

**MEMORANDUM OF UNDERSTANDING BY AND AMONGST THE TOWNSHIP OF WINSLOW, THE  
CAMDEN COUNTY MUNICIPAL UTILITIES AUTHORITY AND THE NEW JERSEY PINELANDS  
COMMISSION**

This **Memorandum of Understanding** is made as of this \_\_\_\_\_ day of \_\_\_\_\_ in the year of 2010 by and amongst

The **Township of Winslow** (hereinafter, “Winslow”), a municipal corporation of the State of New Jersey;

The **Camden County Municipal Utilities Authority** (hereinafter, “CCMUA”), a municipal authority of the State of New Jersey; and,

The **New Jersey Pinelands Commission** (hereinafter, “Pinelands Commission”), an independent political subdivision of the State of New Jersey, in but not of the Department of Environmental Protection.

**WHEREAS**, the CCMUA’s Winslow Township Wastewater Treatment Plant (hereinafter, “WWWTP”)(NJPDES permit NJ0061760), located within the Great Egg Harbor River Basin, has reached its current wastewater treatment and recharge capacity and Winslow is currently prohibited by the New Jersey Department of Environmental Protection (hereinafter, “NJDEP”) from permitting additional sewer connections;

**WHEREAS**, site constraints and other considerations make it infeasible for the CCMUA to further expand the WWWTP;

**WHEREAS**, the CCMUA has proposed to connect the WWWTP, which it has operated since 1990, to the CCMUA’s regional sewage collection system, located within the Delaware River basin;

**WHEREAS**, upon connection to the CCMUA’s regional sewage collection system, the CCMUA has proposed to decommission the WWWTP including its nearby Infiltration/ Percolation facility (hereinafter, “I/P Facility”), which recharges approximately 2.25 million gallons per day (hereinafter, “mgd”) of treated wastewater from the WWWTP into the K/C Aquifer and thereby has the potential to contribute to the base-flow of the headwaters of the Great Egg Harbor River that flows through the Pinelands Area as well as the Great Egg Harbor River Basin;

**WHEREAS**, upon connection to the CCMUA’s regional sewage collection system, all current and future wastewater from the WWWTP will be conveyed to the CCMUA’s Delaware No. 1 Water Pollution Control Facility (NJPDES permit NJ0026182) located in the City of Camden;

**WHEREAS**, conveying wastewater from the WWWTP to the CCMUA’s Delaware No. 1 Water Pollution Control Facility will result in the inter-basin transfer of water between watersheds;

**WHEREAS**, conveying wastewater from the WWTP to the CCMUA's Delaware No. 1 Water Pollution Control Facility has the potential to reduce base-flows of the headwaters of the Great Egg Harbor River Basin;

**WHEREAS**, conveying wastewater from the WWTP to the CCMUA's Delaware No. 1 Water Pollution Control Facility has the potential to reduce low-flows of the headwaters of the Great Egg Harbor River Basin;

**WHEREAS**, without offsetting measures, a reduction in base-flows or low-flows of the headwaters of the Great Egg Harbor River Basin will potentially have an adverse ecological impact on the Pinelands Area;

**WHEREAS**, appropriate offsetting measures are hereinafter outlined which will address potential adverse ecological impacts on the Pinelands Area which may occur as a result of a reduction in base-flows or low-flows of the headwaters of the Great Egg Harbor River Basin;

**WHEREAS**, conveying wastewater from the WWTP to the CCMUA's Delaware No. 1 Water Pollution Control Facility will obviate the need to discharge any wastewater into the WWTP's I/P Facility and thus will eliminate a potential source of pollutant loading within the Great Egg Harbor River Basin thereby potentially improving water quality therein;

**WHEREAS**, without an offsetting, non-K/C Aquifer source of water, Winslow will continuously increase its water-supply diversions from the K/C Aquifer as development therein increases;

**WHEREAS**, Winslow currently purchases not less than 1.5 mgd of water exclusively for use within the Great Egg Harbor River Basin-portion of the Township through annual contracts with New Jersey American Water (hereinafter, "NJAW");

**WHEREAS**, under the circumstances provided hereinafter, Winslow may be required to purchase additional water from a non-K/C Aquifer supplier of water in amounts sufficient to ensure that it not continuously increase its annual water-supply diversions from the K/C Aquifer as development therein increases;

**WHEREAS**, the Pinelands Comprehensive Management Plan at N.J.A.C. 7:50-6.86(a) provides that to the maximum extent practical the inter-basin transfer of water between watersheds should be avoided;

**WHEREAS**, the Pinelands Comprehensive Management Plan at N.J.A.C. 7:50- 6.86(e) provides that increases in water-supply diversions from the K/C Aquifer may be permitted only if it is demonstrated that said increases will not result in any adverse ecological impact on the Pinelands Area;

**WHEREAS**, Winslow and the CCMUA seek endorsement of the proposal to decommission the WWTP and convey all current and future wastewater to the CCMUA's Delaware No. 1 Water Pollution Control Facility;

**NOW, THEREFORE**, Winslow, the CCMUA and the Pinelands Commission hereby agree as follows:

A. To Alleviate Impacts on Average Streamflow

1. Upon execution of this Memorandum of Understanding (hereinafter, "MOU") and for so long as Winslow's wastewater is conveyed to the CCMUA's Delaware No. 1 Water Pollution Control Facility, or anywhere else outside of the Great Egg Harbor River Basin, and for so long as Winslow's treated wastewater is not recharged into the K/C Aquifer, Winslow shall continue to purchase not less than 1.5 mgd of water exclusively for use within the Great Egg Harbor River Basin-portion of the Township through annual contracts with NJAW, or obtain said water amount from another non-K/C Aquifer water source;
2. Upon execution of this MOU and for so long as Winslow's wastewater is conveyed to the CCMUA's Delaware No. 1 Water Pollution Control Facility, or anywhere else outside of the Great Egg Harbor River Basin, and for so long as Winslow's treated wastewater is not recharged into the K/C Aquifer, in addition to the water obtained pursuant to paragraph 1 hereof, Winslow shall purchase or obtain additional water amounts from a non-K/C Aquifer water source in accordance with the terms hereof;
3. For all development within the Township for which the approvals, permits or other authorizations required to begin work have been issued after the execution of this MOU, but not including development currently under construction or development for which a NJDEP Safe Drinking Water permit has been issued prior to the execution of this MOU, Winslow shall increase its annual water purchase amount from NJAW, or another non-K/C Aquifer water source, in accordance with the lesser of the following: (a) 270 gallons per day for each new dwelling unit and 0.12 gallons per day for each square foot of new nonresidential construction; or, (b) the actual water usage as recorded between March 1<sup>st</sup> of each year and February 28<sup>th</sup> of the following year for each new dwelling unit and each new nonresidential structure;
4. Winslow shall annually provide a report detailing the actual water usage as recorded between March 1 of each year and February 28 of the following year for all new dwelling units and all new nonresidential structures to the Pinelands Commission not later than April 1 of each year. Winslow's obligation to provide annual water usage reports shall become effective upon execution of this MOU;
5. Winslow shall annually provide a copy of its annual water purchase contracts with NJAW, or another non-K/C Aquifer water source, to the Pinelands Commission not later than April 1 of each year. Winslow's obligation to provide annual water purchase contracts shall become effective upon execution of this MOU;
6. Upon execution of this MOU and for so long as its Administrative Consent Order with the NJDEP, dated August 9, 2007, which is attached hereto and incorporated herein by

reference, remains in effect, Winslow shall continue to comply with the Capacity Assurance Program's Inflow and Infiltration requirements of said Administrative Consent Order;

B. Manage Growth and Well Usage Impacts

7. Wastewater Flows Not Exceeding 2.9 mgd (up to approximately 0.7 mgd of Additional Wastewater Flow): The CCMUA shall simultaneously construct two parallel sanitary sewer lines which will connect the WWTP to the CCMUA's regional sewerage collection system and allow for the conveyance of wastewater from the WWTP to the Delaware No. 1 Water Pollution Control Facility. One of the two sewer lines, to be known as the Phase I line, shall be designed to accommodate up to 2.9 mgd of wastewater flow. So long as the ninety-day average wastewater flow in the Phase I line does not exceed eighty percent of 2.9 mgd (i.e., 2.32 mgd) only the Phase I line shall be permitted to handle wastewater;
8. Wastewater Flows Exceeding 2.9 mgd but Not Exceeding 3.5 mgd (up to approximately 1.3 mgd of Additional Wastewater Flow): The other of the two sewer lines, to be known as the Phase II line, shall be designed to accommodate an additional 600,000 gallons per day of wastewater flow. When the ninety-day average wastewater flow in the Phase I line has reached eighty percent of its 2.9-mgd-capacity (i.e., 2.32 mgd) the CCMUA may activate the Phase II line if, and only if, (a) decommissioning the WWTP; (b) not recharging Winslow's treated wastewater therefrom into the K/C Aquifer and conveying wastewater therefrom outside of the Great Egg Harbor River Basin; and, (c) Winslow's K/C well-management practices are not causing an Adverse Ecological Impact (as defined by paragraph 16 hereof) upon the Pinelands Area (more specifically, the Great Egg Harbor River Basin);
9. Wastewater Flows Exceeding 3.5 mgd (Wastewater Flows in Excess of Winslow's Anticipated Build-out): Winslow agrees that it shall not seek to permit additional development to occur that would increase wastewater flow in excess of 3.5 mgd unless, at that time, there is no Adverse Ecological Impact (as defined by paragraph 16 hereof) upon the Pinelands Area (more specifically, the Great Egg Harbor River Basin) resulting from (a) decommissioning the WWTP; (b) not recharging Winslow's treated wastewater therefrom into the K/C Aquifer and conveying wastewater therefrom outside of the Great Egg Harbor River Basin ; and, (c) Winslow's K/C well-management practices. Winslow agrees that it shall obtain the CCMUA's approval prior to conveying additional wastewater flow in excess of 3.5mgd. The CCMUA shall not approve the conveyance of wastewater flow in excess of 3.5 mgd absent NJDEP's approval of an amendment to the Camden County Wastewater Management Plan permitting such increased wastewater flow;
10. As soon as is practicable following execution of this MOU and prior to the conveyance of any wastewater flows through the Phase I line, Winslow shall execute a contract with the U.S. Geological Survey (hereinafter, "USGS") whereby USGS will conduct an Aquifer Study of the area where Winslow's K/C Aquifer wells and I/P Facility (hereinafter,

“Study Area”) are located. The Aquifer Study shall include the creation of a groundwater model capable of (1) ascertaining current hydrological conditions relative to stream base-flow and related water table elevations in the headwaters of the Great Egg Harbor River Basin; and, (2) predicting likely changes in stream base-flow and water table elevations in the headwaters of the Great Egg Harbor River Basin resulting from possible changes in water withdrawal amounts from Winslow’s K/C Aquifer wells and concurrent changes to inputs to the I/P Facility. On the basis of the results produced by using the groundwater model, the contract shall also require USGS to develop three well management/sequencing options and determine the difference between current stream base-flow and related water table elevations in the headwaters of the Great Egg Harbor River Basin and simulated stream base-flow and related water table elevations in the headwaters of the Great Egg Harbor River Basin based on the effect of each of the three well management/sequencing options. All costs related to the USGS Aquifer Study shall be the sole responsibility of Winslow;

11. Winslow shall manage/sequence the use of its K/C Aquifer wells in accordance with the results of the Aquifer Study, or shall do so in accordance with another method acceptable to the Pinelands Commission which acceptance shall not be unreasonably withheld, such that it will thereby minimize the impacts of the use of its K/C Aquifer wells on stream base-flow, low-flow and related water table elevations in the headwaters of the Great Egg Harbor River Basin. Winslow’s obligation to manage/sequence the use of its K/C Aquifer wells in accordance with this paragraph shall become effective immediately upon completion of the Aquifer Study and shall be an ongoing obligation for so long as Winslow’s wastewater is conveyed to the CCMUA’s Delaware No. 1 Water Pollution Control Facility, or anywhere else outside of the Great Egg Harbor River Basin, and for so long as Winslow’s treated wastewater is not recharged into the K/C Aquifer;
12. Winslow shall provide well water withdrawal information to the Pinelands Commission on an annual basis not later than April 1 of each year. Winslow’s obligation to provide annual well water withdrawal information shall become effective upon execution of this MOU;

#### C. Monitoring, Impact Alleviation and Optimal Management

13. Upon execution of this MOU, the CCMUA, with the assistance of the USGS, shall convert or upgrade, as necessary, the Great Egg Harbor River-stream monitoring stations located at USGS Site No. 01410820 (Great Egg Harbor River near Blue Anchor NJ) and at USGS Site No. 0140784 (Great Egg Harbor River near Sicklerville)(hereinafter, the “Study Sites”) to continuous stream monitoring stations. The monitoring provided by these continuous monitoring stations shall continue until such time as the Commission has accepted Winslow’s demonstration (which acceptance shall not be unreasonably withheld) that any remaining potential development (including redevelopment of existing, developed areas) within the Township will not increase K/C well withdrawals by more than 5% (hereinafter, the “Maximum K/C Well Withdrawal”), and until Winslow’s K/C Aquifer quarterly well withdrawals have not increased in three consecutive years by more than 5% from the corresponding quarter in the prior years.

Winslow shall not increase its K/C well withdrawals above the amount determined to be the Maximum K/C Well Withdrawal. All costs related to said monitoring shall be the sole responsibility of the CCMUA. The USGS shall provide all stream monitoring data to CCMUA on a monthly basis not later than 10 days following the last day of the preceding month.;

14. The CCMUA shall provide the stream monitoring data obtained from the Great Egg Harbor River monitoring station(s) to Winslow and the Pinelands Commission on a monthly basis not later than 30 days following the last day of the preceding month, or within 10 days of receiving said data from the USGS, whichever occurs later. CCMUA's obligation to provide monthly stream monitoring data shall become effective upon execution of this MOU;
15. In the event that the stream-monitoring data obtained from the Great Egg Harbor River monitoring stations demonstrates that decommissioning the WWTP or Winslow's K/C well-management practices are causing an Adverse Ecological Impact on the Pinelands Area (more specifically, the Great Egg Harbor River Basin), Winslow shall, within 90 days of the occurrence of the Adverse Ecological Impact, take appropriate measures to eliminate the Adverse Ecological Impact including, but not limited to,: purchasing additional water from a non-K/C Aquifer source; implementing mandatory water conservation measures; revising the Aquifer Study to reflect this stream-monitoring data and manage the use of its K/C Aquifer wells in accordance with the results of the revised Aquifer Study such that its revised well-management practices will eliminate the Adverse Ecological Impact of the use of its K/C Aquifer wells on water table elevation within the Great Egg Harbor River Basin and on base-flows and low-flows of the headwaters of the Great Egg Harbor River; providing for recharge of stormwater, treated wastewater or other suitable recharge waters to offset the impact; and, implementing a moratorium on all additional sewer connections. The measures set forth in this section are in no particular order of priority and the implementation of these, or other, measures shall be at the discretion of Winslow so as to carry out the effect of this provision;

#### D. Definition and Duration of Adverse Ecological Impact

16. Using all streamflow monitoring data available for the Study Sites as well as for the three Index Sites (USGS Site No. 01409400 (Mullica River near Batsto), USGS Site No. 01411456 (Little Ease Run near Clayton) and USGS Site No. 0411000 (Great Egg Harbor River at Folsom)), Winslow Township shall, upon execution of this MOU, develop individual regression models for each month of the year by plotting the log - log relationship between the daily flows at each of the Study Sites and each of the three Index Sites. Winslow Township shall plot the prediction interval (the range established by each of the individual regression models within which all future daily streamflows at each of the Study Sites may be expected, with 95% assurance, to occur). Following decommissioning of the WWTP Winslow Township shall measure and record flows for the Study Sites on a daily basis and plot them against corresponding daily flows for the Index Sites. If two or more of the data points plotted in any month at either Study Site fall below the prediction interval for two of the three Index Sites in three of any 12

consecutive months (hereinafter, "Scenario A"); or, the same month for three consecutive years (hereinafter, "Scenario B"), then an Adverse Ecological Impact has occurred. For purposes of Scenario A, an Adverse Ecological Impact will be determined to have ceased if in two consecutive months following the determination that an Adverse Ecological Impact has occurred the applicable condition is not met. For purposes of Scenario B, an Adverse Ecological Impact will be determined to have ceased if the applicable condition is not met in the same month of the subsequent year. If a determination of Adverse Ecological Impact is made based on Scenario A, then the measures of paragraph 15 above need only be implemented until the impact is determined to have ceased. If a determination of Adverse Ecological Impact is made based on Scenario B, then the measures of paragraph 15 above need only be implemented during the particular month in question and during the two months preceding the month in question and only until the impact is determined to have ceased;

#### E. Construct Necessary Facilities

17. As soon as practicable following the execution of this MOU, the stream monitoring required pursuant to paragraph 13 hereof and the construction of the Phase I and II sanitary sewer lines shall begin; however, no wastewater shall be conveyed through said lines to the Delaware No. 1 Water Pollution Control Facility until: (1) Winslow has commenced managing/sequencing the use of its K/C Aquifer wells in accordance with paragraph 11 hereof or the CCMUA has reported for a minimum of 12 consecutive months the continuous stream monitoring data required pursuant to paragraphs 13 and 16 hereof and reliable, stage-discharge relationships for the Study Sites have been established by the USGS for the purposes of continuous stream monitoring, whichever occurs first; (2) all reports required to be delivered to the Pinelands Commission pursuant hereto have been delivered; and, (3) all water amounts required to be purchased pursuant to paragraphs 1 through 3 hereof have been purchased. If, and only if, all of the conditions of this paragraph have been satisfied, upon completion of the construction of both parallel sanitary sewer lines, the CCMUA shall decommission the WWTP, including its I/P Facility, and begin conveying wastewater to the Delaware No. 1 Water Pollution Control Facility using only the Phase I line initially. Immediately thereafter, Winslow's obligation's under paragraph 15 hereof shall become effective. The Phase II line, and any subsequent lines, may be activated if, and only if, all of the conditions set forth in this MOU regarding their activation are satisfied;
18. Upon execution of this MOU, the CCMUA shall condition all future amendments to the Camden County Wastewater Management Plan concerning the subject matter hereof upon Winslow's continuing compliance with the terms hereof;

#### F. Pinelands Commission Endorsement

19. By executing this MOU, the Pinelands Commission expresses its endorsement of the CCMUA's amendment to the Camden County Wastewater Management Plan which permits the decommissioning of the WWTP and the conveyance of wastewater to the Delaware No. 1 Water Pollution Control Facility; and,

G. Plan Compliance

20. Should the CCMUA or Winslow fail for any reason to fulfill its obligations hereunder, the CCMUA shall not permit any additional sewer connections within the area previously served by the WWTP and the Pinelands Commission shall, by way of illustration and in no way limiting the remedies available to the Pinelands Commission at law or equity, seek specific performance of the defaulting party's obligations hereunder; and, comment negatively on all future Water Allocation Permit applications; Wastewater Management Plan amendments; and, Water Quality Management Plan amendments concerning the subject matter hereof, until such time as CCMUA and/or Winslow shall resume compliance with the terms hereof. In the event the CCMUA or the Pinelands Commission intends to take any action hereunder, they shall provide all parties, including Winslow, ten (10) days written notice of its intent to take such action.

H. Effective Date & Duration

21. In accordance with N.J.S.A. 13:18A-5(h), this Memorandum of Understanding, and any subsequent amendments hereto, shall take effect following the conclusion of the Governor's review period and/or approval of the Pinelands Commission's minutes authorizing entry of this Memorandum of Understanding and then upon approval and signature by the authorized representative of all parties; the date of execution of the last signatory shall constitute the effective date and shall be written above.

22. This Memorandum of Understanding shall remain in effect unless amended by the written consent of all parties.

23. This Memorandum of Understanding may be terminated at any time by the written consent of all parties.

**IN WITNESS WHEREOF**, the parties have caused their duly authorized representatives to execute this Memorandum of Understanding on and as of the day and year first written above. This Memorandum of Understanding shall be executed in at least three original copies of which one is to be delivered to the Township of Winslow; one of which is to be delivered to the Camden County Municipal Utilities Authority; and, one of which is to be delivered to the New Jersey Pinelands Commission.

**Township of Winslow**

By: Sue Ann Metzner  
Hon. Sue Ann Metzner, Mayor

Date: 1/25/2010

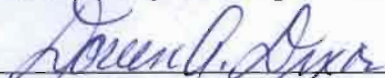
**Witnessed:**


By: [Signature]  
Name: DEBORAH A. TUCHAKJIAN  
Title: Municipal Clerk



**Camden County Municipal Utilities Authority**

**Witnessed:**

By:   
Doreen A Dixon, Chairperson

By: 

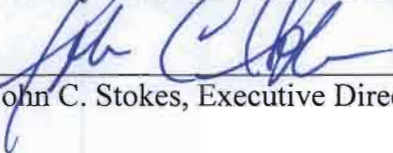
Name: Sandra Cevallos

Date: 2/1/10

Title: Asst. Authority Secretary

**New Jersey Pinelands Commission**

**Witnessed:**

By:   
John C. Stokes, Executive Director

By: 

Name: Kathleen A. Whitton

Date: 1/21/10

Title: Secretary to the Exec. Dir.