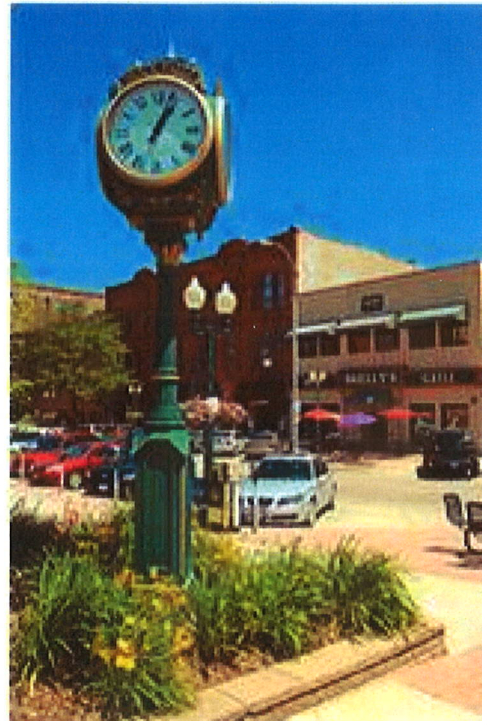


Final Report  
**City of Sioux Falls**



**Wastewater Regionalization Study**  
**Volume 2 – Regional System Development**  
**Charges**

**July 2013**



**HDR** *Prepared by:*  
**HDR Engineering, Inc.**

July 11, 2013

Mr. Trent Lubbers  
Wastewater Superintendent  
224 W. 9th Street  
Sioux Falls, SD 57104

**Subject: Comprehensive Regional Wastewater System Development Charge Study**

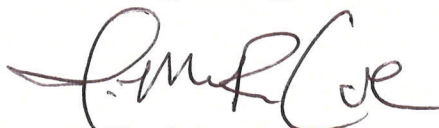
Dear Mr. Lubbers:

HDR Engineering, Inc. (HDR) is pleased to present the final report on the comprehensive regional wastewater system development charge (SDC) study conducted for the City of Sioux Falls (City). The City of Sioux Falls is exploring the issue of regionalization of their wastewater system. This study summarizes the various activities undertaken in relation to the review of the feasibility of regionalization. In particular, a key objective in developing the City's comprehensive regional wastewater SDC study was to determine an equitable approach for new customers connecting to the City's system. SDCs are a "generally accepted" wastewater utility industry method of developing equitable charges for new customers connecting to a wastewater system. This study also creates equity between the City's customers and the other outside City regional customers. This report outlines the approach, methodology, and findings of our wastewater regionalization SDC study.

This report was developed utilizing the City's accounting, operating and management records. HDR has relied upon this cost and planning information to develop our analyses that form our findings and conclusions. At the same time, this study was developed utilizing generally accepted system development charge principles, which were then tailored to the specific and unique circumstances of the City's potential regional system. This report provides the basis for the City to evaluate the concept of regionalization and be able to make informed decisions concerning regionalization.

We appreciate the assistance provided by City staff in the development of this study. More importantly, we appreciate working with City of Sioux Fall's staff, management and City Council on this project.

Sincerely yours,  
HDR Engineering, Inc.



J. Mike Coleman, P.E.  
Project Manager



Tom Gould  
Vice President and National  
National Technical Director  
of Finance and Rates





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## Executive Summary

### Introduction

HDR Engineering, Inc. (HDR) was retained by the City of Sioux Falls (City) to perform a comprehensive regional wastewater study, including development of regional rates and system development charges (SDCs). This report addresses the methodology, process, findings and results of the regional system development charge study. The regional wastewater rate study is addressed under separate cover (Volume 1). This study determines cost-based charges for new customers connecting to the regional system, or existing regional customers expanding their existing capacity.

There are two important objectives in establishing regional SDCs. First, regional SDCs create equity between existing regional customers and new regional customers connecting to the system. Existing customers may have built and carried the cost of excess regional capacity in anticipation of future customer growth. The second key objective is that the methodology that is used to collect the SDC's is a local decision. The recommendation for Sioux Falls is to collect funding from existing cost recoveries and fund the remaining imbalance from other sources. Regional customers outside of Sioux Falls will need to determine how they will collect the SDC's as well.

### Development of Regional System Development Charges

System development charges are one-time charges paid for new development to finance construction of public facilities needed to serve them. Simply stated, SDCs are a contribution of capital to either reimburse existing customers for the available capacity in the existing system, or to help finance planned future growth-related capacity improvements, or a combination of both purposes. System development charges are assessed to all new users of the regional system based upon the amount of wastewater generated (capacity). The SDC considers the value of capacity for both regional collection and treatment.

As a part of the regional financial policies developed as a part of this study, cost-based regional fees and charges were to be established. Regional system development charges are a cost-based method of fairly assessing new development for the cost of expansion.

For purposes of determining and administering regional SDCs, the City's wastewater system will be considered a single unified system. A single unified system implies that the per unit capacity cost of an SDC is the same for all new connections, regardless of the customer or geographic location of the customer (i.e., a "unit of capacity" is a "unit of capacity"). This concept is also often referred to as a "postage stamp" approach.

## System Development Charges vs. Cost Recovery Fees

The City currently has “cost recovery fees” for their wastewater system. There are similarities between cost recovery fees and SDCs, but there are also some significant differences between them. The comparison below illustrates the similarities and differences between the two.

Cost Recovery Fees	System Development Charges
<ul style="list-style-type: none"> <li>• CRFs are a form of a capital contribution</li> </ul>	<ul style="list-style-type: none"> <li>• SDCs are a form of a capital contribution</li> </ul>
<ul style="list-style-type: none"> <li>• CRFs recover collection system costs for a specific area or improvement. Does not include the cost of any treatment facilities</li> </ul>	<ul style="list-style-type: none"> <li>• SDCs recover the value of both regional collection and treatment facilities</li> </ul>
<ul style="list-style-type: none"> <li>• Charge is based on specific area (facilities) where development occurs. Charge varies by area.</li> </ul>	<ul style="list-style-type: none"> <li>• SDC is “regional” based (postage stamp). Uniform SDC, regardless of area of development.</li> </ul>
<ul style="list-style-type: none"> <li>• CRFs are only applied to in-City development (note issue of Harrisburg’s connection)</li> </ul>	<ul style="list-style-type: none"> <li>• SDCs would be applied to all regional customers (in-City and out-of-City).</li> </ul>
<ul style="list-style-type: none"> <li>• Fees may not reflect all of the collection facilities needed to deliver wastewater to City’s treatment facilities</li> </ul>	<ul style="list-style-type: none"> <li>• SDC reflects the regional collection and treatment facilities needed to serve all regional customers</li> </ul>
<ul style="list-style-type: none"> <li>• Fee assessed based upon parcel size (area), which may not have any relationship to capacity utilization</li> </ul>	<ul style="list-style-type: none"> <li>• SDC is based upon needed capacity (capacity requirements)</li> </ul>

As can be seen, there are significant differences between these two types of fees. Regional system development charges are more equitable in that all regional customers connecting to the system (in-City and outside City) will pay a regional SDC. The regional SDC will also include the cost of capacity for both regional treatment and collection.

## Calculation of the Regional System Development Charges

In general, the process of calculating an SDC can be broken down into the following four tasks:

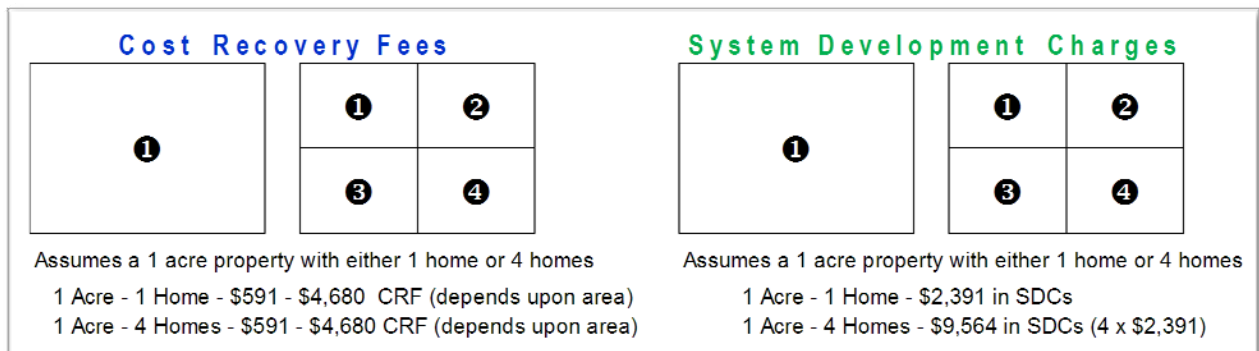
1. **System Valuation.** The value of the utility’s existing assets used in the calculation of the reimbursement fee.
2. **Multi-Purpose Project Allocation.** The estimation of capital improvement costs related to growth that can be used in the calculation of an improvement fee portion of an SDC.
3. **Capacity Definition.** Defining the system capacities to be used in the calculation of the SDC.
4. **Assessment Schedule Development.** A schedule of charges or equivalent units used to determine the SDC charge per customer.

In calculating the regional SDC, the various major components of the regional system were reviewed and their per unit value determined. The SDC was further subdivided between a buy-in component and an improvement component for both the regional treatment and collection system.

In summary form, the regional system development charge for one equivalent residential unit (ERU) was calculated as \$2,391. The SDC can be assessed on the basis of capacity use. Water meter capacities are generally used as the surrogate for capacity use. The regional system development charges increase in direct relation to the capacity associated with the customer's meter size. The system development charges are not intended to replace the City's existing cost recovery fees, but rather be used to "true-up" any amounts not collected above the local cost recovery component amounts within the City of Sioux Falls system. Regional customers outside of Sioux Falls would be charged SDCs. SDCs are a more equitable method of assessing the costs related to growth and expansion.

<u>Meter Size</u>	<u>Collection</u>	<u>Treatment</u>	<u>Total SDC</u>
5/8" x 3/4"	\$780	\$1,611	\$2,391
1"	2,761	3,217	5,978
1-1/2"	5,521	6,433	11,954
2"	8,834	10,293	19,127
3"	16,564	19,299	35,863
4"	27,607	32,165	59,772

As noted above, SDCs are assessed on the basis of capacity. The diagram below compares the assessment of cost recovery fees to the regional system development charges.



As can be seen from the above comparison, cost recovery fees are assessed on the basis of the area where development occurs and the amount of acreage of the development, and not capacity use. Under cost recovery fees, the fee would be the same for a 1 acre lot with 1 home or 4 homes. In contrast to this, the regional SDC is assessed on capacity, or the number of homes (ERUs) within that development.

### Regional SDCs and Cost Recovery Fees for In City and Outside City Customers

As noted previously, regional SDCs are not intended to replace the City's existing cost recovery fees, but rather be used to "true-up" any amounts not collected above the cost recovery amounts within the City of Sioux Falls system. Regional customers outside of Sioux Falls would be charged strictly SDCs. It will be the decision of each regional customer on how the SDCs are collected at the local level in an appropriate manner. Regardless of the method of passing through the regional SDC, the regional SDC must be paid by the local entity to the regional system.

## Assessment of Regional System Development Charges

Going forward, regional SDCs would be assessed to all new connections or expansions of capacity, regardless of regional location.<sup>1</sup> In other words, all new regional customers (in-City and outside City) connecting to the regional system will be assessed a regional system development charge. At the local level, the regional SDCs may be assessed (i.e. passed through) to the new customer connecting to the regional system in any manner the local entity deems appropriate. Regardless of how the regional SDC is passed through to the local customer<sup>2</sup> a regional SDC payment must be made to the regional system. This requirement for payment of the regional SDCs includes the City of Sioux Falls. “Waiving” the regional SDC at the local level is a local policy decision, but it does not “waive” the payment by the local entity of the regional SDC to the regional system.

At the local level, local entities may also include an SDC component for their local wastewater collection system. If that were the case, then the SDC charged to new development would contain the regional SDC component and a local SDC component.

## Summary

System development charges provide an equitable basis for new customers connecting to the regional system. Regional SDCs would be assessed to all new customers (in-City and outside City) and the SDCs may be passed through to new customers in any manner deemed appropriate by the local entity.

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<sup>1</sup> It is presumed that all existing customers, with the exception of Harrisburg, would have their existing customers “grand-fathered in” for purposes of assessing system development charges.

<sup>2</sup> The regional SDC may be collected in a number of different ways. It may be passed directly through to the developer (growth pays for growth), partially passed through to the developer and the balance paid by existing rate payers, or entirely collected from local ratepayers. Regardless of the method of passing through the regional SDC, the regional SDC must be paid by the local entity to the regional system.





## Section 1 Introduction

### 1.1 Introduction

The City of Sioux Falls (City) retained HDR Engineering, Inc. (HDR) to perform a comprehensive wastewater regionalization study to determine the feasibility of providing regional wastewater service to local outlying communities and to determine the key policy and analytical mechanisms which are needed to effectively provide regional wastewater service. This volume of the regionalization study is a companion to Volume 1 which provided a comprehensive review of the development of regional wastewater rates.

Regionalization is not a “new” concept for the City’s wastewater system. The City currently has agreements with other jurisdictions to provide wastewater services. The most recent agreement with the City of Harrisburg raised the important question of regionalization as a concept, but also whether the City’s current approach was equitable to the City’s existing customers and the new customer’s connecting to the wastewater system. This report has focused on the issue of the City’s existing cost recovery fees and the potential establishment of regional system development charges (SDCs).

The main focus of this volume of the report is on the development of equitable and cost-based regional wastewater system development charges. SDCs provide the means of balancing the infrastructure cost requirements between existing customers and new customers. The portion of existing plant and future capital improvements that will provide service (capacity) to new customers is included in the SDCs. In contrast to this, the City has future regional capital improvement projects that are related to renewal and replacement of existing regional plant in service. These regional infrastructure costs that provide no additional or new capacity should be included within the regional wastewater rates, and are not included within the SDC. By establishing cost-based SDCs, the City will be taking a step towards having a greater and more dependable funding mechanism for providing for additional capacity within the regional system and allow regional customers outside the city to contribute their fair share towards capacity in the system.

### 1.2 Purpose of Undertaking the Wastewater Regionalization Study

The main driver for undertaking this wastewater regionalization study was an agreement for wastewater services between the City of Sioux Falls and the City of Harrisburg (Harrisburg). The agreement requires the City to accept municipal wastewater flows from Harrisburg. At the time of the signing of the agreement, there was concern that the City’s current system of cost recovery fees may be inequitable between existing customers and the new entity or customers connecting to the wastewater system. Given that concern, the City determined it would be prudent to review the current cost recovery mechanisms and rates, but at the same time, be more forward thinking and establish a consistent approach or methodology to deal with the issue of other potential new jurisdictions connecting to the City’s wastewater system in the future. The City recognizes there is an opportunity to be a “good neighbor” in the metro community and assist other communities in addressing the ever increasing water quality

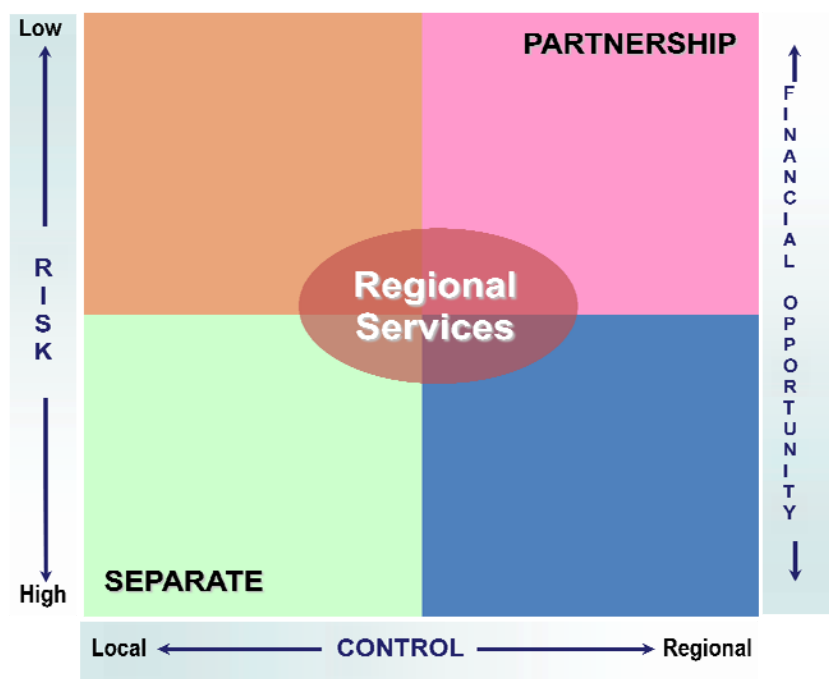
treatment requirements and regulations of the Clean Water Act. However, in allowing new connections to the City’s wastewater system, the City needs an equitable method of cost recovery at the time of connection and over the life of the regional agreements.

Another driving force for regionalization is that the City’s wastewater system has near term treatment capacity available. Therefore it appeared feasible to explore the options available to provide regional wastewater treatment services. The City also recognizes that regional wastewater services should lead to more logical development in the Sioux Falls planning area. Regionalization also provides benefits beyond a planning perspective. These other benefits include better “economies of scale” of the City’s system, along with improved water quality and resource management enhancements through regional cooperation. Complexity of the regulatory environment is challenging for all parties, but particularly for smaller systems.

With new regulations on the horizon, and environmental considerations of the receiving water an issue, it appeared reasonable to explore the option of providing regional wastewater services to localities within a 10 mile radius of the City.

### 1.3 Trade-Offs of Regionalization

Regionalization has certain trade-offs between both the City and jurisdictions connecting to the City’s wastewater system. The diagram below illustrates those trade-offs. As an individual



jurisdiction there is certainly greater local control, but with greater local control comes potentially greater risk and less financial opportunity to share costs over a wider base of customers. Less financial opportunity to share costs over a wider base of customers may lead to high rates and customer bills. Maintaining local control may also provide less opportunity for certain financing options if the jurisdiction or utility is in a relatively weak financial position. With regionalization, risk should be minimized since risk is being shared over a wider group of customers. At the same time rates may

be lower or more affordable as costs are spread over a wider group of customers. However, the trade-off with regionalization is the jurisdiction or utility must give up a certain level of local control. The City of Sioux Falls and local jurisdictions must determine whether regionalization is an acceptable concept given these trade-offs. While this study has not attempted to directly quantify the trade-off in risks, this study has attempted to quantify the financial trade-offs by developing a reasonable estimate of the potential cost of new connections to the system, along with the potential regional wastewater rates.

It is important to note that this is essentially a “conceptual” study in that the City, at this point in time, has not committed to a regionalized wastewater system. In conducting this study, the City is not attempting to “force” any jurisdiction to regionalize or join the City’s system. The City is simply exploring the option of regionalization as an alternative for those jurisdictions that would like to receive wastewater services from the City. This study provides a clearer understanding of the potential up-front investment, or payment of system development charges, that would need to be made to connect to the regional wastewater system.

*“In conducting this study, the City is not attempting to “force” any jurisdiction to regionalize or join the City’s system.”*

## 1.4 Disclaimer

HDR, in its calculation of the regional SDCs presented in this report, has used “generally accepted” engineering and ratemaking principles. This should not be construed as a legal opinion with respect to South Dakota law. HDR would recommend that the City have its legal counsel review the regional SDCs as set forth in this report to ensure compliance with any applicable South Dakota law.

## 1.5 Summary

This report will review the comprehensive regional wastewater system development charge analysis prepared for the City. This report has been developed utilizing generally accepted wastewater system development charge methodologies. The next section will review the development of the financial and rate setting policies established for the City’s wastewater utility.



## Section 2 – System Development Charges and Regional Principles and Policies

### 2.1 Introduction

An important starting point in the review of regionalization is beginning with a basic set of principles around which the City will operate the regional wastewater utility. These basic regionalization principles were the foundation upon which financial policies were drafted. These financial principles and policies are discussed in more detail in the Volume 1 report, but they do contain important elements that are directly related to the establishment and use of system development charges. This section of the report provides a brief summary overview of these guiding principles and resulting financial policies for regionalization that are related to the development of the regional system development charges.

### 2.2 Establishment of the Guiding Regional Principles

The City, with assistance from HDR, reviewed a number of guiding principles for regionalization. In certain cases, various options were presented to the City for their input and guidance. These various decisions with regard to guiding principles needed to be made since it may ultimately impact the final approach or methodology to an issue. As an example, the issues of ownership and governance have impacts at a variety of points in the regionalization study. Given clear direction on the guiding principles to be used for regionalization, a methodology could be established to reflect those basic principles.

Provided below is a brief overview and summary of these key guiding principles as they relate to the development of the system development charges.

- **Ownership**
  - The City is the sole owner of the regional system and is responsible for the operation and maintenance of the regional system.<sup>3</sup>
- **Regional System**
  - The “Regional System” is comprised of the City’s wastewater treatment facilities and regional interceptors (note: regional interceptors to be clearly identified and defined).
- **Financial Planning and Rate Setting**
  - The City will use “generally accepted” financial planning and rate setting techniques in establishing rates, fees and charges for the Regional Wastewater System.
  - The City’s methodology for establishing Regional Wastewater System rates, fees and charges should reflect the specific and unique characteristics of the regional system.
- **Regional Wastewater System Development Charges**
  - Regional SDCs will be established and assessed for all new future connections.
  - With the exception of Harrisburg, existing regional customers will be “grandfathered” in for purposes of payment of SDCs on the existing number of equivalent residential units

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<sup>3</sup> Payment of a regional system development charge (SDC) will not impart ownership in the regional wastewater system.



(ERUs). Reserved capacities will be assigned for existing “grandfathered” customers and exempt from SDC payments.

- Regional SDCs will be established using “generally accepted” methods and the adopted SDCs shall be no greater than the cost established within the SDC study.
- Uniform SDCs will be established, regardless of the location of the Regional Customer [Note: any costs associated with an extension to connect to a Regional Interceptor shall be borne by the Regional Customer(s) connecting to the system.]
- The individual Regional Customer which is assessed Regional Wastewater System Development Charges may pass those costs through to their local customers in any manner that they deem appropriate.<sup>4</sup>

#### ■ Policy Governance/Local Control

- Regional customers shall retain control of their local rates and fees and their rate setting process.

The guiding principles noted above are just that — guiding principles which were established at the start of the regionalization process. However, these guiding principles were used as the framework to establish the financial policies as they relate to system development charges.

## 2.3 Overview of the City’s Global Rate Setting Policy Statements

The foundation of the policy statement process is the “global policy” statements. It is around these global policy statements that the general and specific policies are established. Provided below is a listing of the key global policy statements for City that relate to the development and use of regional system development charges.

**1.2 – ESTABLISHING WASTEWATER RATES AND FEES** – THE CITY’S WASTEWATER UTILITY RATES AND SYSTEM DEVELOPMENT CHARGES (SDCs) SHALL BE REVIEWED ANNUALLY, TO ASSURE SUFFICIENT OPERATING AND CAPITAL INFRASTRUCTURE FUNDING, MAINTAIN SUFFICIENT RESERVES, AND MAINTAIN SMOOTH RATES FOR THE PURPOSE OF AVOIDING LARGE FLUCTUATIONS IN RATES. THIS DOES NOT IMPLY THAT RATES MUST BE ADJUSTED EACH YEAR, SIMPLY THAT THE RATES ARE REVIEWED IN THE CONTEXT OF THESE POLICIES TO ASSURE THAT THEY ARE ADEQUATELY FUNDING THE WASTEWATER UTILITY.

This policy provides a detailed discussion of the analytical approach or methodology that should be used in reviewing the regional utility rates and fees. This section addresses the establishment of system development charges (SDCs). For purposes of determining and administering SDCs, the City’s wastewater system will be considered a single unified system. A single unified system implies that the per unit capacity cost of an SDC is the same for all new connections, regardless of the customer or geographic location of the customer (i.e., a “unit of capacity” is a “unit of capacity”). This concept is also often referred to as a “postage stamp” approach.

SDCs should be established to reflect the City Council’s policy or philosophy as it relates to the sharing of growth-related costs between existing customers and new customers connecting to the system. At no time shall the City Council establish or adopt SDCs greater than the calculated cost-based SDCs.

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<sup>4</sup> The City of Sioux Falls, as a regional customer, will also be assessed regional system development charges for new connections to the City’s system. The City will pay the SDC to the regional system and may pass the cost of the SDC through to their customers in any manner their City Council deems appropriate.

**1.3 – RESERVE FUNDS** – THE CITY’S WASTEWATER UTILITY SHALL STRIVE TO MAINTAIN ADEQUATE FUND BALANCES (RESERVES) IN ORDER TO PROVIDE SUFFICIENT CASH FLOWS TO MEET OPERATING AND CAPITAL EXPENSES. THE CITY AND WASTEWATER UTILITY WILL MAINTAIN SYSTEM FUNDS AS REQUIRED BY LAW, ORDINANCE AND BOND COVENANT, SO AS TO PROVIDE WORKING CAPITAL (CASH FLOW) FOR NORMAL AND ORDINARY OPERATIONS, WHILE ALSO PROVIDING THE FINANCIAL ABILITY TO ADDRESS ECONOMIC DOWNTURNS AND SYSTEM EMERGENCIES. IF RESERVES ARE DEPLETED, THE RESERVES SHOULD BE REPLENISHED OVER A FIVE (5) YEAR PERIOD TO RE-ESTABLISH THE MINIMUM TARGET LEVEL FOR THE RESERVE.

This policy establishes specific reserves. Included in this policy is a reserve for regional system development charge revenues received. By establishing this specific reserve fund for regional system development charges, the City can clearly demonstrate that the funds derived from these fees have been applied against regional expansion related projects or expansion related debt service.

**2.2 – POLICIES AND PLANS FOR CAPITAL ASSETS ACQUISITION, MAINTENANCE, REPLACEMENT, AND RETIREMENT** – CUSTOMER GROWTH AND SYSTEM EXPANSION AS A RESULT OF NEW DEVELOPMENT HAS DIRECT IMPACTS UPON A UTILITY’S INFRASTRUCTURE REQUIREMENTS, THE FINANCING OF THE “GROWTH RELATED” INFRASTRUCTURE, AND CUSTOMER RATES. THROUGH THE ESTABLISHMENT OF SPECIFIC FINANCIAL/RATE POLICIES, THE CITY WILL ATTEMPT TO SHELTER THE CITY’S EXISTING CUSTOMERS, AS MUCH AS REASONABLY POSSIBLE, FROM THE FINANCIAL/RATE IMPACTS OF GROWTH AND SYSTEM EXPANSION.

Defining “growth-related” projects and the establishment of system development charges (SDCs) will help to create a more dependable funding mechanism for providing for additional capacity within the regional system and allow regional customers outside the city to contribute their fair share towards capacity in the system. SDCs should be properly established and the use of SDC revenues should only be applied to growth-related projects or debt. On a yearly basis, the wastewater utility will track and maintain asset records for all additions, replacements or retirements of assets. This will be maintained on an on-going basis in an asset management database and reported in a yearly asset record report.

The above discussion has provided an overview of the global policies as they relate to system development charges. The Volume 1 report contains Appendix A which provides the detailed financial policies developed as a part of this comprehensive regional wastewater rate study.

## **2.4 Summary**

The written financial and rate setting policies developed as a part of this study are intended to provide a reasonable framework for the City to operate the regional and local wastewater utility in a “business-like” manner using utility best management practices. These policies contain key elements related to the establishment of regional system development charges. These basic principles and draft policies have been used in the development of this report. The next section of the report provides an overview of the basic theory and methodology used to establish cost-based system development charges.



## Section 3

# Overview of System Development Charges

### 3.1 Introduction

An important starting point in establishing system development charges (SDCs) is to have a basic understanding of the purpose of these charges, along with criteria and general methodology that is used to establish cost-based SDCs. Presented in the section of the report is an overview of SDCs and the criteria and general methodology used to develop cost-based charges.

### 3.2 Defining System Development Charges

The first step in establishing cost-based SDCs is to gain a better understanding of the definition of a system development charge. One definition of a system development charge is as follows:

*“System development charges are one-time charges paid by new regional customers to finance construction of public facilities needed to serve them.”*

Simply stated, SDCs are a contribution of capital to either reimburse existing customers for the available capacity in the existing system, or to help finance planned future growth-related capacity improvements, or a combination of both purposes. At some utilities, SDCs may be referred to as capacity fees, impact fees, connection charges, plant investment fees, etc. Regardless of the label used to identify them, their objective is the same. That is, these charges are intended to provide funds to the utility to finance all or a part of the capital improvements needed to serve (accommodate) new customer growth.

### 3.3 SDC Components

SDCs can consist of a reimbursement (buy-in) fee, an improvement fee, or a combination of both. Reimbursement fees are defined as fees recovering costs associated with capital improvements already constructed or under construction. In other words, a reimbursement fee allows a utility to assess a charge on growth to reimburse existing customers for past investments in over-sizing of the current system that will serve new customers. That is, new customers are asked to make similar contributions to the utility that existing customers have made.

Improvement fees are for costs associated with capital improvements to be constructed. The fee should be designed so that the impact of the cost of growth is mitigated. Under some State regulations, spending improvement fee proceeds is more restricted than that for the reimbursement fee proceeds.

#### 3.3.1 Reimbursement Fee

Generally accepted SDC development principles indicate that reimbursement fees be established by ordinance or resolution setting forth a methodology that takes into account:

- Cost of existing facilities,
- Past contributions by existing users,

- Value of unused capacity,
- Rate-making principles employed to finance publicly owned capital improvements, and
- Other relevant factors identified by the local government imposing the SDC.

As a general rule, the goal is that future users contribute no more than their equitable share of the cost of the existing facilities.

### 3.3.2 Improvement Fee

Similar to reimbursement fees, improvements fees are often established by ordinance or resolution that set forth a methodology considering the projected capital improvements that are required to increase the capacity of the system to which the fee is related. Sometimes, state laws specify that the improvement fee must also provide a credit for the construction of a qualified public improvement. A qualified public improvement is a capital improvement that is required as a condition of development approval, identified in the capital improvement, public facilities, or master plan of the agency.

## 3.4 Economic Theory and SDCs

SDCs are generally imposed as a condition of service. The objective of an SDC is not merely to generate money for a utility, but to ensure that all customers seeking to connect to the utility's system bear an equitable share of the cost of capacity that is invested in both the existing and any future growth-related expansions. Through the implementation of fair and equitable SDCs, existing customers will not be unduly burdened with the cost of new development.

By establishing cost-based SDCs, the City will be taking an important step in assuring adequate infrastructure to meet growth-related needs, but more importantly, providing the required infrastructure to regional customers in a cost-based, fair and equitable manner.

## 3.5 Financial Objectives of SDCs

An SDC is a regulation and not a user fee or revenue-raising device. To understand this perspective, one must view new development as creating the need for new or expanded facilities. As a result, without payment of SDCs the utility has insufficient revenues to provide the facilities and therefore the community is unable to accommodate new development.<sup>5</sup> With that said, SDCs do have certain financial objectives associated with them. While on the surface it may appear as simply a means to extract revenue from new customers, the reality is far more complicated. SDCs help utilities achieve a number of different financial objectives. These objectives tend to lean more towards financial equity between customers, as opposed to simply producing revenue.

### 3.5.1 SDCs and Equity

One key financial/rate objective that is achieved from SDCs is equity. Equity is achieved in two different ways. First, an SDC establishes equity between existing (old) customers and new customers. For example, assume that a treatment plant is expanded by 5 million gallons per day (MGD) to accommodate growth and the facility is financed over a 20-year period. Without an SDC, new customers connect to the system and pay for the debt service on the facility via their rates. The customer that connects to the system in year one will contribute to the cost of

<sup>5</sup> Said another way, absent SDCs, the utility is unwilling to raise rates to unacceptable levels to build new facilities to accommodate growth.



that facility for 20 years. In contrast, the person who connects in year 10 will only pay for debt service on the facility for ten years, even though the “value” of the capacity was the same for the person connecting in year 1 or year 10. SDCs create equity within the system by addressing the issue of timing and the “value” of the assets and the “value” of the capacity.

The second way in which SDCs help to create equity is after a facility is paid for. Continuing with the example above, after the debt service is fully paid off in year 20, and assuming that capacity is still available, a new customer connecting to the system would “in theory” receive their capacity at zero cost, because the debt service is paid in full. All the existing customers connected to the system, over the past twenty years, paid for that customer’s capacity. Therefore, an SDC is also a form of a financial reimbursement to existing ratepayers who paid for those facilities in advance of the new customer connecting to the system.

Based upon the above example, SDCs also have an equity perspective associated with the rate setting process. That is, SDCs are a form of “system buy-in.” A properly established SDC implies that a new customer connecting to the system has bought into the system at its current cost. Therefore, from a rate setting perspective the utility does not need to have rates for “old” and “new” customers. Again, existing customers have been equitably reimbursed for their past investments.

Even with the above discussion, not all communities have SDCs. Most commonly, SDCs are adopted in high growth areas where infrastructure expansion has strained existing financial resources. Philosophically, many utilities desire to have a policy of SDCs paying for growth. SDCs comport with that philosophy, and it is achieved by applying the SDCs either directly against the capital cost of the expansion facilities or against the debt service associated with it.

### **3.5.2 Restrictions on SDC Revenues**

Some states’ laws specify that revenues generated by reimbursement fees can only be spent on capital improvements associated with the system for which the fees are assessed, including expenditures relating to the repayment of debt. Similarly, revenues generated from improvement fees can only be used on capacity increasing capital improvements and expenditures related to the repayment of debt associated with such capital improvements. An increase in capacity is defined as increasing the level of performance or service provided by existing facilities or providing new facilities. The portion of improvements funded by improvement fees must be related to current or projected development.

Oftentimes, local governments implementing an SDC must prepare a capital improvement plan, public facilities plan, master plan, or comparable plan that lists the improvements that may be funded with the improvement fee revenues and the estimated timing and cost of each improvement.

## **3.6 Relationship of SDCs and New Construction Activity**

There are a number of myths surrounding SDCs. In a very broad sense, some may argue that SDCs are bad for economic development. These arguments center around two issues. These are as follows:

- Development will occur on those parcels with lower or non-existent SDCs.
- SDCs raise the cost of doing business and hinder development.

Of the research conducted on these topics, just the opposite has been found. Provided below is a brief explanation of each.

Developers look at many factors before a parcel is developed. One myth concerns the selection of parcels for development and whether SDCs are applied to the land.

*“The argument goes that if a developer is choosing between two parcels of land on which to build—where the first parcel is inside a city where SDC’s (SDCs) are charged and the second is just outside where lower or no SDC’s (SDCs) are charged—the developer will choose the second parcel.*

*The trouble is this means that the owner of the first parcel does not make a sale. The landowner must lower the land price to offset the fee in order to make a sale. However, if the landowner does not lower the price, this indicates that the value of future development may be higher on that parcel. Thus, be wary of developers who claim they will choose the second parcel. Chances are they would not have chosen the first parcel anyway. In the meantime, the land market will be holding the first parcel available for higher value development. In effect what might look like a loss in the short term may be a much higher level of development in the long-term.”<sup>6</sup>*

The other argument and myth that one commonly hears about SDCs is that they are bad for economic development. The argument against this position is as follows:

*“The argument goes that because SDC’s (SDCs) raise the price of doing business, they frustrate economic development. However, just the opposite is really true. First, remember that SDC’s (SDCs) will be offset by reduced land prices and by enabling the community to more easily expand the supply of buildable land relative to demand.*

*Now, consider what economic development really looks for: skilled labor, access to markets, and land with adequate infrastructure. Competitiveness for economic development will be stimulated by the new or expanded infrastructure paid in part by SDC’s (SDCs). Besides, local governments retain the option to waive SDC’s (SDCs) for specific kinds of economic development, such as development locating in enterprise zones. In the competition for certain kinds of development, it will be able to show developers the dollar value of SDC’s (SDCs) waived as a solid demonstration of the local government’s commitment to such development.”<sup>7</sup>*

As can be seen, at least in the opinion of Nelson, SDCs do not hinder growth, but in fact may help to spur growth. It must be remembered that an important concept associated with SDCs is that the fees are required to develop infrastructure in advance of the actual development.

From the developer’s perspective, absent SDCs (i.e. a moratorium on new connections) no new development can occur. Therefore, developers are generally supportive of cost-based SDCs, particularly when it provides available capacity and opportunities for development.

### 3.7 SDC Approaches

Provided below is an overview of the alternative approaches available for developing reimbursement fees and improvement fees.

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<sup>6</sup> Arthur C. Nelson, System Development Charges for Water, Wastewater, and Stormwater Facilities, Lewis Publishers, New York, 1995, p. 1.

<sup>7</sup> Arthur C. Nelson, System Development Charges for Water, Wastewater, and Stormwater Facilities, Lewis Publishers, New York, 1995, p. 1.

### 3.7.1 Reimbursement (Buy-In) Approach

A buy-in approach is a common method of developing the reimbursement fee portion of an SDC. As the name implies, a reimbursement fee reimburses a utility's existing customers for a portion of their past investments. A reimbursement fee can be calculated using one of two common methods. These are:

- Equity Buy-in Approach
- Capacity Buy-in Approach

When calculating an SDC using the *equity buy-in approach*, new customers are asked to pay their share of the equity in the current system. This is similar to buying stock in a company. In exchange for new ownership in the company, the new shareholder must reimburse the existing shareholder for their past investments. The amount of the reimbursement is determined so that the equity of existing shareholders stays the same after the new shares are issued. For example, consider a company that has \$100 of equity and 100 shares outstanding. Each share has \$1 of equity. If the company decides to issue one additional share, the new shareholder should contribute \$1 of equity. After this transaction, the company would have \$101 of equity and 101 shares outstanding. The equity per share would remain at \$1.

Because governmental utilities have customers rather than shareholders, the method of calculation is more complex. Generally the equity buy-in approach is incompatible with an SDC methodology that includes an improvement fee, and is less common in some states.

Under the *capacity buy-in approach*, the reimbursement fee is estimated by valuing the excess capacity of the utility and estimating the percentage of that excess capacity that new customers will need. The capacity buy-in approach is compatible with SDC methodologies that include both an improvement fee and a reimbursement fee, and is more common in some states.

### 3.7.2 Improvement Approach

An improvement approach is a common method of developing the improvement fee portion of an SDC. An improvement fee is a charge to new customers that includes the costs for expanding the system to serve growth. An improvement fee can be calculated using one of two common methods. These are:

- Improvement Cost Approach
- Incremental Cost Approach

Unlike the two buy-in approaches discussed above, the *improvement cost approach* to calculating SDCs is a forward-looking approach. As such, it ignores past investment in the system and bases the entire SDC on the hypothetical cost of providing all infrastructure to meet a new customer's capacity. The hypothetical costs are determined using current technologies at today's costs. This method is commonly used in some states to calculate the improvement fee portion of the SDC.

The philosophical basis for the *improvement cost approach* is that current users should not experience rate increases to meet the needs of growth. In this manner, the goal of SDCs that new customers are asked to mitigate the impact that their growth will have on current customers is achieved.

To serve growth, a utility must incur capital costs to expand its existing system. The *incremental cost approach* is based on the principle that new customers should be responsible for the next increment of that capital cost that the City incurs to expand for growth. SDCs are designed to recover the costs of expansion using recent construction cost experience or projected costs of future facilities. This approach is used in some states for calculation of the improvement fee SDC. Under this approach, user charges should not be affected by the capital costs for growth.

## 3.8 Calculating SDCs

Provided below is a brief overview of the common steps involved in calculating an SDC. The second part of this section discusses the various steps involved in the calculation of the reimbursement and improvement fee portions of the SDC.

### 3.8.1 General Overview

In general, the process of calculating an SDC can be broken down into the following four tasks:

1. **System Valuation.** The value of the utility's existing assets used in the calculation of the reimbursement fee.
2. **Multi-Purpose Project Allocation.** The estimation of capital improvement costs related to growth that can be used in the calculation of an improvement fee portion of an SDC.
3. **Capacity Definition.** Defining the system capacities to be used in the calculation of the SDC.
4. **Assessment Schedule Development.** A schedule of charges or equivalent units used to determine the SDC charge per customer.

The following presents a description of each task.

### 3.8.2 System Valuations

There are four techniques commonly used to measure the value of the existing assets. The differences in the fixed asset valuation techniques are primarily associated with differences in how the carrying cost of capital is recovered and how inflation is incorporated in the valuation. If the utility intends to recover its carrying cost of capital from new customers (i.e., growth), the utility may choose to include all or a part of its carrying cost of capital within its SDC.

The carrying cost of capital consists of the following two components:

1. Depreciation expense
2. Interest expense

The depreciation expense is a periodic charge made against the value of an asset to recognize its loss in value. Many methods exist to estimate the loss in asset value. The most common measures of depreciation for utilities are accounting measures that use a straight-line method. Under a straight-line method, depreciation expense is assumed to occur evenly throughout the life of the asset. If the asset is estimated to have a life of 50 years, then one-fiftieth of the asset's original cost is depreciated each year.

Interest expense can either be the cost of paying interest on bonded debt, the opportunity cost of money, or a combination of both. The opportunity cost of money is the interest expense measure used when expenditures are paid for with cash. In essence, the opportunity cost of money is the interest that the utility could have earned on its cash balances if the cash was invested instead of spent on capital projects. Whether or not the capital project was debt



financed or paid for with cash, the utility incurs a carrying cost associated with the interest expense.

The technique chosen to value fixed assets ultimately affects the reimbursement fee component of the SDC. The common techniques include:

1. Book Value
2. Original Cost
3. Replacement Cost New Less Depreciation
4. Replacement Cost New

Replacement cost new (RCN) is recommended as the valuation method for the regional system. RCN is a common valuation technique for utilities. The RCN value of a utility's fixed assets is estimated by using cost indices or other means to estimate the current cost of reconstructing previously-built facilities today. This adjustment to asset values accounts for inflation over time.

By including inflation in the reimbursement fee, the utility is receiving a rate of return on its investment equal to the rate of inflation. Although this is not a competitive rate of return, it partially compensates existing customers for their past investments.

### **3.8.3 Multi-Purpose Project Cost Allocations**

The second task required to calculate SDCs is a technique to estimate the capital improvement costs related to growth. These costs form the basis for the improvement fee. To take advantage of economies of scale in design and construction, capital improvement projects often provide both additional capacity for growth and resolve a current problem for existing customers (hence the term, "multi-purpose"). The growth-related portion of these improvements must be determined for inclusion in the improvement fee.

Four techniques of allocating the costs of these multi-purpose projects are common. These four techniques include:

1. Incremental Upgrade
2. Proportionate Capacity
3. Proportionate Cost
4. Incremental Expansion

The proportionate capacity technique is very common, and was used in this study. Under this technique the additional capacity that an improvement yields is compared with the improvement's total capacity. The percentage of total capacity that is available for future use is used to allocate the cost for growth. For example, if the improvement has a total project cost of \$10 million, and if 40 percent is available for growth after the improvement is put in place, then 40 percent of the cost of the improvement would be allocated to growth (i.e., 40 percent of \$10 million = \$4 million.)

### **3.8.4 Capacity Definitions**

When using the capacity buy-in approach, the unused capacity of the facility is used to determine the percentage of the facility cost that can be included in the fee. Also, when an improvement fee is used as part of an SDC, the additional capacity provided by the improvement is used to determine the improvement fee.

### **3.8.5 Assessment Schedule Development**

An assessment schedule is a schedule of equivalencies used to determine the SDC due from customers of different sizes. The technique of developing an assessment schedule can vary substantially depending on the basis for assessing the SDC. For example, some utilities base their assessment schedule on fixture counts, meter sizes/capacity, etc. The purpose of an assessment schedule is to determine the number of equivalent residential units (ERUs) a new customer represents. The number of residential units is commonly used to set an assessment schedule for single-family and multi-family residential customers.

## **3.9 Summary**

Presented in this section of the report has been a discussion of the criteria typically used in the determination of SDCs. In addition, an overview of the “generally accepted” methodology used in the calculation of the SDCs has been provided. Given this background, the next section of the report discusses the specifics of the regional SDC calculation.



## Section 4 – Determination of the Regional System Development Charges

### 4.1 Introduction

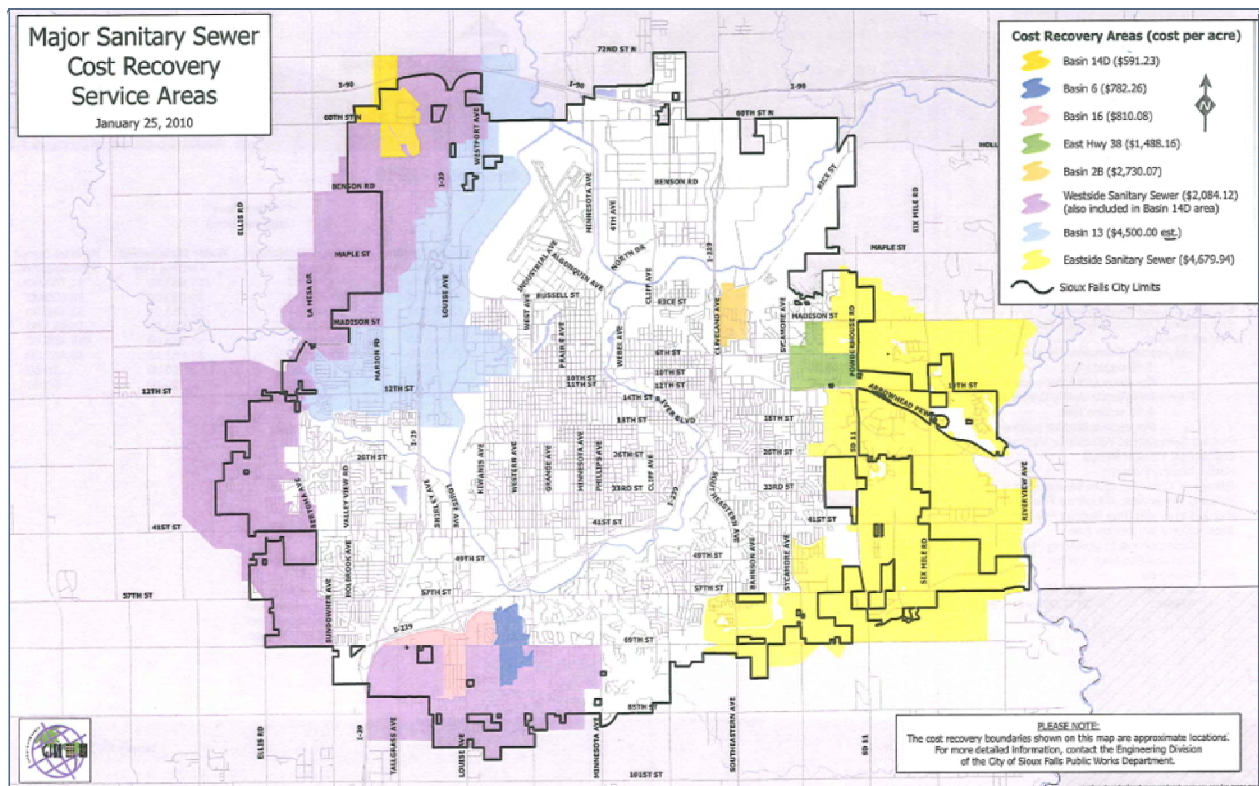
A key objective of the regionalization study was to provide a better understanding of the concepts and approaches that may be used for regional rates and fees. At the present time, the City uses a concept of cost recovery fees. System development charges (SDCs) are a similar, but different, concept. Regardless of whether a system development charge or cost recovery fee is used, both are one-time, up-front charges, to recover the capital costs of growth and expansion. This section of the report will review the development of the regional SDCs.

### 4.2 Comparison of Cost Recovery Fees to SDCs

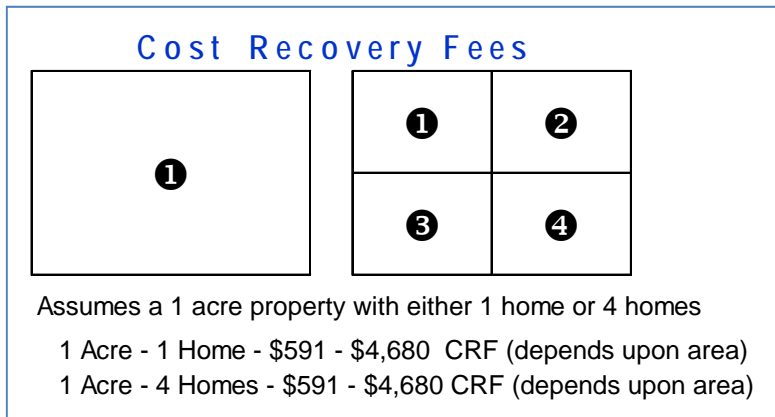
The objectives of a cost recovery fee are similar to that of a system development charge, but that is where the similarities end. At the present time, cost recovery fees are designed to recover costs associated with City's collection system from customers connecting with the City within or near the City limits. Provided below is a more detailed discussion of each of these approaches.

#### 4.2.1 Cost Recovery Fees

At the present time, the City uses cost recovery fees. Provided below is an overview of the cost recovery fees, by area, and amount.



As can be seen, cost recovery fees are primarily charged to in-City customers. Cost recovery fees are only charged to customers within or near the City limits. It is also not necessarily charged in all portions of the City, depending upon the area of development. Administratively, the City's current cost recovery fees are charged on a per acre basis. In recovering costs on a per area basis, the current approach, for the most part, ignores the issue of the capacity requirements of the new customer(s)

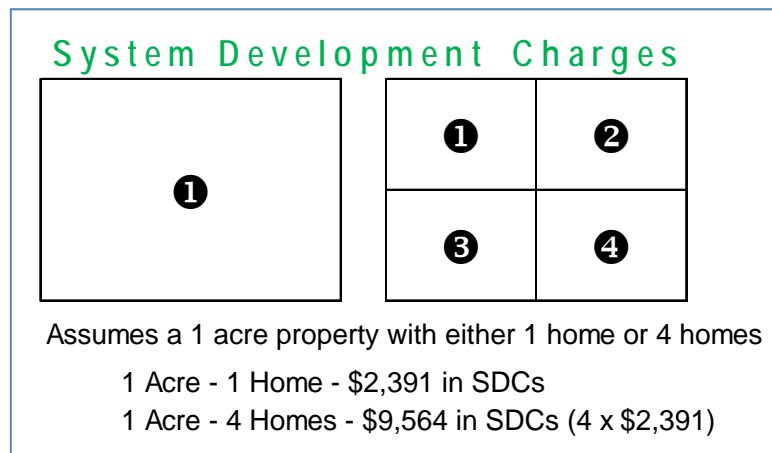


connecting to the system. As can be seen in the graphical example, the amount of the fee varies based upon the specific cost recovery area, but does not vary based upon the number of homes or capacity used. This approach is in sharp contrast to a system development charge which considers capacity and typically ignores area as the criteria for determination of the fee.

Another key short-coming of the City's cost recovery fee approach is that it does not include any costs associated with treatment plant capacity. In providing service to new customers, a new customer requires both capacity within the collection/interceptor system and the wastewater treatment plant. Under the cost recovery approach, a new customer is only paying for the costs associated with the collection system for a specific portion of the City. This fails to recognize or include those facilities needed to deliver the wastewater to the wastewater treatment plant. In other words, a customer living on the west side of the City does not pay for any of the facilities needed to move their wastewater from the west side of the City to the east side where the treatment plant is located. Finally, for purposes of regionalization, a cost recovery fee is only applied to customers within the City of Sioux Falls or near its city limits. A customer that connects in an outlying community does not pay a cost recovery fee, yet the customer will still use the same (regional) infrastructure and treatment plant capacity as an in-city customer.

#### 4.2.2 System Development Charges

The prior section of the report discussed the key elements of a system development charge. A



key difference in the system development charge, compared to the City's cost recovery fee, is that an SDC considers the customer's capacity requirements. A customer is charged on the basis of the capacity needs of that particular development (e.g. home or business). At the same time, the regional system development charges, as developed herein, have included the value of both the wastewater treatment plant and the regional



collection/interceptor system. The facilities designated as the regional system are a unified system capable of delivering wastewater to the treatment plant from all areas of the City. Finally, the other important and key difference between the regional SDC and cost recovery fees is that the regional SDCs will be applied against all regional customers and not simply the City of Sioux Falls customers. In other words, and for example, a new customer connecting in the City of Renner would be required to pay the regional SDC.

To better understand the similarities and differences between these fees, the table below provides a side-by-side comparison of cost recovery fees and system development charges.

Cost Recovery Fees	System Development Charges
<ul style="list-style-type: none"> <li>• CRFs are a form of a capital contribution</li> </ul>	<ul style="list-style-type: none"> <li>• SDCs are a form of a capital contribution</li> </ul>
<ul style="list-style-type: none"> <li>• CRFs recover collection system costs for a specific area or improvement. Does not include the cost of any treatment facilities</li> </ul>	<ul style="list-style-type: none"> <li>• SDCs recover the value of both regional collection and treatment facilities</li> </ul>
<ul style="list-style-type: none"> <li>• Charge is based on specific area (facilities) where development occurs. Charge varies by area.</li> </ul>	<ul style="list-style-type: none"> <li>• SDC is “regional” based (postage stamp). Uniform SDC, regardless of area of development.</li> </ul>
<ul style="list-style-type: none"> <li>• CRFs are only applied to in-City development (note issue of Harrisburg’s connection)</li> </ul>	<ul style="list-style-type: none"> <li>• SDCs would be applied to all regional customers (in-City and out-of-City).</li> </ul>
<ul style="list-style-type: none"> <li>• Fees may not reflect all of the collection facilities needed to deliver wastewater to City’s treatment facilities</li> </ul>	<ul style="list-style-type: none"> <li>• SDC reflects the regional collection and treatment facilities needed to serve all regional customers</li> </ul>
<ul style="list-style-type: none"> <li>• Fee assessed based upon parcel size (area), which may not have any relationship to capacity utilization</li> </ul>	<ul style="list-style-type: none"> <li>• SDC is based upon needed capacity (capacity requirements)</li> </ul>

In summary, SDCs are more equitable for purposes of regionalization since they address the key short-comings of the existing cost recovery approach. SDCs are a more appropriate and equitable method for regionalization because:

- SDCs are assessed against capacity, and are not based on area or land use
- SDCs include the value of both treatment and collection
- SDCs include a “regional system” component for collection
- SDCs would be applied to all regional customers (inside and outside the City of Sioux Falls)

For the above reasons, regional SDCs were more closely analyzed.

### 4.3 Overview of the Regional Wastewater System

The City owns and operates a water reclamation plant (wastewater treatment plant), which currently provides sanitary sewer service to the City and nearby communities, including:

- City of Brandon
- Renner Sanitary District
- Prairie Meadows Sanitary District
- City of Harrisburg

Historically, the City assessed cost recovery fees to growth within or near its City Limit boundary. As noted in the prior discussion, the existing cost recovery fees may not be an appropriate or equitable method for regionalization. To help rectify that problem, system development charges were explored as a more appropriate and equitable method of assessing new connections under a regionalization approach. Provided below is a more detailed discussion of the technical analyses undertaken to develop a regional system development charge.

#### **4.4 Calculation of the Regional Wastewater SDCs**

The proposed methodology for the regional SDC is based on historical investments by the City and future capital improvements as identified in existing master plans. This section of the report presents the details and key assumptions used in the calculation of the regional wastewater SDCs. The SDC calculation is based upon City and regional accounting and planning information. Specifically, the SDCs are based upon fixed asset records, capital improvement plan (CIP) and regional planning data. To the extent that the cost and timing of future capital improvements change, then the SDCs presented in this section of the report should be updated to reflect the changes.

#### **4.5 Reimbursement Fee**

The reimbursement fee is based on the capacity buy-in approach, and requires three steps:

1. Fixed asset valuation,
2. Capacity definition, and
3. Assessment schedule.

The following is a description of each step.

##### **4.5.1 Fixed Asset Valuation**

The City provided a listing of its fixed asset records for this analysis. Under the recommended methodology, the value of the City's fixed assets is based on an estimate of the wastewater system's reproduction cost new (RCN). In addition to the City's fixed assets, the valuation also includes over \$9 million in cash reserves.

The City's system is designed to meet the needs of its customers and provide safe and reliable service throughout its service area. The system consists of many individual components that serve specific functions. To estimate the value of assets related to each function, the value of each asset is allocated to one or more of thirteen system components. The City's wastewater system components for this study were defined as follows:

1. Interceptors
2. Water Reclamation Facility (WRF) - Flow Equalization
3. WRF - Preliminary Treatment
4. WRF - Primary Treatment
5. WRF - Trickling Filters
6. WRF - Intermediate Clarifier
7. WRF - Tertiary (Except Filters)
8. WRF - Tertiary Filters
9. WRF - Sludge Treatment
10. Administrative Facilities

11. Brandon Road Pump Station
12. Brandon Road Forcemain
13. 66" Outfall Sewer From EQ

Many assets used in the collection system are typically contributed by developers and thus excluded from the calculation of the reimbursement fee. To explicitly show the value of the excluded assets, they were assigned to an additional category labeled *Exclude from SDC*. Table 4-1 summarizes the asset values attributed to each function.

Table 4-1 Summary of the Net Fixed Asset Valuation (\$000)	
System Component	System Value
Interceptors	\$66,960
WRF – Flow Equalization	6,428
WRF – Preliminary Treatment	8,606
WRF – Primary Treatment	5,422
WRF – Trickling Filters	15,630
WRF – Intermediate Clarifier	3,816
WRF – Tertiary (Except Filters)	22,119
WRF – Tertiary Filters	6,736
WRF – Sludge Treatment	16,758
Administrative Facilities	8,938
Brandon Road Pump Station	5,036
Brandon Road Forcemain	1,743
66" Outfall From EQ	1,150
Exclude from SDC	<u>5,550</u>
Total Net Fixed Assets	\$174,892

Based on the analysis, the total value of the wastewater system assets for SDC purposes in fiscal year ending 2010 (FY2010) is nearly \$175 million. Of the total value, \$5.5 million is excluded from the SDC to account for assets that are considered contributed or obsolete assets. Thus, for the purpose of establishing a reimbursement SDC, the wastewater system is valued at approximately \$169 million. Table 4-2 provides a summary of these values in categories relevant to the City's regional system; interceptors and treatment.

Table 4-2 Summary of the Net Fixed Asset Valuation (\$000)	
System Component	Value
Interceptors	\$66,960
Treatment	<u>102,383</u>
Total Net Fixed Assets	\$169,342

#### 4.5.2 Capacity Definition

The next step in determining the reimbursement fee under the capacity buy-in approach is to define the system capacity. Specifically, under the capacity buy-in approach, the system capacity is based on the unused capacity of the system for each function identified above. The

City provided data used for this analysis. Table 4-3 lists the current capacities and requirements per ERU of each function.

Table 4-3  
Capacities and Requirements By Function

System Component	Capacities	Requirements Per ERU
Interceptors	118,517.0 ERU	1.0 ERU
WRF – Flow Equalization	12.0 MG	183.7 Gallons
WRF – Preliminary Treatment	21.0 ADF MGD	214.4 gpd
WRF – Primary Treatment	21.0 ADF MGD	214.4 gpd
WRF – Trickling Filters	16.2 ADF MGD	173.1 gpd
WRF – Intermediate Clarifier	21.0 ADF MGD	173.1 gpd
WRF – Tertiary (Except Filters)	21.0 ADF MGD	214.4 gpd
WRF – Tertiary Filters	13.2 ADF MGD	152.2 gpd
WRF – Sludge Treatment	45,126.0 lb VS/Day	0.46 lb VS/day
Administrative Facilities	121,293.0 ERU	1.0 ERU
Brandon Road Pump Station	35.0 MGD	373.5 gpd
Brandon Road Forcemain	35.0 MGD	373.5 gpd
66" Outfall From EQ	35.0 MGD	373.5 gpd

Note: ERU = Equivalent Residential Unit; MG = Millions of Gallons  
 ADF = Average Daily Flow gpd = gallons per day  
 VS = Volatile Solids MGD = Millions Gallons Per Day

Underlying the numbers shown in this table is the assumption that one ERU contributes 214.4 gallons of wastewater per day on an average-day basis. This estimate is based on the City's most recent estimates and an assumption that the system currently serves 73,429 ERUs. This value is derived from the City's estimated numbers of meters at various meter sizes.

Using these assumptions and the capacities for each function summarized in Table 4-3, the number of ERUs that can be served by each function is calculated. Subtracting the number of ERUs currently served by the utility generates the number of ERUs available for growth. Table 4-4 presents an estimate of the capacity in the existing system that is available for growth.

Table 4-4  
Summary of the Available Capacities of the Existing System  
in Equivalent Residential Units (ERUs)

System Component	Total Capacity (ERUs)	Subscribed Capacity (ERUs)	Available Capacity (ERUs)	Remaining Capacity (ERUs)
Interceptors	118,517	73,429	45,088	38.0%
WRF – Flow Equalization	65,312	73,429	0	0.0%
WRF – Preliminary Treatment	97,968	73,429	24,539	25.0%
WRF – Primary Treatment	97,968	73,429	24,539	25.0%
WRF – Trickling Filters	93,569	73,429	20,140	21.5%
WRF – Intermediate Clarifier	121,293	73,429	47,864	39.5%
WRF – Tertiary (Except Filters)	87,968	73,429	24,539	25.0%
WRF – Tertiary Filters	86,732	73,429	13,303	15.3%
WRF – Sludge Treatment	97,968	73,429	24,539	25.0%
Administrative Facilities	121,293	73,429	47,864	39.5%
Brandon Road Pump Station	93,714	73,429	20,285	21.6%
Brandon Road Forcemain	93,714	73,429	20,285	21.6%
66" Outfall From EQ	93,714	73,429	20,285	21.6%

A description of how the number of ERUs currently served by the City is estimated follows below.

#### 4.5.3 Assessment Schedule Development

Table 4-5 provides an inventory of the number of ERUs by meter size. The number of ERUs is based on the number of meters by size and the associated equivalency factors. The equivalency factors are calculated based on an analysis of the City's customer billing data for the last five years. Based on the number of meters served by the City and the equivalency schedule presented in Table 4-5, the total number of ERUs served by the City is estimated to be 73,429.

Table 4-5  
Determination of Equivalent Meters and Equivalent Residential Units (ERUs)

Meter Size	Estimated Number of Meters	Capacity Equivalency Factor	Equivalent Meters (ERUs)
5/8" x 3/4"	41,124	1.0	41,124
1"	4,216	2.5	10,540
1-1/2"	1,372	5.0	6,860
2"	1,440	8.0	11,520
3"	64	15.0	960
4"	25	25.0	625
6"	36	50.0	1,800
Total	48,277		73,429



It should be noted here that the equivalency factors shown in this table will be used for calculating SDCs for connections to the system with meters 2-inches and smaller. For connections to the wastewater system with meters larger than 2-inches, the City may forecast the requirements for flow, biochemical oxygen demand (BOD), total suspended solids (TSS), and nitrogen (TKN) to determine the number of ERUs specific to each connection. The number of ERUs associated with these requirements may be determined by the following:

$$ERUs = \left( \frac{Flow * 0.804}{214.4} \right) + \left( \frac{BOD * 0.093}{150.9} \right) + \left( \frac{TSS * 0.071}{150.3} \right) + \left( \frac{TKN * 0.032}{26.8} \right)$$

Where:

- Flow is the projected maximum monthly average wastewater flow of the new user in gallons per day.
- BOD is the projected BOD loading of the new customer in pounds per year of the new user's effluent.
- TSS is the projected TSS loading of the new customer in pounds per year of the new user's effluent.
- TKN is the projected TKN loading of the new customer in pounds per year of the new user's effluent.

The constants used in the above formula are:

- 0.804 equals the proportion of the City's wastewater facilities allocated to the flow parameter in its cost-of-service analysis.
- 214.4 equals the estimated capacity requirements of an ERU in gallons per day of flow on maximum monthly average basis.
- 0.093 equals the proportion of the City's wastewater facilities allocated to the BOD parameter in its cost-of-service analysis.
- 150.9 equals the estimated capacity requirements of an ERU in pounds of BOD per year.
- 0.071 equals the proportion of the City's wastewater facilities allocated to the TSS parameter in its cost-of-service analysis.
- 150.3 equals the estimated capacity requirements of an ERU in pounds of TSS per year.
- 0.032 equals the proportion of the City's wastewater facilities allocated to the TKN parameter in its cost-of-service analysis.
- 26.8 equals the estimated capacity requirements of an ERU in pounds of TKN per year.

The City may update the values in the formula above as its system changes to recognize the changing costs imposed by a new large customer.

#### 4.5.4 Fee Calculation

The total costs to be recovered from the reimbursement fee SDC are based on the percentage of remaining capacities by functions calculated in Table 4-4 and the total system asset values in Table 4-1. Table 4-6 presents the total reimbursement amount by system component.

Table 4-6  
Determination of the Reimbursement Totals

System Component	% Capacity Available for Growth	Reimbursement Total (\$000)
Interceptors	38.0%	\$25,474
WRF – Flow Equalization	0.0%	0
WRF – Preliminary Treatment	25.0%	2,156
WRF – Primary Treatment	25.0%	1,358
WRF – Trickling Filters	21.5%	3,364
WRF – Intermediate Clarifier	39.5%	1,506
WRF – Tertiary (Except Filters)	25.0%	5,540
WRF – Tertiary Filters	15.3%	1,033
WRF – Sludge Treatment	25.0%	4,197
Administrative Facilities	39.5%	3,527
Brandon Road Pump Station	21.6%	1,090
Brandon Road Forcemain	21.6%	377
66" Outfall From EQ	21.6%	249
Exclude from SDC	0.0%	<u>0</u>
Total		\$49,872

The total amount attributable to the reimbursement fee is almost \$50 million. Table 4-7 calculates the reimbursement fee per ERU for each of the system components. The total reimbursement fee per ERU is \$1,104.

Table 4-7  
Summary of the Reimbursement Fee (\$/ERU)

System Component	Recommended Reimbursement SDC
Interceptors	\$532
WRF – Flow Equalization	0
WRF – Preliminary Treatment	24
WRF – Primary Treatment	28
WRF – Trickling Filters	70
WRF – Intermediate Clarifier	31
WRF – Tertiary (Except Filters)	116
WRF – Tertiary Filters	22
WRF – Sludge Treatment	171
Administrative Facilities	74
Brandon Road Pump Station	23
Brandon Road Forcemain	8
66" Outfall From EQ	5
Exclude from SDC	<u>0</u>
Total	\$1,104

## 4.6 Improvement Fee

The improvement fee is based on the City’s adopted capital improvement program (CIP). To calculate an improvement fee based on the incremental cost approach,<sup>8</sup> the following three tasks must be completed:

1. Multi-purpose project allocations,
2. Capacity definitions, and
3. Assessment schedule development.

### 4.6.1 Multi-Purpose Project Allocations

Allocating the costs of multi-purpose projects is an integral part of calculating an improvement fee. A multi-purpose project is an improvement that will serve both growth and address existing needs (i.e. rehabilitation/replacement). Few projects are designed and built exclusively to serve growth or solve an existing deficiency. Rather, projects are often designed to maximize economies of scale in design and construction. Therefore, projects serving both growth and rehabilitation/upgrade (i.e., multi-purpose projects) are allocated to growth and non-growth.

The value of each capital project is allocated to one or more of the system functions described previously. Based on these allocations, Table 4-8 summarizes the percent of capacities available for growth and the resulting value of growth-related improvements attributable to each system function. The total amount of capital improvements costs used to calculate the improvement fee is approximately \$77 million.

System Component	% Capacity Available for Growth	Investment Total (\$000)
Interceptors	5.8%	\$11,868
WRF – Flow Equalization	100.0%	28,949
WRF – Preliminary Treatment	72.7%	3,600
WRF – Primary Treatment	48.7%	5,340
WRF – Trickling Filters	57.9%	497
WRF – Intermediate Clarifier	0.0%	0
WRF – Tertiary (Except Filters)	48.7%	21,360
WRF – Tertiary Filters	72.2%	824
WRF – Sludge Treatment	0.0%	0
Administrative Facilities	0.0%	0
Brandon Road Pump Station	57.6%	1,000
Brandon Road Forcemain	57.6%	1,831
66" Outfall From EQ	57.6%	1,523
Exclude from SDC	0.0%	0
<b>Total</b>		<b>\$76,792</b>

<sup>8</sup> Approach options are discussed in Section 2 of this report.

#### 4.6.2 Capacity Definitions

Table 4-9 summarizes the added capacities and the estimated number of ERUs available for growth by system component.

Table 4-9 Additional Capacities in ERUs from Improvements				
System Component	Added Capacities	Requirements Per ERU	Additional ERUs Available	
Interceptors	2,776. ERU	1.0 ERU	2,776	
WRF – Flow Equalization	16.5 MG	183.7 Gallons	89,850	
WRF – Preliminary Treatment	14.0 ADF MGD	214.4 gpd	65,312	
WRF – Primary Treatment	5.0 ADF MGD	214.4 gpd	23,326	
WRF – Trickling Filters	4.8 ADF MGD	173.1 gpd	27,724	
WRF – Intermediate Clarifier	0.0 ADF MGD	173.1 gpd	0	
WRF – Tertiary (Except Filters)	5.0 ADF MGD	214.4 gpd	23,326	
WRF – Tertiary Filters	5.3 ADF MGD	152.2 gpd	34,561	
WRF – Sludge Treatment	0.0 lb VS/Day	0.46 lb VS/day	0	
Administrative Facilities	0.0 ERU	1.0 ERU	0	
Brandon Road Pump Station	10.3 MGD	373.5 gpd	27,579	
Brandon Road Forcemain	10.3 MGD	373.5 gpd	27,579	
66" Outfall From EQ	10.3 MGD	373.5 gpd	27,579	

#### 4.6.3 Assessment Schedule Development

As with the reimbursement fee, the improvement fee portion of the City's proposed SDC will be based on meter size. Table 4-5 previously presented the number of ERUs for each meter size.

#### 4.6.4 Fee Calculation

The improvement fee is calculated based on the cost of the growth-related capital projects and the additional capacities estimated by these projects. Table 4-10 summarizes the improvement fee by system function. Based on the CIP developed by the City, the improvement fee per ERU is \$1,287.

Table 4-10  
Summary of the Improvement Fee (\$/ERU)

System Component	Recommended Improvement SDC
Interceptors	\$248
WRF – Flow Equalization	322
WRF – Preliminary Treatment	40
WRF – Primary Treatment	112
WRF – Trickling Filters	10
WRF – Intermediate Clarifier	0
WRF – Tertiary (Except Filters)	446
WRF – Tertiary Filters	17
WRF – Sludge Treatment	0
Administrative Facilities	0
Brandon Road Pump Station	21
Brandon Road Forcemain	38
66" Outfall From EQ	32
Exclude from SDC	<u>0</u>
Total	\$1,287

## 4.7 Summary of the Regional SDC

Based on our review of the City’s facilities and planned capital improvements, HDR calculated a regional wastewater SDC of \$1,104 per ERU for the reimbursement fee and \$1,287 per ERU for the improvement fee. Table 4-11 presents the resulting regional SDC schedule by meter size.<sup>9</sup>

Table 4-11  
Total Regional System Development Charge By Type and Meter Size

Meter Size	Reimbursement Component	Improvement Component	Total Regional SDC
5/8" x 3/4"	\$1,104	\$1,287	\$2,391
1"	2,761	3,217	5,977
1-1/2"	5,521	6,433	11,954
2"	8,834	10,293	19,127

Based on historical cost recovery fees, the City classifies its regional system into two primary categories:

- Collection System, and
- Treatment.

Given these system classifications, a summary of the calculated regional SDCs per ERU is provided in Table 4-12 below.

<sup>9</sup> SDCs for larger meter sizes will be calculated based on the formula described in Section 4.5.3 of this report.



Table 4-12  
Total System Development Charge By Type and System Classification (\$/ERU)

Meter Size	Reimbursement Component (\$/ERU)	Improvement Component (\$/ERU)	Total SDC (\$/ERU)
Collection	\$532	\$248	\$780
Treatment	<u>572</u>	<u>1,039</u>	<u>1,611</u>
Total	\$1,104	\$1,287	\$2,391

Based on the total SDCs by system classification in Table 4-12 above, Table 4-13 shown below provides the resulting SDC schedule by meter size.

Table 4-13  
Total System Development Charge By Component and Meter Size (\$/ERU)

Meter Size	Conveyance Component (\$/ERU)	Treatment Component (\$/ERU)	Total SDC (\$/ERU)
5/8" x 3/4"	\$780	\$1,611	\$2,391
1"	1,950	4,027	5,977
1-1/2"	3,901	8,054	11,954
2"	6,241	12,886	19,127

## 4.8 Regional SDCs Replace Cost Recovery Fees

With the establishment of regional SDCs, they are not intended to replace cost recovery fees, but, rather be used to “true-up” any amounts not collected above the local cost recovery component amounts within the City of Sioux Falls system. Regional customers outside of Sioux Falls would be charged SDCs. It will be the decision of each regional customer on how the SDCs are collected at the local level in an appropriate manner. Regardless of the method of passing through the regional SDC, the regional SDC must be paid by the local entity to the regional system.

## 4.9 Assessment of Regional System Development Charges

Going forward, regional SDCs would be assessed to all new connections for expansions of capacity, regardless of regional location.<sup>10</sup> In other words, all new regional customers (in-City and outside City) connecting to the regional system will be assessed system development charges. The regional SDCs are payable to the regional system and are limited in their use to the regional system. As a part of the regional rate study, a set of regional financial policies were established which limit the use of regional SDCs to two uses; direct funding of a growth (expansion) related capital project or for the payment of growth-related debt service.

At the local level, the regional SDCs may be assessed (i.e. passed through) to the new customer connecting to the regional system in any manner the local entity deems appropriate.

<sup>10</sup> It is presumed that all existing customers, with the exception of Harrisburg, would have their existing customers “grand-fathered in” for purposes of assessing system development charges.

Regardless of how the regional SDC is passed through to the local customer<sup>11</sup> a regional SDC payment must be made to the regional system, including the City of Sioux Falls. Regional entities may have differences in philosophy of how these SDCs should be assessed and as such, the establishment and assessment of regional SDCs provides for local decision-making on the method by which the regional SDCs are passed through to their local customers. “Waiving” the regional SDCs at the local level is a local policy decision, but it does not “waive” the SDC payment to the regional system by the local entity.

At the local level, local entities may also include an SDC component for their local wastewater collection system. If that were the case, then the SDC charged to new customers would contain the regional SDC and a local SDC. The portion of the total SDC related to the regional SDC would be paid to the regional system and the balance, or local SDC component, would be retained by the local wastewater system for their collection system.

## 4.10 Implementation Considerations

Should regional SDCs be adopted, there are a number of issues related to maintaining cost-based regional SDCs. As such, HDR recommends the City:

- Increase/adjust the SDC annually to account for the impact of inflation.
- Review the SDCs if significant changes to the regional CIPs occur (e.g. expansion of regional facilities).
- Recover its annual SDC administrative costs from its SDC receipts.
- Use improvement fee receipts on eligible projects before funding those projects with other resources.

## 4.11 Summary

This report has developed regional system development charges. Regional system development charges are a more equitable method of assessing growth/expansion related costs to new customers connecting to the system. The existing cost recovery fees should be used with the regional SDCs to “true-up” any amounts not collected above the cost recovery amounts within the City of Sioux Falls system. Regional Customers outside of Sioux Falls would be charged strictly SDCs. It will be the decision of each regional customer on how the SDCs are collected at the local level in an appropriate manner. Regardless of the method of passing through the regional SDC, the regional SDC must be paid by the local entity to the regional system.

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<sup>11</sup> The regional SDC may be collected in a number of different ways. It may be passed directly through to the developer (growth pays for growth), partially passed through to the developer and the balance paid by existing rate payers, or entirely collected from local ratepayers. Regardless of the method of passing through the regional SDC, the regional SDC must be paid by the local entity to the regional system.



## Technical Appendices

Table 1  
City of Sioux Falls  
Regional Wastewater SDC  
Existing Assets

Description	Asset No.	Useful Life (years)	Month Acquired	Year Acquired	Age (Months)	Original Cost	Annual Depreciation	Accumulated Depreciation	Net Fixed Assets	% Regional
Central Main - 1967-68 RCP pipe project	2031800	40	Jan.	1968	517	\$0	\$0	\$0	\$0	100.0%
Central Main - 1993 CIP 60" DIP & 36" PVC pipe	2200000	50	June	1994	200	936,974	18,739	312,325	624,650	100.0%
Phase 2 - Central Main Interceptor - S.Falls Park	3007880	25	Dec.	2004	74	157,635	6,305	38,883	118,752	100.0%
Phase 2 - Central Main Interceptor - S.Falls Park	3010652	25	Dec.	2005	62	1,376,602	55,064	284,498	1,092,104	100.0%
Phase 3 - Central Main Interceptor - Design & Construction Admin		25	Dec.	2011	0	1,600,000	64,000	0	1,600,000	100.0%
Phase 3 - Central Main Interceptor - Segment 1	3014912	25	Dec.	2009	14	1,977,205	79,088	92,270	1,884,935	100.0%
Phase 3 - Central Main Interceptor - Segment 2	NA	25	Dec.	2010	2	701,058	28,042	4,674	696,384	100.0%
Phase 3 - Central Main Interceptor - Segment 3	NA	25	Dec.	2010	2	1,496,323	59,853	9,975	1,486,348	100.0%
Phase 3 - Central Main Interceptor - Segment 4	NA	25	Dec.	2010	2	2,128,627	85,145	14,191	2,114,436	100.0%
Phase 3 - Central Main Interceptor - Segment 5	NA	25	Dec.	2011	0	5,800,000	232,000	0	5,800,000	100.0%
Phase 3 - Central Main Interceptor - Segment 6	NA	25	Dec.	2011	0	7,200,000	288,000	0	7,200,000	100.0%
Add'l Phase 3 Seg.3 - Central Main Interceptor	3013143	25	Dec.	2007	38	110,345	4,414	13,977	96,368	100.0%
Phase 3 - Central Main Interceptor - Segment 5 & 6	NA	25	Dec.	2011	0	0	0	0	0	100.0%
Outfall Sewer Replacement Project	3007880	25	Dec.	2004	74	44,555	1,782	10,990	33,565	100.0%
Outfall Sewer Replacement Project	3013143	25	Dec.	2007	38	161,506	6,460	20,457	141,049	100.0%
66" Outfall Sewer & 36" Brandon Road Force Main	2074910	50	Dec.	1981	350	1,022,642	20,453	596,541	426,101	100.0%
Sioux River S. Interceptor 1987	2124750	50	July	1987	283	1,057,277	21,146	498,682	558,595	100.0%
I229 N. Trunk Sewer - Phase 1 - Louise to Sundowner	3001604	25	June	1997	164	670,682	26,827	366,640	304,043	100.0%
I229 N. Trunk Sewer - Prairie View Drainage	?	25	Dec.	1998	146	226,062	9,042	110,017	116,045	100.0%
I229 N. Trunk Sewer - Louise Avenue Upsize	3007879	25	Dec.	2004	74	54,987	2,199	13,563	41,424	100.0%
I229 N. Trunk Sewer - Louise Avenue Upsize	3014011	25	Dec.	2008	26	923,930	36,957	80,074	843,856	100.0%
I229 N. Trunk Sewer - Louise Avenue Upsize	3014011	25	Dec.	2008	26	41,900	1,676	3,631	38,269	100.0%
I229 N. Trunk Sewer Extension	3007844	25	Dec.	2002	98	79,758	3,190	26,054	53,704	100.0%
I229 N. Trunk Sewer Extension	3007879	25	Dec.	2004	74	52,717	2,109	13,003	39,713	100.0%
I229 N. Trunk Sewer Extension	3007879	25	Dec.	2004	74	223,613	8,945	55,158	168,455	100.0%
Sioux River N. Interceptor, Force Main, and PS	3004901	25	Dec.	2000	122	11,198,256	447,930	4,553,958	6,644,299	100.0%
Sioux River N. Interceptor, Force Main, and PS	3003581	25	Dec.	1999	134	3,842,906	153,716	1,716,498	2,126,408	100.0%
Sioux River N. Interceptor, Force Main, and PS	3003582	25	Jan.	2000	133	539,580	21,583	239,214	300,366	100.0%
Sioux River N. Interceptor, Force Main, and PS	3003586	40	Dec.	1999	134	2,747,206	68,680	766,928	1,980,278	100.0%
PS 215 Sioux River N. Interceptor PS	3003586	40	Dec.	2010	2	178,142	4,454	742	177,400	100.0%
Basin 15 Trunk Sewer	3004898	25	Dec.	2000	122	594,807	23,792	241,888	352,919	100.0%
Basin 15 Trunk Sewer	3002456	25	Dec.	2001	110	41,199	1,648	15,106	26,093	100.0%
Basin 15 Trunk Sewer, extension	3004918	25	Dec.	2006	50	1,011,456	40,458	168,576	842,880	100.0%
Basin 13 Trunk Sewer - Westport	3007845	25	Dec.	2002	98	563,411	22,536	184,048	379,363	100.0%
Basin 13 Trunk Sewer - Westport	3007845	25	Dec.	2002	98	255,805	10,232	83,563	172,242	100.0%
Basin 13 Trunk Sewer - Westport	3007844	25	Dec.	2002	98	91,024	3,641	29,735	61,290	100.0%
Basin 13 Trunk Sewer - ?	3007072-2	25	Dec.	2003	86	300,300	12,012	86,086	214,214	100.0%
Basin 13 Trunk Sewer - ?	3007879	25	Dec.	2004	74	26,583	1,063	6,557	20,026	100.0%
Basin 13 Trunk Sewer - Westport	3007879	25	Dec.	2004	74	6,885	275	1,698	5,187	100.0%
Basin 13 Trunk Sewer - Westport	3007879	25	Dec.	2004	74	3,720	149	918	2,802	100.0%
Basin 13 Trunk Sewer - PS 215 (Zoo) to Russell	3013143	25	Dec.	2007	38	8,442,533	337,701	1,069,388	7,373,146	100.0%
Basin 13 Trunk Sewer - PS 215 (Zoo) to Russell	3014011	25	Dec.	2008	26	1,720,278	68,811	149,091	1,571,187	100.0%
Basin 13 Trunk Sewer - Benson to 60th	NA	25	Dec.	2010	2	828,489	33,140	5,523	822,965	100.0%
Western Interceptor Pipe Lining Project	3013143	25	Dec.	2007	38	353,448	14,138	44,770	308,678	100.0%
Western Interceptor Tunnel Repair Project	NA	25	Dec.	2010	2	1,274,822	50,993	8,499	1,266,323	100.0%
ESSS Interceptors, Force Main and PS	25	25	Dec.	2007	38	3,691,894	147,676	467,640	3,224,255	100.0%
ESSS Interceptors, Force Main and PS	25	25	Dec.	2007	38	3,080,405	123,216	390,185	2,690,220	100.0%
Odor Control Collection System	NA	25	Dec.	2010	2	492,011	19,680	3,280	488,731	100.0%
Odor Control Collection System	NA	25	Dec.	2010	2	829,905	33,196	5,533	824,373	100.0%
2002 Sani Sewer Collections System Facilities Plan		10	Dec.	2002	98	275,500	27,550	224,992	50,508	100.0%
Public Works Addn (Land)	2062480	NA	Jan.	1917	973	110,864	0	0	110,864	100.0%
Office & Lab 1-Story Class C	416900	50	Jan.	1960	613	42,269	845	42,269	0	100.0%
Office Addition	416900	50	Jan.	1976	421	28,821	576	20,223	8,598	100.0%
Brandon Rd PS EPA Project	2080380	50	Dec.	1982	338	2,223,268	44,465	1,252,441	970,827	100.0%
Piping Mods - Brandon Rd PS	2080380	40	Dec.	2002	98	540,092	13,502	110,269	429,823	100.0%
Digester Complex VN Various-Carr	2100950	50	Feb.	1985	312	3,117,060	62,341	1,620,871	1,496,189	100.0%
Energy Recovery Unit	2101350	50	Feb.	1985	312	870,369	17,407	452,592	417,777	100.0%
Digester Gas Piping	2101350	40	Dec.	2007	38	142,095	3,552	11,249	130,846	100.0%
Process PS consisting of (1) Transfer	2115720	50	Feb.	1986	300	2,755,996	55,120	1,377,998	1,377,998	100.0%
Grit Removal Unit - (2) Grit Tanks (1)	2116220	50	Feb.	1986	300	1,000,939	20,019	500,470	500,470	100.0%

Table 1  
City of Sioux Falls  
Regional Wastewater SDC  
Existing Assets

Description	Asset No.	Useful Life (years)	Month Acquired	Year Acquired	Age (Months)	Original Cost	Annual Depreciation	Accumulated Depreciation	Net Fixed Assets	% Regional
Screenings Facility Addition	2116220	40	Dec.	2007	38	3,231,519	80,788	255,829	2,975,690	100.0%
Primary Sludge PS	2116400	50	Feb.	1986	300	931,038	18,621	465,519	465,519	100.0%
Sewage Dump Station	2167530	20	Dec.	1990	242	96,664	4,833	96,664	0	100.0%
Liquid Waste Dump Station	2208740	50	Oct.	1995	184	99,814	1,996	30,610	69,204	100.0%
Renovate the 888 Building	428100	15	Dec.	2003	86	19,640	1,309	9,384	10,256	100.0%
Aerated Grit Removal Rehab	2116220	15	Dec.	2001	110	234,926	15,662	143,566	91,360	100.0%
Standby Pump System	3004899	25	Oct.	2000	124	537,648	21,506	222,228	315,420	100.0%
Fencing for Flow Equalization Basin	2208690	20	Oct.	1995	184	34,366	1,718	26,347	8,019	100.0%
Sidewalks & Steps	2115660	30	Aug.	1986	294	33,229	1,108	27,137	6,092	100.0%
Street & Roadways	2115670	20	Aug.	1986	294	156,140	7,807	156,140	0	100.0%
Storm Sewers	2115650	50	Aug.	1986	294	73,695	1,474	36,111	37,584	100.0%
Underground Fiberglass Reinforced Piping	2115700	50	Feb.	1986	300	130,900	2,618	65,450	65,450	100.0%
Process Piping	2115910	50	Feb.	1986	300	1,893,141	37,863	946,571	946,571	100.0%
Meter Vault No. 3	2115920	50	Feb.	1986	300	23,200	464	11,600	11,600	100.0%
Flow Structure	2115930	50	Feb.	1986	300	130,189	2,604	65,095	65,095	100.0%
Tunnels Underground	2100940	50	Feb.	1985	312	308,337	6,167	160,335	148,002	100.0%
Tunnel - Gravity Thickeners & Primary	2115680	50	Feb.	1986	300	124,215	2,484	62,108	62,108	100.0%
Digester Gas Sphere	2115540	20	Oct.	1984	316	254,950	12,748	254,950	0	100.0%
Blend Tank	2115710	20	Oct.	1984	316	73,366	3,668	73,366	0	100.0%
Flow Equalization Basin	2208750	20	Oct.	1995	184	4,155,279	207,764	3,185,714	969,565	100.0%
Flow Equalization Improvements	2208750	20	Dec.	2007	38	27,591	1,380	4,369	23,222	100.0%
Gravity Thickeners	2115550	33	Oct.	1984	316	461,539	13,986	368,299	93,240	100.0%
Intermediate Clarifiers	2115280	33	Feb.	1986	300	1,465,105	44,397	1,109,928	355,177	100.0%
Primary Clarifiers	2115300	33	Feb.	1986	300	1,871,248	56,704	1,417,612	453,636	100.0%
Second Stage Trickling Filter	2115270	33	Feb.	1986	300	3,947,783	119,630	2,990,745	957,038	100.0%
First Stage Trickling Filters	2115290	33	Feb.	1986	300	3,895,477	118,045	2,951,119	944,358	100.0%
Underground Sprinkling System Piping	2115690	20	Aug.	1986	294	61,100	3,055	61,100	0	100.0%
Generators	33	Feb.	1985	312	521,072	15,790	410,542	110,530	100.0%	
Hoists	10	Feb.	1986	300	74,110	7,411	74,110	0	100.0%	
Air Compressors	10	Aug.	1986	294	15,000	1,500	15,000	0	100.0%	
5 Pumps - Vortex Warren	2101150-90	15	Feb.	1985	312	50,800	3,387	50,800	0	100.0%
3 Pumps - Displacement Marlow	2101240-60	15	Feb.	1985	312	30,514	2,034	30,514	0	100.0%
First Stage Recirculation Pump	2115780	15	Feb.	1986	300	14,650	977	14,650	0	100.0%
First Stage Recirculation Pump	2115790	15	Feb.	1986	300	57,760	3,851	57,760	0	100.0%
Recirculation Pump	2115810	15	Feb.	1986	300	52,760	3,517	52,760	0	100.0%
Second Stage Recirculation Pump	2115820	15	Feb.	1986	300	52,760	3,517	52,760	0	100.0%
Second Stage Recirculation Pump	2115830	15	Feb.	1986	300	9,650	643	9,650	0	100.0%
3 Inplant/Humus Pumps	2115840-60	15	Feb.	1986	300	43,500	2,900	43,500	0	100.0%
4 Primary Sludge Pumps	2116500-30	15	Feb.	1986	300	65,400	4,360	65,400	0	100.0%
3 Scum Pumps	2116540-60	15	Feb.	1986	300	28,200	1,880	28,200	0	100.0%
4 Transfer Pumps	3004938-41	10	Dec.	2009	14	2,316,283	231,628	270,233	2,046,050	100.0%
4 Sludge Pumps	3007888-91	10	Dec.	2005	62	253,094	25,309	130,765	122,329	100.0%
2 Gas Compressors	2101110-20	20	Feb.	1985	312	55,800	2,790	55,800	0	100.0%
Exhaust Fan	2115340	20	Feb.	1986	300	8,900	445	8,900	0	100.0%
First Stage Recirculation Flowmeter	2115970	20	Feb.	1986	300	13,487	674	13,487	0	100.0%
Second Stage Recirculation Flowmeter	2115980	20	Feb.	1986	300	13,487	674	13,487	0	100.0%
Make-up Air Unit MU-401	2116580	20	Feb.	1986	300	12,600	630	12,600	0	100.0%
Septic Hauler Dump Station	2167630	20	June	1990	248	42,608	2,130	42,608	0	100.0%
Clarifier for Flow Equalization Basin	2208670	20	Oct.	1995	184	305,151	15,258	233,949	71,202	100.0%
SCADA for Flow Equalization Basin	2208710	20	Oct.	1995	184	103,463	5,173	79,322	24,141	100.0%
SCADA for Brandon Rd PS	2208720	20	Oct.	1995	184	69,676	3,484	53,418	16,258	100.0%
SCADA for Flow Equalization Basin & Brandon	2208730	20	Oct.	1995	184	31,643	1,582	24,260	7,383	100.0%
Electrical Switchgear for Flow Equalization Basin	2208770	20	Oct.	1995	184	66,138	3,307	50,706	15,432	100.0%
Standby Power Supply for Brandon Rd PS	2080380	20	Dec.	2008	26	1,343,351	67,168	145,530	1,197,821	100.0%
Standby Power	2080380	20	Dec.	2009	14	33,515	1,676	1,955	31,560	100.0%
Slurry Pumps for Grit System	2208780	20	Oct.	1995	184	26,490	1,325	20,309	6,181	100.0%
Pump - Submersible 75hp	3004075	20	May	2000	129	25,660	1,283	13,792	11,868	100.0%
36-102-49	2062500	NA	Jan.	1971	481	103,837	0	0	103,837	100.0%
1-101-49	2062570	NA	Jan.	1975	433	14,277	0	0	14,277	100.0%
Effluent Filter Unit	2088410	50	Nov.	1983	327	3,300,361	66,007	1,798,697	1,501,664	100.0%



Table 1  
City of Sioux Falls  
Regional Wastewater SDC  
Existing Assets

Description	Asset No.	Useful Life (years)	Month Acquired	Year Acquired	Age (Months)	Original Cost	Annual Depreciation	Accumulated Depreciation	Net Fixed Assets	% Regional
In Plant Waste PS	2088440	50	Nov.	1983	327	484,523	9,690	264,065	220,458	100.0%
Control Unit	2088450	50	Nov.	1983	327	1,341,674	26,833	731,212	610,462	100.0%
Chemical Feed Unit	2088460	50	Nov.	1983	327	544,284	10,886	296,635	247,649	100.0%
Return Activated Sludge PS	2088470	50	Nov.	1983	327	500,879	10,018	272,979	227,900	100.0%
Admin & Maint Bldg.	2093720	50	May	1984	321	3,168,618	63,372	1,695,210	1,473,407	100.0%
Parking Lot Improvements	2093720	20	June	1998	152	58,940	2,947	37,329	21,611	100.0%
Chain Link Fence	2088120	20	Nov.	1983	327	32,040	1,602	32,040	0	100.0%
Sidewalks	2088110	30	Nov.	1983	327	16,757	559	15,221	1,536	100.0%
WW Lines, Storm Lines, & Manholes	2088140	50	Nov.	1983	327	203,383	4,068	110,844	92,539	100.0%
Aeration Basins	2088080	20	Nov.	1983	327	3,345,137	167,257	3,345,137	0	100.0%
Post Aeration Basin	2088090	20	Nov.	1983	327	569,472	28,474	569,472	0	100.0%
Roadways	2088130	20	Nov.	1983	327	218,008	10,900	218,008	0	100.0%
Backwash Storage Tank	2088480	20	Nov.	1983	327	615,185	30,759	615,185	0	100.0%
Chlorine Contact Unit	2088490	20	Nov.	1983	327	269,584	13,479	269,584	0	100.0%
Final Clarifiers	2088100	30	Nov.	1983	327	1,876,430	62,548	1,704,424	172,006	100.0%
Curtains Rolling	2093280	10	May	1984	321	18,882	1,888	18,882	0	100.0%
SCADA System - Phase 1	3007861	5	Dec.	2003	86	492,833	98,567	492,833	0	100.0%
SCADA System - Phase 2	3007861	5	Dec.	2007	38	691,014	138,203	437,642	253,372	100.0%
Crane 3-ton	2093300	10	May	1984	321	19,613	1,961	19,613	0	100.0%
Hoists and Trolleys	2093310	10	May	1984	321	16,510	1,651	16,510	0	100.0%
Hoist Crane Monorail System	2088350	20	Nov.	1983	327	56,847	2,842	56,847	0	100.0%
Mower, Riding	3007820	10	Apr.	2008	34	16,047	1,605	4,547	11,500	100.0%
4 Multi-Stage Blowers		15	Nov.	1983	327	496,200	33,080	496,200	0	100.0%
Pumps - Other		15	Nov.	1983	327	236,500	15,767	236,500	0	100.0%
Tertiary Plant Equipment		20	Nov.	1983	327	158,500	7,925	158,500	0	100.0%
Blower, Gas Shp	3003108	20	Mar.	2000	131	11,007	550	6,008	4,999	100.0%
Cabinets - Lab	3002023	10	Sep.	1998	149	9,850	985	9,850	0	100.0%
Microwave Moisture/Solids Analyzer	3001669	10	Feb.	1998	156	16,098	1,610	16,098	0	100.0%
Distiller, Nitrogen	3007780	10	June	2006	56	11,146	1,115	5,202	5,945	100.0%
Bio-Solids Handling - Land (3)		NA	Jan.	1973	457	52,500	0	0	52,500	100.0%
Bio-Solids Handling - Land (1)		NA	Jan.	1980	373	48,300	0	0	48,300	100.0%
Solids Dewatering Unit	2101670	50	Feb.	1985	312	1,610,690	32,214	837,559	773,131	100.0%
Loading Station for Biosolids	3003580	40	Dec.	1999	134	161,702	4,043	45,142	116,560	100.0%
Facultative Biosolids Basin	2208660	20	Dec.	1995	182	716,407	35,820	543,276	173,132	100.0%
Cranes 3-ton	2093330	10	May	1984	321	20,106	2,011	20,106	0	100.0%
Belt Conveyor System	2101800	10	Feb.	1985	312	68,400	6,840	68,400	0	100.0%
6 Sludge Dewatering System Pumps	2183080-130	15	July	1992	223	168,850	11,257	168,850	0	100.0%
2 Flowmeter Liquid	2101780-90	20	Feb.	1985	312	32,000	1,600	32,000	0	100.0%
Replace Underground Storage Tank	3001605	20	June	1997	164	10,886	544	7,439	3,447	100.0%
Lime Silo/Feed		2	Jan.	2010	13	475,000	237,500	257,292	217,708	100.0%
Digester Mixing System		1	Jan.	2011	1	200,000	200,000	16,667	183,333	0.0%
Energy Recovery Unit		0	Apr.	2011	0	1,814,000	0	0	1,814,000	0.0%
<b>Totals</b>						<b>\$135,569,633</b>	<b>\$5,503,217</b>	<b>\$51,641,060</b>	<b>\$83,928,573</b>	

## Sioux Falls Regional SDC

Table 2  
City of Sioux Falls  
Regional Wastewater SDC  
**Valuation of Assets by Valuation Method**

Description	Asset No.	Original Cost	RCN
Central Main - 1967-68 RCP pipe project	2031800	\$0	\$0
Central Main - 1993 CIP 60" DIP & 36" PVC pipe	2200000	936,974	1,442,206
Phase 2 - Central Main Interceptor - S.Falls Park	3007880	157,635	167,627
Phase 2 - Central Main Interceptor - S.Falls Park	3010652	1,376,602	1,413,117
Phase 3 - Central Main Interceptor - Design & Construction	0	1,600,000	1,600,000
Phase 3 - Central Main Interceptor - Segment 1	3014912	1,977,205	1,977,205
Phase 3 - Central Main Interceptor - Segment 2	NA	701,058	701,058
Phase 3 - Central Main Interceptor - Segment 3	NA	1,496,323	1,496,323
Phase 3 - Central Main Interceptor - Segment 4	NA	2,128,627	2,128,627
Phase 3 - Central Main Interceptor - Segment 5	NA	5,800,000	5,800,000
Phase 3 - Central Main Interceptor - Segment 6	NA	7,200,000	7,200,000
Add'l Phase 3 Seg.3 - Central Main Interceptor	3013143	110,345	111,170
Phase 3 - Central Main Interceptor - Segment 5 & 6	NA	0	0
Outfall Sewer Replacement Project	3007880	44,555	47,379
Outfall Sewer Replacement Project	3013143	161,506	162,714
66" Outfall Sewer & 36" Brandon Road Force Main	2074910	1,022,642	2,098,998
Sioux River S. Interceptor 1987	2124750	1,057,277	1,966,938
I229 N. Trunk Sewer - Phase 1 - Louise to Sundowner	3001604	670,682	914,151
I229 N. Trunk Sewer - Prairie View Drainage	?	226,062	282,112
I229 N. Trunk Sewer - Louise Avenue Upsize	3007879	54,987	58,472
I229 N. Trunk Sewer - Louise Avenue Upsize	3014011	923,930	916,340
I229 N. Trunk Sewer - Louise Avenue Upsize	3014011	41,900	41,556
I229 N. Trunk Sewer Extension	3007844	79,758	91,581
I229 N. Trunk Sewer Extension	3007879	52,717	56,058
I229 N. Trunk Sewer Extension	3007879	223,613	237,787
Sioux River N. Interceptor, Force Main, and PS	3004901	11,198,256	13,196,292
Sioux River N. Interceptor, Force Main, and PS	3003581	3,842,906	4,675,193
Sioux River N. Interceptor, Force Main, and PS	3003582	539,580	656,440
Sioux River N. Interceptor, Force Main, and PS	3003586	2,747,206	3,342,189
PS 215 Sioux River N. Interceptor PS	3003586	178,142	178,142
Basin 15 Trunk Sewer	3004898	594,807	700,935
Basin 15 Trunk Sewer	3002456	41,199	48,768
Basin 15 Trunk Sewer, extension	3004918	1,011,456	1,016,413
Basin 13 Trunk Sewer - Westport	3007845	563,411	646,927
Basin 13 Trunk Sewer - Westport	3007845	255,805	293,723
Basin 13 Trunk Sewer - Westport	3007844	91,024	104,517
Basin 13 Trunk Sewer - ?	3007072-2	300,300	331,463
Basin 13 Trunk Sewer - ?	3007879	26,583	28,268
Basin 13 Trunk Sewer - Westport	3007879	6,885	7,322
Basin 13 Trunk Sewer - Westport	3007879	3,720	3,956
Basin 13 Trunk Sewer - PS 215 (Zoo) to Russell	3013143	8,442,533	8,505,649
Basin 13 Trunk Sewer - PS 215 (Zoo) to Russell	3014011	1,720,278	1,706,146
Basin 13 Trunk Sewer - Benson to 60th	NA	828,489	828,489
Western Interceptor Pipe Lining Project	3013143	353,448	356,090
Western Interceptor Tunnel Repair Project	NA	1,274,822	1,274,822
ESSS Interceptors, Force Main and PS	0	3,691,894	3,719,495
ESSS Interceptors, Force Main and PS	0	3,080,405	3,103,434
Odor Control Collection System	NA	492,011	492,011
Odor Control Collection System	NA	829,905	829,905
2002 Sani Sewer Collections System Facilities Plan	0	275,500	316,338
Public Works Addn (Land)	2062480	110,864	4,468,370
Office & Lab 1-Story Class C	416900	42,269	419,709
Office Addition	416900	28,821	93,797
Brandon Rd PS EPA Project	2080380	2,223,268	4,296,200
Piping Mods - Brandon Rd PS	2080380	540,092	620,152
Digester Complex VN Various-Carr	2100950	3,117,060	5,942,947
Energy Recovery Unit	2101350	870,369	1,659,435
Digester Gas Piping	2101350	142,095	143,157
Process PS consisting of (1) Transfer	2115720	2,755,996	5,249,900
Grit Removal Unit - (2) Grit Tanks (1)	2116220	1,000,939	1,906,690
Screenings Facility Addition	2116220	3,231,519	3,255,677
Primary Sludge PS	2116400	931,038	1,773,535
Sewage Dump Station	2167530	96,664	170,132
Liquid Waste Dump Station	2208740	99,814	146,190
Renovate the 888 Building	428100	19,640	21,678
Aerated Grit Removal Rehab	2116220	234,926	278,088

Table 2  
City of Sioux Falls  
Regional Wastewater SDC  
**Valuation of Assets by Valuation Method**

Description	Asset No.	Original Cost	RCN
Standby Pump System	3004899	537,648	652,460
Fencing for Flow Equalization Basin	2208690	34,366	50,333
Sidewalks & Steps	2115660	33,229	62,818
Street & Roadways	2115670	156,140	295,176
Storm Sewers	2115650	73,695	139,317
Underground Fiberglass Reinforced Piping	2115700	130,900	249,352
Process Piping	2115910	1,893,141	3,606,247
Meter Vault No. 3	2115920	23,200	44,194
Flow Structure	2115930	130,189	247,997
Tunnels Underground	2100940	308,337	587,872
Tunnel - Gravity Thickeners & Primary	2115680	124,215	236,617
Digester Gas Sphere	2115540	254,950	486,957
Blend Tank	2115710	73,366	140,130
Flow Equalization Basin	2208750	4,155,279	6,085,911
Flow Equalization Improvements	2208750	27,591	27,797
Gravity Thickeners	2115550	461,539	881,544
Intermediate Clarifiers	2115280	1,465,105	2,790,880
Primary Clarifiers	2115300	1,871,248	3,564,543
Second Stage Trickling Filter	2115270	3,947,783	7,520,137
First Stage Trickling Filters	2115290	3,895,477	7,420,499
Underground Sprinkling System Piping	2115690	61,100	115,507
Generators	0	521,072	993,469
Hoists	0	74,110	141,172
Air Compressors	0	15,000	28,357
5 Pumps - Vortex Warren	2101150-90	50,800	96,855
3 Pumps - Displacement Marlow	2101240-60	30,514	58,178
First Stage Recirculation Pump	2115780	14,650	27,907
First Stage Recirculation Pump	2115790	57,760	110,027
Recirculation Pump	2115810	52,760	100,503
Second Stage Recirculation Pump	2115820	52,760	100,503
Second Stage Recirculation Pump	2115830	9,650	18,382
3 Inplant/Humus Pumps	2115840-60	43,500	82,863
4 Primary Sludge Pumps	2116500-30	65,400	124,581
3 Scum Pumps	2116540-60	28,200	53,718
4 Transfer Pumps	3004938-41	2,316,283	2,316,283
4 Sludge Pumps	3007888-91	253,094	259,807
2 Gas Compressors	2101110-20	55,800	106,388
Exhaust Fan	2115340	8,900	16,954
First Stage Recirculation Flowmeter	2115970	13,487	25,691
Second Stage Recirculation Flowmeter	2115980	13,487	25,691
Make-up Air Unit MU-401	2116580	12,600	24,002
Septic Hauler Dump Station	2167630	42,608	73,891
Clarifier for Flow Equalization Basin	2208670	305,151	446,931
SCADA for Flow Equalization Basin	2208710	103,463	151,534
SCADA for Brandon Rd PS	2208720	69,676	102,049
SCADA for Flow Equalization Basin & Brandon	2208730	31,643	46,345
Electrical Switchgear for Flow Equalization Basin	2208770	66,138	96,867
Standby Power Supply for Brandon Rd PS	2080380	1,343,351	1,332,315
Standby Power	2080380	33,515	33,515
Slurry Pumps for Grit System	2208780	26,490	38,798
Pump - Submersible 75hp	3004075	25,660	31,133
36-102-49	2062500	103,837	574,351
1-101-49	2062570	14,277	51,455
Effluent Filter Unit	2088410	3,300,361	6,285,001
In Plant Waste PS	2088440	484,523	922,695
Control Unit	2088450	1,341,674	2,554,999
Chemical Feed Unit	2088460	544,284	1,036,500
Return Activated Sludge PS	2088470	500,879	953,843
Admin & Maint Bldg.	2093720	3,168,618	6,046,556
Parking Lot Improvements	2093720	58,940	75,886
Chain Link Fence	2088120	32,040	61,015
Sidewalks	2088110	16,757	31,911
WW Lines, Storm Lines, & Manholes	2088140	203,383	387,310
Aeration Basins	2088080	3,345,137	6,370,269
Post Aeration Basin	2088090	569,472	1,084,467
Roadways	2088130	218,008	415,161

Table 2  
City of Sioux Falls  
Regional Wastewater SDC  
**Valuation of Assets by Valuation Method**

Description	Asset No.	Original Cost	RCN
Backwash Storage Tank	2088480	615,185	1,171,520
Chlorine Contact Unit	2088490	269,584	513,379
Final Clarifiers	2088100	1,876,430	3,573,356
Curtains Rolling	2093280	18,882	36,032
SCADA System - Phase 1	3007861	492,833	543,976
SCADA System - Phase 2	3007861	691,014	696,180
Crane 3-ton	2093300	19,613	37,427
Hoists and Trolleys	2093310	16,510	31,505
Hoist Crane Monorail System	2088350	56,847	108,256
Mower, Riding	3007820	16,047	16,220
4 Multi-Stage Blowers	0	496,200	944,932
Pumps - Other	0	236,500	450,376
Tertiary Plant Equipment	0	158,500	301,837
Blower, Gas 5hp	3003108	11,007	13,366
Cabinets - Lab	3002023	9,850	12,647
Microwave Moisture/Solids Analyzer	3001669	16,098	21,025
Distiller, Nitrogen	3007780	11,146	11,446
Bio-Solids Handling - Land (3)	0	52,500	247,217
Bio-Solids Handling - Land (1)	0	48,300	107,283
Solids Dewatering Unit	2101670	1,610,690	3,070,920
Loading Station for Biosolids	3003580	161,702	196,723
Facultative Biosolids Basin	2208660	716,407	1,050,519
Cranes 3-ton	2093330	20,106	38,368
Belt Conveyor System	2101800	68,400	130,411
6 Sludge Dewatering System Pumps	2183080-130	168,850	275,313
2 Flowmeter Liquid	2101780-90	32,000	61,011
Replace Underground Storage Tank	3001605	10,886	14,838
Lime Silo/Feed	0	475,000	475,000
Digester Mixing System	0	0	0
Energy Recovery Unit	0	0	0
<b>Total</b>		<b>\$133,555,633</b>	<b>\$190,993,502</b>

Table 3  
City of Sioux Falls  
Regional Wastewater SDC  
**Percentage Allocation of Fixed Assets**

Description	Asset No.	Interceptors	WRF - Flow Equalization	WRF - Preliminary Treatment	WRF - Primary Treatment	WRF - Trickling Filters	WRF - Intermediate Clarifier	WRF - Tertiary (Except Filters)	WRF - Tertiary Filters	WRF - Sludge Treatment
Central Main - 1967-68 RCP pipe project	2031800	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Central Main - 1993 CIP 60" DIP & 36" PVC pipe	2200000	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Phase 2 - Central Main Interceptor - S.Falls Park	3007880	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Phase 2 - Central Main Interceptor - S.Falls Park	3010652	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Phase 3 - Central Main Interceptor - Design & Construction	0	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Phase 3 - Central Main Interceptor - Segment 1	3014912	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Phase 3 - Central Main Interceptor - Segment 2	NA	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Phase 3 - Central Main Interceptor - Segment 3	NA	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Phase 3 - Central Main Interceptor - Segment 4	NA	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Phase 3 - Central Main Interceptor - Segment 5	NA	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Phase 3 - Central Main Interceptor - Segment 6	NA	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Add'l Phase 3 Seg.3 - Central Main Interceptor	3013143	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Phase 3 - Central Main Interceptor - Segment 5 & 6	NA	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Outfall Sewer Replacement Project	3007880	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Outfall Sewer Replacement Project	3013143	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
66" Outfall Sewer & 36" Brandon Road Force Main	2074910	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sioux River S. Interceptor 1987	2124750	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
I229 N. Trunk Sewer - Phase 1 - Louise to Sundowner	3001604	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
I229 N. Trunk Sewer - Prairie View Drainage	?	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
I229 N. Trunk Sewer - Louise Avenue Upsize	3007879	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
I229 N. Trunk Sewer - Louise Avenue Upsize	3014011	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
I229 N. Trunk Sewer - Louise Avenue Upsize	3014011	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
I229 N. Trunk Sewer Extension	3007844	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
I229 N. Trunk Sewer Extension	3007879	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
I229 N. Trunk Sewer Extension	3007879	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sioux River N. Interceptor, Force Main, and PS	3004901	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sioux River N. Interceptor, Force Main, and PS	3003581	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sioux River N. Interceptor, Force Main, and PS	3003582	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sioux River N. Interceptor, Force Main, and PS	3003586	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PS 215 Sioux River N. Interceptor PS	3003586	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Basin 15 Trunk Sewer	3004898	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Basin 15 Trunk Sewer	3002456	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Basin 15 Trunk Sewer, extension	3004918	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Basin 13 Trunk Sewer - Westport	3007845	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Basin 13 Trunk Sewer - Westport	3007845	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Basin 13 Trunk Sewer - Westport	3007844	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Basin 13 Trunk Sewer - ?	3007072-2	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Basin 13 Trunk Sewer - ?	3007879	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Basin 13 Trunk Sewer - Westport	3007879	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Basin 13 Trunk Sewer - Westport	3007879	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Basin 13 Trunk Sewer - PS 215 (Zoo) to Russell	3013143	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Basin 13 Trunk Sewer - PS 215 (Zoo) to Russell	3014011	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Basin 13 Trunk Sewer - Benson to 60th	NA	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Western Interceptor Pipe Lining Project	3013143	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Western Interceptor Tunnel Repair Project	NA	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



Sioux Falls Regional SDC

Table 3  
 City of Sioux Falls  
 Regional Wastewater SDC  
 Percentage Allocation of Fixed Assets

Description	Asset No.	Interceptors	WRF - Flow Equalization	WRF - Preliminary Treatment	WRF - Primary Treatment	WRF - Trickling Filters	WRF - Intermediate Clarifier	WRF - Tertiary (Except Filters)	WRF - Tertiary Filters	WRF - Sludge Treatment
ESSS Interceptors, Force Main and PS	0	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ESSS Interceptors, Force Main and PS	0	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Odor Control Collection System	NA	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Odor Control Collection System	NA	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2002 Sani Sewer Collections System Facilities Plan	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Public Works Addn (Land)	2062480	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Office & Lab 1-Story Class C	416900	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Office Addition	416900	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Brandon Rd PS EPA Project	2080380	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Piping Mods - Brandon Rd PS	2080380	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Digester Complex VN Various-Carr	2100950	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Energy Recovery Unit	2101350	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Digester Gas Piping	2101350	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Process PS consisting of (1) Transfer	2115720	0.0%	0.0%	0.0%	0.0%	15.0%	0.0%	85.0%	0.0%	0.0%
Grit Removal Unit - (2) Grit Tanks (1)	2116220	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Screenings Facility Addition	2116220	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Primary Sludge PS	2116400	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Sewage Dump Station	2167530	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Liquid Waste Dump Station	2208740	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Renovate the 888 Building	428100	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%
Aerated Grit Removal Rehab	2116220	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Standby Pump System	3004899	0.0%	0.0%	25.0%	25.0%	12.5%	12.5%	25.0%	0.0%	0.0%
Fencing for Flow Equalization Basin	2208690	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sidewalks & Steps	2115660	0.0%	20.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	0.0%
Street & Roadways	2115670	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Storm Sewers	2115650	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Underground Fiberglass Reinforced Piping	2115700	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Process Piping	2115910	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Meter Vault No. 3	2115920	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Flow Structure	2115930	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Tunnels Underground	2100940	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Tunnel - Gravity Thickeners & Primary	2115680	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Digester Gas Sphere	2115540	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Blend Tank	2115710	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Flow Equalization Basin	2208750	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Flow Equalization Improvements	2208750	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Gravity Thickeners	2115550	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Intermediate Clarifiers	2115280	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
Primary Clarifiers	2115300	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Second Stage Trickling Filter	2115270	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
First Stage Trickling Filters	2115290	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Underground Sprinkling System Piping	2115690	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Generators	0	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Hoists	0	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Air Compressors	0	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%

Sioux Falls Regional SDC

Table 3  
City of Sioux Falls  
Regional Wastewater SDC  
Percentage Allocation of Fixed Assets

Description	Asset No.	Interceptors	WRF - Flow Equalization	WRF - Preliminary Treatment	WRF - Primary Treatment	WRF - Trickling Filters	WRF - Intermediate Clarifier	WRF - Tertiary (Except Filters)	WRF - Tertiary Filters	WRF - Sludge Treatment
5 Pumps - Vortex Warren	2101150-90	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
3 Pumps - Displacement Marlow	2101240-60	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
First Stage Recirculation Pump	2115780	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%
First Stage Recirculation Pump	2115790	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%
Recirculation Pump	2115810	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%
Second Stage Recirculation Pump	2115820	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%
Second Stage Recirculation Pump	2115830	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%
3 Inplant/Humus Pumps	2115840-60	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
4 Primary Sludge Pumps	2116500-30	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
3 Scum Pumps	2116540-60	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	50.0%
4 Transfer Pumps	3004938-41	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
4 Sludge Pumps	3007888-91	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2 Gas Compressors	2101110-20	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Exhaust Fan	2115340	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
First Stage Recirculation Flowmeter	2115970	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%
Second Stage Recirculation Flowmeter	2115980	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	0.0%
Make-up Air Unit MU-401	2116580	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Septic Hauler Dump Station	2167630	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Clarifier for Flow Equalization Basin	2208670	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
SCADA for Flow Equalization Basin	2208710	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
SCADA for Brandon Rd PS	2208720	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
SCADA for Flow Equalization Basin & Brandon	2208730	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Electrical Switchgear for Flow Equalization Basin	2208770	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Standby Power Supply for Brandon Rd PS	2080380	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Standby Power	2080380	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Slurry Pumps for Grit System	2208780	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Pump - Submersible 75hp	3004075	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
36-102-49	2062500	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
1-101-49	2062570	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Effluent Filter Unit	2088410	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
In Plant Waste PS	2088440	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Control Unit	2088450	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Chemical Feed Unit	2088460	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Return Activated Sludge PS	2088470	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Admin & Maint Bldg.	2093720	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Parking Lot Improvements	2093720	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Chain Link Fence	2088120	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Sidewalks	2088110	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
WW Lines, Storm Lines, & Manholes	2088140	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Aeration Basins	2088080	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Post Aeration Basin	2088090	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Roadways	2088130	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Backwash Storage Tank	2088480	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Chlorine Contact Unit	2088490	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Final Clarifiers	2088100	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%

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**Percentage Allocation of Fixed Assets**

Description	Asset No.	Interceptors	WRF - Flow Equalization	WRF - Preliminary Treatment	WRF - Primary Treatment	WRF - Trickling Filters	WRF - Intermediate Clarifier	WRF - Tertiary (Except Filters)	WRF - Tertiary Filters	WRF - Sludge Treatment
Curtains Rolling	2093280	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
SCADA System - Phase 1	3007861	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
SCADA System - Phase 2	3007861	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Crane 3-ton	2093300	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Hoists and Trolleys	2093310	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Hoist Crane Monorail System	2088350	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Mower, Riding	3007820	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
4 Multi-Stage Blowers	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Pumps - Other	0	0.0%	0.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	20.0%
Tertiary Plant Equipment	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Blower, Gas Shp	3003108	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cabinets - Lab	3002023	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Microwave Moisture/Solids Analyzer	3001669	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Distiller, Nitrogen	3007780	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bio-Solids Handling - Land (3)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Bio-Solids Handling - Land (1)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Solids Dewatering Unit	2101670	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Loading Station for Biosolids	3003580	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Facultative Biosolids Basin	2208660	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cranes 3-ton	2093330	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Belt Conveyor System	2101800	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
6 Sludge Dewatering System Pumps	2183080-130	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2 Flowmeter Liquid	2101780-90	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Replace Underground Storage Tank	3001605	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Lime Silo/Feed	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Digester Mixing System	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Energy Recovery Unit	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

<i>Functions listed here used for Asset Summary look-up:</i>	<i>Interceptors</i>	<i>WRF - Flow Equalization</i>	<i>WRF - Preliminary Treatment</i>	<i>WRF - Primary Treatment</i>	<i>WRF - Trickling Filters</i>	<i>WRF - Intermediate Clarifier</i>	<i>WRF - Tertiary (Except Filters)</i>	<i>WRF - Tertiary Filters</i>	<i>WRF - Sludge Treatment</i>
Allocation Indicator by Function	1	1	1	1	1	1	1	1	1

Table 3  
City of Sioux Falls  
Regional Wastewater SDC  
**Percentage Allocation of Fixed Assets**

Description	Administrative Facilities	Brandon Road Pump Station	Brandon Road Force Main	66" Outfall Sewer From EQ	Exclude from SDC	Total
Central Main - 1967-68 RCP pipe project	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Central Main - 1993 CIP 60" DIP & 36" PVC pipe	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Phase 2 - Central Main Interceptor - S.Falls Park	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Phase 2 - Central Main Interceptor - S.Falls Park	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Phase 3 - Central Main Interceptor - Design & Construction	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Phase 3 - Central Main Interceptor - Segment 1	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Phase 3 - Central Main Interceptor - Segment 2	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Phase 3 - Central Main Interceptor - Segment 3	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Phase 3 - Central Main Interceptor - Segment 4	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Phase 3 - Central Main Interceptor - Segment 5	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Phase 3 - Central Main Interceptor - Segment 6	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Add'l Phase 3 Seg.3 - Central Main Interceptor	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Phase 3 - Central Main Interceptor - Segment 5 & 6	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Outfall Sewer Replacement Project	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
Outfall Sewer Replacement Project	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
66" Outfall Sewer & 36" Brandon Road Force Main	0.0%	0.0%	50.0%	50.0%	0.0%	100.0%
Sioux River S. Interceptor 1987	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
I229 N. Trunk Sewer - Phase 1 - Louise to Sundowner	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
I229 N. Trunk Sewer - Prairie View Drainage	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
I229 N. Trunk Sewer - Louise Avenue Upsize	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
I229 N. Trunk Sewer - Louise Avenue Upsize	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
I229 N. Trunk Sewer - Louise Avenue Upsize	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
I229 N. Trunk Sewer Extension	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
I229 N. Trunk Sewer Extension	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
I229 N. Trunk Sewer Extension	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Sioux River N. Interceptor, Force Main, and PS	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Sioux River N. Interceptor, Force Main, and PS	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Sioux River N. Interceptor, Force Main, and PS	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Sioux River N. Interceptor, Force Main, and PS	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
PS 215 Sioux River N. Interceptor PS	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Basin 15 Trunk Sewer	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Basin 15 Trunk Sewer	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Basin 15 Trunk Sewer, extension	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Basin 13 Trunk Sewer - Westport	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Basin 13 Trunk Sewer - Westport	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Basin 13 Trunk Sewer - Westport	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Basin 13 Trunk Sewer - ?	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Basin 13 Trunk Sewer - ?	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Basin 13 Trunk Sewer - Westport	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Basin 13 Trunk Sewer - Westport	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Basin 13 Trunk Sewer - PS 215 (Zoo) to Russell	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Basin 13 Trunk Sewer - PS 215 (Zoo) to Russell	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Basin 13 Trunk Sewer - Benson to 60th	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Western Interceptor Pipe Lining Project	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Western Interceptor Tunnel Repair Project	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

Table 3  
City of Sioux Falls  
Regional Wastewater SDC  
**Percentage Allocation of Fixed Assets**

Description	Administrative Facilities	Brandon Road Pump Station	Brandon Road Forcemain	66" Outfall Sewer From EQ	Exclude from SDC	Total
ESSS Interceptors, Force Main and PS	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
ESSS Interceptors, Force Main and PS	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Odor Control Collection System	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Odor Control Collection System	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2002 Sani Sewer Collections System Facilities Plan	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Public Works Addn (Land)	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Office & Lab 1-Story Class C	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Office Addition	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Brandon Rd PS EPA Project	0.0%	80.0%	20.0%	0.0%	0.0%	100.0%
Piping Mods - Brandon Rd PS	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Digester Complex VN Various-Carr	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Energy Recovery Unit	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Digester Gas Piping	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Process PS consisting of (1) Transfer	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Grit Removal Unit - (2) Grit Tanks (1)	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Screenings Facility Addition	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Primary Sludge PS	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Sewage Dump Station	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Liquid Waste Dump Station	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Renovate the 888 Building	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Aereated Grit Removal Rehab	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Standby Pump System	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Fencing for Flow Equilization Basin	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Sidewalks & Steps	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Street & Roadways	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Storm Sewers	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Underground Fiberglass Reinforced Piping	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Process Piping	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Meter Vault No. 3	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Flow Structure	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Tunnels Underground	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Tunnel - Gravity Thickeners & Primary	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Digester Gas Sphere	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Blend Tank	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Flow Equilization Basin	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Flow Equilization Improvements	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Gravity Thickeners	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Intermediate Clarifiers	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Primary Clarifiers	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Second Stage Trickling Filter	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
First Stage Trickling Filters	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Underground Sprinkling System Piping	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Generators	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Hoists	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Air Compressors	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

Sioux Falls Regional SDC

Table 3  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Percentage Allocation of Fixed Assets**

Description	Administrative Facilities	Brandon Road Pump Station	Brandon Road Forcemain	66" Outfall Sewer From EQ	Exclude from SDC	Total
5 Pumps - Vortex Warren	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
3 Pumps - Displacement Marlow	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
First Stage Recirculation Pump	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
First Stage Recirculation Pump	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Recirculation Pump	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Second Stage Recirculation Pump	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Second Stage Recirculation Pump	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
3 Inplant/Humus Pumps	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
4 Primary Sludge Pumps	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
3 Scum Pumps	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
4 Transfer Pumps	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
4 Sludge Pumps	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2 Gas Compressors	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Exhaust Fan	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
First Stage Recirculation Flowmeter	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Second Stage Recirculation Flowmeter	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Make-up Air Unit MU-401	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Septic Hauler Dump Station	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Clarifier for Flow Equalization Basin	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
SCADA for Flow Equalization Basin	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
SCADA for Brandon Rd PS	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
SCADA for Flow Equalization Basin & Brandon	0.0%	50.0%	0.0%	0.0%	0.0%	100.0%
Electrical Switchgear for Flow Equalization Basin	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Standby Power Supply for Brandon Rd PS	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Standby Power	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Slurry Pumps for Grit System	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Pump - Submersible 75hp	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
36-102-49	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
1-101-49	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Effluent Filter Unit	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
In Plant Waste PS	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Control Unit	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Chemical Feed Unit	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Return Activated Sludge PS	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Admin & Maint Bldg.	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Parking Lot Improvements	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Chain Link Fence	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Sidewalks	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
WW Lines, Storm Lines, & Manholes	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Aeration Basins	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Post Aeration Basin	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Roadways	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Backwash Storage Tank	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Chlorine Contact Unit	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Final Clarifiers	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%



Table 3  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Percentage Allocation of Fixed Assets**

Description	Administrative Facilities	Brandon Road Pump Station	Brandon Road Forcemain	66" Outfall Sewer From EQ	Exclude from SDC	Total
Curtains Rolling	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
SCADA System - Phase 1	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
SCADA System - Phase 2	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Crane 3-ton	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Hoists and Trolleys	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Hoist Crane Monorail System	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Mower, Riding	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
4 Multi-Stage Blowers	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Pumps - Other	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Tertiary Plant Equipment	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Blower, Gas 5hp	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cabinets - Lab	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Microwave Moisture/Solids Analyzer	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Distiller, Nitrogen	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Bio-Solids Handling - Land (3)	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Bio-Solids Handling - Land (1)	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Solids Dewatering Unit	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Loading Station for Biosolids	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Facultative Biosolids Basin	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Cranes 3-ton	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Belt Conveyor System	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
6 Sludge Dewatering System Pumps	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
2 Flowmeter Liquid	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Replace Underground Storage Tank	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Lime Silo/Feed	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Digester Mixing System	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Energy Recovery Unit	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%

*Functions listed here used for Asset Summary look-up:*

	Administrative Facilities	Brandon Road Pump Station	Brandon Road Forcemain	66" Outfall Sewer From EQ	Exclude from SDC
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Allocation Indicator by Function	1	1	1	1	1	14
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Table 4  
City of Sioux Falls  
Regional Wastewater SDC  
**Allocation of RCN to Facility Type**

Description	Interceptors	WRF - Flow Equalization	WRF - Preliminary Treatment	WRF - Primary Treatment	WRF - Trickling Filters	WRF - Intermediate Clarifier	WRF - Tertiary (Except Filters)	WRF - Tertiary Filters	WRF - Sludge Treatment	Administrative Facilities
Central Main - 1967-68 RCP pipe project	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Central Main - 1993 CIP 60" DIP & 36" PVC pipe	1,442,206	0	0	0	0	0	0	0	0	0
Phase 2 - Central Main Interceptor - S.Falls Park	167,627	0	0	0	0	0	0	0	0	0
Phase 2 - Central Main Interceptor - S.Falls Park	1,413,117	0	0	0	0	0	0	0	0	0
Phase 3 - Central Main Interceptor - Design & Construction Admin	1,600,000	0	0	0	0	0	0	0	0	0
Phase 3 - Central Main Interceptor - Segment 1	1,977,205	0	0	0	0	0	0	0	0	0
Phase 3 - Central Main Interceptor - Segment 2	701,058	0	0	0	0	0	0	0	0	0
Phase 3 - Central Main Interceptor - Segment 3	1,496,323	0	0	0	0	0	0	0	0	0
Phase 3 - Central Main Interceptor - Segment 4	2,128,627	0	0	0	0	0	0	0	0	0
Phase 3 - Central Main Interceptor - Segment 5	5,800,000	0	0	0	0	0	0	0	0	0
Phase 3 - Central Main Interceptor - Segment 6	7,200,000	0	0	0	0	0	0	0	0	0
Add'l Phase 3 Seg.3 - Central Main Interceptor	111,170	0	0	0	0	0	0	0	0	0
Phase 3 - Central Main Interceptor - Segment 5 & 6	0	0	0	0	0	0	0	0	0	0
Outfall Sewer Replacement Project	0	0	0	0	0	0	0	0	0	0
Outfall Sewer Replacement Project	0	0	0	0	0	0	0	0	0	0
66" Outfall Sewer & 36" Brandon Road Force Main	0	0	0	0	0	0	0	0	0	0
Sioux River S. Interceptor 1987	1,966,938	0	0	0	0	0	0	0	0	0
I229 N. Trunk Sewer - Phase 1 - Louise to Sundowner	914,151	0	0	0	0	0	0	0	0	0
I229 N. Trunk Sewer - Prairie View Drainage	282,112	0	0	0	0	0	0	0	0	0
I229 N. Trunk Sewer - Louise Avenue Upsize	58,472	0	0	0	0	0	0	0	0	0
I229 N. Trunk Sewer - Louise Avenue Upsize	916,340	0	0	0	0	0	0	0	0	0
I229 N. Trunk Sewer - Louise Avenue Upsize	41,556	0	0	0	0	0	0	0	0	0
I229 N. Trunk Sewer Extension	91,581	0	0	0	0	0	0	0	0	0
I229 N. Trunk Sewer Extension	56,058	0	0	0	0	0	0	0	0	0
I229 N. Trunk Sewer Extension	237,787	0	0	0	0	0	0	0	0	0
Sioux River N. Interceptor, Force Main, and PS	13,196,292	0	0	0	0	0	0	0	0	0
Sioux River N. Interceptor, Force Main, and PS	4,675,193	0	0	0	0	0	0	0	0	0
Sioux River N. Interceptor, Force Main, and PS	656,440	0	0	0	0	0	0	0	0	0
Sioux River N. Interceptor, Force Main, and PS	3,342,189	0	0	0	0	0	0	0	0	0
PS 215 Sioux River N. Interceptor PS	178,142	0	0	0	0	0	0	0	0	0
Basin 15 Trunk Sewer	700,935	0	0	0	0	0	0	0	0	0
Basin 15 Trunk Sewer	48,768	0	0	0	0	0	0	0	0	0
Basin 15 Trunk Sewer, extension	1,016,413	0	0	0	0	0	0	0	0	0
Basin 13 Trunk Sewer - Westport	646,927	0	0	0	0	0	0	0	0	0
Basin 13 Trunk Sewer - Westport	293,723	0	0	0	0	0	0	0	0	0
Basin 13 Trunk Sewer - Westport	104,517	0	0	0	0	0	0	0	0	0
Basin 13 Trunk Sewer - ?	331,463	0	0	0	0	0	0	0	0	0
Basin 13 Trunk Sewer - ?	28,268	0	0	0	0	0	0	0	0	0
Basin 13 Trunk Sewer - Westport	7,322	0	0	0	0	0	0	0	0	0
Basin 13 Trunk Sewer - Westport	3,956	0	0	0	0	0	0	0	0	0
Basin 13 Trunk Sewer - PS 215 (Zoo) to Russell	8,505,649	0	0	0	0	0	0	0	0	0
Basin 13 Trunk Sewer - PS 215 (Zoo) to Russell	1,706,146	0	0	0	0	0	0	0	0	0
Basin 13 Trunk Sewer - Benson to 60th	828,489	0	0	0	0	0	0	0	0	0
Western Interceptor Pipe Lining Project	356,090	0	0	0	0	0	0	0	0	0
Western Interceptor Tunnel Repair Project	1,274,822	0	0	0	0	0	0	0	0	0
ESSS Interceptors, Force Main and PS	3,719,495	0	0	0	0	0	0	0	0	0
ESSS Interceptors, Force Main and PS	3,103,434	0	0	0	0	0	0	0	0	0

Table 4  
City of Sioux Falls  
Regional Wastewater SDC  
**Allocation of RCN to Facility Type**

Description	Interceptors	WRF - Flow Equalization	WRF - Preliminary Treatment	WRF - Primary Treatment	WRF - Trickling Filters	WRF - Intermediate Clarifier	WRF - Tertiary (Except Filters)	WRF - Tertiary Filters	WRF - Sludge Treatment	Administrative Facilities
Odor Control Collection System	0	0	492,011	0	0	0	0	0	0	0
Odor Control Collection System	0	0	829,905	0	0	0	0	0	0	0
2002 Sani Sewer Collections System Facilities Plan	0	0	0	0	0	0	0	0	0	0
Public Works Addn (Land)	0	0	0	0	0	0	0	0	0	0
Office & Lab 1-Story Class C	0	0	0	0	0	0	0	0	0	419,709
Office Addition	0	0	0	0	0	0	0	0	0	93,797
Brandon Rd PS EPA Project	0	0	0	0	0	0	0	0	0	0
Piping Mods - Brandon Rd PS	0	0	0	0	0	0	0	0	0	0
Digester Complex VN Various-Carr	0	0	0	0	0	0	0	0	5,942,947	0
Energy Recovery Unit	0	0	0	0	0	0	0	0	1,659,435	0
Digester Gas Piping	0	0	0	0	0	0	0	0	143,157	0
Process PS consisting of (1) Transfer	0	0	0	0	787,485	0	4,462,415	0	0	0
Grit Removal Unit - (2) Grit Tanks (1)	0	0	1,906,690	0	0	0	0	0	0	0
Screenings Facility Addition	0	0	3,255,677	0	0	0	0	0	0	0
Primary Sludge PS	0	0	0	0	0	0	0	0	1,773,535	0
Sewage Dump Station	0	0	170,132	0	0	0	0	0	0	0
Liquid Waste Dump Station	0	0	146,190	0	0	0	0	0	0	0
Renovate the 888 Building	0	0	0	0	10,839	10,839	0	0	0	0
Aerated Grit Removal Rehab	0	0	278,088	0	0	0	0	0	0	0
Standby Pump System	0	0	163,115	163,115	81,558	81,558	163,115	0	0	0
Fencing for Flow Equalization Basin	0	50,333	0	0	0	0	0	0	0	0
Sidewalks & Steps	0	12,564	12,564	12,564	6,282	6,282	6,282	6,282	0	0
Street & Roadways	0	0	59,035	59,035	29,518	29,518	29,518	29,518	59,035	0
Storm Sewers	0	0	27,863	27,863	13,932	13,932	13,932	13,932	27,863	0
Underground Fiberglass Reinforced Piping	0	0	49,870	49,870	24,935	24,935	24,935	24,935	49,870	0
Process Piping	0	0	721,249	721,249	360,625	360,625	360,625	360,625	721,249	0
Meter Vault No. 3	0	0	8,839	8,839	4,419	4,419	4,419	4,419	8,839	0
Flow Structure	0	0	49,599	49,599	24,800	24,800	24,800	24,800	49,599	0
Tunnels Underground	0	0	117,574	117,574	58,787	58,787	58,787	58,787	117,574	0
Tunnel - Gravity Thickeners & Primary	0	0	0	0	0	0	0	0	236,617	0
Digester Gas Sphere	0	0	0	0	0	0	0	0	486,957	0
Blend Tank	0	0	0	0	0	0	0	0	140,130	0
Flow Equalization Basin	0	6,085,911	0	0	0	0	0	0	0	0
Flow Equalization Improvements	0	27,797	0	0	0	0	0	0	0	0
Gravity Thickeners	0	0	0	0	0	0	0	0	881,544	0
Intermediate Clarifiers	0	0	0	0	0	2,790,880	0	0	0	0
Primary Clarifiers	0	0	0	3,564,543	0	0	0	0	0	0
Second Stage Trickling Filter	0	0	0	0	7,520,137	0	0	0	0	0
First Stage Trickling Filters	0	0	0	0	7,420,499	0	0	0	0	0
Underground Sprinkling System Piping	0	0	23,101	23,101	11,551	11,551	11,551	11,551	23,101	0
Generators	0	0	198,694	198,694	99,347	99,347	99,347	99,347	198,694	0
Hoists	0	0	28,234	28,234	14,117	14,117	14,117	14,117	28,234	0
Air Compressors	0	0	5,671	5,671	2,836	2,836	2,836	2,836	5,671	0
5 Pumps - Vortex Warren	0	0	0	0	0	0	0	0	96,855	0
3 Pumps - Displacement Marlow	0	0	0	0	0	0	0	0	58,178	0
First Stage Recirculation Pump	0	0	0	0	13,953	13,953	0	0	0	0
First Stage Recirculation Pump	0	0	0	0	55,014	55,014	0	0	0	0

Table 4  
City of Sioux Falls  
Regional Wastewater SDC  
**Allocation of RCN to Facility Type**

Description	Interceptors	WRF - Flow Equalization	WRF - Preliminary Treatment	WRF - Primary Treatment	WRF - Trickling Filters	WRF - Intermediate Clarifier	WRF - Tertiary (Except Filters)	WRF - Tertiary Filters	WRF - Sludge Treatment	Administrative Facilities
Recirculation Pump	0	0	0	0	50,251	50,251	0	0	0	0
Second Stage Recirculation Pump	0	0	0	0	50,251	50,251	0	0	0	0
Second Stage Recirculation Pump	0	0	0	0	9,191	9,191	0	0	0	0
3 Inplant/Humus Pumps	0	0	0	0	0	0	0	0	82,863	0
4 Primary Sludge Pumps	0	0	0	0	0	0	0	0	124,581	0
3 Scum Pumps	0	0	0	26,859	0	0	0	0	26,859	0
4 Transfer Pumps	0	0	0	0	0	0	0	0	2,316,283	0
4 Sludge Pumps	0	0	0	0	0	0	0	0	259,807	0
2 Gas Compressors	0	0	0	0	0	0	0	0	106,388	0
Exhaust Fan	0	0	3,391	3,391	1,695	1,695	1,695	1,695	3,391	0
First Stage Recirculation Flowmeter	0	0	0	0	12,846	12,846	0	0	0	0
Second Stage Recirculation Flowmeter	0	0	0	0	12,846	12,846	0	0	0	0
Make-up Air Unit MU-401	0	0	4,800	4,800	2,400	2,400	2,400	2,400	4,800	0
Septic Hauler Dump Station	0	73,891	0	0	0	0	0	0	0	0
Clarifier for Flow Equalization Basin	0	446,931	0	0	0	0	0	0	0	0
SCADA for Flow Equalization Basin	0	151,534	0	0	0	0	0	0	0	0
SCADA for Brandon Rd PS	0	0	0	0	0	0	0	0	0	0
SCADA for Flow Equalization Basin & Brandon	0	23,173	0	0	0	0	0	0	0	0
Electrical Switchgear for Flow Equalization Basin	0	96,867	0	0	0	0	0	0	0	0
Standby Power Supply for Brandon Rd PS	0	0	0	0	0	0	0	0	0	0
Standby Power	0	0	6,703	6,703	3,352	3,352	3,352	3,352	6,703	0
Slurry Pumps for Grit System	0	38,798	0	0	0	0	0	0	0	0
Pump - Submersible 75hp	0	31,133	0	0	0	0	0	0	0	0
36-102-49	0	0	114,870	114,870	57,435	57,435	57,435	57,435	114,870	0
1-101-49	0	0	10,291	10,291	5,146	5,146	5,146	5,146	10,291	0
Effluent Filter Unit	0	0	0	0	0	0	0	6,285,001	0	0
In Plant Waste PS	0	0	184,539	184,539	92,270	92,270	92,270	92,270	184,539	0
Control Unit	0	0	0	0	0	0	2,554,999	0	0	0
Chemical Feed Unit	0	0	0	0	0	0	1,036,500	0	0	0
Return Activated Sludge PS	0	0	0	0	0	0	953,843	0	0	0
Admin & Maint Bldg.	0	0	0	0	0	0	0	0	0	6,046,556
Parking Lot Improvements	0	0	0	0	0	0	0	0	0	75,886
Chain Link Fence	0	0	12,203	12,203	6,101	6,101	6,101	6,101	12,203	0
Sidewalks	0	0	6,382	6,382	3,191	3,191	3,191	3,191	6,382	0
WW Lines, Storm Lines, & Manholes	0	0	77,462	77,462	38,731	38,731	38,731	38,731	77,462	0
Aeration Basins	0	0	0	0	0	0	6,370,269	0	0	0
Post Aeration Basin	0	0	0	0	0	0	1,084,467	0	0	0
Roadways	0	0	83,032	83,032	41,516	41,516	41,516	41,516	83,032	0
Backwash Storage Tank	0	0	0	0	0	0	1,171,520	0	0	0
Chlorine Contact Unit	0	0	0	0	0	0	513,379	0	0	0
Final Clarifiers	0	0	0	0	0	0	3,573,356	0	0	0
Curtains Rolling	0	0	0	0	0	0	0	0	0	36,032
SCADA System - Phase 1	0	0	108,795	108,795	54,398	54,398	54,398	54,398	108,795	0
SCADA System - Phase 2	0	0	139,236	139,236	69,618	69,618	69,618	69,618	139,236	0
Crane 3-ton	0	0	7,485	7,485	3,743	3,743	3,743	3,743	7,485	0
Hoists and Trolleys	0	0	6,301	6,301	3,151	3,151	3,151	3,151	6,301	0
Hoist Crane Monorail System	0	0	21,651	21,651	10,826	10,826	10,826	10,826	21,651	0

Table 4  
 City of Sioux Falls  
 Regional Wastewater SDC  
 Allocation of RCN to Facility Type

Description	Interceptors	WRF - Flow Equalization	WRF - Preliminary Treatment	WRF - Primary Treatment	WRF - Trickling Filters	WRF - Intermediate Clarifier	WRF - Tertiary (Except Filters)	WRF - Tertiary Filters	WRF - Sludge Treatment	Administrative Facilities
Mower, Riding	0	0	3,244	3,244	1,622	1,622	1,622	1,622	3,244	0
4 Multi-Stage Blowers	0	0	0	0	0	0	944,932	0	0	0
Pumps - Other	0	0	90,075	90,075	45,038	45,038	45,038	45,038	90,075	0
Tertiary Plant Equipment	0	0	0	0	0	0	301,837	0	0	0
Blower, Gas 5hp	0	0	0	0	0	0	0	0	13,366	0
Cabinets - Lab	0	0	0	0	0	0	0	0	0	12,647
Microwave Moisture/Solids Analyzer	0	0	0	0	0	0	0	0	0	21,025
Distiller, Nitrogen	0	0	0	0	0	0	0	0	0	11,446
Bio-Solids Handling - Land (3)	0	0	0	0	0	0	0	0	247,217	0
Bio-Solids Handling - Land (1)	0	0	0	0	0	0	0	0	107,283	0
Solids Dewatering Unit	0	0	0	0	0	0	0	0	0	3,070,920
Loading Station for Biosolids	0	0	0	0	0	0	0	0	196,723	0
Facultative Biosolids Basin	0	0	0	0	0	0	0	0	1,050,519	0
Cranes 3-ton	0	0	0	0	0	0	0	0	38,368	0
Belt Conveyor System	0	0	0	0	0	0	0	0	130,411	0
6 Sludge Dewatering System Pumps	0	0	0	0	0	0	0	0	0	0
2 Flowmeter Liquid	0	0	0	0	0	0	0	0	61,011	0
Replace Underground Storage Tank	0	0	0	0	0	0	0	0	0	0
Lime Silo/Feed	0	0	0	0	0	0	0	0	0	0
Digester Mixing System	0	0	0	0	0	0	0	0	0	0
Energy Recovery Unit	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>\$73,327,002</b>	<b>\$7,038,933</b>	<b>\$9,424,565</b>	<b>\$5,937,274</b>	<b>\$17,116,248</b>	<b>\$4,179,008</b>	<b>\$24,222,011</b>	<b>\$7,376,379</b>	<b>\$18,351,224</b>	<b>\$9,788,019</b>
Include in SDC	1	1	1	1	1	1	1	1	1	1
Direct	\$73,327,002	\$7,038,933	\$9,424,565	\$5,937,274	\$17,116,248	\$4,179,008	\$24,222,011	\$7,376,379	\$18,351,224	\$9,788,019
Indirect Allocation Percentage	39.5%	3.8%	5.1%	3.2%	9.2%	2.3%	13.1%	4.0%	9.9%	5.3%
Include in SDC	1	1	1	1	1	1	1	1	1	1
Direct	\$73,327,002	\$7,038,933	\$9,424,565	\$5,937,274	\$17,116,248	\$4,179,008	\$24,222,011	\$7,376,379	\$18,351,224	\$9,788,019
Debt Service Credit Allocation Percentage	39.5%	3.8%	5.1%	3.2%	9.2%	2.3%	13.1%	4.0%	9.9%	5.3%

Table 4  
City of Sioux Falls  
Regional Wastewater SDC  
**Allocation of RCN to Facility Type**

Description	Brandon Road Pump Station	Brandon Road Forcemain	66" Outfall Sewer From EQ	Exclude from SDC	Total
Central Main - 1967-68 RCP pipe project	\$0	\$0	\$0	\$0	\$0
Central Main - 1993 CIP 60" DIP & 36" PVC pipe	0	0	0	0	1,442,206
Phase 2 - Central Main Interceptor - S.Falls Park	0	0	0	0	167,627
Phase 2 - Central Main Interceptor - S.Falls Park	0	0	0	0	1,413,117
Phase 3 - Central Main Interceptor - Design & Construction	0	0	0	0	1,600,000
Phase 3 - Central Main Interceptor - Segment 1	0	0	0	0	1,977,205
Phase 3 - Central Main Interceptor - Segment 2	0	0	0	0	701,058
Phase 3 - Central Main Interceptor - Segment 3	0	0	0	0	1,496,323
Phase 3 - Central Main Interceptor - Segment 4	0	0	0	0	2,128,627
Phase 3 - Central Main Interceptor - Segment 5	0	0	0	0	5,800,000
Phase 3 - Central Main Interceptor - Segment 6	0	0	0	0	7,200,000
Add'l Phase 3 Seg.3 - Central Main Interceptor	0	0	0	0	111,170
Phase 3 - Central Main Interceptor - Segment 5 & 6	0	0	0	0	0
Outfall Sewer Replacement Project	0	0	47,379	0	47,379
Outfall Sewer Replacement Project	0	0	162,714	0	162,714
66" Outfall Sewer & 36" Brandon Road Force Main	0	1,049,499	1,049,499	0	2,098,998
Sioux River S. Interceptor 1987	0	0	0	0	1,966,938
I229 N. Trunk Sewer - Phase 1 - Louise to Sundowner	0	0	0	0	914,151
I229 N. Trunk Sewer - Prairie View Drainage	0	0	0	0	282,112
I229 N. Trunk Sewer - Louise Avenue Upsize	0	0	0	0	58,472
I229 N. Trunk Sewer - Louise Avenue Upsize	0	0	0	0	916,340
I229 N. Trunk Sewer - Louise Avenue Upsize	0	0	0	0	41,556
I229 N. Trunk Sewer Extension	0	0	0	0	91,581
I229 N. Trunk Sewer Extension	0	0	0	0	56,058
I229 N. Trunk Sewer Extension	0	0	0	0	237,787
Sioux River N. Interceptor, Force Main, and PS	0	0	0	0	13,196,292
Sioux River N. Interceptor, Force Main, and PS	0	0	0	0	4,675,193
Sioux River N. Interceptor, Force Main, and PS	0	0	0	0	656,440
Sioux River N. Interceptor, Force Main, and PS	0	0	0	0	3,342,189
PS 215 Sioux River N. Interceptor PS	0	0	0	0	178,142
Basin 15 Trunk Sewer	0	0	0	0	700,935
Basin 15 Trunk Sewer	0	0	0	0	48,768
Basin 15 Trunk Sewer, extension	0	0	0	0	1,016,413
Basin 13 Trunk Sewer - Westport	0	0	0	0	646,927
Basin 13 Trunk Sewer - Westport	0	0	0	0	293,723
Basin 13 Trunk Sewer - Westport	0	0	0	0	104,517
Basin 13 Trunk Sewer - ?	0	0	0	0	331,463
Basin 13 Trunk Sewer - ?	0	0	0	0	28,268
Basin 13 Trunk Sewer - Westport	0	0	0	0	7,322
Basin 13 Trunk Sewer - Westport	0	0	0	0	3,956
Basin 13 Trunk Sewer - PS 215 (Zoo) to Russell	0	0	0	0	8,505,649
Basin 13 Trunk Sewer - PS 215 (Zoo) to Russell	0	0	0	0	1,706,146
Basin 13 Trunk Sewer - Benson to 60th	0	0	0	0	828,489
Western Interceptor Pipe Lining Project	0	0	0	0	356,090
Western Interceptor Tunnel Repair Project	0	0	0	0	1,274,822
ESSS Interceptors, Force Main and PS	0	0	0	0	3,719,495
ESSS Interceptors, Force Main and PS	0	0	0	0	3,103,434

Table 4  
City of Sioux Falls  
Regional Wastewater SDC  
**Allocation of RCN to Facility Type**

Description	Brandon Road Pump Station	Brandon Road Forcemain	66" Outfall Sewer From EQ	Exclude from SDC	Total
Odor Control Collection System	0	0	0	0	492,011
Odor Control Collection System	0	0	0	0	829,905
2002 Sani Sewer Collections System Facilities Plan	0	0	0	316,338	316,338
Public Works Addn (Land)	0	0	0	4,468,370	4,468,370
Office & Lab 1-Story Class C	0	0	0	0	419,709
Office Addition	0	0	0	0	93,797
Brandon Rd PS EPA Project	3,436,960	859,240	0	0	4,296,200
Piping Mods - Brandon Rd PS	620,152	0	0	0	620,152
Digester Complex VN Various-Carr	0	0	0	0	5,942,947
Energy Recovery Unit	0	0	0	0	1,659,435
Digester Gas Piping	0	0	0	0	143,157
Process PS consisting of (1) Transfer	0	0	0	0	5,249,900
Grit Removal Unit - (2) Grit Tanks (1)	0	0	0	0	1,906,690
Screenings Facility Addition	0	0	0	0	3,255,677
Primary Sludge PS	0	0	0	0	1,773,535
Sewage Dump Station	0	0	0	0	170,132
Liquid Waste Dump Station	0	0	0	0	146,190
Renovate the 888 Building	0	0	0	0	21,678
Aerated Grit Removal Rehab	0	0	0	0	278,088
Standby Pump System	0	0	0	0	652,460
Fencing for Flow Equilization Basin	0	0	0	0	50,333
Sidewalks & Steps	0	0	0	0	62,818
Street & Roadways	0	0	0	0	295,176
Storm Sewers	0	0	0	0	139,317
Underground Fiberglass Reinforced Piping	0	0	0	0	249,352
Process Piping	0	0	0	0	3,606,247
Meter Vault No. 3	0	0	0	0	44,194
Flow Structure	0	0	0	0	247,997
Tunnels Underground	0	0	0	0	587,872
Tunnel - Gravity Thickeners & Primary	0	0	0	0	236,617
Digester Gas Sphere	0	0	0	0	486,957
Blend Tank	0	0	0	0	140,130
Flow Equilization Basin	0	0	0	0	6,085,911
Flow Equilization Improvements	0	0	0	0	27,797
Gravity Thickeners	0	0	0	0	881,544
Intermediate Clarifiers	0	0	0	0	2,790,880
Primary Clarifiers	0	0	0	0	3,564,543
Second Stage Trickling Filter	0	0	0	0	7,520,137
First Stage Trickling Filters	0	0	0	0	7,420,499
Underground Sprinkling System Piping	0	0	0	0	115,507
Generators	0	0	0	0	993,469
Hoists	0	0	0	0	141,172
Air Compressors	0	0	0	0	28,357
5 Pumps - Vortex Warren	0	0	0	0	96,855
3 Pumps - Displacement Marlow	0	0	0	0	58,178
First Stage Recirculation Pump	0	0	0	0	27,907
First Stage Recirculation Pump	0	0	0	0	110,027



Table 4  
City of Sioux Falls  
Regional Wastewater SDC  
**Allocation of RCN to Facility Type**

Description	Brandon Road Pump Station	Brandon Road Forcemain	66" Outfall Sewer From EQ	Exclude from SDC	Total
Recirculation Pump	0	0	0	0	100,503
Second Stage Recirculation Pump	0	0	0	0	100,503
Second Stage Recirculation Pump	0	0	0	0	18,382
3 Inplant/Humus Pumps	0	0	0	0	82,863
4 Primary Sludge Pumps	0	0	0	0	124,581
3 Scum Pumps	0	0	0	0	53,718
4 Transfer Pumps	0	0	0	0	2,316,283
4 Sludge Pumps	0	0	0	0	259,807
2 Gas Compressors	0	0	0	0	106,388
Exhaust Fan	0	0	0	0	16,954
First Stage Recirculation Flowmeter	0	0	0	0	25,691
Second Stage Recirculation Flowmeter	0	0	0	0	25,691
Make-up Air Unit MU-401	0	0	0	0	24,002
Septic Hauler Dump Station	0	0	0	0	73,891
Clarifier for Flow Equalization Basin	0	0	0	0	446,931
SCADA for Flow Equalization Basin	0	0	0	0	151,534
SCADA for Brandon Rd PS	102,049	0	0	0	102,049
SCADA for Flow Equalization Basin & Brandon	23,173	0	0	0	46,345
Electrical Switchgear for Flow Equalization Basin	0	0	0	0	96,867
Standby Power Supply for Brandon Rd PS	1,332,315	0	0	0	1,332,315
Standby Power	0	0	0	0	33,515
Slurry Pumps for Grit System	0	0	0	0	38,798
Pump - Submersible 75hp	0	0	0	0	31,133
36-102-49	0	0	0	0	574,351
1-101-49	0	0	0	0	51,455
Effluent Filter Unit	0	0	0	0	6,285,001
In Plant Waste PS	0	0	0	0	922,695
Control Unit	0	0	0	0	2,554,999
Chemical Feed Unit	0	0	0	0	1,036,500
Return Activated Sludge PS	0	0	0	0	953,843
Admin & Maint Bldg.	0	0	0	0	6,046,556
Parking Lot Improvements	0	0	0	0	75,886
Chain Link Fence	0	0	0	0	61,015
Sidewalks	0	0	0	0	31,911
WW Lines, Storm Lines, & Manholes	0	0	0	0	387,310
Aeration Basins	0	0	0	0	6,370,269
Post Aeration Basin	0	0	0	0	1,084,467
Roadways	0	0	0	0	415,161
Backwash Storage Tank	0	0	0	0	1,171,520
Chlorine Contact Unit	0	0	0	0	513,379
Final Clarifiers	0	0	0	0	3,573,356
Curtains Rolling	0	0	0	0	36,032
SCADA System - Phase 1	0	0	0	0	543,976
SCADA System - Phase 2	0	0	0	0	696,180
Crane 3-ton	0	0	0	0	37,427
Hoists and Trolleys	0	0	0	0	31,505
Hoist Crane Monorail System	0	0	0	0	108,256

Table 4  
City of Sioux Falls  
Regional Wastewater SDC  
Allocation of RCN to Facility Type

Description	Brandon Road Pump Station	Brandon Road Forcemain	66" Outfall Sewer From EQ	Exclude from SDC	Total
Mower, Riding	0	0	0	0	16,220
4 Multi-Stage Blowers	0	0	0	0	944,932
Pumps - Other	0	0	0	0	450,376
Tertiary Plant Equipment	0	0	0	0	301,837
Blower, Gas Shp	0	0	0	0	13,366
Cabinets - Lab	0	0	0	0	12,647
Microwave Moisture/Solids Analyzer	0	0	0	0	21,025
Distiller, Nitrogen	0	0	0	0	11,446
Bio-Solids Handling - Land (3)	0	0	0	0	247,217
Bio-Solids Handling - Land (1)	0	0	0	0	107,283
Solids Dewatering Unit	0	0	0	0	3,070,920
Loading Station for Biosolids	0	0	0	0	196,723
Facultative Biosolids Basin	0	0	0	0	1,050,519
Cranes 3-ton	0	0	0	0	38,368
Belt Conveyor System	0	0	0	0	130,411
6 Sludge Dewatering System Pumps	0	0	0	275,313	275,313
2 Flowmeter Liquid	0	0	0	0	61,011
Replace Underground Storage Tank	0	0	0	14,838	14,838
Lime Silo/Feed	0	0	0	475,000	475,000
Digester Mixing System	0	0	0	0	0
Energy Recovery Unit	0	0	0	0	0
<b>Total</b>	<b>\$5,514,648</b>	<b>\$1,908,739</b>	<b>\$1,259,592</b>	<b>\$5,549,860</b>	<b>\$190,993,502</b>
Include in SDC	1	1	1	0	
Direct	\$5,514,648	\$1,908,739	\$1,259,592	\$5,549,860	\$190,993,502
Indirect Allocation Percentage	3.0%	1.0%	0.7%	0.0%	100.0%
Include in SDC	1	1	1	0	
Direct	\$5,514,648	\$1,908,739	\$1,259,592	\$5,549,860	\$190,993,502
Debt Service Credit Allocation Percentage	3.0%	1.0%	0.7%	0.0%	100.0%

Table 5  
City of Sioux Falls  
Regional Wastewater SDC  
**Allocation of Credit for Debt to Facility Type**

Description	Total	Interceptors	WRF - Flow Equalization	WRF - Preliminary Treatment	WRF - Primary Treatment	WRF - Trickling Filters	WRF - Intermediate Clarifier	WRF - Tertiary (Except Filters)	WRF - Tertiary Filters	WRF - Sludge Treatment
Principal Balances from Bonds	(\$25,281,588)	(\$9,996,693)	(\$959,620)	(\$1,284,854)	(\$809,430)	(\$2,333,463)	(\$569,725)	(\$3,302,194)	(\$1,005,624)	(\$2,501,828)
Cash Balances	9,180,046	3,629,918	348,449	466,546	293,914	847,308	206,874	1,199,066	365,154	908,444
<b>Total</b>	<b>(\$16,101,542)</b>	<b>(\$6,366,774)</b>	<b>(\$611,170)</b>	<b>(\$818,308)</b>	<b>(\$515,517)</b>	<b>(\$1,486,155)</b>	<b>(\$362,851)</b>	<b>(\$2,103,128)</b>	<b>(\$640,470)</b>	<b>(\$1,593,384)</b>
Percentage Allocation of Net Credit for Debt Service										
Principal Balances from Bonds		39.5%	3.8%	5.1%	3.2%	9.2%	2.3%	13.1%	4.0%	9.9%
Cash Balances		39.5%	3.8%	5.1%	3.2%	9.2%	2.3%	13.1%	4.0%	9.9%

Table 5  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Allocation of Credit for Debt to Facility Type**

Description	Administrative Facilities	Brandon Road Pump Station	Brandon Road Forcemain	66" Outfall Sewer From EQ	Exclude from SDC	Total
Principal Balances from Bonds	(\$1,334,404)	(\$751,814)	(\$260,219)	(\$171,721)	\$0	(\$25,281,588)
Cash Balances	484,538	272,993	94,489	62,354	0	9,180,046
<b>Total</b>	<b>(\$849,866)</b>	<b>(\$478,821)</b>	<b>(\$165,730)</b>	<b>(\$109,367)</b>	<b>\$0</b>	<b>(\$16,101,542)</b>
Percentage Allocation of Net Credit for Debt Service						
Principal Balances from Bonds	5.3%	3.0%	1.0%	0.7%	0.0%	100.0%
Cash Balances	5.3%	3.0%	1.0%	0.7%	0.0%	100.0%

Sioux Falls Regional SDC

Table 6  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Net Fixed Asset Valuation**

Description	RCN Fixed Asset Valuation	Summary of Credit for Debt	RCN Net Fixed Asset Valuation
Interceptors	\$73,327,002	(\$6,366,774)	\$66,960,228
WRF - Flow Equalization	7,038,933	(611,170)	6,427,762
WRF - Preliminary Treatment	9,424,565	(818,308)	8,606,257
WRF - Primary Treatment	5,937,274	(515,517)	5,421,758
WRF - Trickling Filters	17,116,248	(1,486,155)	15,630,093
WRF - Intermediate Clarifier	4,179,008	(362,851)	3,816,156
WRF - Tertiary (Except Filters)	24,222,011	(2,103,128)	22,118,883
WRF - Tertiary Filters	7,376,379	(640,470)	6,735,909
WRF - Sludge Treatment	18,351,224	(1,593,384)	16,757,839
Administrative Facilities	9,788,019	(849,866)	8,938,153
Brandon Road Pump Station	5,514,648	(478,821)	5,035,827
Brandon Road Forcemain	1,908,739	(165,730)	1,743,009
66" Outfall Sewer From EQ	1,259,592	(109,367)	1,150,225
Exclude from SDC	5,549,860	0	5,549,860
<b>Total</b>	<b>\$190,993,502</b>	<b>(\$16,101,542)</b>	<b>\$174,891,960</b>
Check		OK	OK

Sioux Falls Regional SDC

Table 7  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Inventory of ERUs for FY2011**

Meter Size	Estimated Number of Meters	Equivalency Factor	ERUs
5/8 x 3/4 Inch	41,124	1.0	41,124
1 Inch	4,216	2.5	10,540
1.5 Inch	1,372	5.0	6,860
2 Inch	1,440	8.0	11,520
3 Inch	64	15.0	960
4 Inch	25	25.0	625
6 Inch	36	50.0	1,800
8 Inch	0	80.0	0
10 Inch	0	156.3	0
12 Inch	0	225.1	0
<b>Total</b>	<b>48,277</b>		<b>73,429</b>

Table 8  
 City of Sioux Falls  
 Regional Wastewater SDC  
**System Capacity for Existing System**

System Component	System Component Capacities		ERU Estimates				Capacity Comparison		
	Capacities	Units	Requirements per ERU	Units	Unit Conversion	Total Capacity (ERUs)	Subscribed Capacity (ERUs)	Available Capacity (ERUs)	Remaining Capacity
Interceptors	118,516.7	ERU	1.0	ERU	1	118,517	73,429	45,088	38.0%
WRF - Flow Equalization	12.0	MG	183.7	gallons	1,000,000	65,312	73,429	0	0.0%
WRF - Preliminary Treatment	21.0	ADF MGD	214.4	gpd	1,000,000	97,968	73,429	24,539	25.0%
WRF - Primary Treatment	21.0	ADF MGD	214.4	gpd	1,000,000	97,968	73,429	24,539	25.0%
WRF - Trickling Filters	16.20	ADF MGD	173.1	gpd	1,000,000	93,569	73,429	20,140	21.5%
WRF - Intermediate Clarifier	21.0	ADF MGD	173.1	gpd	1,000,000	121,293	73,429	47,864	39.5%
WRF - Tertiary (Except Filters)	21.0	ADF MGD	214.4	gpd	1,000,000	97,968	73,429	24,539	25.0%
WRF - Tertiary Filters	13.2	ADF MGD	152.2	gpd	1,000,000	86,732	73,429	13,303	15.3%
WRF - Sludge Treatment	45,126.0	lb VS/day	0.46	lbs VS/day	1	97,968	73,429	24,539	25.0%
Administrative Facilities	121,293.1	ERU	1.00	ERU	1	121,293	73,429	47,864	39.5%
Brandon Road Pump Station	35.0	MGD	373.5	gpd	1,000,000	93,714	73,429	20,285	21.6%
Brandon Road Forcemain	35.0	MGD	373.5	gpd	1,000,000	93,714	73,429	20,285	21.6%
66" Outfall Sewer From EQ	35.0	MGD	373.5	gpd	1,000,000	93,714	73,429	20,285	21.6%
Exclude from SDC						0			
<i>Equalization PF (35 MGD / 21 MGD)</i>	<i>1.67</i>		<i>2010 WWTP Avg. Monthly Flow</i>		<i>15.74 MGD</i>		<i>2010 Population</i>	<i>153,888</i>	
<i>SF Res Avg. Day per ERU</i>	<i>214.4 gpd</i>		<i>ADF after New WRF Phase 1</i>		<i>26.00 MGD</i>		<i>2030 Population</i>	<i>199,600</i>	
<i>SF Res Peak 2010 per ERU</i>	<i>521 gpd</i>		<i>ERU Capacity of both WRFs</i>		<i>121,293 ERUs</i>		<i>Total ERU @ 2030</i>	<i>95,241</i>	
							<i>Buildout Population</i>	<i>309,000</i>	



Table 9  
 City of Sioux Falls  
 Regional Wastewater SDC  
**System Capacity for System Improvements**

System Component	System Function Capacities		ERU Estimates			
	Additional Capacity from Improvements	Units	Requirements per ERU	Units	Unit Conversion	Additional ERUs Available
Interceptors	2,776.47	ERU	1.0	ERU	1	2,776
WRF - Flow Equalization	16.51	MG	183.7	gallons	1,000,000	89,850
WRF - Preliminary Treatment	14.00	ADF MGD	214.4	gpd	1,000,000	65,312
WRF - Primary Treatment	5.00	ADF MGD	214.4	gpd	1,000,000	23,326
WRF - Trickling Filters	4.80	ADF MGD	173.1	gpd	1,000,000	27,724
WRF - Intermediate Clarifier	0.00	ADF MGD	173.1	gpd	1,000,000	0
WRF - Tertiary (Except Filters)	5.00	ADF MGD	214.4	gpd	1,000,000	23,326
WRF - Tertiary Filters	5.26	ADF MGD	152.2	gpd	1,000,000	34,561
WRF - Sludge Treatment	0.00	lb VS/day	0.5	lbs VS/day	1	0
Administrative Facilities	0.00	ERU	1.0	ERU	1	0
Brandon Road Pump Station	10.30	MGD	373.5	gpd	1,000,000	27,579
Brandon Road Forcemain	10.30	MGD	373.5	gpd	1,000,000	27,579
66" Outfall Sewer From EQ	10.30	MGD	373.5	gpd	1,000,000	27,579
Exclude from SDC	0.00	0.0	0.0	0	0	0

Table 10  
City of Sioux Falls  
Regional Wastewater SDC  
**Capital Improvements Costs Allocated to System Function**

Description	CIP ID	Project Capacities				Costs		Interceptors	Unused	Unused	WRF - Flow Equalization	WRF - Preliminary Treatment
		Total Project Capacity	Percent Expansion	Expansion Capacity	Capacity Units	Sioux Falls Costs (\$)						
Sioux River South Phase I	1	5,685.0	48.8%	2,776.47	ERU	\$14,000,000	100.0%	0.0%	0.0%	0.0%	0.0%	
Sioux River South Phase II	2	5,685.0	48.8%	2,776.47	ERU	10,300,000	100.0%	0.0%	0.0%	0.0%	0.0%	
EQ Basin 66-inch RCP outfall pipe (Repla	3	45.3	22.7%	10.30	MGD	6,700,000	0.0%	0.0%	0.0%	0.0%	0.0%	
WRF - Flow Equalization - Phase 1	13	6.0	75.1%	4.51	MG	13,000,000	0.0%	0.0%	0.0%	100.0%	0.0%	
WRF - Flow Equalization - Phase 2	14	12.0	100.0%	12.00	MG	19,180,000	0.0%	0.0%	0.0%	100.0%	0.0%	
WRF - Primary Treatment	15	35.0	0.0%	0.00	MGD	0	0.0%	0.0%	0.0%	0.0%	0.0%	
WRF - Trickling Filters	16	21.0	22.9%	4.80	MGD	2,173,000	0.0%	0.0%	0.0%	0.0%	0.0%	
WRF - Intermediate Clarifier	17	35.0	37.1%	13.00	MGD	0	0.0%	0.0%	0.0%	0.0%	0.0%	
WRF - Tertiary (Except Filters)	18	21.0	0.0%	0.00	MGD	0	0.0%	0.0%	0.0%	0.0%	0.0%	
WRF - Tertiary Filters	19	21.0	25.0%	5.26	MGD	3,290,000	0.0%	0.0%	0.0%	0.0%	0.0%	
Brandon Road Pump Station	22	45.3	22.7%	10.30	MGD	4,400,000	0.0%	0.0%	0.0%	0.0%	0.0%	
Brandon Road Forcemain	23	45.3	22.7%	10.30	MGD	8,060,000	0.0%	0.0%	0.0%	0.0%	0.0%	
WRF - East Side MBR - Phase 1	24	5.0	100%	5.00	MGD	26,700,000	0.0%	0.0%	0.0%	0.0%	0.0%	
WRF - East Side MBR - Phase 1 Prelimina	26	14.0	100%	14.00	MGD	3,600,000	0.0%	0.0%	0.0%	0.0%	100.0%	
<b>Total</b>						<b>\$111,403,000</b>						

Table 10  
City of Sioux Falls  
Regional Wastewater SDC  
**Capital Improvements Costs Allocated to Syst**

Description	CIP ID	WRF - Primary Treatment	WRF - Trickling Filters	WRF - Intermediate Clarifier	WRF - Tertiary (Except Filters)	WRF - Tertiary Filters	WRF - Sludge Treatment	Administrative Facilities	Brandon Road Pump Station	Brandon Road Forcemain
Sioux River South Phase I	1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sioux River South Phase II	2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
EQ Basin 66-inch RCP outfall pipe (Repla	3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
WRF - Flow Equalization - Phase 1	13	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
WRF - Flow Equalization - Phase 2	14	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
WRF - Primary Treatment	15	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
WRF - Trickling Filters	16	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
WRF - Intermediate Clarifier	17	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
WRF - Tertiary (Except Filters)	18	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
WRF - Tertiary Filters	19	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Brandon Road Pump Station	22	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Brandon Road Forcemain	23	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
WRF - East Side MBR - Phase 1	24	20.0%	0.0%	0.0%	80.0%	0.0%	0.0%	0.0%	0.0%	0.0%
WRF - East Side MBR - Phase 1 Prelimina	26	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Total</b>										

Table 10  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Capital Improvements Costs Allocated to Syst**

Description	CIP ID	<u>Unused--Sioux River S. Interceptor</u>	<u>66" Outfall Sewer From EQ</u>	<u>Unused</u>	<u>Unused</u>	<u>Exclude from SDC</u>	<u>Total</u>
Sioux River South Phase I	1	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Sioux River South Phase II	2	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
EQ Basin 66-inch RCP outfall pipe (Repla	3	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
WRF - Flow Equalization - Phase 1	13	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
WRF - Flow Equalization - Phase 2	14	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
WRF - Primary Treatment	15	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
WRF - Trickling Filters	16	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
WRF - Intermediate Clarifier	17	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
WRF - Tertiary (Except Filters)	18	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
WRF - Tertiary Filters	19	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Brandon Road Pump Station	22	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Brandon Road Forcemain	23	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
WRF - East Side MBR - Phase 1	24	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
WRF - East Side MBR - Phase 1 Prelimina	26	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
<b>Total</b>							

Table 11  
City of Sioux Falls  
Regional Wastewater SDC  
**Capital Improvements Costs by System Function**

Description	CIP ID	Interceptors	Unused	Unused	WRF - Flow Equalization	WRF - Preliminary Treatment	WRF - Primary Treatment	WRF - Trickling Filters	WRF - Intermediate Clarifier	WRF - Tertiary (Except Filters)
Sioux River South Phase I	1	\$14,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sioux River South Phase II	2	10,300,000	0	0	0	0	0	0	0	0
EQ Basin 66-inch RCP outfall pipe (Repla	3	0	0	0	0	0	0	0	0	0
WRF - Flow Equalization - Phase 1	13	0	0	0	13,000,000	0	0	0	0	0
WRF - Flow Equalization - Phase 2	14	0	0	0	19,180,000	0	0	0	0	0
WRF - Primary Treatment	15	0	0	0	0	0	0	0	0	0
WRF - Trickling Filters	16	0	0	0	0	0	2,173,000	0	0	0
WRF - Intermediate Clarifier	17	0	0	0	0	0	0	0	0	0
WRF - Tertiary (Except Filters)	18	0	0	0	0	0	0	0	0	0
WRF - Tertiary Filters	19	0	0	0	0	0	0	0	0	0
Brandon Road Pump Station	22	0	0	0	0	0	0	0	0	0
Brandon Road Forcemain	23	0	0	0	0	0	0	0	0	0
WRF - East Side MBR - Phase 1	24	0	0	0	0	0	5,340,000	0	0	21,360,000
WRF - East Side MBR - Phase 1 Prelimin:	26	0	0	0	0	3,600,000	0	0	0	0
<b>Total</b>		<b>\$24,300,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$32,180,000</b>	<b>\$3,600,000</b>	<b>\$5,340,000</b>	<b>\$2,173,000</b>	<b>\$0</b>	<b>\$21,360,000</b>

Table 11  
City of Sioux Falls  
Regional Wastewater SDC  
**Capital Improvements Costs by System Function**

Description	CIP ID	WRF - Tertiary Filters	WRF - Sludge Treatment	Administrative Facilities	Brandon Road Pump Station	Brandon Road Forcemain	Unused--Sioux River S. Interceptor	Unused--Central Main Interceptor	Unused--Sioux River N. Interceptor, Force Main, and PS
Sioux River South Phase I	1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sioux River South Phase II	2	0	0	0	0	0	0	0	0
EQ Basin 66-inch RCP outfall pipe (Repla	3	0	0	0	0	0	0	0	0
WRF - Flow Equalization - Phase 1	13	0	0	0	0	0	0	0	0
WRF - Flow Equalization - Phase 2	14	0	0	0	0	0	0	0	0
WRF - Primary Treatment	15	0	0	0	0	0	0	0	0
WRF - Trickling Filters	16	0	0	0	0	0	0	0	0
WRF - Intermediate Clarifier	17	0	0	0	0	0	0	0	0
WRF - Tertiary (Except Filters)	18	0	0	0	0	0	0	0	0
WRF - Tertiary Filters	19	3,290,000	0	0	0	0	0	0	0
Brandon Road Pump Station	22	0	0	0	4,400,000	0	0	0	0
Brandon Road Forcemain	23	0	0	0	0	8,060,000	0	0	0
WRF - East Side MBR - Phase 1	24	0	0	0	0	0	0	0	0
WRF - East Side MBR - Phase 1 Prelimin	26	0	0	0	0	0	0	0	0
<b>Total</b>		<b>\$3,290,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,400,000</b>	<b>\$8,060,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

Table 11  
City of Sioux Falls  
Regional Wastewater SDC  
**Capital Improvements Costs by System Functi**

Description	CIP ID	Unused--Basin 13 Trunk Sewer	Unused--Western Interceptor	66" Outfall Sewer From EQ	Unused	Exclude from SDC	Total
Sioux River South Phase I	1	\$0	\$0	\$0	\$0	\$0	\$14,000,000
Sioux River South Phase II	2	0	0	0	0	0	10,300,000
EQ Basin 66-inch RCP outfall pipe (Repla	3	0	0	6,700,000	0	0	6,700,000
WRF - Flow Equalization - Phase 1	13	0	0	0	0	0	13,000,000
WRF - Flow Equalization - Phase 2	14	0	0	0	0	0	19,180,000
WRF - Primary Treatment	15	0	0	0	0	0	0
WRF - Trickling Filters	16	0	0	0	0	0	2,173,000
WRF - Intermediate Clarifier	17	0	0	0	0	0	0
WRF - Tertiary (Except Filters)	18	0	0	0	0	0	0
WRF - Tertiary Filters	19	0	0	0	0	0	3,290,000
Brandon Road Pump Station	22	0	0	0	0	0	4,400,000
Brandon Road Forcemain	23	0	0	0	0	0	8,060,000
WRF - East Side MBR - Phase 1	24	0	0	0	0	0	26,700,000
WRF - East Side MBR - Phase 1 Prelimin	26	0	0	0	0	0	3,600,000
<b>Total</b>		<b>\$0</b>	<b>\$0</b>	<b>\$6,700,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$111,403,000</b>



Table 12  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Allocation of Interceptors Expansion Costs**

Description	CIP ID	Sioux Falls Costs (\$)	Total Project Capacity	Expansion Capacity	Capacity Units	Percent Cost for Expansion Capacity	Cost of Expansion Capacity	Project Group	Added Capacity
Sioux River South Phase I	1	\$14,000,000	5,684.96	2,776.47	ERU	48.8%	\$6,837,438	1	2,776.47
Sioux River South Phase II	2	10,300,000	5,684.96	2,776.47	ERU	48.8%	5,030,401	1	0.00
<b>Total</b>		<b>\$24,300,000</b>				<b>48.8%</b>	<b>\$11,867,840</b>		<b>2,776.47</b>

Table 13  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Allocation of WRF - Flow Equalization Expansion Costs**

Description	CIP ID	Sioux Falls Costs (\$)	Total Project Capacity	Expansion Capacity	Capacity Units	Percent Cost for Expansion Capacity	Cost of Expansion Capacity	Project Group	Added Capacity
WRF - Flow Equalization - Phase 1	13	13,000,000	6.00	4.51	MG	75.1%	9,768,571		4.51
WRF - Flow Equalization - Phase 2	14	19,180,000	12.00	12.00	MG	100.0%	19,180,000		12.00
<b>Total</b>		<b>\$32,180,000</b>				<b>90.0%</b>	<b>\$28,948,571</b>		<b>16.51</b>

Table 14  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Allocation of WRF - Preliminary Treatment Expansion Costs**

Description	CIP ID	Sioux Falls Costs (\$)	Total Project Capacity	Expansion Capacity	Capacity Units	Percent Cost for Expansion Capacity	Cost of Expansion Capacity	Project Group	Added Capacity
WRF - East Side MBR - Phase 1 Prelimin:	26	3,600,000	14.00	14.00	ADF MGD	100.0%	3,600,000		14.00
<b>Total</b>		<b>\$3,600,000</b>				<b>100.0%</b>	<b>\$3,600,000</b>		<b>14.00</b>

Table 15  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Allocation of WRF - Primary Treatment Expansion Costs**

Description	CIP ID	Sioux Falls Costs (\$)	Total Project Capacity	Expansion Capacity	Capacity Units	Percent Cost for Expansion Capacity	Cost of Expansion Capacity	Project Group	Added Capacity
WRF - East Side MBR - Phase 1	24	5,340,000	5.00	5.00	ADF MGD	100.0%	5,340,000		5.00
<b>Total</b>		<b>\$5,340,000</b>				<b>100.0%</b>	<b>\$5,340,000</b>		<b>5.00</b>

Table 16  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Allocation of WRF - Trickling Filters Expansion Costs**

Description	CIP ID	Sioux Falls Costs (\$)	Total Project Capacity	Expansion Capacity	Capacity Units	Percent Cost for Expansion Capacity	Cost of Expansion Capacity	Project Group	Added Capacity
WRF - Trickling Filters	16	2,173,000	21.00	4.80	ADF MGD	22.9%	496,686		4.80
<b>Total</b>		<b>\$2,173,000</b>				<b>22.9%</b>	<b>\$496,686</b>		<b>4.80</b>

Table 17  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Allocation of WRF - Intermediate Clarifier Expansion Costs**

Description	CIP ID	Sioux Falls Costs (\$)	Total Project Capacity	Expansion Capacity	Capacity Units	Percent Cost for Expansion Capacity	Cost of Expansion Capacity	Project Group	Added Capacity
Total		\$0				0.0%	\$0		0.00

Table 18  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Allocation of WRF - Tertiary (Except Filters) Expansion Costs**

Description	CIP ID	Sioux Falls Costs (\$)	Total Project Capacity	Expansion Capacity	Capacity Units	Percent Cost for Expansion Capacity	Cost of Expansion Capacity	Project Group	Added Capacity
WRF - East Side MBR - Phase 1	24	21,360,000	5.00	5.00	ADF MGD	100.0%	21,360,000		5.00
<b>Total</b>		<b>\$21,360,000</b>				<b>100.0%</b>	<b>\$21,360,000</b>		<b>5.00</b>



Table 19  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Allocation of WRF - Tertiary Filters Expansion Costs**

Description	CIP ID	Sioux Falls Costs (\$)	Total Project Capacity	Expansion Capacity	Capacity Units	Percent Cost for Expansion Capacity	Cost of Expansion Capacity	Project Group	Added Capacity
WRF - Tertiary Filters	19	3,290,000	21.00	5.26	ADF MGD	25.0%	824,067		5.26
<b>Total</b>		<b>\$3,290,000</b>				<b>25.0%</b>	<b>\$824,067</b>		<b>5.26</b>

Table 20  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Allocation of WRF - Sludge Treatment Expansion Costs**

Description	CIP ID	Sioux Falls Costs (\$)	Total Project Capacity	Expansion Capacity	Capacity Units	Percent Cost for Expansion Capacity	Cost of Expansion Capacity	Project Group	Added Capacity
Total		\$0				0.0%	\$0		0.00

Table 21  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Allocation of Administrative Facilities Expansion Costs**

Description	CIP ID	Sioux Falls Costs (\$)	Total Project Capacity	Expansion Capacity	Capacity Units	Percent Cost for Expansion Capacity	Cost of Expansion Capacity	Project Group	Added Capacity
Total		\$0				0.0%	\$0		0.00

Table 22  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Allocation of Brandon Road Pump Station Expansion Costs**

Description	CIP ID	Sioux Falls Costs (\$)	Total Project Capacity	Expansion Capacity	Capacity Units	Percent Cost for Expansion Capacity	Cost of Expansion Capacity	Project Group	Added Capacity
Brandon Road Pump Station	22	4,400,000	45.32	10.30	MGD	22.7%	1,000,000		10.30
<b>Total</b>		<b>\$4,400,000</b>				<b>22.7%</b>	<b>\$1,000,000</b>		<b>10.30</b>

Table 23  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Allocation of Brandon Road Forcemain Expansion Costs**

Description	CIP ID	Sioux Falls Costs (\$)	Total Project Capacity	Expansion Capacity	Capacity Units	Percent Cost for Expansion Capacity	Cost of Expansion Capacity	Project Group	Added Capacity
Brandon Road Forcemain	23	8,060,000	45.32	10.30	MGD	22.7%	1,831,818		10.30
<b>Total</b>		<b>\$8,060,000</b>				<b>22.7%</b>	<b>\$1,831,818</b>		<b>10.30</b>

Table 24  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Allocation of 66" Outfall Sewer From EQ Expansion Costs**

Description	CIP ID	Sioux Falls Costs (\$)	Total Project Capacity	Expansion Capacity	Capacity Units	Percent Cost for Expansion Capacity	Cost of Expansion Capacity	Project Group	Added Capacity
EQ Basin 66-inch RCP outfall pipe (Repl	3	6,700,000	45.32	10.30	MGD	22.7%	1,522,727		10.30
<b>Total</b>		<b>\$6,700,000</b>				<b>22.7%</b>	<b>\$1,522,727</b>		<b>10.30</b>

Table 25  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Allocation of Exclude from SDC Expansion Costs**

Description	CIP ID	Sioux Falls Costs (\$)	Total Project Capacity	Expansion Capacity	Capacity Units	Percent Cost for Expansion Capacity	Cost of Expansion Capacity	Project Group	Added Capacity
Total		\$0				0.0%	\$0		0.00

Sioux Falls Regional SDC

Table 26  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Summary of New Capacity Costs & % to Growth**

Description	CIP ID	Sioux Falls Costs (\$)	Cost of Expansion Capacity	Percent Cost for Expansion Capacity
Sioux River South Phase I	1	\$14,000,000	\$6,837,438	48.8%
Sioux River South Phase II	2	10,300,000	5,030,401	48.8%
EQ Basin 66-inch RCP outfall pipe (Repla	3	6,700,000	1,522,727	22.7%
WRF - Flow Equalization - Phase 1	13	13,000,000	9,768,571	75.1%
WRF - Flow Equalization - Phase 2	14	19,180,000	19,180,000	100.0%
WRF - Primary Treatment	15	0	0	0.0%
WRF - Trickling Filters	16	2,173,000	496,686	22.9%
WRF - Intermediate Clarifier	17	0	0	0.0%
WRF - Tertiary (Except Filters)	18	0	0	0.0%
WRF - Tertiary Filters	19	3,290,000	824,067	25.0%
Brandon Road Pump Station	22	4,400,000	1,000,000	22.7%
Brandon Road Forcemain	23	8,060,000	1,831,818	22.7%
WRF - East Side MBR - Phase 1	24	26,700,000	26,700,000	100.0%
WRF - East Side MBR - Phase 1 Prelimina	26	3,600,000	3,600,000	100.0%
<b>Total</b>		<b>\$111,403,000</b>	<b>\$76,791,709</b>	<b>68.9%</b>



Table 27  
City of Sioux Falls  
Regional Wastewater SDC  
**Summary of New Capacity Costs**

Description	New Capacity Added	Units	Units per ERU	Units	Unit Conversion Factor	Added ERU	Cost of New Capacity \$
Interceptors	2,776.47	ERU	1.0	ERU	1	2,776	\$11,867,840
WRF - Flow Equalization	16.51	MG	183.7	gallons	1,000,000	89,850	28,948,571
WRF - Preliminary Treatment	14.00	ADF MGD	214.4	gpd	1,000,000	65,312	3,600,000
WRF - Primary Treatment	5.00	ADF MGD	214.4	gpd	1,000,000	23,326	5,340,000
WRF - Trickling Filters	4.80	ADF MGD	173.1	gpd	1,000,000	27,724	496,686
WRF - Intermediate Clarifier	0.00	ADF MGD	173.1	gpd	1,000,000	0	0
WRF - Tertiary (Except Filters)	5.00	ADF MGD	214.4	gpd	1,000,000	23,326	21,360,000
WRF - Tertiary Filters	5.26	ADF MGD	152.2	gpd	1,000,000	34,561	824,067
WRF - Sludge Treatment	0.00	lb VS/day	0.5	lbs VS/day	1	0	0
Administrative Facilities	0.00	ERU	1.0	ERU	1	0	0
Brandon Road Pump Station	10.30	MGD	373.5	gpd	1,000,000	27,579	1,000,000
Brandon Road Forcemain	10.30	MGD	373.5	gpd	1,000,000	27,579	1,831,818
66" Outfall Sewer From EQ	10.30	MGD	373.5	gpd	1,000,000	27,579	1,522,727
Exclude from SDC	0.00	0	0.0	0	0	0	0
<b>Total</b>							<b>\$76,791,709</b>

Sioux Falls Regional SDC

Table 28  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Calculation of Reimbursement Totals**

System Component	Capacity Available for Growth	RCN
Interceptors	38.0%	\$25,473,890
WRF - Flow Equalization	0.0%	0
WRF - Preliminary Treatment	25.0%	2,155,663
WRF - Primary Treatment	25.0%	1,358,021
WRF - Trickling Filters	21.5%	3,364,255
WRF - Intermediate Clarifier	39.5%	1,505,914
WRF - Tertiary (Except Filters)	25.0%	5,540,254
WRF - Tertiary Filters	15.3%	1,033,146
WRF - Sludge Treatment	25.0%	4,197,440
Administrative Facilities	39.5%	3,527,133
Brandon Road Pump Station	21.6%	1,090,052
Brandon Road Forcemain	21.6%	377,291
66" Outfall Sewer From EQ	21.6%	248,977
Exclude from SDC	0.0%	0
<b>Total</b>		<b>\$49,872,033</b>

Table 29  
City of Sioux Falls  
Regional Wastewater SDC  
**Calculation of Proposed SDC Using RCN**

System Component	Cost of Available Capacity			Capacities Available for Growth (ERU)			Proposed SDC		
	Existing	New	Total	Existing	New	Total	Reimbursement	Improvement	Total
Interceptors	\$25,473,890	\$11,867,840	\$37,341,729	45,088	2,776	47,864	\$532	\$248	\$780
WRF - Flow Equalization	0	28,948,571	28,948,571	0	89,850	89,850	0	322	322
WRF - Preliminary Treatment	2,155,663	3,600,000	5,755,663	24,539	65,312	89,850	24	40	64
WRF - Primary Treatment	1,358,021	5,340,000	6,698,021	24,539	23,326	47,864	28	112	140
WRF - Trickling Filters	3,364,255	496,686	3,860,941	20,140	27,724	47,864	70	10	81
WRF - Intermediate Clarifier	1,505,914	0	1,505,914	47,864	0	47,864	31	0	31
WRF - Tertiary (Except Filters)	5,540,254	21,360,000	26,900,254	24,539	23,326	47,864	116	446	562
WRF - Tertiary Filters	1,033,146	824,067	1,857,212	13,303	34,561	47,864	22	17	39
WRF - Sludge Treatment	4,197,440	0	4,197,440	24,539	0	24,539	171	0	171
Administrative Facilities	3,527,133	0	3,527,133	47,864	0	47,864	74	0	74
Brandon Road Pump Station	1,090,052	1,000,000	2,090,052	20,285	27,579	47,864	23	21	44
Brandon Road Forcemain	377,291	1,831,818	2,209,109	20,285	27,579	47,864	8	38	46
66" Outfall Sewer From EQ	248,977	1,522,727	1,771,704	20,285	27,579	47,864	5	32	37
Exclude from SDC	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>\$49,872,033</b>	<b>\$76,791,709</b>	<b>\$126,663,742</b>				<b>\$1,104</b>	<b>\$1,287</b>	<b>\$2,391</b>

Sioux Falls Regional SDC

Table 30  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Summary of SDCs by SDC Fee and Meter Size Using RCN**

Meter Size	Reimbursement	Improvement	Total
5/8 x 3/4 Inch	\$1,104	\$1,287	\$2,391
1 Inch	2,761	3,217	5,977
1.5 Inch	5,521	6,433	11,954
2 Inch	8,834	10,293	19,127
3 Inch	16,564	19,299	35,863
4 Inch	27,607	32,165	59,772
6 Inch	55,213	64,330	119,543
8 Inch	88,341	102,928	191,269
10 Inch	172,597	201,096	373,692
12 Inch	248,539	289,578	538,117

Sioux Falls Regional SDC

Table 31  
 City of Sioux Falls  
 Regional Wastewater SDC  
**Summary of SDCs by System Function and Meter Size Using RCN**

Meter Size	Conveyance	Treatment	Total
5/8 x 3/4 Inch	\$780	\$1,611	\$2,391
1 Inch	1,950	4,027	5,977
1.5 Inch	3,901	8,054	11,954
2 Inch	6,241	12,886	19,127
3 Inch	11,702	24,161	35,863
4 Inch	19,504	40,268	59,772
6 Inch	39,008	80,535	119,543
8 Inch	62,413	128,856	191,269
10 Inch	121,939	251,753	373,692
12 Inch	175,592	362,525	538,117