

DRINKING WATER BOARD
BOARD PACKET FOR CONSTRUCTION LOAN

APPLICANT’S REQUEST:

Ticaboo Utility Improvement District is requesting financial assistance in the amount of \$700,000 to replace the Well #1 pump and pump house.

STAFF COMMENTS:

The pumping equipment for the District’s primary source, Well #1, has failed. The existing pump house has exceeded its useful life and is failing. The existing security fence is also old and requires replacement. The system presently uses diesel generators to provide the power required for the operation of the two existing wells. The dependence upon diesel power generation results in high pumping costs. The project also includes the installation of new solar panel arrays to provide power for Well #1 and Well #2 and reduce the reliance on diesel generation and associated high pumping costs.

The local MAGI for Ticaboo is \$19,243 which is 49% of the State MAGI. They currently have a water bill of approximately \$61.23 per month, which is 3.82% of local MAGI. Due to Ticaboo’s low MAGI and high water bill relative to its MAGI the town qualifies for grant.

On November 7, at the Drinking Water Board meeting Chip Shortreed of Ticaboo requested that the Board offer a 50-50 loan to grant split because of the financial hardship the Town of Ticaboo experiences. Chip Shortreed stated that the Town’s average water bill is higher than the staff’s evaluation demonstrated. The Board tabled authorizing the loan at the Financial Assistance Committee’s recommendation allowing for updated information to be provided to Division staff.

Chip has since provided a lower connection count of 93 than the previous provided count of 123, higher system expenses of \$52,578 from \$27,578 and higher system income of \$68,332 from \$58,032. Staff provides updated funding options with no recommendation.

	Total Request	Term (Yr)	Interest	Loan		P.F.		Water Bill	% of MAGI
1	\$700,000	30	0.0%	\$560,000	80%	\$140,000	20%	\$68.70	4.28%
2	\$700,000	30	0.0%	\$350,000	50%	\$350,000	50%	\$61.79	3.83%

APPLICANT'S LOCATION:

Ticaboo is located in Garfield County.

MAP OF APPLICANT'S LOCATION:



PROJECT DESCRIPTION:

The pumping equipment for the District's primary source, Well #1, has failed. The existing pump house has exceeded its useful life and is failing and the existing security fence is also old and requires replacement. The system presently uses diesel generators to provide the power required for the operation of the two existing wells. The dependence upon diesel power generation results in high pumping costs.

The project includes the following:

- Replacement of Well #1 pump and related equipment.
- Construction of a new pump house for Well #1.
- New fencing to secure Well #1 and the existing storage reservoir.
- Installation of new solar panel arrays to provide power for Well #1 and Well #2 and reduce the reliance on diesel generation and associated high pumping costs.

This project is designed to place this source back in reliable service, reduce pumping costs and satisfy state and federal regulatory requirements.

A solar engineering firm was consulted and provided with the District's kilowatt hour usage on the well pumps. From their analysis they recommended: 78.4 kW solar-direct for Well Pump 1; and 39.2 kW solar-direct for Well Pump 2. The solar-direct kW needed to power each pump was based upon historical usage values. This provides the District the ability to run the pumps solely on solar-direct power and keep up with demand even during night time hours when no pumping would occur. By doing so the District would no longer be reliant on diesel generation for water production though under an emergency situation the diesel generation can still be utilized. The District has estimated a return on investment for the solar construction in approximately 15 years.

POPULATION GROWTH:

According to the Utah State Governor's Office of Planning and Budgeting, the anticipated growth rate for Trenton Town Water System is approximately 1.1% per year over the next 40 years

	<u>Year</u>	<u>Population</u>
Current:	2014	134
Projected:	2030	180

IMPLEMENTATION SCHEDULE:

Apply to DWB for Construction Funds:	September 25, 2014
SRF Committee Conference Call:	October 15, 2014
DWB Funding Authorization:	November 7, 2014
Complete Design:	December 31, 2014
Plan Approval:	January 31, 2014
Advertise for Bids:	January 31, 2014
Bid Opening:	February 28, 2014
Loan Closing:	March 9, 2014
Begin Construction:	March 23, 2014
Complete Construction:	June 23, 2014
Receive Operating Permit:	July 23, 2014

COST ESTIMATE:

Legal and Bonding	\$6,000
Engineering- Design	\$25,000
Engineering- CMS	\$10,000
Engineering- O&M Manual	\$5,000
Construction-Water Source	\$236,000
Construction- Solar Equipment	\$358,000
Contingency	<u>\$60,000</u>
Total Project Cost	\$700,000

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%, 30-yr)	\$560,000	80%
DWB Grant	\$140,000	20%
Total Amount	<u>\$700,000</u>	<u>100%</u>

ESTIMATED ANNUAL COST OF WATER SERVICE:

Operation and Maintenance plus Depreciation: \$27,578

Existing DW Debt Service: \$0

DDW Debt Service (0%, 30-yrs): \$18,666.67

DDW Debt Reserve: \$1,866.67

Replacement Reserve Account: \$2,800.00

Annual Cost/ERC: \$413.91

Monthly Cost/ERC: \$34.49

Cost as % MAGI: 2.15%

Ticaboo Utility Improvement District

November 26, 2014

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APPLICANT:

Ticaboo Utility Improvement District
Highway 276, Mile Marker 27
P.O. Box 2140
Ticaboo, Utah 84533-8343
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**PRESIDING OFFICIAL &
CONTACT PERSON:**

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TREASURER/RECORDER:

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CONSULTING ENGINEER:

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FINANCIAL CONSULTANT:

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BOND ATTORNEY:

Baline Carlton
Ballard Spahr Andrews & Ingersoll, LLP
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Salt Lake City, Utah 84111
801-531-3020

DRINKING WATER BOARD FINANCIAL ASSISTANCE EVALUATION

SYSTEM NAME: Ticaboo
 COUNTY: Garfield
 PROJECT DESCRIPTION: Well Construction

FUNDING SOURCE: State SRF

80 % Loan & 20 % Grant

ESTIMATED POPULATION:	134	NO. OF CONNECTIONS:	93 *	SYSTEM RATING:	APPROVED
CURRENT AVG WATER BILL:	\$61.23 *			PROJECT TOTAL:	\$700,000
CURRENT % OF AGI:	3.82%	FINANCIAL PTS:	68	LOAN AMOUNT:	\$560,000
ESTIMATED MEDIAN AGI:	\$19,243			GRANT AMOUNT:	\$140,000
STATE AGI:	\$39,325			TOTAL REQUEST:	\$700,000
SYSTEM % OF STATE AGI:	49%				

	@ ZERO % RATE 0%	@ RBBI MKT RATE 4.93%		AFTER REPAYMENT PENALTY & POINTS 0.00%
<u>SYSTEM</u>				
ASSUMED LENGTH OF DEBT, YRS:	30	30		30
ASSUMED NET EFFECTIVE INT. RATE:	0.00%	4.93%		0.00%
REQUIRED DEBT SERVICE:	\$18,666.67	\$36,138.64		\$18,666.67
*PARTIAL COVERAGE (15%):	\$0.00	\$5,420.80		\$0.00
*ADD. COVERAGE AND RESERVE (10%):	\$1,866.67	\$3,613.86		\$1,866.67
ANNUAL NEW DEBT PER CONNECTION:	\$220.79	\$485.73		\$220.79
O & M + FUNDED DEPRECIATION:	\$52,578.00	\$52,578.00		\$52,578.00
OTHER DEBT + COVERAGE:	\$0.00	\$0.00		\$0.00
REPLACEMENT RESERVE ACCOUNT:	\$3,562.23	\$0.00		\$3,562.23
ANNUAL EXPENSES PER CONNECTION:	\$603.66	\$565.35		\$603.66
TOTAL SYSTEM EXPENSES	\$76,673.57	\$97,751.30		\$76,673.57
TAX REVENUE:	\$0.00	\$0.00		\$0.00
<u>RESIDENCE</u>				
MONTHLY NEEDED WATER BILL:	\$68.70	\$87.59		\$68.70
% OF ADJUSTED GROSS INCOME:	4.28%	5.46%		4.28%

* Equivalent Residential Connections

Ticaboo

PROPOSED BOND REPAYMENT SCHEDULE

80 % Loan & 20 % Grant

PRINCIPAL	\$560,000.00	ANTICIPATED CLOSING DATE	09-Mar-15
INTEREST	0.00%	FIRST P&I PAYMENT DUE	01-Jul-16
TERM	30	REVENUE BOND	
NOMIN. PAYMENT	\$18,666.67	PRINC PREPAID:	\$0.00

YEAR	BEGINNING BALANCE	DATE OF PAYMENT	PAYMENT	PRINCIPAL	INTEREST	ENDING BALANCE	PAYM NO.
2015	\$560,000.00		\$0.00 *	\$0.00	\$0.00	\$560,000.00	0
2016	\$560,000.00		\$19,000.00	\$19,000.00	\$0.00	\$541,000.00	1
2017	\$541,000.00		\$19,000.00	\$19,000.00	\$0.00	\$522,000.00	2
2018	\$522,000.00		\$19,000.00	\$19,000.00	\$0.00	\$503,000.00	3
2019	\$503,000.00		\$19,000.00	\$19,000.00	\$0.00	\$484,000.00	4
2020	\$484,000.00		\$19,000.00	\$19,000.00	\$0.00	\$465,000.00	5
2021	\$465,000.00		\$19,000.00	\$19,000.00	\$0.00	\$446,000.00	6
2022	\$446,000.00		\$19,000.00	\$19,000.00	\$0.00	\$427,000.00	7
2023	\$427,000.00		\$19,000.00	\$19,000.00	\$0.00	\$408,000.00	8
2024	\$408,000.00		\$19,000.00	\$19,000.00	\$0.00	\$389,000.00	9
2025	\$389,000.00		\$19,000.00	\$19,000.00	\$0.00	\$370,000.00	10
2026	\$370,000.00		\$19,000.00	\$19,000.00	\$0.00	\$351,000.00	11
2027	\$351,000.00		\$18,000.00	\$18,000.00	\$0.00	\$333,000.00	12
2028	\$333,000.00		\$19,000.00	\$19,000.00	\$0.00	\$314,000.00	13
2029	\$314,000.00		\$18,000.00	\$18,000.00	\$0.00	\$296,000.00	14
2030	\$296,000.00		\$19,000.00	\$19,000.00	\$0.00	\$277,000.00	15
2031	\$277,000.00		\$18,000.00	\$18,000.00	\$0.00	\$259,000.00	16
2032	\$259,000.00		\$19,000.00	\$19,000.00	\$0.00	\$240,000.00	17
2033	\$240,000.00		\$18,000.00	\$18,000.00	\$0.00	\$222,000.00	18
2034	\$222,000.00		\$19,000.00	\$19,000.00	\$0.00	\$203,000.00	19
2035	\$203,000.00		\$18,000.00	\$18,000.00	\$0.00	\$185,000.00	20
2036	\$185,000.00		\$19,000.00	\$19,000.00	\$0.00	\$166,000.00	21
2037	\$166,000.00		\$18,000.00	\$18,000.00	\$0.00	\$148,000.00	22
2038	\$148,000.00		\$19,000.00	\$19,000.00	\$0.00	\$129,000.00	23
2039	\$129,000.00		\$18,000.00	\$18,000.00	\$0.00	\$111,000.00	24
2040	\$111,000.00		\$19,000.00	\$19,000.00	\$0.00	\$92,000.00	25
2041	\$92,000.00		\$18,000.00	\$18,000.00	\$0.00	\$74,000.00	26
2042	\$74,000.00		\$19,000.00	\$19,000.00	\$0.00	\$55,000.00	27
2043	\$55,000.00		\$18,000.00	\$18,000.00	\$0.00	\$37,000.00	28
2044	\$37,000.00		\$19,000.00	\$19,000.00	\$0.00	\$18,000.00	29
2045	\$18,000.00		\$18,000.00	\$18,000.00	\$0.00	\$0.00	30
			\$560,000.00	\$560,000.00	\$0.00		

*Interest Only Payment

DRINKING WATER BOARD FINANCIAL ASSISTANCE EVALUATION

SYSTEM NAME: Ticaboo
 COUNTY: Garfield
 PROJECT DESCRIPTION: Well Construction

FUNDING SOURCE: State SRF

50 % Loan & 50 % Grant

ESTIMATED POPULATION:	134	NO. OF CONNECTIONS:	93 *	SYSTEM RATING:	APPROVED
CURRENT AVG WATER BILL:	\$61.23 *			PROJECT TOTAL:	\$700,000
CURRENT % OF AGI:	3.82%	FINANCIAL PTS:	68	LOAN AMOUNT:	\$350,000
ESTIMATED MEDIAN AGI:	\$19,243			GRANT AMOUNT:	\$350,000
STATE AGI:	\$39,325			TOTAL REQUEST:	\$700,000
SYSTEM % OF STATE AGI:	49%				

	@ ZERO % RATE 0%	@ RBBI MKT RATE 4.93%		AFTER REPAYMENT PENALTY & POINTS 0.00%
<u>SYSTEM</u>				
ASSUMED LENGTH OF DEBT, YRS:	30	30		30
ASSUMED NET EFFECTIVE INT. RATE:	0.00%	4.93%		0.00%
REQUIRED DEBT SERVICE:	\$11,666.67	\$22,586.65		\$11,666.67
*PARTIAL COVERAGE (15%):	\$0.00	\$0.00		\$0.00
*ADD. COVERAGE AND RESERVE (10%):	\$1,166.67	\$2,258.67		\$1,166.67
ANNUAL NEW DEBT PER CONNECTION:	\$137.99	\$267.15		\$137.99
O & M + FUNDED DEPRECIATION:	\$52,578.00	\$52,578.00		\$52,578.00
OTHER DEBT + COVERAGE:	\$0.00	\$0.00		\$0.00
REPLACEMENT RESERVE ACCOUNT:	\$3,212.23	\$3,758.23		\$3,212.23
ANNUAL EXPENSES PER CONNECTION:	\$599.89	\$605.77		\$599.89
TOTAL SYSTEM EXPENSES	\$68,623.57	\$81,181.55		\$68,623.57
TAX REVENUE:	\$0.00	\$0.00		\$0.00
<u>RESIDENCE</u>				
MONTHLY NEEDED WATER BILL:	\$61.49	\$72.74		\$61.49
% OF ADJUSTED GROSS INCOME:	3.83%	4.54%		3.83%

* Equivalent Residential Connections

Ticaboo

PROPOSED BOND REPAYMENT SCHEDULE

50 % Loan & 50 % Grant

PRINCIPAL	\$350,000.00	ANTICIPATED CLOSING DATE	09-Mar-15
INTEREST	0.00%	FIRST P&I PAYMENT DUE	01-Jul-16
TERM	30	REVENUE BOND	
NOMIN. PAYMENT	\$11,666.67	PRINC PREPAID:	\$0.00

YEAR	BEGINNING BALANCE	DATE OF PAYMENT	PAYMENT	PRINCIPAL	INTEREST	ENDING BALANCE	PAYM NO.
2015	\$350,000.00		\$0.00 *	\$0.00	\$0.00	\$350,000.00	0
2016	\$350,000.00		\$12,000.00	\$12,000.00	\$0.00	\$338,000.00	1
2017	\$338,000.00		\$12,000.00	\$12,000.00	\$0.00	\$326,000.00	2
2018	\$326,000.00		\$12,000.00	\$12,000.00	\$0.00	\$314,000.00	3
2019	\$314,000.00		\$12,000.00	\$12,000.00	\$0.00	\$302,000.00	4
2020	\$302,000.00		\$12,000.00	\$12,000.00	\$0.00	\$290,000.00	5
2021	\$290,000.00		\$12,000.00	\$12,000.00	\$0.00	\$278,000.00	6
2022	\$278,000.00		\$12,000.00	\$12,000.00	\$0.00	\$266,000.00	7
2023	\$266,000.00		\$12,000.00	\$12,000.00	\$0.00	\$254,000.00	8
2024	\$254,000.00		\$12,000.00	\$12,000.00	\$0.00	\$242,000.00	9
2025	\$242,000.00		\$12,000.00	\$12,000.00	\$0.00	\$230,000.00	10
2026	\$230,000.00		\$12,000.00	\$12,000.00	\$0.00	\$218,000.00	11
2027	\$218,000.00		\$11,000.00	\$11,000.00	\$0.00	\$207,000.00	12
2028	\$207,000.00		\$12,000.00	\$12,000.00	\$0.00	\$195,000.00	13
2029	\$195,000.00		\$11,000.00	\$11,000.00	\$0.00	\$184,000.00	14
2030	\$184,000.00		\$12,000.00	\$12,000.00	\$0.00	\$172,000.00	15
2031	\$172,000.00		\$11,000.00	\$11,000.00	\$0.00	\$161,000.00	16
2032	\$161,000.00		\$12,000.00	\$12,000.00	\$0.00	\$149,000.00	17
2033	\$149,000.00		\$11,000.00	\$11,000.00	\$0.00	\$138,000.00	18
2034	\$138,000.00		\$12,000.00	\$12,000.00	\$0.00	\$126,000.00	19
2035	\$126,000.00		\$11,000.00	\$11,000.00	\$0.00	\$115,000.00	20
2036	\$115,000.00		\$12,000.00	\$12,000.00	\$0.00	\$103,000.00	21
2037	\$103,000.00		\$11,000.00	\$11,000.00	\$0.00	\$92,000.00	22
2038	\$92,000.00		\$12,000.00	\$12,000.00	\$0.00	\$80,000.00	23
2039	\$80,000.00		\$11,000.00	\$11,000.00	\$0.00	\$69,000.00	24
2040	\$69,000.00		\$12,000.00	\$12,000.00	\$0.00	\$57,000.00	25
2041	\$57,000.00		\$11,000.00	\$11,000.00	\$0.00	\$46,000.00	26
2042	\$46,000.00		\$12,000.00	\$12,000.00	\$0.00	\$34,000.00	27
2043	\$34,000.00		\$11,000.00	\$11,000.00	\$0.00	\$23,000.00	28
2044	\$23,000.00		\$12,000.00	\$12,000.00	\$0.00	\$11,000.00	29
2045	\$11,000.00		\$11,000.00	\$11,000.00	\$0.00	\$0.00	30
			\$350,000.00	\$350,000.00	\$0.00		

*Interest Only Payment

Ticaboo

DWB Loan Terms

Local Share (total):	\$	-
Other Agency Funding:	\$	-
DWB Grant Amount:	\$	350,000
DWB Loan Amount:	\$	350,000
DWB Loan Term:		30
DWB Loan Interest:		0.00%
DWB Loan Payment:	\$	11,667

DW Expenses (Estimated)

Proposed Facility Capital Cost:	#VALUE!
Existing Facility O&M Expense:	\$ 52,578
Proposed Facility O&M Expense:	\$ 52,578
O&M Inflation Factor:	1.0%
Existing Debt Service:	\$ -

DW Revenue Sources (Projected)

Beginning Cash:	\$	-
Existing Customers (ERC):		93
Projected Growth Rate:		1.0%
Impact Fee/Connection Fee:	\$	3,500
Current Monthly User Charge:	\$	61.23
Needed Average Monthly User Charge:	\$	61.49

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%	1	93	68,332	3,500	-	71,832	-	-	350,000	-	-	-	52,578	52,578	-	
1	1.0%	1	94	69,361	3,500	-	72,861	12,000	1,167	338,000	12,000	-	-	52,578	65,745	1.69	
2	1.0%	1	95	70,099	3,500	-	73,599	12,000	1,167	326,000	12,000	-	-	53,104	66,270	1.71	
3	1.0%	1	96	70,837	3,500	-	74,337	12,000	1,167	314,000	12,000	-	-	53,635	66,801	1.73	
4	1.0%	1	97	71,575	3,500	-	75,075	12,000	1,167	302,000	12,000	-	-	54,171	67,338	1.74	
5	1.0%	1	98	72,313	3,500	-	75,813	12,000	1,167	290,000	12,000	-	-	54,713	67,880	1.76	
6	1.0%	1	99	73,051	3,500	-	76,551	12,000	1,167	278,000	12,000	-	-	55,260	68,427	1.77	
7	1.0%	1	100	73,789	3,500	-	77,289	12,000	1,167	266,000	12,000	-	-	55,813	68,979	1.79	
8	1.0%	1	101	74,527	3,500	-	78,027	12,000	1,167	254,000	12,000	-	-	56,371	69,537	1.80	
9	1.0%	1	102	75,265	3,500	-	78,765	12,000	1,167	242,000	12,000	-	-	56,934	70,101	1.82	
10	1.0%	1	103	76,002	3,500	-	79,502	12,000	1,167	230,000	12,000	-	-	57,504	70,670	1.83	
11	1.0%	1	104	76,740	3,500	-	80,240	12,000	1,167	218,000	12,000	-	-	58,079	70,079	1.85	
12	1.0%	1	105	77,478	3,500	-	80,978	11,000	1,167	207,000	11,000	-	-	58,660	69,660	2.03	
13	1.0%	1	106	78,216	3,500	-	81,716	12,000	1,167	195,000	12,000	-	-	59,246	71,246	1.87	
14	1.0%	1	107	78,954	3,500	-	82,454	11,000	1,167	184,000	11,000	-	-	59,839	70,839	2.06	
15	1.0%	1	108	79,692	3,500	-	83,192	12,000	1,167	172,000	12,000	-	-	60,437	72,437	1.90	
16	1.0%	1	109	80,430	3,500	-	83,930	11,000	1,167	161,000	11,000	-	-	61,041	72,041	2.08	
17	1.0%	1	110	81,168	3,500	-	84,668	12,000	1,167	149,000	12,000	-	-	61,652	73,652	1.92	
18	1.0%	1	111	81,906	3,500	-	85,406	11,000	1,167	138,000	11,000	-	-	62,268	73,268	2.10	
19	1.0%	1	112	82,643	3,500	-	86,143	12,000	1,167	126,000	12,000	-	-	62,891	74,891	1.94	
20	1.0%	1	113	83,381	3,500	-	86,881	11,000	1,167	115,000	11,000	-	-	63,520	74,520	2.12	
21	1.0%	2	115	84,857	7,000	-	91,857	12,000	1,167	103,000	12,000	-	-	64,155	76,155	2.31	
22	1.0%	1	116	85,595	3,500	-	89,095	11,000	1,167	92,000	11,000	-	-	64,797	75,797	2.21	
23	1.0%	1	117	86,333	3,500	-	89,833	12,000	1,167	80,000	12,000	-	-	65,445	77,445	2.03	
24	1.0%	1	118	87,071	3,500	-	90,571	11,000	1,167	69,000	11,000	-	-	66,099	77,099	2.22	
25	1.0%	1	119	87,809	3,500	-	91,309	12,000	1,167	57,000	12,000	-	-	66,760	78,760	2.05	
26	1.0%	1	120	88,547	3,500	-	92,047	11,000	1,167	46,000	11,000	-	-	67,428	78,428	2.24	
27	1.0%	2	122	90,022	7,000	-	97,022	12,000	1,167	34,000	12,000	-	-	68,102	80,102	2.41	
28	1.0%	1	123	90,760	3,500	-	94,260	11,000	1,167	23,000	11,000	-	-	68,783	79,783	2.32	
29	1.0%	1	124	91,498	3,500	-	94,998	12,000	1,167	11,000	12,000	-	-	69,471	81,471	2.13	
30	1.0%	1	125	92,236	3,500	-	95,736	11,000	1,167	-	11,000	-	-	70,166	81,166	2.32	
Total Paid in Debt Service =											350,000	-					