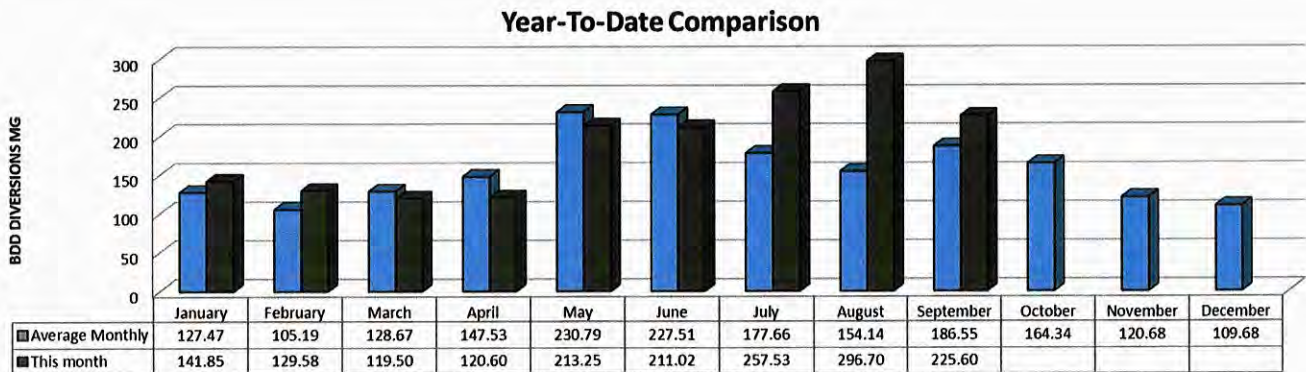




Date: October 1, 2020
To: Buckman Direct Diversion Board
From: Randy Sugrue, BDD Operations Superintendent
Subject: Update on BDD Operations for the Month of September 2020

ITEM:

1. This memorandum is to update the Buckman Direct Diversion Board (BDDDB) on BDD operations during the month of September 2020. The BDD diversions and deliveries have averaged, in Million Gallons Per Day (MGD) as follows:
 - a. Raw water diversions: 7.52 MGD.
 - b. Drinking water deliveries through Booster Station 4A/5A: 6.44 MGD.
 - c. Raw water delivery to Las Campanas at BS2A: 0.94 MGD.
 - d. Onsite treated and non-treated water storage: 0.14 MGD Average.
2. The BDD is providing approximately 50% percent of the water supply to the City and County for the month.
3. Regional Demand/Drought Summary.
4. The BDD year-to-date diversions are depicted below:

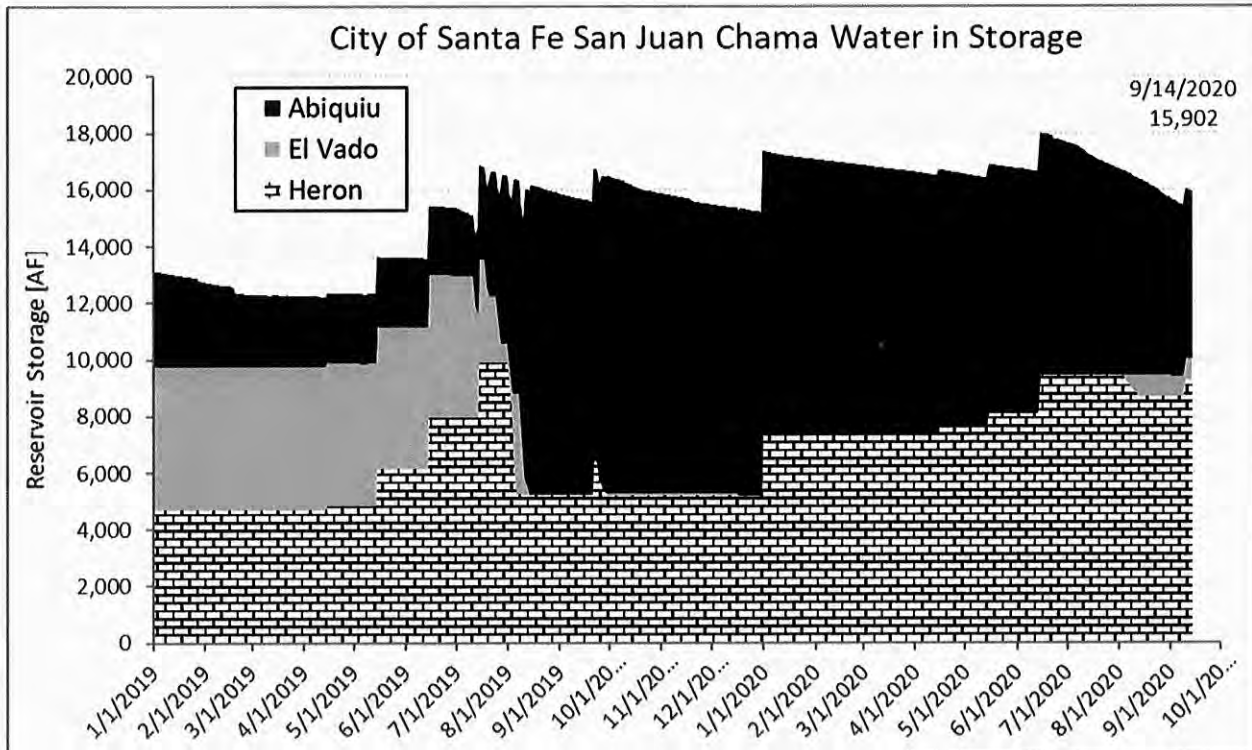




Regional Water Overview

Daily metered regional water demand for the month of September 2020 is approximately 11.5 MGD for the city and 1.2 MGD for the county.

Rio Grande flows for September 2020 average approximately 500 CFS (cubic feet per second.)



ENSO Summary

September 14, 2020

ENSO Alert System Status: La Niña Advisory. La Niña conditions are present.*Equatorial sea surface temperatures (SSTs) are below average across the east-central and eastern Pacific Ocean. The tropical atmospheric circulation is consistent with La Niña. La Niña conditions are present and are likely to continue through the Northern Hemisphere winter (~75% chance).



Buckman Direct Diversion Monthly SJC and Native Diversions

Sep-20

In Acre-Feet

Month	Total SJC + Native Rights	SP-4842 RG Native COUNTY	SD-03418 RG Native LAS CAMPANAS	SJC Call Total	SP-2847-E SJC Call CITY	SP-2847-N-A SJC Call LAS CAMPANAS	All Partners Conveyance Losses
JAN	438.797	134.433	0.000	304.364	298.249	6.115	2.759
FEB	385.360	207.046	0.000	178.314	178.314	0.000	1.679
MAR	364.592	192.426	0.000	172.165	172.165	0.000	1.621
APR	362.944	178.481	0.000	184.463	125.850	58.613	1.737
MAY	635.468	523.991	0.000	111.477	109.015	2.463	0.889
JUN	650.009	522.607	0.000	127.402	3.256	124.146	1.017
JUL	784.520	0.000	0.000	784.520	780.957	3.564	3.663
AUG	874.354	0.000	0.000	874.354	841.945	32.409	4.214
SEP	692.070	0.000	0.000	692.070	635.070	57.520	2.248
OCT	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NOV	0.000	0.000	0.000	0.000	0.000	0.000	0.000
DEC	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL	5,188.114	1,758.984	0.000	3,429.650	3,144.820	284.830	19.827

In Million Gallons

Month	Native COUNTY	Native Las Campanas	SJC TOTAL	SJC CITY	SJC Las Campanas	All Partners Diversions
JAN	43.789	0.000	98.103	96.304	1.975	141.892
FEB	67.442	0.000	57.454	57.454	0.000	124.896
MAR	62.680	0.000	55.473	55.473	0.000	118.152
APR	58.137	0.000	59.435	40.622	18.919	117.572
MAY	170.681	0.000	35.812	33.143	0.749	206.493
JUN	170.230	0.000	40.927	1.046	39.881	211.158
JUL	0.000	0.000	252.754	252.056	1.148	252.754
AUG	0.000	0.000	281.681	271.726	10.460	281.681
SEP	0.000	0.000	225.430	203.860	18.567	225.430
OCT	0.000	0.000	0.000	0.000	0.000	0.000
NOV	0.000	0.000	0.000	0.000	0.000	0.000
DEC	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL	572.959	0.000	1,107.069	1,011.683	91.699	1,680.028



Dec-19							
In Acre-Feet							
Month	Total SJC + Native Rights	SP-4842 RG Native COUNTY	SD-03418 RG Native LAS CAMPANAS	SJC Call Total	SP-2847-E SJC Call CITY	SP-2847-N-A SJC Call LAS CAMPANAS	All Partners Conveyance Losses
JAN	327.677	56.671	0.000	271.007	271.007	0.000	2.483
FEB	278.357	71.266	0.000	207.090	207.090	0.000	1.908
MAR	134.335	88.610	0.000	45.725	45.725	0.000	3.498
APR	126.924	114.750	0.000	12.175	12.175	0.000	0.110
MAY	550.285	550.285	0.000	0.000	0.000	0.000	0.000
JUN	546.222	546.222	0.000	0.000	0.000	0.000	0.000
JUL	649.014	23.285	0.000	625.729	519.383	106.345	2.907
AUG	422.340	17.075	0.000	405.265	318.606	86.659	1.912
SEP	518.606	169.956	0.000	348.650	261.901	86.749	1.564
OCT	531.254	15.373	0.000	515.881	477.452	38.429	4.676
NOV	325.023	42.180	0.000	282.843	280.865	1.978	2.936
DEC	334.880	48.808	0.000	286.071	286.071	0.000	2.893
TOTAL	4,744.916	1,744.482	0.000	3,000.434	2,680.275	320.160	24.886

In Million Gallons

Month	Native COUNTY	Native Las Campanas	SJC TOTAL	SJC CITY	SJC Las Campanas	All Partners Diversions
JAN	18.460	0.000	87.342	87.342	0.000	105.802
FEB	23.214	0.000	66.739	66.739	0.000	89.953
MAR	28.863	0.000	13.735	13.735	0.000	42.598
APR	37.378	0.000	3.924	3.924	0.000	41.302
MAY	179.246	0.000	0.000	0.000	0.000	179.246
JUN	177.923	0.000	0.000	0.000	0.000	177.923
JUL	7.585	0.000	201.598	167.635	34.262	209.183
AUG	5.562	0.000	130.586	102.846	27.974	136.148
SEP	55.360	0.000	112.401	84.384	28.017	167.762
OCT	5.008	0.000	166.279	154.168	12.409	171.287
NOV	13.739	0.000	91.045	90.407	0.638	104.785
DEC	15.899	0.000	92.109	92.109	0.000	108.008
TOTAL	568.235	0.000	965.760	863.292	103.299	1,533.995



Buckman Direct Diversion Monthly SJC and Native Diversions

Dec-18

In Acre-Feet

Month	Total SJC + Native Rights	SP-4842 RG Native COUNTY	SD-03418 RG Native LAS CAMPANAS	SJC Call Total	SP-2847-E SJC Call CITY	SP-2847-N-A SJC Call LAS CAMPANAS	All Partners Conveyance Losses
JAN	383.578	77.954	0.000	305.624	305.624	0.000	2.708
FEB	343.467	75.227	0.000	268.240	268.240	0.000	2.415
MAR	363.780	267.512	0.000	96.268	96.268	0.000	4.036
APR	662.407	569.253	0.000	93.154	93.154	0.000	3.898
MAY	941.240	209.538	0.000	731.702	615.366	116.336	8.171
JUN	912.903	30.894	0.000	882.009	740.070	141.939	8.707
JUL	905.897	0.000	0.000	905.897	816.188	89.709	4.255
AUG	678.383	1.466	0.000	676.917	676.917	0.000	6.087
SEP	694.411	0.000	0.000	694.411	694.411	0.000	6.404
OCT	608.789	0.000	0.000	608.789	599.228	9.560	5.805
NOV	404.616	82.390	0.000	322.226	316.641	5.585	3.196
DEC	369.186	2.966	0.000	366.220	366.220	0.000	3.392
TOTAL	7,268.656	1,317.200	0.000	5,951.456	5,588.327	363.129	59.073

In Acre-Feet

Month	Native COUNTY	Native Las Campanas	SJC TOTAL	SJC CITY	SJC Las Campanas	All Partners Diversions
JAN	77.954	0.000	302.916	302.916	0.000	380.870
FEB	75.227	0.000	265.825	265.825	0.000	341.052
MAR	267.512	0.000	92.231	92.231	0.000	359.744
APR	569.253	0.000	89.256	89.256	0.000	658.509
MAY	209.538	0.000	723.531	608.494	115.037	933.069
JUN	30.894	0.000	873.302	732.764	140.538	904.196
JUL	0.000	0.000	900.737	811.539	89.198	900.737
AUG	1.466	0.000	670.830	670.830	0.000	672.295
SEP	0.000	0.000	688.007	688.007	0.000	688.007
OCT	0.000	0.000	602.984	593.515	9.469	602.984
NOV	82.390	0.000	319.030	313.500	5.530	401.420
DEC	2.966	0.000	362.829	362.829	0.000	365.794
TOTAL	1,317.200	0.000	5,891.477	5,531.706	359.772	7,208.677



Dec-17

In Acre-Feet

Month	Total SJC + Native Rights	SP-4842 RG Native COUNTY	SD-03418 RG Native LAS CAMPANAS	SJC Call Total	SP-2847-E SJC Call CITY	SP-2847-N-A SJC Call LAS CAMPANAS	All Partners Conveyance Losses
JAN	395.248	84.736	0.000	310.512	310.512	0.000	2.717
FEB	383.179	26.107	3.426	353.646	353.646	0.000	3.087
MAR	547.849	17.804	11.643	518.402	518.402	0.000	4.564
APR	592.385	381.170	0.000	211.216	211.216	0.000	1.821
MAY	488.240	478.925	0.000	9.315	9.315	0.000	0.072
JUN	616.871	12.970	0.000	603.900	477.780	126.121	5.517
JUL	626.113	23.719	0.000	602.394	484.406	117.988	5.429
AUG	557.303	17.073	0.000	540.230	540.230	0.000	4.871
SEP	637.339	230.584	0.000	406.755	395.200	11.555	3.873
OCT	444.333	127.611	0.000	316.723	316.723	0.000	2.938
NOV	356.536	107.143	0.000	249.394	203.128	46.266	1.658
DEC	360.218	73.071	0.000	287.147	287.147	0.000	2.321
TOTAL	6,005.614	1,580.910	15.069	4,409.635	4,107.705	301.930	38.868

In Acre-Feet

Month	Native COUNTY	Native Las Campanas	SJC TOTAL	SJC CITY	SJC Las Campanas	All Partners Diversions
JAN	84.736	0.000	307.795	307.795	0.000	392.531
FEB	26.107	3.426	350.559	350.559	0.000	380.091
MAR	17.804	11.643	513.838	513.838	0.000	543.285
APR	381.170	0.000	209.395	209.395	0.000	590.565
MAY	478.925	0.000	9.243	9.243	0.000	488.168
JUN	12.970	0.000	598.383	473.415	124.969	611.354
JUL	23.719	0.000	596.965	480.040	116.925	620.684
AUG	17.073	0.000	535.359	535.359	0.000	552.431
SEP	230.584	0.000	402.883	391.437	11.445	633.466
OCT	127.611	0.000	313.785	313.785	0.000	441.396
NOV	107.143	0.000	247.736	201.777	45.958	354.878
DEC	73.071	0.000	284.826	284.826	0.000	357.898
TOTAL	1,580.910	15.069	4,370.767	4,071.470	299.297	5,966.747

Memorandum



Buckman Direct Diversion

Date: October 1, 2020
To: Buckman Direct Diversion Board
From: Mackie Romero, BDD Financial Manager *MR*
Subject: 4th Quarter Financial Statements

Information Item:

This report is to update the BDD Board and its partners on the 4th quarter financial position as of June 30, 2020.

Budget Overview – A financial plan that quantifies our current and future operations.

- Beginning Budget – FY19/20 Adopted Budget includes any budget adjustments.
- Expended – Expenditures for services and/or goods received as of 6/30/2020.
- Available Balance – Represents vacancy savings and uncommitted budget balance as of June 30, 2020.
- Percentage – Represents percentage of expended budget balance.

90 Day Cash Reserve Credit – Represents the partners cash reserve credit, which is used to fund current and future obligations as per the BDD Working Capital and Billing Policy.

Fixed & Variable Costs – All expenses billed to our partners for services and/or goods received as of June 30, 2020.

Other Funds - Major Repair & Replacement and Emergency Reserve Fund monthly contributions, cash balances and budget overview of funds authorized by the BDDDB for expenditure.

This presentation of financial information for fiscal year ended June 30, 2020, certifies the Buckman Direct Diversion's accounting transactions are reconciled in preparation for the annual audit.

BDD will continue to provide quarterly updates with financial information to provide the highest level of transparency to our partners and the BDD Board.

If you require any additional information to be included in this report, please contact me.



Buckman Direct Diversion 341 Caja del Rio Santa Fe, NM 87506





4th Quarter Financial Statement – Operations (07/01/2019-6/30/2020)

Budget Overview

CATEGORY	BEGINNING BUDGET	EXPENDED				TOTAL	BALANCE AVAILABLE	EXP BDGT %
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter			
Employee Salaries & Benefits	2,404,610	401,184	454,451	571,197	551,855	1,978,687	425,923	82%
Electricity	1,173,761	186,326	188,384	265,051	265,855	905,616	268,145	77%
Chemicals	970,000	227,804	178,789	171,602	291,211	869,406	100,594	90%
Solids	336,000	109,020	72,231	68,902	121,223	371,376	(35,376)	111%
Materials & Supplies	47,500	24,122	9,738	3,219	9,567	46,646	854	98%
Other Operating Costs	802,054	34,773	133,246	123,334	252,779	544,132	257,922	68%
Litigation Costs	1,125,840	281,975	193,406	142,386	379,074	996,841	128,999	89%
Fiscal Agent Fees	2,420,000	-	1,066,127	400,506	1,095,729	2,562,362	(142,362)	106%
TOTAL	320,644	-	-	-	320,644	320,644	-	100%
TOTAL	9,600,409	1,265,204	2,296,372	1,746,197	3,287,937	8,595,710	1,004,699	90%
DOE Federal Grant	96,000	-	52,465	4,920	-	57,385	38,615	60%
Total Expenses thru 6/30/2020					8,653,095			

90-Day Cash Reserve Credit

	Balance
City of Santa Fe	1,674,748
Santa Fe County	536,031
LC - Club	92,191
LC - Coop	18,637
Total	2,321,607

Fixed & Variable Cost – Operations

July - September	Total	Fixed	Variable (Projected)	Project Wide (Projected)
Partner Revenue				
City of Santa Fe	5,704,093	1,807,335	816,599	3,080,159
Santa Fe County	2,215,124	632,110	325,477	1,257,537
LC - Club	544,504	41,838	67,796	434,871
LC - Coop	56,626	53,992	2,635	-
Total	8,520,348	2,535,274	1,212,507	4,772,567
Other Revenue				
PNM Solar Rebate	75,362			
DOE Federal Grant	57,385			
Total	132,747			
Grand Total	8,653,095			



**4th Quarter Financial Statement – Other Funds
(07/01/2019-6/30/2020)**

Pre-Bills – Major Repair & Replacement Fund (Yearly Contribution)

	Total	City of SF	SF County	Las Campanas Coop	Las Campanas Club
Major Repair Fund	626,706	445,545	156,494	13,898	10,769
	626,706	445,545	156,494	13,898	10,769

Financial Position - Cash

	*Emergency Reserve	Major Repair
Balance at 06/30/2019	2,063,495	1,791,227
19/20 Yearly Contributions - Billed	-	626,706
Total	2,063,495	2,417,933
Less Expenses at 6/30/2020		(434,411)
Projected Cash Balance at 6/30/2020		2,852,344

* Emergency Reserve Fund has reached the funding target, per the established policy.

Budget Overview – Major Repair and Replacement Fund

CATEGORY	FY19/20 BUDGET	EXPENDED	EXPENDED	EXPENDED	EXPENDED	TOTAL	BALANCE
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter		AVAILABLE
Engineering Services	40,000	-	-	-	-	-	40,000
System Equipment	674,312	-	370,971	61,120	2,320	434,411	239,901
TOTAL	714,312	-	370,971	61,120	2,320	434,411	279,901

Memorandum



Buckman Direct Diversion

Date: September 22, 2020
To: Buckman Direct Diversion Board
From: Rick Carpenter, BDD Facility Manager
Kyle Harwood, BDD Legal Counsel
Subject: Preliminary Framework and Principles for 2020 LANL MOU

ITEM AND ISSUE:

The current BDD Board LANL MOU expires this year and BDD Project staff and counsel request guidance on a framework and principles for negotiating a new LANL MOU.

BACKGROUND:

The BDD Board directed staff to present the attached memo from April 29, 2020 to LANL NNSA for negotiation of a new MOU for 2021. We have received some feedback from LANL that will be discussed at the meeting.

Attachment:

BDD Board memo re LANL MOU Principles, dated April 29, 2020, and approved on May 7, 2020



Buckman Direct Diversion 341 Caja del Rio Santa Fe, NM 87506



Memorandum



Buckman Direct Diversion

Date: April 29, 2020
To: Buckman Direct Diversion Board
From: Rick Carpenter, BDD Facility Manager
Kyle Harwood, BDD Legal Counsel
Subject: Preliminary Framework and Principles for 2020 LANL MOU

ITEM AND ISSUE:

The current BDD Board LANL MOU expires this year and BDD Project staff and counsel request guidance on a framework and principles for negotiating a new LANL MOU.

BACKGROUND:

The background on the LANL MOU and issues addressed by the MOU are the topic of other memos to the Board.

RECOMMENDATIONS:

Board staff, counsel and consultants recommend the following principles be requested to be included in a new MOU.

Early Notification System in Los Alamos/Pueblo Canyon [section E.2 2017 MOU]

1. Continue to maintain the design and functionality of the ENS system in LA/Pueblo Canyon in order to provide the BDD Project real time notification of surface water flows in this tributary of the Rio Grande upstream of the BDD Project intake. Continue to identify stations by name in the MOU, and continue to operate E050.1, E060.1, E062 and E099 as components of the ENS.
2. Identify a schedule, budget and required approvals for the re-installation of E109.9 as a placeholder (subject to change of location or configuration depending on current condition and access agreement(s) with San Ildefonso Pueblo)
3. Evaluate and re-initiate the E110 station, and continue coordination with NMED on co-located samplers (note: which does not include the Guaje Canyon tributary)
4. Board staff, counsel and consultants, in conjunction with LANL staff, conduct a site visit of each station upon execution of the new MOU (subject to work and distance restrictions) and prepare a joint report of current conditions of each gage, control measures and changes in aggradation/incision of stream bed over time.



Buckman Direct Diversion 341 Caja del Rio Santa Fe, NM 87506



5. LANL/DOE will conduct inspection and maintenance of ENS components in April and October of each year with written inspection reports provided to BDD staff. Other inspections as needed if ENS is damaged.

6. Board staff, counsel and consultants will conduct independent assessment or co-inspections of ENS components as needed.

7. Board staff, counsel and consultants provide the BDD Board an annual report summarizing Los Alamos/Pueblo and Guaje Canyons flow events, whether or not detected by ENS stations. The summary will include a correlation with shut-off events at BDD and detection of flow at ENS locations.

8. Board staff, counsel and consultants will establish a renewed effort to document a Storm Water Quality Sampling Program and Report using DOE "Annual Surveillance Report" and NMED data.

9. LANL/DOE will provide funding for all inspections and identified improvements of \$XXX,000 (dependent on assessment of current condition of ENS stations and locations). Unexpended funds do not revert to DOE and instead may be carried over to future years for use on these issues.

Sediment Evaluations in Los Alamos/Pueblo Canyon

10. DOE will provide an annual report on sediment sampling/mapping and monitoring to BDD (including all submittals to regulatory agencies, such as DOE and NMED).

11. DOE will provide an initial summary of current and prior 5 year work effort regarding sediment sampling/mapping program, including technical details, regulatory notifications and approvals, and monitoring results of sediment control structures (including all submittals to regulatory agencies, such as DOE and NMED).

12. For actions taken in Los Alamos/Pueblo and Guaje Canyons, the BDD is copied on all correspondence between NMED/DOE and LANL, and is provided copies of all reports and workplans submitted to regulatory agencies (including DOE for monitoring, remediation and reporting of actions relations to radionuclides).

13. Board staff, counsel and consultants will conduct assessment of the Contaminant Inventory in the Los Alamos/Pueblo and Guaje Canyons to evaluate and update appropriate protections to LANL-derived pollutants.

14. DOE responded on March 31, 2020 to BDD's initial request for technical information on contaminated sites in Los Alamos/Pueblo Canyon, and DOE will provide updates annually to those requests for technical information as the issues are updated. Reconnaissance level review conducted by Board staff, counsel and consultants in conjunction with ENS "current state" assessment if significant data gaps are revealed.

BDD Project Location Sampling in Rio Grande [section E.3 2017 MOU]

15. Board staff, counsel and consultants will conduct Rio Grande base-flow and event water sampling in Rio Grande at the BDD Project intake.

16. Board staff, counsel and consultants to conduct sediment sampling on floodplain/slough/low water sediment exposure sites upstream of BDD and downstream of Los Alamos Canyon and at intake structure.

17. Board staff, counsel and consultants review and assess previous work to determine sampling locations, extent, and need for additional information.

18. DOE will provide new funding for Rio Grande sediment mapping sampling -- \$XXX,000 / year (tbd after assessment described above).

19. DOE will provide continued funding for Rio Grande water quality sampling -- \$96,000 / year

20. DOE will provide new funding for TREAT 5 -- \$70,000 project estimate cost

Data Sharing [section F. 2017 MOU]

21. DOE will continue to collect ENS data, and report to BDD.



22. DOE will continue to monitor or increase sediment sampling/mapping in response to results from 11-14 above, and report to BDD.

23. DOE will continue monitor and maintain sediment control structures, and report to BDD.

24. DOE will continue to monitor or increase storm water sampling and analysis at ENS sites in response to the results from 1-9 above, and report to BDD.

25. BDD will conduct project location sampling in Rio Grande and within treatment works (e.g., TREAT), and will provide to BDD and post verified/validated data on the BDD Project website.

Coordination with DOE/LANL and San Ildefonso Pueblo [section E.1 2017 MOU]

26. Recognize the importance and role of San Ildefonso Pueblo under DOE/San Ildefonso MOU, BDD/San Ildefonso MOU, conduct biannual MOU review meetings with all stakeholders and quarterly technical meetings regarding the new technical initiatives described above, annual schedule to be modified after initiatives are established.

List of Acronyms

BDD Buckman Direct Diversion
DOE U.S. Department of Energy
ENS Early Notification System
LANL Los Alamos National Laboratory
MOU Memorandum of Understanding
NMED – New Mexico Environment Department
TREAT – The Removal Efficiency and Assessments of Treatments



Memorandum



Buckman Direct Diversion

Date: September 22, 2020
To: Buckman Direct Diversion Board
From: John Dupuis, Santa Fe County Utilities Division Director
Subject: BDD Shared Pool Agreement Between Santa Fe County and the City of Santa Fe

ITEM AND ISSUE

Presentation on the proposed BDD Shared Pool Agreement Between Santa Fe County and the City of Santa Fe.

BACKGROUND AND SUMMARY

This relatively simple Agreement is based on the fact that both parties have underutilized resources. The County has excess native water that cannot currently be stored in-basin while the city has excess storage capacity that it is not fully utilizing. Through conjunctive management, the parties currently use native water to the greatest extent possible, as it cannot be stored. In practice this means that the City diverts County native water earlier in the year and the County diverts City SJC water later in the year when native rights may not be available.

This system has been working well, but is limited by a requirement to balance these diversions annually. The City has been limited in diverting County water by how much City water the County can reasonably use in the same year. This Agreement will continue this practice, but removes the annual accounting requirement by creating a credit "pool" where the County can deposit native water for the City's immediate use, and then call on that credit in that year or future years, when only San Juan Chama water or groundwater may be available.

The Agreement is temporary in nature, and will only remain in place so long as both parties see a benefit in continuing. It sets reasonable limits on the amount of water the County can place in the pool, and the amount of credit water that can be called on in a given year, while leaving open the opportunity to negotiate for more if mutually beneficial. It also accounts for any conveyance, diversion or storage losses that may occur.

Finally, this Agreement allows the City, as Operator of the BDD, to shut down for any reason, as long as the County is given 3 days' notice and is not required to use more than 150 AF of credit water to account for the shutdown. The Agreement allows the City to act more nimbly based off its own needs while also providing an additional backup supply to the County in the event of a planned shutdown.

Practically, water rights accounting under the Agreement will be handled as part of general water right diversion records, but any payments made to the City by the County will be done outside of BDD Project financial accounting.



Buckman Direct Diversion 341 Caja del Rio Santa Fe, NM 87506



BDD SHARED POOL AGREEMENT

This BDD Shared Pool Agreement (“Agreement”) is between Santa Fe County (“County”), a political subdivision of the State of New Mexico, and the City of Santa Fe (“City”), a New Mexico home-rule municipality (together the “Parties”).

Recitals

- A. The County and the City are partners in the Buckman Direct Diversion (“BDD”) under a Joint Powers Agreement (“the JPA”) executed on March 7, 2005.
- B. The County and City also executed a Water Resources Agreement on January 11, 2005 and then an Amended and Restated Water Resources Agreement on December 14, 2016 (“WRA”) to address utility-to-utility issues.
- C. The purpose of this Agreement is to make more efficient use of the parties’ respective available resources by making currently excess County native water rights available to the City and by making additional City system capacity and water sources available to the County through creation of a BDD Shared Pool. By creation of the BDD Shared Pool, the City will gain access to additional native supply, the County will gain additional back-up and sources of supply when the BDD is not in operation, and both parties will achieve greater flexibility in BDD operations.

Agreement

1. **Establishment of BDD Shared Pool.** The BDD Shared Pool is hereby created as an accounting pool of water within the BDD that will allow the City to use additional County native water rights and allow the County to deposit and bank water for later use at times when BDD production is restricted or shut down either for unplanned or uncontrollable reasons or because of discretionary operational shutdowns of the BDD, as described in Paragraph 3 below. The maximum quantity balance of water credited at any time in the BDD Shared Pool is limited to 1,100 acre-feet (AF), unless the Parties agree in writing to a larger amount. Operation of the BDD Shared Pool is separate from and does not affect the Parties’ current practice of joint use of native and San Juan-Chama Project water pursuant to Optimized Annual Water Rights Accounting as described in the BDD Annual Operating Plan.
2. **Deposits into the BDD Shared Pool.** On or before December 1 of each year, the County will advise the City and the BDD of the quantity of additional County native water rights that will be available the coming year for diversion by the BDD for delivery to the City. Each year the BDD will divert for delivery to the City a minimum of 167 of acre-feet (AF) of County native water, subject to the following conditions and limitations:
 - a. To account for typical unaccounted water losses, 90% of the amount of water diverted will be credited to the County and deposited in the BDD Shared Pool. For example, diversion of 167 AF will result in a deposit of 150 AF.

- b. The quantity diverted may not exceed the quantity made available by the County for that year.
- c. Once the BDD Shared Pool is at its limit of 1,100 AF, no additional deposits may be credited without written agreement by the Parties.
- d. When hydrological conditions reasonably preclude diversion of the minimum of 167 AF during a given year, the quantity diverted and the corresponding amount deposited will be based on the actual amount diverted that year.

3. **Withdrawals and Deliveries from the BDD Shared Pool.** The County may withdraw water credits from the BDD Shared Pool and the City shall deliver water from the City's Independent Water System, as defined in the WRA, to the County's requested Points of Delivery, as described in Paragraph 9 of the WRA, under the following terms and conditions:

- a. **Discretionary Shutdowns.** When the City as BDD operator chooses to temporarily shut down the BDD for a discretionary reason, such as for operational efficiency or for system-wide cost savings, the rate of exchange of BDD Shared Pool water credits withdrawn to the quantity of water delivered from the City to the County shall be 1.0 to 1.0, meaning that for every AF delivered by the City to the County, the County's credit balance will be reduced by one AF. Discretionary shutdowns are characterized by a fully functional BDD that could be diverting and treating water throughout. The City may implement a discretionary shutdown of the BDD with a minimum of 3 days written notice to the County. Discretionary shutdowns shall not result in a debit to the BDD Shared Pool in excess of 150 AF per year, shall not result in a negative balance to the BDD Shared Pool, and must be timed and made at a sufficient flow rate so that all County demand otherwise supplied by the BDD will be met by the City from other City sources.
- b. **Non Discretionary Shutdowns.** When BDD production is restricted or shut down completely for any other reason, the rate of exchange of BDD Shared Pool water credits withdrawn to the quantity of water delivered by the City to the County shall be 1.1 to 1.0. In other words, for every AF of water that the City delivers to the County, the County's credit balance will be reduced by 1.1 AF. The Parties acknowledge that this exchange rate appropriately reflects that the City's water stored in Abiquiu Reservoir is a component of City back-up supply and is subject to a one time reduction of 10% of the amount stored for rights to such storage. In any calendar year, the City may limit withdrawal from the BDD Shared Pool to 550 AF and the associated delivery of City water to the County to 500 AF if delivery greater than that would result in more than 6,000 AF of groundwater use by the City. The City will exercise reasonable due diligence to make deliveries to the County at the greatest rate practicable, but the rate may be limited to no more than 1 million gallons per day during an unplanned shutdown.

4. **Accounting of Credit Balance.** The Parties shall calculate and maintain a running balance of the quantity of County water credits in the BDD Shared Pool. The County's water credit balance shall be increased by the quantity of additional deposits to and reduced by the amount of new withdrawals from the BDD Shared Pool. The County's water credit balance will be reduced at the

end of each calendar year by 10% of the December 31st value to reflect evaporative losses of City water in Abiquiu. Upon request by the County, the City at its sole discretion may approve a temporary negative balance. Deposits made to the BDD Shared Pool not used within a calendar year shall be carried over to the next year and credited to the County's running balance. The Parties will direct BDD staff to administer the BDD Shared Pool based on monthly diversion and use accounting of BDD water.

5. Cost Accounting and Billing.

- a. **City Costs.** The City will pay all costs associated with diversion, pumping and treatment of County native water delivered by the BDD to the City under this Agreement.
- b. **County Costs.** For water the County receives from the City under this Agreement, the County will pay the City at a rate equal to the variable cost of BDD water paid by the County during the same fiscal year in which the BDD Shared Pool water is delivered. For example, during fiscal year 2018-2019, the County paid \$402,354 in variable operating costs (electricity, chemicals, and solids) at BDD for 1393 AF of treated water, representing a variable cost of \$288.89 per AF. This rate would have been charged for any BDD Shared Pool water delivered that year. Because that rate will not be available until after final BDD invoicing for the fiscal year, the City can bill during the fiscal year using the variable cost of BDD water to the County during the previous fiscal year, with final reconciliation occurring after final BDD invoicing. In addition, for water delivered by the City to the County during unplanned shutdowns, the County will pay the City for wheeling the water through the City system based on the rate specified in the current wheeling agreement. The County will not pay a wheeling fee for water delivered by the City during planned shutdowns. If during an unplanned BDD shutdown the County expends all water credits and reaches a zero balance in the BDD Shared Pool and the City does not approve a temporary negative balance as described in Paragraph 4, any additional County use of City water will be billed at the then-current agreed upon wholesale and wheeling rates.

6. WRA Unaffected. This Agreement does not amend or affect the terms and conditions of the WRA. In particular, delivery by the City of water to the County from the BDD Shared Pool is separate from and does not affect the County's right to Wholesale Water Delivery from the City under Paragraph 3 of the WRA.

7. Term.

- a. This Agreement shall be effective on the latest signature date below and shall continue thereafter unless terminated pursuant to Paragraph 7(b).
- b. Either Party may terminate this Agreement for any reason by giving sixty (60) day's written notice of termination to the other Party. If terminated, the BDD Shared Pool balance if any, will be continue to be available for use by the County during BDD shutdowns,

consistent with the terms and conditions of this Agreement, until the balance has been fully utilized.

8. **Amendment.** This Agreement may be modified only by a written agreement between the Parties.

9. **Dispute Resolution.** The City and County agree to mediate disputes consistent with the Mediation Procedures Act, NMSA 1978, secs. 44-7B-1 through 44-7B-6 prior to initiating any litigation, to resolve any conflicts arising under this Agreement, the expenses of which shall be shared equally by the City and County. Disputes shall be first discussed by representatives of each party. Such representatives shall use their best efforts to amicably and promptly resolve the dispute. If the parties are unable to resolve the dispute through informal mechanisms or mediation within 60 days of the occurrence of the event or circumstances giving rise to the dispute, either party may give notice to the other party that the aggrieved party intends to litigate the dispute. Any dispute requiring notice shall be reported to the next meeting of the respective City and County governing bodies

10. **Entire Agreement.** This Agreement contains the Entire Agreement between the City and County with regard to the matters set forth herein.

11. **Binding Effect.** This Agreement shall be binding upon and inure to the benefit of the Parties and their respective representatives, successors, and assigns.

12. **Law.** The laws of the State of New Mexico shall govern this Agreement

13. **Notices.** Any notice, demand, request, or information authorized or related to this Agreement shall be deemed to have been given if mailed (return receipt requested), hand delivered or faxed as follows:

To the City:

Director of the Water Division
City of Santa Fe
PO Box 909
Santa Fe, NM 87501
Phone: 955-420
Fax: 955-4352

With a copy to:

City Manager City of Santa Fe
PO Box 909
Santa Fe, NM 87501
Phone: 955-6509
Fax: 955-6683

Draft September 2, 2020

City Attorney City of Santa Fe
PO Box 909
Santa Fe, NM 87501 Phone:955-6511
Fax: 955-6748

To the County:

Santa Fe County Utilities Director Santa Fe County
PO Box 276
Santa Fe, N.M. 87504-0276 Phone: 992-9870
Fax: 992-3028

With a copy to:

County Manager
Santa Fe County
PO Box 276
Santa Fe, N.M.87504-0276 Phone: 986-6200
Fax: 986-2740

County Attorney
Santa Fe County
PO Box 276
Santa Fe, NM 87504-0276 Phone: 986-6279
Fax: 986-6362

a. Notice shall be deemed to have been given based upon the method of delivery, as follows: notices sent by facsimile or hand delivered shall be deemed given on the date of delivery, as evidenced, with respect to facsimile delivery, by a printout showing successful transmission of all pages included in the notice; notices sent by mail shall be deemed given three business days after the notice is mailed with postage prepaid.

b. A Party may change the persons to whom or addresses or fax numbers at which notice shall be given by giving all other Parties and the Authority notice of the change in accordance with this Article.

IN WITNESS WHEREOF, each of the City of Santa Fe, New Mexico, and the County of Santa Fe, New Mexico, has caused this Agreement to be executed and delivered by its duly authorized representatives as of the date specified below.

CITY OF SANTA FE

Date

Attest:

Date

Approved as to form:

Date

SANTA FE COUNTY

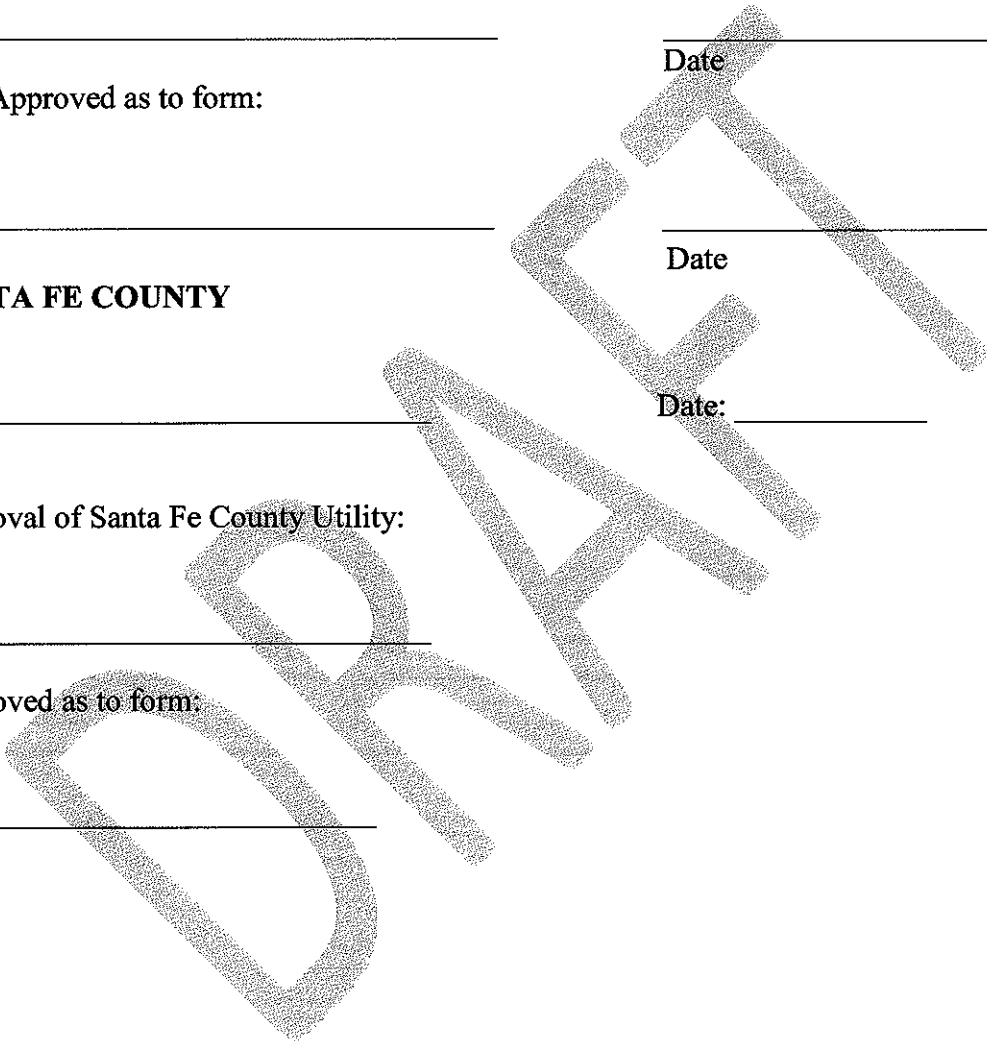
By: _____

Date: _____

Approval of Santa Fe County Utility:

By: _____

Approved as to form:



ATTACHMENT B

OPTIMIZED ANNUAL WATER RIGHTS ACCOUNTING PROTOCOL

Background

One of the principles of the shared nature of the BDD Project is that each of the partners (County, City and Las Campanas Coop 'LC Coop' & The Club at Las Campanas Inc. 'CLCI') provides access to their water rights that they want diverted and delivered to the respective points of interconnection where the BDD Project transmission lines terminate.

This memo is addressed to those persons at each of the 4 partners who have a role in managing the water rights covered by this policy. This memo will be included in the Annual Operating Plan for the BDD Project reviewed and approved by the BDD Project Partners.

The present accounting process for the diversion from the Rio Grande of SJCP and native NM water rights, and then delivery to each of the BDD Partners, has become inefficient and time consuming. In some cases, the complexity of the current accounting process has led to very significant staff time and reporting errors. The accounting process generally must be coordinated with state and federal agencies and must be done in accordance with BDD Project documents, OSE diversion permits and the Record of Decision for the EIS approval of the BDD Project. The state and federal agency accounting criteria requires the Project to provide detailed reports on volume, and attendant type of water right, that has been diverted.

The methods and procedures for Optimized Annual Water Right Accounting described below are designed to:

1. Lessen the time and resources required of staff to meet Project permitting requirements
2. Move the timing of native NM water rights diversions out of the restrictive time periods when conditions might adversely impact Project operations
3. Generally improve the efficiencies of operations and accounting to federal and state agencies as required by the respective permits
4. Improve the efficiencies of compliance with the City and County SJCP diversion permits
5. Generally optimize the use of SJCP water where appropriate and thereby make that SJCP water available for other purposes.

Introduction

In order to improve the efficiency of operations and the accounting process, staff has identified that an internal accounting process could be developed that changes the timing of diversions of the combined native NM water right portfolio. This proposal does not require the approval of the state and federal agencies and is designed to fit within the existing permit approvals.

For reporting to the state and federal agencies, this approach would show the native NM water rights being diverted at times of the year that avoid or lessen the low flow curtailment constraints described on pages 11-12 of the BDD Project Biological Opinion. By changing the timing of such diversions, the BDD Partners would create additional operational flexibility for the overall benefit of the BDD Project and staff of both the BDD Project and the agencies who monitor compliance with the existing permits.

Several permitting constraints limit the operational flexibility of the BDD Project. During the spring when the Rio Grande is in flood operations, SJCP water cannot be routed through Abiquiu Reservoir and BDD Project diversions of SJCP water can only be permitted by an inefficient process that requires an accounting 'exchange' for downstream stored water in coordination with state and federal agencies. The Biological Opinion limits the diversion of native NM water rights during times when the Rio Grande experiences low flow conditions. The SJCP diversion permits contain a strict rule that requires exact releases from upstream reservoirs and then exact diversions at the intake. The Optimized Annual Accounting method will provide compliance with the federal and state permits while also allowing for greater flexibility in operations for the Project and the BDD Partners.

The Optimized Annual Accounting method allows for some flexibility in the aggregate diversions since native NM water rights are available for diversion without calling for release. This change will allow native NM water rights to be diverted when they are most useful to meeting the combined BDD Project demands, and also allow SJCP water rights to be diverted when they are most useful to meeting the combined BDD Project demands. For example, the native NM water rights owned by the BDD Partners would be diverted during the likely flood operations time period to meet BDD Partner demand...and SJCP water rights owned by the BDD Partners would be diverted during the likely low flow time period to meet BDD Partner demand. A discrete amount of native NM water rights would be identified to balance the SJCP calls for delivery, and actual diversions must be within the native NM diversion flow constraint identified in the Biological Opinion. This will simplify the monthly accounting provided to the agencies and avoid changes to BDD Project operations during this time period. A significant part of the native NM water right portfolio will be scheduled for use during the likely flood operation time period to avoid changes in BDD Project operations during this time period. And the balance of the native NM water right portfolio would be used in the fall in order to preserve the combined SJCP water owned by BDD Partners.

Review of Permit Compliance

OSE permits: The City / County SJCP diversion permit contains the restriction described above, that strictly accounts for upstream reservoir releases and subsequent diversions. From the November 1, 2006 permit:

8. The maximum amount of San Juan-Chama Project water diverted in any day under this permit shall not exceed the amount of the permittees' San Juan- Chama water calculated to be in the Rio Grande at the BDD on that same day. The amount of the

permittees' SJCP water available for diversion at the BDD on a particular day shall be calculated as the amount of water released from either Heron or El Vado Reservoir two days prior to diversion at the BDD, less a 2% conveyance loss or the amount of water released from Abiquiu Reservoir one day prior to diversion at the BDD less a 0.9% conveyance loss. The State Engineer expressly reserves the right to adjust the travel time periods as better information becomes available or based on river channel conditions. The permittees shall notify the State Engineer at the time releases of SJCP water are ordered to be released or are ordered to be discontinued.

9. The permittees' maximum peak daily surface water diversion rate shall not exceed 32.0 cfs. The State Engineer recognizes that other external factors may further limit the actual diversion rate.

Note that 'Otowi Gage native flows' is a defined term from the ROD (discussed below) and is calculated as the total Otowi gage flow less SJCP releases for municipal and industrial uses. This definition of native flow is different from the definition that is used elsewhere in Rio Grande water management.

The proposed Optimized Annual Accounting method does not conflict with the SJCP permit conditions of approval, and is intended to simplify compliance with the permit requirements.

Several native NM water right permits that are permitted for diversion from the BDD were reviewed, and they typically contain two provisions that relate to operations. From a County transfer approved in 2010:

8. The maximum instantaneous rate of diversion from the Buckman Direct Diversion under all permits (San Juan Chama Project water and native water) shall not exceed 32.0 cfs, inclusive of amount of water necessary for sediment removal.

9. Diversion of water under this permit shall be subject to adherence with the Staged Curtailment Schedule (U.S. Department of Interior, Fish and wildlife Biologic Opinion, June 25, 2007 at 12) for the Buckman Project when Otowi Gage native flows are below 325 cfs.

Note that the requirement to comply with the Staged Curtailment Schedule has been the topic of a related work effort, and the OSE will not independently determine compliance with the BO requirement. The proposed Optimized Annual Accounting method does not conflict with the native NM water right permit conditions of approval, and is intended to simplify compliance with the permit requirements.

Staff of the OSE and ISC has indicated that they are not concerned with who is delivered which water rights (under the proposed Optimized Annual Accounting method) as long as the Rio Grande diversions are consistent with the Conditions of Approval of the permits.

BDD Board documents: The BDD JPA, City-County WRA and BDD PMFSA do not contain provisions that relate to the Optimized Annual Accounting method. BDD FOPA, section 8, states:

8. Water Rights and Divertible Water Supply. Each BDD Partner shall divert only that amount of water in the system for which water rights are in good standing with the New Mexico State Engineer, subject to the limitations on diversions at low flow set as forth in the BDD Project EIS or other applicable permits. The BDD Partners each recognize an individual responsibility to maintain their own water rights portfolio and to manage any water rights shortage within that portfolio. No BDD Partner shall make any claim or attempt to use another BDD Partner's water rights without the express written consent of that BDD Partner.

The final sentence of this section requires written consent to use another BDD Partner's water rights. In order to address this condition, staff and counsel recommend that the procedures described below be added to the BDD Project Annual Operating Plan. This Plan is prepared annually by the staff of the City, County and Las Campanas (CLCI and LC Coop), and is signed by the respective water utility directors.

BDD Project Biological Opinion: The Record of Decision issued by the US Forest Service and Bureau of Land Management incorporated the requirements of the Biological Opinion (BO) issued by the Fish and Wildlife Service. In general, the BO prescribes an annual maximum volume of diversion (8,730 ac-ft/yr), an annual maximum volume of SJCP and native NM water rights, and maximum rates of diversion (32 cfs, sediment return/net diversion, RG low flow native NM water right diversion limits). The BO does not contain a provision that limits the Optimized Annual Accounting method, and the proposed method intended to simplify compliance with the permit requirements.

Conclusion

In summary, the proposed Optimized Annual Accounting method provides for the full use of the native NM water right portfolio in the near term (providing the beneficial use requirement) and allows the BDD Partners to preserve as much SJCP water as possible in any given year. It provides a simplified and efficient process for staff and agency review, and is consistent with the permits and agreements for the BDD Project that have been reviewed.

Implementation of revised Optimized Annual Accounting Process

Staff and counsel recommend that the implementation of the revised accounting process be acknowledged by the respective water utility directors of the BDD Partners through inclusion in future year versions of the Annual Operating Plan (as is described in BDD Project documents).



City of Santa Fe, New Mexico

Memorandum



DATE: September 23, 2020

TO: Buckman Direct Diversion Board

FROM: Regina Wheeler, Public Works Department Director

ITEM AND ISSUE:

Update on Investment Grade Audit for solar and lighting improvement at Buckman Direct Diversion Project, Regina Wheeler, rawheeler@santafenm.gov, 505-955-6622.

BACKGROUND AND SUMMARY:

In August 2019, the City of Santa Fe initiated a contract with Yearout Energy Services Company (Yearout) to perform an Investment-Grade Energy Audit (IGA). Yearout was selected from a list of seven pre-qualified Energy Savings Companies (ESCOs) on the Statewide Price Agreement, because it is the only ESCO contractor is headquartered and fully staffed in New Mexico, one of three ESCOs listed as a PNM Authorized Contractor for retrofit rebates and has experience with solar and lighting retrofits for governmental entities. Partial funding of \$925,000 for this project was received from the NM State Legislature in the 2019 session.

Yearout evaluated 22 facilities, including Buckman Direct Diversion Facility, and 17 pumping and booster stations, including BDD Booster Stations #1A and #2A and BDD Lift Station, for solar, lighting and water conservation measures. The IGA included the assessment of information on 149 utility meters, 12,564 existing lighting fixtures, 759 existing domestic water fixtures, 67 existing low voltage transformers and existing building envelope conditions of 931,800 ft² of gross facility area across City facilities.

After assessing the meters, buildings and systems listed above, Yearout provided scope, conceptual design, costs and payback for LED retrofit lighting, solar, transformer retrofits, water conservation and building envelope improvements that met the City's criteria for feasibility. The Executive Summary of the IGA is attached in Exhibit 1. New Mexico Energy Minerals and Natural Resources Department oversees these projects and has reviewed and certified the findings and recommendations in the IGA (Exhibit 2.)

LED lighting retrofits and solar were determined to have energy savings that paid for the asset for BDD. Replacement of non-LED lighting with LEDs for interior lighting was recommended for the buildings at the Buckman Direct Diversion Facility, as well as BDD Booster Stations #1A and #2A, and BDD Lift Station. Existing LED lighting will not be replaced. Facility Improvement Measures (FIM) for LED lighting are shown below.

FIM No.	FIM Name	Facility	Year 1 Total Annual Savings	Labor, Equip & Material Costs	Estimated Utility Rebate	Net Cost	Simple Payback Years
1.35	LED Lighting	BDD Main	\$20,803	\$87,186	\$12,415	\$74,771	3.6
1.36	LED Lighting	BDD Booster Station #1A	\$1,413	\$10,654	\$1,076	\$9,578	6.8
1.37	LED Lighting	BDD Booster Station #2A	\$1,342	\$8,526	\$1,188	\$7,338	5.5
1.38	LED Lighting	BDD Lift Station	\$3,502	\$22,470	\$2,593	\$19,877	5.7

LED Lighting Scope of Work:

Proposed Modifications: This measure will retrofit and/or replace the existing interior and exterior incandescent, fluorescent, metal-halide and other lighting equipment with new Light Emitting Diode (LED) technology. This will significantly reduce the energy consumption of the lighting system while also improving security and the working environment. In addition, the proposed solution would standardize the lighting system throughout the facilities, resulting in simplified inventory requirements and reduced maintenance costs and work.

Occupancy and dimming controls will be added to private offices and conference rooms. Adding controls will help drive down energy costs and improve occupant comfort. Occupancy sensors will ensure energy is not wasted by automatically turning lights off when a space is vacant. The lighting controls will be set to 'vacant mode' which follows a manual-on, auto-off operation. Lighting levels will be commissioned during project implementation to IESNA recommendations in each perspective space. Dimming will allow users to reduce/increase light levels to their preference.

Solar is planned for BDD Booster Station #1A and BDD Lift Station. Additional solar was considered for the BDD plant, however, after further analysis indicated that a new array would likely cause the loss of the REC payments from the current array (approximately \$300K/year). Solar should be considered for the plant after the current REC contract expires in 2031. Note that the solar asset warranted life is 20 years and expected life is 30 years, so a payback in 13 years achieve significant savings over the life of the asset.

FIM No.	FIM Name	Facility	Year 1 Total Annual Savings	Labor, Equip & Material Costs	Estimated Utility Rebate	Net Cost	Simple Payback Years
2.36	Solar	BDD Booster Station #1A	\$137,989	\$1,728,339	\$0	\$1,728,339	12.5
2.38	Solar	BDD Lift Station	\$51,755	\$699,933	\$0	\$699,933	13.5

Solar Scope of Work:

Proposed Modifications: This measure will install new solar PV systems that will generate clean, renewable energy onsite for the next 25 to 50 years and reduce the amount of power purchased from the utility grid. This measure will provide complete turnkey installation, interconnection, startup, and commissioning of the solar PV systems. Land use agreements will require further determination at Public utility and BDD sites.

Savings Methodology: During the IGA, the COSF and YE established a target offset of the post-retrofit on-peak energy consumption through the installation of solar PV systems at select sites. The designed offset was set at 80% of post-retrofit on-peak energy consumption for the COSF Facility sites and 60% of post-retrofit on-peak energy consumption for the Water Utility and BDD sites. The lower target offset applied to the water utility and BDD sites was to account for potential load shifting of current on-peak operation to off-peak operation.

Next steps in the project are to secure financing, execute the Energy Performance Contract (EPC), gain interconnection approval from PNM for the solar arrays and secure special use permits for siting BDD arrays on Forest Services Land. The original IGA contract was amended to add a due diligence phase during which interconnection applications were submitted to PNM for all solar arrays and special use permit applications were submitted.

Special Use Permits (SUPs) are required for locating the BDD Lift Station and BS1A arrays. Applications for these SUPs were submitted to the Forest Service in June. An archeological literature review submitted as well. Forest Service is completing their review, somewhat delayed by forest fires. Forest Service has indicated they expect a Categorical Exclusion from NEPA for the SUP.

The City is soliciting offers for financing and expects to bring the EPC contract and financing packages for approval by BDD Board and Governing Body in November. An MOU will also be executed with the County for repayment of a portion of the financing for solar at BDD. The net cost to the City, BDD and the County will be zero since the payments for solar financing replace the cost of energy purchased from PNM.

The total cost and cash flow for BDD FIMs implementation is attached in Exhibit 3.

Attachments

1. Executive Summary of the Investment Grade Audit
2. EMNRD Certification of Guaranteed Energy Savings
3. Project Summary by Group showing BDD Cash Flow

YEAROUT

E N E R G Y



City of Santa Fe

Investment Grade Audit (IGA) Report
Executive Summary



1.0 Executive Summary

The City of Santa Fe (COSF) engaged Yearout Energy (YE) in August 2019 to perform an Investment Grade Audit (IGA) of several facilities of various types located in Santa Fe, NM. The goal of an IGA is to identify the potential project scope for budget-neutral facility upgrades thanks to reduced utility and O&M costs. The IGA was developed following the program guidelines outlined by the New Mexico Energy, Minerals, and Natural Resources Department (NM-EMNRD) and New Mexico General Services Department (NM-GSD).

The project specific objectives for this IGA include:

- Developing a self-funding, budget-neutral project with a finance period ≤ 20 years
- Reduce energy and water consumption
- Reduce utility and operational costs
- Standardize equipment throughout city facilities
- Accelerate the implementation of renewable energy where feasible to support the Sustainable Santa Fe 25-Year Plan
- Implement LED lighting retrofit/replacement opportunities
- Reduce the COSF's environmental impact

An essential step in the IGA process is to establish the baseline performance for each facility from which proposed improvements will be measured. The following tables depict a summary of the baseline annual cost and energy consumption by utility type for all COSF facilities included in the IGA.

Table 1: Baseline Annual Cost Breakdown by Utility Type

Utility	\$/year
Electricity	\$3,888,817
Natural Gas	\$335,028
Water & Sewer	\$317,231
Total	\$4,541,076

Table 2: Baseline Annual Energy Consumption Breakdown by Utility Type

Utility	kBTU/year
Electricity	159,107,775
Natural Gas	75,732,660
Total	234,840,435

As a result of the comprehensive IGA process, Yearout Energy and the COSF have co-developed the following recommended Guaranteed Energy Service Performance Contract (GESPC) project:

Table 3: GESPC Project Summary

Turn-Key GESPC Project Price	\$15,442,785
Up-front Capital Contribution by COSF	\$1,125,000
Approximate Net Financed Amount	\$14,280,347
Year 1 Utility Savings	\$752,137
Year 1 Operations and Maintenance Savings	\$27,643
Estimated Incentives from Utility Provider(s)	\$230,392
Project Financing Period	18.0 Years
Weighted Average Service Life of Proposed Measures	31.0 Years
Percent Reduction in Annual Utility Costs*	16.8%
Environmental Impact (Reduction in Annual Emissions)	6,717,430 lbs. CO ₂
Environmental Impact (Direct Reduction in Annual Water Consumption)	2,007,380 gallons
Environmental Impact (Indirect Reduction in Annual Water Consumption)	3,264,992 gallons

*The percent reduction in annual utility costs takes into consideration existing or future REC payments made to the COSF

A fundamental benefit of GESPC projects is that they allow for the savings from measures with quicker returns on investment to supplement the funding of critical infrastructure improvements and/or high priority capital intensive measures such as renewable energy.

Throughout the IGA process, Yearout Energy collaborated closely with COSF to identify and co-develop Facility Improvement Measures (FIM) that would allow COSF to leverage future energy and operational savings to fund essential facility capital improvements through a GESPC. The FIMs recommended for implementation include:

- Upgrading approximately 9,000 existing lighting fixtures to LED technology
- Install 2.750MW DC renewable energy systems which are sized for a target offset of 80% of post-retrofit On-Peak consumption at select COSF facilities and a 60% of post-retrofit On-Peak consumption at select Water Utilities and Buckman Direct Diversion (BDD) sites
- Repair the underperforming existing solar PV carports at Genoveva Chavez Community Center to recover lost production and available REC payments
- Upgrade approximately 760 existing domestic water fixtures to reduce water consumption
- Remediate ~200 square feet of existing air leakage in building envelope
- Install 28 new high efficiency transformers
- Identify and correct billing errors to reduce utility costs
- Replace the roof at the Canyon Road Water Treatment Plant in order reduce energy and operational costs and support the installation of rooftop solar PV.

The benefits from those measures are summarized in the following table.

Table 4: Facility Improvement Measures (FIM) Summary

FIM No.	FIM Name	Year 1 Annual Utility Savings	Year 1 Annual O&M Savings	Year 1 Total Annual Savings	Labor, Equip & Material Costs	Estimated Utility Rebate	Net Cost	Average Service Life Years
1.00	LED Lighting	\$217,056	\$21,761	\$238,818	\$2,222,158	\$192,032	\$2,030,126	15.0
2.00	Renewable Energy	\$473,609	\$0	\$473,609	\$7,167,913	\$0	\$7,167,913	37.0
3.00	Water Conservation	\$14,404	\$1,135	\$15,539	\$173,807	\$21,450	\$152,357	20.0
4.00	Building Envelope	\$10,477	\$1,572	\$12,048	\$206,170	\$0	\$206,170	20.0

FIM No.	FIM Name	Year 1 Annual Utility Savings	Year 1 Annual O&M Savings	Year 1 Total Annual Savings	Labor, Equip & Material Costs	Estimated Utility Rebate	Net Cost	Average Service Life Years
5.00	HE Transformers	\$9,567	\$1,435	\$11,002	\$199,171	\$7,766	\$191,405	32.0
6.00	Utility Management	\$1,821	\$0	\$1,821	\$0	\$1,516	(\$1,516)	—
7.00	GCCC Solar Carport Repairs	\$25,204	\$0	\$25,204	\$155,730	\$7,628	\$148,102	20.0
8.00	Roof Replacement	\$0	\$1,740	\$1,740	\$199,918	\$0	\$199,918	20.0
Total		\$752,137	\$27,643	\$779,780	\$10,324,867	\$230,392	\$10,094,474	31.0

* Total Annual Savings include Utility Savings and O&M Savings.

Additional FIMs were investigated during the IGA but not recommended for a variety of reasons. A description of these FIMs is provided in Section 4.0 of this report.

The reduction in greenhouse gas (GHG) emissions is of particular interest for the City of Santa Fe. The “Sustainable Santa Fe 25-year Plan” calls for carbon neutrality by 2040 and targets 50% renewable energy consumption by 2025. The installation of solar photovoltaic (PV) energy, energy efficient lighting, high efficiency transformers and building envelope remediation make a significant contribution towards achieving these goals. The annual 6.7-million-pound reduction in CO₂ emissions is equivalent to planting 833 acres of trees or not driving 3.96 million miles each year. It is worth noting that these values are based on the current electricity supply mix and should the targets of the New Mexico Energy Transition Act be achieved, the reductions in GHG emissions by COSF would be even greater.

Following the review and acceptance of this report by COSF, NM-EMNRD and NM-OSE, Yearout Energy will develop a Guaranteed Utility Savings Contract (GUSC) to implement the final agreed-upon project scope. Yearout Energy anticipates the implementation of this project to commence in Q4, 2020, with a 16-month overall construction period.

State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham
Governor

Sarah Cottrell Propst
Cabinet Secretary

Todd E. Leahy, JD, PhD
Deputy Secretary

Louise N. Martinez, Director
Energy Conservation and Management Division



September 12, 2020

BY EMAIL: mayor@santafenm.gov

Mayor Alan Webber
City of Santa Fe
200 Lincoln Ave
Santa Fe, NM 87504

SUBJECT: Certification of Guaranteed Energy Savings under the Public Facility Energy Efficiency and Water Conservation Act (NMSA 1978, Section 6-23-5) – City of Santa Fe

Dear Mayor Webber:

The Investment Grade Energy Audit submitted by the City of Santa Fe to implement energy efficiency and renewable measures in city facilities has been reviewed and is hereby approved. The Investment Grade Energy Audit was performed by Yearout Energy Services Co. (YESCO).

The Energy Conservation and Management Division (ECMD) of the New Mexico Energy, Minerals and Natural Resources Department (EMNRD) has certification responsibilities and provides technical assistance to governmental entities under the Public Facility Energy Efficiency and Water Conservation Act (Act). The two certifications needed from EMNRD for each energy performance contracting project under the Act are:

- Vendor is a Qualified Provider and meets EMNRD experience requirements; and
- Guaranteed energy savings appear to be accurately estimated and reasonable.

EMNRD reviewed the Investment Grade Energy Audit. EMNRD now issues the following certification:

- Qualifications were provided on December 1, 2017 approving YESCO as a qualified entity under EMNRD's experience criteria.
- EMNRD certifies that the guaranteed energy savings from the proposed efficiency measures appear to be accurately estimated and reasonable.

The City of Santa Fe Investment Grade Audit is hereby certified with these Special Conditions:

- Certification is contingent upon implementation of the measures as outlined in the investment grade energy audit. No significant changes in scope are to be considered unless submitted for review and approval by EMNRD.
- Section 6-23-4 Requires that the savings be guaranteed by the provider. Measurement and Verification of the savings is essential to determine if the savings are being met. A copy of the Annual Measurement and

Verification Report shall be provided to EMNRD every year the contract is in place by January 31st of the following year. These reports are essential to meet legislative reporting requirements.

- The 3rd party reviewer costs of 1.0% percent of the total project cost are to be included and accounted for in the project contract to reimburse EMNRD.

Pursuant to NMSA 1978, Section 6-23-5 of the Act, EMNRD has performed its certification duties. It is recommended that The City of Santa Fe implement its approval requirements to comply with NMSA 1978, 6-23-8 of the Act. Please contact me at Harold.Trujillo@state.nm.us, 505-490-7912 or Louise.N.Martinez@state.nm.us, 505-476-3315 if there are any questions.

Sincerely,


Harold Trujillo, PE
Bureau Chief
ECMD Energy Technology & Engineering

cc: Regina Wheeler, Public Works Director rawheeler@santafenm.gov
Caryn Grosse, Project Administrator clgrosse@santafenm.gov
Louise Martinez, Director ECMD
David Griego, Engineer ECMD
Alex Montano, YESCO

Project Summary by Group

City of Santa Fe

September 24, 2020



Item	Facilities	Water Utilities	BDD	Total
Turn-Key Cost	\$6,122,614	\$5,495,534	\$3,824,638	\$15,442,785
Estimated Rebate	\$176,046	\$37,074	\$17,272	\$230,392
Capital Infusion	\$925,000	\$200,000	\$0	\$1,125,000
Net Amount After Rebate & Infusion	\$5,021,568	\$5,258,460	\$3,807,365	\$14,087,393
Year 1 Savings	\$301,821	\$261,155	\$216,804	\$779,780
Construction Period Interest (Capitalized Interest)	\$169,896	\$177,911	\$128,816	\$476,623
Closing Costs / Lender Fees	\$103,829	\$108,727	\$78,724	\$291,280
Total Financed Amount	\$5,295,293	\$5,545,099	\$4,014,905	\$14,855,297

Memorandum



Buckman Direct Diversion

Date: September 21, 2020

To: Buckman Direct Diversion Board

From: Jamie-Rae Diaz, Public Utilities Administrative Manager 

Via: Shannon Jones, Public Utilities Department Director 
Shannon.Jones (Sep 23, 2020 12:24 MDT)

ITEM AND ISSUE:

2021 Buckman Direct Diversion Board Meetings Calendar

BACKGROUND AND SUMMARY:

The Buckman Direct Diversion Board meetings are normally conducted on the 1st Thursday of each month. The meetings are held in the City Council Chambers starting at 4:00pm. The following is the proposed 2021 meeting calendar:

DATE OF MEETING

- Thursday, January 7, 2021 @4:00
- Thursday, February 4, 2021 @ 4:00
- Thursday, March 4, 2021 @ 4:00
- Thursday, April 1, 2021 @ 4:00
- Thursday, May 6, 2021 @4:00
- Thursday, June 3, 2021 @ 4:00
- Thursday, July 1, 2021 @ 4:00
- Thursday, August 5, 2021 @ 4:00
- Thursday, September 2, 2021 @4:00
- Thursday, October 7, 2021 @ 4:00
- Thursday, November 4, 2021 @ 4:00
- Thursday, December 2, 2021 @4:00

RECOMMENDED ACTION:

For your approval.





Date: October 1, 2020
To: Buckman Direct Diversion Board
From: Mackie M. Romero, BDD Financial Manager *MR*
Subject: 2021 FSAC Meeting Calendar

ITEM AND ISSUE:

2021 Fiscal Services and Audit Committee (FSAC) Meeting Calendar

BACKGROUND AND SUMMARY:

The BDD FSAC meetings are normally conducted within the 1st week of each month, prior to the BDD Board meetings.

The following is the proposed 2021 schedule for the Fiscal Services and Audit Committee meetings:

FSAC	BDDDB	BCC
Tuesday January 5 th @ 4:30pm	January 7 th	January 12 th & 26 th
Tuesday February 2 nd @ 4:30pm	February 4 th	February 9 th & 23 rd
Tuesday March 2 nd @ 4:30pm	March 4 th	March 9 th & 30 th
Monday March 29 th @ 1:30pm	April 1 st	April 13 th & 27 th
Tuesday May 4 th @ 4:30pm	May 6 th	May 11 th & 25 th
Tuesday June 1 st @ 4:30pm	June 3 rd	June 8 th & 29 th
Monday June 28 th @ 1:30pm	July 1 st	July 13 th & 27 th
Tuesday August 3 rd @ 4:30pm	August 5 th	August 10 th & 31 st
Monday August 30 th @ 1:30pm	September 2 nd	September 14 th & 28 th
Tuesday October 5 th @ 4:30pm	October 7 th	October 12 th & 26 th
Tuesday November 2 nd @ 4:30pm	November 4 th	November 9 th & 30 th
Monday November 29 th @ 1:30pm	December 2 nd	December 14 th & 28 th

This schedule was drafted so as not to conflict with Santa Fe County Commission meetings and miscellaneous City of Santa Fe committee meetings and City Council meetings, therefore dates and times are subject to change.

ACTION REQUESTED:

For your approval.

