

**DRINKING WATER BOARD
BOARD PACKET FOR CONSTRUCTION LOAN**

APPLICANT'S REQUEST:

Big Plains Sewer and Water Special Service District has a project consisting of upgraded well house, and transmission line. The cost of the project is estimated at \$176,000.

STAFF COMMENTS:

The local MAGI for Apple Valley is \$32,468 (77% of the state MAGI), and their after project water bill is 2.36% of the local MAGI. Therefore they do qualify to receive grant money.

FINACIAL ASSISTANCE COMMITTEE RECOMMENDATION:

The Drinking Water Board authorize \$88,000 construction loan with an interest rate of 0% for 20 years and \$88,000 in grant. Conditions include that they resolve all issues on their compliance report, namely missing lead and copper sampling.

APPLICANT'S LOCATION:

The District is located in Apple Valley in Washington County approximately 30 miles east of St. George.

MAP OF APPLICANT'S LOCATION:



PROJECT DESCRIPTION:

The project consists of upgraded well house, and transmission line.

POPULATION GROWTH:

According to their application, Apple Valley is expected to grow at an average annual rate of less than 1% over the next 20 years. Projected populations and number of connections are shown in the table below:

Year	Population	Connections
2020	742	330
2025	764	340
2030	787	350
2035	810	362

IMPLEMENTATION SCHEDULE:

FA Committee Conference Call:	Jun 2016
DWB Funding Authorization:	July 2016
Complete Design:	Aug 2016
Plan Approval:	Aug 2016
Advertise for Bids:	Aug 2016
Loan Closing:	Sept 2016
Begin Construction:	Sept 2016
Complete Construction:	Dec 2016
Operating Permit:	Jan 2017

COST ESTIMATE:

Legal – Bonding, Admin	\$20,000
Engineering - Design, CMS	\$18,750
Construction	\$125,000
Contingency	\$12,000
DDW Admin Fee	\$0
Total Project Cost	\$175,750

COST ALLOCATION:

The cost allocation proposed for the project is shown below:

<u>Funding Source</u>	<u>Cost Sharing</u>	<u>Percent of Project</u>
DWB Loan (0%, 20-yr)	\$88,000	50%
DWB Grant	\$88,000	50%
Self-Contribution	\$0	0%

ESTIMATED ANNUAL COST OF WATER SERVICE:

Operation and Maintenance	\$94,522
Existing DW Debt Service	\$110,117
DDW Debt Service (0%, 20 yrs):	\$4,400
DDW Debt Reserve (10%):	\$440
DDW Coverage (15%):	n/a
Replacement Reserve Account (5%):	\$10,452
Annual Cost/ERC:	\$766
Monthly Cost/ERC:	\$63.84
Cost as % MAGI:	2.36%

CONTACT INFORMATION:

APPLICANT:

Big Plains Sewer & Water SSD
177 N Meadowlark Dr
Apple Valley, UT 84737
435-877-1190

PRESIDING OFFICIAL &
CONTACT PERSON:

Harold Merritt
Chairman
177 N Meadowlark Dr
Apple Valley, UT 84737
435-877-1190
hmerritt@applevalleyut.gov

CONSULTING ENGINEER:

Curtis Nielson
Ensign Engineering
1870 N Main Ste. 104
Cedar City, UT 84721
435-865-1453
cnielson@ensignutah.com

RECORDER:

Neil Duncan
801.661.5589
nduncan@applevalleyut.gov

FINANCIAL CONSULTANT:

n/a

CITY ATTORNEY:

Gary Kuhlman
107 S 1470 E
St George, UT 84790
435-229-9198
kuhllaw@infowest.com

BOND ATTORNEY:

Richard Chamberlain
225 N 100 E
Richfield, UT 84701
435-896-4461
rchamberlain13@gmail.com

DRINKING WATER BOARD FINANCIAL ASSISTANCE EVALUATION

SYSTEM NAME: Big Plains SWSSD
 COUNTY: Iron
 PROJECT DESCRIPTION: well house and transmission line

FUNDING SOURCE: State SRF

50 % Loan & 50 % Grant

ESTIMATED POPULATION:	720	NO. OF CONNECTIONS:	323 *	SYSTEM RATING:	Corrective Action
CURRENT AVG WATER BILL:	\$59.21 *			PROJECT TOTAL:	\$176,000
CURRENT % OF AGI:	2.19%	FINANCIAL PTS:	64	LOAN AMOUNT:	\$88,000
ESTIMATED MEDIAN AGI:	\$32,468			GRANT AMOUNT:	\$88,000
STATE AGI:	\$41,923			TOTAL REQUEST:	\$176,000
SYSTEM % OF STATE AGI:	77%				

	@ ZERO % RATE 0%	@ RBBI MKT RATE 3.48%		AFTER REPAYMENT PENALTY & POINTS 0.00%
<u>SYSTEM</u>				
ASSUMED LENGTH OF DEBT, YRS:	20	20		20
ASSUMED NET EFFECTIVE INT. RATE:	0.00%	3.48%		0.00%
REQUIRED DEBT SERVICE:	\$4,400.00	\$6,180.57		\$4,400.00
*PARTIAL COVERAGE (15%):	\$0.00	\$0.00		\$0.00
*ADD. COVERAGE AND RESERVE (10%):	\$440.00	\$618.06		\$440.00
ANNUAL NEW DEBT PER CONNECTION:	\$14.98	\$21.05		\$14.98
O & M + FUNDED DEPRECIATION:	\$94,522.00	\$94,522.00		\$94,522.00
OTHER DEBT + COVERAGE:	\$137,646.25	\$137,646.25		\$137,646.25
REPLACEMENT RESERVE ACCOUNT:	\$10,451.95	\$10,540.98		\$10,451.95
ANNUAL EXPENSES PER CONNECTION:	\$751.15	\$751.42		\$751.15
TOTAL SYSTEM EXPENSES	\$247,460.20	\$249,507.86		\$247,460.20
TAX REVENUE:	\$6,000.00	\$6,000.00		\$6,000.00
<u>RESIDENCE</u>				
MONTHLY NEEDED WATER BILL:	\$63.84	\$64.37		\$63.84
% OF ADJUSTED GROSS INCOME:	2.36%	2.38%		2.36%

* Equivalent Residential Connections

R309-700-5

Big Plains SWSSD
Iron
May 25, 2016

TABLE 2 FINANCIAL CONSIDERATIONS

	POINTS	
1. COST EFFECTIVENESS RATIO (SELECT ONE)		
A. Project cost \$0 to \$500 per benefitting connection	16	
B. \$501 to \$1,500	14	X
C. \$1,501 to \$2,000	11	
D. \$2,001 to \$3,000	8	
E. \$3,001 to \$5,000	4	
F. \$5,001 to \$10,000	1	
G. Over \$10,000	0	
	\$545	
2. CURRENT LOCAL MEDIAN ADJUSTED GROSS INCOME (AGI) (SELECT ONE)		
A. Less than 70% of State Median AGI	19	
B. 71 to 80% of State Median AGI	16	X
C. 81 to 95% of State Median AGI	13	
D. 96 to 110% of State Median AGI	9	
E. 111 to 130% of State Median AGI	6	
E. 131 to 150% of State Median AGI	3	
F. Greater than 150% of State Median AGI	0	
	77%	
3. PROJECT FUNDING CONTRIBUTED BY APPLICANT (SELECT ONE)		
a. Greater than 25% of project funds	17	
b. 15 to 25% of project funds	14	
c. 10 to 15% of project funds	11	
c. 5 to 10% of project funds	8	
d. 2 to 5% of project funds	4	
e. Less than 2% of project funds	0	X
	0.0%	
4. ABILITY TO REPAY LOAN		
4. WATER BILL (INCLUDING TAXES) AFTER PROJECT IS BUILT RELATIVE TO LOCAL MEDIAN ADJUSTED GROSS INCOME (SELECT ONE)		
a. Greater than 2.50% of local median AGI	16	
b. 2.01 to 2.50% of local median AGI	12	X
c. 1.51 to 2.00% of local median AGI	8	
d. 1.01 to 1.50% of local median AGI	3	
e. 0 to 1.00% of local median AGI	0	
	2.36%	
5. SPECIAL INCENTIVE POINTS Applicant: (Mark all that apply)		
A. has a replacement fund receiving annual deposits of 5% of the system's drinking water budget been established, and has already accumulated a minimum of 10% of said annual DW budget in this reserve fund.	5	
B. Has a replacement fund equal to at least 15% or 20% of annual DW budget.	5	
C. Is creating or enhancing a regionalization plan	16	X
D. Has a rate structure encouraging conservation	6	X
TOTAL POINTS FOR FINANCIAL NEED	64	
TOTAL POSSIBLE POINTS FOR FINANCIAL NEED	100	

Big Plains SWSSD

PROPOSED BOND REPAYMENT SCHEDULE

50 % Loan & 50 % Grant

PRINCIPAL	\$88,000.00	ANTICIPATED CLOSING DATE	15-Sep-16
INTEREST	0.00%	FIRST P&I PAYMENT DUE	15-Sep-17
TERM	20	REVENUE BOND	
NOMIN. PAYMENT	\$4,400.00	GRANT AMOUNT:	\$88,000.00

YEAR	BEGINNING BALANCE	DATE OF PAYMENT	PAYMENT	PRINCIPAL	INTEREST	ENDING BALANCE	PAYM NO.
2016	\$88,000.00		\$0.00 *	\$0.00	\$0.00	\$88,000.00	0
2017	\$88,000.00		\$4,000.00	\$4,000.00	\$0.00	\$84,000.00	1
2018	\$84,000.00		\$4,000.00	\$4,000.00	\$0.00	\$80,000.00	2
2019	\$80,000.00		\$4,000.00	\$4,000.00	\$0.00	\$76,000.00	3
2020	\$76,000.00		\$4,000.00	\$4,000.00	\$0.00	\$72,000.00	4
2021	\$72,000.00		\$4,000.00	\$4,000.00	\$0.00	\$68,000.00	5
2022	\$68,000.00		\$4,000.00	\$4,000.00	\$0.00	\$64,000.00	6
2023	\$64,000.00		\$4,000.00	\$4,000.00	\$0.00	\$60,000.00	7
2024	\$60,000.00		\$4,000.00	\$4,000.00	\$0.00	\$56,000.00	8
2025	\$56,000.00		\$4,000.00	\$4,000.00	\$0.00	\$52,000.00	9
2026	\$52,000.00		\$4,000.00	\$4,000.00	\$0.00	\$48,000.00	10
2027	\$48,000.00		\$4,000.00	\$4,000.00	\$0.00	\$44,000.00	11
2028	\$44,000.00		\$4,000.00	\$4,000.00	\$0.00	\$40,000.00	12
2029	\$40,000.00		\$5,000.00	\$5,000.00	\$0.00	\$35,000.00	13
2030	\$35,000.00		\$5,000.00	\$5,000.00	\$0.00	\$30,000.00	14
2031	\$30,000.00		\$5,000.00	\$5,000.00	\$0.00	\$25,000.00	15
2032	\$25,000.00		\$5,000.00	\$5,000.00	\$0.00	\$20,000.00	16
2033	\$20,000.00		\$5,000.00	\$5,000.00	\$0.00	\$15,000.00	17
2034	\$15,000.00		\$5,000.00	\$5,000.00	\$0.00	\$10,000.00	18
2035	\$10,000.00		\$5,000.00	\$5,000.00	\$0.00	\$5,000.00	19
2036	\$5,000.00		\$5,000.00	\$5,000.00	\$0.00	\$0.00	20
			\$88,000.00	\$88,000.00	\$0.00		

*Interest Only Payment

Big Plains SWSSD

DWB Loan Terms

Local Share (total):	\$	-
Other Agency Funding:	\$	-
DWB Grant Amount:	\$	88,000
DWB Loan Amount:	\$	88,000
DWB Loan Term:		20
DWB Loan Interest:		0.00%
DWB Loan Payment:	\$	4,400

DW Expenses (Estimated)

Proposed Facility Capital Cost:	\$	176,000
Existing Facility O&M Expense:	\$	94,522
Proposed Facility O&M Expense:	\$	94,522
O&M Inflation Factor:		1.0%
Existing Debt Service:	\$	110,117

DW Revenue Sources (Projected)

Beginning Cash:	\$	-
Existing Customers (ERC):		323
Projected Growth Rate:		1.0%
Impact Fee/Connection Fee:	\$	12,000
Current Monthly User Charge:	\$	59.21
Needed Average Monthly User Charge:	\$	63.84

DW Revenue Projections

Yr	Growth Rate (%)	Annual Growth (ERC)	Total Users (ERC)	User Charge Revenue	Impact Fee Revenue	Property Tax Revenue	Total Revenue	DWB Loan Repayment	DWB Loan Reserves	Remaining Principal	Principal Payment	Interest Payment	Existing DW Debt Service	O&M Expenses	Total Expenses	Debt Service Ratio
0	1.0%	3	323	229,500	36,000	6,000	271,500	-	-	88,000	-	-	110,117	94,522	204,639	-
1	1.0%	3	326	249,759	36,000	6,000	291,759	4,000	440	84,000	4,000	-	110,117	94,522	209,079	1.73
2	1.0%	3	329	252,057	36,000	6,000	294,057	4,000	440	80,000	4,000	-	110,117	95,467	210,024	1.74
3	1.0%	4	333	255,122	48,000	6,000	309,122	4,000	440	76,000	4,000	-	110,117	96,422	210,979	1.86
4	1.0%	3	336	257,420	36,000	6,000	299,420	4,000	440	72,000	4,000	-	110,117	97,386	211,943	1.77
5	1.0%	3	339	259,718	36,000	6,000	301,718	4,000	440	68,000	4,000	-	110,117	98,360	212,917	1.78
6	1.0%	4	343	262,783	48,000	6,000	316,783	4,000	440	64,000	4,000	-	110,117	99,344	213,901	1.91
7	1.0%	3	346	265,081	36,000	6,000	307,081	4,000	440	60,000	4,000	-	110,117	100,337	214,894	1.81
8	1.0%	4	350	268,146	48,000	6,000	322,146	4,000	440	56,000	4,000	-	110,117	101,340	215,897	1.93
9	1.0%	3	353	270,444	36,000	6,000	312,444	4,000	440	52,000	4,000	-	110,117	102,354	216,911	1.84
10	1.0%	4	357	273,509	48,000	6,000	327,509	4,000	440	48,000	4,000	-	110,117	103,377	217,934	1.96
11	1.0%	3	360	275,807	36,000	6,000	317,807	4,000	440	44,000	4,000	-	110,117	104,411	218,528	1.87
12	1.0%	4	364	278,872	48,000	6,000	332,872	4,000	440	40,000	4,000	-	110,117	105,455	219,572	1.99
13	1.0%	4	368	281,936	48,000	6,000	335,936	5,000	5,000	35,000	5,000	-	110,117	106,510	221,627	1.99
14	1.0%	3	371	284,234	36,000	6,000	326,234	5,000	5,000	30,000	5,000	-	110,117	107,575	222,692	1.90
15	1.0%	4	375	287,299	48,000	6,000	341,299	5,000	5,000	25,000	5,000	-	110,117	108,651	223,768	2.02
16	1.0%	4	379	290,364	48,000	6,000	344,364	5,000	5,000	20,000	5,000	-	110,117	109,737	224,854	2.04
17	1.0%	4	383	293,428	48,000	6,000	347,428	5,000	5,000	15,000	5,000	-	110,117	110,834	225,951	2.06
18	1.0%	3	386	295,726	36,000	6,000	337,726	5,000	5,000	10,000	5,000	-	110,117	111,943	227,060	1.96
19	1.0%	4	390	298,791	48,000	6,000	352,791	5,000	5,000	5,000	5,000	-	110,117	113,062	228,179	2.08
20	1.0%	4	394	301,855	48,000	6,000	355,855	5,000	5,000	-	5,000	-	110,117	114,193	229,310	2.10

Total Paid in Debt Service = 88,000 -

Utah Department Of Environmental Quality

Division Of Drinking Water

APPLE VALLEY BIG PLAINS	PWS ID: UTAH27069	Rating: Corrective Action	01/05/2015	Active
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Legal Contact

DALE ERNEST HARRIS
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 Phone:
 County: WASHINGTON COUNTY
 System Type: Community
 Population: 718

Site Updates

Last Inventory Update: 01/05/2016
 Last Surveyor Update: 12/09/2015
 Surveyor: KLINTON A FREI
 Operating Period: 1/1 - 12/31
 Last IPS Update: 05/30/2016 07:00:00

Consumptive Use Zone

Irrigation Zone: 5
 Date: 02/15/2013

Admin Contacts

Name	Title	Office	Emergency	Email
HARRIS, DALE ERNEST		435-877-1190	435-632-8358	dharris@applevalleyut.gov

IPS Report**IPS Summary**

Total IPS Points	Admin & Physical Facilities	Quality & Monitoring	Operator Certification	Significant Deficiency
9	-1	20	-10	0

Physical Facility Points

Code	Description	Severity	Point Effective		
M001	CURRENT EMERGENCY RESPONSE PROGRAM REC		-10		
Facility	Comments	Status	Determined	Point Not Assessed	Point Assessed
			07/14/2009		-10
R001	INADEQUATE BACTERIOLOGICAL SAMPLING SITE PLAN	MIN	5		
Facility	Comments	Status	Determined	Point Not Assessed	Point Assessed
			12/09/2015		5
V004	STORAGE FACILITY INADEQUATE LADDERS OR RAILINGS	MIN	2		
Facility	Comments	Status	Determined	Point Not Assessed	Point Assessed
ST001	STORAGE FACILITY ST001	Active	07/14/2009		2
ST002	STORAGE FACILITY ST002	Active	12/09/2015		2
V005	STORAGE FACILITY VENT NOT TURNED DOWN	MIN	2		
Facility	Comments	Status	Determined	Point Not Assessed	Point Assessed
ST001	STORAGE FACILITY ST001	Active	07/14/2009		2
ST002	STORAGE FACILITY ST002	Active	07/14/2009		2

Total Effective Points: -1

Lead Copper Monitoring And Quality Violations

Violation No.	Period	Code	Description/Name	Point Effective
2016-9014407	01/01/2013 - 12/31/2015	52	FOLLOW-UP OR ROUTINE TAP M/R (LCR)	20
Total Effective Points: 20				

Operator Certification Points

Type	Level Required	Highest Certificate	Point Effective
Distribution	Dist 1	Dist 2	-10
Treatment			0
Total Effective Points: -10			

Utah Department Of Environmental Quality

Division Of Drinking Water

BIG PLAINS SEWER AND WATER SSD	PWS ID: UTAH27089	Rating: Approved	07/22/2014	Active
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Legal Contact

DALE ERNEST HARRIS
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 Phone:
 County: WASHINGTON COUNTY
 System Type: Community
 Population: 100

Site Updates

Last Inventory Update: 01/05/2016
 Last Surveyor Update: 12/09/2015
 Surveyor: KLINTON A FREI
 Operating Period: 1/1 - 12/31
 Last IPS Update: 05/30/2016 07:00:00

Consumptive Use Zone

Irrigation Zone: 5
 Date: 02/15/2013

Admin Contacts

Name	Title	Office	Emergency	Email
HARRIS, DALE ERNEST		435-877-1190	435-632-8358	dharris@applevalleyut.gov

IPS Report**IPS Summary**

Total IPS Points	Admin & Physical Facilities	Quality & Monitoring	Operator Certification	Significant Deficiency
11	1	20	-10	0

Physical Facility Points

Code	Description	Severity	Point Effective
S015	WELL LACKS A MEANS TO MEASURE DRAWDOWN	MIN	1

Facility	Comments	Status	Determined	Point Not Assessed	Point Assessed
WS002 JESSUP WELL	ON SITE BUT NOT INSTALLED. SCHEDULED TO BE INSTALLED BEFORE THE END OF THE YEAR	Active	12/09/2015		1

Total Effective Points: 1**Lead Copper Monitoring And Quality Violations**

Violation No.	Period	Code	Description/Name	Point Effective
2016-26300	07/01/2015 - 12/31/2015	52	FOLLOW-UP OR ROUTINE TAP M/R (LCR)	20

Total Effective Points: 20**Operator Certification Points**

Type	Level Required	Highest Certificate	Point Effective
Distribution	Small System	Dist 2	-10
Treatment			0

Total Effective Points: -10