

Wastewater Capacity Analysis
Water Quality Management Plan Amendment Application
Transfer from Central STP to Northern STP
Jackson Township, Ocean County
PDS # 324021
April 26, 2024

Background:

A portion of the Central Sewer Service Area (SSA), 1,597 acres, is proposed to be transferred to the Northern SSA. The Central SSA will be reduced by this same area. An application has been filed with NJDEP for the SSA Transfer. This report is the Wastewater Capacity Analysis of the OCUA treatment facilities prepared in accordance with NJAC 7:15-4.5 (b). An analysis is required for both the Central and Northern treatment plants. The Analysis consists of the following:

1. Existing flow to treatment plant
2. Projected flows:
 - a. Additional flows generated by WQMP amendments adopted since WQMP Approval
 - b. Additional flows generated by WQMP transfer

1. Existing flows to Treatment Plant

Attached as Appendix A & B are spreadsheets for the 12 month rolling average flow volume for the most recent 5 year period. The Northern WPCF (A) is 25.3 MGD in July 2019 and the Central WPSF (B) is 22.56 in October 2019.

2. Projected Flows

- a. Attached as Appendix C & D are spreadsheets summarizing the additional estimated sewerage flows generated by site-specific WQMP amendments approved since the WQMP was adopted in November 2013. The amendments total 0.2686 MGD to the Northern WPCF and 0.882 MGD to the Central WPCF
- b. The additional flows to the Northern WPCF currently in the service area to the Central WPCF are summarized in Appendix E. It is estimated that 0.788 MGD additional flow will be generated to the Northern WPCF. The flow to the Central WPCF will be reduced by the same number, 0.788 MGD.

Summary:

- a. Northern WPCF:
The OCUA Northern WPCF is permitted to discharge up to 32 MGD of treated wastewater to the Atlantic Ocean. The highest existing flow over the most recent five-year period is 25.3 MGD. The total flow of the SSA Amendments approved since the WQMP was approved in 2013 is 0.289 MGD and the estimated

flow for the portion of the Central SSA to be transferred to the Northern WPCF is 0.788 MGD. Adding the 1.08 MGD to the 25.3 MGD results in a projected additional flow of 26.4 MGD, significantly less than the 32 MGD permitted flow. The addition of the wastewater flow from the approved WQMP amendments and proposed transfer would not cause the wastewater generation potential of the expanded SSA to exceed the permitted capacity of the OCUA Northern WPCF.

b. Central WPCF:

The OCUA Northern WPCF is permitted to discharge up to 32 MGD of treated wastewater to the Atlantic Ocean. The highest existing flow over the most recent five-year period is 22.6 MGD. The total flow of the SSA Amendments approved since the WQMP was approved in 2013 is 0.088 MGD. The estimated flow for the portion of the Central SSA to be transferred to the Northern WPCF will reduce the flow to the Central WPCF by 0.788 MGD. The wastewater flow from the approved WQMP amendments and reduction of flow from the proposed transfer would not cause the wastewater generation potential of the expanded SSA to exceed the permitted capacity of the OCUA Central WPCF.



Ian M. Borden, P.P., President
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Appendix A

Ocean County Utilities Authority - Northern Water Pollution Control Facility 12 Month Rolling Average Flow Volume - Most Recent 5 Year Period		
Date	Monthly ADF (MGD)	12 Month Rolling Average (MGD)
April 30, 2019	23.83	25.30
May 31, 2019	25.49	25.28
June 30, 2019	24.34	25.25
July 31, 2019	23.56	25.30
August 31, 2019	21.98	25.19
September 30, 2019	21.57	25.03
October 31, 2019	21.17	24.78
November 30, 2019	20.91	24.19
December 31, 2019	23.20	23.77
January 31, 2020	22.55	23.37
February 29, 2020	22.20	23.09
March 31, 2020	22.90	22.81
April 30, 2020	22.87	22.73
May 31, 2020	22.32	22.46
June 30, 2020	23.39	22.38
July 31, 2020	22.87	22.33
August 31, 2020	22.26	22.35
September 30, 2020	22.12	22.40
October 31, 2020	21.89	22.46
November 30, 2020	23.21	22.65
December 31, 2020	25.31	22.82
January 31, 2021	24.04	22.95
February 28, 2021	24.76	23.16
March 31, 2021	24.88	23.33
April 30, 2021	25.33	23.53
May 31, 2021	22.86	23.58
June 30, 2021	24.31	23.65
July 31, 2021	26.56	23.96
August 31, 2021	24.56	24.15
September 30, 2021	23.33	24.25
October 31, 2021	22.32	24.29
November 30, 2021	22.00	24.19
December 31, 2021	21.39	23.86
January 31, 2022	22.06	23.70
February 28, 2022	22.63	23.52
March 31, 2022	22.30	23.30
April 30, 2022	23.52	23.15
May 31, 2022	24.03	23.25
June 30, 2022	22.73	23.12
July 31, 2022	22.00	22.74
August 31, 2022	21.19	22.46
September 30, 2022	21.28	22.29
October 31, 2022	22.69	22.32
November 30, 2022	22.36	22.35
December 31, 2022	24.29	22.59
January 31, 2023	23.72	22.73
February 28, 2023	23.18	22.77
March 30, 2023	23.20	22.85
April 30, 2023	22.65	22.78
May 31, 2023	24.81	22.84
June 30, 2023	22.57	22.83
July 31, 2023	22.53	22.87
August 31, 2023	21.84	22.93
September 30, 2023	24.40	23.19
October 31, 2023	25.06	23.38
November 30, 2023	22.74	23.42
December 31, 2023	26.00	23.56
January 31, 2024	29.14	24.01
February 29, 2024	25.18	24.18
March 31, 2024	29.26	24.68

Appendix B

Ocean County Utilities Authority - Central Water Pollution Control Facility 12 Month Rolling Average Flow Volume - Most Recent 5 Year Period		
Date	Monthly ADF (MGD)	12 Month Rolling Average (MGD)
April 30, 2019	20.78	21.92
May 31, 2019	23.45	22.09
June 30, 2019	24.24	22.31
July 31, 2019	24.63	22.44
August 31, 2019	23.85	22.55
September 30, 2019	21.82	22.51
October 31, 2019	21.37	22.56
November 30, 2019	20.44	22.44
December 31, 2019	22.17	22.39
January 31, 2020	19.77	22.13
February 29, 2020	19.18	21.95
March 31, 2020	19.99	21.81
April 30, 2020	20.91	21.82
May 31, 2020	20.45	21.57
June 30, 2020	21.40	21.33
July 31, 2020	23.29	21.22
August 31, 2020	23.20	21.16
September 30, 2020	21.68	21.15
October 31, 2020	21.26	21.14
November 30, 2020	21.58	21.24
December 31, 2020	22.30	21.25
January 31, 2021	21.06	21.36
February 28, 2021	21.59	21.56
March 31, 2021	20.44	21.60
April 30, 2021	20.74	21.58
May 31, 2021	20.85	21.61
June 30, 2021	22.48	21.70
July 31, 2021	24.81	21.83
August 31, 2021	23.57	21.86
September 30, 2021	21.76	21.87
October 31, 2021	19.67	21.74
November 30, 2021	18.41	21.47
December 31, 2021	18.58	21.16
January 31, 2022	19.08	21.00
February 28, 2022	19.25	20.80
March 31, 2022	19.10	20.69
April 30, 2022	19.85	20.62
May 31, 2022	21.35	20.66
June 30, 2022	21.22	20.55
July 31, 2022	22.19	20.33
August 31, 2022	20.51	20.08
September 30, 2022	19.34	19.88
October 31, 2022	21.18	20.00
November 30, 2022	19.36	20.08
December 31, 2022	20.77	20.27
January 31, 2023	19.57	20.31
February 28, 2023	18.53	20.25
March 30, 2023	19.78	20.30
April 30, 2023	19.57	20.28
May 31, 2023	20.67	20.22
June 30, 2023	20.79	20.19
July 31, 2023	21.98	20.17
August 31, 2023	21.21	20.23
September 30, 2023	21.10	20.37
October 31, 2023	20.83	20.35
November 30, 2023	19.13	20.33
December 31, 2023	21.50	20.39
January 31, 2024	24.28	20.78
February 29, 2024	20.87	20.98
March 31, 2024	23.81	21.31

WQMP Amendments to Ocean County Northern WTP

Appendix C

WQMP Amendments Approved after November 2013 Northern WPCF

<u>Name</u>	<u>Municipality</u>	<u>File #</u>	<u>Date</u>	<u>ADF</u>
Clinton Avenue	Lakewood	20141125	11/25/2014	0.0176
Cedar Swap Development	Jackson	20150319	3/19/2015	0.0015
Congregate Care Center	Lakewood	20150909	9/9/2015	0.0020
Harms & Pinnacle	Howell	20151019	10/19/2015	0.0180
Sunnyside (1)	Howell	20151019	10/19/2015	0.0000
BJ's Wholesale (Greenleaf) (1)	Howell	20151113	11/13/2015	0.0000
Yeshivah Gedolah Bais Yisroel	Lakewood	20170330	3/30/2017	0.0025
Mill Club Shopping Center	Howell	20170404	4/3/2017	0.0144
Harms & Pinnacle	Howell	20180312	3/12/2018	0.0180
Mesivta Nezer Hatorah and Salem Street	Lakewood	20180828	8/28/2018	0.0072
Firmino Property	Brick	20181114	11/14/2018	0.0003
Plumsted Outfall Relocation	Plumsted	20190411	4/11/2019	0.0000
Clearstream Subdivision	Jackson	20191001	1/1/2019	0.0015
Brick Township Police Department Operation:	Brick	20191119	11/19/2019	0.0007
Adventure Crossing	Jackson	20200804	8/4/2020	0.0580
Eagle Oaks Golf Club Carolina House	Howell	20210518	5/18/2021	0.0032
GSS Industries	Howell	20210723	7/23/2021	0.0012
The Boulevard Office Retail Plaza	Jackson	20210727	7/27/2021	0.0043
Royale Property Subdivision	Jackson	20210727	7/27/2021	0.0015
Jackson Diner	Jackson	20210917	9/17/2021	0.0074
View at Monmouth Manor	Howell	20220304	5/4/2022	0.0957
Megan Associates	Jackson	20220513	5/13/2022	0.0032
20 Airport Road	Lakewood	20230322	3/22/2023	0.0095
Hope Road LLC (Schindler Court)	Jackson	20240308	3/8/2024	0.0009
Total				0.2686

(1) WQMP Amendment was to correct mapping errors.

WQMP Amendments to Ocean County Central WTP

Appendix D

WQMP Amendments Approved after November 2013
Central WPCF

<u>Name</u>	<u>Municipality</u>	<u>File #</u>	<u>Date</u>	<u>ADE</u>
Freedom Village at Toms River	Toms River	20140401	4/1/2014	0.0165
Toms River Senior Affordable Apts Toms	Toms River	20150512	5/12/2015	0.0122
Route 70 Townhouses	Manchester	20151221	12/21/2015	0.0118
Ocean County WMP - Island Beach SP	Berkeley	20151230	12/30/2015	0.0240
Norma Place Subdivision	Toms River	20171120	11/20/2017	0.0009
Beachwood Borough Forecastle Avenue	Beachwood	20210520	5/20/2021	0.0021
Homes for All Manitou Park	Berkeley	20230517	5/17/2023	0.0132
2030-2040 Whitesville Road Subdivision	Toms River	20230517	12/20/2023	0.0021
Oceanic Drive Toms River	Toms River	20240301	3/1/2024	0.0012
St Mary's Commercial Center	Toms River	20240301	3/1/2024	0.0042
Total				0.0882

Appendix E
WQMP Amendment from Central to North WPCF

Name	ADF
Royal Grove Homes	35,100
RG 2 Assoc Major Sub	63,300
Grawtown Estates Major Sub	150,000
Grawtown Subdivisions (Lot 4, 8, 13, 14)	35,700
Grande Blvd Subdivision	10,500
East Veterans house of worship	1,200
East Veterans Redevelopment	75,000
Bowman Redevelopment	100,000
R-1 zone North of East Veterans	20,000
Grawtown Road Redevelopment	75,000
Pine Rock Major Subdivision	13,800
Hunter Major Subdivision	5,400
Zolty Major Subdivision	6,900
361Grawtown Major Sub	23,550
54Whitesville Major Sub	9,075
26 Whitesville	1,200
Swanborne, Phase 1 thru 5	92,700
Denton Pines Major Subdivision	12,300
Denton Holding Major Subdivision	7,200
South Hope Redevelopment	25,000
Whitesville Redevelopment	25,000
<i>Total (MGD)</i>	<i>0.7879</i>