

RESOLUTION NO. 2015099

RE: ESTABLISHING PART COUNTY SEWER DISTRICT NO. 8
AND ZONES OF ASSESSMENT 8A AND 8B IN THE
TOWN OF HYDE PARK, DUTCHESS COUNTY

Legislators MICCIO, SAGLIANO, PERKINS, FARLEY, and IGNAFFO offer the following and move its adoption:

WHEREAS, the New York State Legislature, by Chapter 592 of the Laws of 1991 (§1142, Public Authorities Law), created the Dutchess County Water & Wastewater Authority (WWA), and

WHEREAS, the WWA is entering into an Agreement, with the Town of Hyde Park, owner of the Greenfields Sewer System, regarding the WWA's acquisition of that system which is located in the Town of Hyde Park; and

WHEREAS, the WWA's ability to close on this acquisition and provide sewer service to the customers of the Greenfields Sewer System is contingent on the creation of a Part County Sewer District encompassing all properties in the said sewer system, which will include a total of four hundred and three parcels, and

WHEREAS, the WWA has presented to this Legislature a notice of project pursuant to Section 1124 of the Public Authorities Law which outlines the WWA's plan to establish a Part County Sewer District #8 for the Greenfields Sewer System, located in the Town of Hyde Park, and

WHEREAS, this Legislature has before it a Map, Plan and Report entitled "Map, Plan and Report, Part County Sewer District No. 8 which was submitted to it by the WWA with the Notice of Project pursuant to Section 1124, and

WHEREAS, WWA proposes to enter into a service agreement with Dutchess County (County), on behalf of the proposed Part County Sewer District No. 8 (District) whereby the District will provide sewer service to customers within the District at rates established by WWA, and

WHEREAS, said Map, Plan and Report identifies the parcels to be included in the sewer district, describes the infrastructure to be used to provide sewer service, and provides the estimated annual cost for sewer service for the typical property in the proposed sewer district, and

WHEREAS, a portion of the Greenfields Sewer System service area, to be designated as Zone 8A, includes a total of two hundred and eighty-four parcels, consisting of one hundred ninety-four (194) single family residential properties, seventy-nine (79) townhouse properties, eight (8) two-family residences, one water plant parcel, one sewer plant parcel, and one undevelopable vacant parcel, and

WHEREAS, a portion of the Greenfields Sewer System service area, to be designated as Zone 8B, includes a total of one hundred and nineteen (119) parcels, consisting of one hundred and eighteen (118) vacant townhouse lots and one vacant open space parcel, and

WHEREAS, in order to properly allocate the capital costs and assessments within Part County Sewer District #8, it is necessary to create Zones of Assessment 8A and 8B, described in Attachment A attached hereto, and

WHEREAS, the first year cost to the typical one family home in Zone of Assessment 8A is estimated to be seven hundred and seventy-five dollars (\$775), and

WHEREAS, the first year cost to the typical undeveloped townhouse lot in Zone of Assessment 8B is estimated to be eight dollars (\$8.00), and

WHEREAS, this Legislature must create Part County Sewer District No. 8 and Zones of Assessment 8A and 8B covering the area of the Greenfields Sewer System described in "Attachment A," and

WHEREAS, this Legislature conducted a public hearing on this proposal on April 13, 2015, and heard all persons interested, and

WHEREAS, the establishment of said Part County Sewer District No. 8 will ensure an efficient sewer system for all properties within the service area, now, therefore, be it

RESOLVED that this Legislature hereby waives the notice provisions of Section 1124 of the Public Authorities Law and by this Resolution consents to this project, and be it further

RESOLVED, that it is hereby determined that all the property and property owners within the proposed Part County Sewer District No. 8 are benefited thereby and all the property and property owners benefited are included within the proposed Part County Sewer District No. 8 and it is in the public interest to create the Part County Sewer District No. 8, and be it further

RESOLVED, that a Part County Sewer District, to be known as Part County Sewer District No. 8 in the Town of Hyde Park, more particularly described in "Attachment A" attached hereto, is hereby established, and be it further

RESOLVED, that Zones of Assessment 8A and 8B within Part County Sewer District #8, which Zones of Assessment are more particularly described in Attachment A are hereby established, and be it further

RESOLVED, that this resolution is subject to permissive referendum.

CA-074-15
CRC/BB/kvh G-1217-N
3/12/15
Fiscal Impact: See attached statement

STATE OF NEW YORK

ss:

COUNTY OF DUTCHESS

This is to certify that I, the undersigned Clerk of the Legislature of the County of Dutchess have compared the foregoing resolution with the original resolution now on file in the office of said clerk, and which was adopted by said Legislature on the 13th day of April 2015, and that the same is a true and correct transcript of said original resolution and of the whole thereof.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of said Legislature this 13th day of April 2015.

CAROLYN MORRIS, CLERK OF THE LEGISLATURE

FISCAL IMPACT STATEMENT

NO FISCAL IMPACT PROJECTED

APPROPRIATION RESOLUTIONS (To be completed by requesting department)

Total Current Year Cost \$ _____

Total Current Year Revenue \$ _____
and Source

Source of County Funds (check one): Existing Appropriations, Contingency,
 Transfer of Existing Appropriations, Additional Appropriations, Other (explain).

Identify Line Items(s):

Related Expenses: Amount \$ _____
Nature/Reason:

Anticipated Savings to County: _____

Net County Cost (this year): _____
Over Five Years: _____

Additional Comments/Explanation:

Prepared by: Bridget Barclay, DCWWA

Prepared On: 03/09/15

APPENDIX "A"

Dutchess County Sewer District 8 – Zone of Assessment 8-A
Greenfields Sewer System

DESCRIPTION OF ZONE

(map and parcel listing)

The Dutchess County Sewer District 8 – Zone of Assessment 8-A shall include all those tax parcels presently indicated on the attached boundary map. These parcels are further described by the following list of tax parcel grid numbers:

6264-02-542510-0000	6264-57-588473-0000	6264-57-568441-0000
6264-02-560508-0000	6264-04-545453-0000	6264-57-609444-0000
6264-01-497502-0000	6264-04-531470-0000	6264-03-473444-0000
6264-02-523511-0000	6264-57-576466-0000	6264-57-604441-0000
6264-01-497513-0000	6264-57-577467-0000	6264-57-570442-0000
6264-04-544484-0000	6264-57-609465-0000	6264-57-562440-0000
6264-04-502480-0000	6264-57-587477-0000	6264-57-564440-0000
6264-03-498490-0000	6264-57-590470-0000	6264-57-554437-0000
6264-02-525501-0000	6264-57-591468-0000	6264-57-600439-0000
6264-04-562494-0000	6264-57-610463-0000	6264-57-578445-0000
6264-04-526490-0000	6264-03-454442-0000	6264-57-587450-0000
6264-04-529480-0000	6264-57-552436-0000	6264-57-589451-0000
6264-04-540495-0000	6264-57-558438-0000	6264-57-582447-0000
6264-57-608467-0000	6264-57-560439-0000	6264-03-443441-0000
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6264-04-509463-0000	6264-04-501436-0000	6264-57-605434-0000
6264-57-611461-0000	6264-04-540434-0000	6264-03-464443-0000
6264-57-553454-0000	6264-57-584448-0000	6264-57-611445-0000
6264-57-597455-0000	6264-04-522437-0000	6264-57-549434-0000
6264-57-607469-0000	6264-57-551435-0000	6264-57-556437-0000
6264-04-534452-0000	6264-57-607443-0000	6264-57-566441-0000
6264-57-555453-0000	6264-57-598438-0000	6264-57-560450-0000
6264-57-581468-0000	6264-57-572443-0000	6264-57-587430-0000
6264-57-612460-0000	6264-57-606442-0000	6264-57-612421-0000
6264-04-520449-0000	6264-03-483444-0000	6264-57-590423-0000
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6264-57-611425-0000	6264-03-420349-0000	6264-04-538285-0000
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6264-04-567467-0000

APPENDIX "B"

Dutchess County Sewer District 8 – Zone of Assessment 8-B
Greenfields EAST Sewer System

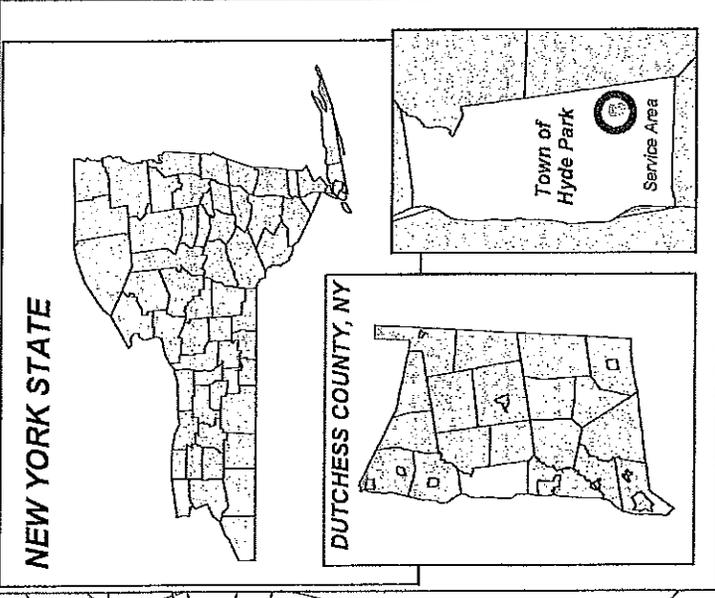
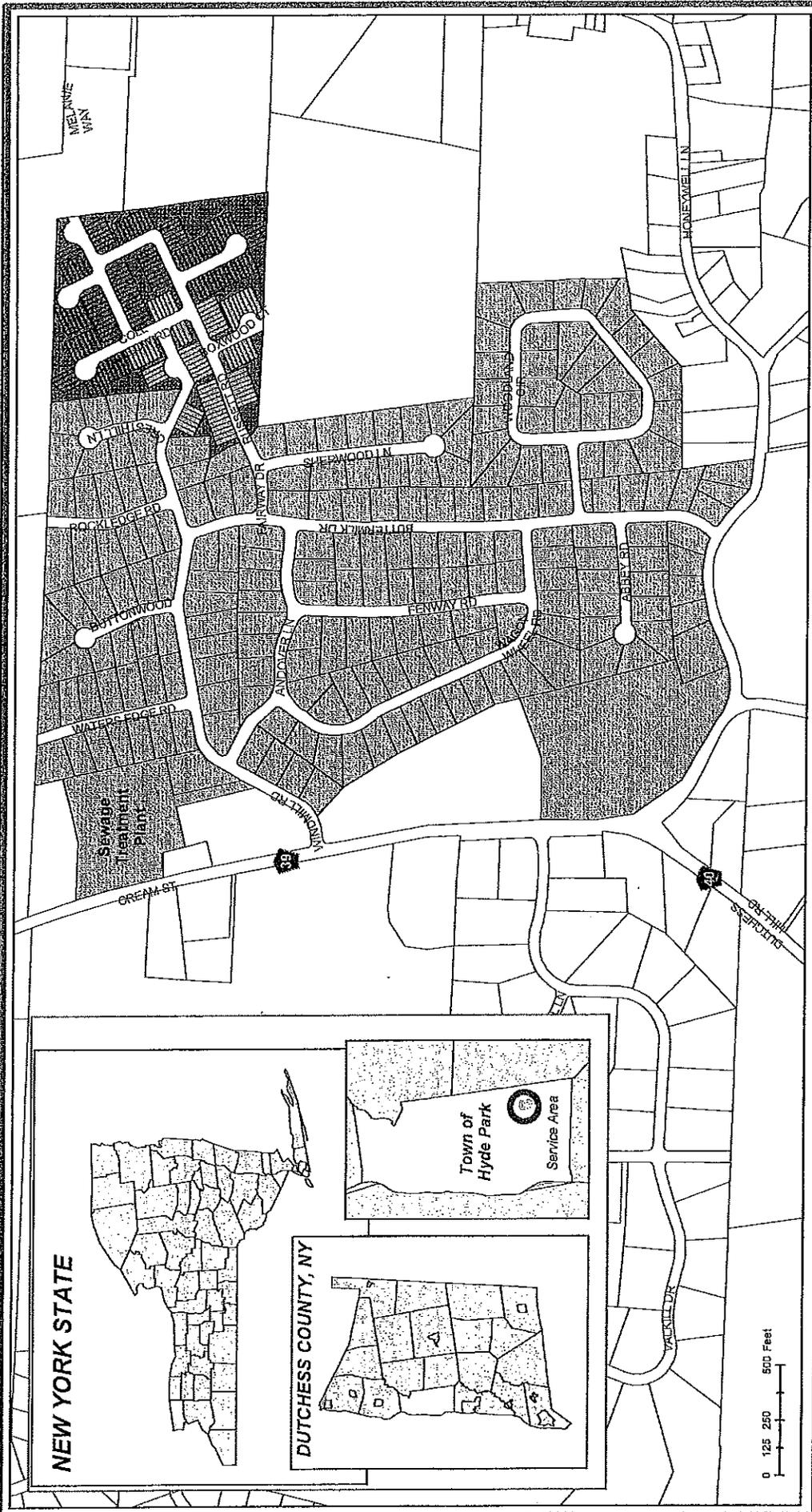
DESCRIPTION OF ZONE

(map and parcel listing)

The Dutchess County Sewer District 8 -- Zone of Assessment 8-B shall include all those tax parcels presently indicated on the attached boundary map. These parcels are further described by the following list of tax parcel grid numbers:

6264-49-603510-0000	6264-57-574493-0000	6264-58-631453-0000
6264-57-624485-0000	6264-57-596488-0000	6264-58-632451-0000
6264-58-643494-0000	6264-58-644482-0000	6264-57-623436-0000
6264-57-614479-0000	6264-58-630455-0000	6264-58-644437-0000
6264-58-643484-0000	6264-57-624467-0000	6264-57-621441-0000
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6264-57-612496-0000	6264-58-646462-0000	6264-58-642422-0000
6264-57-605493-0000	6264-58-646478-0000	6264-57-624432-0000
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6264-58-628469-0000



Greenfields Sewer System
 Hyde Park, NY
Dutchess County Sewer District 8 - Zone of Assessment 8-A
Dutchess County Sewer District 8 - Zone of Assessment 8-B

DUTCHESS COUNTY
Water & Wastewater Authority
 27 High Street
 Poughkeepsie, NY 12601

Sheet No.
1 of 1

Date Surveyed - Dutchess County Real Properties Tax Service Agency
 Prepared by - Dutchess County Water and Wastewater Authority
 Drawn By - Jonathan Churns, Project Facilities
 Date: February 2018
 Scale: 1" = 1000'
 North Arrow



DUTCHESS COUNTY

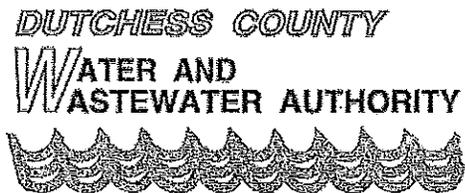
**Proposed Part County
Sewer District #8**

(Greenfields Sewer System)
Hyde Park, NY

MAP, PLAN AND REPORT

March 2015

Dutchess County Water and Wastewater Authority
Poughkeepsie, NY



March 2015

**PROPOSED PART COUNTY SEWER DISTRICT #8
(GREENFIELDS SEWER SYSTEM)**

MAP, PLAN AND REPORT

INTRODUCTION

This Map, Plan and Report contains the information required for the formation of the proposed Part County Sewer District #8. Part County Sewer District #8 is located along the southeast quadrant of the Town of the Town of Hyde Park. The District has 403 individual properties and 281 connected customers. In order to allow for the proper allocation of capital costs, the District will be further subdivided into two Zones of Assessment; Zone of Assessment 8-A and Zone of Assessment 8-B. Proposed Zone of Assessment 8-A includes two hundred and eighty-four (284) parcels, and is comprised of one hundred and ninety-four (194) detached single family developed lots, seventy-nine (79) attached single family dwellings, eight two-family dwellings, one water treatment plant parcel, one sewage treatment plant parcel, and one open-space parcel. Proposed Zone of Assessment 8-B is comprised of one hundred and nineteen (119) undeveloped lots. All developable parcels within proposed Zone of Assessment 8-A are developed with residences, while all developable parcels within proposed Zone of Assessment 8-B are vacant. It is anticipated that, when developed, properties in Zone of Assessment 8-B will connect to, and receive sewer service from, the existing Greenfields Sewer System, however significant system improvements will be required to meet the additional demand. These improvements will be separately funded by Zone of Assessment 8-B.

Upon successful formation of proposed Part County Sewer District #8 (“the District”) by the Dutchess County Legislature, ownership and operation of the Greenfields Sewer System will transfer to the Dutchess County Water and Wastewater Authority (“DCWWA”, “Authority”) in accordance with the terms and conditions set forth in an agreement between the Authority and the Town of Hyde Park (Town.) Information provided herein includes the proposed District boundaries and a list of the tax parcels that will comprise each of the future Zones of Assessment, as well as a description of the current and proposed infrastructure by which sewer service will be provided to customers.

In addition, budgetary estimates for the first year operation and maintenance costs, and capital costs, as well as a cost allocation formula, have been included with this report.

The DCWWA will enter into a contract (the “Service Agreement”) with Dutchess County on behalf of the District for the purpose of administering the provision of sewer services to all properties within the proposed Zones, with such service to be provided through the sewer system facilities as described below. The Authority will administer the District and Zones pursuant to guidelines established by the Service Agreement and collect sewer revenues. Sewer service rates will be set annually by the Authority.

HISTORY

The Greenfields Sewer System was originally constructed in the mid-1960s by a private developer. The sewer system gained its initial approval from the Dutchess County Health Department in 1967. The Town acquired the Sewer System from the private developer in 1977, and established the Greenfields Sewer District. The Engineer's Report for the Formation of the Greenfields Sewer District and Water District (July 1976) detailed that the Sewer System at that time provided service to one hundred and eighty-six (186) developed house lots, sixty-seven (67) developed townhouse lots, and an additional twelve (12) undeveloped house lots and one hundred thirty (130) undeveloped townhouse lots, for a total of 395 developed or developable lots.¹ At the time of this report, there have been constructed one hundred and ninety-four (194) single family residences, eight (8) two-family residences, and seventy-nine (79) townhouses. The undeveloped portion of the project makes up the majority of what is commonly referred to as Greenfields East, and is comprised of one hundred and eighteen (118) townhouse lots and one common open space parcel.

In 2009 the Town entered into an agreement (Greenfields East Agreement dated June 23, 2009) with the then owner ("Developer") of the one hundred and nineteen remaining vacant parcels in the "Greenfields East" section of the Greenfields subdivision. The Agreement stated in part that, "The infrastructure for water and sewer supply within the proposed Greenfields East development and the connection to the existing Greenfields water and sewer systems, and any capital improvements required in the wastewater treatment plant and water treatment plant to accommodate the new development, shall be installed at the sole cost of the Developer and at no cost to the existing homeowners." As of the date of this report, the 118 lots in proposed Zone of Assessment 8-B remain undeveloped.

In 2011 the Town of Hyde Park was awarded a Local Government Efficiency Grant from the New York State Department of State. The purpose of the grant was to support an independent evaluation of the Greenfields Sewer System, with a focus on opportunities to streamline and improve the service delivery. The grant provided for an engineering evaluation of the system and consideration of the option to transfer the assets and management of the system to the DCWWA (Engineering Evaluation.) Pursuant to the grant, the Town completed a Reorganization Study and Proposed Dissolution Plan for the Greenfields Sewer District (February, 2015) and, on February 19, 2015 conducted a public hearing on the Study and Plan. On February 23, 2015 the Town Board passed a resolution of intent to transfer ownership and management of the Town's water and sewer systems, including Greenfields Sewer, to the DCWWA.

PART COUNTY SEWER DISTRICT #8 AND ZONES OF ASSESSMENT 8-A AND 8-B

The Greenfields Sewer Service Area Zone 8-A (Sewer District Map: Appendix A) consists of two hundred eighty-four (284) properties including one hundred ninety-four (194) detached residential properties, seventy nine (79) attached residential properties, eight (8) two family dwellings, one water treatment plant, one sewage treatment plant, and one undevelopable parcel. The Greenfields Service Area Zone of Assessment 8-B (Sewer District Map: Appendix A) consists of one hundred eighteen (118) developable vacant lots and one open space lot.

¹ A subsequent purchase agreement noted 129 additional undeveloped townhouse lots, for a total of 394 lots.

PHYSICAL FACILITIES

Wastewater Treatment System

The Greenfields Wastewater Treatment System uses screening, primary clarification, rotating biological contactors, secondary clarification, sand filtration, chlorine contact chamber, post aeration and outfall to discharge a permitted flow to a tributary of the Fall Kill Creek before draining to the Hudson River. A generator provides power in the event of a power failure. The plant's SPDES permit flow limit is 132,000 GPD.

Sewer Collection System

The Greenfields Sewer District collection system is a network of gravity mains and manholes with three main trunk lines converging at the wastewater treatment plant, installed between 1950 and 1970. The collection system is located solely within proposed Zone of Assessment 8-A. At this time there are no sewer collection mains or house service laterals within proposed Zone of Assessment 8-B.

SYSTEM CAPACITY EVALUATION

The wastewater treatment plant is permitted for a monthly average flow of 132,000 gpd. The NYSDEC calculated flow for the developed area of Greenfields is 91,325 (based on 281 developed residential units, an average of 2.5 bedrooms per unit, and a design standard flow of 130 gpd per bedroom.) The 2013 average daily flow to the Greenfields WWTP was 70,000 gpd, versus an average daily demand in the co-terminus Water District of 42,700 gpd. The evaluating engineer determined peak flow to the plant is expected to be 194,000 gpd. However, due to very high levels of infiltration and inflow (I&I) entering the collection system, the plant has seen flows as high as 407,000 gpd. During these peak flows, the evaluating engineer estimated the portion of inflow to be in the amount of 334,000 gpd. As a result of the high levels of I&I, the facility's permit limit for average flow has been exceeded several times.

The capacity evaluation of individual components of the wastewater treatment facility is discussed below under Future Capital Improvements.

FUTURE DEMAND

All developable parcels within proposed Zone of Assessment 8-A have been developed, and there are no plans to expand Zone 8-A beyond the current service area. There is the potential for the development of 118 parcels, within the "Greenfields East" area, proposed Zone of Assessment 8-B. Based on accepted wastewater demand design standards (130 gpd per bedroom) and assuming an average of 2.5 bedrooms per unit, the anticipated potential future flow as the result of development of the proposed Zone of Assessment 8-B parcels are 38,350 gpd average day demand and 105,500 gpd maximum day demand.

FUTURE CAPITAL ISSUES

The Engineering Evaluation of the Greenfields Sewer System, completed as part of the Reorganization Study, and included as Appendix A to the Study, included recommendations for

system improvements, organized by priority level.

The Engineering Evaluation noted that most system components are beyond their typical service life, and significant plant improvements are needed.

Several treatment modules that, although functional, are undersized per modern standards (Ten State Standards.) The concrete tanks, while generally in good condition, require patching and protective coating to extend their life span. Components of the primary clarifier and sludge handling system require updates. The sand filter dosing pumps, their controls and distribution boxes require maintenance or replacement. The existing blowers and air distribution piping need to be replaced. The RBC room is in serious disrepair and may create a hazardous environment. The underground oil storage tank has served beyond its useful life and should be replaced. The Engineering Evaluation notes that the secondary clarifiers should be replaced. It is anticipated that the arrangement and design of the facility is adequate to allow sequential replacement of individual components while maintaining operations.

As noted above, the WWTP experiences significant inflow and infiltration during storm events. These elevated flows from the collection system place undue pressure and wear on the treatment modules while presenting a serious risk of bypass occurring at several points in the WWTP.

As part of the Engineering Evaluation manholes were inspected for condition and susceptibility to infiltration and inflow, and were generally found to be in good condition, with minimal indications of inflow and infiltration. Based on observed flows during the manhole inspection, a targeted video inspection was completed of the collection main in proximity to two ponds and along Wagon Wheel Road. The inspection indicated significant groundwater flow within this area and, in general, the largest flow appeared to be from service laterals. This presents several difficulties in approaching remediation. Typically, the lateral within the sewer right-of-way is maintained by the system owner, while the remaining portion of the lateral is owned and maintained by the private property owner; this may take the repair out of the hands of the DCWWA. Additionally, sump pumps may be responsible for a significant portion of the lateral flow. While it is not permissible to connect sump pumps to sewer lines, it is nevertheless common and very difficult to identify connections and enforce removals.

The Engineering Evaluation recommends addressing the inflow and infiltration through a comprehensive collection system inspection and repair program.

DCWWA proposes to undertake the following urgent improvements upon acquisition, funded by system fund balance and current revenues;

- Install Safety Signage
- Provide Eye Wash Stations
- Construct Tank Railings
- Install Machine Safety Guards
- Install Influent Grinder Disconnect Switch
- Install Adequate Exterior Lighting

- Replace Secondary Clarifier Walkway
- Replace Dosing Tank Control Panel and Motor Starters
- Provide Secondary Egress from RBC Building
- Repair Air Piping System and Valves
- Repair the Secondary Clarifier
- Replace Air System Blower Units

The cost of the above improvements is estimated at about \$42,100.

The Engineering Evaluation identified approximately \$1.2 million in short term improvements required over the next five years, as listed below;

- Obtain Collection System Easements
- Conduct Inflow and Infiltration Evaluation
- Repair Sagging Pipe and Known Manhole Leaks
- Obtain WWTP Easement
- Replace the Primary Clarifier
- Replace the Secondary Clarifier
- Replace the Air Lift System

Improvements for Zone of Assessment 8-B

It is anticipated that, when developed, properties in Zone of Assessment 8-B will connect to, and receive sewer service from, the existing Greenfields Sewer System, however significant system improvements will be required to meet the additional demand.

While the anticipated dry weather flow from the development of properties in Zone of Assessment 8-B should be able to be accepted by the treatment plant, assuming the correction of the deficiencies noted above, the on-going I&I issue makes acceptance of additional flow sources ill-advised until I&I flows to the plant can be significantly reduced. It is unlikely the NYS Department of Environmental Conservation would allow additional connections to the wastewater treatment plant until the I&I issues are adequately addressed.

At the time of this report, there are no sewage collection facilities within proposed Zone of Assessment 8-B. Sewer mains and appurtenances, and individual service laterals would need to be constructed to support the development of the 118 existing vacant lots.

A 2007 study (“Cost Evaluation Study for Greenfields Sewer District Extension to Serve Future Townhouses,” Morris Associates, P.S., L.L.C., October 2007) estimated the construction cost for the collection system for the properties within Zone of Assessment 8-B at \$1,241,000. This estimate included 2,200 linear feet of 8” collection piping, a pumping station and a four hundred linear foot force main. It did not appear to include the service laterals. Applying the ENR construction cost index to update the costs to current (February 2015) values results in a capital cost estimate of approximately \$1,554,000. This cost estimate does not include the necessary repairs to the existing sewer collection system in order to reduce I&I to an acceptable level that would allow for additional flow to be accepted by the wastewater treatment facility, nor for other

upgrades to the treatment facility that may be required.

As there are no current plans before the Town to develop the vacant lots in proposed Zone 8-B estimated capital improvement costs provided are order-of-magnitude only. Actual costs will depend on the timing of the development, type of construction, and consideration of all applicable standards at the time of development.

PROJECTED CAPITAL COSTS AND ALLOCATIONS

As discussed above, the initial collection system and treatment plant improvements will be funded through system fund balance and current revenues.

The engineering evaluation has identified approximately \$1.2 million in short term capital improvement needs to be accomplished over the next five years, also as discussed above. It would be the DCWWA's intent to finance the next level of engineering analysis and design through a one year bond anticipation note, which would ultimately be rolled into the long term bonding once the final scope of the construction project is determined. Assuming a thirty year bond borrowed at 4.5% interest the annual debt service expense would be about \$78,000.

Further, as discussed above, significant capital improvements will be required to provide capacity for the development of vacant parcels in Zone of Assessment 8-B. These improvements may be financed by the project developer, by bonds issued by the DCWWA on behalf of Zone of Assessment 8-B, or by a combination of the two.

For any bonds issued by the DCWWA, an annualized capital cost, being the cost to pay debt service and associated administrative charges, will be apportioned between the two Zones of Assessment in a manner proportionate to the benefit to be received by each Zone of Assessment. Initially, ninety-nine percent (99%) of the annualized capital cost for the short term improvements identified above will be allocated to Zone of Assessment 8-A. The remaining one percent (1%) of the annualized capital cost will be allocated to Zone of Assessment 8-B. This allocation is consistent with, and based upon, the current allocation of the annual debt service on the outstanding Town of Hyde Park Greenfields Sewer District bonds (discussed further below.) Any subsequent system improvements to provide for sewage collection within Zone 8-B, and any additional improvements required solely to meet the treatment capacity needs of Zone 8-B, will be apportioned solely to Zone of Assessment 8-B.

The capital costs apportioned to each Zone will then be allocated equitably among all parcels within each respective Zone of Assessment through the assignment of benefit units to each parcel. The methodology for the assignment of benefit units is attached (see Appendix C.)

Assuming a total of 2,874 benefit units in Zone of Assessment 8-A, and a total annual debt service of \$77,200, the rate per benefit unit will be approximately \$26.90 for Year One under Authority Ownership. In accordance with the attached Benefit Assessment Methodology, a single family dwelling on less than 3 whole acres (the "typical property") will be assigned ten

(10) benefit units and could generally expect to pay an annual benefit assessment of two hundred and sixty-nine (\$269) for the first year under Authority ownership.

Assuming a total of 994 benefit units in Zone of Assessment 8-B, and a total annual debt service of \$780, the rate per benefit unit will be approximately \$0.83 for Year One under Authority Ownership. In accordance with the attached Benefit Assessment Methodology, a vacant parcel of less than three (3) whole acres (the "typical property") will be assigned eight (8) benefit units and could generally expect to pay an annual benefit assessment of six dollars and sixty-one cents (\$6.61) for the first year under Authority ownership.

OPERATION AND MAINTENANCE (O&M) COSTS

The O&M Budget Projection is the total cost to the DCWWA to operate the Greenfields Sewer System; ground water withdrawal, chemicals, electricity, alarms, laboratory fees, labor, insurance, typical repairs and other ongoing costs. The DCWWA has developed an O&M budget projection to illustrate estimated First Year costs of the Greenfields Sewer System under DCWWA ownership, based on the DCWWA's prior operating expenses and history for comparable size sewer systems, and possible anticipated repairs to the system. A copy of the O&M budget projection, using 2015 as a base year for demonstration purposes of those First Year costs, has been included as Appendix "B". The first year operational cost (2015 dollars) is estimated at \$147,927. With 281 connected customers, and assuming collection of late fees at historical levels, the cost per a typical single family residential customer would be four hundred forty-six dollars (\$446) per year.

Should the system ownership be transferred mid-year, the budget would be pro-rated for the portion of the year DCWWA would own the system. All future O&M system budgets, rates, fees and other charges are reviewed annually and subject to change by the DCWWA Board of Directors.

CONNECTION CHARGES

For any properties within the proposed District that are not connected and receiving sewer service from the Greenfields Sewer System at the time that the DCWWA acquires the Sewer System, an "Application for Sewer Service" and a related fee will be required at the time service is requested. Generally, for a typical residential connection, the costs for the plan review and/or inspections, and tap on the main are covered by the Sewer Service Application (tapping fee) fee which is paid by the property owner to the DCWWA at the time of their request for service. As of the date of this report, the application fee for a standard residential sewer service connection is \$500 per service and is a one-time charge. The cost to install, repair and/or maintain the sewer lateral from the property line (edge of public road right of way) to the property owner's house or other structure shall be the sole responsibility of the respective property owner.

PAST TOWN SEWER DISTRICT CAPITAL EXPENSES

The Greenfields Sewer District currently has outstanding bonded indebtedness, relating to collection system improvements made during the early 2000's and a sludge holding tank installed circa 2009. As of January 1, 2015 the amount of bonds outstanding was \$239,492. The maturity date of the bonds is July, 2031.

The Town of Hyde Park currently collects revenues to pay the annual debt service through an assessment on all parcels within the Town's District. In 2015, given the annual debt service expense of \$19,000, the cost assessed by the Town for a typical single family residence within proposed County Sewer District Zone of Assessment 8-A is sixty-seven dollars (\$67.00.) In 2015

the cost assessed by the Town for a typical vacant residential parcel within proposed County Sewer District Zone of Assessment 8-B is two dollars (\$2.00.)

Annual Cost per a Typical Property

The total annual cost for a typical property in a zone is generally a combination of the long-term capital charges (debt service) and Sewer usage charges.

In the proposed Zone of Assessment 8-A a typical property will be a single family dwelling unit. Given the assumptions and estimates described above, the projected "First Year" total cost for a typical single family dwelling, on less than three (3) whole acres in County Sewer District Zone of Assessment 8-A will be seven hundred and eighty-two dollars (\$782.00), of which \$446 will be the first year O&M charge; \$269 will be the DCWWA capital assessment and \$67 will be the Town District capital assessment.

In the proposed Zone of Assessment 8-B a typical property will be a vacant residential parcel. Given the assumptions and estimates described above, the projected "First Year" total cost for a typical vacant parcel of less than three (3) whole acres in County Sewer District Zone of Assessment 8-B will be eight dollars and sixty-one cents (\$8.61), of which \$6.61 will be the DCWWA capital assessment and \$2 will be the Town District capital assessment.

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APPENDICES

Appendix A – Description of Part County Sewer District 8 - Zone of Assessment A
(Parcel List and Map)

Appendix B – Description of Part County Sewer District 8 - Zone of Assessment B
(Parcel List and Map)

Appendix C - Proposed Operation & Maintenance Budget

Appendix D – Proposed Benefit Assessment Methodology

APPENDIX "A"

Dutchess County Sewer District 8 – Zone of Assessment 8-A Greenfields Sewer System

DESCRIPTION OF ZONE

(map and parcel listing)

The Dutchess County Sewer District 8 – Zone of Assessment 8-A shall include all those tax parcels presently indicated on the attached boundary map. These parcels are further described by the following list of tax parcel grid numbers:

6264-02-542510	6264-57-596456	6264-57-562450
6264-02-560508	6264-57-588473	6264-57-580446
6264-01-497502	6264-04-545453	6264-57-568441
6264-02-523511	6264-04-531470	6264-57-609444
6264-01-497513	6264-57-576466	6264-03-473444
6264-04-544484	6264-57-577467	6264-57-604441
6264-04-502480	6264-57-609465	6264-57-570442
6264-03-498490	6264-57-587477	6264-57-562440
6264-02-525501	6264-57-590470	6264-57-564440
6264-04-562494	6264-57-591468	6264-57-554437
6264-04-526490	6264-57-610463	6264-57-600439
6264-04-529480	6264-03-454442	6264-57-578445
6264-04-540495	6264-57-552436	6264-57-587450
6264-57-608467	6264-57-558438	6264-57-589451
6264-04-547473	6264-57-560439	6264-57-582447
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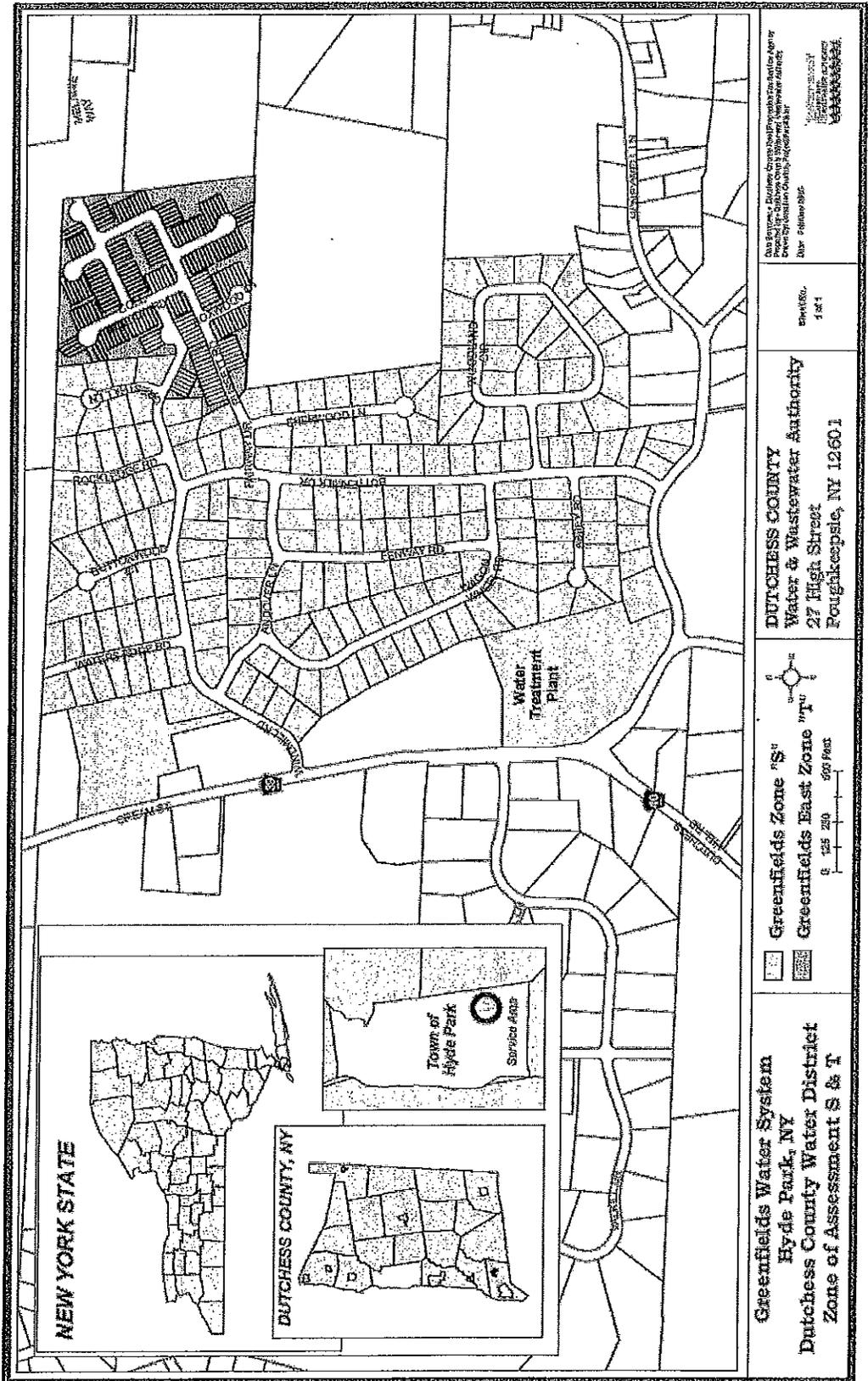
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APPENDIX "B"

Dutchess County Sewer District 8 – Zone of Assessment 8-B Greenfields EAST Sewer System

DESCRIPTION OF ZONE

(map and parcel listing)

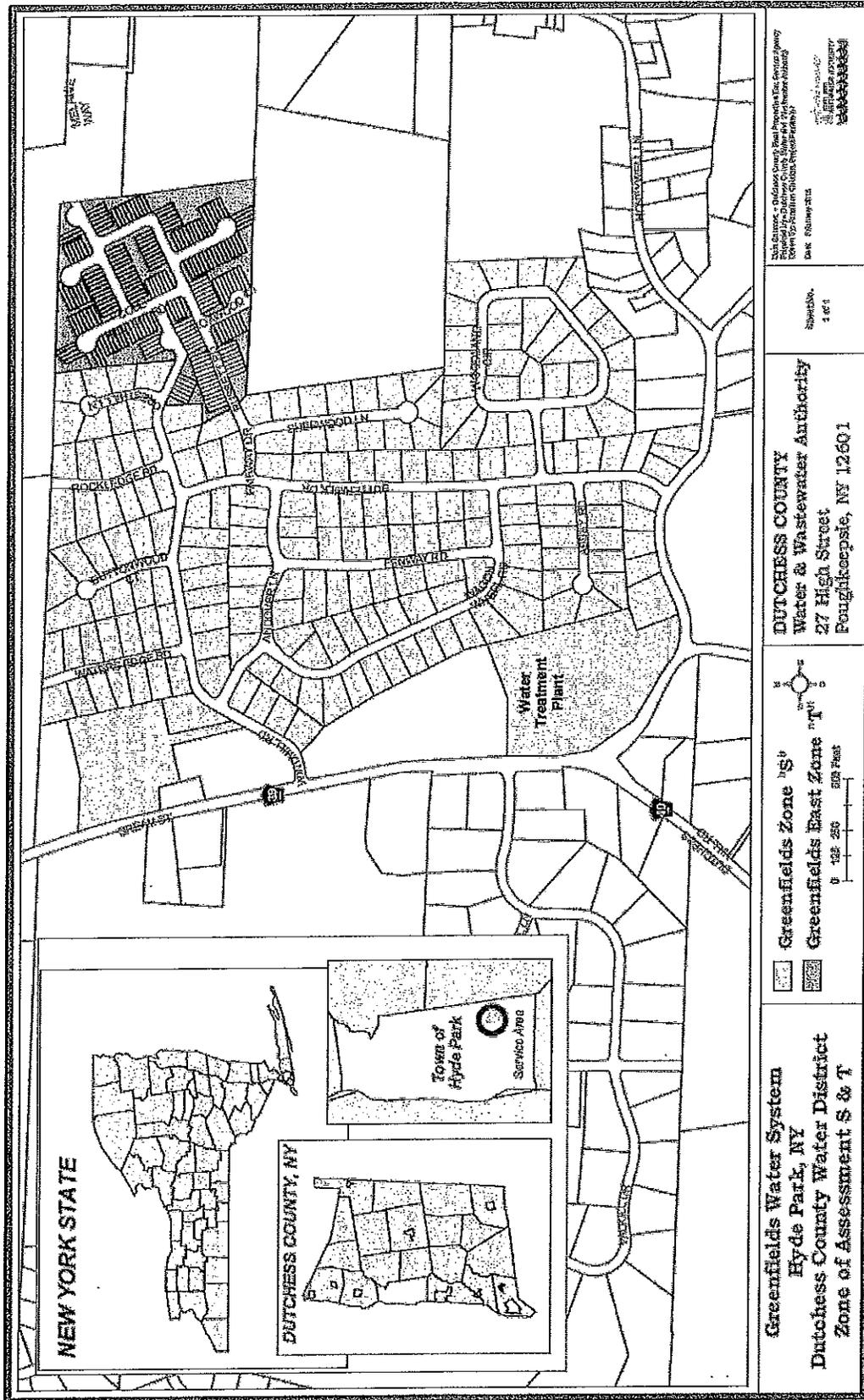
The Dutchess County Sewer District 8 – Zone of Assessment 8-B shall include all those tax parcels presently indicated on the attached boundary map. These parcels are further described by the following list of tax parcel grid numbers:

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6264-57-615480	6264-57-596488	6264-58-645436
6264-57-612479	6264-58-644482	6264-57-617449
6264-57-581488	6264-58-630455	6264-58-634448
6264-58-645495	6264-57-624467	6264-58-642439
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APPENDIX "C"

Greenfields Sewer System
Proposed Operation & Maintenance Budget

DCWWA 2015 BUDGET PROTECTION
Greenfields Sewer District

Beginning Fund Balance	37,627
Annual Expenses	147,927
Power/Chemicals	18,379
Operations	47,475
ERM	10,000
Sludge Hauling	17,000
Lab/Sampling/Permit	3,855
Administration	22,270
Legal/Engineering	2,250
Insurance	2,278
Operations Improvement Items	24,420
Debt Service	-
Annual Revenues	147,927
Sewer Sales/Penalties	127,927
Property Taxes	-
Other	-
Transfer from Fund Balance	20,000
Ending Fund Balance	17,627

APPENDIX "D"

**COUNTY WATER DISTRICT
ZONES OF ASSESSMENT C, D, H, M, O, P, Q, R, S, T and U (Not J or K)**

PART COUNTY SEWER DISTRICT #1, 2, 3, 6, 7 and 8

BENEFIT ASSESSMENT METHODOLOGY

DEVELOPED LAND (Use the higher of either LAND USE/WATER USE or ACREAGE)

LAND USE/WATER USE

RESIDENTIAL

FIRST DWELLING UNIT 10
EACH ADDITIONAL DWELLING UNIT 8

COMMERCIAL/INSTITUTIONAL:

FIRST 500 GPD WATER USAGE 20
EACH ADDITIONAL 100 GPD 4

ACREAGE

FIRST 2 ACRES 10
EACH ADDITIONAL WHOLE ACRE 2

UNDEVELOPED LAND

FIRST 2 ACRES 8
EACH ADDITIONAL WHOLE ACRE 2

STATE PARK LANDS

FIRST 500 GPD WATER USAGE 20
EACH ADDITIONAL 100 GPD 4