

TALBOT COUNTY, MARYLAND

Region II Wastewater Treatment Plant Sewer Service Allocation Policy

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Adopted: Date Amendments: Date

SECTION 1. DEFINITIONS

The following definitions apply to this policy:

Allocate, allocated, or allocation -- the process by which sewer service is made available.

Annual Capacity – the Total Capacity subject to allocation in any calendar year.

Annual Daily Average Wastewater Flow ("ADAWF") -- the total daily wastewater flows recorded at the Talbot County Wastewater Treatment Plant serving Regions I & II for an entire calendar year, divided by the number of days in the calendar year.

Capacity – the capability to process wastewater expressed in terms of gallons per day ("gpd").

Committed Capacity – total outstanding commitments for future sewer service, including prepaid benefit charges and phased allocation.

CWSP -- the Talbot County Comprehensive Water & Sewer Plan.

Depleted Capacity -- the sum total of Expanded Capacity that has been allocated for each SSA.

DPW -- the Talbot County Department of Public Works

Expanded Capacity - capacity available for allocation in each Sewer Service Area shown on Table 1.

Equivalent Dwelling Unit or "EDU" – the amount of daily wastewater flow that is attributable to an attached or detached single-family residence, calculated for planning and allocation purposes.

Inflow & Infiltration (I&I) Reserve -- capacity set aside to offset Inflow & Infiltration.

Inflow and infiltration or "I&I" -- groundwater, stormwater, or other extraneous (non-wastewater) flows into the Wastewater Treatment Plant collection system.

Lot -- a part of a subdivision or a parcel of land legally permitted for use as a building site or for building purposes.

Lot of Record -- a lot appearing on a subdivision plat recorded among the plat records of Talbot County on or before the effective date of this policy, or an existing lot or parcel created or recognized prior to the effective date of this policy under all applicable subdivision laws, ordinances, or regulations.

PWAB – the Talbot County Public Works Advisory Board.

Recaptured I&I – actual, verified, and stabilized reduction in I&I as determined in accordance with this policy.

Record Plat -- a completed drawing which contains all pertinent information required by State, federal, and local laws, ordinances, and regulations and meeting all formal recordation requirements.

Sewer Service Area or "SSA" – a sub-area of the Talbot County Sanitary District established for planning and allocation purposes.

Subdivision -- the division of a single tract, tracts, or other parcels of land, or a part of it, into two or more lots, for the purpose, whether immediate or future, of sale or of building development.

Total Capacity -- the total of Existing Flows and Expanded Capacity.

Wastewater Treatment Plant, "Plant", or "WWTP" -- the sewerage treatment facility expanded to accommodate up to 660,000 GPD, scheduled for completion in late 2007 or early 2008, owned by Talbot County and serving Sewer Service Areas in Region I and II, and that possesses a National Pollutant Discharge Elimination System and/or State discharge permit.

SECTION 2. GENERAL

A. Applicability.

This policy applies within each Sewer Service Area to determine the number of future connections per year through allocation of wastewater capacity from the Plant to each Sewer Service Area.

B. Sewer Service Areas.

Capacity shall be calculated separately for each Sewer Service Area. The WWTP presently receives wastewater flow from the following Sewer Service Areas:

Region I – Unionville, Tunis Mills and Copperville;

Region II – Royal Oak, Newcomb and Bellevue;

Region II – Rio Vista, Bentley Hay and Back Creek; and

Region II – St. Michaels.

C. Map classification and other requirements.

This policy does not affect CWSP map classifications or the processes by which those classifications are changed. Conformity with CWSP map classification and all other requirements, as amended from time to time, is a pre-requisite to sewer allocation.

SECTION 3. PURPOSE

This policy is intended to establish a balanced, coordinated planning process to allocate capacity and maintain an adequate reserve of capacity for future growth, and to reduce pollution and enhance the water quality of the Chesapeake Bay and its tributaries. The policy promotes public health, safety, and welfare through a process that will:

- 1. Ensure sufficient revenue is available to make timely payments on bond indebtedness;
- 2. Reserve capacity generated from Recaptured I&I to enable the County to implement strategies to comply with TMDL (total maximum daily load) requirements to substantially reduce harmful phosphorus and nitrogen loading and enhance the water quality of the Chesapeake Bay and its tributaries;
- 3. Comply with the Maryland Department of the Environment Guidance Document issued for "Wastewater Capacity Management Plans" (2006);
- 4. Provide sewer service that will reasonably accommodate growth throughout the term of the indebtedness incurred to upgrade and expand the WWTP, and conserve capacity for future growth at sustainable rates throughout that period;
- 5. Ensure that property owners paying a benefit charge have Committed Capacity reserved to accommodate allocation of sewer service;
- 6. Provide capacity for development where sewerage treatment infrastructure is available, and minimize development that might otherwise take place in more rural areas;
- 7. Provide adequate public facilities for public services necessary to maintain a desirable quality of life for County residents;
- 8. Provide sewer service in a timely and sequential fashion, linked to development, that encourages a reasonable balance and mix of uses;
- 9. Provide a reasonable and equitable procedure for obtaining sewer allocation consistent with the goals, objectives, and policies of the Comprehensive Plan, CWSP, and the Chesapeake and Atlantic Coastal Bays Critical Area laws, regulations, policies, and requirements; and,
- 10. Provide a reasonable and equitable procedure for obtaining sewer allocation in coordination with subdivision, site plan, and building permit approval.

This policy is intended to assure staged growth of mixed uses and efficient use of available public sanitary sewer, to assure that capacity remains available for development occurring throughout the term of the bond indebtedness incurred to upgrade and enhance the WWTP, to enhance the water quality of the Chesapeake Bay and its tributaries by utilizing Recaptured I&I as part of the strategy to comply with TMDL requirements, to avoid surges in effluent loads into the waters of the Chesapeake Bay and its tributaries, and to avoid surges in demand placing unnecessary stresses on the WWTP.

SECTION 4. CALCULATIONS

The design capacity of the WWTP is 660,000 gpd. The estimated wastewater flow used in this allocation policy is based on a ratio of wastewater generation equal to 80% of water consumption.

A. Gravity systems.

The estimated wastewater flow for gravity systems is 250 gpd per EDU, calculated as follows:

Daily water consumption:

Number people per EDU:

Daily Water Consumption per EDU:

2.3 people/EDU

230 gpd/EDU

(80% of water consumption = wastewater flow)

 $80\% \times 230 \text{ gpd} = 184 \text{ gpd/EDU}$

Wastewater flow: 184 gpd/EDU
Plus: Reserve for I&I flows: 66 gpd/EDU
Total daily wastewater flow: 250 gpd/EDU

B. Low-pressure systems.

A low pressure system is any non-gravity collection system. The estimated wastewater flow for low pressure systems is 185 gpd per EDU, calculated as follows:

Daily water consumption: 100 gpd per person Number people per EDU: 2.3 people/EDU Daily Water Consumption per EDU: 230 gpd/EDU

(80% of water consumption = wastewater flow)

80% x 230 gpd = 184 gpd/EDU

Total daily wastewater flow: 185gpd/EDU

For low pressure sewer systems extraneous flows (I&I) are negligible, consequently there are no I&I flows reserved in this calculation.

C. Commercial, industrial, and institutional flows.

Commercial, industrial, and institutional flows shall be determined by DPW on a case-by-case basis utilizing the Maryland Department of Environment flow projections for water and wastewater systems converted to EDUs.

D. Alteration of flow.

With the consent of the County Council, the County Engineer may adjust the rate of gpd/EDU for a combination of gravity and low-pressure sewer systems whenever, in the County Engineer's judgment, the adjusted rate will better achieve the purposes of this policy. Any adjustment in the rate of gpd/EDU for a combination of gravity and low pressure sewer systems shall be between the rates established for gravity and low-pressure systems.

E. Formula.

The Annual Capacity for each Sewer Service Area shall be re-calculated annually under the following formula.

$$\frac{A - B - C}{D} = Annual Capacity$$

Where:

A = Expanded Capacity

B = Depleted Capacity

C = Committed Capacity

D = 2028 minus (current year); this equals the number of years remaining on bond indebtedness incurred to upgrade and expand the WWTP

F. Capacity by Sewer Service Area

Table 1 lists Capacity by Sewer Service Area, Existing Flows, Expanded Capacity, and Total Capacity for Each Sewer Service Area as approved in the CWSP:

TABLE 1. CAPACITY BY SEWER SERVICE AREA						
SEWER SERVICE AREA	EXISTING FLOWS	EXPANDED CAPACITY	TOTAL CAPACITY			
Region II St. Michaels	133,950	109,700	243,650			
Region II Rio Vista/ Bentley Hay	95,850	18,400	114,250			
Region I Unionville, Tunis Mills, Copperville	21,100	5,900	27,000			
Region II Royal Oak, Newcomb, Bellevue	47,100	58,000	105,100			
Inflow and Infiltration Reserve	170,000	0	170,000			
Totals	468,000	192,000	660,000			

G. Administrative Updates

The County Engineer shall have authority to re-calculate the figures shown in Table 1 "Capacity by Sewer Service Area" from time to time as required by this policy, law, or regulation, consistent with the discharge monitoring reports submitted to MDE and best available flow data, as determined by the County Engineer. The County Engineer shall annually calculate, update and maintain totals for Annual Capacity, Depleted Capacity, and Committed Capacity, for each Sewer Service Area. The County Engineer shall update I&I Reserve annually in accordance with Section 7 of this Policy.

SECTION 5. ALLOCATION PROCEDURE

A. General.

DPW shall prescribe the form and information required for all applications. The owner and applicant shall provide any additional information requested by DPW. The owner and applicant shall certify under penalties of perjury that the application and all accompanying information, plats, and site plans are complete and accurate. Applications shall be reviewed in the order in which they are received, but approved as they are determined eligible for allocation.

B. Lots of Record and existing uses.

The following applications shall receive approval from DPW for sewer service provided all wastewater capital charges and other fees are paid, the application is in compliance with all applicable laws, ordinances, and regulations, and all other required permits and approvals have been obtained:

- (1) Lots of Record paying benefit charges for sewer service for the subject property.
- (2) Unimproved Lots of Record for allocation of one (1) EDU or less.
- (3) Expansions of non-residential uses existing on the effective date of this policy resulting in a single flow increase of 225 gpd or less.

(4) Existing Lots of Record to connect existing (failing and non-failing) septic systems for the purpose of enhancing the water quality of the Chesapeake Bay and its tributaries.

Approvals under Section 5 B. are not subject to allocation limits established by Annual Capacity calculations. However, if the sum of all capacity allocated in any Sewer Service Area in any calendar year exceeds the Annual Capacity established for that Sewer Service Area under the formula in Section 4 E., the excess shall reduce the Annual Capacity for that Sewer Service Area for the ensuing calendar year. Capacity allocated under this Section shall be added into Depleted Capacity when calculating ensuing years' Annual Capacity.

C. Maximum allocation.

To prevent Annual Capacity from being depleted by a single project, no more than fifty percent (50%) of the unallocated Annual Capacity for any Sewer Service Area may be allocated to any single project, as determined by the County Engineer, during any calendar year. Unallocated Annual Capacity, if any, remaining at the end of a calendar year shall be added back into the total available Expanded Capacity. Unfilled requests for allocation, if any, shall be placed on a waiting list and filled in order from the list.

D. New uses and lots.

The following procedures apply to all applications for new subdivisions, commercial, industrial, institutional, or other development:

- (1) Pre-application meeting. Applicants shall schedule a pre-application meeting with DPW to discuss the proposed allocation of wastewater capacity.
- (2) Application. The applicant shall submit an application to DPW, including a concept plan, phasing and utility plans, and the eligibility review fee.
- (3) Eligibility Review. DPW shall review the application to determine eligibility for allocation. This review shall include completeness, compliance with the CWSP, including map classification criteria, and all applicable State, federal, and local laws, ordinances, and regulations. DPW shall advise the applicant in writing whether the proposed project is eligible for allocation, including any anticipated limitations, conditions, phasing, fees, and other requirements for final approval. Applications found to be ineligible for allocation shall receive no further review by County staff.
- (4) Effect. A finding of eligibility is preliminary only and is not an assurance that capacity will be allocated, or that additional, supplemental, or different conditions or fees may not be imposed. It is not binding on DPW, other County departments or agencies, nor any State or federal department or agency. It is intended only to eliminate review of projects that are not eligible for allocation, and creates no vested or enforceable right to sewer service.
- (5) Allocation. Before receiving allocation an applicant shall apply for and obtain all other zoning, subdivision, site plan, and other reviews, approvals, and permits required

for recordation of a subdivision plat, final site plan approval, or issuance of a building permit. Where sewer service is required, allocation is a condition precedent to recordation of a subdivision plat, obtaining final site plan approval, or issuance of a building permit.

- (a) New lots. When the connection is for newly created subdivision lots, a Record Plat shall be prepared, reviewed and deemed approvable under applicable subdivision regulations. The County Engineer shall review the proposal to determine if it meets all applicable CWSP requirements, and if so the County Engineer shall issue a project specific approval letter to the Talbot County Health Officer, who may then sign the plat with a plat note to the effect that use of the community sewerage system is in conformance with the County CWSP. The Health Officer shall return the plat to the County Engineer for final approval. The plat shall not be recorded without a plat note signed by the County Engineer certifying that the WWTP will be available to serve all lots in the subdivision. The plat note shall include allocation of capacity, expressed in EDU, for each lot and shall include a maximum EDU for the entire subdivision.
- (b) New uses. When the connection is for new commercial, industrial, or other non-residential uses, a site plan shall be prepared, reviewed and deemed approvable under applicable site plan regulations. The County Engineer shall review the proposal to determine if it meets all applicable CWSP requirements. The site plan shall include the total gpd/EDUs allocated to the uses and shall state the basis and method of calculation of total gpd/EDUs allocated to each. The site plan shall not be approved without the County Engineer's written certification that the WWTP will be available to serve the proposed uses.
- (c) Modifications. Recordation of a revision plat or site plan approval in accordance with this policy and the applicable provisions of any municipal or County codes, rules, or regulations shall be required for changes to previously allocated gpd/EDU's defined on a recorded subdivision plat or approved site plan.
- (6) The County Engineer shall not sign any plat or site plan to certify that the WWTP will be available to serve proposed lots or uses until:
 - (a) The applicant has paid all wastewater capital charges and other fees;
 - (b) The applicant has entered into a Public Works Agreement ("PWA") with DPW to design, engineer, construct, and fund for all infrastructure required for the connection, and to convey to the County all easements or other interests required by the County. The PWA shall include such additional or supplemental terms, conditions, limitations, and contingencies required by the County Engineer.

SECTION 6. PHASING

A. Purpose.

Finite capacity within each Sewer Service Area limits the ability to commit capacity to multiyear projects and reserve capacity to allocate to other applicants in future years. Developers of multi-year projects may request a predictable and fixed advance commitment of sewer capacity for future phases in order to make long-term commitments to underwrite capital costs for infrastructure for a period not to exceed 10 years. Reservation and allocation of treatment capacity without payment of associated capital and operating charges, and denial of that capacity to other qualified applicants ready to pay those charges, undermines the County's ability to adequately fund its bond indebtedness. This policy attempts to balance these competing interests to permit a phased, multi-year commitment to provide future capacity to a developer proposing a phased development project.

B. Procedure.

Phasing may be used to allocate capacity to a portion of a multi-year development project that has received or is eligible to receive final approval under applicable site plan or subdivision regulations. Applicants may request allocation of sewer capacity for future years provided the following requirements are met:

- (1) The area is or is anticipated to become eligible for sewer service under applicable CWSP mapping classification and criteria. The requisite map classification must be either in existence or, before the date the capacity is to be utilized, the Applicant must apply for and obtain an amendment to the CWSP to re-map the area to make it eligible for sewer service.
- (2) Phased allocation of capacity is conditioned upon the required map amendments being adopted by the County Council. DPW's agreement for a phased allocation is wholly independent of the CWSP map amendment process, and of itself does not guarantee or represent that any required or proposed map amendments will be adopted.
- (3) Committed Capacity shall be limited to the maximum amount required to serve areas currently eligible for sewer service. Committed Capacity shall not be allocated to areas that are not currently eligible for sewer service until requisite map amendments have been adopted.
- (4) Committed Capacity for future phases shall not be awarded at a rate greater than 50% of the total Annual Capacity for the Sewer Service Area. The County Engineer may reduce that maximum rate based upon existing or anticipated competing demands for service in the Sewer Service Area.
- (5) The Sewer Service Area will have future Annual Capacity available for each ensuing phase of the project under the formula in Section 4 E.
- (6) The applicant enters into a PWA setting forth phasing requirements and timetables, payment terms, and such additional or supplemental terms, conditions, limitations, and contingencies required by the County Engineer. These terms shall be in addition to those required by Section 5 D. (5) (b).
- (7) The applicant shall have paid all prior wastewater capital charges and other fees associated with prior allocations. Wastewater capital charges and all other fees for

each ensuing phase of the project are due in full on January 1 of each ensuing year for which the applicant receives phased allocation.

(8) The County and DPW reserve the right to limit the reservation and allocation of EDU's in order to maintain and ensure the integrity of the WWTP and compliance with State and Federal laws and regulations, and the allocation and reservation shall be expressly subject to compliance with all such laws and regulations and the existence of capacity and facilities to serve the property for which the application is made.

C. Limitations.

Capacity allocated to a phased development project shall not be awarded unless the following conditions exist for the calendar year in which capacity has been allocated:

- (1) The allocation complies with all provisions of the CWSP and this policy at the time of the allocation.
- (2) The allocation complies with all then applicable State and federal statutes, rules, and regulations, and is consistent with all permit requirements, limitations, or restrictions.

SECTION 7. RECAPTURED INFLOW & INFILTRATION.

A. General.

The County is improving the WWTP wastewater collection system to reduce I&I. Additional capacity that becomes available for allocation in accordance with this Section shall be used exclusively to implement strategies to comply with impending TMDL limits that will enhance the water quality of the Chesapeake Bay and its tributaries. The amount of Recaptured I&I available for allocation shall be determined in accordance with this Section.

B. Procedure.

Changes in I&I shall be determined based on actual, verified, stabilized changes in I&I flows as monitored and measured using technological practices determined by the County Engineer after the upgraded and enhanced WWTP becomes operational. The County Engineer shall use the following procedure to determine the amount of I &I, Recaptured I&I, and I&I Reserve:

- (1) The PWAB and County Engineer shall consider:
 - (a) Annual Daily Average Wastewater Flows (ADAWF) recorded for the entire WWTP for a minimum of 5 years after the upgraded and expanded WWTP becomes operational; and,
 - (b) Collection system improvements, flow trends, number and severity of storm events, annual and monthly average precipitation, and other relevant data as determined by the PWAB or County Engineer.

- (2) The PWAB shall make advisory findings and a recommendation to the County Engineer concerning the amount of change in I&I, if any, the amount of Recaptured I&I, if any, and the amount of change in I&I Reserve, if any, as part of the annual recalculation of I&I Reserve under Section 4. G.
- (3) The County Engineer shall consider the PWAB findings and recommendation as part of an annual determination of the amount of change in I&I, if any, the amount of Recaptured I&I, if any, and the amount of change in I&I Reserve, if any.

C. Administrative authority.

The County Engineer shall have administrative authority, consistent with the requirements of this policy, to re-calculate and adjust the amount of I&I Reserve set forth in Table 1 provided that, at a minimum:

- (1) There shall be a sufficient I&I Reserve at all times to prevent backup or discharge of untreated effluent, violation of any permit, or any increased risk of harm to public health, safety, or welfare;
- (2) The amount of I&I Reserve may be reduced by not more than ½ (one-half) of the total amount of Recaptured I&I as determined by the County Engineer under this Section 7.

SECTION 8. WASTEWATER CAPACITY BY SEWER SERVICE AREA

The Annual Capacity for 2008 for each of the following sewer service areas is calculated using the formula in Section 4. E. as follows:

A. Region I – Unionville, Tunis Mills and Copperville

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A. = 5, 900 gpd

B. = 0

C. = 0

D. = 20

\frac{5,900}{20} = 295 gpd Annual Capacity
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B. Region II – Royal Oak, Newcomb and Bellevue

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A. = 58,000 gpd

B. = 0

C. = 0

D. = 20

\frac{58,000}{20} = 2,900 \text{ gpd Annual Capacity}
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C. Region II – Rio Vista, Bentley Hay and Back Creek

$$A. = 18,400 \text{ gpd}$$

 $B_{\cdot} = 0$

 $C_{.} = 0$

D = 20

D. Region II – St. Michaels

A. = 109,700 gpd

 $B_{\cdot} = 0$

C = 7.250

D. = 20

E. Effective Date

This policy becomes effective upon adoption and applies to all capacity allocated and all connections approved after the expanded and upgraded WWTP becomes operational. Existing sewer service allocation policies remain in effect until the Plant becomes operational, after which they no longer apply. Pending applications that have not received approval to connect as of the date the expanded and upgraded WWTP becomes operational shall be processed under the new policy.

F. Severability clause.

The provisions of this policy are severable. If any provision of this policy or the application thereof to any person or circumstance is held invalid for any reason by a court of competent jurisdiction, the invalidity does not affect any other provision or application of this policy which can be given effect without the invalid provision or application.

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