

ST. CLEMENT SHORES WWTP EXPANSION AMENDMENT TO CWSP 2017 UPDATE TO BE CONSISTENT WITH COMPREHENSIVE PLAN

Amendments to the St Mary's County, Maryland Comprehensive Water and Sewerage Plan, 2017 Update. The following amendment will modify the CWSP 2017 update for consistency with the 2010 Comprehensive Plan. Text proposed to be added is shown as underlined and text proposed to be deleted is shown with ~~striketrough~~. Note that the St. Mary's County Comprehensive Plan is referred to as the County Land Use Plan in the Comprehensive Water and Sewerage Plan (CWSP 2017 update, page 1-2).

Modify Text:

St. Mary's County Comprehensive Water and Sewerage Plan, 2017 Update
Chapter 1: GOALS, POLICIES AND RELATED PLANS
1.2 Related Plans Policies and Ordinances
1.2.1 Comprehensive Land Use Plan: page 1-2

The ~~Board of County Commissioners~~ Commissioners of St. Mary's County have adopted a plan for locating land use (types, amounts, and relationships), community facilities (parks, libraries, schools, fire stations, health and emergency medical services), roads and utilities over a twenty to thirty-year period. The plan also addresses the protection of wildlife and natural resources, particularly the Chesapeake Bay and its tributaries. The plan's fundamental concept is focusing development and the expenditure of public dollars on community facilities and transportation in areas where these things already exist or can be economically provided and preserving the rural character of the remainder of the County. Identified as development districts or primary growth areas are Lexington Park and Leonardtown. Identified as Town Centers or secondary growth areas are Charlotte Hall, New Market, Mechanicsville, Hollywood and Piney Point. The Village Centers within the County are Callaway, Chaptico, Clements, Loveville, Valley Lee, St. Inigoes and Ridge. The remainder of the County is identified as a rural preservation area where development densities are to be kept lower than in the growth areas, and the expenditure of public dollars for water and sewerage is to be devoted to maintenance of existing facilities and not new facilities, unless justified by health issues.

The St. Clements Shores Wastewater Treatment Plant (SCS WWTP), which is owned by the St. Mary's County Metropolitan Commission (MetCom) is being expanded. The SCS WWTP can be expanded to 200,000 gallons per day under its current MDE permit. The current permit allows the plant to be expanded to treat an additional 100,000 gallons per day, which would potentially allow for an additional 400 EDUs. Current information indicates that the plant can be expanded by an additional 320 EDUs by utilizing all the property owned by MetCom.

Because the St. Clements Shores WWTP and the properties that will connect to the wastewater treatment plant are not in a Priority Funding Area (PFA), the Commissioners of St. Mary's County, MetCom, and the St. Mary's County Health Department, with the assistance of the Maryland Department of the Environment, have cooperatively established a SCS WWTP Sewer Service Area that has within it a Priority Funding Area (PFA) Exception Area. The SCS WWTP Sewer Service area and SCS PFA exception area allow developed properties and limited new development to connect to the expanded St. Clements Shores WWTP. The SCS WWTP Sewer Service Area in the vicinity of the St. Clements Shores WWTP is an existing residential / rural area where it is difficult to replace an onsite sewage disposal system (OSDS) that has been certified as being in failure by the St. Mary's County

Health Department. Most, if not all, of the existing houses in the SCS PFA exception area cannot install a replacement OSDS when their current one fails because of high water tables, impermeable soils, and small lot size. The SCS WWTP Sewer Service Area is justified by (1) the need to protect public health through safe sewage transmission and treatment; and (2) the expanded St. Clements Shores WWTP will remove nitrogen to the maximum extent practicable utilizing Biological Nutrient Removal (BNR) technology, which will provide significant environmental protection by keeping nitrogen from entering the watershed.

The St. Mary's County Comprehensive Land Use Plan has been amended to describe the need for a SCS WWTP Sewer Service Area, including a SCS PFA exception area for developed properties on onsite sewage disposal systems (OSDS). A Resolution from the Commissioners of St. Mary's County will be approved to regulate service within the SCS WWTP Sewer Service Area.

The Land Use Plan provides specific policies for water supply and sewerage facilities, ~~which are reflected below,~~ which are found in Chapter 7, Water Resources Element, beginning on page 7-1 of the 2010 County Land Use Plan, *Quality of Life in St. Mary's County – A Strategy for the 21st Century*, effective April 6, 2010. In addition to the ~~zoning ordinance~~ Comprehensive Zoning Ordinance, ~~this water and sewerage plan~~ the Comprehensive Water and Sewerage Plan is an important means of implementing the Land Use Plan.

~~The St. Mary's County Comprehensive Plan, entitled "Quality of Life in St. Mary's County – A Strategy for the 21st Century", provides the following goals, policies and guidelines governing the provision water and sewerage facilities:~~

~~3.1.2.A.i Provide planned SEWERAGE SERVICE~~

~~3.1.2.A.ii Limit impacts of SEPTIC SYSTEMS~~

~~3.1.2.A.iii Provide planned WATER SERVICE~~

Subsections 3.1.2.A.i, Provide planned sewerage service; 3.1.2.A.ii, Limit impacts of septic systems; and 3.1.2.A.iii, Provide planned water service that are in strikethrough above are references to the 2002 County Land Use Plan. The subsections are not in the 2010 County Land Use Plan. The subsections from the 2002 County Land Use Plan are being deleted in this amendment to the CWSP 2017 update. The content of the deleted subsections is found in Chapter 7, Water Resources Element, beginning on page 7-1 in the 2010 County Land Use Plan. Chapter 7, Water Resources Element is being amended for the SCS WWTP Sewer Service Area.

Modify Text:

St Mary's Comprehensive Water and Sewerage Plan, 2017 Update

Chapter 1: GOALS, POLICIES AND RELATED PLANS

1.2 Related Plans Policies and Ordinances

1.2.2 Comprehensive Zoning Ordinance: pages 1-4 – 1-5

The purpose of a zoning ordinance is to promote the health, safety, order, convenience, and general welfare of the citizens of the County. The ordinance divides the County's territory into residential, commercial, marine, industrial, and rural preservation planning districts. It also includes requirements for the provision of facilities that are adequate to the sewerage, fire protection and water supply needs of new development.

The intent of the adequate facilities requirements of the ordinance is to control phasing and timing of development approval by conditioning such approval upon a finding that sufficient infrastructure and public facilities are present or will be provided to serve proposed development. Provision of adequate facilities is a joint responsibility of County government, MetCom, and the developer. As such, it is accomplished only in conjunction with additional planning tools including the Land Use Plan and the Capital Improvements Program (CIP).

Benefits to the County, MetCom, and developers which accrue from these provisions include 1) a mechanism for coordinating the timing and location of development; 2) a mechanism for the orderly expansion of public capital facilities; 3) consistency among new development, capital improvements, and the Land Use Plan; 4) a reduced likelihood of environmental damage from overburdened facilities; and 5) a mechanism for stabilizing necessary capital expenditures and associated financing mechanisms. Adequate facilities are required to maintain and improve the quality of life within the County.

Modify Text:

St Mary's Comprehensive Water and Sewerage Plan, 2017 Update WWTP Sewer Service Area
Chapter 1: GOALS, POLICIES AND RELATED PLANS
1.3 Water and Sewerage Service Areas: page 1-7

To implement the County and Town Land Use Plans, this Water and Sewerage Plan provides the service priorities listed below. The numeral in the service classification does not guarantee the timeframe for which service may be realized. For example an S-6 or W-6 category does not guarantee that service will be available on site within 6-10 years.

The Land Use Plan allows community sewerage systems outside of Development Districts, Town Centers or Village Centers to alleviate health hazards, ~~or~~ to serve neighborhood conservation districts, or to serve a Wastewater Treatment Plant (WWTP) Sewer Service Area. Community sewerage systems, including wastewater treatment plants, may not be considered as shared systems. Specifically, wastewater treatment plants at Marlay-Taylor, Leonardtown, St. Clements Shores and Wicomico Shores are not shared systems per this definition. Areas outside of designated districts and centers that are served by these wastewater treatment plants are categorized RS-E (rural service – environmental hazard), or S-1 in a WWTP Sewer Service Area. ~~Properties within NPS areas or within such RS-E service areas which are not certified by the health department as experiencing septic system failure shall be denied access to the sewerage facilities passing through such RS-E or NPS categorized areas. Properties within NPS or RS-E areas with a failing OSDS certified by the Health Department can~~ may connect to a wastewater treatment plant if when there is capacity at the plant. Owners of developed or undeveloped properties that are within a WWTP Sewer Service Area may be allowed to connect to a wastewater treatment plant if there is capacity at the plant subject to the regulations in the Land Use Plan, CWSP, Zoning and Subdivision Ordinances, and the Resolution for the WWTP Sewer Service Area. Developed properties within a WWTP Sewer Service Area that are on OSDSs that cannot be replaced may be eligible for inclusion in a PFA exception area within a WWTP Sewer Service Area.

Modify Text:

St Mary's Comprehensive Water and Sewerage Plan, 2017 Update
Chapter 1: GOALS, POLICIES AND RELATED PLANS
1.3 Water and Sewerage Service Areas:
1.3.1 Service within Growth Areas: page 1-7 – 1-8

A. W-1, S-1 - Existing and Under Construction Service Area: A water or sewer line is assumed to be existing if it is in operation or under construction (notice to proceed and a contract has been let) and will be placed in operation immediately after construction is completed, or if the line is to be installed within a WWTP Sewer Service Area . Parcels or lots assigned this service area must be in a Development District, a Town Center, a Village Center or a Neighborhood Conservation District as defined by the Land Use Plan or within a WWTP Sewer Service Area and must abut a road, easement, right of way, or alley in which an existing or future water main or sewer is or will be located. W-1 and S-1 indicate that service is available or anticipated for ~~to~~ structures located on the property or means that undeveloped property is entitled to a maximum of one EDU, unless additional EDUs are duly allocated.

Modify Text:

St Mary's Comprehensive Water and Sewerage Plan, 2017 Update

Chapter 1: GOALS, POLICIES AND RELATED PLANS

1.3 Water and Sewerage Service Areas

1.3.2: Rural Service Areas: page 1-8

A. RW-1, RS-1 (existing service), RW-D, RS-D (approved for service, developer financed); RSE (rural sanitary service – environmental hazard): Properties within Rural Preservation Districts as designated in the Land Use Plan may be assigned these service categories. The associated population densities and land uses in a rural area are typically accommodated by private individual systems, but the RPD zoning district does allow for clustered low-density residential development and some non-residential uses allowed in the Comprehensive Zoning Ordinance. Rural water systems may be comprised of shared wells. A community water system is necessary to supplement fire prevention and preventing possible ground water contamination by limiting the number of penetrations into the aquifer's confining beds. Shared septic systems help facilitate clustering and preservation of open space. Per direction by the Maryland Department of the Environment, the designation of rural shared septic service also applies to onsite septic systems that treat more than 5,000 gallons per day (GPD). To implement the Comprehensive Land Use Plan (see section IV.3.1.2.A.i.f) new sewerage service shall not be extended to rural areas unless it corrects an existing health hazard or environmental threat. This applies to service originating in a growth area and being extended to a rural area. To accommodate clustered low-density residential development in rural areas, shared systems may be designed and installed exclusively for that development. The creation of such a system requires an amendment to the Comprehensive Water and Sewerage Plan. A WWTP Sewer Service Area may be considered when public sewer is a practical solution for eliminating existing or potential health or environmental hazards. A new WWTP Sewer Service Area requires amendments to the CWSP, the County Land Plan, and a Resolution with the specific rules for the properties that may be allowed to connect to the wastewater treatment plant.

Modify Text:

St Mary's Comprehensive Water and Sewerage Plan, 2017 Update

Chapter 1: GOALS, POLICIES AND RELATED PLANS

1.4 Organization of Agencies and Commissions

1.4.1 St. Mary's County: page 1-9 – 1-10

A. ~~The St. Mary's County Board of County Commissioners~~ Commissioners of St. Mary's County ~~is acts as~~ the local approving authority for the Comprehensive Water and Sewerage Plan. ~~The Board of County Commissioners~~ Commissioners of St. Mary's County enacts and amends resolutions that direct water and sewerage policies within the County and approve amendments to the CWSP which involve the

expansion of public water and sewerage systems into the RPD zoning district. The Maryland Department of the Environment has final approval authority.

D. The Metropolitan Commission (MetCom) designs, constructs and operates public water and sewerage systems, reviews plans for community water and sewerage systems, and advises regarding proposed amendments to this Comprehensive Water and Sewerage Plan. MetCom reviews requests and verifies the number of equivalent dwelling units (EDUs) to be allocated for all developments that will connect (new) or are connected (change of use or expansion) to MetCom owned infrastructure. MetCom is responsible for tracking the remaining capacity of its permitted facilities.

F. The Department of Land Use and Growth Management coordinates the process of amending this Comprehensive Water and Sewerage Plan at the local level and monitors state agency review of locally approved reviews and amendments, approves subdivision plats, and proposes and implements development policies of the Land Use Plan. ~~The Planning Commission allocates capacity of all wastewater facilities operated by the Metropolitan Commission. This responsibility may be delegated to Planning Department staff.~~ The Department of Land Use and Growth Management is authorized to allocate EDUs after determining that a project has the proper land use and zoning for the planned use. The property also must have a CWSP sewer category that allows connection.

Modify Text:

St Mary's Comprehensive Water and Sewerage Plan, 2017 Update
Chapter 1: GOALS, POLICIES AND RELATED PLANS
1.5 Plan Amendments: Pages 1-10 – 1-11

A review and report may be initiated as needed to facilitate amendments to the plan for expansions of existing systems or for new systems as defined in the previous section. A full amendment process involving both the Planning Commission and the ~~Board of County Commissioners of St. Mary's County~~ is required for new wastewater treatment plants, ~~or~~ for extending the service area of an existing wastewater treatment plant beyond the limits of a Development District, Town Center or Village Center to accommodate the correction of a certified health hazard, or to provide service within an approved WWTP Sewer Service Area, which can include a PFA exception area for developed properties. Such full process is necessary to ensure that access to the expanded facility will be denied to properties outside of designated growth areas for which a health hazard has not been certified. The creation of a new WWTP Sewer Service Area requires review by the Planning Commission and approval by the Commissioners of St. Mary's County and the Maryland Smart Growth Coordinating Committee. A resolution adopted by the Commissioners of St. Mary's County in conjunction with the WWTP Sewer Service Area will contain the procedures and restrictions for connecting to the wastewater treatment plant, including specific limitations for undeveloped properties and subdivision. if there are to be any An administrative amendment process, Section 1.5, Plan Amendments, is available for qualifying systems as described below.

Modify Text:

St Mary's Comprehensive Water and Sewerage Plan, 2017 Update
Chapter 1: GOALS, POLICIES AND RELATED PLANS
1.5 Plan Amendments
1.5.1 Periodic Amendments: page 1-11

Paragraph (a)(3) to Section 506 of Title 9 of the Environment Article of the Annotated Code of Maryland (amended per House Bill 394 of 2007), pertains specifically to St. Mary's County and reads as follows:

(a)(3)(I) This paragraph applies only in St. Mary's County

(II) A new public sewerage system or an expansion of an existing public sewerage system, or a new water supply system or an expansion of an existing water supply system, may not be allowed in St. Mary's County unless the adoption, revision, or amendment to the County plan containing the public sewerage system or water supply system: Is reviewed by the St. Mary's County Planning Commission in conformity with the provisions of this paragraph; and is approved by the ~~Board of County Commissioners~~ Commissioners of St. Mary's County, or subject to subparagraph (v) of this paragraph, the Commissioners' designee.

(III) The ~~County Commissioners~~ Commissioners of St. Mary's County or the Commissioners' designee may not approve the adoption, revision, or amendment of the County plan that contains a new public sewerage system or an expansion of an existing public sewerage system or a new water supply system or an expansion of an existing water supply system, until the Planning Commission:

1. Conducts a complete review of the County plan; and
2. Holds or arranges to be held at least one public hearing on the County plan. The Planning Commission may delegate the responsibility of holding a public hearing under this subparagraph to county staff as directed by the ~~County Commissioners~~ Commissioners of St. Mary's County.

(IV) In its review and recommendation to the ~~County Commissioners~~ Commissioners of St. Mary's County or the Commissioners' designee, the St. Mary's County Planning Commission should consider and make specific findings of fact with respect to the following objectives and policies of the ~~County plan~~ CWSP that contains a new public sewerage system or an expansion of an existing public sewerage system, or a new water supply system or an expansion of an existing water supply system, or a new WWTP Sewer Service Area:

1. Compatibility with the ~~Comprehensive Land Use Plan~~ County Land Use Plan;
2. Planning and zoning issues;
3. Population estimates;
4. Engineering;
5. Economics;
6. State, regional, and municipal plans; and
7. Comments received from other agencies in the County.

(V) The ~~County Commissioners~~ Commissioners of St. Mary's County may only appoint a designee under this subsection for purposes of considering amendments to the ~~County Plan~~ CWSP containing a public sewerage system or water supply system in growth areas shown on an adopted Comprehensive Land Use Plan.

A. The following definitions clarify the scope of Paragraph 9-506(a)(3):

(1) "New public sewerage system" means any such system:

a) that has not been incorporated into the Comprehensive Water and Sewerage Plan as of the date of its adoption, or

b) for which the amendment process has not begun by such date of adoption.

(2) "Expansion of an existing sewerage system" means initiating a CWSP amendment for:

a) increasing the service area of such a system, or

b) increasing the capacity of such a system, or

c) creating a WWTP Sewer Service Area that will allow the properties within the WWTP Sewer Service Area to connect to a publicly owned wastewater treatment plant.

(3) "Expansion" does not mean connecting a dwelling unit or equivalent dwelling unit to such a system where the unit is located within a legal lot of record and does not require increasing the service area of such a system.

B. Amendments to this plan to accommodate new subdivisions, planned unit developments or nonresidential developments should be processed ~~as follows.~~ in accordance with section 1.5.2 Amendment Process.

Modify Text:

St Mary's Comprehensive Water and Sewerage Plan, 2017 Update
Chapter 1: GOALS, POLICIES AND RELATED PLANS
1.6 Allocation of Sewer Capacity: pages 1-15 – 1-16

Lots of record, and in limited cases, recorded tracts or parcels of land abutting a public sewer and upon which a ~~benefit assessment charge~~ system improvement charge is being levied may be entitled to one (1) sewer connection for each such tract or parcel as applied for, provided that all applicable regulations and requirements which are prerequisite for building permit issuance have been met. ~~A list of such properties shall be maintained by the Department of Land Use and Growth Management (DLUGM).~~ Subdivisions and developments which are located within the service area of a public sewerage facility, or within a WWTP Sewer Service Area, as defined by the Comprehensive Water and Sewerage Plan may obtain ~~sewerage capacity~~ an EDU allocation for sewerage capacity and building permits on a first come, first served basis, as qualified below. ~~pursuant to a realistic build-out schedule stipulated by the Planning Commission. The potential number of EDUs for a development shall be determined at the time of submission of an adequate public facilities report for major subdivisions and site plans as required by Chapter 70 (Adequate Public Facilities) of the Comprehensive Zoning Ordinance. For all other developments, potential EDU determination should be made at TEC. Allocation shall occur at the time of subdivision record plat, or final site plan approval in conjunction with the determination of adequacy of public facilities described in Chapter 70 of the Comprehensive Zoning Ordinance.~~

Upon submission of an application for development to the Department of Land Use and Growth Management, MetCom determines the number of EDUs required. Allocations of capacity are made as required for zoning permit or development approval. These allocations remain valid as long as the zoning permit or development approval does not expire. Upon the expiration of any zoning permit or development approval, previously allocated capacity is rescinded and becomes available to other projects.

If there is no capacity available in a water or sewerage system or a component thereof as determined by MetCom, ~~the applicant requesting EDUs shall be placed on a waiting list maintained by the DLUGM.~~ The

~~applicant positioned at the top of the list may receive allocations as a result of relinquishment of EDUs from an existing account, or if additional capacity is generated through system design or recalculation of EDU values the applicant may design and construct any upgrades required for the development in accordance with federal, state and local requirements. Otherwise, the applicant must wait until such time as additional capacity becomes available. Lots of record or parcels with confirmed failing onsite sewerage disposal systems and having been designated as a health hazard as certified by the St. Mary's County Health Department shall be a priority for allocating sewer capacity ahead of new development.~~

Modify Text:

St Mary's Comprehensive Water and Sewerage Plan, 2017 Update
Chapter 1: GOALS, POLICIES AND RELATED PLANS
1.6 Allocation of Sewer Capacity
1.6.1 In Growth Areas: Development Districts, Town Centers, Village Centers, Neighborhood Conservation Areas, and WWTP Sewer Service Areas defined by the Comprehensive Land Use Plan: page 1-16

Modify Text:

St Mary's Comprehensive Water and Sewerage Plan, 2017 Update
Chapter 1: GOALS, POLICIES AND RELATED PLANS
1.6 Allocation of Sewer Capacity
1.6.2 Outside of Growth Areas: page 1-16

Treatment capacity for wastewater treatment plants at Marlay-Taylor Water Reclamation Facility (by way of the Bay Interceptor, Piney Pt. Pump-over, ~~or Holly Gaf (proposed)~~, Airedele Road, Leonardtown (by way of Banneker or the Villages at Leonardtown) or St. Clements Shores ~~(as serving properties outside of the RNC zone)~~), may be allocated as follows:

A. Properties with certified septic system failure or other environmental hazard

(1) One EDU per dwelling for which the health department has certified septic system failure or ordered connection as a means of correcting such failure; or for which the septic system has been determined to contribute nitrogen and phosphorus contamination of the Chesapeake Bay.

(2) Such properties shall automatically ~~constitute an~~ be designated as service category RS-E service area without further amendment to this Comprehensive Water and Sewerage Plan. The RS-E sewer category will be shown on the County GIS maps and the CWSP Sewer Service Area maps.

(D) The Commissioners of St. Mary's County may find it in the best interests of the County to pursue a WWTP Sewer Service Area. ~~PFA exception area.~~ Upon approval of a WWTP Sewer Service Area, properties within the WWTP Sewer Service Area may apply to connect to the wastewater treatment plant. The Department of Land Use and Growth Management will verify that the property is within the WWTP Sewer Service Area and provide this information to MetCom. MetCom will review and verify the number of EDUs needed for the proposed use and confirm that treatment capacity is available. The Department will allocate the number of EDUs specified by MetCom. If there is a PFA exception area included in the WWTP Sewer Service Area, the owner of a developed property on an OSDS may be eligible to apply for a Bay Restoration Fund grant from the Health Department.

Modify Text:

St Mary's Comprehensive Water and Sewerage Plan, 2017 Update
Chapter 1: GOALS, POLICIES AND RELATED PLANS
1.6 Allocation of Sewer Capacity
1.6.8 St. Clements Shores: page 1-17

By Resolution 84-22, dated August 14, 1984, the ~~Board of County Commissioners~~ Commissioners of St. Mary's County established the St. Clements Shores wastewater treatment plant allocation policy, which limits outlined how capacity was to be allocated. allocations to its present capacity The plant is currently at capacity and is programmed to be expanded. In conjunction with the expansion, Resolution 84-22 will be repealed, a SCS WWTP Sewer Service Area will be established, and a new resolution will be adopted to regulate connections.

The geographic extent of the SCS WWTP Sewer Service Area has been defined and illustrated in the amendment to the County Land Use Plan, but the additional capacity of the expansion to the St. Clements Shores WWTP has not yet been determined. It is estimated that the expansion will allow for an additional 320 EDUs of treatment capacity.

Modify Text:

St Mary's Comprehensive Water and Sewerage Plan, 2017 Update
Chapter 4: SEWERAGE
4.5 Sewerage Service Areas
4.5.2 Dukehart's Creek Sanitary District No. 2: Page 4-4

This area is comprised of the drainage areas of St. Clement's Creek and Bay, Tomakokin Creek, Canoe Neck Creek, St. Patrick Creek, Dukehart's Creek and Whites Neck Creek. The area of the sanitary district is 36,934 acres. Besides the Saint Clement Shores subdivision, the treatment plant serves a number of other properties as approved by the planning commission pursuant to Allocation Policy 84-22 ~~described in Chapter 1.~~

A. St. Clements Shores/Compton: This area is served by the St. Clements Shores wastewater treatment facility. This facility previously consisted of two 2.7-acre treatment lagoons, one 2.0-acre storage lagoon followed by chlorination and disposal through spray irrigation of fields.

In 1996 and 1997 the Compton Area Project (self-help-project) connected Comb's Road, Joe Hazel Road, and Tippett Road areas to the system due to health department determination that the residences in the area were in failure. Due to these connections the plant's capacity was totally committed. The system had reached EDU and organic loading capacity.

In 2000 the facility was upgraded to a "Biolac" treatment system and four rapid infiltration basins (RIB) were constructed to supplement spray irrigation. The spray irrigation and treatment facility is located on a 115-acre site. The 4 one acre RIB's are located on a separate 30 acre site.

Sewerage in the area is collected primarily by individual grinder pumps and conveyed through a network of 1.25" to 3" diameter PVC pressure sewer. Saint Clement Shores subdivision has a 280 gallon per minute pumping station and 6" force main which conveys sewerage to the treatment plant. There is also a small pumping station on Rosebank Court. The Breton Bay PUD has a gravity collection system to a pump station that pumps to the treatment plant.

In 2018 the discharge permit was modified to reflect that the plant is operating at BNR treatment levels, after upgrades were accomplished to both the treatment and disposal systems, which enabled failing private onsite sewage disposal systems in the vicinity to be eligible to apply for Bay Restoration Funding.

The Plant's current NPDES Permit (19-DP-15878) allows a maximum discharge of 75,000 gpd to the spray irrigation fields and 100,000 gpd to the RIBs. The existing St. Clements Shores WWTP currently serves approximately 527 EDUs with additional capacity of 27 EDUs (5 of which are for failing septic systems) which have been allocated but have yet to connect. Current (2020) flow is approximately 131,800 gallons per day (gpd).

The St. Clements Shores Wastewater Treatment Plant (St. Clements Shores WWTP), which is owned by the St. Mary's County Metropolitan Commission (MetCom) is being expanded. This expansion project was begun so that 140 existing houses in the vicinity of the SCS WWTP that are on OSDs that cannot be replaced when they fail due to high water table, poor soil, and small lot size would be eligible to apply for Bay Restoration Fund grants to connect to the WWTP when it is expanded. Because the St. Clements Shores WWTP and the properties that will connect to the wastewater treatment plant are not in a priority funding area (PFA), the Commissioners of St. Mary's County, MetCom, and the St. Mary's County Health Department, with the assistance of the Maryland Department of the Environment, are cooperatively seeking to establish a SCS WWTP Sewer Service Area and a SCS PFA exception area to allow developed properties and limited new development to connect to the expanded St. Clements Shores WWTP. The SCS WWTP Sewer Service Area in the vicinity of the St. Clement Shores WWTP is an existing residential / rural area where it is difficult to replace an onsite sewage disposal system (OSDS) that has been certified as being in failure by the St. Mary's County Health Department. Most, if not all, of the existing houses in the PFA exception area cannot install a replacement OSDS when their current one fails because of high water tables, impermeable soils, and small lot size. The SCS WWTP Sewer Service Area and the PFA exception area within it are justified by (1) the need to protect public health through safe sewage collection and treatment; and (2) the expanded St. Clements Shores WWTP will remove nitrogen to the maximum extent practicable utilizing BNR technology, which will provide significant environmental protection by keeping nitrogen from entering the watershed.

The County Land Use Plan (St. Mary's County Comprehensive Plan) has been amended to describe the need for a SCS WWTP Sewer Service Area and SCS PFA exception area. A Resolution from the Commissioners of St. Mary's County will be approved to regulate service within the SCS WWTP Sewer Service Area.

MetCom recently completed Phase A of the plant expansion. This involved upgrading both the treatment and disposal systems to reliably serve the existing customers as well as those who have been allocated capacity but are yet to connect. MetCom's FY 2021 Capital Budget includes funds for "Phase B" of the plant expansion to further upgrade the treatment and disposal systems. This will increase the design capacity by 80,000 gpd. At 250 gpd per EDU, this would accommodate an additional 320 EDUs. Although the design has not been initiated, it is contemplated that the plant will be designed for an influent average daily flow of 200,000 gpd and a peak hydraulic flow rate of 800,000 gpd. The peak flow to the treatment works will be reduced to approximately 300,000 gpd. It is contemplated that a minimum biological nutrient removal (BNR) treatment level will be achieved with enhanced nutrient removal (ENR) upgrades under consideration at this time. With the contemplated improvements to the rapid infiltration basins (RIBs), storage lagoons, and existing spray irrigation system, there could be

sufficient capacity to dispose of approximately 180,000 gpd on an annual average basis which would reduce the increase in capacity of the treatment system from 400 EDUs to 320 EDUs. In short, the treatment plant will potentially have a treatment capacity of 200,000 gpd (and the plant is currently permitted for 200,000 gallons per day) but is limited by the land disposal system which has a potential capacity of 180,000 gpd. Construction of a fifth RIB may be included as a part of the final design which could add another 15,000 gpd of land treatment and disposal capacity.

Climate change and resiliency will be included as a part of the State design and permitting process. It is recommended that the spray irrigation capacity be limited to approximately 25,000 gpd on an annual average basis which would provide a minimum of approximately 160 days of storage during inclement weather periods. Utilizing treated effluent for golf course irrigation will still be authorized under drought conditions with State approval, with consideration for more frequent use as may be permitted by the State.

Funding for the project will be through MDE and/or DHCD low interest loans should the plant provide BNR treatment levels, but may also include BRF grant monies if the decision is made to further upgrade to ENR treatment levels.

As the Compton area is not in the growth area designated by the comprehensive plan, there are no plans to expand the plant for growth. No additional EDUs will be allocated unless existing allocations are relinquished. Effort is being made to accommodate failing systems.

Modify and Update Table:

St Mary's Comprehensive Water and Sewerage Plan, 2017 Update

Chapter 4: SEWERAGE

4.1 Projected Wastewater Treatment Demands and Planned Capacity

Page; 4-14

Table 1 Projected Wastewater Treatment Demands and Planned Capacity

(as of ~~December 2012~~ as of October 2020)

Treatment Facility Name	Total Capacity (EDU's)	EDU's Allocated	Not Allocated	Gallons per EDU	Average Demand 2012 (MGD)	Capacity (MGD)	Projected Demand 2017 (MGD)	Planned Capacity (MGD)
Wicomico Shores	522	460	62	270	0.1143	0.141	0.186	0.141
St. Clements Shores	400	<u>554</u>	<u>-None</u>	250	0.1318 (2020)	0.100	0.170 (2025)	<u>0.180</u>
Forrest Farm	230	209	21	250	0.0363	0.058	0.025	0.058
Marlay - Taylor	26,086	20,919	5,167	230	3.6852	6.000	5.053	6.000
Leonardtown	2,720	2,300	420	250*	0.4257	.680	0.760	.940

* 225 GPD after 12/31/11

2.1% = Assumed Growth Rate

Modify Table:

St Mary's Comprehensive Water and Sewerage Plan, 2017 Update
 Chapter 4: SEWERAGE
 4.2A Inventory of Community and Rural Shared Systems
 Page: 4-14

Facility	Design Capacity (MGD)	NPDES Permit (MGD)	Calendar Year 2012 Avg Daily Flow (MGD)	Gross Adjusted Available Flow (MGD)
Marlay-Taylor	6.0	6.0	3.6852	2.3148
St. Clement's Shores	0.1	0.1	<u>0.1318 (2020)</u>	<u>None (2020)</u>
Charlotte Hall LC	0.01875	0.01875	.006473	.012277
Wicomico Shores	0.141	0.141	0.1143	0.0267
Forrest Farm	0.0575	0.0575	0.0363	0.0212
Airedele Road	0.021	0.021	0.015	0.006
Leonardtown	.68	.68	0.4257	.2543

Source: MDE, MetCom, Town of Leonardtown

Modify Table:

St Mary's Comprehensive Water and Sewerage Plan, 2017 Update
 Chapter 4: SEWERAGE
 4..2C Inventory of Pumping Stations
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Table 4-2C: Inventory of Pumping Stations

Station Name	CY2014 Average Daily Flow, MGD	Maximum Design Daily Flow, MGD	Number of Pumps	Capacity of Each Pump, GPM	Force Main Diameter, Inches
Abberly Crest	0.012	0.494	2	343	8
Breton Bay	0.037	0.099	2	69	3
Airport Road	0.004	0.029	2	20	2
Black Duck	0.011	0.069	2	48	4
Bradley Boulevard	0.046	0.518	2	360	8
Breton Bay	0.037	0.099	2	69	3
Broad Creek	0.021	0.215	2	149	6
California Run	0.257	1.320	2	917	10

Station Name	CY2014 Average Daily Flow, MGD	Maximum Design Daily Flow, MGD	Number of Pumps	Capacity of Each Pump, GPM	Force Main Diameter, Inches
Cecil's Mill	0.015	0.096	2	67	3
Cedar Cove	0.061	0.245	2	170	6
Dunleigh	0.006	0.105	2	73	3
Esperanza Farms	0.007	0.192	2	133	4
Essex South	0.184	1.129	2	784	4
Evergreen Park	0.033	0.072	2	50	3
First Colony #1	0.019	0.269	2	187	3
First Colony #2	0.043	0.756	2	525	6
Forest Run	0.506	1.548	2	1075	12
Glebe Run	0.021	0.350	2	243	6
Great Mills	0.196	0.577	2	401	8
Greenbrier	0.073	0.657	2	456	8
Hickory Hills	0.051	0.549	2	381	8
Hilton Run	0.047	0.435	2	302	8
Hunting Creek	0.021	0.167	2	116	4
Hunting Quarters	0.035	0.467	2	324	6
Joy Chapel	0.015	0.179	2	124	4
Kingston	0.009	0.451	2	313	
Laurel Glen	0.008	0.147	2	102	4
Leyland Park	0	0.038	2	115	4
Lynn Drive	0.017	0.144	2	100	4
Meadow Lake	0.026	0.124	2	86	4
Moorings	0.021	0.085	2	59	4
Oak Crest (Interim)	0	0.015	2	50	2
Patuxent Park West	0.024	0.431	2	299	6
Pegg Road	0.009	0.132	2	92	6
Pembroke #1	0.045	0.913	2	634	8
Pembroke #2	0.025	0.288	2	200	8
Pickett's Harbor	0.019	0.216	2	150	4
Piney Point	0.157	0.474	2	329	12
Piney Point Landings	0.028	0.297	2	206	6
Planters Court	0.019	0.166	2	115	4
Riverbay	0.04	0.275	2	191	6

Station Name	CY2014 Average Daily Flow, MGD	Maximum Design Daily Flow, MGD	Number of Pumps	Capacity of Each Pump, GPM	Force Main Diameter, Inches
Rosebank	0.002	0.036	2	25	4
Rue Woods	0.008	0.055	2	38	4
Sheehan	0.016	0.189	2	131	4
Southgate	0.014	0.128	2	89	4
Spring Valley	0.063	0.278	2	193	6
St. Clement's Shores	0.027	0.360	2	250	6
St. George's Island	0.021	0.196	2	136	6
St. George's Peninsula	0.006	0.186	2	129	4
St. Mary's City	0.056	0.665	2	462	10
St. Mary's Industrial Park	0.06	0.445	2	309	10
St. Mary's Square	0.03	0.176	2	122	4
Villages at Leonardtown	0.018	0.058	2	40	3
Waters Edge	0.031	0.187	2	130	4
Westbury	0.059	0.369	2	256	6
Wicomico Shores #1	0.032	0.619	2	430	4
Wicomico Shores #2	0.024	0.174	2	121	4
Wicomico Shores #3	0.017	0.348	2	242	6
Widgeon	0.014	0.014	2	10	2
Wildewood #1	0.065	0.720	2	500	8
Wildewood #2	0.033	0.380	2	264	8
Wildewood #3	0.159	0.917	2	637	4
Willow Woods	0.036	0.040	2	28	2
Woods @ Myrtle Pt Sec 5		0.018		65	

Source: MetCom, MDE

Modify Table:

St Mary's Comprehensive Water and Sewerage Plan, 2017 Update

Chapter 4: SEWERAGE

4.3 Inventory of Sewer Problem Areas

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Sanitary District	Location	Nature of Problem	Dwelling Units	Demand	Options
1	Longview Beach	High water table; small lots; impermeable soils	Greater than 100 Residences (some seasonal)	Minimum 100 EDUs	Package treatment plant
2	Mill Point Shores	High water table; small lots; impermeable soils	Greater than 100 Residences (some seasonal)	Minimum 100 EDUs	Package treatment plant
3	Colton's Point/ Point Blackistone	high water table; impermeable soils; small lots	30 Residences	Minimum 30 EDUs	Package treatment plant
4	<u>Rose Bank & SCS WWTP Sewer Service Area</u>	High water table; small lots; impermeable soils Failing septic systems	<u>Rose Bank 59</u> <u>Society Hill 20</u> <u>St Clem Wds 14</u> <u>St Clem Shrs 5</u> <u>Glasgow Beach 11</u> <u>Other 31</u>	59 140 EDUs <u>Total</u>	Possible tie into St. Clements Shores WWTP, if expanded <u>Connect to expanded St. Clements Shores WWTP w adoption of SCS WWTP Sewer Service Area amendment.</u>
5	Mt. Pleasant Subdivision	Failing septic systems; small lots; impermeable soils; high water table	30-40 Residences	Minimum 30-40 EDUs	Package treatment plant
3	Holly Gaf	Failing septic systems; high water; topographical limitations	75 residences	75 EDUs	Possible tap into future Hollywood lines
6	McKay's Beach Subdivision	Failing septic systems; small lots; critical area; impermeable soils; high water table.	40 Residences	Minimum 40 EDUs	Package treatment plant
5	Spring Ridge	Failing septic systems; some small lots; critical area; some impermeable soils; high water table	40 Residences	Minimum 35 EDUs	Possible tap into Bay Interceptor line
6	Fish Commission Subdivision on Murray Rd.	Failing septic systems; small lots; critical area; impermeable soils; high water table. Beach erosion also a factor, many homes have existing septic between house and beach.	30 Residences	Minimum 30 EDUs	Package treatment plant
6	Rodo Beach	Failing septic systems in the critical area; small lots;		Minimum	Package treatment plant or force

Sanitary District	Location	Nature of Problem	Dwelling Units	Demand	Options
		some impermeable soils; high water table		40 EDUs	main to Bay Interceptor
6 <u>10</u>	Scotland Beach	Failing septic systems in the critical area; small lots; some impermeable soils; high water table	45 Residences	Minimum 45 EDUs	Package treatment plant or force main to Bay Interceptor
6 <u>11</u>	Hays Beach	Failing septic systems; small lots; critical area; impermeable soils; high water table. Beach erosion also a factor, many homes have existing septic between house and beach	14 Residences	Minimum 14 EDUs	Package treatment plant
6 <u>12</u>	St. Jerome's Shores & St. Jerome's Beach Subdivision	Failing septic systems; small lots; critical area; impermeable soils; high water table	30 Residences	Minimum 30 EDUs	Package treatment plant
7 <u>13</u>	Cornfield Harbor	Failing septic systems; small lots; critical area; some impermeable soils; high water table	20 Residences	Minimum 20 EDUs	Possible force main to Bay Interceptor
8 <u>14</u>	Rt. 489 Park Hall Rd	Soils in this area are typically impermeable for conventional drain field systems and there is usually a lack of a 4 foot buffer from the water table	34 Residences, 1 Church	35 EDUs	Package treatment plant and/or possible tap into Marley Taylor
8 <u>15</u>	Langley Trailer Park and Adkins Road	Small lots; failing septic systems; impermeable soils; poor drainage; critical area	57 Residences	57	Remove or elevate trailers. Adkins Rd possible tie into Marley Taylor at Great Mills Rd
8 <u>16</u>	Patuxent Beach/Levering	Small lots; critical area	147 Residences, 1 Restaurant, 2 Marinas	Minimum 150	Package treatment plant
8 <u>17</u>	Gross Drive (off Kingston Creek Rd)	Topography and soil limitations	20 Residences	Minimum 20 EDUs	Package treatment plant
8 <u>18</u>	Town Creek	Topographical limitations; impermeable soils; high water table on some lots close to the water	To be determined by survey	TBD	Package treatment plant

Sanitary District	Location	Nature of Problem	Dwelling Units	Demand	Options
10 <u>19</u>	Golden Beach	Failing septic systems; small lots; critical area; soils limitations in areas; high water table in areas	585	585	Package treatment plant

Source: St. Mary's County Health Department

Update Table 4-5: St. Mary's County Metropolitan Commission Capital Improvements (CIP) Budget FY 14-19 (Sewer) to the most current CIP available.

Table 4-5 is to be updated as follows:

St. Mary's County Metropolitan Commission
Capital Improvements Budget
FY 2021 - 2026 Sewer

With Escalation i=2.5%

Project Name	Status	Project ID	Prior Approved	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY2021 - 2026 TOTAL
Rehabilitation/Replacement										
Various Rehabilitation at MTWRF	1			\$916,000 ^A	\$345,937 ^A	\$120,822 ^A			\$29,699 ^A	\$1,414,458
Piney Point Road Sewer Line Analysis and Force Main Replacement	2	S171MS	\$505,664			\$1,131,408 ^C	\$0 ^C			\$1,131,408
Southampton Sewer System Rehabilitation	1	8201SR	\$73,570		\$887,166		\$1,968,435			\$2,855,601
Inflow & Infiltration Sewer Replacement, Rehabilitation and Upgrade	4	SM2106	\$231,220 ^B	\$236,940	\$242,880	\$248,820	\$255,200	\$261,580	\$267,960	\$1,513,380
Manhole Rehabilitation	4	SM2105	\$99,845 ^B	\$102,315	\$104,880	\$107,445	\$110,200	\$112,955	\$115,748	\$653,543
Various Wastewater System Rehabilitation	1			\$87,125 ^A	\$89,335 ^A	\$91,545 ^A	\$93,840 ^A	\$96,135 ^A	\$98,574 ^A	\$556,554
Glenn Forest to NAS Interceptor	1								\$924,926 ^A	\$924,926
FY2021 CIB (FY21-FY26) Replacement Subtotal =			\$910,299	\$1,344,380	\$1,670,198	\$1,700,040	\$2,427,675	\$470,670	\$1,436,907	\$9,049,870

Approved FY2020 CIB (FY20 - FY25)	\$339,255	\$1,234,926	\$358,265	\$3,493,835	\$374,535	\$5,798,816
Change to Program from FY2020 CIB	\$1,005,125	\$435,272	\$1,343,775	-\$1,066,160	\$96,135	\$1,814,147

Project Name	Status	Project ID	Prior Approved	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY2021 - 2026 TOTAL
Pump Stations										
Bradley Boulevard WWPS	1			\$38,439	\$315,217					\$353,656
Esperanza Shopping Center WWPS	1		\$39,449		\$323,503					\$362,952
Charlotte Hall WWPS Replacement	1				\$141,834 ^A					\$141,834
Greenbrier WWPS	1				\$42,278	\$346,493				\$388,771
Wilcomoo Shores #1 WWPS Replacement	1				\$45,506	\$381,142				\$427,648
Hunting Quarters WWPS	1					\$40,725	\$334,151			\$374,876
FY2021 CIB (FY21-FY26) Pump Stations Subtotal =			\$0	\$77,888	\$869,338	\$768,360	\$334,151	\$0	\$0	\$2,049,737

Approved FY2020 CIB (FY20 - FY25)	\$77,888	\$727,504	\$768,360	\$334,151	\$0	\$1,907,903
Change to Program from FY2020 CIB	\$0	\$141,834	\$0	\$0	\$0	\$141,834

Project Name	Status	Project ID	Prior Approved	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY2021 - 2026 TOTAL
System Upgrades / Expansion										
St. Clements Shores WWTP Expansion Phase B	1	21515F	\$1,218,162	\$2,684,591						\$2,684,591
Energy Efficiency Upgrades	1			\$337,500 ^C						\$337,500
Grinder Pump Truck	1			\$170,000 ^A						\$170,000
Methane Co-Generator Upgrade at Manay-Taylor WWTP	1	81719F	\$120,000	\$326,379 ^C	\$89,409 ^C				\$98,691	\$514,479
Sewer Vacuum Truck	1						\$581,521 ^A			\$581,521
Grinder Pump Replacements	4	SM2109		\$850,000		\$850,000		\$850,000		\$2,550,000
Property Acquisition	1			\$500,000 ^A						\$500,000
FY2021 CIB (FY21-FY26) Systems Upgrades/Expansion Subtotal =			\$1,338,162	\$4,868,460	\$89,409	\$850,000	\$581,521	\$850,000	\$98,691	\$6,838,081

Approved FY2020 CIB (FY20 - FY25)	\$3,534,581	\$0	\$850,000	\$0	\$850,000	\$5,234,581
Change to Program from FY2020 CIB	\$1,333,879	\$89,409	\$0	\$581,521	\$0	\$2,004,809

Totals										
Replacement			\$910,299	\$1,344,380	\$1,670,198	\$1,700,040	\$2,427,675	\$470,670	\$1,436,907	\$9,049,870
Pump Stations			\$0	\$77,888	\$869,338	\$768,360	\$334,151	\$0	\$0	\$2,049,737
Upgrades/Expansion			\$1,338,162	\$4,868,460	\$89,409	\$850,000	\$581,521	\$850,000	\$98,691	\$7,338,081
Subtotal			\$2,248,461	\$6,290,728	\$2,628,944	\$3,318,400	\$3,343,347	\$1,320,670	\$1,535,598	\$18,437,688
Capital Reserves ^B		6.20%	\$139,000	\$390,000	\$163,000	\$206,000	\$207,000	\$82,000	\$95,000	\$1,143,000
FY2021 CIB (FY21-FY26) Total =			\$2,387,461	\$6,680,728	\$2,791,944	\$3,524,400	\$3,550,347	\$1,402,670	\$1,630,598	\$19,580,688

Approved FY2020 CIB (FY20 - FY25)	\$4,196,724	\$2,084,430	\$2,096,625	\$4,064,986	\$1,300,535	\$13,743,300
Change to Program from FY2020 CIB	\$2,484,004	\$707,514	\$1,427,775	-\$514,639	\$102,135	\$4,206,790

Yellow highlights denote changes from the approved FY20 CIB.