#### Amendment No. 2 to Resolution No. 347

Proposed by: Mr. Lesher

Introduced by: Mr. Lesher and Ms. Mielke

Date: January 23, 2024

A RESOLUTION TO AMEND THE TALBOT COUNTY COMPREHENSIVE WATER AND SEWER PLAN TO PROVIDE THE EQUIVALENT DWELLING UNITS FOR ALL PHASES OF THE LAKESIDE DEVELOPMENT

## KEY

**Boldface**.....Heading or defined term

<u>Underlining</u>.....Added to CWSP by Resolution

Double Underlining......Added by amendment

Double Strikethrough.....Deleted by amendment

\* \* \* .....Existing CWSP/Resolution unaffected

Proposed Amendments: The amendments proposed to the text of the Resolution are as follows:

A RESOLUTION TO AMEND THE TALBOT COUNTY COMPREHENSIVE WATER AND SEWER PLAN TO PROVIDE THE EQUIVALENT DWELLING UNITS FOR ALL PHASES OF THE LAKESIDE DEVELOPMENT, FOR CONSISTENCY WITH DISCHARGE PERMIT NO. 19-DP-3460, ISSUED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT ON OCTOBER 27, 2022, AND TO REQUIRE THAT ANY FUTURE EXPANSION OF THE NEW LAKESIDE WASTEWATER TREATMENT PLANT SHALL REQUIRE AN AMENDMENT TO THE CWSP

\* \* \*

WHEREAS, one such capital project added to the CWSP pursuant to Resolution No. 281 was an Enhanced Nutrient Removal 0.54 million gallon per day Membrane Bio-Reactor wastewater treatment plant and collection system to be designed and constructed in phases to serve the Lakeside Project within the Trappe East Sewer District (the "Lakeside WWTP"); and

<u>WHEREAS</u>, or about November 4, 2020, MDE approved the amendments to the CWSP as set forth in Resolution No. 281 as adopted by the County Council on August 1 1, 2020; and

<u>WHEREAS</u>, on October 27, 2022, MDE issued Discharge Permit No. 19-DP-3460 (the "Discharge Permit"), which authorizes the Town and Trappe East Holding Business Trust to discharge the treated wastewater from the Lakeside WWTP by spray irrigation, subject to certain conditions, limitations, and requirements; and

WHEREAS, the Discharge Permit sets forth certain conditions, limitations, and restrictions that are stricter than those set forth in the CWSP as amended pursuant to Resolution No. 281; and

<u>WHEREAS</u>, pursuant to Code of Maryland Regulations ("COMAR") 26.08.04.02.A(2)(b) and 26.08.04.10.D(3), a discharge permit, including a major modification thereof, shall comply with an approved county water and sewerage plan adopted under Title 9, Subtitle 5 of the Environment Article; and

WHEREAS, the County Council is desirous of amending the CWSP as amended by Resolution No. 281 for consistency with the Discharge Permit and to provide that any future expansion of the Lakeside WWTP shall require an amendment to the CWSP; and

\* \* \*

**SECTION TWO**: The CWSP is hereby amended as shown in Exhibit A attached hereto and incorporated by reference herein as if fully set forth to provide the EDUs for all phases of the Lakeside Development <u>and to update the narrative description of the Town's sewer system</u>.

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### **EXHIBIT A**

# AMENDMENT TO CHAPTER TWO OF THE TALBOT COUNTY COMPREHENSIVE WATER AND SEWER PLAN

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### TRAPPE AREA SEWERAGE SYSTEM - FUTURE PLANNING

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As identified within the goals of Chapter One of this Plan, growth of the County is to be encouraged and directed in concentrated centers around existing centers of population that presently have adequate or potentially adequate water and sewer services. To plan sewer service to meet the needs of future growth, the sewer service provider, the Town of Trappe, is proposing to create sanitary sewer service districts. The sewer service presently being provided in the Town of Trappe would

be referred to as the Trappe Sewer District. To address the sanitary sewer needs in the growth area around the Town of Trappe, two sewer service districts are being proposed.

The proposed Trappe East Sewer District will serve parcels located in the Town on the east side of Maryland Route 50. On the northern end of Town, a second sewer service district, White Marsh Sewer District, is being proposed to serve parcels annexed into the Town of Trappe.

The delineated development area around the Town of Trappe is shown on Figure 24. The factors that influence the size of the development areas for the Town of Trappe includes the growth potential of the Town, the presence of natural growth constraints such as waterways, the Chesapeake Bay Critical Area, and the availability of water and sewer service. As land is annexed into the Town of Trappe, these areas would be designated as S-1 (means areas served or to be served by the Town of Trappe that are either existing, under construction, or have immediate priority status to be served with sewer service) after amending the Talbot County Comprehensive Water and Sewer Plan.

An Enhanced Nutrient Removal ("ENR") 0.54 million gallon per day ("MGD") Membrane Bio-Reactor ("MBR") wastewater treatment plant (the "Lakeside WWTP") and collection system will be designed, constructed in phases and operated to serve the proposed Lakeside development within the Trappe East Sewer District. The proposed MBR ENR Lakeside WWTP will be is designed such that it can be constructed in phases. This type of design eliminates operating challenges associated with the low flows generated by early phases of development and the inability of a WWTP constructed to full build-out capacity to operate properly at initial low flows.

In accordance with Discharge Permit No. 19-DP-3460 ("Permit 19-DP-3460") issued by MDE on October 27, 2022, the permitted flow for the Lakeside WWTP is 100,000 gallons per day, which will allow approximately 400 residential units to be built. An initial flow of 37,500 gallons per day may be directed from the Lakeside development to the existing Trappe District wastewater treatment plant, with all such flows to be redirected to the Lakeside WWTP once constructed and operational. Such initial flow is part of the 100,000 gallons per day authorized under Permit 19-DP-3460. No other capacity of the existing Trappe District wastewater treatment plant shall be allocated to serve the Trappe East Sewer District. Phase 1 Section 1 of the proposed Lakeside project is expected to include approximately 84 single-family residential dwellings and a visitor and sales center. Sanitary sewer capacity for the proposed start-up phase will require treatment and disposal of approximately 30,000 to 40,000 gallons per day. The initial treatment and disposal capacity estimate includes consideration of flow equalization and peak-flow capacity. Start-up wastewater treatment for the Lakeside project may be provided by a modular ENR MBR WWTP, capable of operating at the initial development flow rates or by a direct connection to the existing Trappe wastewater system. Connection to the existing Town of Trappe wastewater system is subject to the approval of the Town of Trappe, available WWTP capacity, and adequate access to the existing collection system. Following the initial section of development, the full-capacity Lakeside WWTP will be constructed in phases of approximately 100,000 gallons per day of wastewater. The Lakeside WWTP will be expanded in phases as the capacity of the then-existing Lakeside WWTP approaches 80% of the design hydraulic capacity.

Pursuant to Permit 19-DP-3460, <u>Treated treated</u> effluent from the Lakeside WWTP will be disposed of by spray irrigation on lands within the Trappe East Sewer District <u>subject to the limitations</u> and requirements set forth in Table 1 below.

If the initial section of the Lakeside project is served by the existing Town of Trappe wastewater system, wastewater flow from that section may be redirected to the full capacity Lakeside WWTP if required by the Town of Trappe. Otherwise, no wastewater capacity of the existing Trappe District wastewater treatment plant will be allocated to serve the Trappe East Sewer District.

Table 1 – Lakeside WWTP Permit 19-DP-3460 Limitations and Requirements

<u>Effluent</u>	Effluent Limitations		Monitoring Requirements		
<u>Parameter</u>					
	<b>Loading</b>		<b>Concentration</b>	<b>Monitoring</b>	Sample Type
	<u>Yearly</u>	Monthly	Monthly Average	<b>Frequency</b>	
	<u>Average</u>	Average			
Flow <sup>(1)</sup>	100,000 GPD	<u>N/A</u>	<u>N/A</u>	Continuous	Recorded
BOD <sub>5</sub>	<u>N/A</u>	<u>N/A</u>	<u>10 mg/l</u>	<u>Weekly</u>	8 hr. Comp
Suspended Solids	<u>N/A</u>	<u>N/A</u>	<u>10 mg/l</u>	<u>Weekly</u>	8 hr. Comp
Nitrite + Nitrate	<u>N/A</u>	<u>N/A</u>	Monitor Only	<u>Weekly</u>	8 hr. Comp
Total Nitrogen (N)	<u>N/A</u>	N/A	<u>3 mg/l</u>	<u>Weekly</u>	8 hr. Comp
Total Phosphorus	<u>N/A</u>	N/A	<u>0.3 mg/l</u>	<u>Weekly</u>	8 hr. Comp
Escherichia coli (E.	<u>N/A</u>	<u>N/A</u>	3 MPN/100ml	<u>Weekly</u>	Grab <sup>(2)</sup>
<u>coli)</u>					

- (1) As stated in Permit 19-DP-3460, a major permit modification is required for any future expansion of the Lakeside WWTP. Such expansion shall also require an amendment to this Plan, including a certification by the Talbot County Planning Commission that the amendment is consistent with the Talbot County Comprehensive Plan pursuant to Md. Code Ann., Environment § 9-506(a)(1)(ii).
- (2) As stated in Permit 19-DP-3460, grab samples must be obtained from the effluent line as it enters the pump chamber.

Based upon the discharge permit previously issued by MDE for the Trappe East Sewer District, treated wastewater from the Lakeside WWTP must meet minimum treatment and flow limitations of BODS - 10 mg/1, Suspended Solids - 10 mg/1, Flow - 540,000 gpd (Ultimate Permitted Flow) 37,500 gpd (Permitted Flow at Start-Up Phase), Total Nitrogen - 8 mg/1, Total Phosphorus - 3 mg/1, and Feeal Coliform 3 MPN/100m1. The Trappe East MBR ENR wastewater treatment plant will be capable of exceeding minimum nutrient effluent standards with effluent nutrient levels of Total Nitrogen - 3 mg/1, Total Phosphorus - .3 mg/1.

The following table shows the equivalent dwelling units ("EDUs") for all phases of the Lakeside development as confirmed by the Town of Trappe and the developer on June 30, 2023, as well as the current sewer classifications therefor:

Phase 1: Lakeside Village			
	<u>EDUs</u>	Classification	
Phase 1, Section A -	<u>94</u>	<u>S-1</u>	
Residential			
Phase 1, Section A -	<u>6</u>	<u>S-1</u>	
Community Use			
(estimated)			
<u>Phase 1, Section B – </u>	<u>25</u>	<u>S-1</u>	
Residential			
Phase 1, Section B.2	<u>6</u>	<u>S-1</u>	
- Residential			
Phase 1, Section C -	<u>200</u>	<u>S-1</u>	
Residential			
Phase 1, Section C -	<u>6</u>	<u>S-1</u>	
Community Use			
(estimated)			
Phase 1, Section D -	<u>180</u>	<u>S-1</u>	
Residential			
<u>Total EDUs</u>	<u>517 (12</u>		
	<u>estimated)</u>		

Phase 2: Lakeside Park (all estimated)			
	<u>EDUs</u>	Classification	
Residential	<u>153</u>	<u>S-1</u>	
Residential	<u>340</u>	<u>S-2</u>	
Commercial	<u>56</u>	<u>S-1</u>	
<u>Total EDUs</u>	<u>549</u>		

Phase 3: Lakeside Commons (all estimated)			
	<u>EDUs</u>	Classification	
Residential	<u>500</u>	<u>S-2</u>	
Total EDUs	500		

Phase 4: Lakeside Run (all estimated)			
	<b>EDUs</b>	Classification	
Residential	<u>386</u>	<u>S-2</u>	
Residential	<u>115</u>	<u>S-3</u>	
Total EDUs	<u>501</u>		

Phase 5: Lakeside Center (all estimated)			
EDUs		Classification	
Residential	<u>500</u>	<u>S-1</u>	
Total EDUs	500		

Phase 6: Shops at Lakeside (all estimated)			
EDUs Classification		Classification	
Commercial:	<u>307</u>	<u>S-2</u>	
Total EDUs	<u>307</u>		

Total Number of EDUs in S-1: 1,226

Total Number of EDUs in S-2: 1,533

Total Number of EDUs in S-3: 115

Total Number of EDUs for the Lakeside Development: 2,874

The foregoing phases and EDUs are based on the June 25, 2021 Phasing Plan approved by the Town of Trappe. As noted above, the EDUs for the community uses for Phase 1 and Phases 2 through 6 are estimates only. This information is included in this Plan at MDE's request<sup>1</sup>. The phases represent defined land uses only and do not represent the timing or sequence of development; provided, however, that all phases of the Lakeside development, or portions thereof, classified as S-2 or S-3 shall be reclassified as S-1 through an amendment to this Plan before receiving sewer service from the Town of Trappe. EDUs will be allocated in accordance with applicable Town laws, policies, and regulations as lots are subdivided and commercial uses are developed based on actual flows and permitted capacity. Flows shall be monitored by the Town, with updates provided to the County at least annually, whether at an annual CWSP meeting or by separate letter to the County Engineer. The Town shall also promptly notify the County Engineer of any updates to the Phasing Plan for the Lakeside development, including any changes in the phasing or allocation of EDUs from those set forth hereinabove. Any changes in the phasing or allocation of EDUs from those set forth hereinabove shall not require an update to the CWSP; however, such information may be incorporated as part of the amendment(s) proposing to reclassify any phases of the Lakeside Development from S-2 or S-3 to S-1.

The information presented in Figure 24 is for planning purposes. The Sewer Districts have been defined using a blue line with various colors, shading and hatches defining the areas of existing sewer service and future sewer service areas and the Priority Funding Areas as defined by the Town of Trappe and the County and those Priority Funding Areas approved by the State. This map does not impose an obligation on Talbot County or the Town of Trappe to provide sewer and/or sanitary sewer service to areas not presently being served. Prior to extending sewer service into the growth areas, the Town of Trappe would assure that the existing sewer system has capacity to

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On November 4, 2020, D. Lee Currey, Director of MDE's Water and Science Administration, sent a letter to County Council President Chuck Callahan, in which he stated that the EDUs for the different phases of the Lakeside development are "necessary to assess the adequacy of the water and sewer systems to accommodate and serve those EDUs." Mr. Currey further requested that the County provide "updated EDUs for Phases 2 and 3 in the next Amendment" for the Town of Trappe. On April 24, 2023, Dinorah Dalmasy, Program Manager for MDE's Water and Science Administration, sent a letter to Council President Callahan, in which she requested that the County provide updated EDUs for "all phases" of the Lakeside development in an update to the CWSP. On July 21, 2023, Ms. Dalmasy sent another letter to the County Council President in which she clarified that MDE was seeking the finalized EDUs for Phase 1 of the Lakeside Development only and a best estimate of the EDUs for all other phases thereof.

serve the growth areas and the safety and adequacy of its public sewer supply system in maintained for all its users.

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<u>Purpose</u>: This amendment is intended to incorporate Resolution No. 338 and Amendment No. 1 thereto into Resolution No. 347.