

**The Board of County Commissioners for St. Mary's County recognizes the scope of the work and implementation effort necessary to meet the Federally mandated TMDL but continues to have significant concern regarding the cost projected for many of the WIP implementation options. The Board also recognizes the difficulty of implementing new projects and programs with such significant budgetary implications at a time of serious budget shortfalls for the local, state and federal governments.** Board members continue to have concerns about the science used to develop the model estimates and loads, particularly regarding the septic load contribution. Based on the Board members concerns:

- This report (narrative and supporting attachments) is being submitted to MDE without the Board of County Commissioners formally adopting this Local Phase II WIP developed to date and contained herein.
- No formal approval by the Board of County Commissioners or commitment for funding beyond the existing CIP is implied or to be inferred by MDE from receipt of this submission. Current commitments are indicated in Table A-1 in Attachment A.
- To the extent that County resources and funding allow, the Board and county agencies will work to continue to refine of strategies, establish future WIP 2 year milestones, and to implement projects and programs necessary to achieve water quality improvements in the Chesapeake Bay. Potential strategies for future analysis are indicated in Table A-2 in Attachment A.

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## ST MARY'S LOCAL TEAM –WATERSHED IMPLEMENTATION PLAN DEVELOPMENT PROCESS

### 1. OVERVIEW OF LOCAL TEAM'S PROCESS AND PARTICIPANTS

#### a. Summary of the Team's work and County commitment to meet the Phase II WIP goals:

The St. Mary's County WIP partners included the agencies, organizations and facilities represented by the individuals who served on the WIP Team noted below. The Team members met monthly to understand and document local capacity and programs and to develop the recommendation and commitment outlined in c. below. Cooperation among WIP partners has been long established within St. Mary's County via the ongoing land use planning and development approval processes. Cooperation focused on water quality issues is also strong among the partners as a result of cooperative efforts to implement the Tributary Strategies, to develop a watershed restoration actions strategy (WRAS) for Breton Bay and for the St Mary's River watershed, to partner with the Army Corps of Engineers for development of a St. Mary's Feasibility study, the ongoing work on the St. Mary's River Project, and finally as a result of preparation for development of an NPDES permit required now that the county has exceeded a population of 100,000. Those many cooperative efforts have informed the WIP Phase II development effort. The County anticipates that similar cooperation will continue through WIP implementation to achieve Phase II WIP goals. The St Mary's County Department of Land Use and Growth Management had the lead responsibility for development of Phase II WIP and for assuring that the various agencies and organizations partnering in the WIP process are participating in the development of the local strategies and in achieving the milestones. The Department of Public Works and Transportation, Soil Conservation District and Metropolitan Commission will have principal responsibilities for overseeing implementation of the county strategy. The four principal County agencies/organizations and the other participating agencies, organizations and facilities have committed to tracking and reporting implementation efforts for the two year milestones.

St. Mary's County's Phase II WIP Team Participants (Principal Team members\*):

DeAnn Adler	Town Planner, Town of Leonardtown
Christine Bergmark	Director, Southern Maryland Agricultural Development Commission
Daryl Calvano*	Director, St. Mary's County (SMCo) Health Department Division of Environmental Health Services (SMHD)
John Groeger*	Deputy Director, St. Mary's County (SMCo) Dept. of Public Works and Transportation (DPWT)
Robert Elwood*	President, Potomac River Association
Dan Ichniowski*	Assistant Director, St. Mary's County Metropolitan Commission (MetCom)

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Mario Maningas	Industrial Wastewater Program Manager, NAVFAC Washington, Public Works Department, Environmental Division
Charles (Chip) Jackson	Associate Vice-President, St. Mary's College of Maryland
Cindy Jones	Commissioner, SMC Co Board of County Commissioners
Tom Koviak*	Soil Conservation Planner, Maryland Department of Agriculture
Bob Lewis*	Executive Director, St Mary's River Watershed Association
Ling Li, PE	Project Engineer, Maryland State Highway Administration (SHA)
Tracy Maningas*	Stormwater Program Manager, PNAS
Laschelle McKay	Town Administrator, Town of Leonardtown
Jacki Meiser*	Director, MetCom
Oliver Miranda	District Conservationist, Natural Resources Conservation Service (NRCS)
Luke Mowbray*	Facilities Planner/Sustainability Coordinator, St. Mary's College
Mark Muir	Forester, MDNR Forestry Service
Karuna Pujara	Chief, Highway Hydraulics Division. SHA
Donna Sasscer*	Agricultural Specialist, SMC Co Department of Economic and Community development (DECD)
Sheryl Skrabacz*	Environmental Health Officer, SMHD
Jackie Smith*	Natural Resources Specialist, Naval Air Station Patuxent River (PNAS)
Jackie Takacs*	Watershed Restoration Specialist, Maryland Sea Grant Extension Program, University of Maryland
Sue Veith*	Environmental Planner, SMC Co Department of Land Use and Growth Management (DLUGM) -- Local WIP Coordinator
Bruce Young*	District Manager, Soil Conservation District

As was noted in the November Draft, the Board of County Commissioners asked that the WIP team and commissioners begin to meet to work on specific issues in order to prepare a formal submission as requested for June 2012. Beginning in January 2012 the WIP team began to meet monthly with the St. Mary's County Board of County Commissioners to discuss the strategies proposed for each Sector in detail. Background material, supporting documentation on pollution source sectors, scientific information documenting the need and justification for the required reductions, and information on the specific cost implications and needs identified for funding, programs and policies. The results of those meetings are reflected in this narrative and in a refinement of the draft Table of Proposed Strategies: In general the Board has further narrowed the options from the table based on additional analysis.

- The commitment of the Board remains for accomplishing work based on prior budget, programs and projects that support the County efforts to meet the 2017 Interim Goals. Some refinement and expansion of the budget, programs and projects was approved in the FY 2013 to Fy2018 budget.
- In a number of areas the Board feels that additional study and information is necessary before they can make a commitment to funding the full range of implementation identified by the team as necessary to meet the WIP reduction Goals. Funding for the anticipated additional studies and consultant services is being provided so that work can begin in FY 2013.

**b. The County's approach to meeting reduction targets:**

The Team completed analysis of current capacity and implementation levels, identified areas of accomplishment as well as gaps in programs, policies, assessment of needs and potential enhancement of programs, staffing and revenue sources and areas where data gathering and monitoring need to be improved. The Team approached WIP Phase II planning with the following assumptions (listed in no particular order).

- Agricultural strategies might be enhanced and achieve greater than targeted reductions as a means in part to offset growth and urban sector goals by establishing the means for redevelopment and for new development help offset the costs for additional Ag sector reductions. Given the revised Agricultural sector loads, this may not be possible in the near term, although the team still considers conversion of

areas that are marginal for agriculture to be converted to forest cover as a BMP that changes land use and also treats agricultural runoff.

- New development and redevelopment can and must achieve minimal increase in loads via use of ESD and innovative SWM, tree conservation and where necessary the implementation of offsetting BMPs—an option discussed by the Team is developing a private sector program to implement BMPs on “Plain Sect” (Amish and Mennonite) lands since those owners will not accept government funds and financing.
- Capital facilities projects and planning in anticipation of NPDES permitting requirements programs and data needs will proceed since these activities and projects support Phase II WIP implementation.
- Existing Capital Projects for sewer and water services are under way and credited in the Wastewater sector load cap. Credit for innovative projects beyond ENR that reduce effluent quantity and nutrient loading is needed. The analysis and discussion regarding septic sector that has occurred since the November submission reveals three findings:
  - Existing projects, budgets and plans for ENR upgrade of WWTP facilities and for future plant expansion address only current approvals and projected growth and provide no capacity to address WIP load reductions.
  - There is no current plan and no funding available to accommodate the increase in infrastructure, collection systems or WWTP capacity necessary to address the connection of the number of onsite sewage disposal systems (OSDS) needed to meet the Septic Sector load reduction.
  - To meet the 2017 Interim Load Reduction, funding would need to be immediately available to begin the planning and design phases for capacity expansion of the primary WWTP , however such efforts will not be initiated until the completion of the ENR upgrade in 2014.
- The Navy at Patuxent River Air Station and Webster Field are taking steps via changes in land management and to WWTP infrastructure to meet Phase II WIP goals. They have developed milestones for 2012 that are included as Attachment B.
- Use of existing funds to leverage grants and other funds will be needed to finance BMPs. Of particular interest is use of FCA and CA fee-s-in-lieu monies to achieve larger scale reforestation efforts, to enhance urban tree coverage.

**c. Accomplishments**

The quantifiable accomplishments are noted under the 2010-2011 heading in Attachment A: STRATEGY TABLES for St Mary's County Phase II WIP for June 2012 Submission.

**d. Challenges**

The more significant challenges to meeting the County Load Allocations that have been identified include:

- **The funds necessary to address septic sector loads does not exist.** The County analyzed the level of funding that will be necessary to achieve the needed load reduction through various combinations of septic denitrification retrofits, connection to existing sewer, expansion of sewer capacity to allow connection of septic to sewer outside of current service areas, septic pumping (at OSDS owner expense) and offsets from stormwater retrofits. The least expensive combination is well over \$176 million dollars, and the costs to individual sewer service customers and to individual OSDS owners is unaffordable, will be politically difficult to fund through cost sharing among all OSDS owners, and beyond any ability of the County to fund without significant funding assistance from State or Federal sources.
  - The Board has committed funding and has directed staff to procure consultant services to develop local funding options.
  - The county, State and federal agencies need to consider how to finance WIP implementation projects in a manner that distributes costs across the broader community and does not overly burden small sectors of the population for the costs that benefit the wider community.
  - State and/or Federal funding assistance seems necessary to meet the load reduction goal by 2025.
- Given that new and increased discharges to tidal waters from waste water treatment plants are prohibited, land application will be necessary to discharge effluent associated with capacity increases needed to meet

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WIP requirements and to serve anticipated growth. Land application is a land intensive use that cannot and should not be located in a Priority Funding Area expected to achieve at least 3.5 units per acre. The restrictions on funding for public WWTP facilities outside PFAs needs to be addressed by MDE and the Department of Planning.

- Our County had defined Rural Legacy Areas adjacent to growth areas to define a distinct boundary between urban and rural land. Prohibition of placement of land application facilities on these adjacent open space lands limits the County's ability to provide cost effective sewer capacity to meet WIP and growth capacity needs and must be addressed in the uses criteria for Rural Legacy Areas.
- St. Mary's is not yet regulated under an MS 4 Phase I permit and the State Highway administration has proposed no action to address BMP's currently needed for loads generated on approximately 2,000 acres of State owned ROW with estimated 1,250 acres of IS coverage. SHA did commit to working with the county to address specific projects and problem as they are identified.
- The lack of State staffing to speed up the incorporation of the Bay TMDL into existing NPDES permits which will delay the County's ability to begin the application process for our required permit has been identified as an issue by the team. The County has establish an FY2013 Capital Improvement Budget project (identifying fund needs through 2018) to provide the basic planning and implementation necessary to implement the federally mandated Phase I National Pollution Discharge Elimination System permit and the Phase II Chesapeake Bay Watershed Implementation Plan. The Phase II WIP 2012-2013 Milestone includes work necessary to the development of an MS4 Phase I permit for the County as well as to implement pilot projects that will inform the development of the permit as well as achieving reductions necessary to meet the Urban sector load reductions or offsets for the Septic sector.
- The University of Maryland has begun a grant funded project to develop an online tool for landowners to do self-reporting of BMPs with a follow-up verification process to comprehensively to track and verify installation and maintenance of homeowner/private BMPs. St. Mary's County's is cooperating with the University of Maryland and is a pilot location for testing the tool.
- Amish and Mennonite landowners do not participate in government funded programs that require them to be the recipients of the funding and there is the need to develop an alternative funding model to gain their participation. A structural change to funding programs to allow third parties to receive funding either as a pass through agency or to allow the third party to be paid directly by State or federal agencies for onsite implementation is recommended.

## 2. COUNTY PHASE II WIP STRATEGY:

The team met on 5/22/2012 with the St. Mary's County Board of County Commissioners to present and discuss submission of a Final Local Strategy. The Commissioners were provided with Attachment A: STRATEGY TABLES for St Mary's County Phase II WIP for June 2012 Submission which refines the range of actions/strategies/projects previously submitted for meeting the TMDL load goals. The table identifies costs where available and whether an action that supports the WIP is already in the County's Capital Improvement Program (CIP) or in an operating budget. The Board consented to the Team transmitting this revised table to the State as the St. Mary's County Final WIP Phase II submission. There should be a clear understanding the table is divided into two sections:

- **Table A-1: Proposed Implementation through 2017 based on existing commitments** which are items currently implemented via existing programs, policies, regulations or projects or is included in an approved budget or capital improvement program.
- **Table A-2: Implementation Options to Consider for future Milestones** which are items not currently in any budget plan or capital improvement program and which are provided only as information in order for MDE to be informed of the full range of options the county is considering. Items .
  - The Board required that the team clearly state that the county intends to further narrow the options from the table once additional analysis is performed in order to develop our final plan for our June 2012 submission.
  - The Board asked that the WIP team and commissioners begin to meet monthly to work on specific issues in order to prepare a formal submission as requested for June 2012.

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a. **Proposed 2012-2013 Milestones:**

- Continue to implement existing CIP projects and to fund existing operational programs that support achieving reductions necessary to meet the load allocations for the county;
- Perform future planning/capacity analysis/cost benefit analysis to evaluate capacity and needs for county programs and infrastructure;
- Investigate funding options necessary to fund future implementation efforts;
- Continuing to prepare for NPDES permit. Initiate a SWM pilot project program to inform our implementation strategy and future NPDES permit development;
- Identify the appropriate tracking measures and monitoring procedures and data entry where these are currently inadequate to institutionalize the assurance of implementation and that information necessary to demonstrate WIP milestone compliance is available;
- Work with other counties and organizations to identify common needs and concerns that may be better addressed through statewide or regional efforts/programs; and
- Coordinate with the State Highway Administration to address SWM, erosion and maintenance issues for their facilities within the county.

b. **Interim strategies to achieve load reductions are identified by sector in**

**Attachment A: STRATEGY TABLES for St Mary's County Phase II WIP for June 2012 Submission.**

The table identifies two categories of strategies:

- Proposed Implementation through 2017 These strategies are identified because of the availability of funding in the short term. When possible the proposed year for implementation is noted in the table. During the development of the Final WIP the available funding may be reprogrammed and programs tailored to better meet load reduction targets
- Implementation Options to Consider for future Milestones. These include a myriad of options identified for which a cost benefit analysis will be required prior to selecting the strategies necessary to close the anticipated load reduction shortfall after implementation of existing commitments to programs and projects. A majority of the identified options address the identified shortfall in meeting septic sector load reductions. The options may also be considered to address urban sector load reductions and future reductions necessary to accommodate growth.

c. **Description of local area tracking, verification, and reporting methods.**

The team documented tracking and reporting currently performed is in accordance with state requirements—

- Notice of Completion forms completed by DPWT and submitted to MDE for stormwater management BMPs. Maintenance agreements for privately-owned SWM facilities are required. Period inspections are performed on facilities to assure proper maintenance and operation. Additional documentation regarding bonding and enforcement provisions is needed. *Gap analysis: While the presumption is that tracking, monitoring, and reporting performed by jurisdictions that operate outside county control is performed, information regarding these efforts will be needed by the local jurisdiction to assure all responsible parties are meeting their share of the necessary implementation. The assignment of loads to agencies and jurisdictions outside county control is needed and given that there is no county means to compel compliance, compliance needs to track at a State or federal level. Of particular concern are local colleges, Leonardtown, State and Federal facilities.*
- DPWT, SCD, and MDE maintain records for grading permits, sediment and erosion control during construction.
- SCD, NRCS, and Department of Agriculture maintain records of Soil Conservation and Water Quality Plan (SCWQP), and implementation of nutrient management BMPs and other agricultural BMPS. Spot checks are performed to assure SCWQP implementation. *Gap analysis: There is also a need to address tracking for landowners in the agricultural sector who do not participate in any government programs so that no data on their agricultural practices is available.*
- Annual Reports to Maryland Department of Planning (MDP) identifying development applications and approvals, tracking of development in and out of PFAs and land use change. *Gap analysis: There appears to be*

*a need for MDP to establish clear and consistent reporting formats to standardize the information submitted by each jurisdiction and from year to year to facilitate analysis and comparison of data and demonstrate progress.*

- Permits are maintained in DLUGM files for Forest Conservation afforestation & reforestation, Critical Area limits of disturbance, afforestation, mitigation, and Buffer establishment; Timber harvests, tidal and non-tidal wetlands impacts, mitigation; Shore erosion control (living shorelines and structural BMPs), Forest interior dwelling species (FIDS) habitat loss and mitigation. *Gap analysis: Incorporation of appropriate entry standards and field into digital permit tracking systems appears to be needed and would facilitate tracking and reporting of implementation progress. Having the state define specific data needs for reporting would facilitate this process and help standardize the information submitted by each jurisdiction and from year to year to facilitate analysis and comparison of data and demonstrate progress.*
- DLUGM submits requests for amendments to the Comprehensive Water and Sewer Plan (CWSP) to MDE for approval of expansion of water and sewer service areas. EDU letters issued authorizing connection in served areas. MetCom tests, approves and maintains public infrastructure and bills for service. *Gap analysis: In order to meet Septic Sector loads and to address possible "PlanMD" guidance and to meet any potential rural septic restriction, the Priority Funding Area guidance/restrictions for funding sewer outside of designated growth areas will need to be revised.*
- DLUGM maintains periodically updated GIS data layers for forest coverage and impervious surface coverage (determined from available aerial photography), lands permanently protected via fee-simple acquisition, various easement programs (MALPF, MET, MHT, Rural Legacy, etc.), land conservation via transfer of development rights (TDRs), and mandatory open space conservation required for subdivision approval and sensitive areas. *Gap analysis: There is a disconnect between local land use and resource data and the Bay Program data. Of note is the discrepancy between the stream coverage identified at the state/federal level and at the local level. (For example, during a Breton Bay WRAS stream survey, DNR estimated and budgeted for 70 miles of perennial stream but the field stream survey team walked and documented more than 150 miles of stream in the watershed.) Also of note is the discrepancy between numbers of OSDS in the Bay Model and from local data and the fact that using County GIS stream layers it appears that well over 90% of all OSDS are within 1000' of a stream and tidal shorelines not 50% as identified by the Bay Program.*
- Reconciliation of discrepancies between State, CBP Bay Model, and local area data (e.g., land use/land cover information, BMPs DRAFT State of MD is needed to assure accurate crediting of implementation. Of particular concern is the need to separately account for state owned lands and load allocations: *Gap analysis: SHA: estimated 2,000 acres with approx 1,250 acres of IS; MD State Parks and resource lands: estimated 4,545 acres with approx. 80 acres of IS*

**d. Use of existing plans, regulations and programs.**

A number of local watershed plans, environmental and water quality regulations and programs exist that are not currently quantified and credited in the Bay Model as contributing to nutrient or sediment reductions, The citizen participation in the development and implementation of many of these programs and support for regulations and enforcement to protect sensitive areas demonstrates that the County has the support of its citizens' for efforts to improve water quality conditions both locally and in the Bay.

**Land Conservation Programs/Funding:**

- Rural Legacy Program
- MALPF & ALPD easements
- MET easements
- MHT easements
- Nature Conservancy easements
- Patuxent Tidewater Land Trust easements

**Open Space Conservation funding:**

- POS
- Federal grants for habitat conservation
- Military encroachment programs to limit development encroachment around Naval Facilities
- TDR fee in lieu provisions in the CZO
- Recording tax dedication

**Programs/Organizations with Funding  
(Match potential):**

Forest: Forest Conservation planting or fee-in-lieu  
Critical Area planting or fee-in-lieu  
FIDS Mitigation planting or fee-in-lieu

Septic: Chesapeake Bay Restoration (CBR) Fund  
Owner financing, and installation

Sewer: CIP  
CBR Fund  
Developer financing & installation & dedication

SWM retrofits: CIP  
Developer financing & installation & dedication  
CA 10% Rule regulations  
Grants to SMRW/CWP--SMR  
WRAS implementation projects

Wetlands/streams restoration/mitigation: State Highway projects  
DPWT projects  
Developer financing & installation

Oysters/SAV: Restoration projects funded via grants and state programs

**Plans:**

ACOE St. Mary's Feasibility Study  
(work products include recommendations for SWM retrofits, Oyster and SAV restoration)

Hilton Run Watershed Plan  
Patuxent River Policy Plan  
St Mary's River WRAS and implementation projects (in process)  
Wicomico Scenic River Management Plan  
McIntosh Run Conservancy Partnership  
Breton Bay WRAS  
Comprehensive Plan WRE  
Comprehensive water and sewer plan

**Comprehensive Zoning Ordinance CZO regulations:**

50% undeveloped open space in major subdivisions with provisions for open space reductions in exchange for increased affordable and workforce housing.

80% conservation of Prime Farm soils in rural developments

CZO TDR & Clustering  
(projected land conservation 84,000 acres in addition to current 34,000 acres of land conserved countywide including requirements for:

- Minimum developed open space & landscaping requirements
- Sensitive Areas<sup>1</sup> preservation
- Environmental Site design standards for new development and for redevelopment

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<sup>1</sup> Tidal wetlands plus 100-foot Buffer; Perennial Streams in and out of CA plus 100-foot buffer; Intermittent 50' Buffer; Non-tidal wetlands plus 25' buffer; steep slopes greater than 15% in CA; steep slopes greater than 25% outside of CA; Highly erodible soils >15% slope; hydric soils within 200 feet of wetlands and streams; floodplains plus 50' Buffer for new development.