# IMPACT FEE

# WRITTEN ANALYSIS

prepared for SNYDERVILLE BASIN WATER RECLAMATION DISTRICT



prepared by ROSENTHAL & ASSOCIATES INC.

in association with

Snyderville Basin Water Reclamation District

November 15, 2010

## Contents

Executive Summary	1
Impact Fee Schedule	1
Purpose and Need for Impact Fees	2
Contents of the Impact Fee Written Analysis	4
Overview of Current Conditions in the District	4
Legal Framework	7
The Rate and Structure of Impact Fees	7
Summary of Calculation Methodology	8
Estimating Assumptions	9
Impact Fee Administration	12
Evaluation of Alternative Funding Sources and Determination That Impact Fees Are Necessary	13
Impact Fee Schedule Application Notes	14
Impact Fee Written Analysis	16
Introduction	16
Impact Fee Calculation Methodology	18
Source and Use of Funds	23
Estimating Assumptions, Decisions, Criteria and Conclusions	24
Calculation of Atypical or Contested Impact Fees	31
Impact Fee Spend or Encumber Deadline	32
Impact Fee Reductions	34
Proportionate Share Analysis	35
Glossary	37
Appendix A – Capital Facilities Plan	39

## List of Tables

Table 1:	Impact Fees per RE	. 1
Table 2:	Projected New Development and Plant Capacity Demand	15
Table 3:	Example Residential Impact Fees	15
Table 4:	Impact Fee Calculation	18
Table 5:	Cost of Capital Facilities for New Development	18
Table 6:	Impact Fee Schedule	19
Table 7:	Base Year Impact Fee Calculation (1 of 2)	21
Table 8:	Base Year Impact Fee Calculation (1 of 2)	22
Table 9:	CFP Projects – Source and Use of Funds	23
Table 10:	Projected New Development and Plant Capacity Demand	25
Table 11:	Impact Fee Financial Assumptions	28
Table 12:	Impact Fee Debt Summary	29
Table 13:	Summary of Current & Projected Treatment Capacity	30
Table 14:	Spend or Encumber Deadline	33

# List of Figures

Figure 1: Service Area Map	3
Figure 2: Impact Fee Fund – Revenue and Expenses – Actual and Projected	24
Figure 3: Annual New REs – Actual and Projected	26
Figure 4: Treatment Capacity Demand – Actual and Projected	27

## **EXECUTIVE SUMMARY**

This *Impact Fee Written Analysis* is an update of a 2008 impact fee analysis. This revision is based on the Snyderville Basin Water Reclamation District's (SBWRD) 2010 *Impact Fees Capital Facilities Plan* (the CFP), along with current growth, build-out and capacity absorption projections. In context of updates to the type, timing and cost of planned capital facilities, it is otherwise based on the same methodology and many of the same estimating assumptions as the prior analysis.

The 2011 impact fee calculated in this analysis is nearly equal to the 2011 fee calculated in the prior analysis. This means that, although the capital plan and other significant assumptions have changed, long term demand and the unit cost of service, remain essentially constant.

Recent changes to the *Impact Fees Act* require that the *Impact Fees Capital Facilities Plan* and *Impact Fee Written Analysis* be separately published. A copy of the 2010 *Impact Fees Capital Facilities Plan* is attached at the end of this report, for reference.

## **Impact Fee Schedule**

Table 1 shows the updated impact fee schedule. Table 1 is expressed in terms of an impact fee per RE ("residential equivalent demand unit"). This is the fee amount for a three bedroom single family home. The fee for other property types is calculated based a formula enacted by the District (as discussed on page 15.

Table 1		
IMPACT Maximum All	FEE PER RE owable SBWRD Impac	t Fee
Calendar Year	Impact Fee per RE	
2011	\$6,576	(per RE)
2012	\$6,711	(per RE)
2013	\$6,948	(per RE)
2014	\$7,092	(per RE)
2015	\$7,238	(per RE)

Source - Table 6

Table 1 shows the maximum impact fee that could be assessed. The Board may choose to enact fees at a reduced rate, depending on its assessment of other relevant factors. Impact fees in Table 1 have no effect until 90 days after enactment by the Board.

Impact fees are assessed for all new construction in the District – the boundaries of which include Park City and a part of Summit County, as generally illustrated by the schematic in Figure 1. Fees shown in Table 1 apply to typical categories of new development. In the case of atypical or contested impact fee amounts, the District has defined a procedure for case-specific *Impact Fee Calculation*, described on page 31.

#### **Purpose and Need for Impact Fees**

The purpose of an impact fee, and the reason impact fees are assessed, is to help fund the construction of system capacity needed to meet demand from new development. Impact fees are one of a number of revenue measures the District has researched and may implement, to fund facilities for new development.

The calculation and use of impact fees is governed by the Utah *Impact Fees Act*. Impact fees can be used only to fund capacity expansion for the benefit of new development. They cannot be used to fund operations expense, or any other cost attributable to the benefit of existing development -- and they must be set at a rate that corresponds to the cost to serve new development – i.e. set at an amount equal to the cost to mitigate the impacts presented by new development. Calculation of this amount is the purpose of this report.

Impact fees have been used by the District since 1978, as a way to allocate capital facilities cost among beneficiaries. By means of impact fee assessment, the cost of capacity for new development is assigned to new development, and cost attributable to existing development, or equally attributable to both new and existing development, is similarly assigned.

The SBWRD Board has determined that impact fees are necessary, 1) as a component of its strategy to preserve the level of service for new growth now provided existing users; 2) in order to maintain a fair and proportionate ongoing cost/benefit relationship as to the provision of capital facility capacity for new growth; and 3) as an aid in the effort to provide service to new development in a timely manner. This report documents analysis by means of which cost is allocated among beneficiaries, a share assigned to new development, and that cost in turn apportioned among new development units based on relative demand (i.e. property type and size).





#### **Contents of the Impact Fee Written Analysis**

<u>Chapter 1</u> is the *Impact Fee Written Analysis* Executive Summary. It provides an overview of calculation methodology, estimating assumptions, fee assessment guidelines, a review of the legal framework under which impact fees are assessed in Utah, and a review of impact fee administrative policies.

<u>Chapter 2</u> is the *Impact Fee Written Analysis*. It details the process of impact fee calculation and demand differentiation – the means by which capital facilities demand and the amount of the impact fee is differentiated by property type and size.

<u>Chapter 3</u> discusses *Proportionate Share Analysis*. This chapter re-casts key points of the analysis in terms of certain basic criteria of *Impact Fees Act* (UCA 11-36-201 (5) (c). Although the same information is presented elsewhere in this report, the purpose of this chapter is to illustrate in another way, that impact fees calculated in this analysis are roughly proportionate and reasonably related to the impacts of new development.

Chapter 4 is a glossary of some impact fee specific terms and acronyms that are used in this analysis.

<u>Appendix A</u> is a copy of the *Capital Facilities Plan* (CFP). The CFP is a separately enacted document that is the basis for calculation of impact fees. It derives from the District's overall *Capital Improvement Plan* (CIP) and defines a list of projects and parts of projects that are attributable specifically to capacity expansion for the benefit of new development.

#### **Overview of Current Conditions in the District**

Impact fees are assessed for the purpose of providing added capital facility capacity needed to meet demand from new development. The District anticipates significant growth in capacity demand – 19,906 new REs – an increase of about 85%.

The District's growth projection is illustrated in Table 2 on the following page. The projection is the product of a rigorous and ongoing analytical program, based on land use analysis, continuing evaluation of development activities, and consultation with other local government entities which comprise the District, to identify current planning objectives, development patterns, timing and build-out potential. The District has a responsibility to accommodate this increased demand, and it is by means of this analysis and the accompanying CFP, that the requisite financial plan is articulated.

#### Table 2

	Total REs				Capacity [	Demand	Treatment Capacity		
Total	Growth	New	Exempt (REs attributable	Net New	LOS	Capacity	Treatment	Capacity	Now Capa
TOTAL	Rate	Development	to state buildings)	Fee REs	(gpd/RE)	(mgd)	(mgd)	Utilization	New Capa
15,831									
16,897					284	4.80	4.80	100%	
17,412					284	4.95	4.80	103%	
18,100					284	5.14	7.00	73%	2.
18,770					284	5.33	7.00	76%	
19,729					284	5.60	7.00	80%	
20,781					284	5.90	7.00	84%	
21,504					284	6.11	7.00	87%	
21,858					284	6.21	7.00	89%	
21,978					284	6.24	7.00	89%	
22,130					284	6.28	7.00	90%	
22,291	0.7%	161	(4)	157	284	6.33	7.00	90%	
22,470	0.8%	179	(4)	175	284	6.38	7.00	91%	
22,678	0.9%	208	(4)	204	284	6.44	7.00	92%	
22,924	1.1%	246	(4)	242	284	6.51	7.00	93%	
23,220	1.3%	296	(4)	292	284	6.59	7.00	94%	
23,577	1.5%	357	(4)	353	284	6.70	7.00	96%	
24,007	1.8%	430	(4)	426	284	6.82	9.00	76%	. 2
24,522	2.1%	515	(4)	511	284	6.96	9.00	77%	
25,132	2.5%	610	(4)	606	284	7.14	9.00	79%	
25,844	2.8%	712	(4)	708	284	7.34	9.00	82%	
26,662	3.2%	818	(4)	814	284	7.57	10.00	76%	
27.582	3.5%	920	(4)	916	284	7.83	10.00	78%	
28 594	3.7%	1 012	(4)	1 008	284	8 12	10.00	81%	
29 679	3.8%	1 085	(4)	1 081	284	8 4 3	10.00	84%	
30,811	3.8%	1 132	(4)	1 128	284	8 75	10.00	88%	
31 959	3.7%	1 148	(4)	1 144	284	9.08	10.00	91%	
33 080	3.5%	1,140	(+) (A)	1,144	284	9.00	10.00	9/1%	
3/ 171	3 3%	1,130	( <del>י</del> ) (4)	1,120	204	9.70	10.00	97%	
35 170	2.0%	1,002	( <del>י</del> ) (4)	1,070	204	9.70	11.65	86%	
36,004	2.970	015	(4)	011	204	10.25	11.05	88%	
36,005	2.0%	913	(4)	807	204	10.23	11.05	00%	
27 610	2.2/0	705	(4)	701	204	10.40	11.05	90 %	
20 212	1.5/0	602	(4)	509	204	10.00	11.05	92 /0	
20 710	1.070	502	(4)	500	204	11.00	11.05	9370	
20,710	1.3%	300	(4)	302	204	11.00	11.00	94%	
39,130	1.170	420	(4)	410	204	11.12	11.05	90%	
39,483	0.9%	340	(4)	341	284	11.21	11.05	90%	
39,764	0.7%	281	(4)	2//	284	11.29	11.65	97%	
39,991	0.6%	227	(4)	223	284	11.36	11.65	97%	
40,1/3	0.5%	182	(4)	1/8	284	11.41	11.65	98%	
40,319	0.4%	146	(4)	142	284	11.45	11.65	98%	
40,435	0.3%	116	(4)	112	284	11.48	11.65	99%	
40,527	0.2%	92	(4)	88	284	11.51	11.65	99%	
40,600	0.2%	73	(4)	69	284	11.53	11.65	99%	
40,658	0.1%	58	(4)	54	284	11.55	11.65	99%	
40,704	0.1%	46	(4)	42	284	11.56	11.65	99%	
40,740	0.1%	36	(4)	32	284	11.57	11.65	99%	
40,769	0.1%	29	(4)	25	284	11.58	11.65	99%	
40,794	0.1%	25	(4)	21	284	11.59	11.65	99%	
40,820	0.1%	26	(4)	22	284	11.59	11.65	100%	
40,858	0.1%	38	(4)	34	284	11.60	11.65	100%	
40,896	0.1%	38	(4)	34	284	11.61	11.65	100%	
40,934	0.1%	38	(4)	34	284	11.63	11.65	100%	
40,971	0.1%	38	(4)	34	284	11.64	11.65	100%	
41,009	0.1%	38	(4)	34	284	11.65	11.65	100%	
41.047	0.1%	38	(4)	34	284	11.66	11.65	100%	
41.085	0.1%	38	(4)	34	284	11.67	11.65	100%	
41 123	0.1%	38	(4)	34	284	11.68	11.65	100%	
	0.170	00	(-)	<b>.</b>	204			. 50 / 0	
41 160	0.1%	38	(4)	.34	284	11 69	11 65	100%	
41,160 41 198	0.1% 0.1%	38 38	(4)	34 34	284 284	11.69 11.70	11.65 11.65	100%	

٦

# PROJECTED NEW DEVELOPMENT AND PLANT CAPACITY DEMAND

Source - Total REs are from SBWRD staff. By terms of U.C.A. 11-36, state buildings, which are not required to pay impact fees. The wastewater LOS is the District's adopted demand planning factor. Total capacity demand is calculated as the product of Net New Impact Fee REs and the LOS. New treatment capacity and online year are from SBWRD analysis. With respect to capacity utilization, note that the plants are designed to operate at levels slightly above 100% of stated capacity. This is intended to accommodate temporary changes in the demand curve, compared to available capacity, and to accommodate small potential changes in total demand.









In order to assess an impact fee this *Impact Fee Written Analysis* must be prepared, and it is by means of this analysis that the District will assess a fee for wastewater collection and treatment system improvements (wastewater is one of the seven types of impact fee eligible capital facilities defined by the *Impact Fees Act* (U.C.A §11-36).

The object of a *Impact Fee Written Analysis* is to equitably allocate the cost of planned capital facilities between existing and new development based on an assessment of benefit conferred, and for that part attributable to capacity expansion for new development, to document the calculation of proportionate share impact fees which assign costs to each unit of new development in a way consistent with relative capital facility capacity demand. In this way the amount of the impact fee relates directly to the cost of the service, and new development is charged only for the capacity that it requires, at a rate that corresponds to its demand for capacity, and it is not charged for improvements attributable to existing development.

Impact fees are necessary not only as a means to fund capacity for new development, but also as a matter of equity. The impact fee assessment has been, and continues to be the means by which new development is assigned, and pays, the cost of new capacity it requires. On-going impact fee assessment preserves this cost-benefit relationship so that each generation of new entrants is treated the same, and fairly

Impact fees are necessary because they enable growth to occur. The provision of high quality and cost efficient wastewater service is characterized by competing priorities and limited resources, and in this context the demands of growth must be balanced against a prior commitment to provide service to existing users, to do so in a responsible and cost efficient manner, and to preserve the function and value of current infrastructure.

The District has evaluated alternative funding sources. The District is limited to financing system improvements using three basic revenue sources. Property taxes may be used to repay general obligation bonds for system improvements however general obligation bonds require voter approval which is not generally successful in the financing of new growth. The District has concluded that general obligation bonds are not a reasonable or reliable source of funds to fund system improvements for new growth. The District may also use service charges to repay revenue bonds which may be used for

system improvements. The District is committed to limiting the use of revenue bonding based on

service charges to the funding of improvements designed to maintain service for system users that pay service charges. Impact fees are therefore the selected source of revenue to fund system improvements in the CFP.

### Legal Framework

Development impact fees have been allowed in Utah by case law for over 25 years. However until 1995 local jurisdictions did not have statutory authority to assess impact fees. The 1995 *Impact Fees Act* now codifies how impact fees are to be imposed, collected and accounted for. Since 1995 the *Impact Fees Act* has been revised multiple times. This analysis has been prepared to meet the most current requirements of the *Impact Fees Act*.

The *Impact Fees Act* limits the type of activities for which local government entities may charge impact fees. It specifies that fees are to be used for capital projects needed to meet demand from new development, and not to be used for operations expense, maintenance, repair, or service provision upgrade for the benefit of existing development. It also specifies certain requirements for impact fee calculation methodology, along with administrative and bookkeeping requirements that guide collection, accounting and use of the funds.

By means of Resolution, the Board has adopted rules and regulations consistent with the requirements of the *Impact Fees Act*.

## The Rate and Structure of Impact Fees

An impact fee can be no greater than the maximum amount justified by the *Impact Fee Written Analysis.* Impact fees cannot be used to cure existing capital facility deficiencies, and cannot be set at a rate that would result in a higher level of service. While level of service (LOS) is not specifically cited in the *Impact Fees Act*, this analysis assumes the maximum fee to be no greater than the amount required to maintain the current LOS.

The maximum fee can be charged only if the *Capital Facilities Plan* includes projects sufficient to maintain the current LOS. If the CFP were to include insufficient projects (not the case in this analysis) a lesser amount is the highest fee that could be charged.

This analysis quantifies the maximum impact fee. The Board may enact fees at a reduced rate, depending on its assessment of other relevant factors.



East Canyon Relief Trunk Line

### **Summary of Calculation Methodology**

Impact fees are calculated based on the cost of capital facilities needed to meet demand from new development. The allocation of capital cost to new development is defined by the 2010 Impact Fee Capital Facilities Plan (the CFP). Impact fee eligible cost are defined by the Impact Fees Act and include land, construction, financing and capital facilities planning expense for wastewater treatment and collection system improvements.

The amount of the impact fee is determined by methodology illustrated beginning on page 16. This methodology assigns fees of different amount to different land-use types and sizes based relative capacity demand.

The *Impact Fee Capital Facilities Plan* derives from the District's overall *Capital Improvement Plan*, which is defined by staff and approved by the Board, and describes a comprehensive list of projects needed over the long-run. The CFP is a subset of that overall plan, and is limited to capacity expansion projects needed to meet demand from new development. It is the basis for calculation of the impact fee.

The CIP and CFP are long range planning documents that are implemented – specific projects selected for construction at a specific time – by means of near-term construction plans recommended by staff and approved by the Board. These implementation plans are driven by current priorities rather than projections which may sequence the projects in a way that is different from that shown in the CIP/CFP.

Impact fee calculation can be described in terms of four general steps:

- Step 1 Define a long range Capital Improvement Plan document the plan and undertake analysis to quantify the CFP, which identifies projects and parts of projects specifically attributable to capacity expansion for new development. The CFP is the basis for calculating the impact fee because it represents the cost to mitigate the specific impacts presented by new development, and is precisely targeted in terms of both quantity and type of requisite facilities. Both the CIP and CFP are defined by staff and approved by the Board. The CFP defines a plan by means of which the District can preserve the level of service now provided existing development, and meet demands presented by new development, at exactly the same LOS. The CFP is carefully defined so as to exclude costs attributable to existing development deficiency correction for example, or service provision upgrade for the benefit of existing development.
- Step 2 <u>Implement proportionate demand allocation methodology for each class of new development</u> define methodology that assigns cost to each class of new development in a way that is proportionate to relative capital capacity demand. "Proportionality" is a key measure of equity in that it is the means by which the amount of the fee is related to the impacts presented by a particular development activity. A proportionate impact fee differentiates capacity demand based on property type and size. For example, a single family home consumes less capacity than does a shopping mall or car wash, so single family is assigned a lower demand index, and by means of that a reduced share of CFP cost and a relatively lower impact fee.

The demand index is calculated based on the District's wastewater LOS of 280 gallons per day.<sup>1</sup> This is the District's standard unit of measure for demand planning.

Note with respect to the estimation of relative service demand, that impact fee assessment is held to a standard of average rather than case specific impact, and that proportionality is assessed based on average demand attributable to a class or category of new development.

- Step 3 <u>Quantify the impact fee</u> cost per RE is calculated as the product of CFP cost per gallon of system capacity, and the wastewater LOS. The amount of the impact fee for a given unit of new development is calculated as the product of cost per RE and number of demand units represented by that property type. District policy defines the specific calculation methodology. A three bedroom single family unit represents one RE. Other single family units are indexed to that measure, based on number of bedrooms. Other property types are assessed a fee based on a demand analysis of the construction plans.
- Step 4 <u>Quantify impact fee reductions</u> in certain cases, an impact fee can be reduced to account for present value of past or future payments by new development, attributable to existing service provision. Because capacity for new development has, and will be funded entirely by impact fees, credits are not calculated as part of this analysis.

### **Estimating Assumptions**

Impact fee calculation relies on certain estimating assumptions, decisions, criteria and conclusions – construction cost, demand for new capacity, absorption rate, total new system capacity required, the probable borrowing and earnings rate, and others. These assumptions derive from research and analysis, and the considered judgment of wastewater and financial planning professionals – District staff, engineering consultants, banking and financial consultants. Many estimating assumptions are made in context of related planning analyses, completed by District staff and by some of the political subdivisions that comprise the District. This section of the report discusses some of the key assumptions that guide the conclusions in this analysis.

• The impact fee level of service standard is (LOS) of 280 gpd per RE. This is the demand planning factor and is applied at the same rate, to both new and existing development, in calculating current and future system capacity demand. New development is not held to a higher and more costly standard.

<sup>&</sup>lt;sup>1</sup> Capital facilities demand planning is calculated based on the wastewater LOS - 280.4 gpd (peak month, average day consumption, per RE). Impact fee calculation is denominated differently, as defined by District policy, and is based on a planning factor of 320 gpd (daily peak demand per RE). The use of different denominators for these two purposes reflects different, but proportionate measures of total capacity, and has no effect on the amount of the impact fee – calculation based on daily peak or monthly average demand yields exactly the same impact fee amount.









The District's growth projection determines the timing and quantity of requisite new capacity, and to a large extent the cost of the CFP and the amount of the impact fee. The projection in this analysis is based on new methodology – a structured modeling approach that makes use of the District's own land use analysis, along with collaborative research with some of the other political subdivisions that comprise the District.

The amount of the impact fee is affected by the cost of commercial debt. The par amount of the debt is defined by District analysis. Assumptions that set the cost of the debt are estimated in consultation with the District's bond adviser. This includes term, interest rate, number of interest only years (as may be needed), cost of issuance, debt service reserve, debt coverage ratio, and other detailed criteria that structure the bond so that it is marketable, and meets match the cash requirements of the district's financing plan.

This analysis does not distinguish between impact attributable to primary and non-primary homes. Wastewater capacity planning is based on peak demand, and in this regard both occupancy types present the same impact.

The Board has determined to implement a single impact fee service area. This is in keeping with the design and operation of the District's capital facilities. The facilities are operated as a single and functionally interrelated service provision system. The facilities operations center manages the facilities as a single operational unit, and it is typical practice to vary the load applied to each of the two plants, depending on system wide parameters. A single service area is appropriate because all areas of the District are served at the same LOS. Implementation of a single service area means that the impact fee for a given property type is charged at the same rate district-wide.

- This analysis is based on conservative estimating assumptions in keeping with the goal of defining an equitable and conservative fee amount. It is based on realistic demand planning, intended to ensure that the projects will be online when needed. It is based on a capital plan that will preserve the LOS funded by, and now provided, existing development. And it is structured so as to be fair to new development as regards the relationship between the cost of the impact, and the amount of the impact fee.
- CIP cost, and the need for each project, is carefully considered and carefully priced. Cost to new development is not overstated and represents the actual cost to offset the impacts of the new development. The CFP includes only projects and parts of projects needed to meet demand from new development. The timing and sequencing of those projects and the quantity of needed new capacity has been adjusted in this revision of the *Impact Fee Written Analysis*, to reflect current conditions and current expectations as to growth and the capacity absorption.
- This analysis is expressed in constant value terms. The nominal fee rate is inflated over time to maintain a constant "real" amount. Construction cost is similarly expressed in future value terms so that planned impact fee revenue is adequate to fund the work, at the time the projects are built.
- With respect to the projected impact fees in Table 1, note that the *Impact Fee Capital Facilities Plan* and this *Impact Fee Written Analysis*, will be periodically reevaluated and updated as necessary, to reflect current conditions. To the extent that construction cost increases faster than expected, or that other estimating assumptions change, CFP cost will increase, and the amount of the impact fee will increase.









### **Impact Fee Administration**

Impact fee administrative policies established by the District include the following:

Impact fee payment is required no later than the time a building permit is issued.

Impact fees are accounted for separately and are spent or encumbered as prescribed by the *Impact Fees Act*.

The District will periodically review and update the *Capital Improvement Plan*, the *Impact Fee Capital Facilities Plan* and this *Impact Fee Written Analysis*. As conditions warrant, the cost of capital projects will be revised, and the amount of the impact fee may increase. In addition, impact fee calculation methodology will be reviewed to assure continued compliance with the *Impact Fees Act*.

Residential impact fees are assessed by means of an impact fee schedule. Nonresidential fees are assessed by means of application-specific calculation. The process of fee calculation is detailed in the next section.

The District has defined a process for calculation of contested impact fees, and for the calculation of fees for atypical property types and sizes.

The District has an appeals process for contested impact fees in the event that the procedure for site specific fee calculation does not yield satisfactory resolution.









#### Evaluation of Alternative Funding Sources and Determination That Impact Fees Are Necessary

The *Impact Fees Act* requires that all potential revenue sources, (not just impact fees) be considered in evaluating the need for, an impact fee assessment. <sup>2</sup> The District has researched funding alternatives and has concluded that impact fees are necessary.

Grants and advantageous state or federal loans are not, at present, available. The District is limited to financing system improvements using three basic revenue sources. Property taxes may be used to repay general obligation bonds for system improvements however general obligation bonds require voter approval which is not generally successful in the financing of new growth. The District has concluded that general obligation bonds are not a reasonable or reliable source of funds to fund system improvements for new growth. The District may also use service charges to repay revenue bonds which may be used for system improvements. The District is committed to limiting the use of revenue bonding based on service charges to the funding of improvements designed to maintain existing service provision for system users that pay service charges. Impact fees are therefore the selected source of revenue to fund system improvements for new development.

<sup>&</sup>lt;sup>2</sup> The *Impact Fees Act* requires that fee calculation"... generally consider all revenue sources, including impact fees, to finance the impact on system improvements." (Utah Code Ann. §11-36-201 (3).

## **Impact Fee Schedule Application Notes**

Impact fee schedule calculated in this report:

IMPACT FEE PER RE Maximum Allowable SBWRD Impact Fee				
Calendar Year	Impact Fee per RE			
2011	\$6,576	(per RE)		
2012	\$6,711	(per RE)		
2013	\$6,948	(per RE)		
2014	\$7,092	(per RE)		
2015	\$7,238	(per RE)		

Source - Table 1

- The impact fee per RE is the fee amount for a single family equivalent unit of system capacity demand.
- Impact fees for a specific property type and size are calculated as described on the following page.
- The Board may enact fees at a reduced rate. Fees shown above are the maximum allowable rate.
- The fees shown above have no effect until 90 days after enactment by the Board.<sup>3</sup>
- Impact fees in Table 1 are assessed against all new development. Fees are paid at the time of building permit application.<sup>4</sup>

The District has implemented a single impact fee service area which means that impact fees for each property type are assessed at the same rate district-wide. A single service area is used because SBWRD capital facilities are designed and built to provide service, and service redundancy, district-wide; and because all areas of the District are served at the same LOS.

The District has defined a procedure for contested or atypical impact fee applications. This is shown on page 31.

The Board has generally defined its position with respect to impact fees for affordable housing. The District does not forgo impact fee assessment for any new development activity. All new development requires system capacity, and as a matter of policy the cost of that capacity is assessed against each new development activity. However, for qualified affordable housing projects, time-payment of impact fees is possible.

Because the definition of affordable housing, and the terms and duration of the affordability commitment very widely, each application for time-payment of impact fees will be evaluated on a case-specific basis. In general, qualified affordable housing projects are those which meet governing standards of affordability, implement restricted rental rates and restricted resale prices, and allow priority access to essential local government service workers and other local employees.

<sup>&</sup>lt;sup>3</sup> Utah Code Ann. §11-36-202 (9)

<sup>&</sup>lt;sup>4</sup> Utah Code Ann. §11-36-202 (9)

Residential impact fee assessment methodology is defined by District policy<sup>5</sup> as follows:

The amount of the impact fee is set according to number of bedrooms, based on a scale illustrated in Table 2. A three-bedroom home is equal to one RE and is assessed a 2011 impact fee of \$6,576. Homes with fewer or more bedrooms, present less or more capacity demand, and are charged proportionately lower or higher fees.

Table 3

2011 Maximu	E RESIDENTIA	L IMPACT FEE
Number of Bedrooms	Number of REs	Impact Fee Amount
1	1/3	\$2.192.00
2	2/3	\$4,384.00
3	1	\$6,576.00
4	1 1/3	\$8,768.00
5	1 2/3	\$10,960.00
6	2	\$13,152.00
7	2 1/3	\$15,344.00
8	2 2/3	\$17,536.00

Source - number of REs per bedroom are specified by District policy. Impact fee for one RE is from Table 1. Incremental fee amounts are calculated as the product of number of REs and the impact fee per RE.

Nonresidential impact fee assessment methodology is defined by District policy, as follows:<sup>6</sup>

The impact fee for nonresidential establishments is based on estimated water usage during the months of November through April. Estimates will be calculated by the project engineer or architect. Actual water usage from similar facilities can also be used. Wastewater flow shall be divided by 320 gallons per day in order to determine the number of residential equivalent demand units (REs). The impact fee shall be computed by multiplying the REs times the residential equivalent system impact fee of a home with three (3) living sections.

<sup>&</sup>lt;sup>5</sup> SBWRD impact fee rules and regulations.

<sup>&</sup>lt;sup>6</sup> SBWRD impact fee rules and regulations.







# IMPACT FEE WRITTEN ANALYSIS Introduction

The wastewater impact fee is quantified based on the cost of capital facilities needed to meet demand from new development. Impact fee eligible capital cost is defined by the *Impact Fees Act*. Specific facilities included in the District's impact fee are shown in the separately published *Impact Fee Capital Facilities Plan* (the CFP, attached as Exhibit A). Financing expense for the capital facilities is calculated as part of this report. The CFP is a subset of the District's overall capital improvement plan (the CFP is limited to projects and parts of projects that are uniquely attributable to capacity expansion for new development.

The allocation of projects and cost to the CFP is made by staff, such that new development is not assigned costs attributable to existing service provision or to the benefit of existing users

A plan-based approach to impact fee calculation – one based on a specifically defined capital program such as described above – directly supports the most significant objectives of equitable impact fee assessment:

The cost to offset the impact of a development activity is specifically known, in that it is defined by the cost of a specific and uniquely attributable set of capital facilities.

The impact fee excludes all costs attributable to existing service provision, and is reduced by other revenue sources available to fund capacity for new development.

The fee is "... roughly proportionate and reasonably related" to the "...demands placed upon existing public facilities by new development."<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> A proportionate impact fee is defined by the *Impact Fees Act* – Utah Code Ann. §11-36-102 (11). The Utah Supreme Court case of B.A.M Development vs. Salt Lake County presents a useful way to conceptualize "… roughly proportionate and reasonably related". "Roughly proportionate" refers to the objective that the amount of the fee and the impacts presented by new development are related in *extent* – a measure of which is relative cost – i.e. the amount of the fee vs. cost to offset the impacts. "Reasonably related" refers to the *nature* of the impact and is directed at the objective that the projects funded by an impact fee represent a "solution" to the impacts presented by the development activity.



The cost of capital facilities for new development is reduced by two factors.

The impact fee account beginning balance (about \$13 million). This represents reimbursement payments by new development for capacity built before implementation of the *Impact Fees Act*, for the purpose of meeting demand from future new development.

Interest earned on the impact fee account.

The District has a long-standing practice of using impact fees as a way to equitably apportion costs between new and existing development, according to benefit conferred. Impact fees are the means by which new development is assessed the cost of capacity it requires and existing development is assessed the cost of facilities it requires. Implementation of this *Impact Fee Written Analysis* continues that practice.





#### Impact Fee Calculation Methodology

An impact fee represents the unit cost of capital facilities needed to meet demand from new development. Calculation of the fee is straightforward – the amount of the fee for a given property type is the product of number of residential equivalent capacity demand units for that property type, and cost per demand unit. Quantification of number of demand units is discussed on page 14. This section discusses calculation of the cost per demand unit.

Calculation of the unit cost of service is summarized in below (Table 4). Unit cost is the nominal impact fee amount. The actual assessment is the nominal impact fee, adjusted to recognize the time value of money.<sup>8</sup>

#### Table 4

UNIT COST OF SERVICE New Development Cost per Demand Unit (nominal)	
Cost of Capital Facilities for New Development Total Capital Cost Capacity Demand (gallons) Capital Facilities Unit Cost (per gallon)	\$176,455,654 4,650,000 \$37.95
Impact Fee Calculation Wastewater LOS (ppd/RE)	284
Capital Facilities Unit Cost (cost per gallon)	\$37.95
Average Cost per Demand Unit (RE)	\$10,777

Source – cost of capital facilities is from Table 5. Cost per gallon is calculated as the quotient of capital cost for new development and capacity demand. New development capacity demand is calculated as the product of Net New Fee Assessment REs from Table 10 and the wastewater LOS. The wastewater LOS is the District's demand planning factor (gpd/RE). Cost per demand unit is calculated as the product of the wastewater LOS and capital facilities unit cost.

The cost of capital facilities for new development is calculated as follows:<sup>9</sup>

#### Table 5

COST OF CAPITAL FACILITIES FOR NEW	V DEVELOPMENT
Construction Cost, Net Financing Expense & Beginning Balar	nce
Cost of Capital Facilities for New Development	
CFP Cost	\$161,573,796
Interest Expense	\$41,821,473
Investment Income	(\$13,787,860)
Impact Fee Account Beginning Balance	(\$13,151,755)
Total	\$176,455,654

Source – CFP cost is from the *impact Fee Capital Facilities Plan.* Interest expense is calculated as the difference between debt service (P&I) and debt proceeds, from Table 8. Investment income and beginning balance are from Table 8.

<sup>&</sup>lt;sup>8</sup> A constant value fee is required by Utah Code (UCA Ann. §11-36-201 (5) (c) (vii)). The nominal amount of a constant value fee is less in the early years of the planning period, and more in the later years.

<sup>&</sup>lt;sup>9</sup> The *Impact Fees Act* defines allowable costs (Utah Code Ann. §11-36-202 (1) (c) and (d)). This includes, for system improvements, land and construction, debt service, and planning, surveying and engineering. A charge for overhead is allowed, however the District has elected not to assess this component of cost.

Table 6 shows the projected impact fee adjusted to account for the time-value of money. Note that total revenue under the constant value schedule (below) is identical to the cost of capital facilities for new development as shown in Table 5.

Table 6

PROJE		ACT FEES	
Cost per L	Demand Unit - Co	nstant \$s	
	Constant Value	Net New Fee	Total Impact
	Impact Fee	Assessment	Fee Revenue
	(per RE)	REs	
2010			
2011	\$6,576	157	\$1,032,432
2012	\$6,711	175	\$1,174,425
2013	\$6,948	204	\$1,417,474
2014	\$7,092 \$7,092	242	\$1,716,220
2015	\$7,230 \$7,388	292	\$2,113,555 \$2,607,824
2010	\$7,500	400	\$2,007,024
2017	\$7,540 \$7,606	426	\$3,212,078
2010	\$7,090 \$7,855	606	\$3,932,514 \$4 759 868
2020	\$8,017	708	\$5 675 818
2021	\$8,182	814	\$6,660,281
2022	\$8,351	916	\$7,649,561
2023	\$8,523	1,008	\$8,591,609
2024	\$8,699	1,081	\$9,403,999
2025	\$8,879	1,128	\$10,015,414
2026	\$9,062	1,144	\$10,367,135
2027	\$9,249	1,126	\$10,414,634
2028	\$9,440	1,078	\$10,176,473
2029	\$9,030 \$0,834	1,004 911	\$9,073,534 \$8,958,654
2030	\$10,037	807	\$8 099 735
2032	\$10,244	701	\$7,181,055
2033	\$10,455	598	\$6,252,365
2034	\$10,671	502	\$5,356,977
2035	\$10,892	416	\$4,530,877
2036	\$11,116	341	\$3,790,672
2037	\$11,346	277	\$3,142,784
2038	\$11,580 \$11,910	223	\$2,582,335
2039	\$12,063	142	\$2,103,782 \$1,712,939
2041	\$12,312	112	\$1,378,937
2042	\$12,566	88	\$1,105,814
2043	\$12,825	69	\$884,955
2044	\$13,090	54	\$706,869
2045	\$13,360	42	\$561,135
2046	\$13,636	32	\$436,356
2047	\$13,918	25	\$347,940
2048	\$14,205 \$14,408	21	\$298,302
2049	914,498 \$11 707	22	9010,901 \$500 110
2051	\$15 103	34	\$510 747
2052	\$15,414	34	\$521,289
2053	\$15,733	34	\$532,049
2054	\$16,057	34	\$543,031
2055	\$16,389	34	\$554,240
2056	\$16,727	34	\$565,680
2057	\$17,072	34	\$577,356
2058	\$17,425	34	\$589,273
2059	\$17,784 \$10,454	34	\$613.950
2000	φ10,101	- 34	φ013,00U
TOTAL		18,906	\$176,455,655

Source – Table 7







The unit cost of capital facilities is calculated as shown in Table 4 – as the simple quotient of the net cost of capital facilities for new development and number of new development units. The impact fee (the "time-adjusted" unit cost of service) is calculated by means of a financial planning model (Table 7 and Table 8) that incorporates projected annual capital spending, the quantity and rate of new development, debt proceeds and debt P & I, accrued investment income and projected inflation to project the annual account balance, and by means of that, the annual impact fee.

The calculation process is iterative because it uses the above parameters, along with estimated impact fee revenue (a part of the annual account balance) to set the amount of the fee. This process of iteration requires the use of a financial model. The calculation process includes the constraint that total revenue is exactly equal to the cost of capital facilities for new development. It also includes the constraint that annual impact fee account balance is minimized, though positive, and that at the end of the planning period the account balance falls to \$0.

The impact fee account balance (shown in Table 8) includes an internal debt service reserve – an amount, in addition to that required by the debt underwriter, which is carried by the District as a hedge against planning uncertainties - lower than projected impact fee revenue or higher than projected capital cost. The former is reasonably foreseeable as a consequence of different than projected growth, or growth rate. The latter is foreseeable as the result of different than projected construction market price, costly additional treatment mandates, etc. The internal debt service reserve is recommended by staff and approved by the Board. It is considered a necessary and prudent financial planning measure, particularly important in light of the magnitude of projected P & I, which ranges from about \$2,000,000 per year in 2021, to more than \$6,000,000 later in the planning period. The internal debt service reserve earns interest which accrues to the impact fee account, and goes to reduce the amount of the impact fee.

A summary of the calculation of the impact fee, and structure of the financial planning model, is shown on the following two pages, in Table 7 and Table 8. The calculation process is simple, and essentially the same as that used for the unit cost of service. – net

cost of capital facilities (capital cost plus financing expense less accrued interest from the account balance, debt reserve and other) divided by number of new development units. It differs only in that it is made on an annual, rather than aggregate basis.

т	able	7
1	avie	/

lr	\$6,576 \$6,711 \$6,948 \$7,092 \$7,238 \$7,388 \$7,540	Total REs 22,130 22,291 22,470 22,678 22,924 23,220 23,220	Annual New REs 161 179 208 246	(4) (4) (4) (4)	RE) Net New Fee Assessment REs 157	Total Impac Fee Revenu
	\$6,576 \$6,711 \$6,948 \$7,092 \$7,238 \$7,388 \$7,540	22,130 22,291 22,470 22,678 22,924 23,220 23,220	161 179 208 246	(4) (4)	157	
	\$6,576 \$6,711 \$6,948 \$7,092 \$7,238 \$7,388 \$7,540	22,291 22,470 22,678 22,924 23,220	161 179 208 246	(4) (4)	157	
	\$6,711 \$6,948 \$7,092 \$7,238 \$7,388 \$7,540	22,470 22,678 22,924 23,220	179 208 246	(4)		\$1.032.43
	\$6,948 \$7,092 \$7,238 \$7,388 \$7,540	22,678 22,924 23,220	208 246		175	\$1,174,42
	\$7,092 \$7,238 \$7,388 \$7,540	22,924 23,220	246	(4)	204	\$1,417,47
	\$7,238 \$7,388 \$7,540	23,220		(4)	242	\$1,716,22
	\$7,388 \$7,540	00 577	296	(4)	292	\$2,113,55
	\$7,540	23,577	357	(4)	353	\$2,607,82
		24,007	430	(4)	426	\$3,212,07
	\$7,696	24,522	515	(4)	511	\$3,932,51
	\$7,855	25,132	610	(4)	606	\$4,759,86
	\$8,017	25,844	712	(4)	708	\$5,675,81
	\$8,182	26,662	818	(4)	814	\$6,660,28
	\$8,351	27,582	920	(4)	916	\$7,649,56
	\$8,523	28,594	1,012	(4)	1,008	\$8,591,60
	\$8,699	29,679	1,085	(4)	1,081	\$9,403,99
	\$8,879	30,811	1,132	(4)	1,128	\$10,015,41
	\$9,062	31,959	1,148	(4)	1,144	\$10,367,13
	\$9,249	33,089	1,130	(4)	1,126	\$10,414,63
	\$9,440	34,171	1,082	(4)	1,078	\$10,176,47
	\$9,635	35,179	1,008	(4)	1,004	\$9,673,53
	\$9,834	36,094	915	(4)	911	\$8,958,65
	\$10,037	36,905	811	(4)	807	\$8,099,73
	\$10,244	37,610	705	(4)	701	\$7,181,05
	\$10,455	38,212	602	(4)	598	\$6,252,36
	\$10,671	38,718	506	(4)	502	\$5,356,97
	\$10,892	39,138	420	(4)	416	\$4,530,87
	\$11,116	39,483	345	(4)	341	\$3,790,67
	\$11,346	39,764	281	(4)	277	\$3,142,78
	\$11,580	39,991	227	(4)	223	\$2,582,33
	\$11,819	40,173	182	(4)	178	\$2,103,78
	\$12,063	40,319	146	(4)	142	\$1,712,93
	\$12,312	40,435	116	(4)	112	\$1,378,93
	\$12,500 \$12,905	40,527	92	(4)	88	\$1,105,81 ¢004.05
	⊅1∠,ŏ∠⊃ \$12.000	40,600	13	(4)	69 E 4	3004,95 \$706.00
	\$12 260	40,000	00 AN	(4)	04 10	\$700,00 \$561.12
	\$13,300 \$13 636	40,704	40 36	(4)	42	4001,13 \$126.25
	\$13,000	40,740	20	(4) (A)		\$347 QA
	\$14 205	40,709	25	(4)	23	\$298 30
	\$14 498	40 820	26	(4)	21	\$318.95
	\$14,797	40.858	38	(4)	34	\$500.41
	\$15.103	40.896	38	(4)	34	\$510.74
	\$15.414	40.934	38	(4)	34	\$521.28
	\$15,733	40,971	38	(4)	34	\$532.04
	\$16,057	41,009	38	(4)	34	\$543,03
	\$16,389	41,047	38	(4)	34	\$554.24
	\$16,727	41,085	38	(4)	34	\$565,68
	\$17,072	41,123	38	(4)	34	\$577,35
	\$17,425	41,160	38	(4)	34	\$589,27
	\$17,784	41,198	38	(4)	34	\$601,43
	\$18,151	41,236	38	(4)	34	\$613,85
						•

Source – the impact fee inflation rate is the GDP deflator, from Table 11. New development is from Table 10. The number of exempt REs is estimated by SBWRD staff. Total impact fee revenue is calculated as the product of the impact fee per RE and Net New Fee Assessment Units.

#### Table 8

#### IMPACT FEE CALCULATION

Total Cos		niit a impact re		2 01 2)				
		Schedul	ed Debt					
	Construction Cost	Cost Debt Proceeds Debt Servic (P & I)		Pro Forma Debt P & I	Investment Income	Annual Net Revenue	Account Balance	Pro Forma Bond Proceeds
2010							\$13 151 755	
2010	\$680 709				\$266 552	\$618 276	\$13,770,031	
2012	\$982 745				\$277 317	\$468,997	\$14 239 028	
2013	\$386 785				\$295,087	\$1 325 776	\$15,564,803	
2014	\$981,182				\$318.646	\$1.053.684	\$16,618,488	
2015	\$10.810.505	\$9.500.000			\$292.900	\$1.095.950	\$17.714.438	
2016	\$9,867,373	•-,,	\$842,531		\$290,119	(\$7,811,962)	\$9,902,476	
2017	\$10.507.466	\$1.000.000	\$842.531		\$138.521	(\$6.999.399)	\$2.903.077	
2018	\$1,396,483	* ,,	\$972.036		\$90.552	\$1.654.547	\$4.557.624	
2019	\$2,686,526		\$972,036		\$119,016	\$1,220,322	\$5,777,947	
2020	\$4,514,131	\$11,000,000	\$972,036		\$189,306	\$11,378,957	\$17,156,903	
2021	\$19,688,009	\$4,000,000	\$1,947,599		\$249,747	(\$10,725,580)	\$6,431,323	
2022	\$125,199		\$2,465,617		\$215,576	\$5,274,320	\$11,705,643	
2023	\$1,108,027		\$2,465,617		\$320,654	\$5,338,619	\$17,044,262	
2024	\$130,421		\$2,465,617		\$445,327	\$7,253,287	\$24,297,550	
2025	\$244,059		\$2,465,617		\$595,370	\$7,901,108	\$32,198,658	
2026	\$135,861		\$2,465,617		\$757,992	\$8,523,648	\$40,722,306	
2027	\$8,169,155		\$2,465,617		\$848,607	\$628,469	\$41,350,775	
2028	\$48,456,935	\$10,000,000	\$2,336,113		\$507,212	(\$30,109,362)	\$11,241,413	
2029	\$33,792,582	\$29,000,000	\$3,427,073		\$139,598	\$1,593,477	\$12,834,890	
2030	\$250,149		\$6,243,914		\$367,371	\$2,831,962	\$15,666,851	
2031	\$170,067		\$6,243,914		\$416,221	\$2,101,976	\$17,768,827	
2032	\$153,579		\$5,725,895		\$454,419	\$1,756,000	\$19,524,827	
2033	\$277,366		\$5,725,895		\$479,014	\$728,118	\$20,252,945	
2034	\$159,984		\$5,725,895		\$485,797	(\$43,106)	\$20,209,839	
2035	\$184,549		\$4,883,364		\$468,003	(\$69,033)	\$20,140,806	
2030	\$308,290 \$170,007		\$4,883,364		\$457,983 \$437,026	(\$942,999)	\$19,197,807 \$17,701,156	
2037	\$170,097 \$173,608		\$4,003,304 \$4,883.364		\$434,020 \$308 853	(\$1,470,001)	\$17,721,130	
2030	\$173,000		\$4,003,304 \$4,225,841		\$350,000	$(\psi^2, 073, 703)$ (\$2,118,234)	\$13,043,373 \$13,527,138	
2039	\$180 848		\$2 483 251		\$310,696	(\$640.464)	\$12,886,675	
2040	\$208 617		\$2 483 251		\$294,269	(\$1 018 661)	\$11 868 013	
2042	\$188,391		\$2 483 251		\$271,200	(\$1 294 461)	\$10,573,552	
2043	\$192,280		\$2,483,251		\$243.230	(\$1,547,345)	\$9.026.208	
2044	\$196.248		\$2,483,251		\$210,463	(\$1,762,167)	\$7.264.040	
2045	\$200,299	\$3,500,000	\$2,483,251		\$191,222	\$1,568,807	\$8,832,847	
2046	\$204,434		\$2,936,517		\$199,276	(\$2,505,318)	\$6,327,529	
2047	\$208,653	\$6,500,000	\$2,936,517		\$180,743	\$3,883,513	\$10,211,042	
2048	\$212,960		\$3,334,859		\$212,522	(\$3,036,995)	\$7,174,048	
2049	\$217,356		\$1,295,046		\$131,547	(\$1,061,898)	\$6,112,150	
2050	\$221,842		\$1,295,046		\$112,078	(\$904,391)	\$5,207,759	
2051	\$226,421		\$1,295,046		\$94,048	(\$916,672)	\$4,291,087	
2052	\$231,094	•	\$1,295,046		\$75,773	(\$929,078)	\$3,362,009	
2053	\$235,864	\$5,500,000	\$1,295,046		\$84,752	\$4,585,890	\$7,947,900	
2054	\$240,733		\$2,007,321		\$141,908	(\$1,563,115)	\$6,384,785	
2055	\$245,702		\$2,007,321		\$110,708	(\$1,588,075)	\$4,796,709	
2056	\$250,773		\$1,554,055		\$83,543	(\$1,155,606)	\$3,641,103	
2057	\$255,949		\$1,554,055 \$712,275		\$60,496 \$45,527	(\$1,172,153)	\$∠,468,950 \$2,120,252	
2050	9201,232 \$266.604		⊅112,215 ¢710.075		940,037 ¢20 020	(\$330,098) (\$330,698)	φ2,130,252 \$1 701 619	
2059	₽∠00,024 \$272,129		φιιζ,2/5 \$2 151 079		\$30,03U \$17,720	(\$330,034) (\$1 701 619)	010,191,00 ¢1	
2000	ψ <i>21</i> 2,120		ψ2,101,070		φ17,739	(91,731,010)	١؈	
TOTAL	\$161,573,796	\$80,000,000	\$121,821,473	\$0	\$13,787,860			

Source - Construction Cost is from the 2010 Impact Fee Capital Facilities Plan. Debt Proceeds and debt service are from Table 12. P & I is calculated based on debt par amount, which includes debt proceeds available for project construction, the underwriter's debt service reserve account and cost of issuance. Investment income is calculated based on the inflation rate (GDP deflator) from Table 11 applied to the annual account balance, and including interest earned on the underwriter's debt service reserve. The final year of each debt issue is assumed to be paid by the debt service reserve, which is set at an amount equal to one year of debt service. Annual net revenue calculated as the difference between revenue and expenses. Revenue includes, the beginning account balance, impact fees, debt proceeds, and earned interest. Expenses include construction cost and debt service. The account balance is calculated as cumulative net revenue

#### Source and Use of Funds

Impact fees are assessed to pay the cost of capital facilities needed to meet demand from new development. In this analysis, impact fees are set at a rate that exactly meets that requirement – the impact fee account yields a \$0 balance at the end of the planning period.

The source of funds for impact fee projects includes impact fees, impact fee account beginning balance (more than \$13,000,000), and interest realized from investment of the annual account balance, the debt service reserve, and other.

Funds are used to pay for impact fee eligible capital projects and financing expense.

The source and use of funds is summarized below (Table 9).

Table 9		
<b>CFP PROJECTS - SOURCE AND US</b>	SE OF FUNDS	
2010 Impact Fee CFP		
		Total
Revenue		
Impact Fee Account Beginning Balance	\$13,151,755	
Impact Fees	\$176,455,655	
Investment Income	\$13,787,860	
Total		\$203,395,270
Capital Facilities for New Development		
Capital Projects	(\$161,573,796)	
Debt Interest & Cost of Debt Issuance	(\$41,821,473)	
Total		(\$203,395,269)
Net Revenue		\$1

Source - Table 7 and Table 8. Debt interest and cost of issuance is from Table 5.

Figure 2 (on the following page) shows the source and use of funds (the same information as Table 9), from a different perspective – an annual comparison of revenue, capital spending and net revenue. As in Table 9, Figure 2 and ending impact fee account of \$0.

Figure 2 illustrates a pro forma or estimated cash flow. As will be discussed later (page 33), that cash flow – and the disposition of collected impact fees – as planned, will meet the six year impact fee spend deadline required by the *Impact Fees Act*.





Source - Table 6 and Table 7.

#### **Estimating Assumptions, Decisions, Criteria and Conclusions**

Impact fee calculation relies on various estimating assumptions. Some are "externalities" not subject to the discretion of the analyst – cost of construction, project timing, capacity absorption rate and ultimate quantity, the borrowing or earnings rate and others. Others are matters of judgment that more directly rely on research and analysis by the practitioner in order to estimate reasonable criteria. This section discusses some of the more notable assumptions in this analysis.

Projected growth in capacity demand, and the treatment capacity expansion plan, are illustrated in Table 10. These assumptions, along with estimated captial facilities cost, are fundamental in setting the amount of an impact fee. This projection is updated compared to the preceding *Impact Fee Written Analysis*. It shows a slowed near-term growth rate and an extended capacity utilization horizon. Total demand is estimated based on a rigorous and ongoing analytical program, based on land use analysis, continuing evaluation of development activities, and consultation with other local government entities which comprise the District, to identify current planning objectives, development patterns, timing and build-out potential.

Note that capacity demand in Table 10 is calculated based on the same LOS applied to both new and existing development. New development is not held to a higher and more costly standard. This is fundamental in defining an equitable impact fee that excludes costs attributable to existing service provision – deficiency correction, service provision upgrade for existing development, and other.

#### Table 10

Actual and F	Projected									
		1	Total RE	s		Capacity Demand Treatme			eatment Capa	city
	Total	Growth Rate	New Development	Exempt (REs attributable to state buildings)	Net New Impact Fee REs	LOS (gpd/RE)	Capacity Demand (mgd)	Treatment Capacity (mgd)	Capacity Utilization	New Capacity
2000	15,831									
2001	16,897					284	4.80	4.80	100%	
2002	17,412					284	4.95	4.80	103%	
2003	18,100					284	5.14	7.00	73%	2.20
2004	18,770					284	5.33	7.00	70%	
2005	20 781					204	5.00	7.00	8/1%	
2000	20,701					284	6.11	7.00	87%	
2007	21,858					284	6.21	7.00	89%	
2009	21,978					284	6.24	7.00	89%	
2010	22,130					284	6.28	7.00	90%	
2011	22,291	0.7%	161	(4)	157	284	6.33	7.00	90%	
2012	22,470	0.8%	179	(4)	175	284	6.38	7.00	91%	
2013	22,678	0.9%	208	(4)	204	284	6.44	7.00	92%	
2014	22,924	1.1%	246	(4)	242	284	6.51	7.00	93%	
2015	23,220	1.3%	296	(4)	292	284	6.59	7.00	94%	
2016	23,577	1.5%	357	(4)	353	284	6.70	7.00	96%	
2017	24,007	1.8%	430	(4)	426	284	6.82	9.00	76%	2.00
2018	24,522	2.1%	515	(4)	511	284	6.96	9.00	77%	
2019	25,132	2.5%	610	(4)	606	284	7.14	9.00	79%	
2020	25,844	2.8%	712	(4)	708	284	7.34	9.00	82%	
2021	26,662	3.2%	818	(4)	814	284	7.57	10.00	76%	1.00
2022	27,582	3.5%	920	(4)	916	284	7.83	10.00	78%	
2023	28,594	3.7%	1,012	(4)	1,008	284	8.12	10.00	81%	
2024	29,679	3.8%	1,085	(4)	1,081	284	8.43	10.00	84%	
2025	30,811	3.8%	1,132	(4)	1,128	284	8.75	10.00	88%	
2020	31,909	3.1%	1,140	(4)	1,144	204	9.00	10.00	91%	
2027	34 171	3.3%	1,130	(4)	1,120	204	9.40	10.00	94 /0	
2020	35 179	2.9%	1,002	(4)	1,070	284	9.70	11.65	86%	1.65
2030	36.094	2.6%	915	(4)	911	284	10.25	11.65	88%	1.00
2031	36,905	2.2%	811	(4)	807	284	10.48	11.65	90%	
2032	37.610	1.9%	705	(4)	701	284	10.68	11.65	92%	
2033	38,212	1.6%	602	(4)	598	284	10.85	11.65	93%	
2034	38,718	1.3%	506	(4)	502	284	11.00	11.65	94%	
2035	39,138	1.1%	420	(4)	416	284	11.12	11.65	95%	
2036	39,483	0.9%	345	(4)	341	284	11.21	11.65	96%	
2037	39,764	0.7%	281	(4)	277	284	11.29	11.65	97%	
2038	39,991	0.6%	227	(4)	223	284	11.36	11.65	97%	
2039	40,173	0.5%	182	(4)	178	284	11.41	11.65	98%	
2040	40,319	0.4%	146	(4)	142	284	11.45	11.65	98%	
2041	40,435	0.3%	116	(4)	112	284	11.48	11.65	99%	
2042	40,527	0.2%	92	(4)	88	284	11.51	11.65	99%	
2043	40,600	0.2%	73	(4)	69	284	11.53	11.65	99%	
2044	40,658	0.1%	58	(4)	54	284	11.55	11.65	99%	
2045	40,704	0.1%	46	(4)	42	284	11.56	11.65	99%	
2040	40,740	0.1%	36	(4)	32	284	11.5/	11.65	99%	
2047	40,769	0.1%	29	(4)	25	284	11.58	11.65	99%	
2040	40,794	0.1%	25	(4)	21	284	11.09	11.05	99%	
2049	40,820 40,859	0.1%	20	(4)	22	∠84 294	11.59	11.05	100%	
2051	40,896	0.1%	30	(4)	34	204	11.60	11.65	100%	
2052	40,030	0.1%	38	(4) (A)	34	204	11.63	11.65	100%	
2053	40,971	0.1%	38	(4)	34	284	11.64	11.65	100%	
2054	41.009	0.1%	38	(4)	34	284	11.65	11.65	100%	
2055	41.047	0.1%	-38	(4)	34	284	11.66	11.65	100%	
2056	41.085	0.1%	38	(4)	34	284	11.67	11.65	100%	
2057	41,123	0.1%	38	(4)	34	284	11.68	11.65	100%	
2058	41,160	0.1%	38	(4)	34	284	11.69	11.65	100%	
2059	41,198	0.1%	38	(4)	34	284	11.70	11.65	100%	
2060	41,236	0.1%	38	(4)	34	284	11.71	11.65	101%	
Total 2000	to 2025		10.100	(200)	19 000					
1 Ulai - 2009	10 2000		19,100	(200)	10,900					

## PROJECTED NEW DEVELOPMENT AND PLANT CAPACITY DEMAND

Source – Total REs are from SBWRD staff. By terms of U.C.A. 11-36, state buildings, which are not required to pay impact fees. The wastewater LOS is the District's adopted demand planning factor. Total capacity demand is calculated as the product of Net New Impact Fee REs and the LOS. New treatment capacity and online year are from SBWRD analysis. With respect to capacity utilization, note that the plants are designed to operate at levels slightly above 100% of stated capacity. This is intended to accommodate temporary changes in the demand curve, compared to available capacity, and to accommodate small potential changes in total demand.

Figure 3 and Figure 4 illustrate the growth projection. Figure 3 shows the historic growth rate, in order to give context to the short run projection. Figure 4 shows estimated total capacity demand compared to planned capacity expansion.



Figure 3

Source -SBWRD.





Source - SBWRD.

Table 11 shows financial assumptions used to calculate the impact fee:

IMPACT FEE FINANCIAL ASSUMPTIONS Estimating Assumptions for Capital Planning and Impact Fee Calculation	n
Construction cost inflation	5.50%
Inflation rate (GDP deflator - 10 yr average)	2.06%
SBWRD investment rate (PTIF average)	2.00%
Revenue Bond	
Term (years)	20
Estimated interest rate	5.00%
Number of interest only years	0
Estimated cost of issuance	2.50%
Interfund loan	
Term (years)	10
Interest rate (fixed)	5.00%

Source – see below.

• The construction cost inflation rate is used to calculate the cost of future new construction projects. This rate is estimated by Carollo Engineers in consultation with District staff.

• The inflation rate (GDP inflator) is used to calculate the cost of certain capital projects (as discussed in the 2010 *Impact Fee Capital Facilities Plan*) and to calculate a constant value impact fee based on the unit cost of service. This rate is the 10 year average change in the GDP deflator, for the period 1995 to 2005. It has been implemented at the same rate in prior impact fee analyses because comparative rates for other time periods are only slightly different; because, within that range, a new rate would have relatively small effect on the amount of the impact fee; and because of the questionable ability of projecting a new and more accurate rate under current conditions of economic uncertainty.

- The SBWRD investment rate is as estimated by staff, based on the District's past return on investment.
- Revenue bond parameters are as estimated by District staff in consultation with SBWRD bond advisors.
- Interfund loans are planned as a supplement to commercial debt. Interfund loans are loans from the existing customer account to the impact fee account. The loans pay interest at the same estimated rate as that for commercial debt. Term and rates are as estimated by staff.

Table 12 on the following page summarizes debt estimated to be necessary to fund capital improvements for new development, so that they are brought on-line at the time required. Debt and P & I in this analysis includes only that part of total potential borrowing that is attributable to facilities for new development. P & I is calculated based on the debt par amount, which includes funds for construction, cost of issuance and a debt service reserve (equal to one year P & I payment). Impact fee calculations in Table 7 and Table 8 are based on construction funds (rather than the par amount of the debt), and P & I is calculated based on the par amount. The final year P

& I payment is assumed to be paid by the debt service reserve (funds on-hand) and so the final year P & I payment is \$0.

Table 12

DEB	DEBT SUMMARY Debt Par Amount P.8.1 and Earned Interest on the Debt Service Reserve											
DODITIO												
	Existing Impact Fee Account			Debt P & I				Dec	t Service Rese	rve Earned Inte	rest	
	Customer	Commercial	Interfund	Pro Forma	Customer	Commercial	Interfund	Pro Forma	Customer	Commercial	Interfund	Pro Forma
	Account	Debt	Loan	Debt	Account	Debt	Loan	Debt	Account	Debt	Loan	Debt
2011	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2012	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2013	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2014	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2015	\$0	\$10,499,805	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2016	\$0	\$0	\$0	\$0	\$0	\$842,531	\$0	\$0	\$0	\$16,851	\$0	\$0
2017	\$0	\$0	\$1,000,000	\$0	\$0	\$842,531	\$0	\$0	\$0	\$16,851	\$0	\$0
2018	\$0	\$0	\$0	\$0	\$0	\$842,531	\$129,505	\$0	\$0	\$16,851	\$0	\$0
2019	\$0	\$0	\$0	\$0	\$0	\$842,531	\$129,505	\$0	\$0	\$16,851	\$0	\$0
2020	\$0	\$12,157,668	\$0	\$0	\$0	\$842,531	\$129,505	\$0	\$0	\$16,851	\$0	\$0
2021	\$0	\$0	\$4,000,000	\$0	\$0	\$1,818,094	\$129,505	\$0	\$0	\$36,362	\$0	\$0
2022	\$0	\$0	\$0	\$0	\$0	\$1,818,094	\$647,523	\$0	\$0	\$36,362	\$0	\$0
2023	\$0	\$0	\$0	\$0	\$0	\$1,818,094	\$647,523	\$0	\$0	\$36,362	\$0	\$0
2024	\$0	\$0	\$0	\$0	\$0	\$1,818,094	\$647,523	\$0	\$0	\$36,362	\$0	\$0
2025	\$0	\$0	\$0	\$0	\$0	\$1,818,094	\$647,523	\$0	\$0	\$36,362	\$0	\$0
2026	\$0	\$0	\$0	\$0	\$0	\$1,818,094	\$647,523	\$0	\$0	\$36,362	\$0	\$0 ©0
2027	\$U	\$U \$C 500 040	\$U ¢E 000 000	\$U	\$U \$0	\$1,818,094	\$647,523	\$U \$0	\$U	\$36,362	\$U	\$U ©0
2028	\$U ©0	\$5,526,213	\$5,000,000	\$U ©0	\$U \$0	\$1,818,094	\$518,018	\$U ©0	\$U \$0	\$36,362	\$U	\$0 ©0
2029	\$U	\$25,420,580 ¢0	\$6,000,000 ¢0	\$U	\$U	\$2,201,332 \$4,201,245	\$1,165,541 \$1,042,560	\$U	\$U \$0	\$45,231 \$96,007	\$U \$0	\$U \$0
2030	\$U	\$U \$0	\$U	\$U	\$U	\$4,301,345 \$4,201,245	\$1,942,569 \$1,042,569	\$U	\$U \$0	\$80,027 \$86,027	\$U \$0	\$U \$0
2031	\$U \$0	\$U \$0	\$U \$0	\$U	\$U \$0	\$4,301,343 \$4,201,245	\$1,942,509 \$1,424,550	\$0 \$0	\$U \$0	\$00,027 \$96,027	\$0 \$0	\$0 \$0
2032	00 \$0	00 \$0	00 02	90 \$0	00	\$4,301,345	\$1,424,550	90 \$0	\$0 \$0	\$86.027	\$0 \$0	φ0 \$0
2034	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$4 301 345	\$1,424,550	\$0 \$0	\$0 \$0	\$86,027	\$0 \$0	\$0 \$0
2035	\$0	\$0	\$0	\$0	\$0	\$3 458 813	\$1 424 550	\$0	\$0	\$69,176	\$0	\$0
2036	\$0	\$0	\$0	\$0	\$0	\$3,458,813	\$1,424,550	\$0	\$0	\$69,176	\$0	\$0 \$0
2037	\$0	\$0	\$0	\$0	\$0	\$3,458,813	\$1,424,550	\$0	\$0	\$69,176	\$0	\$0
2038	\$0	\$0	\$0	\$0	\$0	\$3,458,813	\$1,424,550	\$0	\$0	\$69,176	\$0	\$0
2039	\$0	\$0	\$0	\$0	\$0	\$3,458,813	\$777,027	\$0	\$0	\$69,176	\$0	\$0
2040	\$0	\$0	\$0	\$0	\$0	\$2,483,251	\$0	\$0	\$0	\$49,665	\$0	\$0
2041	\$0	\$0	\$0	\$0	\$0	\$2,483,251	\$0	\$0	\$0	\$49,665	\$0	\$0
2042	\$1	\$0	\$0	\$0	\$0	\$2,483,251	\$0	\$0	\$0	\$49,665	\$0	\$0
2043	\$0	\$0	\$0	\$0	\$0	\$2,483,251	\$0	\$0	\$0	\$49,665	\$0	\$0
2044	\$0	\$0	\$0	\$0	\$0	\$2,483,251	\$0	\$0	\$0	\$49,665	\$0	\$0
2045	\$0	\$0	\$3,500,000	\$0	\$0	\$2,483,251	\$0	\$0	\$0	\$49,665	\$0	\$0
2046	\$0	\$0	\$0	\$0	\$0	\$2,483,251	\$453,266	\$0	\$0	\$49,665	\$0	\$0
2047	\$0	\$0	\$6,500,000	\$0	\$0	\$2,483,251	\$453,266	\$0	\$0	\$49,665	\$0	\$0
2048	\$0	\$0	\$0	\$0	\$0	\$2,039,813	\$1,295,046	\$0	\$0	\$40,796	\$0	\$0
2049	\$0	\$0	\$0	\$0	\$0	\$0	\$1,295,046	\$0	\$0	\$0	\$0	\$0
2050	\$0	\$0	\$0	\$0	\$0	\$0	\$1,295,046	\$0	\$0	\$0	\$0	\$0
2051	\$0	\$0	\$0	\$0	\$0	\$0	\$1,295,046	\$0	\$0	\$0	\$0	\$0
2052	\$0	\$0	\$0	\$0	\$0	\$0	\$1,295,046	\$0	\$0	\$0	\$0	\$0 ©0
2053	\$0	\$0	<b>φ</b> 5,500,000	\$0	\$0	\$0	\$1,295,046 \$2,007,224	\$0	\$0	\$0	\$0	\$0 ©0
2055	\$U	\$U ©	\$U \$0	\$U	\$U \$0	\$U \$0	φ∠,007,321 \$2,007,224	\$U \$0	\$U \$0	\$U \$0	\$U	\$U
2005	20 20	20 20	\$U	20 20	ф0 ФО	\$U	φ2,007,321 \$1.554.055	\$U	\$U	ФО ФО	<b>2</b> 0	φ0 Φ0
2057	\$U	\$U ©	\$U \$0	\$U	\$U \$0	\$U \$0		\$U \$0	\$U \$0	\$U \$0	\$U	\$U
2057	\$U	\$U \$0	\$U	\$U	\$U \$0	\$U \$U	ψ1,004,000 \$712,275	\$0 \$0	¢0	\$U	\$0 \$0	\$U ¢0
2050	\$0 \$0	φ0 ¢0	ው ወ	\$0 \$0	\$0 \$0	\$0 \$0	\$712,275	\$0 \$0	φ0 \$0	ው ወ	\$0 \$0	φ0 ¢0
2060	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$2,151.078	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0
	÷0	÷••		÷0		<b>.</b>	,	÷.	÷0		÷0	φu
TOTAL	\$1	\$53,604,265	\$31,500,000	\$0	\$2	\$81,725,554	\$40,095,919	\$0	\$0	\$1,634,511	\$0	\$0

Source – the timing and amount of debt is from Table 8. For commercial debt, par amount is calculated based on requisite construction funds from Table 8, and assuming the cost of issuance and interest rate from Table 11. Interfund loans, compared to commercial debt, are scheduled in years when the debt coverage ratio for commercial debt is burdensome. Pro Forma debt is unscheduled debt, and in this case, is not required – i.e. all requisite debt is specifically scheduled as part of the impact fee financial plan.

The treatment capacity expansion plan is summarized in Table 13 below. There are three planned phases of capacity expansion – one at the Silver Creek Water Reclamation Facility and two at the East Canyon Water Reclamation Facility.<sup>10</sup> The expansion plan is discussed in more detail in the 2010 *Impact Fee Capital Facilities Plan*.

#### Table 13

SUMMARY OF CURRENT & PROJECTED TREATMENT CAPACITY East Canyon and Silver Creek Water Reclamation Facilities								
	SCWRF	ECW	Total					
		Phase I	Phase II					
System Capacity Current Capacity (mgd) New Capacity (mgd) Total Capacity (mgd) New Capacity "On-Line" Year	2.00 2017	1.00 2021	1.65 2029	7.00 4.65 11.65				
Capacity Expansion Cost New Development Share Existing Development Share Total	\$23,009,686 \$3,209,191 \$26,218,877	\$22,533,380 \$273,685 \$22,807,065	\$62,187,724 \$1,923,332 \$64,111,055	\$107,730,790 \$5,406,207 \$113,136,997				

Source - SBWRD.

<sup>&</sup>lt;sup>10</sup> Treatment capacity demand, project timing and cost, and the quantity of new capacity at each plant, are estimates, which may be altered, depending on the quantity and pattern of future new development.

# Calculation of Atypical or Contested Impact Fees

Case specific analysis provides an alternative approach to the calculation of impact fees, in the case atypical property types or contested fee amounts. The administrative process for such an analysis requires that the applicant document an alternative capacity demand analysis, and an alternative impact fee amount. This analysis is submitted to the impact fee administrator who will review, and accept or reject the analysis, based on established system planning criteria. It is in the interest of the applicant to present a professional and well documented analysis that will support careful peer review.

A case specific impact fee is calculated in the same way as other wastewater impact fees calculated in this analysis, according to the following formula:

Impact Fee per RE × Number of REs = Assessment Amount

- *Impact fee per RE* is from Table 1. This should be considered a "given" or fixed cost. It depends on a number of internal criteria that relate only to District financial planning, and to cost and interrelationship between the components of wastewater system. The cost of capacity depends for example, on design and engineering requirements, budget and funding constraints, capital project cost, sequencing and timing, unique costs attached to public construction projects, and other.
- Quantifying the number of REs is the substantive component of a case specific analysis. In certain unusual cases, the number of REs presented by a project may differ from the number quantified by means of the usual analytical approach. It is the purpose of case specific analysis to define this alternate capacity demand. The demand rate is 284 gpd per RE.















# Impact Fee Spend or Encumber Deadline

The *Impact Fee Act* requires that impact fees be spent within six years of collection<sup>11</sup> or longer, under extraordinary conditions. Analysis of pro forma impact fee revenue and capital spending shows that the impact fees are planned to be spent within that timeframe. This calculation is illustrated in Table 14 on the following page. The column labeled "Impact Fee Retention" shows number of years of impact fee retention.

If impact fee estimating assumptions are not realized (growth and revenue projections, cost of construction, capital plan revisions, cost of commercial debt, and other) then impact fee spendown will be different than here projected. This is particularly true given the nature of the subject facilities<sup>12</sup> and uncertainty of the economic climate.

<sup>&</sup>lt;sup>11</sup> Utah Code Ann. §11-36-302 (2)

<sup>&</sup>lt;sup>12</sup> Wastewater facilities are extraordinarily costly and complex to build, so they must be planned well in advance of demand. Incremental capacity expansion is large-scale and must be sized according to long-term estimates of demand and absorption. And, the facilities must be implemented in a timely manner so that they are brought online in time to meet the *first unit* of excess demand. Wastewater facilities can not be funded from accumulated cash and impact fees alone. They also rely on long term debt. This means that the funding plan must be carefully designed so that it meets construction, operation, maintenance and debt service requirements, and at the same time minimizes cost to the District and to impact fee payers. Impact fees are a cornerstone of the plan to meet demand from new development. In the absence of impact fees, growth can not occur, or cannot occur in a timely manner that meets the demands of real estate developers.
The *Impact Fee Act* allows for the retention of collected impact fees, for a time longer than six years, given "... an extraordinary and compelling reason why the fees should be held longer" and "... an absolute date by which the fees will be expended." If the pro forma impact fee spendown plan is not realized, the District will hold collected impact fees until sufficient funds are accumulated to complete planned projects, or sufficient projects are undertaken to expend the funds. Fees accumulated during the first six years of collection will be spent no later than June 30, 2020 (the exact date being dependent on actual revenue and actual capital spending).

#### Table 14

PRO	D FORMA I	MPACT FEE SI	PEND DEA	DLINE ANA	LYSIS										
										SPENDING					
					Total	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Constr	ruction Cost				\$157,036,194	\$680,709	\$982,745	\$386,785	\$981,182	\$10,810,505	\$9,867,373	\$10,507,466	\$1,396,483	\$2,686,526	\$4,514,131
Debt I	? & I				\$83,023,718	\$0	\$0	\$0	\$0	\$0	\$842,531	\$842,531	\$972,036	\$972,036	\$972,036
Cost o	of Issuance				\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total					\$240,059,912	\$680,709	\$982,745	\$386,785	\$981,182	\$10,810,505	\$10,709,904	\$11,349,998	\$2,368,519	\$3,658,562	\$5,486,167
	Impact Fee	CASH													
	Retention	Net Fee Revenue (plus	E 11.		TOTAL										
	(years)	beg. bal)	Earned Interest	Bond Proceeds	IOTAL										
2011	5	\$14,184,187	\$266,552	\$0	\$14,450,739	113,033	934,769	1,221,999	4,177,660	7,844,289					
2012	4	\$1,174,425	\$277,317	\$0	\$1,451,742		0	0	0	1,273,403					
2013	3	\$1,417,474	\$295,087	\$0	\$1,712,561			0	0	1,467,174					
2014	2	\$1,716,220	\$318,646	\$0	\$2,034,867				0	1,693,429					
2015	3	\$2,113,555	\$292,900	\$9,500,000	\$11,906,455					5,158,756	11,231,274	1,059,863			
2016	3	\$2,607,824	\$290,119	\$0	\$2,897,942						0	515,987	1,833,976		
2017	3	\$3,212,078	\$138,521	\$1,000,000	\$4,350,599							0	1,873,387	903,274	
2018	3	\$3,932,514	\$90,552	\$0	\$4,023,066								0	1,938,325	1,446,584
2019	2	\$4,759,868	\$119,016	\$0	\$4,878,884									0	4,082,722
2020	2	\$5,675,818	\$189,306	\$11,000,000	\$16,865,124										17,254,507

Source - Table 7 and Table 8







### **Impact Fee Reductions**

The *Impact Fees Act* allows for the reduction of an impact fee to account for the contribution of capital facilities included in the CFP. The District will consider on a case by case basis, requests for reduction in a fee based on a claim by a development applicant that the applicant has constructed or will construct a capital facility in the CFP which would otherwise be funded by impact fees.

With respect to impact fee reduction, the following has been taken into consideration in calculation of the impact fee:

The District is limited to financing system improvements • using three basic revenue sources. Property taxes may be used to repay general obligation bonds for system improvements however general obligation bonds require voter approval which is not generally successful in the financing of new growth. The District has concluded that general obligation bonds are not a reasonable or reliable source of funds to fund system improvements for new growth. The District may also use service charges to repay revenue bonds which may be used for system improvements. The District is committed to limiting the use of revenue bonding based on service charges to the funding of improvements designed to maintain service for system users that pay service charges. Impact fees are therefore the selected source of revenue to fund system improvements in the CFP.

There are three components of the financing plan for capital facilities for new development that will reduce the impact fee.

- Impact fee account beginning balance (about \$13 million) collected as reimbursement impact fees for the sale of existing capacity, built in the past to meet demand from future new development).
- Interest earned on the impact fee account.
- The decision by the District to forgo assessment of overhead expense, *Impact Fees Act*<sup>13</sup>, will reduce amount of the impact fee.

<sup>&</sup>lt;sup>13</sup> Utah Code Ann. §11-36-202 (1) (d)



### **PROPORTIONATE SHARE ANALYSIS**

Impact fees in this analysis are roughly proportionate and reasonably related to the impacts caused by new development. The *Utah Impact Fee Act*<sup>14</sup> defines certain nexus and proportionality criteria that, as appropriate, should be considered in calculating an impact fee. These factors, as follows, have been taken into account in calculation of the wastewater impact fee.

- 1. The cost of existing public facilities.
- 2. The manner of financing existing public facilities, such as user charges, special assessments, bonded indebtedness, general taxes, or federal grants.
- 3. The relative extent to which the newly developed properties and other properties have already contributed to the cost of existing facilities.
- 4. The relative extent to which the newly developed properties and other properties have already contributed to the cost of existing public facilities, by such means as user charges, special assessments, or payment from the proceeds of general taxes.
- 5. The relative extent to which the newly developed properties and other properties will contribute to the cost of existing public facilities in the future.
- 6. The extent to which the newly developed properties are entitled to a credit because the local political subdivision or private entity, as the case may be, requires its developers or owners, by contractual arrangement or otherwise, to provide common facilities, inside or outside the proposed development, that have been provided by the local political subdivision or private entity, respectively, and financed through general taxation or other means, apart from user charges, in other parts of the service area.
- 7. Extraordinary costs, if any, in servicing the newly developed properties.
- 8. The time-price differential inherent in fair comparisons of amounts paid at different times.

<sup>&</sup>lt;sup>14</sup> Utah Code Ann. §11-36-201 (5) (c) - "In analyzing whether or not the proportionate share of the costs of public facilities are reasonably related to the new development activity, the local political subdivision or private entity, as the case may be, shall identify, if applicable…"

### Cost of existing public facilities

Not applicable. Existing facilities are not included in calculation of the impact fee.

#### Manner of financing existing facilities

Research by staff shows that existing facilities were funded by existing users – by means of impact fees – or were obtained by contribution. It has been District policy, since implementation of the *Impact Fees Act*, to use impact fees to fund capacity expansion for new development. User fees are used to fund operations and maintenance expense, and to fund system renewal.<sup>15</sup> In the past, the District also has received a small amount of property tax revenue (no longer the case). This was used primarily to fund operations and maintenance expense, but may have been used also to fund capital facilities.

This analysis includes a procedure for case-specific impact fee calculation. Any individual property owner who claims to have contributed to existing improvements in ways not acknowledged in this analysis may apply for a fee reduction at the time of impact fee payment, by means of that procedure.

## <u>Relative extent to which newly developed properties and existing properties have already contributed to the cost of existing public facilities</u>

Existing capacity was funded by impact fees. Newly developed properties have not contributed to those facilities.

This analysis includes a procedure for case-specific impact fee calculation. Any individual property owner who claims to have contributed to existing improvements in ways not acknowledged in this analysis may apply for a fee reduction at the time of impact fee payment, by means of that procedure.

# <u>Relative extent to which newly developed properties and existing properties will contribute to the cost of existing public facilities.</u>

New development will not contribute to the cost of existing facilities. Debt service for existing facilities will be paid by impact fees attributable to existing users.

This analysis includes a procedure for case-specific impact fee calculation. Any individual property owner who claims to have contributed to existing improvements in ways not acknowledged in this analysis may apply for a fee reduction at the time of impact fee payment, by means of that procedure.

#### Credit for system improvements to be provided by new development

System improvements listed in the CFP will be funded by impact fees. Those improvements will not be funded by private entities.

<sup>&</sup>lt;sup>15</sup> System renewal is a structured and ongoing program of capital facility maintenance and replacement that is designed to maintain the function and level of service of the District's capital facilities

#### Extraordinary costs required to service new development.

No extraordinary costs are anticipated in providing service to new development.

#### <u>Time-price differential.</u>

Impact fees calculated in this analysis are expressed in constant value terms. This means that the "real" amount of the fee remains constant over time, and the nominal amount increases, at the estimated inflation rate. In the absence of this calculation – if the fee were to be assessed at a constant nominal rate over time – the fee would be effectively discounted for future year payers. The *Impact Fee Capital Facilities* plan is similarly calculated, meaning that future projects are priced at estimated build-year cost.

### **GLOSSARY**

<u>CIP</u> - *Capital Improvement Plan.* A comprehensive list, prepared by staff, of planned future capital projects. The CIP includes capacity expansion projects, system renewal projects and other capital improvements that provide treatment upgrade. The CIP is a long-term planning document which will be implemented by means of short-term plans approved by the Board, which will specify priority, timing, cost, and other parameters needed for project construction.

<u>CFP</u>- *Capital Facilities Plan.* A subset of the CIP which identifies projects and parts of projects attributable to capacity expansion for the benefit of future development. The allocation of CIP cost to the CFP is made by staff.

<u>LOS</u> - *Level of Service Standard.* A quantitative measure of capital facilities service provision. The LOS is applied at the same rate to existing and new development. It is the basis for calculating the unit cost of capital facilities and hence, is the basis for calculating the impact fee.

Impact Fees Act - the Utah Impact Fees Act - U.C.A. 11-36 - which regulates calculation, assessment, and use of impact fee revenue, and administration of the impact fee system.

<u>RE</u> - residential equivalent demand unit. The unit of measure of capital facility capacity demand. Defined by SBWRD policy to be equal to the capacity demand presented by an average three bedroom home. Demand apportionment methodology, also defined by policy, is the means by which different types and sizes of new development are assigned a quantity of REs that equitably represents relative capacity demand (the means by which capacity demand presented by one unit of new development is different type or size).

<u>Proportionate Share</u> – a proportionate share impact fee is one set at an amount that is proportionate to the impacts presented by new development. Proportionality is conceptualized by means of the *dual rational nexus* test that illustrates the linkage between the impacts presented by a development activity, and the means and cost by which those impacts will be mitigated. Impact fees are quantified based on benefit conferred – meaning that the type of facility funded by the impact fee, and the amount of the fee correspond to the impacts of the development activity. By definition, a proportionate fee only includes the cost of capacity needed to meet demand from new development. It excludes all other costs, such as deficiency correction, service provision upgrade for the benefit of existing development, and other.

<u>Maximum Impact Fee</u> - the maximum amount that could be charged if the CFP includes a quantity of added capital facility capacity sufficient to maintain the LOS. Impact fee assessment is the means by which the current LOS is preserved and demand from new development is accommodated, at the same level. The maximum impact fee could prevail if the CFP provides the same LOS to new development as provided existing development. The SBWRD Board may elect to assess an impact fee and less than the maximum potential amount.

### **APPENDIX A – CAPITAL FACILITIES PLAN**

# IMPACT FEE CAPITAL FACILITIES PLAN

<sup>prepared for</sup> SNYDERVILLE BASIN WATER RECLAMATION DISTRICT



prepared by ROSENTHAL & ASSOCIATES INC.

in association with Snyderville Basin Water Reclamation District

November 15, 2010

### Contents

Executive Summary	. 1
Impact Fee Capital Facilities Plan	.3
Overview of the Capital Planning Process as Related to Impact Fee Calculation	.3
2010 Capital Plan	.3
Capital Plan Implementation	.3
Notes Concerning the CIP Tables	4
SBWRD 2009 Capital Improvement Plan	6
Estimating Assumptions, Decisions, Criteria and Conclusions	29

### List of Tables

Table 1 to Table 20: SBWRD Capital Improvement Plan 6	to 25
Table 21: Recurring Capital Projects (1 of 2)	26
Table 22: Recurring Capital Projects (2 of 2)	27
Table 23: Capital Improvement Plan Summary	28
Table 24: Projected New Development and Plant Capacity Demand	30
Table 25: Capital Facilities Financial Assumptions	33
Table 26: Projected Treatment Capacity	33

### List of Figures

Figure 1: Service Area Map	2
Figure 2: Annual New REs – Actual and Projected	
Figure 3: Treatment Capacity Demand – Actual and Projected	







## **EXECUTIVE SUMMARY**

This *Impact Fee Capital Facilities Plan* ("CFP") is the first of two analyses required in order to document calculation of the Snyderville Basin Water Reclamation District wastewater impact fee.

The purpose of this report is to identify capital projects and cost, needed to meet demand from new development during the current planning period (2011 to 2060).

The Utah *Impact Fees Act*<sup>16</sup> specifies the requirements for an impact fee CFP. According to the *Act*, a CFP is required to identify:

"(i) the demands placed upon existing public facilities by new development...", and

(ii) the proposed means by which the local political subdivision will meet those demands".

The demands presented by new development can be identified by means of the cost and quantity of system improvements needed to meet demand from new development. Project cost is from the capital plan. The quantity of improvements is the quantity of added capacity provided by the capital plan.<sup>17</sup> (The quantity of improvements is based on the District's service provision standard of 284 GPD per residential equivalent demand unit, which is applied equally to both new and existing development.)

The means by which demand from new development will be met is embodied in the list of projects that make up the impact fee CFP. The CFP is specifically limited to capacity expansion projects that are uniquely attributable to demand from new development. The CFP excludes the cost of deficiency correction, service provision upgrade for the benefit of existing development, maintenance expense, the cost of projects that are ineligible for impact fee assessment (as defined by the *Impact Fees Act*) and any other cost that not solely attributable to demand from new development.

Total capital cost, and the allocation of a part of that cost to new development – the definition of CFP cost – is determined by District staff and consulting engineers, based on detailed analysis of the function, timing and need for each project, in context of projected system capacity demand (all of which is discussed later in this report).

<sup>&</sup>lt;sup>16</sup> Utah Code Ann. §11-36-201 (2) (c) in

<sup>&</sup>lt;sup>17</sup> The District has no service provision deficiency, so all new capacity is provided for the benefit of new development.

This analysis is based on capital projects that will be built within the District, and that are needed to meet demand within the District. The boundaries of the District are generally illustrated as follows:



Figure 1



### IMPACT FEE CAPITAL FACILITIES PLAN

# **Overview of the Capital Planning Process as Related to Impact Fee Calculation**

The *Impact Fees Act* requires that an impact fee be calculated based on the cost of a specific set of capital facilities needed to meet demand from new development. The cost of those projects is a part of, and is defined by, the overall and long range SBWRD Capital Improvement Plan – the "CIP".

The CIP is a comprehensive planning document prepared by staff that shows all capital projects for the current planning period (2011 through estimated "buildout" in 2060). The CIP is defined so as to meet three goals – preserve the current capital facilities level-of-service-standard, implement the District's system renewal program, and implement projects that provide capacity for new development.

Cost to meet demand from new development is quantified by means of the *Impact Fee Capital Facilities Plan* (the "CFP"). The CFP is a subset of the overall capital plan and shows projects and parts of projects attributable specifically to capacity expansion – which projects, by definition, are entirely attributable to new development because the District has adequate capacity to meet current demand, and has no current capital facilities deficiency.

### 2010 Capital Plan

The 2010 CIP is revised in keeping with a climate of slowed economic growth, specifically with respect to project timing and cost. This capital plan is based on an extended capacity absorption timeline (2060, which is estimated buildout, compared to a 2035 planning horizon as used in the prior capital plan). It includes added cost to meet more stringent treatment limitations, and is based on a revised growth profile with a reduced near-term rate.

The capital plan includes three phases of treatment capacity expansion; collection system and trunk line improvements; cost for biosolids handling; cost for added nutrient removal; engineering, planning and design for the plant expansion; capital facilities planning; and cost for the system renewal program. (The system renewal program is an ongoing, structured program of capital facilities maintenance designed to preserve the function and level of service of the District's capital facilities.)

### **Capital Plan Implementation**

The CIP is a planning-level document that shows long-range planning objectives. The CIP is implemented by means of the SBWRD Board's approval of near-term implementation goals. The Board selects specific projects for construction, and prioritizes them, based on staff recommendations, and its ongoing assessment of operating priorities. A given project in the CIP may not be implemented in the order or in the amount shown in the CIP. In fact, as conditions change over time, and as treatment technology and treatment limitations change, some CIP projects may be revised by the Board, or may not implemented at all.

The CIP is defined in terms of a single service area, which means that capital facilities are planned and built with the intention of providing service district-wide. This follows from a basic operating strategy, which is to implement a unified network of capital facilities located across the District in order to provide primary service and capacity to meet other contingencies, district-wide. SBWRD facilities are designed to function as an integrated unit, and in this way leverage total system assets to support day-to-day performance and to ensure adequate redundancy.

### **Notes Concerning the CIP Tables**

Tables 1 through 20 show the SBWRD CIP and CFP.

- Tables 1 to 20 detail capital cost by project. Table 21 and Table 22 show the cost of annually recurring projects, which includes capital facilities planning and system rehabilitation. (System rehabilitation is a structured program of capital facility maintenance, that preserves the value and function of the facilities over time, eliminates obsolescence, and eliminates the reporting requirement for depreciation so that the facilities are maintained at a constant service level over time). Projected annual capital spending is shown in Table 23.
- The CIP is a long range planning document, and as such includes completed as well as planned future capital projects. Past projects are included because they provide a component of future system capacity. Note however that CFP cost, and the amount of the impact fee, is based only on the cost of future capital projects past projects are excluded (the cost of future projects is shown Table 23).
- In Tables 1 to 20, each project is shown in terms of three cost components. Total cost is shown in the column "CIP Cost". Cost attributable to demand from new development is shown as "CFP Cost". The column labeled "Non-CFP Cost" shows that part of total cost attributable to the benefit of all system users projects like system renewal or treatment upgrade.
- Capital cost in Tables 1 to 20 is expressed in terms of future value the estimated cost at the time the project is planned to be built. This is in keeping with a requirement of the *Impact Fees Act*, that impact fees be calculated in such a way as to recognize the "... the time-price differential inherent in fair comparisons of amounts paid at different times"<sup>18</sup>. Future value is calculated for each project based on nominal cost, timing and the construction cost inflation rate (defined by the District's consulting engineers). Each project in the CIP shows both nominal and real cost.
- The cost of treatment capacity expansion is summarized in Table 26.
- The cost and timing of each capital project is defined in part based on the projected rate and quantity of new development. That underlying demand projection is illustrated in Figure 2 and Figure 3, and in Table 24.

<sup>&</sup>lt;sup>18</sup> Utah Code Ann. §11-36-201 (5) (c) (vii).

- In this report, the CIP does not include financing expense, which will be an additional cost required for most capital projects. Financing expense is calculated as part of the *Impact Fee Written Analysis*.
- The District is limited to financing system improvements using three basic revenue sources. Property taxes may be used to repay general obligation bonds for system improvements however general obligation bonds require voter approval which is not generally successful in the financing of new growth. The District has concluded that general obligation bonds are not a reasonable or reliable source of funds to fund system improvements for new growth. The District may also use service charges to repay revenue bonds which may be used for system improvements. The District is committed to limiting the use of revenue bonding based on service charges to the funding of improvements designed to maintain existing service provision for system users that pay service charges. Impact fees are therefore the selected source of revenue to fund system improvements in the CFP.

### SBWRD 2009 Capital Improvement Plan

Table 1

#### SBWRD CAPITAL IMPROVEMENTS PLAN

		1	COST	Capital Facility		CIP (nominal)		1 1		CFP (nominal)	
Project	Description	BUILD Year	ESTIMATE Year	Capacity Expansion	New Const. Projects	Other Projects	Total	CFP %	New Const. Projects	Other Projects	Total
TOTAL			•	•	•		\$163,486,896			•	\$96,582,07
TREATMENT DEPARTMENT					\$94,021,198	\$12,922,900	\$106,944,098		\$68,530,278	\$2,773,300	\$71,303,57
COLLECTION DEPARTMENT					\$20,078,598	\$29,211,100	\$49,289,698		\$17,666,098	\$2,504,395	\$20,170,4
ENGINEERING DEPARTMENT					\$0	\$6,861,000	\$6,861,000		\$0	\$5,108,000	\$5,108,0
ADMINISTRATION DEPARTMENT					\$0	\$392,100	\$392,100		\$0	\$0	
Treatment Department											
Biosolids Handling	Compost- Expansion and Upgrade	2003	2000		\$80,000		\$80,000	43%	\$34,400	\$0	\$34,4
Biosolids Handling	County Solid Waste Master Plan	2008	2008			\$26,000	\$26,000	85%	\$0	\$22,100	\$22,1
Biosolids Handling	Disposal Options	2005	2005			\$20,000	\$20,000	84%	\$0	\$16,800	\$16,8
Biosolids Handling	Disposal Options	2015	2009			\$2,000,000	\$2,000,000	85%	\$0	\$1,700,000	\$1,700,0
3iosolids Handling	Disposal Options - BEC Land or other	2006	2006			\$20,000	\$20,000	85%	\$0	\$17,000	\$17,0
3iosolids Handling	Disposal Options - BEC Road or other	2007	2007		\$350,000	)	\$350,000	85%	\$297,500	\$0	\$297,5
Biosolids Handling	EC Centrifuge #1 Bowl Replacement	2009	2009			\$21,000	\$21,000		\$0	\$0	
Biosolids Handling	EC Centrifuge #1 Bowl Replacement	2019	2010			\$40,000	\$40,000		\$0	\$0	
Biosolids Handling	EC Centrifuge #1 Bowl Replacement	2029	2008			\$20,000	\$20,000		\$0	\$0	
Biosolids Handling	EC Centrifuge #1 Bowl Replacement	2038	2008			\$20,000	\$20,000		\$0	\$0	
Biosolids Handling	EC Centrifuge #2 Bowl Replacement	2010	2010			\$40,000	\$40,000		\$0	\$0	
Biosolids Handling	EC Centrifuge #2 Bowl Replacement	2020	2010			\$40,000	\$40,000		\$0	\$0	
Biosolids Handling	EC Centrifuge #2 Bowl Replacement	2030	2008			\$20,000	\$20,000		\$0	\$0	
Biosolids Handling	EC Centrifuge #2 Bowl Replacement	2040	2008			\$20,000	\$20,000		\$0	\$0	
Biosolids Handling	EC Centrifuge #3 Bowl Replacement	2012	2010			\$40,000	\$40,000		\$0	\$0	
Biosolids Handling	EC Centrifuge #3 Bowl Replacement	2022	2010			\$40,000	\$40,000		\$0	\$0	
Biosolids Handling	EC Centrifuge #3 Bowl Replacement	2032	2008			\$20,000	\$20,000		\$0	\$0	
Biosolids Handling	Replace Dump Truck V- 18	2026	2008			\$180,000	\$180,000		\$0	\$0	
Biosolids Handling	Replace Dump Truck V- 19	2027	2008			\$180,000	\$180,000		\$0	\$0	
Biosolids Handling	Replace Dump Truck V- 19	2035	2008			\$180,000	\$180,000		\$0	\$0	
Biosolids Handling	Replace Dump Truck V- 22	2013	2008			\$180,000	\$180,000		\$0	\$0	
Biosolids Handling	Replace Dump Truck V- 22	2028	2008			\$180,000	\$180,000		\$0	\$0	
Biosolids Handling	Replace Dump Truck V- 22	2036	2008			\$180,000	\$180,000		\$0	\$0	
Biosolids Handling	Replace Dump Truck V- 22	2036	2008			\$180,000	\$180,000		\$0	\$0	
Biosolids Handling	Replace Dump Truck V-18	2010	2008			\$125,000	\$125,000		\$0	\$0	
Biosolids Handling	Replace Dump Truck V-18	2018	2008			\$180,000	\$180,000		\$0	\$0	
Biosolids Handling	Replace Dump Truck V-18	2034	2008			\$180,000	\$180,000		\$0	\$0	
Biosolids Handling	Replace Dump Truck V-18	2040	2008			\$180,000	\$180,000		\$0	\$0	
Biosolids Handling	Replace Dump Truck V-19	2012	2008			\$180,000	\$180,000		\$0	\$0	
Biosolids Handling	Replace Dump Truck V-19	2019	2008			\$180,000	\$180,000		\$0	\$0	
Biosolids Handling	Replace Dump Truck V-22	2020	2008			\$180,000	\$180,000		\$0	\$0	
Biosolids Handling	SC Solids Bldg HVAC	2034	2007			\$100,000	\$100,000		\$0	\$0	
Biosolids Handling	Solids Alternative Study	2002	2000			\$100,000	\$100,000	100%	\$0	\$100,000	\$100,0
Biosolids Handling	Solids Grinder	2005	2005			\$10,500	\$10,500		\$0	\$0	
ECWRF Related	319 Planning Study	2004	2004			\$40,000	\$40,000	100%	\$0	\$40,000	\$40,0
ECWRF Related	Aerators (2) #5-6 Replacement	2038	2007			\$120,000	\$120,000		\$0	\$0	
ECWRF Related	Aerators (4) #1-4 Replacement	2028	2007			\$240,000	\$240,000		\$0	\$0	
ECWRF Related	Chemical Feed Pumps	2025	2007			\$36,000	\$36,000		\$0	\$0	
CWRF Related	Chemical Tanks (4) #1-4	2033	2007			\$40,000	\$40,000		\$0	\$0	
ECWRF Related	Clarifier #1 Paint	2011	2008			\$15.000	\$15.000		\$0	\$0	

Source – build-year, construction cost estimate year, project nominal cost, and CFP %, are from SBWRD staff. Future value for each project is calculated based on build-year and the cost inflation rates shown in Table 25.

### SBWRD CAPITAL IMPROVEMENTS PLAN Capital Improvement Plan (page 1 of 10)

			0007		Non-CFP	(nominal)			CIP (constant \$s)		CEP (constant \$s)			
Project I	Description	BUILD Year	ESTIMATE Year	New Const. Projects	Other Projects	Total	Expensed Renewal Cost	New Const. Projects	Other Projects	Total	New Const. Projects	Other Projects	Total	
TOTAL						\$66,904,825	\$17,089,905			\$279,256,706			\$181,198,787	
TREATMENT DEPARTMENT				\$25,490,920	\$10,149,600	\$35,640,520	\$7,200,000	\$184,693,232	\$18,031,793	\$202,725,024	\$146,991,373	\$3,004,747	\$149,996,121	
COLLECTION DEPARTMENT				\$2,412,500	\$26,706,705	\$29,119,205	\$9,889,905	\$23,868,946	\$40,910,772	\$64,779,718	\$19,597,867	\$2,839,385	\$22,437,252	
ENGINEERING DEPARTMENT				\$0	\$1,753,000	\$1,753,000	\$0	\$0	\$11,270,618	\$11,270,618	\$0	\$8,765,415	\$8,765,415	
ADMINISTRATION DEPARTMENT				\$0	\$392,100	\$392,100	\$0	\$0	\$481,346	\$481,346	\$0	\$0	\$0	
Treatment Department														
Biosolids Handling	Compost- Expansion and Upgrade	2003	2000	\$45,600	\$0	\$45,600	\$0	\$93,939	\$0	\$93,939	\$40,394	\$0	\$40,394	
Biosolids Handling	County Solid Waste Master Plan	2008	2008	\$0	\$3,900	\$3,900	\$0	\$0	\$26,000	\$26,000	\$0	\$22,100	\$22,100	
Biosolids Handling	Disposal Options	2005	2005	\$0	\$3,200	\$3,200	\$0	\$0	\$20,000	\$20,000	\$0	\$16,800	\$16,800	
Biosolids Handling	Disposal Options	2015	2009	\$0	\$300.000	\$300.000	\$0	\$0	\$2,260,828	\$2,260,828	\$0	\$1,921,704	\$1,921,704	
Biosolids Handling	Disposal Options - BEC Land or other	2006	2006	\$0	\$3,000	\$3,000	\$0	\$0	\$20,000	\$20,000	\$0	\$17,000	\$17,000	
Biosolids Handling	Disposal Options - BEC Road or other	2007	2007	\$52,500	\$0	\$52,500	\$0	\$350.000	\$0	\$350.000	\$297.500	\$0	\$297,500	
Biosolids Handling	EC Centrifuge #1 Bowl Replacement	2009	2009	\$0	\$21.000	\$21,000	\$21 000	\$0	\$21,000	\$21,000	\$0	\$0	\$0	
Biosolids Handling	EC Centrifuge #1 Bowl Replacement	2019	2010	\$0	\$40.000	\$40.000	\$40,000	\$0	\$48.075	\$48.075	\$0	\$0	\$0	
Biosolids Handling	EC Centrifuge #1 Bowl Replacement	2029	2008	\$0	\$20,000	\$20.000	\$20,000	\$0	\$30,716	\$30,716	\$0	\$0	\$0	
Biosolids Handling	EC Centrifuge #1 Bowl Replacement	2038	2008	\$0	\$20,000	\$20,000	\$20,000	\$0	\$36.916	\$36.916	\$0	\$0	\$0	
Biosolids Handling	EC Centrifuge #2 Bowl Replacement	2010	2010	\$0	\$40.000	\$40.000	\$40,000	\$0	\$40.000	\$40.000	\$0	\$0	\$0	
Biosolide Handling	EC Centrifuge #2 Bowl Replacement	2020	2010	\$0	\$40,000	\$40.000	\$40,000	\$0	\$49.067	\$49.067	\$0	\$0	\$0	
Biosolids Handling	EC Centrifuge #2 Bowl Replacement	2020	2008	\$0	\$20,000	\$20,000	\$20,000	\$0	\$31,350	\$31,350	\$0	\$0	\$0	
Biosolids Handling	EC Centrifuge #2 Bowl Replacement	2030	2008	\$0	\$20,000	\$20,000	\$20,000	\$0	\$38,456	\$38,456	\$0	\$0	\$0 \$0	
Biosolids Handling	EC Centrifuge #2 Bowl Replacement	2040	2000	\$0	\$40,000	\$40,000	\$40,000	\$0	\$41,668	\$41,668	\$0	\$0	\$0 \$0	
Biosolids Handling	EC Centrifuge #3 Bowl Replacement	2012	2010	\$0	\$40,000	\$40,000	\$40,000	\$0	\$51 113	\$51 113	\$0	\$0	\$0 \$0	
Biosolids Handling	EC Centrifuge #3 Bowl Replacement	2022	2008	\$0	\$20,000	\$20,000	\$20,000	\$0	\$32,657	\$32,657	\$0	\$0	\$0 \$0	
Biosolide Handling	Replace Dump Truck V- 18	2026	2008	\$0	\$180,000	\$180,000	\$0	\$0	\$260.007	\$260,007	\$0	\$0	\$0	
Biosolids Handling	Replace Dump Truck V- 19	2020	2000	\$0	\$180,000	\$180,000	\$0	\$0	\$265,374	\$265,374	\$0	\$0	\$0 \$0	
Biosolids Handling	Replace Dump Truck V- 19	2027	2008	\$0	\$180,000	\$180,000	\$0	\$0	\$312 494	\$312 494	\$0	\$0	\$0 \$0	
Biosolids Handling	Roplace Dump Truck V- 13	2000	2000	\$0	\$180,000	\$180,000	\$0	\$0	\$199,360	\$199,360	\$0	\$0	\$0 \$0	
Biosolids Handling	Replace Dump Truck V-22	2013	2008	\$0	\$180,000	\$180,000	\$0 \$0	\$0	\$270,851	\$270,851	\$0	\$0	\$0 \$0	
Diosolids Handling	Replace Dump Truck V-22	2020	2008	\$0 \$0	\$180,000	\$180,000	\$0 \$0	\$0 \$0	\$318.944	\$318 944	\$0 \$0	\$0 \$0	\$0 \$0	
Diosolids Handling	Replace Dump Truck V-22	2030	2008	\$0 \$0	\$180,000	\$180,000	\$0 \$0	\$0 \$0	\$318.944	\$318.944	\$0 \$0	\$0 \$0	φ0 \$0	
Diosolida Handling	Replace Dump Truck V 19	2030	2008	\$0 \$0	\$125,000	\$125,000	00 \$0	\$0 \$0	\$120,212	\$120,212	\$0 \$0	\$0 \$0	00 \$0	
Biosolids Handling	Replace Dump Truck V-18	2010	2008	30 \$0	\$120,000	\$120,000	ψ0 \$0	\$0 \$0	\$220,801	\$220,801	\$0 \$0	\$0 \$0	\$0 \$0	
Diosolida Handling	Replace Dump Truck V 19	2010	2008	\$0 \$0	\$190,000	\$190,000	\$0 \$0	\$0 \$0	\$206.174	\$206.174	\$0 \$0	\$0 \$0	\$0 \$0	
Biosolida Handling	Replace Dump Truck V-18	2034	2008	90 \$0	\$180,000	\$180,000	90 \$0	\$0 \$0	\$300,174	\$300,174	90 ©0	\$0 \$0	\$0 \$0	
Diosolida Handling	Replace Dump Truck V-18	2040	2008	\$0 \$0	\$180,000	\$180,000	90 \$0	\$0 \$0	\$340,103	\$105 229	90 80	90 \$0	\$0 \$0	
Biosolida Handling	Replace Dump Truck V-19	2012	2008	90 \$0	\$180,000	\$180,000	90 \$0	\$0 \$0	\$133,320	\$225,320	90 ©0	\$0 \$0	\$0 \$0	
Diosolius Handling	Replace Durip Truck V-19	2019	2008	90 60	\$180,000	\$100,000	90 ©0	90 ¢0	\$220,009	\$220,000	90 80	90 ¢0	φ0 ¢0	
Biosolids Handling	Replace Dump Truck V-22	2020	2008	30 80	\$160,000	\$160,000	φU \$100.000	\$0	\$230,010	\$230,010	\$U \$0	30 60	\$0 \$0	
Biosolids Handling	SC Solids Bidg HVAC	2034	2007	\$U \$0	\$100,000	\$100,000	\$100,000 ¢o	\$U	\$173,608	\$173,608	\$U ©0	\$U \$104.171	\$U \$104.171	
Biosolids Handling	Solids Alternative Study	2002	2000	30	30 640 500	φU \$10 E00	φU ©0	\$U \$0	\$104,171	\$104,171	30	\$104,171	\$104,171	
Biosolids Handling	Solids Grinder	2005	2005	\$U \$0	\$10,500	\$10,500	\$U \$0	\$U	\$10,500	\$10,500	\$U ©0	\$U \$40.000	\$U \$40.000	
EGWRF RELATED	319 Planning Study	2004	2004	\$0	\$0	\$0	\$0	\$0	\$40,000	\$40,000	\$0	\$40,000	\$40,000 \$0	
ECWRF Related	Aerators (2) #5-6 Replacement	2038	2007	\$0	\$120,000	\$120,000	\$120,000	\$0	\$226,069	\$226,069	\$0	\$0	\$0	
ECWRF Related	Aerators (4) #1-4 Replacement	2028	2007	\$0	\$240,000	\$240,000	\$∠40,000	\$0	\$368,589	\$368,589	\$0	\$0	\$0	
ECWRF Related	Chemical Feed Pumps	2025	2007	\$0	\$36,000	\$36,000	\$36,000	\$0	\$52,001	\$52,001	\$0	\$0	\$0	
ECWRF Related	Cnemical Lanks (4) #1-4	2033	2007	\$0	\$40,000	\$40,000	\$40,000	\$0	\$68,039	\$68,039	\$0	\$0	\$0	
ECWRF Related	Clarifier #1 Paint	2011	2008	\$0	\$15,000	\$15,000	\$15,000	\$0	\$15,948	\$15,948	\$0	\$0	\$0	

Source - see Table 1.

#### SBWRD CAPITAL IMPROVEMENTS PLAN

#### at Dian (name 2 of 10

Capital Improvement 1 ian (pa	age 2 01 10)		•	•							
			COST	Capital Facility		CIP (nominal)				CFP (nominal)	
	Project Description	Year	ESTIMATE Year	Capacity Expansion	New Const. Projects	Other Projects	Total	CFP %	New Const. Projects	Other Projects	Total
ECWRF Related	Clarifier #2 & #3 Paint	2013	2008			\$30,000	\$30,000		\$0	\$0	\$0
ECWRF Related	Compactor Mechanical	2028	2005			\$60,000	\$60,000		\$0	\$0	\$0
ECWRF Related	Control Building Roof Liner	2005	2005			\$16,000	\$16,000		\$0	\$0	\$0
ECWRF Related	Control Building Roof Liner	2024	2005			\$16,000	\$16,000		\$0	\$0	\$0
ECWRF Related	Conveyor Mechanical in HW	2031	2005			\$13,000	\$13,000		\$0	\$0	\$0
ECWRF Related	EC SHT Blower Modifications	2006	2006			\$26,000	\$26,000		\$0	\$0	\$0
ECWRF Related	GAC for Odor Control Towers	2011	2009			\$55,000	\$55,000		\$0	\$0	\$0
ECWRF Related	GAC for Odor Control Towers	2015	2009			\$55,000	\$55,000		\$0	\$0	\$0
ECWRF Related	GAC for Odor Control Towers	2023	2007			\$60,000	\$60,000		\$0	\$0	\$0
ECWRF Related	GAC for Odor Control Towers	2027	2007			\$60,000	\$60,000		\$0	\$0	\$0
ECWRF Related	GAC for Odor Control Towers	2031	2007			\$60,000	\$60,000		\$0	\$0	\$0
ECWRF Related	GAC for Odor Control Towers	2035	2007			\$60,000	\$60,000		\$0	\$0	\$0
ECWRF Related	GAC for Odor Control Towers	2039	2007			\$60,000	\$60,000		\$0	\$0	\$0
ECWRF Related	GAC for Odor Control Towers	2039	2007			\$60,000	\$60,000		\$0	\$0	\$0
ECWRF Related	Generators (1) #3	2035	2007			\$250,000	\$250,000		\$0	\$0	\$0
ECWRF Related	Generators (2) #1-2	2027	2007			\$250,000	\$250,000		\$0	\$0	\$0
ECWRF Related	Grinder Mechanical	2016	2005			\$26,000	\$26,000		\$0	\$0	\$0
ECWRF Related	Grinder Mechanical	2036	2005			\$26,000	\$26,000		\$0	\$0	\$0
ECWRF Related	HVAC Mechanical	2028	2005			\$20,000	\$20,000		\$0	\$0	\$0
ECWRF Related	HVAC Mechanical RAS/WAS Bldg	2016	2005			\$13,000	\$13,000		\$0	\$0	\$0
ECWRF Related	HVAC Mechanical RAS/WAS Bldg	2036	2005			\$13,000	\$13,000		\$0	\$0	\$0
ECWRF Related	Influent Pumps #1-6	2035	2007			\$90,000	\$90,000		\$0	\$0	\$0
ECWRF Related	Instream Flow	2007	2007			\$25,000	\$25,000	100%	\$0	\$25,000	\$25,000
ECWRF Related	Mixers	2025	2008			\$84,000	\$84,000		\$0	\$0	\$0
ECWRF Related	NRCS Earmark	2008	2008			\$400,000	\$400,000		\$0	\$0	\$0
ECWRF Related	Permeate Pumps (4)	2038	2007			\$60,000	\$60,000		\$0	\$0	\$0
ECWRF Related	Phosphorus Optimization	2004	2004			\$120,000	\$120,000	100%	\$0	\$120,000	\$120,000
ECWRF Related	Phosphorus Process Improvement	2005	2005		\$125,000	\$0	\$125,000	84%	\$105,000	\$0	\$105,000
ECWRF Related	Post Aerator	2019	2005			\$24,000	\$24,000		\$0	\$0	\$0
ECWRF Related	Post Aerator	2034	2004			\$24,000	\$24,000		\$0	\$0	\$0
ECWRF Related	Pre-Disaster Mitigation	2015	2010			\$150,000	\$150,000		\$0	\$0	\$0
ECWRF Related	Pre-Disaster Mitigation	2017	2010			\$150,000	\$150,000		\$0	\$0	\$0
ECWRF Related	PS Electrical Winch	2007	2007			\$0	\$0		\$0	\$0	\$0
ECWRF Related	Replace Forklift	2016	2007			\$30,000	\$30,000		\$0	\$0	\$0
ECWRF Related	Replace Forklift	2036	2007			\$30,000	\$30,000		\$0	\$0	\$0
ECWRF Related	Replace HVAC Training Bild	2010	2009			\$15,000	\$15,000		\$0	\$0	\$0
ECWRF Related	Replace Polymer Pumps - Phos.	2009	2009			\$15,000	\$15,000		\$0	\$0	\$0
ECWRF Related	Replace Snow Mower/Blower	2020	2005			\$25,000	\$25,000		\$0	\$0	\$0
ECWRF Related	Replace Snow Mower/Blower	2027	2005			\$25,000	\$25,000		\$0	\$0	\$0
ECWRF Related	Replace Snow Mower/Blower	2036	2005			\$30,000	\$30,000		\$0	\$0	\$0
ECWRF Related	Replace Trash Pump	2001	2000			\$20,000	\$20,000		\$0	\$0	\$0
ECWRF Related	Replace Trash Pump	2016	2007			\$20,000	\$20,000		\$0	\$0	\$0
ECWRF Related	Replace Trash Pump	2030	2005			\$20,000	\$20,000		\$0	\$0	\$0
ECWRF Related	Replace Vehicle V-14	2002	2000			\$25,000	\$25,000		\$0	\$0	\$0
ECWRF Related	Replace Vehicle V-14	2011	2007			\$25,000	\$25,000		\$0	\$0	\$0
ECWRF Related	Replace Vehicle V-14	2018	2007			\$25,000	\$25,000		\$0	\$0	\$0
ECWRF Related	Replace Vehicle V-14	2025	2007			\$25,000	\$25,000		\$0	\$0	\$0

Source – see Table 1.

### SBWRD CAPITAL IMPROVEMENTS PLAN Capital Improvement Plan (page 2 of 10)

	-		1	Non OFP	(nominal)									
		BUILD	COST		Non-CFP	(nominal)			GIP (constant \$s)		CFP (constant \$s)			
	Project Description	Year	ESTIMATE Year	New Const. Projects	Other Projects	Total	Expensed Renewal Cost	New Const. Projects	Other Projects	Total	New Const. Projects	Other Projects	Total	
ECWRF Related	Clarifier #2 & #3 Paint	2013	2008	\$0	\$30,000	\$30,000	\$30,000	\$0	\$33,227	\$33,227	\$0	\$0	\$0	
ECWRF Related	Compactor Mechanical	2028	2005	\$0	\$60,000	\$60,000	\$60,000	\$0	\$95,991	\$95,991	\$0	\$0	\$0	
ECWRF Related	Control Building Roof Liner	2005	2005	\$0	\$16,000	\$16,000	\$16,000	\$0	\$16,000	\$16,000	\$0	\$0	\$0	
ECWRF Related	Control Building Roof Liner	2024	2005	\$0	\$16,000	\$16,000	\$16,000	\$0	\$23,589	\$23,589	\$0	\$0	\$0	
ECWRF Related	Conveyor Mechanical in HW	2031	2005	\$0	\$13,000	\$13,000	\$13,000	\$0	\$22,113	\$22,113	\$0	\$0	\$0	
ECWRF Related	EC SHT Blower Modifications	2006	2006	\$0	\$26,000	\$26,000	\$0	\$0	\$26,000	\$26,000	\$0	\$0	\$0	
ECWRF Related	GAC for Odor Control Towers	2011	2009	\$0	\$55,000	\$55,000	\$55,000	\$0	\$57,294	\$57,294	\$0	\$0	\$0	
ECWRF Related	GAC for Odor Control Towers	2015	2009	\$0	\$55,000	\$55,000	\$55,000	\$0	\$62,173	\$62,173	\$0	\$0	\$0	
ECWRF Related	GAC for Odor Control Towers	2023	2007	\$0	\$60,000	\$60,000	\$60,000	\$0	\$83,199	\$83,199	\$0	\$0	\$0	
ECWRF Related	GAC for Odor Control Towers	2027	2007	\$0	\$60,000	\$60,000	\$60,000	\$0	\$90,284	\$90,284	\$0	\$0	\$0	
ECWRF Related	GAC for Odor Control Towers	2031	2007	\$0	\$60,000	\$60,000	\$60,000	\$0	\$97,972	\$97,972	\$0	\$0	\$0	
ECWRF Related	GAC for Odor Control Towers	2035	2007	\$0	\$60,000	\$60,000	\$60,000	\$0	\$106,315	\$106,315	\$0	\$0	\$0	
ECWRF Related	GAC for Odor Control Towers	2039	2007	\$0	\$60,000	\$60,000	\$60,000	\$0	\$115,368	\$115,368	\$0	\$0	\$0	
ECWRF Related	GAC for Odor Control Towers	2039	2007	\$0	\$60,000	\$60,000	\$60,000	\$0	\$115,368	\$115,368	\$0	\$0	\$0	
ECWRF Related	Generators (1) #3	2035	2007	\$0	\$250,000	\$250,000	\$250,000	\$0	\$442,978	\$442,978	\$0	\$0	\$0	
ECWRF Related	Generators (2) #1-2	2027	2007	\$0	\$250,000	\$250,000	\$250,000	\$0	\$376,182	\$376,182	\$0	\$0	\$0	
ECWRF Related	Grinder Mechanical	2016	2005	\$0	\$26,000	\$26,000	\$26,000	\$0	\$32,552	\$32,552	\$0	\$0	\$0	
ECWRF Related	Grinder Mechanical	2036	2005	\$0	\$26,000	\$26,000	\$26,000	\$0	\$48,982	\$48,982	\$0	\$0	\$0	
ECWRF Related	HVAC Mechanical	2028	2005	\$0	\$20,000	\$20,000	\$20,000	\$0	\$31,997	\$31,997	\$0	\$0	\$0	
ECWRF Related	HVAC Mechanical RAS/WAS Bldg	2016	2005	\$0	\$13,000	\$13,000	\$13,000	\$0	\$16,276	\$16,276	\$0	\$0	\$0	
ECWRF Related	HVAC Mechanical RAS/WAS Bldg	2036	2005	\$0	\$13,000	\$13,000	\$13,000	\$0	\$24,491	\$24,491	\$0	\$0	\$0	
ECWRF Related	Influent Pumps #1-6	2035	2007	\$0	\$90,000	\$90,000	\$90,000	\$0	\$159,472	\$159,472	\$0	\$0	\$0	
ECWRF Related	Instream Flow	2007	2007	\$0	\$0	\$0	\$0	\$0	\$25,000	\$25,000	\$0	\$25,000	\$25,000	
ECWRF Related	Mixers	2025	2008	\$0	\$84,000	\$84,000	\$84,000	\$0	\$118,883	\$118,883	\$0	\$0	\$0	
ECWRF Related	NRCS Earmark	2008	2008	\$0	\$400,000	\$400,000	\$0	\$0	\$400,000	\$400,000	\$0	\$0	\$0	
ECWRF Related	Permeate Pumps (4)	2038	2007	\$0	\$60,000	\$60,000	\$60,000	\$0	\$113,035	\$113,035	\$0	\$0	\$0	
ECWRF Related	Phosphorus Optimization	2004	2004	\$0	\$0	\$0	\$0	\$0	\$120,000	\$120,000	\$0	\$120,000	\$120,000	
ECWRF Related	Phosphorus Process Improvement	2005	2005	\$20,000	\$0	\$20,000	\$0	\$125,000	\$0	\$125,000	\$105,000	\$0	\$105,000	
ECWRF Related	Post Aerator	2019	2005	\$0	\$24,000	\$24,000	\$24,000	\$0	\$31,947	\$31,947	\$0	\$0	\$0	
ECWRF Related	Post Aerator	2034	2004	\$0	\$24,000	\$24,000	\$24,000	\$0	\$44,299	\$44,299	\$0	\$0	\$0	
ECWRF Related	Pre-Disaster Mitigation	2015	2010	\$0	\$150,000	\$150,000	\$150,000	\$0	\$166,133	\$166,133	\$0	\$0	\$0	
ECWRF Related	Pre-Disaster Mitigation	2017	2010	\$0	\$150,000	\$150,000	\$150,000	\$0	\$173,062	\$173,062	\$0	\$0	\$0	
ECWRF Related	PS Electrical Winch	2007	2007	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
ECWRF Related	Replace Forklift	2016	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$36,056	\$36,056	\$0	\$0	\$0	
ECWRF Related	Replace Forklift	2036	2007	\$0	\$30,000	\$30,000	\$30,000	\$0	\$54,255	\$54,255	\$0	\$0	\$0	
ECWRF Related	Replace HVAC Training Bild	2010	2009	\$0	\$15,000	\$15,000	\$15,000	\$0	\$15,310	\$15,310	\$0	\$0	\$0	
ECWRF Related	Replace Polymer Pumps - Phos.	2009	2009	\$0	\$15,000	\$15,000	\$15,000	\$0	\$15,000	\$15,000	\$0	\$0	\$0	
ECWRF Related	Replace Snow Mower/Blower	2020	2005	\$0	\$25,000	\$25,000	\$25,000	\$0	\$33,965	\$33,965	\$0	\$0	\$0	
ECWRF Related	Replace Snow Mower/Blower	2027	2005	\$0	\$25,000	\$25,000	\$25,000	\$0	\$39,187	\$39,187	\$0	\$0	\$0	
ECWRF Related	Replace Snow Mower/Blower	2036	2005	\$0	\$30,000	\$30,000	\$30,000	\$0	\$56,517	\$56,517	\$0	\$0	\$0	
ECWRF Related	Replace Trash Pump	2001	2000	\$0	\$20,000	\$20,000	\$20,000	\$0	\$20,413	\$20,413	\$0	\$0	\$0	
ECWRF Related	Replace Trash Pump	2016	2007	\$0	\$20,000	\$20,000	\$20,000	\$0	\$24,037	\$24,037	\$0	\$0	\$0	
ECWRF Related	Replace Trash Pump	2030	2005	\$0	\$20,000	\$20,000	\$20,000	\$0	\$33,331	\$33,331	\$0	\$0	\$0	
ECWRF Related	Replace Vehicle V-14	2002	2000	\$0	\$25,000	\$25,000	\$0	\$0	\$26,043	\$26,043	\$0	\$0	\$0	
ECWRF Related	Replace Vehicle V-14	2011	2007	\$0	\$25,000	\$25,000	\$0	\$0	\$27,129	\$27,129	\$0	\$0	\$0	
ECWRF Related	Replace Vehicle V-14	2018	2007	\$0	\$25,000	\$25,000	\$0	\$0	\$31,300	\$31,300	\$0	\$0	\$0	
ECWRF Related	Replace Vehicle V-14	2025	2007	\$0	\$25,000	\$25,000	\$0	\$0	\$36,112	\$36,112	\$0	\$0	\$0	

Source - see Table 1.

### SBWRD CAPITAL IMPROVEMENTS PLAN

#### Plan (page 2 of 10

Table 5

Capital Improvement Plan (page 3 or 10)													
			COST	Capital Facility		CIP (nominal)				CFP (nominal)			
Project Des	scription	BUILD Year	ESTIMATE Year	Capacity Expansion	New Const. Projects	Other Projects	Total	CFP %	New Const. Projects	Other Projects	Total		
ECWRF Related	Replace Vehicle V-14	2032	2007			\$25,000	\$25,000		\$0	\$0	\$0		
ECWRF Related	Replace Vehicle V-14	2039	2007			\$25,000	\$25,000		\$0	\$0	\$0		
ECWRF Related	Reuse	2006	2006			\$18,000	\$18,000	100%	\$0	\$18,000	\$18,000		
ECWRF Related	SCADA Upgrade	2009	2009			\$50,000	\$50,000	0%	\$0	\$0	\$0		
ECWRF Related	SCADA Upgrade	2010	2009			\$150,000	\$150,000	100%	\$0	\$150,000	\$150,000		
ECWRF Related	SCADA Upgrade	2018	2009			\$20,000	\$20,000		\$0	\$0	\$0		
ECWRF Related	SCADA Upgrade	2022	2009			\$20,000	\$20,000		\$0	\$0	\$0		
ECWRF Related	SCADA Upgrade	2026	2009			\$100,000	\$100,000		\$0	\$0	\$0		
ECWRF Related	SCADA Upgrade	2030	2009			\$20,000	\$20,000		\$0	\$0	\$0		
ECWRF Related	SCADA Upgrade	2034	2009			\$20,000	\$20,000		\$0	\$0	\$0		
ECWRF Related	SCADA Upgrade	2038	2009			\$20,000	\$20,000		\$0	\$0	\$0		
ECWRF Related	Step Screens #1 & #2 Mechanical	2028	2005			\$108,000	\$108,000		\$0	\$0	\$0		
ECWRF Related	Step Screens #3 Mechanical	2035	2007			\$130,000	\$130,000		\$0	\$0	\$0		
ECWRF Related	TMDL	2008	2008			\$100,000	\$100,000	100%	\$0	\$100,000	\$100,000		
ECWRF Related	Training Bidg Garage Roof Liner	2006	2006			\$30,000	\$30,000		\$0	\$0	\$0		
ECWRF Related	Training Bidg Garage Roof Liner	2026	2006			\$32,000	\$32,000		\$0	\$0	\$0		
ECWRF Related	VFD's - 100 HP (1)	2020	2007			\$25,000	\$25,000		\$0	\$0	\$0		
ECWRF Related	VFD's - 100 HP (1)	2035	2007			\$25,000	\$25,000		\$0	\$0	\$0		
ECWRF Related	VFD's - 100 HP (1)	2038	2007			\$25,000	\$25,000		\$0	\$0	\$0		
ECWRF Related	VFD's - 20 HP (10)	2020	2007			\$80,000	\$80,000		\$0	\$0	\$0		
ECWRF Related	VFD's - 20 HP (10)	2038	2007			\$80,000	\$80,000		\$0	\$0	\$0		
ECWRF Related	VFD's - 20 HP (4)	2035	2007			\$32,000	\$32,000		\$0	\$0	\$0		
ECWRF/SCWRF Related	*Disposal, Compliance Options - Possible Reu	2005	2005		\$900,000		\$900,000	100%	\$900,000	\$0	\$900,000		
ECWRF/SCWRF Related	Membrane Replacement	2032	2019		\$1,075,000	\$0	\$1,075,000		\$0	\$0	\$0		
ECWRF/SCWRF Related	Purchase Additional Membrane Train	2023	2008		\$400,000	\$0	\$400,000	100%	\$400,000	\$0	\$400,000		
ECWRF/SCWRF Related	Purchase Additional Membrane Train	2028	2008		\$400,000	\$0	\$400,000	100%	\$400,000	\$0	\$400,000		
ECWRF/SCWRF Related	Purchase Additional Membranes	2023	2019		\$57,000	\$0	\$57,000	100%	\$57,000	\$0	\$57,000		
ECWRF/SCWRF Related	Purchase Additional Membranes	2025	2019		\$57,000	\$0	\$57,000	100%	\$57,000	\$0	\$57,000		
ECWRF/SCWRF Related	Purchase Additional Membranes	2028	2019		\$57,000	\$0	\$57,000	100%	\$57,000	\$0	\$57,000		
ECWRF/SCWRF Related	Purchase Additional Membranes	2030	2019		\$57,000	\$0	\$57,000	100%	\$57,000	\$0	\$57,000		
ECWRF/SCWRF Related	Purchase Additional Membranes	2033	2019		\$57,000	\$0	\$57,000	100%	\$57,000	\$0	\$57,000		
ECWRF/SCWRF Related	Purchase Additional Membranes	2036	2019		\$57,000	\$0	\$57,000	100%	\$57,000	\$0	\$57,000		
ECWRF/SCWRF Related	Purchase Additional Membranes	2039	2019		\$57,000	\$0	\$57,000	100%	\$57,000	\$0	\$57,000		
Facility Expansion - ECWRF	Facility Expansion	2000	2000		\$1,155,438		\$1,155,438		\$0	\$0	\$0		
Facility Expansion - ECWRF	Facility Expansion	2001	2000		\$5,812,952		\$5,812,952		\$0	\$0	\$0		
Facility Expansion - ECWRF	Facility Expansion	2002	2000		\$7,500,000		\$7,500,000		\$0	\$0	\$0		
Facility Expansion - ECWRF	Facility Expansion	2003	2000		\$1,337,573		\$1,337,573		\$0	\$0	\$0		
Facility Expansion - ECWRF Related	Antidegradation - Permit Renewal	2015	2009		\$2,000,000		\$2,000,000	100%	\$2,000,000	\$0	\$2,000,000		
Facility Expansion - ECWRF Related	EDC Removal/ Stream Augmentation	2015	2009		\$3,564,100		\$3,564,100	47%	\$1,689,383	\$0	\$1,689,383		
Facility Expansion - ECWRF Related	Facility Expansion - Phase 1	2007	2007	ECWRF Phase I	\$503,284		\$503,284	100%	\$503,284	\$0	\$503,284		
Facility Expansion - ECWRF Related	Facility Expansion - Phase 1	2008	2008	ECWRF Phase I	\$1,509,851		\$1,509,851	100%	\$1,509,851	\$0	\$1,509,851		
Facility Expansion - ECWRF Related	Facility Expansion - Phase I, Construction	2021	2009	ECWRF Phase I	\$10,416,000		\$10,416,000	99%	\$10,291,008	\$0	\$10,291,008		
Facility Expansion - ECWRF Related	Facility Expansion - Phase I, Eng. Only	2020	2009	ECWRF Phase I	\$1,667,000		\$1,667,000	99%	\$1,646,996	\$0	\$1,646,996		
Facility Expansion - ECWRF Related	Facility Expansion - Phase II, Construction	2028	2009	ECWRF Phase II	\$9,827,000		\$9,827,000	97%	\$9,532,190	\$0	\$9,532,190		
Facility Expansion - ECWRF Related	Facility Expansion - Phase II, Construction	2029	2009	ECWRF Phase II	\$9,827,000		\$9,827,000	97%	\$9,532,190	\$0	\$9,532,190		
Facility Expansion - ECWRF Related	Facility Expansion - Phase II, Eng. Only	2027	2009	ECWRF Phase II	\$3,151,000		\$3,151,000	97%	\$3,056,470	\$0	\$3,056,470		
Facility Expansion - SCWRF Related	Antidegradation - Permit Renewal	2012	2009		\$750,000		\$750 <u>,</u> 000	100%	\$750,000	\$0	\$750,000		

Source - see Table 1.

#### SBWRD CAPITAL IMPROVEMENTS PLAN

	1		0007		Non-CFP	(nominal)			CIP (constant \$s)		CFP (constant \$s)				
	Project Description	BUILD Year	ESTIMATE Year	New Const. Projects	Other Projects	Total	Expensed Renewal Cost	New Const. Projects	Other Projects	Total	New Const. Projects	Other Projects	Total		
ECWRF Related	Replace Vehicle V-14	2032	2007	\$0	\$25,000	\$25,000	\$0	\$0	\$41,664	\$41,664	\$0	\$0	\$0		
ECWRF Related	Replace Vehicle V-14	2039	2007	\$0	\$25,000	\$25,000	\$0	\$0	\$48,070	\$48,070	\$0	\$0	\$0		
ECWRF Related	Reuse	2006	2006	\$0	\$0	\$0	\$0	\$0	\$18,000	\$18,000	\$0	\$18,000	\$18,000		
ECWRF Related	SCADA Upgrade	2009	2009	\$0	\$50,000	\$50,000	\$50,000	\$0	\$50,000	\$50,000	\$0	\$0	\$0		
ECWRF Related	SCADA Upgrade	2010	2009	\$0	\$0	\$0	\$0	\$0	\$153,096	\$153,096	\$0	\$153,096	\$153,096		
ECWRF Related	SCADA Upgrade	2018	2009	\$0	\$20,000	\$20,000	\$20,000	\$0	\$24,037	\$24,037	\$0	\$0	\$0		
ECWRF Related	SCADA Upgrade	2022	2009	\$0	\$20,000	\$20,000	\$20,000	\$0	\$26,084	\$26,084	\$0	\$0	\$0		
ECWRF Related	SCADA Upgrade	2026	2009	\$0	\$100,000	\$100,000	\$100,000	\$0	\$141,527	\$141,527	\$0	\$0	\$0		
ECWRF Related	SCADA Upgrade	2030	2009	\$0	\$20,000	\$20,000	\$20,000	\$0	\$30,716	\$30,716	\$0	\$0	\$0		
ECWRF Related	SCADA Upgrade	2034	2009	\$0	\$20,000	\$20,000	\$20,000	\$0	\$33,331	\$33,331	\$0	\$0	\$0		
ECWRF Related	SCADA Upgrade	2038	2009	\$0	\$20,000	\$20,000	\$20,000	\$0	\$36,170	\$36,170	\$0	\$0	\$0		
ECWRF Related	Step Screens #1 & #2 Mechanical	2028	2005	\$0	\$108,000	\$108,000	\$108,000	\$0	\$172,783	\$172,783	\$0	\$0	\$0		
ECWRF Related	Step Screens #3 Mechanical	2035	2007	\$0	\$130,000	\$130,000	\$130,000	\$0	\$230,348	\$230,348	\$0	\$0	\$0		
ECWRF Related	TMDL	2008	2008	\$0	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$0	\$100,000	\$100,000		
ECWRF Related	Training Bidg Garage Roof Liner	2006	2006	\$0	\$30,000	\$30,000	\$0	\$0	\$30,000	\$30,000	\$0	\$0	\$0		
ECWRF Related	Training Bidg Garage Roof Liner	2026	2006	\$0	\$32,000	\$32,000	\$32,000	\$0	\$48,151	\$48,151	\$0	\$0	\$0		
ECWRF Related	VFD's - 100 HP (1)	2020	2007	\$0	\$25,000	\$25,000	\$25,000	\$0	\$32,605	\$32,605	\$0	\$0	\$0		
ECWRF Related	VFD's - 100 HP (1)	2035	2007	\$0	\$25,000	\$25,000	\$25.000	\$0	\$44,298	\$44,298	\$0	\$0	\$0		
ECWRF Related	VFD's - 100 HP (1)	2038	2007	\$0	\$25,000	\$25,000	\$25,000	\$0	\$47,098	\$47,098	\$0	\$0	\$0		
ECWRF Related	VFD's - 20 HP (10)	2020	2007	\$0	\$80,000	\$80,000	\$80,000	\$0	\$104,337	\$104,337	\$0	\$0	\$0		
ECWRF Related	VFD's - 20 HP (10)	2038	2007	\$0	\$80,000	\$80,000	\$80,000	\$0	\$150,713	\$150,713	\$0	\$0	\$0		
ECWRF Related	VFD's - 20 HP (4)	2035	2007	\$0	\$32,000	\$32,000	\$32,000	\$0	\$56,701	\$56,701	\$0	\$0	\$0		
ECWRF/SCWRF Related	*Disposal, Compliance Options - Possible Reu	2005	2005	\$0	\$0	\$0	\$0	\$900.000	\$0	\$900.000	\$900.000	\$0	\$900.000		
ECWRF/SCWRF Related	Membrane Replacement	2032	2019	\$1,075,000	\$0	\$1,075,000	\$1.075.000	\$2,156,207	\$0	\$2,156,207	\$0	\$0	\$0		
ECWRE/SCWRE Related	Purchase Additional Membrane Train	2023	2008	\$0	\$0	\$0	\$0	\$892.991	\$0	\$892.991	\$892,991	\$0	\$892.991		
ECWRF/SCWRF Related	Purchase Additional Membrane Train	2028	2008	\$0	\$0	\$0	\$0	\$1,167,103	\$0	\$1,167,103	\$1,167,103	\$0	\$1,167,103		
ECWRF/SCWRF Related	Purchase Additional Membranes	2023	2019	\$0	\$0	\$0	\$0	\$70,613	\$0	\$70,613	\$70,613	\$0	\$70,613		
ECWRE/SCWRE Related	Purchase Additional Membranes	2025	2019	\$0	\$0	\$0	\$0	\$78.594	\$0	\$78,594	\$78.594	\$0	\$78.594		
ECWRF/SCWRF Related	Purchase Additional Membranes	2028	2019	\$0	\$0	\$0	\$0	\$92,288	\$0	\$92,288	\$92.288	\$0	\$92,288		
ECWRE/SCWRE Related	Purchase Additional Membranes	2030	2019	\$0	\$0	\$0	\$0	\$102,719	\$0	\$102,719	\$102,719	\$0	\$102,719		
ECWRF/SCWRF Related	Purchase Additional Membranes	2033	2019	\$0	\$0	\$0	\$0	\$120.617	\$0	\$120.617	\$120.617	\$0	\$120.617		
ECWRF/SCWRF Related	Purchase Additional Membranes	2036	2019	\$0	\$0	\$0	\$0	\$141.634	\$0	\$141.634	\$141.634	\$0	\$141.634		
ECWRF/SCWRF Related	Purchase Additional Membranes	2039	2019	\$0	\$0	\$0	\$0	\$166.312	\$0	\$166.312	\$166.312	\$0	\$166.312		
Facility Expansion - ECWRF	Facility Expansion	2000	2000	\$1,155,438	\$0	\$1,155,438	\$0	\$1,155,438	\$0	\$1,155,438	\$0	\$0	\$0		
Eacility Expansion - ECWRE	Facility Expansion	2001	2000	\$5,812,952	\$0	\$5,812,952	\$0	\$6,132,664	\$0	\$6,132,664	\$0	\$0	\$0		
Facility Expansion - ECWRF	Facility Expansion	2002	2000	\$7,500,000	\$0	\$7,500,000	\$0	\$8.347.688	\$0	\$8,347,688	\$0	\$0	\$0		
Facility Expansion - ECWRF	Eacility Expansion	2003	2000	\$1,337,573	\$0	\$1.337.573	\$0	\$1,570,634	\$0	\$1,570,634	\$0	\$0	\$0		
Eacility Expansion - ECWRE Relat	ted Antidegradation - Permit Renewal	2015	2009	\$0	\$0	\$0	\$0	\$2,757,686	\$0	\$2,757,686	\$2,757,686	\$0	\$2,757,686		
Eacility Expansion - ECWRE Relat	ted EDC Removal/ Stream Augmentation	2015	2000	\$1,874,717	\$0	\$1,874,717	\$0	\$4,914,334	\$0	\$4,914,334	\$2,329,394	\$0	\$2,329,394		
Facility Expansion - ECWRE Relat	ted Eacility Expansion - Phase 1	2007	2007	\$0	\$0	\$0	\$0	\$503,284	\$0	\$503,284	\$503,284	\$0	\$503,284		
Eacility Expansion - ECWRE Relat	ted Eacility Expansion - Phase 1	2008	2008	\$0	\$0	\$0	\$0	\$1.509.851	\$0	\$1,509,851	\$1,509,851	\$0	\$1.509.851		
Eacility Expansion - ECWRE Relat	ted Eacility Expansion - Phase I. Construction	2021	2000	\$124,992	\$0	\$124,992	\$0	\$19.802.977	\$0	\$19,802,977	\$19,565,341	\$0	\$19,565,341		
Facility Expansion - ECWRF Relat	ted Facility Expansion - Phase I, Eng. Only	2020	2009	\$20,004	\$0	\$20,004	\$0	\$3,004,088	\$0	\$3,004,088	\$2,968,039	\$0	\$2,968,039		
Facility Expansion - ECWRF Relat	ted Facility Expansion - Phase II. Construction	2028	2009	\$294,810	\$0	\$294,810	\$0	\$27,178,012	\$0	\$27,178,012	\$26,362,672	\$0	\$26,362,672		
Facility Expansion - ECWRE Relat	ted Eacility Expansion - Phase II Construction	2029	2009	\$294,810	\$0	\$294,810	\$0	\$28.672.803	\$0	\$28.672.803	\$27,812,619	\$0	\$27,812,619		
Facility Expansion - ECWRE Relat	ted Eacility Expansion - Phase II Eng Only	2023	2009	\$94,530	\$0 \$0	\$94,530	\$0 \$0	\$8,260,240	\$0	\$8,260,240	\$8.012.433	\$0 \$0	\$8.012.433		
Eacility Expansion - SCWRE Relat	ted Antidegradation - Permit Renewal	2012	2009	\$0	\$0	\$0	\$0	\$880,681	\$0	\$880,681	\$880,681	\$0	\$880,681		

Source – see Table 1.

#### SBWRD CAPITAL IMPROVEMENTS PLAN

						CIP (nominal)		CFP (nominal)				
Project D	escription	BUILD Year	COST ESTIMATE Year	Capital Facility Capacity Expansion	New Const. Projects	Other Projects	Total	CFP %	New Const. Projects	Other Projects	Total	
Facility Expansion - SCWRF Related	Echo/Rockport TMDL	2014	2009		\$500,000		\$500,000	88%	\$440,000	\$0	\$440,000	
Facility Expansion - SCWRF Related	EDC removal/steam augmentation	2028	2009		\$4,327,000		\$4,327,000	64%	\$2,769,280	\$0	\$2,769,280	
Facility Expansion - SCWRF Related	Facility Expansion - Nitrogen Removal	2028	2009		\$4,713,000		\$4,713,000	100%	\$4,713,000	\$0	\$4,713,000	
Facility Expansion - SCWRF Related	Facility Expansion - Phase 1	2016	2009	SCWRF Phase I	\$7,642,500		\$7,642,500	88%	\$6,707,058	\$0	\$6,707,058	
Facility Expansion - SCWRF Related	Facility Expansion - Phase 1	2017	2009	SCWRF Phase I	\$7,642,500		\$7,642,500	88%	\$6,707,058	\$0	\$6,707,058	
Facility Expansion - SCWRF/ECWRF Related	Facility Expansion - Phase 1	2015	2009	SCWRF Phase I	\$2,446,000		\$2,446,000	88%	\$2,146,610	\$0	\$2,146,610	
Facility Expansion - SCWRF/ECWRF Related	Reuse	2029	2009		\$4,000,000		\$4,000,000	50%	\$2,000,000	\$0	\$2,000,000	
Laboratory	Analytical Equipment	2019	2000			\$20,000	\$20,000		\$0	\$0	\$0	
Laboratory	Analytical Equipment	2026	2000			\$20,000	\$20,000		\$0	\$0	\$0	
Laboratory	Analytical Equipment	2033	2000			\$20,000	\$20,000		\$0	\$0	\$0	
Laboratory	Analytical Equipment	2040	2000			\$20,000	\$20,000		\$0	\$0	\$0	
Pretreatment	Autosamplers	2002	2000			\$10,000	\$10,000		\$0	\$0	\$0	
Pretreatment	Replace Vehicle V-20	2007	2007			\$25,000	\$25,000		\$0	\$0	\$0	
Pretreatment	Replace Vehicle V-20	2014	2007			\$25,000	\$25,000		\$0	\$0	\$0	
Pretreatment	Replace Vehicle V-20	2021	2007			\$25,000	\$25,000		\$0	\$0	\$0	
Pretreatment	Replace Vehicle V-20	2028	2007			\$25,000	\$25,000		\$0	\$0	\$0	
Pretreatment	Replace Vehicle V-20	2035	2007			\$25,000	\$25,000		\$0	\$0	\$0	
SCWRF Related	Aerator Rebuild	2023	2000			\$25,000	\$25,000		\$0	\$0	\$0	
SCWRF Related	Aerator Replacement	2005	2005			\$52,000	\$52,000		\$0	\$0	\$0	
SCWRF Related	Aerators	2036	2007			\$240,000	\$240,000		\$0	\$0	\$0	
SCWRF Related	Backup Generator	2006	2006			\$410,000	\$410,000	84%	\$0	\$344,400	\$344,400	
SCWRF Related	Chemical Feed Pumps	2026	2007			\$36,000	\$36,000		\$0	\$0	\$0	
SCWRF Related	Echo/Rockport Reservoirs TMDL	2014	2010			\$100,000	\$100,000		\$0	\$0	\$0	
SCWRF Related	Floating Aerator (spare 100hp)	2006	2006			\$23,000	\$23,000		\$0	\$0	\$0	
SCWRF Related	Floating Aerator (spare 100hp)	2010	2009			\$30,000	\$30,000		\$0	\$0	\$0	
SCWRF Related	GAC for Odor Control Towers	2019	2007			\$60,000	\$60,000		\$0	\$0	\$0	
SCWRF Related	GAC for Odor Control Towers	2022	2007			\$60,000	\$60,000		\$0	\$0	\$0	
SCWRF Related	GAC for Odor Control Towers	2026	2007			\$60,000	\$60,000		\$0	\$0	\$0	
SCWRF Related	GAC for Odor Control Towers	2030	2007			\$60,000	\$60,000		\$0	\$0	\$0	
SCWRF Related	GAC for Odor Control Towers	2034	2007			\$60,000	\$60,000		\$0	\$0	\$0	
SCWRF Related	GAC for Odor Control Towers	2038	2007			\$60,000	\$60,000		\$0	\$0	\$0	
SCWRF Related	Generator (1) #1	2039	2007			\$250,000	\$250,000		\$0	\$0	\$0	
SCWRF Related	Grit Removal Equipment (2)	2034	2007			\$200,000	\$200,000		\$0	\$0	\$0	
SCWRF Related	HW HVAC	2034	2007			\$100,000	\$100,000		\$0	\$0	\$0	
SCWRF Related	HW Screens & Conveyors (2)	2039	2007			\$260,000	\$260,000		\$0	\$0	\$0	
SCWRF Related	Influent Pumps (4)	2039	2007			\$60,000	\$60,000		\$0	\$0	\$0	
SCWRF Related	Purchase Mower/Blower	2006	2006			\$28,400	\$28,400		\$0	\$0	\$0	
SCWRF Related	RAS Balance	2003	2000			\$100,000	\$100,000		\$0	\$0	\$0	
SCWRF Related	Replace Snow Mower/Blower	2017	2005			\$30,000	\$30,000		\$0	\$0	\$0	
SCWRF Related	Replace Snow Mower/Blower	2026	2005			\$30,000	\$30,000		\$0	\$0	\$0	
SCWRF Related	Replace Snow Mower/Blower	2035	2005			\$30,000	\$30,000		\$0	\$0	\$0	
SCWRF Related	Replace Trash Pump	2017	2000			\$20,000	\$20,000		\$0	\$0	\$0	
SCWRF Related	Replace Trash Pump	2031	2000			\$20,000	\$20,000		\$0	\$0	\$0	
SCWRF Related	Replace Vehicle V-7	2002	2000			\$25,000	\$25,000		\$0	\$0	\$0	
SCWRF Related	Replace Vehicle V-7	2011	2007			\$25,000	\$25,000		\$0	\$0	\$0	
SCWRF Related	Replace Vehicle V-7	2018	2007			\$25,000	\$25,000		\$0	\$0	\$0	
SCWRF Related	Replace Vehicle V-7	2025	2007			\$25,000	\$25,000		\$0	\$0	\$0	

Source - see Table 1.

### SBWRD CAPITAL IMPROVEMENTS PLAN Capital Improvement Plan (page 4 of 10)

		BUILD	COST		Non-CFP	(nominal)			CIP (constant \$s)			CFP (constant \$s	;)
Project De	scription	Year	ESTIMATE Year	New Const. Projects	Other Projects	Total	Expensed Renewal Cost	New Const. Projects	Other Projects	Total	New Const. Projects	Other Projects	Total
Facility Expansion - SCWRF Related	Echo/Rockport TMDL	2014	2009	\$60,000	\$0	\$60,000	\$0	\$653,480	\$0	\$653,480	\$575,062	\$0	\$575,062
Facility Expansion - SCWRF Related	EDC removal/steam augmentation	2028	2009	\$1,557,720	\$0	\$1,557,720	\$0	\$11,966,954	\$0	\$11,966,954	\$7,658,851	\$0	\$7,658,851
Facility Expansion - SCWRF Related	Facility Expansion - Nitrogen Removal	2028	2009	\$0	\$0	\$0	\$0	\$13,034,494	\$0	\$13,034,494	\$13,034,494	\$0	\$13,034,494
Facility Expansion - SCWRF Related	Facility Expansion - Phase 1	2016	2009	\$935,442	\$0	\$935,442	\$0	\$11,117,385	\$0	\$11,117,385	\$9,756,618	\$0	\$9,756,618
Facility Expansion - SCWRF Related	Facility Expansion - Phase 1	2017	2009	\$935,442	\$0	\$935,442	\$0	\$11,728,842	\$0	\$11,728,842	\$10,293,231	\$0	\$10,293,231
Facility Expansion - SCWRF/ECWRF Related	Facility Expansion - Phase 1	2015	2009	\$299,390	\$0	\$299,390	\$0	\$3,372,650	\$0	\$3,372,650	\$2,959,837	\$0	\$2,959,837
Facility Expansion - SCWRF/ECWRF Related	Reuse	2029	2009	\$2,000,000	\$0	\$2,000,000	\$0	\$11,671,030	\$0	\$11,671,030	\$5,835,515	\$0	\$5,835,515
Laboratory	Analytical Equipment	2019	2000	\$0	\$20,000	\$20,000	\$20,000	\$0	\$29,486	\$29,486	\$0	\$0	\$0
Laboratory	Analytical Equipment	2026	2000	\$0	\$20,000	\$20,000	\$20,000	\$0	\$34,019	\$34,019	\$0	\$0	\$0
Laboratory	Analytical Equipment	2033	2000	\$0	\$20,000	\$20,000	\$20,000	\$0	\$39,250	\$39,250	\$0	\$0	\$0
Laboratory	Analytical Equipment	2040	2000	\$0	\$20,000	\$20,000	\$20,000	\$0	\$45,284	\$45,284	\$0	\$0	\$0
Pretreatment	Autosamplers	2002	2000	\$0	\$10,000	\$10,000	\$0	\$0	\$10,417	\$10,417	\$0	\$0	\$0
Pretreatment	Replace Vehicle V-20	2007	2007	\$0	\$25,000	\$25,000	\$0	\$0	\$25,000	\$25,000	\$0	\$0	\$0
Pretreatment	Replace Vehicle V-20	2014	2007	\$0	\$25,000	\$25,000	\$0	\$0	\$28,844	\$28,844	\$0	\$0	\$0
Pretreatment	Replace Vehicle V-20	2021	2007	\$0	\$25,000	\$25,000	\$0	\$0	\$33,278	\$33,278	\$0	\$0	\$0
Pretreatment	Replace Vehicle V-20	2028	2007	\$0	\$25,000	\$25,000	\$0	\$0	\$38,395	\$38,395	\$0	\$0	\$0
Pretreatment	Replace Vehicle V-20	2035	2007	\$0	\$25,000	\$25,000	\$0	\$0	\$44,298	\$44,298	\$0	\$0	\$0
SCWRF Related	Aerator Rebuild	2023	2000	\$0	\$25,000	\$25,000	\$25,000	\$0	\$39,996	\$39,996	\$0	\$0	\$0
SCWRF Related	Aerator Replacement	2005	2005	\$0	\$52,000	\$52,000	\$0	\$0	\$52,000	\$52,000	\$0	\$0	\$0
SCWRF Related	Aerators	2036	2007	\$0	\$240,000	\$240,000	\$240,000	\$0	\$434,036	\$434,036	\$0	\$0	\$0
SCWRF Related	Backup Generator	2006	2006	\$0	\$65,600	\$65,600	\$0	\$0	\$410,000	\$410,000	\$0	\$344,400	\$344,400
SCWRF Related	Chemical Feed Pumps	2026	2007	\$0	\$36,000	\$36,000	\$36,000	\$0	\$53,075	\$53,075	\$0	\$0	\$0
SCWRF Related	Echo/Rockport Reservoirs TMDL	2014	2010	\$0	\$100,000	\$100,000	\$100,000	\$0	\$108,515	\$108,515	\$0	\$0	\$0
SCWRF Related	Floating Aerator (spare 100hp)	2006	2006	\$0	\$23,000	\$23,000	\$0	\$0	\$23,000	\$23,000	\$0	\$0	\$0
SCWRF Related	Floating Aerator (spare 100hp)	2010	2009	\$0	\$30,000	\$30,000	\$0	\$0	\$30,619	\$30,619	\$0	\$0	\$0
SCWRF Related	GAC for Odor Control Towers	2019	2007	\$0	\$60,000	\$60,000	\$60,000	\$0	\$76,670	\$76,670	\$0	\$0	\$0
SCWRF Related	GAC for Odor Control Towers	2022	2007	\$0	\$60,000	\$60,000	\$60,000	\$0	\$81,516	\$81,516	\$0	\$0	\$0
SCWRF Related	GAC for Odor Control Towers	2026	2007	\$0	\$60,000	\$60,000	\$60,000	\$0	\$88,458	\$88,458	\$0	\$0	\$0
SCWRF Related	GAC for Odor Control Towers	2030	2007	\$0	\$60,000	\$60,000	\$60,000	\$0	\$95,991	\$95,991	\$0	\$0	\$0
SCWRF Related	GAC for Odor Control Towers	2034	2007	\$0	\$60,000	\$60,000	\$60,000	\$0	\$104,165	\$104,165	\$0	\$0	\$0
SCWRF Related	GAC for Odor Control Towers	2038	2007	\$0	\$60,000	\$60,000	\$60,000	\$0	\$113,035	\$113,035	\$0	\$0	\$0
SCWRF Related	Generator (1) #1	2039	2007	\$0	\$250,000	\$250,000	\$250,000	\$0	\$480,699	\$480,699	\$0	\$0	\$0
SCWRF Related	Grit Removal Equipment (2)	2034	2007	\$0	\$200,000	\$200,000	\$200,000	\$0	\$347,215	\$347,215	\$0	\$0	\$0
SCWRF Related	HW HVAC	2034	2007	\$0	\$100,000	\$100,000	\$100,000	\$0	\$173,608	\$173,608	\$0	\$0	\$0
SCWRF Related	HW Screens & Conveyors (2)	2039	2007	\$0	\$260,000	\$260,000	\$260,000	\$0	\$499,927	\$499,927	\$0	\$0	\$0
SCWRF Related	Influent Pumps (4)	2039	2007	\$0	\$60,000	\$60,000	\$60,000	\$0	\$115,368	\$115,368	\$0	\$0	\$0
SCWRF Related	Purchase Mower/Blower	2006	2006	\$0	\$28,400	\$28,400	\$0	\$0	\$28,400	\$28,400	\$0	\$0	\$0
SCWRF Related	RAS Balance	2003	2000	\$0	\$100,000	\$100,000	\$0	\$0	\$106,321	\$106,321	\$0	\$0	\$0
SCWRF Related	Replace Snow Mower/Blower	2017	2005	\$0	\$30,000	\$30,000	\$30,000	\$0	\$38,335	\$38,335	\$0	\$0	\$0
SCWRF Related	Replace Snow Mower/Blower	2026	2005	\$0	\$30,000	\$30,000	\$30,000	\$0	\$46,074	\$46,074	\$0	\$0	\$0
SCWRF Related	Replace Snow Mower/Blower	2035	2005	\$0	\$30,000	\$30,000	\$30,000	\$0	\$55,374	\$55,374	\$0	\$0	\$0
SCWRF Related	Replace Trash Pump	2017	2000	\$0	\$20,000	\$20,000	\$20,000	\$0	\$28,305	\$28,305	\$0	\$0	\$0
SCWRF Related	Replace Trash Pump	2031	2000	\$0	\$20,000	\$20,000	\$20,000	\$0	\$37,678	\$37,678	\$0	\$0	\$0
SCWRF Related	Replace Vehicle V-7	2002	2000	\$0	\$25,000	\$25,000	\$0	\$0	\$26,043	\$26,043	\$0	\$0	\$0
SCWRF Related	Replace Vehicle V-7	2011	2007	\$0	\$25,000	\$25,000	\$0	\$0	\$27,129	\$27,129	\$0	\$0	\$0
SCWRF Related	Replace Vehicle V-7	2018	2007	\$0	\$25,000	\$25,000	\$0	\$0	\$31,300	\$31,300	\$0	\$0	\$0
SCWRF Related	Replace Vehicle V-7	2025	2007	\$0	\$25,000	\$25,000	\$0	\$0	\$36,112	\$36,112	\$0	\$0	\$0

#### Source - see Table 1.

#### SBWRD CAPITAL IMPROVEMENTS PLAN

						010 / 1 -					
			COST	Capital Facility		CIP (nominal)		4 -		CFP (nominal)	
Project De	scription	Year	ESTIMATE Year	Capacity Expansion	New Const. Projects	Other Projects	Total	CFP %	New Const. Projects	Other Projects	Total
SCWRF Related	Replace Vehicle V-7	2032	2007			\$25,000	\$25,000		\$0	\$0	\$0
SCWRF Related	Replace Vehicle V-7	2039	2007			\$25,000	\$25,000		\$0	\$0	\$0
SCWRF Related	SCADA Upgrade	2004	2004			\$100,000	\$100,000		\$0	\$0	\$0
SCWRF Related	SCADA Upgrade	2011	2010			\$120,000	\$120,000	100%	\$0	\$120,000	\$120,000
SCWRF Related	SCADA Upgrade	2018	2008			\$20,000	\$20,000		\$0	\$0	\$0
SCWRF Related	SCADA Upgrade	2022	2008			\$20,000	\$20,000		\$0	\$0	\$0
SCWRF Related	SCADA Upgrade	2026	2008			\$100,000	\$100,000		\$0	\$0	\$0
SCWRF Related	SCADA Upgrade	2030	2008			\$20,000	\$20,000		\$0	\$0	\$0
SCWRF Related	SCADA Upgrade	2034	2008			\$20,000	\$20,000		\$0	\$0	\$0
SCWRF Related	SCADA Upgrade	2038	2008			\$100,000	\$100,000		\$0	\$0	\$0
SCWRF Related	Trash Pump	2002	2000			\$20,000	\$20,000		\$0	\$0	\$0
SCWRF Related	VFD's - 100 HP (1)	2021	2007			\$25,000	\$25,000		\$0	\$0	\$0
SCWRF Related	VFD's - 100 HP (1)	2039	2007			\$25,000	\$25,000		\$0	\$0	\$0
SCWRF Related	VFD's - 20 HP (10)	2021	2007			\$80,000	\$80,000		\$0	\$0	\$0
SCWRF Related	VFD's - 20 HP (10)	2039	2007			\$80,000	\$80,000		\$0	\$0	\$0
SCWRF Related	VFD's (2)	2004	2004			\$14,000	\$14,000		\$0	\$0	\$0
Treatment Related	Post Aerator	2004	2004			\$35,000	\$35,000		\$0	\$0	\$0
Collection Department											
Building Related (not part of plant expansion)	Expand ECSM Building	2011	2009		\$500,000	\$0	\$500,000	80%	\$400,000	\$0	\$400,000
Collection System Related	Replace Splitter	2003	2005			\$60,000	\$60,000		\$0	\$0	\$0
Collection System Related	Replace Splitter	2004	2005			\$30,000	\$30,000		\$0	\$0	\$0
Collection System Related	Silver Creek Trunk Line mining waste clean-u	2019	2010			\$2,000,000	\$2,000,000	50%	\$0	\$1,000,000	\$1,000,000
Collection System Related - enlargement	EC Relief phase II	2003	2005		\$60,850		\$60,850	100%	\$60,850	\$0	\$60,850
Collection System Related - enlargement	EC Relief phase II	2004	2004		\$1,385,100		\$1,385,100	100%	\$1,385,100	\$0	\$1,385,100
Collection System Related - enlargement	EC Relief phase II	2004	2004		\$250,000		\$250,000	100%	\$250,000	\$0	\$250,000
Collection System Related - enlargement	EC Relief phase II	2005	2005		\$10,324,648		\$10,324,648	100%	\$10,324,648	\$0	\$10,324,648
Collection System Related - enlargement	EC Relief phase II	2006	2006		\$2,385,000		\$2,385,000	100%	\$2,385,000	\$0	\$2,385,000
Collection System Related - enlargement	EC Relief phase II	2007	2007		\$360.000		\$360,000	100%	\$360,000	\$0	\$360,000
Collection System Related - enlargement	EC Relief phase II	2008	2008		\$33,000		\$33,000	100%	\$33,000	\$0	\$33,000
Collection System Related - enlargement	Marsac	2004	2004		\$35,000		\$35,000	100%	\$35,000	\$0	\$35,000
Collection System Related - enlargement	Silver Creek Estates Line	2015	2009		\$120,000		\$120,000	100%	\$120,000	\$0	\$120,000
Collection System Related - extension	Treasure Mt Estates phase I	2002	2005			\$330.000	\$330,000	100%	\$0	\$330.000	\$330,000
Collection System Related - rehabilitation	2nd Street Extension	2004	2005			\$50.000	\$50,000		\$0	\$0	\$0
Collection System Related - rehabilitation	5th & Park Ave adi to stairs	2003	2005			\$1,500	\$1,500		\$0	\$0	\$0
Collection System Related - rehabilitation	5th & Park Ave adi to stairs	2004	2005			\$98,500	\$98,500		\$0	\$0	\$0
Collection System Related - rehabilitation	Aerie Backlot	2005	2005			\$20,000	\$20,000		\$0	\$0	\$0
Collection System Related - rehabilitation	Bonanza (Const)	2009	2009			\$120.000	\$120,000		\$0	\$0	\$0
Collection System Related - rehabilitation	Bonanza (Const)	2010	2010			\$800.000	\$800,000		\$0	\$0	\$0
Collection System Related - rehabilitation	Bonanza/Munchkin Rd (Design)	2008	2008			\$50,000	\$50,000		\$0	\$0	\$0
Collection System Related - rehabilitation	Creekside Estates	2005	2005			\$25,000	\$25,000		\$0	\$0	\$0
Collection System Related - rehabilitation	Doubleiack Ct	2012	2008			\$40,000	\$40,000		\$0	\$0	\$0
Collection System Related - rehabilitation	Improvement Projects	2006	2006			\$560,000	\$560,000		\$0	\$0	\$0
Collection System Related - rehabilitation	Improvement Projects	2007	2007			\$110,000	\$110,000		\$0	\$0 \$0	\$0
Collection System Related - rehabilitation	Improvement Projects	2009	2009			\$60,000	\$60,000		\$0	\$0	\$0
Collection System Related - rehabilitation	Ironhorse Condo	2005	2005			\$30,000	\$30,000		\$0	\$0	\$0
Collection System Related - rehabilitation	Jeremy Ranch L.S. Engineering	2010	2009			\$75,000	\$75,000		\$0	\$0	\$0
Collection System Related - rehabilitation	Jeremy Ranch Lift station	2011	2008			\$500.000	\$500,000		\$0	\$0	\$0

Source - see Table 1.

٦

#### SBWRD CAPITAL IMPROVEMENTS PLAN

Capital Improvement Plan (page 5 of 10)													
			COST		Non-CFP	(nominal)			CIP (constant \$s)	)		CFP (constant \$s	1
Project De	scription	<b>BUILD</b> Year	ESTIMATE Year	New Const. Projects	Other Projects	Total	Expensed Renewal Cost	New Const. Projects	Other Projects	Total	New Const. Projects	Other Projects	Total
SCWRF Related	Replace Vehicle V-7	2032	2007	\$0	\$25,000	\$25,000	\$0	\$0	\$41,664	\$41,664	\$0	\$0	\$0
SCWRF Related	Replace Vehicle V-7	2039	2007	\$0	\$25,000	\$25,000	\$0	\$0	\$48,070	\$48,070	\$0	\$0	\$0
SCWRF Related	SCADA Upgrade	2004	2004	\$0	\$100,000	\$100,000	\$100,000	\$0	\$100,000	\$100,000	\$0	\$0	\$0
SCWRF Related	SCADA Upgrade	2011	2010	\$0	\$0	\$0	\$50,000	\$0	\$122,477	\$122,477	\$0	\$122,477	\$122,477
SCWRF Related	SCADA Upgrade	2018	2008	\$0	\$20,000	\$20,000	\$20,000	\$0	\$24,533	\$24,533	\$0	\$0	\$0
SCWRF Related	SCADA Upgrade	2022	2008	\$0	\$20,000	\$20,000	\$20,000	\$0	\$26,623	\$26,623	\$0	\$0	\$0
SCWRF Related	SCADA Upgrade	2026	2008	\$0	\$100,000	\$100,000	\$100,000	\$0	\$144,448	\$144,448	\$0	\$0	\$0
SCWRF Related	SCADA Upgrade	2030	2008	\$0	\$20,000	\$20,000	\$20,000	\$0	\$31,350	\$31,350	\$0	\$0	\$0
SCWRF Related	SCADA Upgrade	2034	2008	\$0	\$20,000	\$20,000	\$20,000	\$0	\$34,019	\$34,019	\$0	\$0	\$0
SCWRF Related	SCADA Upgrade	2038	2008	\$0	\$100,000	\$100,000	\$100,000	\$0	\$184,581	\$184,581	\$0	\$0	\$0
SCWRF Related	Trash Pump	2002	2000	\$0	\$20,000	\$20,000	\$0	\$0	\$20,834	\$20,834	\$0	\$0	\$0
SCWRF Related	VFD's - 100 HP (1)	2021	2007	\$0	\$25,000	\$25,000	\$25,000	\$0	\$33,278	\$33,278	\$0	\$0	\$0
SCWRF Related	VFD's - 100 HP (1)	2039	2007	\$0	\$25,000	\$25,000	\$25,000	\$0	\$48,070	\$48,070	\$0	\$0	\$0
SCWRF Related	VFD's - 20 HP (10)	2021	2007	\$0	\$80,000	\$80,000	\$80,000	\$0	\$106,490	\$106,490	\$0	\$0	\$0
SCWRF Related	VFD's - 20 HP (10)	2039	2007	\$0	\$80,000	\$80,000	\$80,000	\$0	\$153,824	\$153,824	\$0	\$0	\$0
SCWRF Related	VFD's (2)	2004	2004	\$0	\$14,000	\$14,000	\$0	\$0	\$14,000	\$14,000	\$0	\$0	\$0
Treatment Related	Post Aerator	2004	2004	\$0	\$35,000	\$35,000	\$0	\$0	\$35,000	\$35,000	\$0	\$0	\$0
Collection Department													
Building Related (not part of plant expansion)	Expand ECSM Building	2011	2009	\$100,000	\$0	\$100,000	\$0	\$556,513	\$0	\$556,513	\$445,210	\$0	\$445,210
Collection System Related	Replace Splitter	2003	2005	\$0	\$60.000	\$60,000	\$0	\$0	\$57,598	\$57,598	\$0	\$0	\$0
Collection System Related	Replace Splitter	2004	2005	\$0	\$30,000	\$30,000	\$0	\$0	\$29,393	\$29,393	\$0	\$0	\$0
Collection System Related	Silver Creek Trunk Line mining waste clean-u	2004	2000	\$0	\$1,000,000	\$1,000,000	\$0	\$0	\$2,403,733	\$2,403,733	\$0	\$1,201,867	\$1,201,867
Collection System Related - enlargement	EC Relief phase II	2003	2005	\$0	\$0	\$0	\$0	\$54.671	\$0	\$54.671	\$54.671	\$0	\$54.671
Collection System Related - enlargement	EC Relief phase II	2003	2003	\$0	\$0	\$0	\$0	\$1.385.100	\$0	\$1.385.100	\$1.385.100	\$0	\$1.385.100
Collection System Related - enlargement	EC Relief phase II	2004	2004	\$0	\$0	\$0	\$0	\$250,000	\$0	\$250,000	\$250,000	\$0	\$250,000
Collection System Related - chargement	EC Relief phase II	2004	2004	\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$10 324 648	\$0	\$10 324 648	\$10 324 648	\$0 \$0	\$10 324 648
Collection System Related - enlargement	EC Relief phase II	2005	2005	\$0 \$0	\$0 \$0	\$0 \$0	00 \$0	\$2 385 000	φ0 \$0	\$2 385 000	\$2 385 000	\$0 \$0	\$2 385 000
Collection System Related - enlargement	EC Relief phase II	2000	2000	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$2,000,000	φ0 ©0	\$2,000,000	\$2,000,000	\$0 \$0	\$2,000,000
Collection System Related - enlargement	EC Relief phase II	2007	2007	\$0 \$0	40 60	\$0 \$0	\$U \$0	\$300,000	\$0 \$0	\$300,000	\$300,000	30 \$0	\$300,000
Collection System Related - enlargement	EC Reliei priase li	2006	2008	90 ©0	30 60	90 ©0	\$0 \$0	\$35,000	\$0 \$0	\$35,000	\$33,000	30 \$0	\$33,000
Collection System Related - enlargement	Marsac Silver Creek Feletes Line	2004	2004	90 E0	40 60	\$0 ©0	\$U \$0	\$35,000 \$165,464	30 80	\$35,000 \$465,464	\$35,000	30 80	\$35,000 \$465,464
Collection System Related - enlargement	Silver Creek Estates Line	2015	2009	\$U 60	\$U ©0	\$U ©0	40 ¢0	\$105,401	φU 6240.204	\$105,401	\$105,401	00 6240-204	\$105,401 \$210,201
Collection System Related - extension	Predsure Mt Estates phase I	2002	2005	\$U 60	\$U 650.000	ېل ۵۵	\$U ©0	\$U ©0	\$310,361 © 40,000	\$310,301 £40,000	\$U \$0	\$310,361	\$310,361 ¢0
Collection System Related - renabilitation	2nd Street Extension	2004	2005	\$U 60	\$50,000	\$50,000	\$U ©0	\$0 ©0	\$40,909 £1,440	\$40,909 \$1,440	\$U ©0	\$U 80	\$U 80
Collection System Related - renabilitation	Stn & Park Ave adj to stairs	2003	2005	\$U	\$1,500	\$1,500	\$U \$0	30	\$1,440	\$1,440	\$U \$0	\$U \$0	\$U 80
Collection System Related - rehabilitation	5th & Park Ave adj to stairs	2004	2005	\$0	\$98,500	\$98,500	\$U ©0	\$0	\$96,508	\$96,508	\$U \$0	\$0	\$U 60
Collection System Related - renabilitation	Aerie Backlot	2005	2005	\$U	\$20,000	\$20,000	0¢	\$U	\$20,000	\$20,000	\$U ©0	\$0	\$U \$0
Collection System Related - rehabilitation	Bonanza (Const)	2009	2009	\$U	\$120,000	\$120,000	\$120,000	\$0	\$120,000	\$120,000	\$0	\$0	\$U 00
Collection System Related - rehabilitation	Bonanza (Const)	2010	2010	\$0	\$800,000	\$800,000	\$800,000	\$0	\$800,000	\$800,000	\$0	\$0	\$0
Collection System Related - rehabilitation	Bonanza/Munchkin Rd (Design)	2008	2008	\$0	\$50,000	\$50,000	\$50,000	\$0	\$50,000	\$50,000	\$0	\$0	\$0
Collection System Related - rehabilitation	Creekside Estates	2005	2005	\$0	\$25,000	\$25,000	\$0	\$0	\$25,000	\$25,000	\$0	\$0	\$0
Collection System Related - rehabilitation	Doublejack Ct	2012	2008	\$0	\$40,000	\$40,000	\$40,000	\$0	\$43,406	\$43,406	\$0	\$0	\$0
Collection System Related - rehabilitation	Improvement Projects	2006	2006	\$0	\$560,000	\$560,000	\$560,000	\$0	\$560,000	\$560,000	\$0	\$0	\$0
Collection System Related - rehabilitation	Improvement Projects	2007	2007	\$0	\$110,000	\$110,000	\$110,000	\$0	\$110,000	\$110,000	\$0	\$0	\$0
Collection System Related - rehabilitation	Improvement Projects	2009	2009	\$0	\$60,000	\$60,000	\$60,000	\$0	\$60,000	\$60,000	\$0	\$0	\$0
Collection System Related - rehabilitation	Ironhorse Condo	2005	2005	\$0	\$30,000	\$30,000	\$0	\$0	\$30,000	\$30,000	\$0	\$0	\$0
Collection System Related - rehabilitation	Jeremy Ranch L.S. Engineering	2010	2009	\$0	\$75,000	\$75,000	\$75,000	\$0	\$76,548	\$76,548	\$0	\$0	\$0
Collection System Related - rehabilitation	Jeremy Ranch Lift station	2011	2008	\$0	\$500,000	\$500,000	\$500,000	\$0	\$531,605	\$531,605	\$0	\$0	\$0

Source – see Table 1.

.

#### Table 11 SBWRD CAPITAL IMPROVEMENTS PLAN Capital Improvement Plan (page 6 of 10) CIP (nominal) CFP (nominal) COST Capital Facility BUILD Project Description ESTIMATE New Const. New Const. Capacity CFP % Year Other Projects Total Other Projects Expansion Projects Projects Year Collection System Related - rehabilitation Jeremy Ranch Lift station 2005 \$50,000 \$50,000 \$0 2035 \$0 Collection System Related - rehabilitation \$40,000 \$0 Keystone Ct 2012 2008 \$40,000 \$0 Collection System Related - rehabilitation Norfolk to Woodside Recon. \$0 \$0 \$0 2009 2009 \$0 Collection System Related - rehabilitation Norfolk/13th/14th/Lower Woodside 2008 2008 \$1,453,000 \$1,453,000 6% \$0 \$89,795 \$0 Collection System Related - rehabilitation Park City High School 2004 2005 \$25,000 \$25,000 \$0 \$100,000 \$0 Collection System Related - rehabilitation Pre-Disaster Mitigation 2014 2010 \$100,000 50% \$50.000 \$1,000,000 \$0 Collection System Related - rehabilitation Pre-Disaster Mitigation 2015 2010 \$1,000,000 50% \$500,000 Collection System Related - rehabilitation 2005 2005 \$30,000 \$30,000 0% \$0 Prospect Ave. \$0 \$125,000 \$125,000 \$62,500 Collection System Related - rehabilitation Silver Creek Trunkline CIPP 2017 2008 50% \$0 \$1.500.000 Silver Creek Trunkline CIPP 2018 2008 \$1,500,000 50% \$750.000 \$0 Collection System Related - rehabilitation \$1,500,000 Collection System Related - rehabilitation Silver Creek Trunkline CIPP 2019 2008 \$1,500,000 50% \$750.000 \$0 Collection System Related - rehabilitation Silver Creek Trunkline CIPP \$1,500,000 \$1,500,000 \$750.000 \$0 2020 2008 50% \$40.000 Collection System Related - rehabilitation Singlejack Ct 2012 2008 \$40.000 \$0 \$0 Spring Creek Lift Station 2025 2005 \$50,000 \$50,000 43% \$0 \$21.500 Collection System Related - rehabilitation \$0 Collection System Related - rehabilitation Summit Pk lift stations #1 2006 2006 \$160,000 \$160,000 43% \$68,800 Collection System Related - rehabilitation Summit Pk lift stations #1 2031 2005 \$100,000 \$100,000 \$0 \$0 Collection System Related - rehabilitation Swede Alley Rehab. 2012 2008 \$720,000 \$720,000 0% \$0 \$0 \$0 Collection System Related - rehabilitation Upper Park Avenue 2003 2005 \$8.000 \$8.000 \$0 Collection System Related - rehabilitation Upper Park Avenue 2004 2005 \$545,100 \$545,100 \$0 \$0 Collection System Related - rehabilitation Upper Park Avenue 2005 2005 \$30,000 \$30,000 \$0 \$0 Collection System Related - rehabilitation Woodside Realignment 2006 2006 \$75,000 \$75,000 \$0 \$0 \$40,000 \$0 \$0 Collection System Related - remove Fairway PS 2006 2006 \$40,000 2012 2009 \$50.000 \$0 \$0 Collection System Related - replacement Empire Ave. (Const) \$50,000 \$25,000 \$0 \$0 Collection System Related - replacement Empire Ave. (Design) 2011 2009 \$25,000 Collection System Related - replacement Hillside (4") 2009 2009 \$40,000 \$40.000 \$0 \$0 \$800.000 \$0 \$0 Collection System Related - replacement Lowell Ave.(Const) 2012 2009 \$800.000 Collection System Related - replacement Lowell Ave.(Design) 2011 2009 \$25.000 \$25,000 \$0 \$0 \$260,000 \$0 \$0 Collection System Related - replacement Prospect (8") 2006 2006 \$260,000 Collection System Related - replacement Sandridge (8") 2004 2005 \$195,000 \$195.000 \$0 \$0 \$200.000 \$0 \$0 Collection System Related - replacement Summit Park 2010 2010 \$200.000 Collection System Related - replacement Summit Park 2011 2010 \$200.000 \$200,000 \$0 \$0 \$200,000 \$0 \$0 Collection System Related - replacement Summit Park 2012 2010 \$200,000 Collection System Related - replacement Summit Park 2013 2010 \$200,000 \$200.000 \$0 \$0 \$200.000 \$0 Collection System Related - replacement Summit Park 2014 2010 \$200.000 \$0 2015 2010 \$200.000 \$200,000 \$0 \$0 Collection System Related - replacement Summit Park Collection System Related - replacement Chambers (6") 2004 2005 \$175,000 \$175,000 \$0 \$0 Collection System Related - replacement Eliminate Summit Pk lift stations #2 2013 2005 \$160,000 \$160,000 55% \$0 \$88,000 \$0 Collection System Related - replacement Eliminate Summit Pk lift stations #3 2013 2005 \$190,000 \$190,000 80% \$152,000 \$0 Collection System Related - replacement Eliminate Summit Pk lift stations #4 2014 2005 \$190.000 \$190.000 72% \$136,800

Source - see Table 1.

Collection System Related - replacement

Computer Related

Eliminate Summit Pk lift stations #6

Collection Dept. Computer Upgrade

Collection Dept, Computer Upgrade

Collection Dept. Computer Upgrade

Collection Dept. Computer Upgrade

Collection Dept. Computer Upgrade

Collection Dept. Computer Upgrade

Collection Dept work order hardware and soft

2014

2002

2010

2014

2018

2022

2026

2030

2005

2005

2005

2005

2005

2009

2009

2009

\$135,000

\$25,000

\$10,000

\$10.000

\$10.000

\$10,000

\$10,000

\$10,000

\$135,000

\$25,000

\$10.000

\$10.000

\$10,000

\$10,000

\$10.000

\$10.000

50%

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$67,500

\$0

\$0

\$0

\$0

\$0

\$0

\$0

Total

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0 \$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$88,000 \$152.000

\$136,800

\$67,500

\$0

\$0

\$0

\$0

\$0

\$0

\$0

\$89,795

\$50,000

\$500,000

\$62,500

\$750.000

\$750,000

\$750.000

\$21,500

\$68,800

### SBWRD CAPITAL IMPROVEMENTS PLAN

Capital Improvement Plan (page 6 of 10)	
---	--

			0007		Non-CFP	(nominal)			CIP (constant \$s)			CFP (constant \$s)	1
Project De	escription	BUILD Year	ESTIMATE Year	New Const. Projects	Other Projects	Total	Expensed Renewal Cost	New Const. Projects	Other Projects	Total	New Const. Projects	Other Projects	Total
Collection System Related - rehabilitation	Jeremy Ranch Lift station	2035	2005	\$0	\$50,000	\$50,000	\$50.000	\$0	\$92,291	\$92,291	\$0	\$0	\$0
Collection System Related - rehabilitation	Keystone Ct	2012	2008	\$0	\$40,000	\$40,000	\$40,000	\$0	\$43,406	\$43,406	\$0	\$0	\$0
Collection System Related - rehabilitation	Norfolk to Woodside Recon.	2009	2009	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Collection System Related - rehabilitation	Norfolk/13th/14th/Lower Woodside	2008	2008	\$0	\$1,363,205	\$1,363,205	\$1,363,205	\$0	\$1,453,000	\$1,453,000	\$0	\$89,795	\$89,795
Collection System Related - rehabilitation	Park City High School	2004	2005	\$0	\$25,000	\$25,000	\$0	\$0	\$24,494	\$24,494	\$0	\$0	\$0
Collection System Related - rehabilitation	Pre-Disaster Mitigation	2014	2010	\$0	\$50,000	\$50,000	\$50,000	\$0	\$108,515	\$108,515	\$0	\$54,258	\$54,258
Collection System Related - rehabilitation	Pre-Disaster Mitigation	2015	2010	\$0	\$500,000	\$500,000	\$500,000	\$0	\$1,107,553	\$1,107,553	\$0	\$553,777	\$553,777
Collection System Related - rehabilitation	Prospect Ave.	2005	2005	\$0	\$30,000	\$30,000	\$0	\$0	\$30,000	\$30,000	\$0	\$0	\$0
Collection System Related - rehabilitation	Silver Creek Trunkline CIPP	2017	2008	\$62,500	\$0	\$62,500	\$62,500	\$202,387	\$0	\$202,387	\$101,193	\$0	\$101,193
Collection System Related - rehabilitation	Silver Creek Trunkline CIPP	2018	2008	\$750,000	\$0	\$750,000	\$750,000	\$2,562,217	\$0	\$2,562,217	\$1,281,108	\$0	\$1,281,108
Collection System Related - rehabilitation	Silver Creek Trunkline CIPP	2019	2008	\$750,000	\$0	\$750,000	\$750,000	\$2,703,139	\$0	\$2,703,139	\$1,351,569	\$0	\$1,351,569
Collection System Related - rehabilitation	Silver Creek Trunkline CIPP	2020	2008	\$750,000	\$0	\$750,000	\$750,000	\$2,851,811	\$0	\$2,851,811	\$1,425,906	\$0	\$1,425,906
Collection System Related - rehabilitation	Singlejack Ct	2012	2008	\$0	\$40,000	\$40,000	\$40,000	\$0	\$43,406	\$43,406	\$0	\$0	\$0
Collection System Related - rehabilitation	Spring Creek Lift Station	2025	2005	\$0	\$28,500	\$28,500	\$28,500	\$0	\$75,236	\$75,236	\$0	\$32,352	\$32,352
Collection System Related - rehabilitation	Summit Pk lift stations #1	2006	2006	\$0	\$91,200	\$91,200	\$0	\$0	\$160,000	\$160,000	\$0	\$68,800	\$68,800
Collection System Related - rehabilitation	Summit Pk lift stations #1	2031	2005	\$0	\$100,000	\$100,000	\$100,000	\$0	\$170,097	\$170,097	\$0	\$0	\$0
Collection System Related - rehabilitation	Swede Alley Rehab.	2012	2008	\$0	\$720,000	\$720,000	\$720,000	\$0	\$781,311	\$781,311	\$0	\$0	\$0
Collection System Related - rehabilitation	Upper Park Avenue	2003	2005	\$0	\$8,000	\$8,000	\$0	\$0	\$7,680	\$7,680	\$0	\$0	\$0
Collection System Related - rehabilitation	Upper Park Avenue	2004	2005	\$0	\$545,100	\$545,100	\$0	\$0	\$534,076	\$534,076	\$0	\$0	\$0
Collection System Related - rehabilitation	Upper Park Avenue	2005	2005	\$0	\$30,000	\$30,000	\$0	\$0	\$30,000	\$30,000	\$0	\$0	\$0
Collection System Related - rehabilitation	Woodside Realignment	2006	2006	\$0	\$75,000	\$75,000	\$0	\$0	\$75,000	\$75,000	\$0	\$0	\$0
Collection System Related - remove	Fairway PS	2006	2006	\$0	\$40,000	\$40,000	\$0	\$0	\$40,000	\$40,000	\$0	\$0	\$0
Collection System Related - replacement	Empire Ave. (Const)	2012	2009	\$0	\$50,000	\$50,000	\$50,000	\$0	\$53,160	\$53,160	\$0	\$0	\$0
Collection System Related - replacement	Empire Ave. (Design)	2011	2009	\$0	\$25,000	\$25,000	\$25,000	\$0	\$26,043	\$26,043	\$0	\$0	\$0
Collection System Related - replacement	Hillside (4")	2009	2009	\$0	\$40,000	\$40,000	\$40,000	\$0	\$40,000	\$40,000	\$0	\$0	\$0
Collection System Related - replacement	Lowell Ave.(Const)	2012	2009	\$0	\$800,000	\$800,000	\$800,000	\$0	\$850,567	\$850,567	\$0	\$0	\$0
Collection System Related - replacement	Lowell Ave.(Design)	2011	2009	\$0	\$25,000	\$25,000	\$25,000	\$0	\$26,043	\$26,043	\$0	\$0	\$0
Collection System Related - replacement	Prospect (8")	2006	2006	\$0	\$260,000	\$260,000	\$0	\$0	\$260,000	\$260,000	\$0	\$0	\$0
Collection System Related - replacement	Sandridge (8")	2004	2005	\$0	\$195,000	\$195,000	\$0	\$0	\$191,056	\$191,056	\$0	\$0	\$0
Collection System Related - replacement	Summit Park	2010	2010	\$0	\$200,000	\$200,000	\$200,000	\$0	\$200,000	\$200,000	\$0	\$0	\$0
Collection System Related - replacement	Summit Park	2011	2010	\$0	\$200,000	\$200,000	\$200,000	\$0	\$204,128	\$204,128	\$0	\$0	\$0
Collection System Related - replacement	Summit Park	2012	2010	\$0	\$200,000	\$200,000	\$200,000	\$0	\$208,342	\$208,342	\$0	\$0	\$0
Collection System Related - replacement	Summit Park	2013	2010	\$0	\$200,000	\$200,000	\$200,000	\$0	\$212,642	\$212,642	\$0	\$0	\$0
Collection System Related - replacement	Summit Park	2014	2010	\$0	\$200,000	\$200,000	\$200,000	\$0	\$217,031	\$217,031	\$0	\$0	\$0
Collection System Related - replacement	Summit Park	2015	2010	\$0	\$200,000	\$200,000	\$200,000	\$0	\$221,511	\$221,511	\$0	\$0	\$0
Collection System Related - replacement	Chambers (6")	2004	2005	\$0	\$175,000	\$175,000	\$0	\$0	\$171,461	\$171,461	\$0	\$0	\$0
Collection System Related - replacement	Eliminate Summit Pk lift stations #2	2013	2005	\$0	\$72,000	\$72,000	\$72,000	\$0	\$188,410	\$188,410	\$0	\$103,625	\$103,625
Collection System Related - replacement	Eliminate Summit Pk lift stations #3	2013	2005	\$0	\$38,000	\$38,000	\$38,000	\$0	\$223,737	\$223,737	\$0	\$178,989	\$178,989
Collection System Related - replacement	Eliminate Summit Pk lift stations #4	2014	2005	\$0	\$53,200	\$53,200	\$53,200	\$0	\$228,355	\$228,355	\$0	\$164,415	\$164,415
Collection System Related - replacement	Eliminate Summit Pk lift stations #6	2014	2005	\$0	\$67,500	\$67,500	\$67,500	\$0	\$162,252	\$162,252	\$0	\$81,126	\$81,126
Computer Related	Collection Dept work order hardware and soft	2002	2005	\$0	\$25,000	\$25,000	\$0	\$0	\$23,514	\$23,514	\$0	\$0	\$0
Computer Related	Collection Dept. Computer Upgrade	2010	2005	\$0	\$10,000	\$10,000	\$0	\$0	\$11,076	\$11,076	\$0	\$0	\$0
Computer Related	Collection Dept. Computer Upgrade	2014	2005	\$0	\$10,000	\$10,000	\$0	\$0	\$12,019	\$12,019	\$0	\$0	\$0
Computer Related	Collection Dept. Computer Upgrade	2018	2005	\$0	\$10,000	\$10,000	\$0	\$0	\$13,042	\$13,042	\$0	\$0	\$0
Computer Related	Collection Dept. Computer Upgrade	2022	2009	\$0	\$10,000	\$10,000	\$0	\$0	\$13,042	\$13,042	\$0	\$0	\$0
Computer Related	Collection Dept. Computer Upgrade	2026	2009	\$0	\$10,000	\$10,000	\$0	\$0	\$14,153	\$14,153	\$0	\$0	\$0
Computer Related	Collection Dept. Computer Upgrade	2030	2009	\$0	\$10,000	\$10,000	\$0	\$0	\$15,358	\$15,358	\$0	\$0	\$0

Source – see Table 1.

#### SBWRD CAPITAL IMPROVEMENTS PLAN

			COST	Capital Facility		CIP (nominal)				CFP (nominal)	
	Project Description	BUILD Year	ESTIMATE Year	Capacity Expansion	New Const. Projects	Other Projects	Total	CFP %	New Const. Projects	Other Projects	Total
Computer Related	Collection Dept. Computer Upgrade	2034	2009			\$10,000	\$10,000		\$0	\$0	\$0
Computer Related	Collection Dept. Computer Upgrade	2038	2009			\$10,000	\$10,000		\$0	\$0	\$0
For Future Use (1)		Recurring	Recurring			\$0	\$0		\$0	\$0	\$0
For Future Use (2)		Recurring	Recurring			\$0	\$0		\$0	\$0	\$0
Pump Station Related	P. S. SCADA (JRPS)	2002	2005			\$5,000	\$5,000		\$0	\$0	\$0
System Rehabilitation Fund	To Be Identified	Recurring	Recurring			\$11,400,000	\$11,400,000		\$0	\$0	\$0
Vehicles and Equipment	New Work Truck	2005	2005			\$40,000	\$40,000		\$0	\$0	\$0
Vehicles and Equipment	Off Road Vehhicle	2004	2004			\$15,000	\$15,000		\$0	\$0	\$0
Vehicles and Equipment	Off Road Vehicle	2001	2005			\$100,000	\$100,000		\$0	\$0	\$0
Vehicles and Equipment	Off Road Vehicle	2015	2008			\$100,000	\$100,000		\$0	\$0	\$0
Vehicles and Equipment	Off Road Vehicle	2030	2008			\$100,000	\$100,000		\$0	\$0	\$0
Vehicles and Equipment	Purchase Small Jet Truck	2013	2008			\$250,000	\$250,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Backhoe	2015	2008			\$70,000	\$70,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Backhoe	2030	2008			\$80,000	\$80,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2009	2009			\$45,000	\$45,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2011	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2013	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2014	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2016	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2018	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2019	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2021	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2023	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2024	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2026	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2028	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2029	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2031	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2033	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2034	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2036	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2038	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2039	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2040	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Large Jet Truck	2007	2008			\$285,000	\$285,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Large Jet Truck	2017	2008			\$300,000	\$300,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Large Jet Truck	2027	2008			\$300.000	\$300,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Large Jet Truck	2037	2008			\$300,000	\$300,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Pick-up	2009	2009			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Pick-up	2014	2008			\$25,000	\$25,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Pick-up	2019	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Pick-up	2024	2008			\$50,000	\$50,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Pick-up	2029	2008			\$50,000	\$50,000		\$0	0¢ 0	\$0
Vehicles and Equipment	Replace Pick-up	2034	2008			\$50,000	\$50,000		\$0	0¢ 02	\$0
Vehicles and Equipment	Replace Pick-up	2039	2008			\$50,000	\$50,000		\$0	\$0 \$0	\$0
Vehicles and Equipment	Replace Rod Machine	2005	2008			\$38,000	\$38,000		\$0	90 \$0	\$0 \$0
Vehicles and Equipment	Dealers Deal Machine	2000	2000			\$40,000	¢40,000		¢0	φ0 ¢0	¢0

Source – see Table 1.

#### SBWRD CAPITAL IMPROVEMENTS PLAN

Capital Improvement Fiail (page /													
			COST		Non-CFP	(nominal)			CIP (constant \$s)			CFP (constant \$s	
	Project Description	BUILD Year	ESTIMATE Year	New Const. Projects	Other Projects	Total	Expensed Renewal Cost	New Const. Projects	Other Projects	Total	New Const. Projects	Other Projects	Total
Computer Related	Collection Dept. Computer Upgrade	2034	2009	\$0	\$10,000	\$10,000	\$0	\$0	\$16,666	\$16,666	\$0	\$0	\$0
Computer Related	Collection Dept. Computer Upgrade	2038	2009	\$0	\$10,000	\$10,000	\$0	\$0	\$18,085	\$18,085	\$0	\$0	\$0
For Future Use (1)		Recurring	Recurring	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
For Future Use (2)		Recurring	Recurring	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pump Station Related	P. S. SCADA (JRPS)	2002	2005	\$0	\$5,000	\$5,000	\$0	\$0	\$4,703	\$4,703	\$0	\$0	\$0
System Rehabilitation Fund	To Be Identified	Recurring	Recurring	\$0	\$11,400,000	\$11,400,000	\$0	\$0	\$20,329,128	\$20,329,128	\$0	\$0	\$0
Vehicles and Equipment	New Work Truck	2005	2005	\$0	\$40,000	\$40,000	\$0	\$0	\$40,000	\$40,000	\$0	\$0	\$0
Vehicles and Equipment	Off Road Vehhicle	2004	2004	\$0	\$15,000	\$15,000	\$0	\$0	\$15,000	\$15,000	\$0	\$0	\$0
Vehicles and Equipment	Off Road Vehicle	2001	2005	\$0	\$100,000	\$100,000	\$0	\$0	\$92,153	\$92,153	\$0	\$0	\$0
Vehicles and Equipment	Off Road Vehicle	2015	2008	\$0	\$100,000	\$100,000	\$0	\$0	\$115,375	\$115,375	\$0	\$0	\$0
Vehicles and Equipment	Off Road Vehicle	2030	2008	\$0	\$100,000	\$100,000	\$0	\$0	\$156,749	\$156,749	\$0	\$0	\$0
Vehicles and Equipment	Purchase Small Jet Truck	2013	2008	\$0	\$250,000	\$250,000	\$0	\$0	\$276,888	\$276,888	\$0	\$0	\$0
Vehicles and Equipment	Replace Backhoe	2015	2008	\$0	\$70,000	\$70,000	\$0	\$0	\$80,762	\$80,762	\$0	\$0	\$0
Vehicles and Equipment	Replace Backhoe	2030	2008	\$0	\$80,000	\$80,000	\$0	\$0	\$125,399	\$125,399	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2009	2009	\$0	\$45,000	\$45,000	\$0	\$0	\$45,000	\$45,000	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2011	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$53,160	\$53,160	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2013	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$55,378	\$55,378	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2014	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$56,521	\$56,521	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2016	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$58,878	\$58,878	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2018	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$61,334	\$61,334	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2019	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$62,600	\$62,600	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2021	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$65,211	\$65,211	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2023	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$67,930	\$67,930	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2024	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$69,332	\$69,332	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2026	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$72,224	\$72,224	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2028	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$75,236	\$75,236	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2029	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$76,789	\$76,789	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2031	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$79,992	\$79,992	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2033	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$83,328	\$83,328	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2034	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$85,048	\$85,048	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2036	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$88,596	\$88,596	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2038	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$92,291	\$92,291	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2039	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$94,196	\$94,196	\$0	\$0	\$0
Vehicles and Equipment	Replace Crew Truck	2040	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$96,140	\$96,140	\$0	\$0	\$0
Vehicles and Equipment	Replace Large Jet Truck	2007	2008	\$0	\$285,000	\$285,000	\$0	\$0	\$279,236	\$279,236	\$0	\$0	\$0
Vehicles and Equipment	Replace Large Jet Truck	2017	2008	\$0	\$300,000	\$300,000	\$0	\$0	\$360,560	\$360,560	\$0	\$0	\$0
Vehicles and Equipment	Replace Large Jet Truck	2027	2008	\$0	\$300,000	\$300,000	\$0	\$0	\$442,290	\$442,290	\$0	\$0	\$0
Vehicles and Equipment	Replace Large Jet Truck	2037	2008	\$0	\$300,000	\$300,000	\$0	\$0	\$542,545	\$542,545	\$0	\$0	\$0
Vehicles and Equipment	Replace Pick-up	2009	2009	\$0	\$30,000	\$30,000	\$0	\$0	\$30,000	\$30,000	\$0	\$0	\$0
Vehicles and Equipment	Replace Pick-up	2014	2008	\$0	\$25,000	\$25,000	\$0	\$0	\$28,260	\$28,260	\$0	\$0	\$0
Vehicles and Equipment	Replace Pick-up	2019	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$62,600	\$62,600	\$0	\$0	\$0
Vehicles and Equipment	Replace Pick-up	2024	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$69,332	\$69,332	\$0	\$0	\$0
Vehicles and Equipment	Replace Pick-up	2029	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$76,789	\$76,789	\$0	\$0	\$0
Vehicles and Equipment	Replace Pick-up	2034	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$85,048	\$85,048	\$0	\$0	\$0
Vehicles and Equipment	Replace Pick-up	2039	2008	\$0	\$50,000	\$50,000	\$0	\$0	\$94,196	\$94,196	\$0	\$0	\$0
Vehicles and Equipment	Replace Rod Machine	2005	2008	\$0	\$38,000	\$38,000	\$0	\$0	\$35,741	\$35,741	\$0	\$0	\$0
Vehicles and Equipment	Replace Rod Machine	2020	2008	\$0	\$40,000	\$40,000	\$0	\$0	\$51,113	\$51,113	\$0	\$0	\$0

Source – see Table 1.

#### SBWRD CAPITAL IMPROVEMENTS PLAN

Capital Improvement Plan (page 8 of 10)											
			COST	Capital Eacility		CIP (nominal)				CFP (nominal)	
Pro	oject Description	BUILD Year	ESTIMATE Year	Capacity Expansion	New Const. Projects	Other Projects	Total	CFP %	New Const. Projects	Other Projects	Total
Vehicles and Equipment	Replace Rod Machine	2035	2008			\$40,000	\$40,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Small Jet Cleaner	2022	2008			\$250,000	\$250,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Small Jet Cleaner	2032	2008			\$250,000	\$250,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-4	2007	2007			\$47,000	\$47,000		\$0	\$0	\$0
Vehicles and Equipment	TV inspection truck	2003	2005			\$125,000	\$125,000		\$0	\$0	\$0
Vehicles and Equipment	TV inspection Truck Replacement	2012	2008			\$200,000	\$200,000		\$0	\$0	\$0
Vehicles and Equipment	TV inspection Truck Replacement	2020	2008			\$200,000	\$200,000		\$0	\$0	\$0
Vehicles and Equipment	TV inspection Truck Replacement	2028	2008			\$200,000	\$200,000		\$0	\$0	\$0
Vehicles and Equipment	TV inspection Truck Replacement	2036	2008			\$200,000	\$200,000		\$0	\$0	\$0
Engineering Department											
Capital Facilities Planning	Engineering & other consulting	Recurring	Recurring			\$5,000,000	\$5,000,000		\$0	\$5,000,000	\$5,000,000
Computer Related	Computer Upgrade	2002	2000			\$15,000	\$15,000		\$0	\$0	\$0
Computer Related	Computer Upgrade	2004	2004			\$15,000	\$15,000		\$0	\$0	\$0
Engineering Related	Flow Monitoring	2005	2005			\$16,200	\$16,200		\$0	\$0	\$0
Engineering Related	Flow Monitoring	2006	2006			\$16,000	\$16,000		\$0	\$0	\$0
Engineering Related	Flow Monitoring	2007	2007			\$17,000	\$17,000		\$0	\$0	\$0
Engineering Related	Flow Monitoring	2008	2008			\$24,000	\$24,000	50%	\$0	\$12,000	\$12,000
Engineering Related	Flow Monitoring	2011	2007			\$24,000	\$24,000	50%	\$0	\$12,000	\$12,000
Engineering Related	Flow Monitoring	2015	2007			\$24,000	\$24,000	50%	\$0	\$12,000	\$12,000
Engineering Related	Flow Monitoring	2019	2007			\$24,000	\$24,000	50%	\$0	\$12,000	\$12,000
Engineering Related	Flow Monitoring	2023	2007			\$24,000	\$24,000	50%	\$0	\$12,000	\$12,000
Engineering Related	Flow Monitoring	2027	2007			\$24,000	\$24,000	50%	\$0	\$12,000	\$12,000
Engineering Related	Flow Monitoring	2031	2007			\$24,000	\$24,000	50%	\$0	\$12,000	\$12,000
Engineering Related	Flow Monitoring	2035	2007			\$24,000	\$24,000	50%	\$0	\$12,000	\$12,000
Engineering Related	Flow Monitoring	2041	2007			\$24,000	\$24,000	50%	\$0	\$12,000	\$12,000
Engineering Related	Large Format Scanner	2005	2005			\$11,500	\$11,500		\$0	\$0	\$0
Engineering Related	Large Format Scanner	2014	2007			\$20,000	\$20,000		\$0	\$0	\$0
Engineering Related	Large Format Scanner	2022	2007			\$20,000	\$20,000		\$0	\$0	\$0
Engineering Related	Large Format Scanner	2030	2007			\$20,000	\$20,000		\$0	\$0	\$0
Engineering Related	Large Format Scanner	2038	2007			\$20,000	\$20,000		\$0	\$0	\$0
Engineering Related	Large Format Scanner	2046	2007			\$20,000	\$20,000		\$0	\$0	\$0
Engineering Related	Replace GPS Unit	2012	2007			\$50,000	\$50,000		\$0	\$0	\$0
Engineering Related	Replace GPS Unit	2020	2007			\$50,000	\$50,000		\$0	\$0	\$0
Engineering Related	Replace GPS Unit	2028	2007			\$50,000	\$50,000		\$0	\$0	\$0
Engineering Related	Replace GPS Unit	2036	2007			\$50,000	\$50,000		\$0	\$0	\$0
Engineering Related	Replace GPS Unit	2044	2007			\$50,000	\$50,000		\$0	\$0	\$0
Engineering Related	Replace Plotter	2012	2007			\$10,000	\$10,000		\$0	\$0	\$0
Engineering Related	Replace Plotter	2020	2007			\$10,000	\$10,000		\$0	\$0	\$0
Engineering Related	Replace Plotter	2028	2007			\$10,000	\$10,000		\$0	\$0	\$0
Engineering Related	Replace Plotter	2036	2007			\$10,000	\$10,000		\$0	\$0	\$0
Engineering Related	Replace Plotter	2044	2007			\$10,000	\$10,000		\$0	\$0	\$0
LAN Computer Related	Server	2002	2000			\$15,000	\$15,000		\$0	\$0	\$0
LAN Computer Related	Server	2005	2005			\$10,000	\$10,000		\$0	\$0	\$0
LAN Computer Related	Server	2010	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2010	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2011	2007			\$15,000	\$15,000		\$0	\$0	\$0
LAN Computer Related	Server	2012	2007			\$7,000	\$7,000		\$0	\$0	\$0

Source – see Table 1.

### SBWRD CAPITAL IMPROVEMENTS PLAN Capital Improvement Plan (page 8 of 10)

			0007		Non-CFP	(nominal)			CIP (constant \$s)			CFP (constant \$s)	
	Project Description	BUILD Year	ESTIMATE Year	New Const. Projects	Other Projects	Total	Expensed Renewal Cost	New Const. Projects	Other Projects	Total	New Const. Projects	Other Projects	Total
Vehicles and Equipment	Replace Rod Machine	2035	2008	\$0	\$40,000	\$40,000	\$0	\$0	\$69,443	\$69,443	\$0	\$0	\$0
Vehicles and Equipment	Replace Small Jet Cleaner	2022	2008	\$0	\$250,000	\$250,000	\$0	\$0	\$332,783	\$332,783	\$0	\$0	\$0
Vehicles and Equipment	Replace Small Jet Cleaner	2032	2008	\$0	\$250,000	\$250,000	\$0	\$0	\$408,216	\$408,216	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-4	2007	2007	\$0	\$47,000	\$47,000	\$0	\$0	\$47,000	\$47,000	\$0	\$0	\$0
Vehicles and Equipment	TV inspection truck	2003	2005	\$0	\$125,000	\$125,000	\$0	\$0	\$119,995	\$119,995	\$0	\$0	\$0
Vehicles and Equipment	TV inspection Truck Replacement	2012	2008	\$0	\$200,000	\$200,000	\$0	\$0	\$217,031	\$217,031	\$0	\$0	\$0
Vehicles and Equipment	TV inspection Truck Replacement	2020	2008	\$0	\$200,000	\$200,000	\$0	\$0	\$255,567	\$255,567	\$0	\$0	\$0
Vehicles and Equipment	TV inspection Truck Replacement	2028	2008	\$0	\$200,000	\$200,000	\$0	\$0	\$300,946	\$300,946	\$0	\$0	\$0
Vehicles and Equipment	TV inspection Truck Replacement	2036	2008	\$0	\$200,000	\$200,000	\$0	\$0	\$354,382	\$354,382	\$0	\$0	\$0
Engineering Department	4												
Capital Facilities Planning	Engineering & other consulting	Recurring	Recurring	\$0	\$0	\$0	\$0	\$0	\$8.611.338	\$8.611.338	\$0	\$8.611.338	\$8.611.338
Computer Related	Computer Upgrade	2002	2000	\$0	\$15.000	\$15.000	\$0	\$0	\$15,626	\$15.626	\$0	\$0	\$0
Computer Related	Computer Upgrade	2004	2004	\$0	\$15.000	\$15,000	\$0	\$0	\$15,000	\$15,000	\$0	\$0	\$0
Engineering Related	Flow Monitoring	2005	2005	\$0	\$16,200	\$16,200	\$0	\$0	\$16,200	\$16,200	\$0	\$0	\$0
Engineering Related	Flow Monitoring	2006	2006	\$0	\$16.000	\$16,000	\$0	\$0	\$16,000	\$16.000	\$0	\$0	\$0
Engineering Related	Flow Monitoring	2007	2007	\$0	\$17,000	\$17.000	\$0	\$0	\$17.000	\$17.000	\$0	\$0	\$0
Engineering Related	Flow Monitoring	2008	2008	\$0	\$12,000	\$12,000	\$0	\$0	\$24,000	\$24.000	\$0	\$12.000	\$12.000
Engineering Related	Flow Monitoring	2011	2007	\$0	\$12,000	\$12,000	\$0	\$0	\$26.044	\$26.044	\$0	\$13.022	\$13.022
Engineering Related	Flow Monitoring	2015	2007	\$0	\$12,000	\$12,000	\$0	\$0	\$28,261	\$28,261	\$0	\$14,131	\$14,131
Engineering Related	Flow Monitoring	2010	2007	\$0	\$12,000	\$12,000	\$0	\$0	\$30,668	\$30,668	\$0	\$15 334	\$15,334
Engineering Related	Flow Monitoring	2013	2007	\$0	\$12,000	\$12,000	\$0	\$0	\$33,280	\$33,280	\$0	\$16.640	\$16,640
Engineering Related	Flow Monitoring	2020	2007	\$0	\$12,000	\$12,000	\$0	\$0	\$36,114	\$36 114	\$0	\$18.057	\$18,057
Engineering Related	Flow Monitoring	2021	2007	\$0	\$12,000	\$12,000	\$0	\$0	\$39,189	\$39,189	\$0	\$19 594	\$19 594
Engineering Related	Flow Monitoring	2035	2007	\$0	\$12,000	\$12,000	\$0	\$0	\$42 526	\$42 526	\$0	\$21,263	\$21,263
Engineering Related	Flow Monitoring	2041	2007	\$0	\$12,000	\$12,000	\$0	\$0	\$48.072	\$48.072	\$0	\$24,036	\$24.036
Engineering Related	Large Format Scanner	2005	2005	\$0	\$11,500	\$11,500	\$0	\$0	\$11,500	\$11,500	\$0	\$0	\$0
Engineering Related	Large Format Scanner	2003	2003	\$0	\$20,000	\$20,000	\$0	\$0	\$23.075	\$23.075	\$0	\$0	\$0 \$0
Engineering Related	Large Format Scanner	2022	2007	\$0	\$20,000	\$20,000	\$0	\$0	\$27,172	\$27,172	\$0	\$0	\$0
Engineering Related	Large Format Scanner	2022	2007	\$0	\$20,000	\$20,000	\$0	\$0	\$31 997	\$31 997	\$0	\$0	\$0
Engineering Related	Large Format Scanner	2038	2007	\$0	\$20,000	\$20,000	\$0	\$0	\$37,678	\$37.678	\$0	\$0	\$0 \$0
Engineering Related	Large Format Scanner	2046	2007	\$0	\$20,000	\$20,000	\$0	\$0	\$44.368	\$44.368	\$0	\$0	\$0
Engineering Related	Replace GPS Unit	2040	2007	\$0	\$50,000	\$50,000	\$0	\$0	\$55,378	\$55.378	\$0	\$0	\$0
Engineering Related	Replace GPS Unit	2012	2007	\$0	\$50,000	\$50,000	\$0	\$0	\$65,211	\$65,211	\$0	\$0	\$0 \$0
Engineering Related	Replace GPS Unit	2028	2007	\$0	\$50,000	\$50,000	\$0	\$0	\$76,789	\$76 789	\$0	\$0	\$0
Engineering Related	Replace GPS Unit	2020	2007	\$0	\$50,000	\$50,000	\$0 \$0	\$0	\$90,424	\$90,424	\$0	\$0	\$0
Engineering Related	Replace GPS Unit	2030	2007	\$0	\$50,000	\$50,000	\$0	\$0	\$106,480	\$106.480	\$0	\$0	\$0 \$0
Engineering Related	Replace Plotter	2012	2007	\$0	\$10,000	\$10,000	\$0	\$0	\$11.076	\$11.076	\$0	\$0	\$0
Engineering Related	Replace Plotter	2012	2007	\$0	\$10,000	\$10,000	\$0 \$0	\$0	\$13.042	\$13.042	\$0	\$0	\$0
Engineering Related	Replace Plotter	2028	2007	\$0	\$10,000	\$10,000	\$0	\$0	\$15,358	\$15.358	\$0	\$0	\$0 \$0
Engineering Related	Replace Plotter	2020	2007	\$0	\$10,000	\$10,000	\$0 \$0	\$0	\$18,085	\$18.085	\$0	\$0	\$0
Engineering Related	Replace Plotter	2044	2007	\$0	\$10,000	\$10,000	\$0 \$0	\$0	\$21,296	\$21 296	\$0	\$0	\$0
LAN Computer Related	Server	2044	2000	\$0	\$15,000	\$15,000	\$0 \$0	\$0	\$15,626	\$15,626	\$0	\$0	\$0
LAN Computer Related	Server	2002	2005	\$0	\$10,000	\$10,000	00 \$0	\$0	\$10,000	\$10,000	\$0	\$0	\$0
LAN Computer Related	Server	2005	2003	\$0	\$7,000	\$7,000	00 (D	\$0 \$0	\$7 442	\$7 442	\$0 \$0	\$0 \$0	φ0 ¢0
I AN Computer Related	Server	2010	2007	\$0	\$7,000	\$7,000	ΦΦ \$0	\$0	\$7,442	\$7,442	\$0	\$0	\$0
I AN Computer Related	Server	2010	2007	\$0	\$15,000	\$15,000	00 \$0	\$0	\$16,277	\$16.277	\$0	\$0	\$0
LAN Computer Related	Server	2012	2007	\$0	\$7,000	\$7,000	00 (D	\$0 \$0	\$7 753	\$7 753	\$0 \$0	\$0 \$0	φ0 ¢0

Source – see Table 1.

#### SBWRD CAPITAL IMPROVEMENTS PLAN

			COST	Conital Ecolity		CIP (nominal)				CFP (nominal)	
	Project Description	BUILD Year	ESTIMATE Year	Capital Facility Capacity Expansion	New Const. Projects	Other Projects	Total	CFP %	New Const. Projects	Other Projects	Total
LAN Computer Related	Server	2013	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2014	2007			\$15,000	\$15,000		\$0	\$0	\$0
LAN Computer Related	Server	2015	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2016	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2017	2007			\$15,000	\$15,000		\$0	\$0	\$0
LAN Computer Related	Server	2018	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2019	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2020	2007			\$15,000	\$15,000		\$0	\$0	\$0
LAN Computer Related	Server	2021	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2022	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2023	2007			\$15,000	\$15,000		\$0	\$0	\$0
LAN Computer Related	Server	2024	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2025	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2026	2007			\$15,000	\$15,000		\$0	\$0	\$0
LAN Computer Related	Server	2027	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2028	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2029	2007			\$15,000	\$15,000		\$0	\$0	\$0
LAN Computer Related	Server	2030	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2031	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2032	2007			\$15,000	\$15,000		\$0	\$0	\$0
LAN Computer Related	Server	2033	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2034	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2035	2007			\$15,000	\$15,000		\$0	\$0	\$0
LAN Computer Related	Server	2036	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2037	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2038	2007			\$15,000	\$15,000		\$0	\$0	\$0
LAN Computer Related	Server	2039	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Server	2040	2007			\$7,000	\$7,000		\$0	\$0	\$0
LAN Computer Related	Software	2002	2000			\$21,000	\$21,000		\$0	\$0	\$0
LAN Computer Related	Software	2013	2000			\$10,000	\$10,000		\$0	\$0	\$0
LAN Computer Related	Software	2019	2000			\$10,000	\$10,000		\$0	\$0	\$0
LAN Computer Related	Software	2025	2000			\$10,000	\$10,000		\$0	\$0	\$0
LAN Computer Related	Software	2031	2000			\$10,000	\$10,000		\$0	\$0	\$0
LAN Computer Related	Software	2037	2000			\$10,000	\$10,000		\$0	\$0	\$0
LAN Computer Related	Software, SQL	2007	2007			\$15,600	\$15,600		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-17	2005	2005			\$20,700	\$20,700		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-21	2008	2008			\$28,000	\$28,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-24	2002	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-24	2011	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-24	2017	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-24	2023	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-24	2024	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-24	2035	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-24	2041	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-27	2012	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-27	2018	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-27	2024	2007			\$30,000	\$30,000		\$0	\$0	\$0

Source - see Table 1.

### SBWRD CAPITAL IMPROVEMENTS PLAN

				1	Non-CEP	(nominal)			CID (constant fo)			CED (constant fo	<b>\</b>
	Project Description	BUILD Year	COST ESTIMATE Year	New Const. Projects	Other Projects	Total	Expensed Renewal Cost	New Const. Projects	Other Projects	Total	New Const. Projects	Other Projects	Total
LAN Computer Related	Server	2013	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$7,913	\$7,913	\$0	\$0	\$0
LAN Computer Related	Server	2014	2007	\$0	\$15,000	\$15,000	\$0	\$0	\$17,306	\$17,306	\$0	\$0	\$0
LAN Computer Related	Server	2015	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$8,243	\$8,243	\$0	\$0	\$0
LAN Computer Related	Server	2016	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$8,413	\$8,413	\$0	\$0	\$0
LAN Computer Related	Server	2017	2007	\$0	\$15,000	\$15,000	\$0	\$0	\$18,400	\$18,400	\$0	\$0	\$0
LAN Computer Related	Server	2018	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$8,764	\$8,764	\$0	\$0	\$0
LAN Computer Related	Server	2019	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$8,945	\$8,945	\$0	\$0	\$0
LAN Computer Related	Server	2020	2007	\$0	\$15,000	\$15,000	\$0	\$0	\$19,563	\$19,563	\$0	\$0	\$0
LAN Computer Related	Server	2021	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$9,318	\$9,318	\$0	\$0	\$0
LAN Computer Related	Server	2022	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$9,510	\$9,510	\$0	\$0	\$0
LAN Computer Related	Server	2023	2007	\$0	\$15,000	\$15,000	\$0	\$0	\$20,800	\$20,800	\$0	\$0	\$0
LAN Computer Related	Server	2024	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$9,907	\$9,907	\$0	\$0	\$0
LAN Computer Related	Server	2025	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$10,111	\$10,111	\$0	\$0	\$0
LAN Computer Related	Server	2026	2007	\$0	\$15,000	\$15,000	\$0	\$0	\$22,114	\$22,114	\$0	\$0	\$0
LAN Computer Related	Server	2027	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$10,533	\$10,533	\$0	\$0	\$0
LAN Computer Related	Server	2028	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$10,751	\$10,751	\$0	\$0	\$0
LAN Computer Related	Server	2029	2007	\$0	\$15,000	\$15,000	\$0	\$0	\$23,512	\$23,512	\$0	\$0	\$0
LAN Computer Related	Server	2030	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$11,199	\$11,199	\$0	\$0	\$0
LAN Computer Related	Server	2031	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$11,430	\$11,430	\$0	\$0	\$0
LAN Computer Related	Server	2032	2007	\$0	\$15,000	\$15,000	\$0	\$0	\$24,999	\$24,999	\$0	\$0	\$0
LAN Computer Related	Server	2033	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$11,907	\$11,907	\$0	\$0	\$0
LAN Computer Related	Server	2034	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$12,153	\$12,153	\$0	\$0	\$0
LAN Computer Related	Server	2035	2007	\$0	\$15,000	\$15,000	\$0	\$0	\$26,579	\$26,579	\$0	\$0	\$0
LAN Computer Related	Server	2036	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$12,659	\$12,659	\$0	\$0	\$0
LAN Computer Related	Server	2037	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$12,921	\$12,921	\$0	\$0	\$0
LAN Computer Related	Server	2038	2007	\$0	\$15,000	\$15,000	\$0	\$0	\$28,259	\$28,259	\$0	\$0	\$0
LAN Computer Related	Server	2039	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$13,460	\$13,460	\$0	\$0	\$0
LAN Computer Related	Server	2040	2007	\$0	\$7,000	\$7,000	\$0	\$0	\$13,737	\$13,737	\$0	\$0	\$0
LAN Computer Related	Software	2002	2000	\$0	\$21,000	\$21,000	\$0	\$0	\$21,876	\$21,876	\$0	\$0	\$0
LAN Computer Related	Software	2013	2000	\$0	\$10,000	\$10,000	\$0	\$0	\$13,042	\$13,042	\$0	\$0	\$0
LAN Computer Related	Software	2019	2000	\$0	\$10,000	\$10,000	\$0	\$0	\$14,743	\$14,743	\$0	\$0	\$0
LAN Computer Related	Software	2025	2000	\$0	\$10,000	\$10,000	\$0	\$0	\$16,666	\$16,666	\$0	\$0	\$0
LAN Computer Related	Software	2031	2000	\$0	\$10,000	\$10,000	\$0	\$0	\$18,839	\$18,839	\$0	\$0	\$0
LAN Computer Related	Software	2037	2000	\$0	\$10,000	\$10,000	\$0	\$0	\$21,296	\$21,296	\$0	\$0	\$0
LAN Computer Related	Software, SQL	2007	2007	\$0	\$15,600	\$15,600	\$0	\$0	\$15,600	\$15,600	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-17	2005	2005	\$0	\$20,700	\$20,700	\$0	\$0	\$20,700	\$20,700	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-21	2008	2008	\$0	\$28,000	\$28,000	\$0	\$0	\$28,000	\$28,000	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-24	2002	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$27,087	\$27,087	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-24	2011	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$32,555	\$32,555	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-24	2017	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$36,800	\$36,800	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-24	2023	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$41,599	\$41,599	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-24	2024	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$42,458	\$42,458	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-24	2035	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$53,157	\$53,157	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-24	2041	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$60,090	\$60,090	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-27	2012	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$33,227	\$33,227	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-27	2018	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$37,560	\$37,560	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-27	2024	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$42,458	\$42,458	\$0	\$0	\$0

Source – see Table 1.

## SBWRD CAPITAL IMPROVEMENTS PLAN Capital Improvement Plan (page 10 of 10)

			COST	Conital Facility		CIP (nominal)				CFP (nominal)	
F	Project Description			Capital Facility Capacity Expansion	New Const. Projects	Other Projects	Total	CFP %	New Const. Projects	Other Projects	Total
Vehicles and Equipment	Replace Vehicle V-27	2030	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-27	2036	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-31	2013	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-31	2019	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-31	2025	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-31	2031	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-31	2037	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-31	2038	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-33	2014	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-33	2020	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-33	2026	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-33	2032	2007			\$30,000	\$30,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-5	2007	2007			\$30,000	\$30,000		\$0	\$0	\$0
Administration Department											
Administration Bld.	Computer Related	2007	2007			\$23,000	\$23,000		\$0	\$0	\$0
Administration Bld.	Convault - 2000 Tank	2011	2010			\$30,000	\$30,000		\$0	\$0	\$0
Administration Bld.	Repair HVAC	2003	2000			\$20,000	\$20,000		\$0	\$0	\$0
Administration Bld.	Repair Parking Lot - Lower	2012	2009			\$31,000	\$31,000		\$0	\$0	\$0
Administration Bld.	Repair Parking Lot - Upper	2012	2009			\$30,000	\$30,000		\$0	\$0	\$0
Administration Bld.	Replace Carpet	2018	2005			\$30,000	\$30,000		\$0	\$0	\$0
Administration Bld.	Replace Carpet	2028	2005			\$30,000	\$30,000		\$0	\$0	\$0
Administration Bld.	Replace Carpet/Paint	2006	2006			\$43,100	\$43,100		\$0	\$0	\$0
Computer Related	Computer Upgrade	2030	2000			\$15,000	\$15,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-2	2005	2005			\$28,000	\$28,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-26	2012	2007			\$28,000	\$28,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-26	2019	2007			\$28,000	\$28,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-26	2026	2007			\$28,000	\$28,000		\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-26	2033	2007			\$28,000	\$28,000		\$0	\$0	\$0
* Disposal and Compliance Options may	include but not limited to stream augmentation, w	astewater reuse an	d water importation	on projects			\$0		\$0	\$0	\$0

Source - see Table 1.

#### SBWRD CAPITAL IMPROVEMENTS PLAN

			COST	Non-CFP (nominal)			CIP (constant \$s)			CFP (constant \$s)			
Project Description			ESTIMATE Year	New Const. Projects	Other Projects	Total	Expensed Renewal Cost	New Const. Projects	Other Projects	Total	New Const. Projects	Other Projects	Total
Vehicles and Equipment	Replace Vehicle V-27	2030	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$47,995	\$47,995	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-27	2036	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$54,255	\$54,255	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-31	2013	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$33,912	\$33,912	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-31	2019	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$38,335	\$38,335	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-31	2025	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$43,334	\$43,334	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-31	2031	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$48,986	\$48,986	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-31	2037	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$55,374	\$55,374	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-31	2038	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$56,517	\$56,517	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-33	2014	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$34,612	\$34,612	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-33	2020	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$39,126	\$39,126	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-33	2026	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$44,229	\$44,229	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-33	2032	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$49,997	\$49,997	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-5	2007	2007	\$0	\$30,000	\$30,000	\$0	\$0	\$30,000	\$30,000	\$0	\$0	\$0
Administration Department													
Administration Bld.	Computer Related	2007	2007	\$0	\$23,000	\$23,000	\$0	\$0	\$23,000	\$23,000	\$0	\$0	\$0
Administration Bld.	Convault - 2000 Tank	2011	2010	\$0	\$30,000	\$30,000	\$0	\$0	\$30,619	\$30,619	\$0	\$0	\$0
Administration Bld.	Repair HVAC	2003	2000	\$0	\$20,000	\$20,000	\$0	\$0	\$21,264	\$21,264	\$0	\$0	\$0
Administration Bld.	Repair Parking Lot - Lower	2012	2009	\$0	\$31,000	\$31,000	\$0	\$0	\$32,959	\$32,959	\$0	\$0	\$0
Administration Bld.	Repair Parking Lot - Upper	2012	2009	\$0	\$30,000	\$30,000	\$0	\$0	\$31,896	\$31,896	\$0	\$0	\$0
Administration Bld.	Replace Carpet	2018	2005	\$0	\$30,000	\$30,000	\$0	\$0	\$39,126	\$39,126	\$0	\$0	\$0
Administration Bld.	Replace Carpet	2028	2005	\$0	\$30,000	\$30,000	\$0	\$0	\$47,995	\$47,995	\$0	\$0	\$0
Administration Bld.	Replace Carpet/Paint	2006	2006	\$0	\$43,100	\$43,100	\$0	\$0	\$43,100	\$43,100	\$0	\$0	\$0
Computer Related	Computer Upgrade	2030	2000	\$0	\$15,000	\$15,000	\$0	\$0	\$27,687	\$27,687	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-2	2005	2005	\$0	\$28,000	\$28,000	\$0	\$0	\$28,000	\$28,000	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-26	2012	2007	\$0	\$28,000	\$28,000	\$0	\$0	\$31,011	\$31,011	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-26	2019	2007	\$0	\$28,000	\$28,000	\$0	\$0	\$35,779	\$35,779	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-26	2026	2007	\$0	\$28,000	\$28,000	\$0	\$0	\$41,280	\$41,280	\$0	\$0	\$0
Vehicles and Equipment	Replace Vehicle V-26	2033	2007	\$0	\$28,000	\$28,000	\$0	\$0	\$47,627	\$47,627	\$0	\$0	\$0
To be not and compliance Options, may include but on timited to stream augmentation, wastewater reuse and water importation				\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0.	\$0

Source - see Table 1.

## SBWRD RECURRING CAPITAL PROJECTS Nominal Value (page 1 of 2)

		,							•			
		Annual S	ystem		Dianai	For Futu	re Use	For Futu	re Use			
BUILD Year	Year	Rehabilitatio	on Fund	Capital Facilitie	es Planning	(1	)	(2)	)	CIP Total	CFP Total	Non-CFP Total
rear	i cai	CIP Total	CFP %	CIP Total	CFP %	CIP	CFP %	CIP	CFP %			
2011	2011	\$100,000	0%	\$100,000	100%	0	0	0	0	\$200,000	\$100,000	\$100,000
2012	2011	\$100,000	0%	\$100,000	100%	0	0	0	0	\$200,000	\$100,000	\$100,000
2013	2011	\$150,000	0%	\$100,000	100%	0	0	0	0	\$250,000	\$100,000	\$150,000
2014	2011	\$150,000	0%	\$100,000	100%	0	0	0	0	\$250,000	\$100,000	\$150,000
2015	2011	\$150,000	0%	\$100,000	100%	0	0	0	0	\$250,000	\$100,000	\$150,000
2016	2011	\$150,000	0%	\$100,000	100%	0	0	0	0	\$250,000	\$100,000	\$150,000
2017	2011	\$150,000	0%	\$100,000	100%	0	0	0	0	\$250,000	\$100,000	\$150,000
2018	2011	\$150,000	0%	\$100,000	100%	0	0	0	0	\$250,000	\$100,000	\$150,000
2019	2011	\$150,000	0%	\$100,000	100%	0	0	0	0	\$250,000	\$100,000	\$150,000
2020	2011	\$150,000	0%	\$100,000	100%	0	0	0	0	\$250,000	\$100,000	\$150,000
2021	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2022	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2023	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2024	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2025	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2026	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2027	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2028	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2029	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2030	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2031	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2032	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000 \$350,000	\$100,000	\$250,000
2033	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2034	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2035	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2030	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2037	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2030	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2033	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2040	2011	\$250,000	0%	\$100,000	100%	0	0	0 0	0	\$350,000	\$100,000	\$250,000
2041	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2042	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2044	2011	\$250,000	0%	\$100,000	100%	0	0	Ő	Ő	\$350,000	\$100,000	\$250,000
2045	2011	\$250,000	0%	\$100,000	100%	0 0	0	0	Ő	\$350,000	\$100,000	\$250,000
2046	2011	\$250,000	0%	\$100,000	100%	Ő	0	0	Ő	\$350,000	\$100,000	\$250,000
2047	2011	\$250,000	0%	\$100,000	100%	Ő	0	Ő	Ő	\$350,000	\$100,000	\$250,000
2048	2011	\$250,000	0%	\$100,000	100%	Ő	0	0	Ő	\$350,000	\$100,000	\$250,000
2049	2011	\$250.000	0%	\$100,000	100%	0	0	0	Ő	\$350.000	\$100,000	\$250,000
2050	2011	\$250.000	0%	\$100,000	100%	0	0	0	Ő	\$350.000	\$100,000	\$250,000
2051	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2052	2011	\$250.000	0%	\$100,000	100%	Ő	0	0	Ő	\$350.000	\$100,000	\$250,000
2053	2011	\$250.000	0%	\$100.000	100%	0	0	0	0	\$350.000	\$100.000	\$250.000
2054	2011	\$250,000	0%	\$100,000	100%	0	Ō	0	0	\$350,000	\$100,000	\$250,000
2055	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100.000	\$250.000
2056	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2057	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2058	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2059	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100,000	\$250,000
2060	2011	\$250,000	0%	\$100,000	100%	0	0	0	0	\$350,000	\$100.000	\$250,000
TOTAL		\$11,400,000		\$5,000,000		\$0	\$0	\$0	\$0	\$16,400,000	\$5,000,000	\$11,400,000

Source – SBWRD staff.

#### SBWRD RECURRING CAPITAL PROJECTS

Constant \$s (future value - page 2	of 2)
-------------------------------------	-------

Constant \$5	(intuite value -	page 2 01 2)															
				CIP (FV)					CFP (FV)					NON-CFP (FV)	)		
BUILD Year	ESTIMATE Year	Annual System Rehabilitation Fund	Capital Facilities Planning	For Future Use (1)	For Future Use (2)	CIP Total	Annual System Rehabilitation Fund	Capital Facilities Planning	For Future Use (1)	For Future Use (2)	CFP Total	Annual System Rehabilitation	Capital Facilities Planning	For Future Use (1)	For Future Use (2)	CFP Total	
2011	2011	\$100.000	\$100.000	\$0	\$0	\$200.000	\$0	\$100.000	\$0	\$0	\$100.000	\$100.000	\$0	\$0	\$0	\$100.000	
2012	2011	\$102.064	\$102.064	\$0	\$0	\$204,128	\$0	\$102.064	\$0	\$0	\$102.064	\$102.064	\$0	\$0	\$0	\$102.064	
2013	2011	\$156,256	\$104,171	\$0	\$0	\$260,427	\$0	\$104,171	\$0	\$0	\$104,171	\$156,256	\$0	\$0	\$0	\$156,256	
2014	2011	\$159,481	\$106,321	\$0	\$0	\$265,802	\$0	\$106,321	\$0	\$0	\$106,321	\$159,481	\$0	\$0	\$0	\$159,481	
2015	2011	\$162,773	\$108,515	\$0	\$0	\$271,289	\$0	\$108,515	\$0	\$0	\$108,515	\$162,773	\$0	\$0	\$0	\$162,773	
2016	2011	\$166,133	\$110,755	\$0	\$0	\$276,888	\$0	\$110,755	\$0	\$0	\$110,755	\$166,133	\$0	\$0	\$0	\$166,133	
2017	2011	\$169,562	\$113,041	\$0	\$0	\$282,603	\$0	\$113,041	\$0	\$0	\$113,041	\$169,562	\$0	\$0	\$0	\$169,562	
2018	2011	\$173,062	\$115,375	\$0	\$0	\$288,437	\$0	\$115,375	\$0	\$0	\$115,375	\$173,062	\$0	\$0	\$0	\$173,062	
2019	2011	\$176,634	\$117,756	\$0	\$0	\$294,390	\$0	\$117,756	\$0	\$0	\$117,756	\$176,634	\$0	\$0	\$0	\$176,634	
2020	2011	\$180,280	\$120,187	\$0	\$0	\$300,467	\$0	\$120,187	\$0	\$0	\$120,187	\$180,280	\$0	\$0	\$0	\$180,280	
2021	2011	\$306,669	\$122,667	\$0	\$0	\$429,336	\$0	\$122,667	\$0	\$0	\$122,667	\$306,669	\$0	\$0	\$0	\$306,669	
2022	2011	\$312,998	\$125,199	\$0	\$0	\$438,198	\$0	\$125,199	\$0	\$0	\$125,199	\$312,998	\$0	\$0	\$0	\$312,998	
2023	2011	\$319,459	\$127,784	\$0	\$0	\$447,242	\$0	\$127,784	\$0	\$0	\$127,784	\$319,459	\$0	\$0	\$0	\$319,459	
2024	2011	\$326,053	\$130,421	\$0	\$0	\$456,474	\$0	\$130,421	\$0	\$0	\$130,421	\$326,053	\$0	\$0	\$0	\$326,053	
2025	2011	\$332,783	\$133,113	\$0	\$0	\$465,896	\$0	\$133,113	\$0	\$0	\$133,113	\$332,783	\$0	\$0	\$0	\$332,783	
2026	2011	\$339,652	\$135,861	\$0	\$0	\$475,512	\$0	\$135,861	\$0	\$0	\$135,861	\$339,652	\$0	\$0	\$0	\$339,652	
2027	2011	\$346,662	\$138,665	\$0	\$U	\$485,327	\$U \$0	\$138,665	\$0	\$U	\$138,665	\$346,662	\$U \$0	\$U \$0	\$U	\$346,662	
2028	2011	\$353,818 \$261,101	\$141,527	\$U \$0	\$U \$0	\$495,345 \$505,560	\$U	\$141,527	\$U	\$U \$0	\$141,527 \$144,449	\$303,818 \$264,404	\$U	\$U	\$U ©0	\$353,818 \$261,121	
2029	2011	\$301,121 \$269,575	\$144,440 \$147,420	\$U \$0	\$0 \$0	\$505,569	\$U \$0	\$144,440 \$147,420	\$U \$0	\$U \$0	\$144,440 \$147,420	\$301,121 \$269,575	\$0 \$0	\$0 \$0	\$U \$0	\$301,121 \$269,575	
2030	2011	\$300,373 \$276,192	\$147,430 \$150,472	\$U \$0	\$0 \$0	\$516,004 \$526.655	\$U \$0	\$147,430	\$U \$0	\$U \$0	\$147,430 \$150,472	\$300,373 \$376,193	\$0 \$0	\$0 \$0	\$U \$0	\$300,373 \$276,192	
2031	2011	\$383.047	\$153,473	90 \$0	0¢ \$0	\$537 526	υψ 0	\$150,473	00 02	00 \$0	\$153,473	\$383 0/7	00	00 02	90 \$0	\$383.047	
2032	2011	\$391.872	\$156,749	\$0 \$0	\$0 \$0	\$548 621	\$0 \$0	\$156,749	\$0 \$0	\$0 \$0	\$156 749	\$391 872	\$0 \$0	\$0 \$0	\$0 \$0	\$391 872	
2034	2011	\$399,961	\$159,984	\$0	\$0	\$559 945	\$0 \$0	\$159,984	\$0	\$0	\$159,984	\$399,961	\$0	\$0	\$0	\$399.961	
2035	2011	\$408,216	\$163,286	\$0	\$0	\$571 502	\$0	\$163,286	\$0	\$0	\$163,286	\$408 216	\$0	\$0	\$0	\$408 216	
2036	2011	\$416.642	\$166,657	\$0	\$0	\$583,299	\$0 \$0	\$166,657	\$0	\$0	\$166.657	\$416.642	\$0	\$0	\$0	\$416.642	
2037	2011	\$425.242	\$170.097	\$0	\$0	\$595,338	\$0	\$170.097	\$0	\$0	\$170.097	\$425.242	\$0	\$0	\$0	\$425.242	
2038	2011	\$434,019	\$173,608	\$0	\$0	\$607,627	\$0	\$173,608	\$0	\$0	\$173,608	\$434,019	\$0	\$0	\$0	\$434,019	
2039	2011	\$442,978	\$177,191	\$0	\$0	\$620,169	\$0	\$177,191	\$0	\$0	\$177,191	\$442,978	\$0	\$0	\$0	\$442,978	
2040	2011	\$452,121	\$180,848	\$0	\$0	\$632,969	\$0	\$180,848	\$0	\$0	\$180,848	\$452,121	\$0	\$0	\$0	\$452,121	
2041	2011	\$461,453	\$184,581	\$0	\$0	\$646,034	\$0	\$184,581	\$0	\$0	\$184,581	\$461,453	\$0	\$0	\$0	\$461,453	
2042	2011	\$470,978	\$188,391	\$0	\$0	\$659,369	\$0	\$188,391	\$0	\$0	\$188,391	\$470,978	\$0	\$0	\$0	\$470,978	
2043	2011	\$480,699	\$192,280	\$0	\$0	\$672,979	\$0	\$192,280	\$0	\$0	\$192,280	\$480,699	\$0	\$0	\$0	\$480,699	
2044	2011	\$490,621	\$196,248	\$0	\$0	\$686,870	\$0	\$196,248	\$0	\$0	\$196,248	\$490,621	\$0	\$0	\$0	\$490,621	
2045	2011	\$500,748	\$200,299	\$0	\$0	\$701,047	\$0	\$200,299	\$0	\$0	\$200,299	\$500,748	\$0	\$0	\$0	\$500,748	
2046	2011	\$511,084	\$204,434	\$0	\$0	\$715,517	\$0	\$204,434	\$0	\$0	\$204,434	\$511,084	\$0	\$0	\$0	\$511,084	
2047	2011	\$521,633	\$208,653	\$0	\$0	\$730,286	\$0	\$208,653	\$0	\$0	\$208,653	\$521,633	\$0	\$0	\$0	\$521,633	
2048	2011	\$532,400	\$212,960	\$0	\$0	\$745,360	\$0	\$212,960	\$0	\$0	\$212,960	\$532,400	\$0	\$0	\$0	\$532,400	
2049	2011	\$543,389	\$217,356	\$0	\$0	\$760,745	\$0	\$217,356	\$0	\$0	\$217,356	\$543,389	\$0	\$0	\$0	\$543,389	
2050	2011	\$554,605	\$221,842	\$0	\$0	\$776,447	\$0	\$221,842	\$0	\$0	\$221,842	\$554,605	\$0	\$0	\$0	\$554,605	
2051	2011	\$566,052	\$226,421	\$0	\$0	\$792,473	\$0	\$226,421	\$0	\$0	\$226,421	\$566,052	\$0	\$0	\$0	\$566,052	
2052	2011	\$577,736	\$231,094	\$0	\$0	\$808,831	\$0	\$231,094	\$0	\$0	\$231,094	\$577,736	\$0	\$0	\$0	\$577,736	
2053	2011	\$089,661 \$601,600	\$∠35,864	\$0 ©0	\$0 ©0	3825,526	\$0	\$235,864	\$0 ©	\$0 ©0	\$235,864	\$089,661 \$601,800	\$0	\$0	\$0 ©0	\$589,661 \$601,820	
2054	2011	0001,032	Φ∠4U,133 ¢245,702	\$0 \$0	φ0 ¢0	004∠,005 €050.056	\$U	¢240,733	φ0 ¢0	¢0	¢240,733	\$001,832	\$U \$0	\$U	\$0 \$0	0001,832	
2000	2011	0014,200 ¢606.000	\$240,702 \$250,772	\$U 60	φ0 ¢0	\$009,900 \$977 707	\$U \$0	\$240,702 \$250,772	\$U	\$U ¢0	\$240,702 \$250,772	Φ014,200 \$626.022	\$U \$0	\$U	\$U \$0	014,200 ¢626.022	
2057	2011	\$630 874	\$255.040	¢0	φ0 Φ0	\$205,202	¢0	\$255,040	¢0	φ0 ¢0	\$255,040	\$630 871	φ0 ¢0	¢0	φ0 ¢0	\$630 974	
2058	2011	\$653 021	\$261 222	20 \$0	φ0 ¢0	\$914 211	\$0 \$0	\$261 232	ው ወ	0¢ 02	\$261 222	\$653.024	\$0 \$0	\$0 \$0	\$0 \$0	\$653 021	
2059	2011	\$666.561	\$266 624	30 \$0	φ0 \$0	\$933 186	0¢ 02	\$266 624	90 \$0	υφ. Ω2	\$266 624	\$666 561	ው ድር	90 \$0	00 80	\$666 561	
2060	2011	\$680,320	\$272,128	\$0 \$0	\$0 \$0	\$952,447	\$0 .\$0	\$272,128	\$0 \$0	\$0 \$0	\$272,128	\$680.320	\$0	\$0	\$0	\$680.320	
TOTAL		\$20,329,128	\$8,611,338	\$0	\$0	\$28,940,467	\$0 \$0	\$8,611,338	\$0	\$0	\$8,611,338	÷=>0,0±0	40	¢0	<i>4</i> 0	\$20,329,128	

Source - nominal cost from Table 21. Future value is calculated based on build-year and the inflation Rate shown in Table 25.

Table 23 shows a summary of total capital spending by year.

Table 23

SBWRD IMPACT FEE ANALYSIS											
Summar	y of 2010 Capita	I Facilities Plan									
		CIP			CFP						
	New Const.	Other	Total	New Const.	Other	Total					
			(consta	ant \$s)							
2010		¢4 000 450	¢4.050.000	¢ 445 040	¢005 400	¢000 700					
2011	\$556,513	\$1,396,450	\$1,952,963	\$445,210	\$235,499	\$680,709 \$680,709					
2012	\$880,681	\$2,885,055	\$3,765,736	\$880,681	\$102,064	\$982,745 \$206,705					
2013	ው የድድጋ 490	\$1,504,935 \$1,201,109	\$1,504,935 \$1,044,599	ΦE7E 062	\$360,760 \$406,120	\$360,763 \$001.100					
2014	\$033,400 \$11,210,130	\$1,291,100	\$1,344,300 \$15,532,257	\$2,002 \$2,212,378	\$400,120 \$2,508,126	\$10,810,505					
2015	\$11,210,130 \$11,117,385	\$4,322,127 \$453,100	\$11,552,257	\$0,212,370 \$0,756,618	\$2,390,120 \$110,755	\$9,867,373					
2010	\$11,031,228	\$938.066	\$12,869,295	\$10 394 425	\$113.041	\$10 507 466					
2017	\$2 562 217	\$780,000	\$3 342 451	\$1 281 108	\$115,375	\$1 396 483					
2010	\$2,703,139	\$3,363,330	\$6,066,468	\$1,351,569	\$1,334,957	\$2 686 526					
2020	\$5,855,899	\$1 194 074	\$7 049 973	\$4,393,945	\$120 187	\$4 514 131					
2021	\$19 802 977	\$676 911	\$20 479 889	\$19 565 341	\$122,667	\$19,688,009					
2022	\$0	\$1,006,042	\$1,006,042	\$0	\$125,199	\$125 199					
2023	\$963.604	\$734.047	\$1.697.650	\$963.604	\$144,423	\$1,108,027					
2024	\$0	\$713.551	\$713.551	\$0	\$130.421	\$130.421					
2025	\$78.594	\$854.352	\$932,946	\$78.594	\$165,465	\$244.059					
2026	\$0	\$1,485,272	\$1,485,272	\$0	\$135.861	\$135.861					
2027	\$8.260.240	\$1,745,290	\$10.005.531	\$8.012.433	\$156.722	\$8,169,155					
2028	\$53,438,852	\$2,001,026	\$55,439,877	\$48,315,408	\$141,527	\$48,456,935					
2029	\$40,343,833	\$713,376	\$41,057,209	\$33,648,134	\$144,448	\$33,792,582					
2030	\$102,719	\$1,155,125	\$1,257,845	\$102,719	\$147,430	\$250,149					
2031	\$0	\$1,052,950	\$1,052,950	\$0	\$170,067	\$170,067					
2032	\$2,156,207	\$1,136,723	\$3,292,930	\$0	\$153,579	\$153,579					
2033	\$120,617	\$798,771	\$919,389	\$120,617	\$156,749	\$277,366					
2034	\$0	\$1,975,279	\$1,975,279	\$0	\$159,984	\$159,984					
2035	\$0	\$2,307,775	\$2,307,775	\$0	\$184,549	\$184,549					
2036	\$141,634	\$2,457,867	\$2,599,501	\$141,634	\$166,657	\$308,290					
2037	\$0	\$1,227,475	\$1,227,475	\$0	\$170,097	\$170,097					
2038	\$0	\$1,748,073	\$1,748,073	\$0	\$173,608	\$173,608					
2039	\$166,312	\$2,446,782	\$2,613,095	\$166,312	\$177,191	\$343,503					
2040	\$0	\$1,172,690	\$1,172,690	\$0	\$180,848	\$180,848					
2041	\$0	\$754,196	\$754,196	\$0	\$208,617	\$208,617					
2042	\$0	\$659,369	\$659,369	\$0	\$188,391	\$188,391					
2043	\$0	\$672,979	\$672,979	\$0	\$192,280	\$192,280					
2044	\$0	\$814,646	\$814,646	\$0	\$196,248	\$196,248					
2045	\$0	\$701,047	\$701,047	\$0	\$200,299	\$200,299					
2046	\$0	\$759,886	\$759,886	\$0	\$204,434	\$204,434					
2047	\$0	\$730,286	\$730,286	\$0	\$208,653	\$208,653					
2048	\$U	\$745,360	\$745,360	\$U \$0	\$212,960	\$212,960					
2049	\$U \$0	\$760,745	\$760,745	\$U \$0	\$217,356	\$217,356					
2050	\$U ¢0	\$110,441 \$700.470	\$110,441 \$700.470	\$U \$0	9221,042 \$226 424	\$221,042					
2051	\$U ¢O	\$192,413 ¢000 001	\$192,413 \$000 001	\$U \$0	\$220,421 \$221.004	\$220,421 \$221.004					
2002	ሀፍ በ2	4000,00 I \$875 576	9000,031 \$825 526	ው ወ	9231,094 \$235 861	φ∠31,094 \$235 861					
2000	ው በቃ	\$812 565	\$812 565	φ0 ΦΩ	\$200,004 \$200 732	\$210,004					
int Repo		\$850 056	\$850 056	ው ድር	\$245 702	\$245 702					
2050	<b>\$</b> 0	\$877 707	\$877 707	\$0 \$0	\$250 773	\$250 773					
2057	\$0 \$0	\$895 823	\$895 823	\$0 \$0	\$255,949	\$255,949					
2058	\$0 \$0	\$914,314	\$914,314	\$0	\$261,232	\$261,232					
2059	\$0 \$0	\$933,186	\$933,186	\$0	\$266.624	\$266.624					
2060	\$0	\$952,447	\$952,447	\$0 \$0	\$272,128	\$272,128					
τοται	\$173 046 261	\$61 615 615	\$234 661 005	\$148 405 702	\$13 168 004	\$161 573 706					
	Ψ···Ο,Ο ΤΟ,ΖΟΙ	φσ1,σ10,0 <del>1</del> 0	Ψ <u></u> =01,001,000	φ110, r00, r JZ		÷ · · · , · · · , · · · ·					

Source – Summary of Table 1 to Table 22.
## **Estimating Assumptions, Decisions, Criteria and Conclusions**

Capital facilities planning represents the current best estimate as to the cost and timing of future construction projects. The estimates rely on various estimating assumptions – construction cost, demand for new capacity, capacity absorption rate, ultimate quantity required, the District's borrowing and earnings rate, and others. These assumptions derive from research, analysis, and the considered opinion of wastewater and financial planning professionals – District staff, engineering consultants, banking and financial consultants. Many estimating assumptions are made in context of related planning analyses completed by some of the political subdivisions that comprise the wastewater district. This section illustrates some of the most significant assumptions.

Table 23 shows the current growth and treatment capacity demand estimates on which the CIP is based. The projection is revised compared to the prior capital facilities plan, and shows slower near term growth, and a longer, 50 year planning period (estimated to be an aproximate "build-out"). The projection is based on the same analytical methodology as in the past –SBWRD staff analysis to quantify the timing and density of known, upcoming projects; site-specific analysis of remaining development parcels, districtwide; and collaborative research with other local governments and agencies within the district, to confirm and enhance their conclusions.

Note in Table 23 that capacity demand is calculated based on a level of service (LOS) of 280 GPD per RE, applied equally to both new and existing development. New development is not held to a higher or more costly standard, nor is it held to a standard that subsidizes the cost of capacity for existing development. This is the basis for calculation of an equitable impact fee that meets the requirements of the Utah *Impact Fee Act*.

The District has no legal land use planning authority and therefore the time to build capacity for new growth is entirely dependent on decisions of local land use authorities. Actual dates for expenditure of Impact Fee funds will vary from the estimates presented in this *Capital Facilities Plan*.

The CFP is a dynamic document that is constantly under review and often in a state of change. Causes for this range from the need to accommodate revised treatment mandates, to unanticipated increases in construction cost; changed economic conditions that impact the demand for capacity and the absorption rate; changes in treatment technology that call for a revised construction plan; and others. The District has determined that each single revision does not necessarily call for an updated CFP, and updated impact fee written analysis. Rather, a formal update is considered to be necessary if any of the following conditions are met:

- 1. A major project undergoes a significant change in concept.
- 2. A major project shows an increase in cost that exceeds the project contingency.
- 3. The aggregate effect of CFP changes increase or decrease the calculated impact fee by 5% of the fee amount.

## Table 24

## PROJECTED NEW DEVELOPMENT AND PLANT CAPACITY DEMAND

Actual and Proj	ected										
		Total REs					Capacity Demand		Treatment Capacity		
	Total	Growth Rate	New Development	Exempt (REs attributable to state buildings)	Net New Impact Fee REs	LOS (gpd/RE)	Capacity Demand (mgd)	Treatment Capacity (mgd)	Capacity Utilization	New Capacity	
0000	45.004										
2000	15,831					284	4 80	4 80	100%		
2001	17 412					284	4.80	4.80	100%		
2002	18 100					284	5 14	7.00	73%	2 20	
2004	18,770					284	5.33	7.00	76%	2.20	
2005	19,729					284	5.60	7.00	80%		
2006	20,781					284	5.90	7.00	84%		
2007	21,504					284	6.11	7.00	87%		
2008	21,858					284	6.21	7.00	89%		
2009	21,978					284	6.24	7.00	89%		
2010	22,130	0 70/	404	(4)	457	284	6.28	7.00	90%		
2011	22,291	0.7%	101	(4)	157	284	0.33	7.00	90%		
2012	22,470	0.0%	208	(4)	204	284	6 44	7.00	91%		
2014	22,924	1.1%	246	(1)	242	284	6.51	7.00	93%		
2015	23,220	1.3%	296	(4)	292	284	6.59	7.00	94%		
2016	23,577	1.5%	357	(4)	353	284	6.70	7.00	96%		
2017	24,007	1.8%	430	(4)	426	284	6.82	9.00	76%	2.00	
2018	24,522	2.1%	515	(4)	511	284	6.96	9.00	77%		
2019	25,132	2.5%	610	(4)	606	284	7.14	9.00	79%		
2020	25,844	2.8%	712	(4)	708	284	7.34	9.00	82%	4.00	
2021	26,662	3.2%	818	(4)	814	284	7.57	10.00	76%	1.00	
2022	27,302	3.3%	920	(4)	1 008	204	7.03	10.00	/0% 81%		
2023	29,534	3.8%	1,012	(4)	1,000	284	8 43	10.00	84%		
2025	30.811	3.8%	1,132	(4)	1,128	284	8.75	10.00	88%		
2026	31,959	3.7%	1,148	(4)	1,144	284	9.08	10.00	91%		
2027	33,089	3.5%	1,130	(4)	1,126	284	9.40	10.00	94%		
2028	34,171	3.3%	1,082	(4)	1,078	284	9.70	10.00	97%		
2029	35,179	2.9%	1,008	(4)	1,004	284	9.99	11.65	86%	1.65	
2030	36,094	2.6%	915	(4)	911	284	10.25	11.65	88%		
2031	36,905	2.2%	811	(4)	807	284	10.48	11.65	90%		
2032	38 212	1.9%	602	(4)	598	284	10.08	11.05	92 %		
2033	38 718	1.0%	506	(4)	502	284	11.00	11.05	94%		
2035	39.138	1.1%	420	(4)	416	284	11.12	11.65	95%		
2036	39,483	0.9%	345	(4)	341	284	11.21	11.65	96%		
2037	39,764	0.7%	281	(4)	277	284	11.29	11.65	97%		
2038	39,991	0.6%	227	(4)	223	284	11.36	11.65	97%		
2039	40,173	0.5%	182	(4)	178	284	11.41	11.65	98%		
2040	40,319	0.4%	146	(4)	142	284	11.45	11.65	98%		
2041	40,435	0.3%	116	(4)	112	284	11.48	11.65	99%		
2042	40,527	0.2%	92	(4)	88 03	284	11.51	11.05	99%		
2043	40,000	0.2%	58	(4)	54	284	11.55	11.05	99%		
2045	40,704	0.1%	46	(4)	42	284	11.56	11.65	99%		
2046	40,740	0.1%	36	(4)	32	284	11.57	11.65	99%		
2047	40,769	0.1%	29	(4)	25	284	11.58	11.65	99%		
2048	40,794	0.1%	25	(4)	21	284	11.59	11.65	99%		
2049	40,820	0.1%	26	(4)	22	284	11.59	11.65	100%		
2050	40,858	0.1%	38	(4)	34	284	11.60	11.65	100%		
2051	40,896	0.1%	38	(4)	34	284	11.61	11.65	100%		
2052	40,934	0.1%	38	(4)	34	284	11.03	11.05	100%		
2053	40,971	0.1%	38	(4) (4)	34	∠64 284	11.04	11.65	100%		
2055	41,047	0.1%	38	(4) (4)	34	284	11 66	11.65	100%		
2056	41,085	0.1%	38	(4)	34	284	11.67	11.65	100%		
2057	41,123	0.1%	38	(4)	34	284	11.68	11.65	100%		
2058	41,160	0.1%	38	(4)	34	284	11.69	11.65	100%		
2059	41,198	0.1%	38	(4)	34	284	11.70	11.65	100%		
2060	41,236	0.1%	38	(4)	34	284	11.71	11.65	101%		
Total - 2009 to :	2035		19,106	(200)	18,906						

Source -current treatment demand, capacity and projected future capacity demand from SBWRD staff.

Figure 2 illustrates the actual and projected growth rate. Figure 3 (on the following page) illustrates the relationship between treatment capacity demand and treatment capacity expansion.



Figure 2

Source - SBWRD.





Source -. SBWRD.

Table 25 shows financial estimating assumptions for the CIP.

Table 25

CIP FINANCIAL ASSUMPTIONS Estimates for Capital Facilities Planning	
Construction Cost Inflation Rate (major capital projects)	5.50%
Baseline Inflation Rate (all other projects - 10 year average GDP deflator0)	2.06%
Exempt Impact Fees for State Buildings (REs per year)	4

Source – discussed below.

- The construction cost inflation rate, used to calculate the cost of future capital projects, is estimated by Carollo Engineers in consultation with District staff. The estimate is discussed in more detail, at the end of this report.
- The inflation rate for non-new construction projects is the 10 year average GDP deflator.<sup>1</sup>
- State Buildings are exempt from impact fee assessment. Staff estimates average demand attributable to State buildings, of 4 REs per year.

Projected new treatment capacity<sup>2</sup> is summarized as follows.

SUMMARY OF CURRENT & PROJECTED TREATMENT CAPACITY East Canyon and Silver Creek Water Reclamation Facilities									
	SCWRF	ECWRF		Total					
		Phase I	Phase II						
System Capacity Current Capacit				7.00					
New Capacity (r Total Capacity (	2.00	1.00	1.65	4.65 11.65					
New Capacity "(	2017	2021	2029						
Capacity Expansi									
New Developme	\$23,009,686	\$22,533,380	\$62,187,724	\$107,730,790					
Existing Develo	\$3,209,191	\$273,685	\$1,923,332	\$5,406,207					
Total	\$26,218,877	\$22,807,065	\$64,111,055	\$113,136,997					

Table 26

Source - SBWRD.

The Utah *Impact Fees Act* requires that an impact fee be calculated in such a way as to acknowledge the time-value of money. Accordingly, the cost of future capital projects is here calculated in "real" or constant value terms – cost at the time of construction. SBWRD planners consider this to be a necessary strategy – not only with respect to impact fee calculation, but also given the lengthy planning horizon, complexity and cost of the planned capital projects.

<sup>&</sup>lt;sup>1</sup> Source - measuringworth.org. The District continues to use the same rate as has been used in prior impact fee CFPs – the GDP deflator for the period 1995 to 2005. This is a conservative estimating strategy that may slightly underestimate the cost of future projects.

<sup>&</sup>lt;sup>2</sup> Treatment capacity demand, project timing and cost, and the quantity of new capacity at each plant, are estimates, which may be altered, depending on the quantity and pattern of future new development.

For each project, future value is calculated based on professional cost estimates, made in nominal terms, with future value calculated based on a construction inflation rate applied to each project, based on the build-year. The inflation rate used in this analysis is 5.5% per year (down from 7.5% in the prior CIP<sup>3</sup>). The inflation rate is estimated by Carollo Engineers in consultation with District staff. It derives from engineering research and analysis of both domestic and worldwide materials prices,<sup>4</sup> and other factors expected to influence the long-run trend in construction cost.

<sup>&</sup>lt;sup>3</sup> The magnitude of the current economic slowdown is such that it is estimated to have significant weight in influencing the long-run cost trend.

<sup>&</sup>lt;sup>4</sup> The cost of construction materials is set in context of an international market, at increasing rates that reflect international competition for scarce resources.