

St. Mary's County Nuisance Flooding Plan



December 1, 2020

St. Mary’s County Nuisance Flooding Plan

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Background

Maryland Senate Bill (SB) 1006 states that “on or before July 1, 2019, a local jurisdiction that experiences nuisance flooding shall develop a plan to address nuisance flooding.” The legislation further specifies that the plan must be submitted to the Maryland Department of Planning, published on the local jurisdiction’s website, and updated at least every five years. The order was later amended the sub mission date to “on before October 1, 2020. This plan has been developed to meet this requirement. *This plan is not a “Plan” as defined in the Land Use Article.*

Further, Once approved, administrative changes and updates may be made to this document without re-approval. Dates of such changes will be identified on the Cover Page.

I. Introduction

Flooding is one of the most common natural hazards experienced in St. Mary’s County. Depending on the circumstances, flooding may be widespread or isolated, developing slowly or quickly. It may take the form of coastal, overland, or flash flooding. Floods may originate from ice jams or from the failure of dams or levees. Nuisance flooding is a more specific and commonplace phenomenon which dictates a lighter response and threatens the community in less intrusive ways.

The National Oceanic and Atmospheric Administration (NOAA) defines nuisance flooding, or high tide flooding, as “flooding that leads to public inconveniences such as road closures. It is increasingly common as coastal sea levels rise.” The language of SB 1006 refers to nuisance flooding as “high-tide flooding that causes public inconvenience.” Nuisance flooding is typically unrelated to particular storm events, though it may be exacerbated by long-duration wind events or passing storm systems. As such, it is frequently referred to as “sunny day flooding.”

Nuisance flooding is capable of disrupting daily activities through a variety of mechanisms, such as the closure of roads due to high water, the inundation of yards and parks, and the impairment of engineered and natural drainage systems. Currently, these disruptions typically occur for a period of several hours and then abate. However, as a changing climate drives sea levels higher and precipitation events to greater severity, these repeated “nuisance” impacts will become significant stressors on the infrastructure, emergency response, public health, and fabric of the community.

In St. Mary’s County, nuisance flooding of tidal waters occurs most predominately in locations near or adjacent to major bodies of water. Along the Patuxent and Potomac Rivers nuisance flooding is common on both residential and commercial properties. Elsewhere in the County, nuisance flooding has been experienced and addressed in several lowland locations. Sporadic flooding occurs at locations where debris has accumulated in ditches and culverts thus causing an overflow onto the roadways. Some culverts in low-lying areas may have difficulty conveying sufficient water during high rainfall events causing ponding on low-lying roadways within the County.

II. Preparing for Nuisance Flooding

As part of the nuisance flood planning process for St. Mary’s County, the Multi-Jurisdictional Hazards Mitigation Plan (MJHMP) identifies the inventory of known flood hazard areas as required by the legislation. The specific hazards related to tidal waters and roadway flooding potential have been extracted from FEMA mapping and identified in Appendix I to this document. Organizational contacts

involved in management of this plan and other stakeholders involved in the nuisance flood inventory development, data collection and action planning processes can be found in Appendix II.

In addition to mapping, accurate flood forecasting and warning is critical to the safety and preparedness of a community. Weather forecast data is received from the Baltimore/Washington forecasting office of the National Weather Service (NWS). Critical tide information is received from the NOAA tide gauges stationed at St. Georges Island, Clements Creek and an upstream gauge off MD Rt 242, as well as the St. Mary’s River Dam. Additional gauges are available throughout the Chesapeake Bay. These gauges allow St. Mary’s County to be aware of and prepare for possible nuisance flooding impacts.

The St. Mary’s County Department of Emergency Services maintains a close relationship with the National Weather Service (NWS) of Sterling VA forecasting office, sharing live information with the National Weather Service (NWS) and receiving information on special hazards and watches or warnings of severe weather before the community is impacted. The timeliness of these severe weather alerts is critical when the potential for public safety impacts exists, such as in flood situations. Additionally, it is the responsibility of the St. Mary’s County Department of Emergency Services to disseminate public safety information via CodeRED, the County’s mass notification system, and social media outlets. When nuisance flooding is anticipated, it may be necessary for St. Mary’s County Department of Emergency Services to initiate a message to flood hazard areas via CodeRED and social media outlets with details about flood severity, duration, or impacts such as road closures.

III. Responding to Nuisance Flooding

A. Emergency Response

Thresholds are maintained for St. Mary’s County which direct a set of actions based on a particular inundation level or frequency of flooding. These thresholds are meant to supplement actions directed by the St. Mary’s County Emergency Operations Plan.

Threshold	Response Level	Required Action
Forecast data from the NWS or NOAA tide gauge indicates likely nuisance flooding impacts	Level I – Public Warning	Make the public aware of nuisance flooding threat via mass notification emails, social media, etc.
Flood waters are present below nuisance levels and are rising	Level II – Monitor Inundation	Deploy DPW&T and SHA personnel to monitor flood levels as needed and place high water signs at impacted locations.
Flood waters are high enough to warrant temporary road closures	Level III – Flood Response	Place additional DPW&T and SHA personnel on standby; close roads and reroute traffic as flooding reaches hazardous levels

When flooding reaches such a severity that life safety, critical infrastructure, and key resources are threatened, “nuisance” flooding levels have been exceeded. Below are response concepts consistent with the St. Mary’s County Emergency Operations Plan which may become necessary as flood waters rise beyond nuisance levels.

- Responses
 - Lifesaving activities

- Incident containment
- Public health concerns
- Maintenance of transportation routes
- Maintenance of critical facilities
- Public warning mechanisms
- Responder health & safety
- Media & VIP management
- Control & Coordination of operations
- Provision of transport, shelter and documentation of displaced persons
- Restoration of normality
- Recovery
 - Handover from life saving
 - Facilitate the restoration of systems to normality
 - Assess damage and return vital life support systems to minimum operating standards
 - Collate financial cost of the event
 - Legal implications, claim investigation
 - Debrief & compilation of final report
 - Community & restoration of services

B. Documentation

Documenting the extent and impacts of nuisance flooding is critical to public safety and the long-term resilience of St. Mary's County. This information will be documented and updated on a regular basis for emergency planning purposes. A review of flood documentation should provide St. Mary's County a comprehensive view of trends in flooding over time. The following factors will be recorded by St. Mary's County Department of Emergency Services and DPW&T for tracking and archived by County GIS staff. This includes instances of nuisance flooding addressed by SHA and communicated over the radio.

- Date, time, and location of nuisance flooding
- Impacts (e.g. "x amount of water on the roadway," "traffic diversion impacts," "ditch overflow," "docks underwater," etc.)
- Agency notified and action taken

See Appendix III for a description of the St. Mary's County nuisance flooding documentation tool(s).

IV. Mitigating Nuisance Flooding Impacts

Both the Comprehensive Plan and the MJHMP for St. Mary's County address measures by which the impacts of flooding can be mitigated, or lessened, by structural and nonstructural means. The purpose of the Nuisance Flooding Plan is to augment and support the information and recommended actions found in other planning documents in order to develop implementing action strategies and budgets. According to the County's 2014 HMP (p. 6-7):

The Comprehensive Plan addresses the County's accelerated erosion by high winds and high tides, overland flow, and shoreline cliff sluffing and identifies strategies to reduce erosion along St. Mary's County's 268 miles of tidal shoreline. Both the Comprehensive Plan and the Hazard Mitigation Plan identify shoreline control/stabilization measures and both residential and agricultural best management practices as viable means of reducing

accretion/erosion of St. Mary's highly erodible soils. Both plans also emphasize the maintenance, enforcement, and strengthening of floodplain regulations and participation in the Community Rating System. All county projects will be evaluated for consistency with both the Comprehensive Plan and the Hazard Mitigation Plan.

The principles of floodplain management are fundamental to the proper mitigation of nuisance flooding in St. Mary's County. Higher standards – such as freeboard, development restrictions in the floodplain, etc. – can be effective in mitigating the effects of both nuisance flooding and other major flooding events.

St. Mary's County's MJHMP identifies four areas in which focus is directed regarding mitigation activity. These four areas include:

- Ensure that existing structures are resistant to flood-related damage,
- Create awareness of floodplain hazards and protective measures,
- Protect critical facilities, and
- Prepare/update stormwater management plans for various areas in the County.

In addition to actions specified in the MJHMP, this plan identifies activities which St. Mary's County will implement or consider implementing to mitigate the impacts of nuisance flooding. These activities support the four areas of focus found in the MJHMP. They also support recommendations and actions from St. Mary's County's 2016 Climate Change and Sea Level Rise Adaptation Report and goals and strategies of the St. Mary's County Comprehensive Plan.

- Structural
 - Evaluate the need for enhancements to the Comprehensive Zoning Ordinance, Article 7 regarding the requirements for additional freeboard beyond current requirements.
 - Amend the County's Stormwater Management, Grading and Erosion and Sediment Control Ordinance and supporting documents to Improve stormwater conveyance infrastructure to more effectively convey water from flood-prone areas.
 - Conduct regular preventive maintenance of drainage and stormwater control systems.
 - Consider innovative stormwater infrastructure alternatives where additional stormwater BMPs must be utilized.
- Nonstructural
 - Public Information
 - Disseminate flood preparedness information to enable a safer and more aware public in the face of flooding.
 - Integrate nuisance flooding-related public messaging in St. Mary's County's existing public information plans and materials and encourage the public to use the 311 system to support the tracking of nuisance flood areas or concern.
 - 311 messaging provides coordinating contact information for town residents, in the event they attempt to utilize that system for reporting.
 - Planning
 - Ensure St. Mary's County's NFP is kept up to date and referenced in the MJHMP and other pertinent locations.
 - DPW&T will schedule meetings of the Nuisance Flood Plan sub-committee on an

as-needed basis, (but never less than once a year) to address flood-related issues and to review plans.

- The sub-committee will report back to the Steering Committee for the MJHMP to obtain agreement and integration of actions, prior to any CIP submissions for budgeting.
 - Create a workable predictive stormwater flood management plan and strengthen policies to reduce runoff.
 - Annually submit proposed mitigation projects to address the highest priority locations for consideration within the Capital Improvement Program framework.
 - Develop scoping needed to be ready for the budget cycle beginning in September of each year. The normal planning horizon is year 5 for budgeting. Earlier implementation will have to be justified.
 - Grants availability is one factor in advancing the cycle. The current list of locations requiring corrective actions for the next budget cycle are provided in Appendix IV and are updated annually with data from the previous fiscal year.
 - Leonardtown data collection input will be provided for coordination purposes only. Leonardtown action planning will be a separate action. Resulting decisions and actions will be provided to augment this plan as well as the MJHMP.
- Implementation
 - Evaluate the applicability of preserving floodplains as open spaces through the use of legal protection status.
 - Protect natural coastal features (forests, marshes, dunes, underwater grasses, and oysters) that can reduce the impacts of flooding.

V. Projections for Future Impacts

The areas impacted by nuisance flooding will increase gradually in the coming years as changing climate elevates water levels and drives precipitation patterns to new extremes. This shift, however, is likely to accelerate gradually over time. New areas will also become impacted, leading to an increased number of businesses, residents, and critical infrastructure at risk. Public services will also be more frequently impaired as flooding increases.

The County 311 Reporting System will be interrogated annually to determine if additional flood prone areas can be determined by an aggregation of similar complaints. Topographically related areas of concern may present themselves as a result of changes in the community and/or weather patterns.

The County GIS information system related to Nuisance flooding can be found at [link to new site-Future]. Additional analytical support tools were identified in the Nuisance Flood Plan Development Guidance which included the following:

1. [National Weather Service Advanced Hydrologic Prediction Service](https://water.weather.gov/ahps/rfc/rfc.php) (Coastal & Riverine Water levels):
<https://water.weather.gov/ahps/rfc/rfc.php>
Click on the Regional map for the mid-Atlantic to show the flood status of riverine and coastal locations. Selecting a specific location will provide conditions for that gauge. The conditions are current and predicted. A user brochure of what data is available can be found:
[https://www.weather.gov/media/water/brochures/Guide to Hydrologic Information Brochure.pdf](https://www.weather.gov/media/water/brochures/Guide%20to%20Hydrologic%20Information%20Brochure.pdf)

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2. NOAA Inundation Dashboard: <https://tidesandcurrents.noaa.gov/inundationdb/> The dashboard provides real-time and historical inundation information at select National Ocean Service tide stations. For a full list of features, click on the link and then click the 'About?' link at the top of the map.
3. Chesapeake Bay Operational Forecast System: This generates water level, current, temperature, and salinity nowcast and forecast guidance four times per day.
<https://tidesandcurrents.noaa.gov/ofs/cbofs/cbofs.html>

St. Mary's County will also maintain a level of awareness of data made available by NOAA, the State of Maryland, the University of Maryland Center for Environmental Science, and other scientific institutions as it pertains to the community and local flood risks. These risks of increased nuisance flooding will be communicated appropriately to residents and decision makers and direct them to take appropriate action in the areas of emergency response and hazard mitigation. Elected officials and County staff will utilize venues such as County Commissioners' meetings and Planning Commission meetings to communicate information on long-term flood risks as well as web and media based outlets. Future projections of sea level change and nuisance flooding information is also utilized for land use planning, floodplain management, comprehensive planning, and capital investment planning.

This Plan is an adjunct plan to the Multijurisdictional Hazards Mitigation Plan.

Appendix I – Nuisance Flooding Location Inventory

A. Locations Identified by County Highway Division

<u>North Area</u>	<u>Central Area</u>
Golden Beach Road, down in the flats	Bayside Road
South Sandgate Road	Maypole Road
All Faith Church Road	Old Breton Beach Road
Delabrooke Road	McIntosh Road
Morgan Parlett Road	St. Johns Road
Locke’s Hill Road	Jones Road
	Morgan Road
<u>West Area</u>	<u>South Area</u>
Morganza Turner Road	St. Jerome’s Neck Road
Mechanicsville Road	Long Neck Road
Baptist Church Road	Hays Beach Road
Bishop Road	Cornfield Harbor Road
Bethel Church Road	Adkins Road
Hurry Road	Piney Point Road (County Portion)
Manor Road	Thomas Road
Friendship School Road	Ball Point Road
Bushwood Road	Flat Iron Road
Palmer Road	River Road
Foley Mattingly Road	Villa Road
Mill Point Road	Beachville Road
Beach Road	Poplar Street
Locks Crossing Road	
Davis Road	

Note from County Highway Division

Heavy rain events and/or high tides affect different parts of the county, which dictates the County response each time. Storm direction and width of the storm front are also factors.

B. Flooding vulnerable Road Locations based on Current*_FEMA Mapping

*2020 available on St. Mary's GIS Public Platform

County Roads	Location	Note
Adams Dr	at Bay Dr	
Adkins Rd	along St. Mary's River	
Airedele Rd	Multiple locations E of Drury Rd	
All Faith Church Rd	1/4 mi S of Wanda Ln	
Archer St	for 200 ft 580 ft from end	
Asher Ln	770ft .6 mi from Mechanicsville Rd	reg floodway
Ball Point Rd	all	
Baptist Church Rd	For 1500 ft 1300ft N of George Dr	reg floodway
Barger Rd	Bracketed by Riverview Dr, 2 sections	
Bay Dr	At Adams Dr	
Bayside Rd	for 100 ft 500 ft S of Stillwater Ln	
Bayside Rd	for 270 ft 1/4 mi W of Big Chestnut Rd	
Beach Ct	S of Beach Dr (all)	
Beach Rd	500 ft near end	
Beitzell Rd	Near White Necks Rd	
Bethel Church Rd	For 200 ft 0.5 mi E of MD Rt 236	
Bishop Rd	for 400 ft 1/2 mi W of Friendship School Rd	
Bowles Rd	at End	
Buggy Trail Way	at Dr. Johnson Rd	
Bushwood Rd	for 780 ft 0.7 mi N of Maddox Rd	
Busy Corner Rd	W. of Rt 5, at stream crossing	
Camp Merryelande Rd	all	
Chancellors Run Rd	@ Jarboesville Stream	
Clark Rd	E of MD Rt 248	
Cornfield Harbor Dr	F/ Camp Riverview Dr for 0.85ft	
Cornfield Harbor Rd	650 ft S of MD Rt 5 for 850 ft	
Cornfield Harbor Rd	F/0.7 mi s of Md Rt 5 for 0.2 mi	
Deagles Boatyard Rd	all	
Delabrooke Rd	at end of Co Maintenance.	
Dr Johnson Rd	for 750 ft 450 ft W of Sterling Ct	
Drayden Rd	at Cartagena Creek	
Dukeharts Creek Rd	at End	
E of Piney Point Rd	F/300 ft w of Arthur Fenwick Ln to end	
Finnacom Rd	at end	
Finnacom Rd	600 Ft E of Herring Creek Rd	
Flat Iron Rd	From Rt 5 for 0.6 mi.	
Flat Iron Rd	@ Warehouse Run	
Flat Iron Rd	N of Highway to Heaven Ln for 400ft	
Folly Mattingly Rd	For 135 ft, 1200 ft from end	
Freemans Rd	Last 290 ft	

B. Flooding vulnerable Road Locations based on Current_FEMA Mapping

County Roads	Location	Note
Fresh Pond Neck Rd	S of Bradburn Ln for 600 ft	
Golden Thompson Rd	multiple locations 600 ft S of Wilmer Palmer Rd	
Hermanville Rd	@ Pembroke Run	
Herring Creek Rd	at ed	
Holly St	N of St Georges Rd	
Holmes Rd	Bracketed by Riverview Dr	
Hood Lane	at St. Mary's River Western Branch	
Indian Bridge	@ St. Mary's River	
Jones Rd	for 1100 ft. 1/2 mi N of McIntosh Rd	
Laurel Ave	N of St Georges Rd	
Ledford Dr	at Colton Point Rd	
Lockes Crossing Rd	500 ft, 1200 ft E of Briscoe Anderson Ln	
Long Neck Rd	Fr/ E of Tennyson Ln to end	
Maypole Rd	.3 mi S of Parsons Mill Rd for 600 ft	
McIntosh Rd	S of Burnt Mill Dr for .3 mi	reg floodway
Mechanicsville Rd	f 950 ft N of MS Rt 234 for 4600 ft	reg floodway
Moll Dyer Rd	at End	
Monroe Rd	at both ends	
Montford Rd	450 ft 1/4 mi from end	
Morganza-Turner Rd	for 300 ft 350 ft S of Longhorn Ln	
Old Breton Beach Rd	last 0.6 mi	
Old Hermanville Rd	at MD Rt 5	
Oscar Haydon Rd	for 200 ft 1/4 mi w of Tom Bailey Ln	
Palmer Rd	for 600 ft, 1/4 mi from end	
Paul Ellis Rd	400 ft at end	
Paul Ellis Rd	350 ft 850 ft from Colton Pt Rd	
Piney Point Rd	@ Johns Creek	
Point Breeze Rd	multiple 500 ft E of Coltons Pt Rd	
Poplar St	S of St Georges Rd	
River Dr	N of St Georges Rd	
River Shore Dr	at River Rd	
River Springs Rd	at End	
Rodo Beach Dr	at end	
S Sandgates Rd	For 1/4 mi after Connect to N. Sandgates Rd	
Scotland Beach Dr	Last 1300 ft	
St Jeromes Neck Rd	at End	
St. Georges Park DR	E of Shores Dr	
St. Georges Rd	E of MD Rt 249	
St. Johns Rd	for 470 ft 800 ft E of Meredith Ct	
Thomas Rd	S of Piney Point Rd to end	
Trent Hall Rd	Last 1/4 mi	

B. Flooding vulnerable Road Locations based on Current FEMA Mapping

County Roads	Location	Note
Van Ward Rd	for 135 ft 0.4 mi E of Pleasant Plains Way	
Waterloo Cir	at Colton Pt Rd	
Waterview Dr	E of Barger Dr	
Waterview Dr	E of Holmes Rd along water to 560 ft N of Wolf Dr	
Willie Cheseldine Rd	1/4 from Whites Neck Rd to end	
Willows Rd	at MD Rt 5	
Yowaiski Mill Rd	F Mechanicsville Rd for 1500 ft	
Yowaiski Mill Rd	Stream Crossing N of Bosse Dr	
Private Roads	Location	Note
2nd St	S of St. Georges Park Rd	
3rd St	S of St. Georges Park Rd	
4th St	S of St. Georges Park Rd	
Abell Creek Ln	at Medleys Neck Rd	
Arthur Fenwick Ln	E of Piney Point Rd	
Barnsy Ln	at of Md 245	
Bashford Ln	100 ft, 1000 ft from end	
Bay Dr	N of Mill Point Rd (all)	
Bayfront Dr	f/ Scotland Beach Dr to end	
Beach Dr	E of Long Creek Rd	
Bradburn Ln	Last 370 ft	
Brookstone Way	west of Wickshire Dr	
Charles Way	f/ Adkins Rd East	
Cherry Ln	at end of Rd, N of Jones Warf Rd	
Church Creek Ln	Fist 1800 ft off Medleys Neck Rd (MD 244)	
Cricket Ln	at MD Rt 242	
Crowder Ln	all	
Duffys Way	N of Md Rt 5	
Eisenhour Dr	all	
Farrall Ln	E of Old Breton Beach Rd	
Fishermans Way	W of Airedele Rd	
Georges Ln	at Paul Ellis Rd	
Harbor Dr	S of Wicomico Dr	
Hatches Ln	at end	
Holly Dr	Fr/ 560 ft S of Bay Ave	
Knotts Ln	for 500 ft 1000 ft from end	
Kopels Rd	Last 200 ft	
Lake Dr	N of Beach Dr	
Langley Park Way	all	reg floodway
Little Pond Ln	S of Blakeney Rd	

B. Flooding vulnerable Road Locations based on Current FEMA Mapping

Private Roads	Location	Note
Lizzies Ln	N End of Lane off Calvert Bay	
Locust Grove Drive	At Oakland Cove	
Locust St	at Poplar St	
Lois Marie Ln	all	
Long Creek Rd	Last 1/3 of mi	
Macarthur Dr	all	
Malcom Gass Ln	last 250 ft	
McKay Rd	S of Freemans Rd	
Millstone Landing Way	Lat 600 ft to Conn w/ Bradley Farm Ln	
Murray Rd	From end of Co Maintenance	
Nelson Ln	N of Oconnors Ln	
Oconnors Ln	all	
Patton Way	all	
Pinetamare Way	all but last 200ft	
Pizzant Ln	W of Long Creek Rd	
Pleasant Valley Ln	750 ft E of Pleasant Valley Ct	
Poplar St	at Poplar St	
Potato Hill Farm Ln	N of Md Rt 5	
Potomac River Dr	F/Cornfield Harbor Dr - all but last 425ft	
Ridgell Way	N of Md Rt 5	
Riverside Dr	at end	
Riverview Rd	From End of Delabrooke for 260 ft	
Rolling Hills Ln	500 ft N of Friendship Ct	
Sayre Point Ln	all	
Shaeffer Ln	all but 150ft mid street	
Shanty Point Ln	All but 20 ft near Piney Point Rd (MD 249)	
Shea Ally Way	W of St Jerome's Neck Rd	
Shipsview Way	S of Thomas Rd	
Skyview Dr	at end, N of Crosswoods Dr	
South Point Ln	220 ft near end of rd.	
Southview Ln	370 ft of Last 800 ft Notley Hill Farm	
St Michaels Manor Way	N of Md Rt 5	
Tennyson Ln	90 ft from 370 ft before end	
Townley Point Rd	W of Hawley Manor Rd	
Trot Line Way	Last 325 ft	
Uplands Ln	First 425 ft from Drayden Rd	
Western Branch Ln		
Wicomico Dr	320 ft S of Irving Dr to Harbor Dr	
William Howard Way	From River Rd for 320 ft	
Wrinkle Free Ln	for 100 ft 360 ft W of Newtowne Neck Rd	

B. Flooding vulnerable Road Locations based on Current FEMA Mapping

State Roads	Location	Note
Md 4	at MD 5	
MD 5	At 236	
MD 5	From 250ft E of Newtowne Neck Rd, E for 1000ft	
MD 5	N of St. Andrews Church Rd S for 825ft	
MD 5	From MD 471 to MD 246 (vicinity of Flat Iron Rd)	on major storm that require Lake to be lowered
MD 5	From Willows Rd to Old Hermanville Rd	Regulatory floodway
MD 5	From 1400 Ft E of Willows E for 400ft	
MD 5	From 175ft S of Holly Dr for 425ft	
MD 5	From 300ft E of Cornfield Harbor Rd to 10380 Point Look out Rd	
MD 5	From 900 Ft S of 10380 Point Lookout Rd to End	
MD 6	250ft W of Four Seasons Dr W for 550ft	
MD 6	1000ft S of Morgan Brothers Rd for 800ft	
MD 234	325ft E of MD 242 for 1500ft	
MD 234	For 2100 W of MD 238	
MD 235	Runs the ridge between watersheds - stays dry	
MD 238	for 1.2 mi S of MD 234	Some Regulatory floodway
MD 239	Last 150ft	
MD 242	900ft N of Abell Rd for 100ft	
MD 242	F 1050ft N of Sugar Hole Rd for 650'	
MD 242	150 N and 1400ft S of Ledford Dr	
MD 242	3 areas between Ed Brown Rd and Waterloo Cir totaling 870ft	
MD 243	500ft S of MD 5 for 1000ft	
MD 243	800 ft N of EO Rd 2 locations for 475ft (100yr only)	
MD 244	430ft E of MD 249 for 250ft	
MD 244	For 330ft at St. Thomas More Ln	
MD 244	From Little St. Anne's Ln past Abell Creek Ln (1200ft)	
MD 245	700ft S of Steer Horn Neck Rd for 70ft	
MD 245	200ft S and 525ft N of Weatherby Dr	
MD 249	SS St. Georges Isle Bridge nr Shaffer La	regulatory floodway
MD 470	1150ft N of Old Trappe LN for 1100ft	
MD 470	110 ft E of Cryer Rd for 260ft	
MD 472	at South Sandgates Rd	
MD 520	Between Oscar Hayden Rd and I Rd	
MD 520	Last 50 ft	

Appendix II – Nuisance Flood Plan Steering Committee and Sub-Committee Members

A. Steering Committee - Hazard Mitigation Planning Board*

NAME	AGENCY
John Deatrick	Public Works & Transportation
Philip Burch	MD State Highway
Stephen Walker	Emergency Services
Gerald Gardner	Emergency Services
Mark Stancliff	Information Technology
Tony Wheatly	Town of Leonardtown
Vince Wittles	Local Businessman
Bill Hunt	Land Use and Growth Management
Michael Wyant	St. Mary's County Public Schools
Ed Hogan	METCOM

- Ref: MJHMP

B. Nuisance Flood Plan Sub-Committee Members

NAME	AGENCY
Michael Canova	Public Works & Transportation
Philip Burch	MD State Highway
Gerald Gardiner	Emergency Services
Eric Benson	Information Technology
Tony Wheatly	Town of Leonardtown
Richard Tarr	Public Works & Transportation
Ben Cohen	Land Use and Growth Management

Appendix III – Nuisance Flooding Assessment Tools

1. County 311 Reporting System - 311 is a non-emergency service that citizens can use to request county services, make complaints, or report problems like road damage, trees down and flooding issues. It provides a map to allow for a specific location to be identified with the problems being reported. The system also has the ability to capture the complaint information by category and location for later data analysis. This is the primary data collection tool for both tidal and non-tidal flooding impacts.
2. The Town of Leonardtown uses a hard copy system. Residents calls are received, and their concerns are forwarded to the Town's Capital Projects Manager for assessment. Confirmed Nuisance Flooding issues are evaluated for possible action and, if the issue is a town responsibility, the location will be added to the Town's Listing and included in the next cycle's reporting.
3. The County utilizes ESRI GIS tools to provide both public and non-public information sources to more fully allow for assessment of the County's infrastructure and its impacts on the hydrology issues related to flooding. Assessment of the FEMA flood hazard mapping to identify roadway potential impacts from tidal waters.
4. Additional ESRI GIS map presentation elements are being developed to support the necessary analysis of incoming data to provide action planning for areas impacted by nuisance flooding. Currently awaiting Information Technology support resourcing. (*Major software upgrades are currently underway that demand first priority.*) The current scheduling for this activity is at the start of the next analysis cycle in early FY2022.
5. Hazard Mitigation analytics are supported by a separate County Situational Report Dashboard. This site contains links to the NOAA monitors in the waters surrounding St. Mary's County.
6. Outside agency tools, as identified in the Nuisance Flood Plan Development Guidance; the National Weather Service Advanced Hydrologic Prediction Service (Coastal & Riverine Water levels, the 2. NOAA Inundation Dashboard, and 3. Chesapeake Bay Operational Forecast System will also be utilized to develop forward looking analysis as well as information gleaned from University of Maryland Center for Environmental Science, and other scientific institutions as it pertains to the community and local flood risks.

Appendix IV

A. Nuisance Flooding Mitigation Sites*

FY	Area	Location	Tidal Waters	Issues
2020	Golden Beach	Subdivision Phase 1	Patuxent River Shoreline	Lowland community lies within flood hazard zone. Housing predominately ground level homes. Shoreline within 2' of sea level Normal high tides can cause flooding
2021	Golden Beach	Subdivision Phase 1	Patuxent River Shoreline	See above
2022	St. Clements Shores		St. Clements Bay	
2023	Tall Timbers		Potomac River	

**September 2020 listing based on project HW2003 current scoping.*

Appendix IV

B. Complaint-Identified Nuisance Flood Areas

	Road	Area	Issue
TOWN OF LEONARDTOWN			
1	Miles Ct	Academy Hills Sibdivision	partial street flooding
2	Town WWTP	Van Wert Lane	site floods regularly
St. MARY'S COUNTY			
1	Army Navy Dr	Wicomico Shores – Section 1	Roadside drainage
2	Asher Rd	Country Lakes – Section 1 (c)	Blocked Drainage way (permit apvd) affected neighboring properties
3	Belvoir Rd	Greenview Knolls Subdivision	Persistent flooding over past 20 years
4	Birch Manor Circle	Birch Manor Section 3	Impacts from County property – Three Notch Trail
5	Broad Creek Dr	Broad Creek Sub	Road flooding – impacted by design issues with piping and SWM pond 1
6	Hidden Pond Ct	Cedar Grove Farm PH3	Ponds on private property, w/o HOA ownership. Basement flooding occurring on several lots possibly due to design pond elevation.
7	Clarkes Landing Rd	Drainage area at Mervell Dean & Clarkes Landing Rd	Drainage area has obstructed flows causing stormwater backup into this basin area.
8	Coburns Warf Rd	Area of Cedar Point Creek	Drainage way across farm parcel needs I&M agreement
9	Country Lakes Park	HOA Recreational Park Area	Regulatory Floodway – Road flooding contribution?
10	Davis Farm	Adjacent to Wicomico Shores Sub	Potential for future stream restoration project
11	Dorothea Mae Ct	Breezy Acres Sub	Private property with possible roadway drainage impact.
12	East Spicer Dr	Country Lakes Section 2	20 year old problem – Roadway water enters site very shallow roadside ditch area. No outfall beyond house at base of a hill.
13	Pembrook Dr	Forest Farm Subdivision	HOA Pond not draining sufficiently to avoid creating lot flooding opposite side of street.
14	Point Lookout Rd	S of Buzzs Marina Way	Roadway flooding impact
15	Golden Beach Rd	Golden Beach Plat 1 Sect 4	Roadway flooding impact NS Road, S of Gunther Dr
16	Golden Beach Rd	W of MD Rt 5	Veterinary Clinic roadway impact
17	Fail Hill Ln	SWM Pond for Grandview Haven Subdivision Pond 5	Embankment potential failure – HOA Responsibility – all Private Property – Possible Emerg. Response access issue.
18	Harrisburg Ct	Mechanicsville	Possible Three Notch Trail impact on flooding
19	Mervell Dean Rd	Vicinity of Hollywood Transm.	See also Clarkes Landing Rd (same drainage area)
20	Horseshoe Ct	Redgate Estates – Leonardtown-S	Misaligned roadside ditch
21	JM Gough Ct	Villages at Leonardtown	Inadequate drainage control provided from back side of lots
22	Kent Ct	Hollywood	Possible Three Notch Trail impact on flooding/erosion
23	Lewis Creek	California	Multiple sources – continuing sediment load contamination
24	Lighthouse Rd	Potomac Beach (inadequate location)	No shoulder – roadside sinkhole
25	Mason Dr	Adj adjacent 39643	Sinkhole in drainage way (no easement)
26	Misty Pond Ct	Wildewood – California	High flow during storm w/stormwater pond backing up and flooding area. Private property issue impacting residents.
27	Monterey Place	Breton Bay	Replaced drive pipe – flow issues continue
28	Oak Acres	29930 Oak Aces (Golden Beach)	Diverted drainage and sink hole issues – exiting gully expanding into property.
29	Patuxent Dr	St. Mary's Beach	Road drains through pipe to shoreline – Easement? Pipe needs work.
31	Tippett Road (20178)	Spring Ridge	Closed – Private property NOT adjoining Co. Rd
32	Charlotte Hall Rd (29775)	Charlotte Hall	Closed – Drainage from adjacent farm. Owner advised to make any necessary changes. Obtain permits if necessary

County Complaint-Identified Nuisance Flood Areas

	Road	Area	Issue
33	Pocahontas Dr	Golden Beach	Erosion issue in natural watercourse, rear of property. Not County purview. Requested SCD evaluate
34	Poplar St	Piney Point	Entire street in flood hazard zone
35	Redgate Dr (rear 26936)	Country Lakes	Natural watercourse is channel cutting is undercutting trees on embankment. SCD evaluating
36	Richard Cir (29910)	Golden Beach	Private property drainage swale erosion issue – no easement
37	Ricky Dr (36955)	Bushwood	Activity Closed - County repaired damage to bulkhead due to stormwater impacts, diverted upstream, flow to reduce flow through area.
38	Riverside Dr (43178)	Hollywood Shores	Watercourse erosion due to high stormwater flows – Roadwater impact – no easement
39	Riverwinds Dr	Riverside (on Potomac)	Ditch pre-dates house – Watercourse erosion related to pipe under road from other private property – Not County responsibility.
40	Co RR ROW – Hughesville	Hughesville Baptist Church	Closed – Corrected - Damaged pipe at ROW – CO repaired pipe
41	Seneca Ct (37985)	Charlotte Hall	Private drainageway issue – minimal County contribution. County will clear any Road ROW drainage obstructions.
42	Southgate Center	Lexington Park	Closed – Corrected – County assumed some responsibility to ensure access capability for this private roadway system. Main line of the deteriorated storm drain piping.
43	St Jerome’s Neck RD S of Shea Ally Way	St Jerome’s Shores	Road overtops and holds water
44	Steer Horn Neck Rd (45460)	Hollywood	Closed - Roadway cross pipe outfalls though property to Patuxent. Private property drainage way. CO provided assessment of options for resident. Not County responsibility.
45	Susie Ct (45247)	Laurel Glen PUD	Drainage back up related to roadway crossing pipe. Under study.
46	Sycamore Dr. (26080)	Wicomico Shores	Closed - Lot interior cross pipe sinkhole – Not in County ROW . No County responsibility.
47	Tanyard Dr (36973)	Country Lakes Section 1	Closed - County utilized existing easement on property to repair ditch and stabilize the drainage path from the County Road.
48	Tanyard Dr (36940)	Country Lakes Section 1	Clogged crossing pipe
49	W. Cusic Ct	Mechanicsville	Area-wide flooding – Pending evaluation
50	Rominger Ct (21516-21522) -	Westbury Subdivision	Drainage issue from outparcel B – Private property. County suggested alternatives. Not County responsibility
51	Whalen Rd (29534)	Charlotte Hall	Appears that crossing pipe was installed sloped the wrong way... Water not draining to south. Creatin basin to north
52	White Dr (30400)	Charlotte Hall	Flooding issue 8/12/2020. No info yet. Waters have receded.
53	Wolfe Dr	Golden Beach	In 0.2% Flood Hazerd Area – Flooding reported – See Appendix IV (a)