

MECKLENBURG COUNTY RETROFIT PROGRAM POLICY DOCUMENT



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Charlotte-Mecklenburg Storm Water Services
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Executive Summary

Charlotte-Mecklenburg Storm Water Services (CMSWS) proactively manages flood risk by implementing and incentivizing mitigation actions. From 1999-2026, the County has invested more than \$100 Million in the acquisition and demolition of over 500 floodprone buildings. Funding for these endeavors comes from federal (FEMA), state, and local sources. Despite the programs' many successes, some floodprone properties are not cost-effective to buyout or are not eligible for FEMA mitigation grants.

In June 2014, the North Carolina Legislature adopted NC GS153A 274.1, allowing Mecklenburg County to use storm water fees to implement flood damage reduction techniques that result in improvements to private property. The statute is provided in its entirety in Section 1.2 of this policy document. Mecklenburg County Storm Water Services (MCSWS) subsequently created the RetroFIT (Floodproofing • Improvements • Together) grant program for floodplain property owners. This program funds modifications to habitable buildings that will result in reduced flood risk. This policy document, as required by the legislation, establishes and elaborates on the key elements of the RetroFIT program.

Flooding will naturally occur around and within many homes and businesses in the regulated floodplain. The purpose of the RetroFIT program is to reduce flood risk by offering financial and technical assistance to owners to floodproof habitable buildings. In most cases, large flood control projects along County "major system" creeks are not practically feasible or cost effective. In many cases, the best option for some owners is to make their buildings more "fit" to resist flood damage. Under the RetroFIT program, eligible floodplain property owners are able to apply for assistance with;

1. structure demolition,
2. structure elevation (or foundation construction),
3. structure relocation,
4. wet floodproofing,
5. dry floodproofing (commercial properties only),
6. abandoning basement and filling, and
7. protecting mechanical/electrical/service equipment.

Funding for the RetroFIT Program comes from a portion of the County's Storm Water Services Flood Mitigation Capital budget and offers grants to owners to cover a portion of the mitigation project cost. Owners will reimburse MCSWS if the property is sold at a higher market value within 5 years of project completion in cases where the grant amount exceeds \$5,000.

The RetroFIT Program application period is open year-round. Funding is allocated annually and is cumulatively managed as applications are approved. There are three phases of the project lifecycle; Application Phase, Review and Assistance Phase, and Approval and Implementation



Phase. Both the MCSWS and property owner (or designee) will have critical roles at various points of the project lifecycle.

Application Phase: MCSWS reaches out to private property owners that are potentially eligible for the program and educates interested individuals on the flood damage reduction techniques that are available and the requirements of the program. Property owners may indicate their interest in a RetroFIT project through submission of an owner interest application (<https://stormwaterservices.mecknc.gov/retrofit-floodproofing-program>)

Review and Assistance Phase: MCSWS staff provides technical expertise to the property owners to educate them on the flood damage reduction techniques that would be likely to reduce their structural damage during a flood event, the potential cost of the project and other requirements. This phase may culminate in a formal application for a grant.

Approval & Implementation Phase: Includes approval by the Storm Water Advisory Committee (SWAC), grant award, contract, owner implementation of the flood damage reduction project, County reimbursement, and final review and closeout of the project. After execution of the grant contract, the property owner will either oversee the work done on their property directly or hire a designee to act as the project manager for implementation of the project. If desired, the property owner can sign a retroFIT Grant Reimbursement Authorization form that allows MCSWS to pay the designee directly for completed and approved project expenses. This is especially important to lower income homeowners that may not be able to afford the upfront costs of the project while waiting for reimbursement from the County. MCSWS is responsible for ensuring the work is completed according to the contract, reviewing reimbursement requests, and making appropriate reimbursements to the property owner and/or contractor. The project is considered complete when all project components are successfully installed, elevations are verified, and the contract conditions are satisfied. Any work that does not meet the project established Flood Protection Elevation (FPE) will not be reimbursed.

MCSWS will file a Deed of Trust in the amount of the grant with the Register of Deeds for all grants exceeding \$5,000. If the property is sold within five years for more than the pre-mitigation appraised value, the owner must reimburse MCSWS any amount over the pre-mitigation fair market value to the total grant amount. Depending on the type of flood damage reduction technique, a non-conversion agreement and follow up inspections may be needed to assure that the flood mitigation measures remain in place.

Each year staff will assemble a Capital Improvement Project (CIP) report for the SWAC that includes all RetroFIT projects for the previous fiscal year. Upon review and approval, the SWAC will submit the annual report to the BOCC.

Section 1 Introduction

1.1 Background

MCSWS manages and maintains the regulated floodplains within the City of Charlotte, the towns of Cornelius, Davidson, Huntersville, Matthews, Mint Hill, and Pineville, and the unincorporated areas of Mecklenburg County. MCSWS aims to serve the residents of Mecklenburg County by reducing the potential for loss of life and property due to flooding, while enhancing the natural and beneficial functions of the floodplain along streams regulated by FEMA. MCSWS reduces flood risk to people and property through a variety of programmatic strategies, including: enforcing floodplain regulations, maintaining floodplain maps, providing advanced flood notification to emergency responders, assessing flood risk, developing mitigation plans, and implementing flood hazard mitigation projects. MCSWS also disseminates information on flood risk and potential mitigation options to floodplain property owners and the general public as new data becomes available.

MCSWS has evaluated potential flood hazard mitigation sites through a series of studies since the early 2000s. These studies primarily used two sets of criteria to evaluate the different improvement alternatives—location in relation to the Community Encroachment Area Boundary (0.1' Floodway) and cost effectiveness (Benefit-Cost Ratio). As a secondary consideration, the studies also evaluated flood damage reduction techniques for flood reduction capability, constructability, social/environmental impacts, and hydraulic impacts in a broad sense. These studies considered five flood hazard mitigation strategies: acquisition/demolition (buyouts), structure elevation, floodproofing, infrastructure improvements, flood barriers such as a levee or floodwall, and also recommended “no action” where appropriate. Property acquisition and structure demolition was the most frequent flood damage reduction technique recommended in that plan.

Through 2026, these efforts have resulted in the successful implementation of structural and non-structural risk reduction measures, including the acquisition and demolition of over 500 flood-prone structures within the County. However, this program has been focused upon property acquisition and demolition where the County purchases the property and removes all the buildings and impervious surfaces. The resultant property is returned to the community as public open space and has been used for greenway trails, community gardens and utilities. The successful implementation of the buyout strategy coupled with FEMA’s narrow view of the financial “benefits” of mitigation, has created a gap in the flood mitigation strategy. The goal of the RetroFIT Program is to provide assistance to private property owners to fill this gap.

The purpose of the RetroFIT program is to reduce flood damage to existing buildings in the regulated floodplain by offering financial and technical floodproofing assistance to owners. “Floodproofing” involves any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce, but do not eliminate the risk of damage due to

flooding. Techniques under the RetroFIT program will only reduce damage to certain portions of the building, depending on the level of floodproofing and the height of the floodwater.

Many floodprone properties do not qualify or have a low likelihood of funding through traditional federal mitigation grants. FEMA offers grant programs that fund mitigation actions such as acquisition, relocation and elevation, which will make buildings fully compliant with the floodplain standards. MCSWS has been awarded grants from these FEMA programs to fund property acquisition and demolition and elevation of structures that meet their criteria. FEMA's grant programs provide funding when the cost of the flood damage reduction technique is less than the estimated future flood insurance payments to the owner. This generally requires significant prior flooding to have occurred in the living space of a house or business to meet this cost-benefit criteria. FEMA grant programs do not take into account numerous life safety and quality of life risks that are important to local governments, such as emergency response, temporary shelters, high velocity flood areas, cumulative mold, or building settling.

Mecklenburg County has been awarded multiple flood mitigation grants and many of the 400 plus flood-prone structures that were purchased prior to 2015 were acquired with FEMA grant funding. However, many of the remaining 2,500 flood-prone structures located in the regulated floodplains do not qualify for a FEMA grant. The RetroFIT Program is intended to provide a funding and technical assistance option to flood-prone property owners whose properties are unlikely to qualify for FEMA grant funding.

1.2 Statutory Authority

The state legislature enacted the storm water utility law in 1991 that allows municipalities to fund stormwater management programs using stormwater fees. In 1994, Mecklenburg County began operating the storm water utility to manage storm water systems in the county. The enabling statute did not directly address whether storm water utility fees could be used to fund flood mitigation projects that benefit a single property owner without modifying the actual stormwater system. In 2014, at the request of the Mecklenburg County BOCC, the North Carolina General Assembly enacted the following statutory provisions enabling Counties of a certain size to use storm water utility fees for flood mitigation measures on private property.

§ 153A-274.1. Flood control activities under stormwater management programs.

(a) Findings. – The General Assembly finds that it is in the best interest of the residents of North Carolina to promote and fund the implementation of stormwater management programs to control and manage water quantity and flow in order to reduce the chances of loss of life and damage to property due to flooding. The General Assembly also finds that a county has an integral role in furthering this public purpose by promoting and funding implementation of

stormwater management programs within the county's territorial jurisdiction to reduce reliance on emergency response services, to reduce negative financial impacts on the community and the public from flooding, including the cost of public infrastructure repairs, to decrease the number of flood-prone homes and businesses, to increase infiltration of stormwater into the ground, and to reduce pollutants from entering the streams.

(b) Scope. – For purposes of operating a public enterprise under this Article, a county is authorized to do any of the following activities within its stormwater management program:

- (1) Purchase property for the purpose of demolishing flood-prone buildings.*
- (2) Implement flood damage reduction techniques that result in improvements to private property in accordance with subsection (c) of this section, to include:
 - a. Elevating structures or their associated components.*
 - b. Demolishing flood-prone structures.*
 - c. Retrofitting flood-prone structures.**

(c) Policy Document. – The county may engage in the activities listed in subdivision (2) of subsection (b) of this section only under the circumstances contained in a policy document approved by the board of county commissioners. The policy document shall, at a minimum, establish, and may elaborate on, the following:

- (1) Private property owner's written consent must be obtained prior to implementation of flood reduction improvements on the owner's property.*
- (2) The county has determined that improving the stormwater system is not practically feasible or cost-effective, and the activities in subdivision (2) of subsection (b) provide savings to the stormwater fund.*
- (3) The improvements to private property are the minimum necessary to accomplish the stormwater benefit.*
- (4) Funding provided by the county, above a certain amount, to the property owner or expended upon improvements to the property shall be reimbursed to the county if the property is sold within five years of the completion of the flood reduction improvement project. The amount of reimbursement due to the county may be calculated as the difference between the established pre-mitigation fair market value and the sale price of the property, not to exceed the total funding provided by the county.*

(5) The minimum financial contribution the private property owner must make to the project.

(d) Advisory Committee. – An existing stormwater advisory committee established by the board of commissioners and having specific charges, duties, and representation as set forth by the board of county commissioners must review and approve projects that implement flood damage reduction techniques under subdivision (2) of subsection (b) of this section. The committee shall submit an annual report to the board of county commissioners for its review.

(e) Application. – This section applies only to counties with a population of 910,000 or greater according to the most recent annual population estimates certified by the State Budget Officer.

1.3 Goals and Objectives

The purpose of the RetroFIT program is to reduce flood damage to existing buildings located in the Community Floodplain as shown on the Flood Insurance Rate Maps by offering financial and technical floodproofing assistance to owners.

The RetroFIT Program Policy Document (Policy Document) is required to be adopted by the Mecklenburg County BOCC to provide a policy framework for the proposed program. The initial Policy Document was approved by the BOCC in 2015 and this version is the first update.

It is the intent of MCSWS to review policies and adjust as necessary to assure future success. Any proposed changes to the Policy Document will be submitted to the SWAC and the BOCC for approval. MCSWS strives to have an effective and successful program but understands that with any program there are opportunities to improve the program based on experience and changing external conditions.

1.4 Concept

The overall concept for the RetroFIT program is providing assistance to individual property owners interested in elevating, demolishing or retrofitting their flood-prone structures. The program will be offered on an ongoing basis annually depending on available funding and interest. If the number of projects exceed available funding some projects may be deferred to the next fiscal year. The projects representing the greatest flood risk reduction for the least amount of funding will be prioritized.

The three main phases of the RetroFIT process are an Application Phase, a Review and Assistance phase, and an Approval and Implementation phase. Details pertaining to the lifecycle phases are explained in Section 3 of this Policy Document.

1.5 Annual Reporting

§ 153A-274.1. (d) Advisory Committee. – An existing stormwater advisory committee established by the board of commissioners and having specific charges, duties, and representation as set forth by the board of county commissioners must review and approve projects that implement flood damage reduction techniques under subdivision (2) of subsection (b) of this section. The committee shall submit an annual report to the board of county commissioners for its review.

Each year, staff will assemble a CIP report for the SWAC that includes all RetroFIT activity completed during the fiscal year. Upon review, comment, and endorsement by the SWAC, staff will submit the annual report to the BOCC. At a minimum, the report will include the following general information on the RetroFIT program:

- Program goals related to flood risk point reduction and number of structures mitigated,
- Number and types of projects attempted, funded and completed;
- Costs to the utility;
- Flood Risk Point reduction; and,
- Program highlights.

Section 2 Program Eligibility

2.1 Introduction

Projects proposed by owners must meet certain minimum criteria to qualify and be supported by MCSWS for the RetroFIT Program. Satisfying the minimum criteria does not mean that the owner will receive a grant; however, not meeting the criteria will lead to exclusion of the proposed project from being supported by the program. The RetroFIT program will have dedicated annual funding from the County Storm Water Services Flood Mitigation Capital budget. The owner or designee is required to provide a financial contribution based on tax value of the property as described in section 2.3 of this document.

2.2 General Eligibility Criteria

The RetroFIT program is available to property owners that have habitable structures at risk of flooding in the FEMA and Community Floodplains in Mecklenburg County. Owners of structures outside the FEMA and Community Floodplains are not eligible for RetroFIT funding. The purpose of the program is to provide financial and technical assistance to private property owners to reduce the risk of structure flooding.

The statute explicitly allows storm water funds to be spent on mitigation actions described below. The RetroFIT Program is limited to the specific activities described in part (b)(2) of this legislation.

§ 153A-274.1 (b)

- (1) Purchase property for the purpose of demolishing flood-prone buildings.**
- (2) Implement flood damage reduction techniques that result in improvements to private property in accordance with subsection (c) of this section, to include:**
 - a. Elevating structures or their associated components.**
 - b. Demolishing flood-prone structures.**
 - c. Retrofitting flood-prone structures.**

MCSWS already has a robust property acquisition and demolition program that relies heavily on FEMA grant and CIP funding to leverage the storm water fee contribution to these types of projects. MCSWS does not intend to use the RetroFIT program to purchase property. Generally, it is the intention of MCSWS to pursue FEMA grant funding in lieu of RetroFIT funding whenever possible. MCSWS may provide grant funding to FEMA-grant-eligible property owners to mitigate short-term flood damage potential or as part of flood damage mitigation efforts. A drawback to applying for FEMA grants is the 2-3 year timeframe that it can take for approval

and implementation. MCSWS has determined that the following flood damage reduction techniques meet the requirements of paragraph (b) (2):

1. structure demolition,
2. structure elevation or foundation construction,
3. structure relocation,
4. wet floodproofing,
5. dry floodproofing (commercial properties only),
6. abandoning basement and filling, and
7. protecting mechanical/electrical/service equipment,

These criteria are more fully developed in this Policy Document. There are references to the specific legislative provisions where appropriate in this document.

The enabling legislation requires creation of a Policy Document to establish and elaborate on five specific criteria. The five (5) criteria are discussed within this section and are further elaborated on in Section 3 - Program Implementation.

§ 153A-274.1(c)

(1) Private property owner's written consent must be obtained prior to implementation of flood reduction improvements on the owner's property.

This is a voluntary grant program for property owners interested in implementing flood mitigation measures to their buildings. The private property owner must sign a written grant contract with Mecklenburg County whereby the private owner provides consent, and the responsibilities of both MCSWS and the property owner are specified.

§ 153A-274.1(c)

(2) The county has determined that improving the stormwater system is not practically feasible or cost-effective, and the activities in subdivision (2) of subsection (b) provide savings to the stormwater fund.

For each project, MCSWS will review any existing feasibility studies on the major streams to determine if an improvement to the storm water system is practically feasible or cost-effective. If the proposed project is located on a stream without an existing feasibility study, MCSWS will review existing floodplain maps and associated models to determine if cost-effective modifications to the creek will alleviate flooding issues. For consistency and simplicity, MCSWS created a standardized review form titled the "SWAC Review Form" to evaluate and communicate the feasibility of proposed projects. As part of this form, staff will also determine if each project will result in a savings to the storm water fund by comparing the cost of the

proposed flood damage reduction method against the cost of acquiring the property and demolishing the building. This form is presented to SWAC for each proposed project at their monthly meeting as part of the approval process.

§ 153A-274.1(c)

(3) The improvements to private property are the minimum necessary to accomplish the stormwater benefit.

MCSWS will assist the property owner in selecting a flood damage reduction technique that meets their goals and also provides an appropriate level of damage reduction potential for the cost of the project. The goal of this program is to reduce the potential damage to the structure due to flooding. Any financial assistance provided under the RetroFIT program will be limited to the minimum necessary to accomplish flood resilience. Any additional aesthetic or desired work unrelated to the mitigation effort will be funded 100% by the property owner.

§ 153A-274.1(c)

(4) Funding provided by the county, above a certain amount, to the property owner or expended upon improvements to the property shall be reimbursed to the county if the property is sold within five years of the completion of the flood reduction improvement project. The amount of reimbursement due to the county may be calculated as the difference between the established pre-mitigation fair market value and the sale price of the property, not to exceed the total funding provided by the county.

(5) The minimum financial contribution the private property owner must make to the project.

The RetroFIT program will require property owners to pay a portion of the cost of the project and MCSWS will contribute the remainder of the cost. The legislation also requires the property owner to reimburse the County's portion of the cost of the project if the property sells within 5 years for more than the value of the property prior to the flood mitigation project. MCSWS will use premitigation tax values, recent sales price or MCSWS will accept an independent fair market appraisal of the property before executing the grant contract. Additional details pertaining to these funding criteria are expanded upon in Section 2.3 – Grant Contributions and Section 3 - Program Implementation.

Projects selected for MCSWS support must be reasonable and feasible. The cost of a project should not exceed that of an alternative mitigation method that would accomplish the same benefit nor should it exceed the value of the property. For example, the request would not be supported if the owner of a house with a walk-out basement desires to elevate the entire house so that the existing finished square footage is maintained when the same mitigation benefit can be obtained at a significant cost reduction by abandoning the walk-out basement. In some



cases, the grant may fund work above the minimum elevation required by the floodplain ordinance provided the work will result in greater protection at a reasonable cost. An example of this would be an elevation project where meeting the Flood Protection Elevation (FPE) would require elevating the finished floor 4 ft above the current elevation. Grant funding could be allowed to elevate the finished floor an additional 2 ft for a total of 6 ft to allow standing headroom underneath the structure provided this would give greater protection to the structure.

2.3 Grant Contributions

An important requirement of the RetroFIT Program is the financial contribution of the private property owner toward the cost of implementing improvements to their floodprone building. The basic owner contribution rate will range between 1% and 25% of the overall cost of implementing the improvements and MCSWS will reimburse the property owner or designee 75% to 99% of the overall cost as shown in the Table below.

MCSWS analyzed and used the tax values of approximately 2,500 properties located in the current floodplain that may qualify for the RetroFIT program to determine the cost share. A sliding scale based off property value was used to determine the percentage of contribution between 1% and 25% of the overall project cost.

Property Owner Contribution Rate

<u>Total Property Tax Value</u>	<u>Property Owner</u>	<u>Storm Water</u>
\$0 to \$150,000	1%	99%
\$150,001 to \$250,000	5%	95%
\$250,001 to \$300,000	10%	90%
\$300,001 or greater	25%	75%

The owner contribution rates were established to encourage implementation of RetroFIT projects among lower valued properties, which are concentrated in low-income areas of Mecklenburg County. An analysis of past RetroFIT project locations determined that the vast majority of projects were completed outside of the low-income areas. Significant flood risk exists within the low-income areas of Mecklenburg County and the owner contribution rates encourage implementation of projects in these areas.

MCSWS will evaluate maximum grant amounts for each of the flood damage reduction techniques based on past experience and industry averages to act as guardrails for the program and provide property owners with approximate costs.

MCSWS intends to contribute an annual amount to fund the RetroFIT Program from the Storm Water Services Flood Mitigation Capital budget. Additional funding may be allocated in

response to a flood event or significant interest in the program. In the event of flooding, property owners could utilize flood insurance reimbursement funds as RetroFIT owner match to perform flood damage reduction activities while repairing or replacing flood damage.

In some cases, a property owner may make a flood insurance claim under their Increased Cost of Compliance (ICC) coverage to bring their building into compliance with the Floodplain Regulations. This typically occurs after the building has incurred substantial damages from flooding, but it could be triggered under other circumstances. ICC funds are provided to property owner for mitigating future losses and therefore can be used as RetroFIT matching contribution. However, the full amount of the ICC payment must be applied before any grant funding under the RetroFIT program. Therefore, the overall project cost-share for the property owner may be higher than 1%-25% shown in the Table above when ICC funds are used.

2.4 Description of Eligible Flood Damage Reduction Techniques

The program will only fund projects that include one or more of the seven flood damage reduction techniques as described in Sections 2.4.1 through 2.4.7. The grant funding will be provided on a project basis and not on a per-technique basis. For instance, a project that includes both structure elevation and protecting service equipment would be funded with a single grant. The 7 techniques described in Sections 2.4.1 through 2.4.7 are the only techniques currently eligible for RetroFIT funding. Examples of flood damage reduction techniques that are excluded from the program are levee construction, acquisition (funded through a separate MCSWS program), buyout resale, detention, and storm water system structural flood control projects. These projects are being excluded mainly because these techniques are eligible for funding from different local, State, and federal sources.

Costs associated with certain mitigation techniques may be a barrier to pursuing all the mitigation options available. Regardless, MCSWS will work with the property owner to implement any or all eligible RetroFIT techniques. For example, the most effective mitigation options for a structure may be to elevate it and protect service equipment. However, the homeowner may not have the desire or available matching funds for elevation. They may still apply to protect their service equipment to prevent a portion of future losses. All aspects of the selected RetroFIT mitigation option must be completed. For example, if protecting service equipment is selected, all service equipment must be elevated above the FPE.

Below is the legislative reference and a summary of each flood damage reduction technique that is available in the RetroFIT program.

2.4.1 Structure Demolition

§ 153A-274.1 (b) (2) (b): Demolishing flood-prone structures.

Structure demolition involves the demolition of a flood-prone structure located in the regulated floodplain. The RetroFIT program will fund the permitting, demolition of the building, removal and proper disposal of the debris from the property, and the stabilization of the site to prevent erosion. Any future construction on the site would need to comply with the Floodplain Ordinance requirements.



2.4.2 Structure Elevation

§ 153A-274.1 (b) (2) (a). Elevating structures or their associated components.

This technique is only available to structures outside of the FEMA and Community Floodway. Structure elevation consists of physically raising the lowest finished floor of an existing structure to an elevation above the Flood Protection Elevation (FPE). Elevation may be achieved by a variety of methods including piles, posts, and columns, or elevating on fill. The new structure must be fully compliant with floodplain regulations and building codes: foundations must be designed with flood openings to properly convey flood water into and out of the foundation; the elevated structure must be properly anchored to the foundation; flood-resistant materials must be used below the FPE; and all mechanical and electrical utilities must be elevated above the FPE.

Projects eligible for elevation are required to have soil testing completed prior to MCSWS support due to the high likelihood of soils with poor structural qualities in the floodplain.



Some projects may be eligible for a hybrid approach to the elevation techniques. In certain unique circumstances where the home cannot be safely elevated due to extensive damage, a grant may be issued to demolish the existing structure and fund the construction of a new foundation that would bring the FFE above the FPE. Grants issued for qualifying projects would only fund construction of a new foundation for the square footage and footprint equal to the previous structure. Any expansion to the previous structural size and shape would be the homeowners' responsibility to fund at 100% of the cost.

2.4.3 Structure Relocation

§ 153A-274.1 (b) (2) (a) Elevating structures or their associated components.

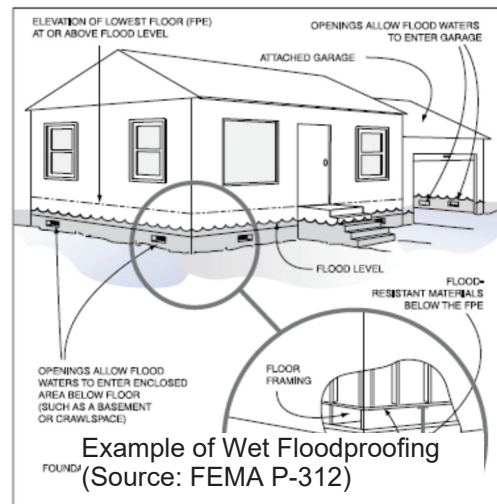
Structure relocation involves relocating the structure to a location outside the floodplain. The property remains in private ownership. The private owner bears the cost of acquiring a new parcel for the structure. The grant would fund the structure relocation costs.



Relocation costs would not include costs associated with site development including new sewer and water connections. However, if the existing parcel is large enough to move the structure outside of the floodplain on the same parcel, the grant could fund to extend the existing services.

2.4.4 Wet Floodproofing of Structures

§ 153A-274.1 (b) (2) (c) Retrofitting flood-prone structures Wet floodproofing of a structure is accomplished by modifying an existing structure to allow flood water to safely enter and leave without causing significant damage. Water is allowed to enter the impacted area (such as a crawl space) to equalize the hydrostatic pressure and then leave when flooding recedes. The area that is inundated during the flood event must be graded to ensure complete drainage when flood water recedes. Structures with a subgrade crawlspace may need to be filled to allow for proper drainage. All construction and finish materials in the inundated areas must be flood resistant. Another element of wet floodproofing is the relocation of mechanical and electrical equipment.

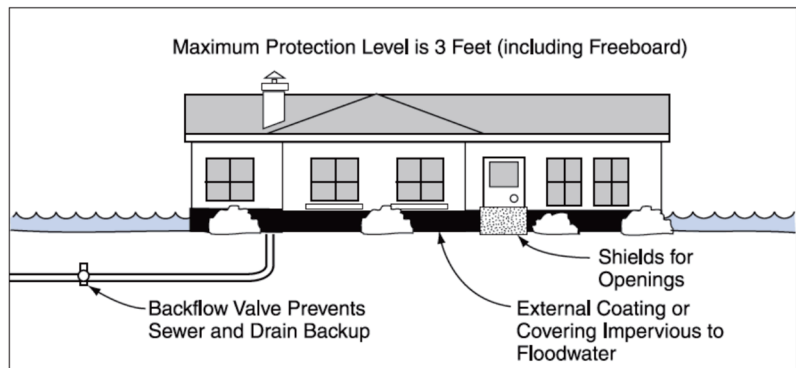


2.4.5 Dry Floodproofing of Structures

§ 153A-274.1 (b) (2) (c) Retrofitting flood-prone structures.

Dry floodproofing is a technique available only to commercial structures and involves making an area watertight to prevent floodwater from entering the structure. The walls must be made watertight with waterproof coatings, impermeable membranes, and/or supplemental layers of concrete or masonry. Any windows, doors, or other openings must be equipped

with permanent or removable shields. Water and sewer lines must be equipped with backflow preventer valves. All mechanical and electrical equipment must be flood protected either by a floodproofing enclosure or by elevating. Dry floodproofing techniques must be approved and sealed by a licensed Professional Engineer. A standard operating procedure (SOP) for the timing and installation of floodproofing barriers must also be developed and kept on-site.



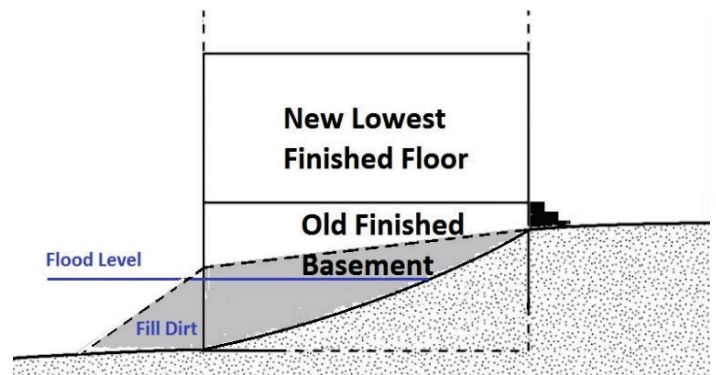
Example of Dry Floodproofing (Source: FEMA P-312)

techniques must be approved and sealed by a licensed Professional Engineer. A standard operating procedure (SOP) for the timing and installation of floodproofing barriers must also be developed and kept on-site.

2.4.6 Abandoning Basement and Filling

§ 153A-274.1 (b) (2) (c) Retrofitting flood-prone structures.

Abandoning finished living space in a walkout basement and filling involves converting the finished basement to crawlspace. Fill may be needed around the exterior perimeter of the foundation to equalize grade. The structure must be modified to allow filling in the basement. This technique may also be applied to structures with sub-grade crawlspaces to bring the home into compliance. The grade of the crawlspace floor must be above the lowest adjacent grade outside of the structure.



2.4.7 Protecting Service Equipment (HVAC, electrical, utilities, fuel)

§ 153A-274.1 (b) (2) (a) Retrofitting flood-prone structures.

Protecting service equipment involves elevating and/or relocating mechanical and electrical equipment including ductwork and receptacles. Service equipment installed outside the structure or in a full height basement can be raised on pedestals or platforms. Service equipment located in a basement, crawlspace, or other area below the flood level can be relocated to an upper floor, attic, or higher ground. Anchors and tie downs for aboveground and underground storage tanks may also be included. For non-compliant homes, the costs associated with protecting service equipment would not be counted towards the costs of Substantial Improvement.



Section 3 Program Implementation

3.1 Introduction

The typical RetroFIT project is completed in three phases as described. The process includes an Application Phase, a Review and Assistance Phase, and an Approval and Implementation Phase as described below.

Phase 1 – Application Phase: MCSWS reaches out to private property owners that are potentially eligible for the program and educates interested individuals on the flood damage reduction techniques that are available and the requirements of the program. Property owners may indicate their interest in a RetroFIT project through submission of an owner interest application (<https://stormwaterservices.mecknc.gov/retrofit-floodproofing-program>)

Phase 2 - Review and Assistance Phase: MCSWS staff provides technical expertise to the property owners to educate them on the flood damage reduction techniques that would be likely to reduce their structural damage during a flood event, the potential cost of the project and other requirements. This phase may culminate in a formal application for a grant.

Phase 3 - Approval & Implementation Phase: Includes approval by the SWAC, grant award, contract, owner implementation of the flood damage reduction project, County reimbursement, and final review and closeout of the project.

3.2 Application Phase

MCSWS will promote the RetroFIT program in hopes of receiving preliminary web-based owner interest applications from interested property owners. MCSWS staff may reach out to owners directly that are likely eligible for the RetroFIT Program. Staff will then assist interested property owners in determining if the program would work for them. This phase includes outreach to all property owners with a building located within the Community Floodplain. All owners that respond to the community outreach will receive technical assistance from MCSWS to help them understand their flood risk and determine if the grant program will meet their goals. MCSWS may also use targeted community outreach for a specific mitigation type or area within the county to increase participation of a certain technique or concentrated flood risk zone. Applications may also be generated through post-flood event inspections and interactions with affected homeowners.

Property owners interested in the program can contact staff directly or submit a web-based application to MCSWS at any time (<https://stormwaterservices.mecknc.gov/retrofit-floodproofing-program>). However, if there is a lack of sufficient applications to expend the dedicated funds, MCSWS may look for opportunities to conduct additional community outreach to increase participation. Also, if there are too many grant applications to fund in a single year, MCSWS may give priority to the unfunded applicants during the next fiscal year.

MCSWS has created simple web-based applications for property owners to communicate their interest in mitigation and provide basic information related to proposed actions (<https://stormwaterservices.mecknc.gov/retrofit-floodproofing-program>).

3.3 Review and Assistance Phase

After the property owner submits an Owner Eligibility Application or contacts staff directly, staff will meet with the property owner at the property to assess the potential for implementing one or more of the acceptable flood damage reduction techniques. MCSWS will use information from the RARR Plan to assess the owner’s options for flood mitigation. The RARR assigns a “Risk Score” based on a variety of potential impacts and the events that may affect the property. Based on the potential flood risk, each mitigation technique is given an effectiveness rating from “highly effective” (the mitigation technique would have a high impact to reduce flood risk) down to “not recommended” (the mitigation technique would not benefit the property due to a variety of factors). For example, a structure located within the FEMA floodway may meet the general criteria for an elevation project, but due to its location in the high-velocity zone or “floodway”, the mitigation technique effectiveness would be “not Recommended.” In combination with the mitigation technique effectiveness, a viability score is also assigned to each mitigation technique. The viability score assigns a numeric value from 1-10 based on the viability of each mitigation technique. Viability takes into account the costs associated with the mitigation technique as it compares to the overall risk reduction benefit of the proposed mitigation technique. Projects with a lower viability score would take priority over those with a higher viability score. Projects with a viability score between 1-5 would be considered high priority and are included in the 15-year CIP goal.

MCSWS staff will provide general cost estimates to the property owners for the flood damage reduction techniques that may work to reduce flood damage to their buildings. The general cost estimates will allow the property owner to understand the financial contribution that may be required if a grant is awarded to them.

MCSWS staff will evaluate the information developed during the Evaluation and Consultation Period to determine if the project meets the minimum eligibility requirements for MCSWS to support the project. This evaluation includes a general assessment of the feasibility of improving the stormwater system and whether the cost of the proposed flood damage reduction techniques is the minimum necessary to accomplish the stormwater benefit. MCSWS will determine if improving the storm water system is practically feasible or cost-effective, and whether the proposed flood damage reduction technique will provide savings to the storm water fund. If the proposed project meets the minimum eligibility criteria and funds are available, MCSWS will support the project. This will allow the owner to proceed with preparing a formal grant application. In the event the proposed activities are not supported by MCSWS, or if funding is clearly not available in the current fiscal year, MCSWS will notify the owner in

writing and clearly explain why the project will not be supported by MCSWS or may be supported in the future when funding becomes available.

After MCSWS works with the owner or designee and determines the project is viable, the owner will be required to submit the formal retroFIT application. As part of the application, the owner or designee will develop detailed information regarding the proposed project. Items include a detailed project scope and a minimum of three (3) detailed quotes from licensed contractors depending on the type of flood damage reduction technique. The owner does not have to use the lowest of the three (3) quotes provided, but the grant will only fund the amount of the lowest of the three quotes. Furthermore, MCSWS reserves the right to ask for additional quotes if the three (3) quotes provided appear to be high based upon industry average and past project knowledge for a given technique. To assist owners, MCSWS has developed a list of qualified contractors for some of the flood damage reduction techniques. This list has been generated from successfully completed grant projects. Owners are not required to use a contractor from the list. This period of the grant lifecycle will culminate in a formal grant application. MCSWS anticipates that this phase could be completed between 1 week to 2 months depending on the owner's level of interest and complexity of the project.

The formal grant application will request general information applicable to all projects as well as more detailed information applicable to the specific flood damage reduction technique(s) proposed for their building. All applications will include a detailed scope of the proposed project and a requested grant amount based on either bids or cost estimates depending on the specific flood damage reduction technique. The owner must demonstrate that the proposed project will mitigate the targeted flood risk or bring the structure into compliance with the current Floodplain Ordinance. There will be an acknowledgement of certain requirements of the grant program including, but not limited to, the estimated amount of the private property owner financial contribution, the fact that this is a reimbursement program, the need to repay the reimbursement amount under specific circumstances, and that a grant application does not necessarily mean that a grant will be awarded. The information in the application should provide enough information to MCSWS staff to fully review the projects and prepare documentation necessary for review and possible approval by the SWAC.

3.4 Approval and Implementation Phase

The Approval and Implementation Phase will begin once MCSWS reviews the formal application and supports the project for the awarding of a grant. In the event that there are more formal grant applications with estimated costs greater than the annual funding amount allocated for that fiscal year, it will be necessary to prioritize projects that are the best candidates for reducing the likelihood of damage due to flooding. The completed grant applications will be ranked by MCSWS staff using a protocol that will assess the likelihood of success and risk reduction. The ranking system will include both objective criteria such as cost-benefit analysis and more subjective criteria such as overall effectiveness of the proposed project and economic

impact. There will be an attempt to select projects from a wide variety of costs, flood damage reduction techniques, watersheds, and economically challenged areas to reach a wider spectrum of property owners. As necessary, MCSWS will rank the projects and determine the maximum number of projects that can be funded given the annual funding amount.

MCSWS has created a standard format for the project descriptions and justification called the “SWAC Review Form.” MCSWS staff will complete a SWAC Review Form and presentation for each of the projects supported by MCSWS for the SWAC to review. The SWAC Review Form will contain the information necessary for SWAC to review and vote on individual grants. MCSWS will present a summary of the project and justification for grant funding at the monthly SWAC meeting for approval. Once SWAC has approved or disapproved the project for grant funding, MCSWS will notify the property owner(s).

The funding Grant Agreement and Implementation period will begin with the development of the grant contract and Deed of Trust. The grant contract between the property owner and MCSWS will formally document the responsibilities of both parties over the course of the grant and acknowledge the private property owners voluntary consent to implement the mitigation measures. The grant contract will include the scope of the project, grant amount available, time limit for completion of the flood mitigation measures, and responsibilities related to construction and inspection. The grant contract will clearly state the mitigation measures that are included in the grant. Grants will only fund items related to the flood mitigation measure and will exclude any other construction. For example, if the property owner wants to elevate their house, MCSWS will pay to elevate the structure but will not pay for improvements to the structure for aesthetic purposes or pay to upgrade the electrical or mechanical system unless required to bring into compliance with the floodplain regulations or building codes. Specifically, property owners cannot use grant funding to remedy building code or floodplain violations for installations completed without proper building or floodplain development permits. The contract will include the total amount of the grant based on a minimum of three detailed bids. The grant amount will be the amount of the lowest bid. The owner must use one of the bidders for the construction, but this will not change the grant amount if the contractor with the lowest bid is not selected. The grant contract will clearly state the pre-mitigation fair market value of the property. Fair market value can be obtained by using tax value, recent area sales price, or a recent appraisal of the subject property. The enabling legislation, quoted below, requires the establishment of the premitigation value of the property.

§ 153A-274.1.(c)(4) Funding provided by the county, above a certain amount, to the property owner or expended upon improvements to the property shall be reimbursed to the county if the property is sold within five years of the completion of the flood reduction improvement project. The amount of reimbursement due to the county may be calculated as the difference between the established premitigation fair market

value and the sale price of the property, not to exceed the total funding provided by the county.

MCSWS has determined that legal and administrative expenses related to the reimbursement process contained in Section 153A-274.1 (c)(4) are approximately \$5,000. Therefore, all grants greater than \$5,000 must reimburse the county consistent with section 153A-274.1 (c)(4). During the development of the grant contract, owners will have the option to use the County's current tax value, recent sales history, or elect to provide an independent Fair Market Value appraisal to establish the pre-mitigation fair market value. The contract will clearly state that if the property is sold within five (5) years of completion for more than the agreed upon pre mitigation fair market value of the property, the owner must reimburse MCSWS any amount over the pre-mitigation fair market value to the total grant amount.

For all grants exceeding the minimum project cost of \$5,000, MCSWS will file a deed of trust with the Register of Deeds in Mecklenburg County for the total amount of the grant. This deed of trust will terminate in five (5) years automatically. If the property sells in the five year time period, the property owner must satisfy the deed of trust if the sale price of the house is greater than the premitigation value at the time the grant contract was executed.

The Owner Implementation Period of the program will begin when a grant contract is executed between the owner and the County and continues until five years after the grant contract is completed. After execution of the grant contract, the owner will be responsible for implementing the flood damage reduction measures and MCSWS will be responsible for inspecting the construction, reviewing reimbursement requests, and making appropriate reimbursements to the property owner and/or the contractor. The owner can use a designee to act as the project manager for the project. If the owner uses a designee, a Grant Reimbursement Authorization form must be submitted to MCSWS that allows the designee (typically a licensed contractor) to work directly with MCSWS on the submittal of plans, estimates, and reimbursement requests. Reimbursements can then be made directly to the designee after paid invoices have been provided for work completed and inspections by MCSWS staff have been completed. In situations where an owner uses a designee, the owner is still responsible for signing the Grant Agreement and Deed of Trust. For elevation projects, the structure must be elevated and back on new foundation prior to reimbursement.

The owner or designee is responsible for all of the construction related activities. For some projects, the owner or designee must hire a contractor licensed by the State of North Carolina to complete certain tasks. MCSWS may assist the owner or designee to select contractors that are licensed and capable of doing the work. The property owner or designee will be liable for all expenses associated with the construction. The property owner, designee, or their licensed contractor is responsible for obtaining all the necessary permits to complete the project. If the project requires the certification of a professional engineer or land surveyor, the owner or designee is responsible for hiring the professional engineer or surveyor. The owner or designee

is responsible for obtaining all required post-project certifications such as an Elevation Certificate.

During construction, MCSWS will inspect the construction to verify that a reimbursement request is supported by the completed construction. When the owner or designee has completed all or a portion of the construction of the flood mitigation measures, the property owner or designee may request an inspection by MCSWS. MCSWS will inspect the construction to assess the progress of the project. MCSWS will authorize reimbursement of the owner or designee for the completed elements. Upon completion of construction, MCSWS will collect all the documentation verifying that the work was completed, including documentation that the licensed contractor and suppliers have been paid. These required documents may include a paid stamped invoice, Certificate of Completion from Mecklenburg County Code Enforcement, Non-Conversion Agreement, and/or an official Elevation Certificate.

There will be a five (5) year monitoring period following the end of the project implementation phase. MCSWS has the authority to make an annual inspection of the property every year for five years to assure that the flood mitigation measures are in compliance with the Floodplain Ordinance and/or operational. For example, if a structure is elevated using grant funding, MCSWS may conduct an annual inspection to verify that the area under the finished floor is used only for parking, building access, or storage and that this area is wet floodproofed. Owners may be required to sign and file a Non-Conversion Agreement when applicable with the Register of Deeds Office. The Non-Conversion Agreement is an acknowledgement from the owner that the areas located below the FPE cannot be habitable space or climate controlled and is for storage use or parking only. This document also serves to notify potential future owners of the flood restrictions related to the property.

Appendix A: Acronyms and Definitions

This policy document uses a number of terms, phrases, and acronyms that may have different meanings to different readers. The following is a list of terms and definitions that may be useful in understanding key concepts of this document.

Basement: Any area of the building, having its floor subgrade (below ground level on all sides).

BOCC: Mecklenburg Board of County Commissioners

Building: Any structure built for support, shelter, or enclosure for any occupancy or storage.

CMSWS: Charlotte-Mecklenburg Storm Water Services

Community Base Flood Elevation: The elevation shown on the Flood Insurance Rate Map Flood Hazard Data Table, having a 1% chance of being equaled or exceeded, determined using future land use conditions.

Community Encroachment Area: The channel of a stream or other watercourse and the adjacent land areas that must be reserved in order to discharge the FEMA Base Flood without cumulatively increasing the water surface elevation more than 0.1 foot.

Community Floodplain: This shows where flooding is likely to occur in the future, based on expected development upstream.

FEMA: Federal Emergency Management Agency

FEMA Base Flood: The flood determined using land use conditions at the time of the study having a 1% chance of being equaled or exceeded in any given year.

FEMA Base Flood Elevation (BFE): The elevation shown on the Flood Insurance Rate Map and Flood Insurance Study Profile that indicates the water surface elevation resulting from a FEMA Base Flood that has a 1% chance of equaling or exceeding that level in any given year.

Flood or Flooding: A general and temporary condition of partial or complete inundation of normally dry land areas from:

1. The overflow of inland or tidal waters; and/or
2. The unusual and rapid accumulation of run-off of surface waters from any source.

Flood Insurance Rate Map (FIRM): An official map of a community, in both digital and printed format, on which the Federal Emergency Management Agency has delineated the Special Flood

Hazard Area and the risk premium zones applicable to the community. The date of the jurisdiction's original FIRM is determined in each jurisdiction's Floodplain ordinance.

Flood Mitigation: Action(s) taken to reduce or eliminate long-term risk to life and property from a flood event.

Flood Protection Elevation (FPE): The elevation to which all structures located within the Community Special Flood Hazard Area must be elevated (or floodproofed if non-residential). Within areas where Base Flood Elevations (BFEs) have been determined, this elevation shall be determined in the communities Floodplain Ordinance.

Floodplain: Any land area susceptible to being inundated by flood waters from any source.

Floodproofing: Any combination of structural and nonstructural additions, changes, or adjustments to structures, which reduce the risk of flood damage to real estate or improved real property, water and sanitation facilities, or structures with their contents.

Flood Resilience: A community's ability to recover or adapt from a significant event caused by the forces of nature or human action. Hazard mitigation is the action taken to reduce or eliminate long-term risk to life and property from such an event.

Increased Cost of Compliance (ICC): The National Flood Insurance Program (NFIP) includes this coverage for all new and renewed Standard Flood Insurance Policies. Policyholders can get financial assistance from the NFIP to help pay the costs to bring their home or business into compliance with their community's floodplain ordinance.

MCSWS: Mecklenburg County Storm Water Services

NFIP: National Flood Insurance Program

Storm Water Advisory Committee (SWAC): The Storm Water Advisory Committee (SWAC) is a multi-disciplinary committee delegated the authority to review and recommend storm water policies, etc. to Charlotte City Council, Mecklenburg Board of County Commissioners and the Towns for the successful operation of a single storm water utility in Mecklenburg County. SWAC is responsible for the review and approval of all RetroFIT grant applications.

Appendix B: Current Policy Revisions Implimented

Policy Section	Topic	May 11, 2026 Revisions	Level of Impact
ES	Executive Summary	Action: Updated summary Impact: Summary updated to reflect changes in overall document.	Minor
1.1	Background	Action: General updates Impact: Brings document up to date with projects completed to date.	Minor
1.4	Concept	Action: Remove language related to an “application period”. Impact: Aligns policy with current practice of allowing an open application period. There is not an opening period or closing date for applications. Rather, applications are accepted throughout the year. Based on interest, projects may need to be prioritized and delayed due to annual funding amounts available.	Moderate
1.5	Annual Reporting	Action: Language updated to include annual reporting via Capital Improvement Project (CIP) report Impact: Update reporting categories and criteria to align with current practices.	Minor
.2.1	Introduction	Action: Changed language requiring owner being “required” to provide a financial contribution and added “or project manager” Impact: This allows property owner to give project management and financing of the project to the contractor.	Major
2.2	General Eligibility Criteria	Action: Removed language related to projects not qualifying for FEMA flood mitigation grants. Impact: Continue to fund elevation projects under with local money that may be eligible for FEMA grant funding.	Minor
2.2	General Eligibility Criteria	Action: Add “Commercial properties only” for dry floodproofing technique. Impact: Aligns mitigation technique with flood ordinance language.	Minor
2.2	General Eligibility Criteria	Action: Define “structure” as it is used in Sec 153A-274.1 state legislation to be any property improvement subject to regulation under applicable floodplain ordinance, i.e. a walled and roofed building that is principally above ground. The eligible mitigation techniques would likely be limited to demolition or relocation and a project would have to provide clear benefits, either through flood risk point reduction or removal of hazardous materials from a high flood-risk zone.	Minor

Policy Section	Topic	May 11, 2026 Revisions	Level of Impact										
		Impact: This would expand program coverage to any structure. To date eligibility has been limited to a primary residence or place of business. Sheds, outbuildings, garages, etc. have not been eligible.											
2.2	General Eligibility Criteria	Action: Establish “reasonable and feasible” criteria for evaluation of project type. Under these conditions, the cost of a project should not exceed that of alternate project that would accomplish the same benefit nor should it exceed the value of the property. Depending on the project type and available data, the criteria could be comparison to another mitigation type or they could be numeric limits or caps for spending. Impact: Provide support for staff determinations regarding project type eligibility.	Minor										
2.2	General Eligibility Criteria	Action: Reinforce concept that grant will only fund the minimum project to provide the desired flood mitigation benefit. Example – owner of diagram 7 walk-out with finished lower-level desires to elevate entire house so that existing square footage of finished living area is maintained. Request denied because same mitigation benefit can be obtained with lower-level abandonment. Impact: Provide support for staff determinations regarding project type eligibility.	Minor										
2.2	General Eligibility Criteria	Action: State that grant will pay for work beyond minimum required by floodplain ordinance if the work provides greater protection/mitigation. Example – Proposed house elevation would require it to be raised 4 feet above existing level to meet flood protection elevation. Owner wishes to elevate to 6 feet above existing level so that space below elevated structure will have standing headroom. Request allowed as the additional height offers greater protection. Impact: Incremental increased cost to program, acknowledge that flooding above/beyond 1%-chance event is possible.	Minor										
2.3	Grant Contributions	Action: Updated the Property Owner Contribution Rate table Impact: Gives schedule of the property value required to qualify for reduced homeowner project contribution. Previous contribution rate for property owner was: <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Tax Value</td> <td style="width: 50%;">Property Owner</td> </tr> <tr> <td>\$0 - \$90,000</td> <td>10%</td> </tr> <tr> <td>\$90,001 - \$115,000</td> <td>15%</td> </tr> <tr> <td>\$115,001 - \$145,000</td> <td>20%</td> </tr> <tr> <td>\$145,001 or greater</td> <td>25%</td> </tr> </table>	Tax Value	Property Owner	\$0 - \$90,000	10%	\$90,001 - \$115,000	15%	\$115,001 - \$145,000	20%	\$145,001 or greater	25%	Major
Tax Value	Property Owner												
\$0 - \$90,000	10%												
\$90,001 - \$115,000	15%												
\$115,001 - \$145,000	20%												
\$145,001 or greater	25%												
2.4	Eligible Flood	Action: Added language related to homeowners being able to choose	Minor										

Policy Section	Topic	May 11, 2026 Revisions	Level of Impact
	Damage Reduction Techniques	available mitigation technique. Impact: Allows homeowner to not have an “all or nothing” approach. If a less expensive technique is viable but not the most effective, they would still be able to pursue the less expensive option although maybe not the maximum benefit for risk reduction.	
2.4	Eligible Flood Damage Reduction Techniques	Action: Create hybrid demolition/elevation project for use at substantially damaged structure that is too difficult or expensive to elevate. A separate, stand-alone policy statement has been prepared to more fully define this technique. Impact: Incorporate current practice into written policy.	Moderate
2.4.2	Eligible Flood Damage Reduction Techniques	Action: Require soil testing to ensure project is viable prior to MCSWS to support the project. Impact: Helps to prevent future unknown costs associated with poor soil conditions such as helical piers.	Minor
2.4.3	Structure Relocation	Action: Added language specifying that costs associated with new sewer and water tap fees and related expenses would not be included in the grant. Impact: Would make relocation projects more fiscally viable as costs associated with water and sewer can be very high. If there is room to move a structure outside of the floodplain on the same parcel, grant funding could be available to extend existing services.	Minor
2.4.4	Wet Floodproofing of Structures	Action: Language added to include mitigating subgrade crawlspaces Impact: Would bring homes considered “non-conforming” to the floodplain ordinance to “compliant” by filling in subgrade crawlspace to outside grade. This would change the structure diagram number from a 9 to a diagram 8.	Moderate
2.4.5	Dry Floodproofing of Structures	Action: Add language for “commercial properties only”. Impact: Aligns mitigation technique with floodplain ordinance language. Plan must be approved by PE and SOP must be kept on-site for installation directions.	Minor
2.4.6	Abandoning Basement and Filling	Action: Added language to include filling of subgrade crawlspaces. Impact: Would allow funding to bring lowest floor of the structure to a grade above the LAG. If the lowest floor of the structure is below the LAG, the structure is non-compliant.	Moderate
2.4.7	Protecting Service Equipment	Action: Removed language for “protecting them in place”. Added language related to Substantial Improvement. Impact: Protecting in place would be considered “dry floodproofing” and is not allowed under the floodplain ordinance for residential properties. The costs associated with bringing service equipment into compliance is not counted against the Substantial Improvement 50% requirement.	Moderate

Policy Section	Topic	May 11, 2026 Revisions	Level of Impact
3.1 & 3.2	Application Process	<p>Action: Revised program lifecycle and application phase to allow for interest application submittal throughout fiscal year. Added language related to targeted mitigation efforts by type or location.</p> <p>Impact: Allows for application period to be always open. Depending on funding, projects can still be prioritized and MCSWS has the option to “not support” projects based on risks, costs and mitigation benefits.</p>	Minor
3.3	Evaluation and Consultation	<p>Action: Added language related to RARR scores and prioritization of projects.</p> <p>Impact: Explains how projects are prioritized and ranked based on risk. Also explains how some projects may not be eligible for certain mitigation techniques.</p>	Moderate
3.3	Evaluation and Consultation	<p>Action: Amended language from “approve” to “support” for mitigation projects.</p> <p>Impact: MCSWS cannot prevent a homeowner from bringing a case to SWAC for approval. However, MCSWS can choose to support or not support a project based on a variety of factors evaluated during the review period.</p>	Moderate
3.3	Evaluation and Consultation	<p>Action: Language added related to formal retroFIT application and application requirements.</p> <p>Impact: Requires the homeowner or designee to obtain 3 quotes for the supported mitigation technique. RetroFIT will fund the lowest of the 3 quotes but the homeowner does not have to select that contractor. Also allows MCSWS to ask for an additional quote if the 3 quotes provided do not align with costs of industry averages or previous projects.</p>	Minor
3.4	Approval and Implementation	<p>Action: Language added regarding SWAC review form and presentation for SWAC approval.</p> <p>Impact: Aligns document with current practice of submitting SWAC Review form and presenting project to SWAC for approval.</p>	Minor
3.4	Approval and Implementation	<p>Action: Clarify that contractor(s) have license(s) appropriate for proposed work.</p> <p>Impact: Reduce burden on grantees and incorporate current practice into written policy.</p>	Minor
3.4	Approval and Implementation	<p>Action: Specify that the deed of trust be filed in conjunction with Grant Agreement. This begins 5-year clock.</p> <p>Impact: Ensure that deed of trust, for proper amount, is filed at appropriate time.</p>	Minor
3.4	Approval and Implementation	<p>Action: Revised Deed of Trust threshold from project costs totaling over \$3,000 to \$5,000.</p> <p>Impact: Due to increase in in-house and legal costs increase brings the costs in-line with current expenses needed to recoup if property</p>	Minor

Policy Section	Topic	May 11, 2026 Revisions	Level of Impact
		is sold within the 5-year post-project completion.	
3.4	Approval and Implementation	Action: Language added to allow the property owner to use a “project manager” to assist with the management of the project. Impact: Would allow property owners that lack the desire, qualifications or aptitude to manage a mitigation project the option to use a 3 rd party to manage the project. Typically this would be the contractor hired to complete the project.	Major
3.4	Approval and Implementation	Action: Added “Grant Reimbursement Authorization” language. Impact: Allows MCSWS to reimburse the contractor directly or 3 rd party acting as the funding source. This would also be incorporated for projects where the funding is paid at 100% due to LMI status. MCSWS would then pay the contractor directly for reimbursement of completed work after completing inspections to verify work completed.	Major
3.4	Approval and Implementation	Action: Revise description of post-project monitoring period to provide flexibility in frequency and method of inspections. Currently each project is subject to annual, in-person inspection. Staff wishes investigate use of owner-certification and/or other methods to confirm that flood risk reduction measures remain in place. Will also investigate tying cancelation of the Deed of Trust to passing final inspection. Impact: Provide flexibility for staff in scheduling inspections.	Minor
3.4	Approval and Implementation	Action: Added language related to Non-Conversion Agreement. Impact: Could require a owner to file a Non-Conversion Agreement at the Register of Deeds Office. This is to notify the current owner and potential future owners of the restrictions related to converting areas below the FPE to living space.	Moderate
Appendix A	Acronyms and Definitions	Action: Revised definition of FPE to reflect the 2-foot freeboard requirement. Impact: Brings policy document in line with current flood regulation definition of FPE.	Minor
Appendix A	Acronyms and Definitions	Action: Added definition for Flood Resilience. Impact: Clarifies the correlation between flood resilience and hazard mitigation.	Minor
Appendix B	Policy Revisions	Action: Added list of current policy changes. Impact: Tracks changes to policy document for future reference.	Minor
Appendix A	Acronyms and Definitions	Action: Added definition for SWAC. Impact: Describes SWAC responsibilities with retroFIT.	