Drive water tower for backup power to the water system. These mitigation initiatives were determined in consideration of natural disaster history in our region. The ECHMP analyzes how a variety of potential disasters would impact our population, our infrastructure, and our economy. As a result, the Borough of North Caldwell has agreed to pursue a number of specific mitigation initiatives during the plan's five-year period to reduce the effects of hazards on our population's health, safety, and wellbeing. As a municipality with a quickly growing population in the most populous metropolitan area of the United States, it is critical that North Caldwell implements the proposed risk reduction projects to build a more sustainable and disaster-resilient community.	\$275,000.00
LPDM-PJ-02-NJ-2023-003	Middlesex County	Monroe Township	87, 86.01, 86.02, 86.04, 86.05, 86.06, 82.04, 82.05, 82.06, 82.07, 82.09, 82.1, 82.11, 82.12, 82.13, 82.14, 83, 84.03, 84.04, 84.05, 84.06, 85.01, 85.02, 85.04, 85.05, 85.06, 81.03, 81.01, 81.02, 61.01, 61.03, 61.04, 62.04, 62.05, 62.06, 62.07, 62.08, 62.09, 63, 64.03, 65, 66.01, 66.04, 66.05, 66.06, 66.07, 66.08, 67.01, 67.03, 94	Middlesex	PDM 2023 - Middlesex County's Southern Middlesex Flood Mitigation Plan	Participation of stakeholders: Establish a Regional Resiliency Team (RRT) as a steering committee to include key members of Middlesex County, each of the ten participating municipalities, and/or other stakeholders. Participants will support a Consultant Team, a multi-disciplinary team of experts, that will address measures for long-term protection, resilience, and stability from extreme weather and precipitation events within ten contiguous southern Middlesex County municipalities. The study area lies entirely within two Watershed Management Areas (WMA), WMA 9: Lower Raritan, South River, and Lawrence and WMA 10: Millstone. In coordination with the RRT, the Consultant Team will conduct public outreach and engagement to ensure public participation and feedback are included in all aspects of implementation planning. The processes undertaken to develop and implement adaptation strategies and actions will be inclusive of the needs of the whole community, with specific steps to ensure participation from socially vulnerable populations. 2) Hazard identification and risk assessment: The Consultant Team will review existing relevant municipal, county, regional, and state planning documents and all resilience work that has been done to date or is in planning stages for the study area. The results of this review will be compiled in an Existing Conditions Assessment, which will include the identification of all flood-related hazards for the study area. The Consultant Team will collect data from local, regional, and state stakeholders on assets to be considered for the risk assessment. The Consultant Team will then prepare a Risk Assessment Report to quantify the risk and vulnerability of these prioritized assets under the relevant flooding and climate change scenarios. The related risk/vulnerability will also consider the Social Vulnerability Index (SVI), which groups 15 census-derived factors into four themes that summarize the extent to which the area is socially vulnerable to disaster: socioeconomic status, household composition/disability, race/ethnicity/language, and housing/transportation. 3) Mitigation strategy: The Consultant Team, in partnership with the RRT, will develop a draft resilience and adaptation strategy to address the needs, goals, and vulnerabilities of the people and assets in the study area with specific recommendations for implementation actions. The strategy will include alternatives for each focus area, which will be informed by public outreach and engagement, with specific steps to ensure participation from socially vulnerable populations. The alternatives will be evaluated under various flood conditions and refined in collaboration with the RRT. The Consultant Team will prepare a Regional Resilience and Adaptation Plan around the selected alternatives. The mitigation strategy will include specific recommended actions that can be implemented to enhance flood resiliency in the region, along with relevant costs associated with the actions and the identification of available funding opportunities to support their implementation. 4) Adoption: Based on the RRT's recommendation, Middlesex County will endorse the plan through a Board of County Commissioners Resolution. The RRT will also suggest endorsement by each of the participating municipalities. 5) Maintenance: The County will revisit the Regional Resilience and Adaptation Plan on an annual basis to determine if additional projects should be prioritized and implemented, or if new projects in the study area should be pursued. This process will include outreach to the municipalities for input. 6) Implementation: The Consultant Team will conduct detailed feasibility studies, including cost-effectiveness, technical feasibility, and mitigation effectiveness, for each of the prioritized mitigation actions in the Regional Resilience and Adaptation Plan. Concept plans will be developed for future funding opportunities	\$387,825.00
LPDM-PJ-02-NJ-2023-001	Atlantic Highlands	Borough of Atlantic Highlands	8002	Monmouth	PDM 2023 - Atlantic Highlands Bulkhead Improvements	In order to mitigate damage from future major storm events it is proposed to install a 1-2 concrete wall along the length of the bulkhead to help provide extra protection from flooding and storms. Additionally, it is being proposed to apply a new protective coating to the existing steel bulkhead in conjunction with the concrete cap. Installing the wall without the bulkhead recoating could leave the wall vulnerable and exposed to water seeping underneath the cap. It is anticipated that the application of a new layer of coating to the steel bulkhead will increase the water resistance of the bulkhead. By implementing a concrete wall as an extra layer of protection and applying a new coating to the bulkhead, damage to the municipal harbor, as well as nearby property and businesses, should be reduced in the event of future major natural disasters.	\$704,377.67
LPDM-PJ-02-NJ-2023-002	City of North Wildwood	North Wildwood	213	Cape May County	PDM 2023 - City of North Wildwood Seawall Project	Construction of steel sheet piling (bulkhead) and a stone seawall on the beach between 2nd and 7th Avenues. See attached cost estimate & preliminary plans for more SOW information. General work includes furnishing and implementing required job trailers, setting up staging and lay down areas, erecting and maintaining required site safety, implementing required detours, preparation of and submission of required shop drawings and submittals and related work. Preliminary survey work (pay item 6) follows to verify actual conditions at the time of construction and analysis by the engineer to determine the final required profile of the actual stone seawall. Site clearing and demolition (pay item 5) is the next step, followed by erection of a temporary cofferdam (pay item 11) to enable the beach excavation work (pay item 10) to proceed. Concurrent with completion of beach excavation, the new steel bulkhead (pay items 12 through 15) between 3rd and 5th Avenues will be constructed, along with realignment of the existing steel bulkhead between 5th and 7th Avenues. Once the steel bulkhead is in place and at the proper alignment, construction of the seawall matstone (pay item 9) will commence, along with construction of the required drainage system (pay items 16 through 20) upland of the steel bulkhead. The drainage system is necessary because the realigned bulkhead between 5th and 7th Avenues will be constructed too close to the existing bicycle path and primary drainage system trunk line and stormwater runoff will pond against the seawall as opposed to naturally drainage into the sandy soil (with the realignment of the bulkhead there is not enough space between the bulkhead and the bike path to enable stormwater runoff to drain through the soil; therefore a drainage system has to be constructed to collect the runoff). The construction of and realignment of the steel bulkhead results in reciprocal damage to existing infrastructure due to the magnitude of vibration from driving the sheet piling. This will result in the need to repair and/or reconstruct some existing infrastructure including the reinforced concrete bike path (pay items 24 & 25) and rehabilitation of existing drainage manholes (pay item 28). In addition, with construction of the new steel bulkhead, the existing 3rd Avenue stormwater outfall must be reinstalled through the new bulkhead (pay item 29) and the outfall must be encased as part of the stone seawall construction. Once the new bulkhead is constructed, mitigation work commences with placement of concrete fill (pay item 27) between the existing and new bulkheads to prevent the uplands from washing into the void between the two bulkheads via the elevated and very shallow groundwater table. Additional mitigation work can also be completed at this time as well. This work includes soil injection (pay item 42) between 2nd and 3rd Avenues to stabilize and solidify the soil to prevent future washout through the deteriorated timber bulkhead. This work is completed in lieu of replacing the bulkhead, which would require removal and replacement of the stone seawall as well. The next phase of the project is the actual construction of the stone seawall (items 7 & 8). This work will be followed by various electrical improvements (pay items 43 through 46) necessitated by construction of the seawall. Specifically, in order to construct the seawall, the existing light poles and electric lines must be removed along JFK Blvd. . This reconstruction work includes pay items 21 through 23 and 30 through 40. Items 21-23 and 30-40 will be completed following complete construction of the seawall and restoration of the site. Site restoration (pay item 41) includes placing the excavated beach back to the new finished grade and cleanup of the site restoring it to or better than preconstruction conditions. The completed project results in long-term coastal protection and resiliency, providing protection to elevation 12NAVD88	\$6,251,884.00

Project Type	If "Other" for the project type, please manually enter the hazard(s)	What hazard is this project mitigating?	If "Other" for the hazard mitigated, please manually enter the hazard(s)	What community lifeline does the project stabilize?	If this loan will be used towards the non-federal cost share for a grant under another HMA grant program, which HMA grant program will it support?	Has the project already started?	Does the project include any work that will be subject to Environmental Planning and Historic Preservation (EHP) review?	For non-revenue generating projects, please identify the local government's revenue stream to support projects.	Is the community a low-income geographic area as defined in 42 U.S.C. 5135 § (m)(6)
Select a dropdown project type that best aligns with the proposed project. If not listed, input a project type manually.	Some projects may be comprehensive and incorporate multiple project types. Insert the project types in the cell below.	Select a hazard from the dropdown. If not listed, input a project type manually.	Some projects may be mitigating multiple hazards. Insert the hazards in the cell below.	Select a community lifeline from the dropdown.	Select a HMA program from the dropdown.	Projects where actual physical activity, such as groundbreaking, construction, or demolition has commenced prior to completion of EHP review, are ineligible. Select from the dropdown.	Projects that require EHP review include any ground disturbing studies or construction projects including but not limited to retrofits, acquisition of flood-prone properties, hazardous fuels reduction, and flood risk reduction projects.	Loan recipients are required to establish a dedicated source of revenue for repayment of the loan per 42 U.S.C. 5135 § (f)(1)(A)(ii).	Loan recipients that are low-income geographic areas can receive different loan terms. The data dictionary sheet has a link for calculation guidance.
Flood Control - Dam		Flooding	Severe Storm	Safety and security Community safety	PDM	No	Yes		Yes- census tract 117.02, 117.03, 117.04
Infrastructure Protective Measures		Flooding	Severe Storm	Safety and security Community safety	PDM	No	Yes	Local funds	No
Generator		Flooding	Severe Storm	Food, Water, Shelter	PDM	No	Yes	Local Funds	No
Advance Assistance		Flooding	Severe Storm	Safety and security Community safety	PDM	No	Yes	local funds	Yes- census tract 61.01
Elevation of Public Structures		Flooding	Severe Storm	Safety and security Community safety	PDM	No	Yes	local funds	No
Infrastructure Protective Measures		Flooding	Severe Storm	Safety and security Community safety	PDM	No	Yes	State Funds	No