PALMDALE WATER DISTRICT

2029 East Avenue Q • Palmdale, California 93550 • Telephone (661) 947-4111
Fax (661) 947-8604
www.palmdalewater.org

LAGERLOF, SENECAL, GOSNEY & KRUSE LLP
Attorneys

Board of Directors

ROBERT E. ALVARADO
Division 1

GORDON G. DEXTER
Division 2

GLORIA DIZMANG
Division 3

KATHY MAC LAREN
Division 4

STEVE R. CORDOVA
Division 5

September 19, 2013

Agenda for a Meeting
of the Water Supply & Reliability Committee of the Palmdale Water District
Committee Members: Gordon Dexter-Chair, Gloria Dizmang
to be held at the District's office at 2029 East Avenue Q, Palmdale

Monday, September 23, 2013

5:00 p.m.

NOTE: To comply with the Americans with Disabilities Act, to participate in any Board meeting please contact Dawn Deans at 661-947-4111 x1003 at least 48 hours prior to a Board meeting to inform us of your needs and to determine if accommodation is feasible.

Agenda item materials, as well as materials related to agenda items submitted after distribution of the agenda packets, are available for public review at the District's office located at 2029 East Avenue Q, Palmdale. Please call Dawn Deans at 661-947-4111 x1003 for public review of materials.

PUBLIC COMMENT GUIDELINES: The prescribed time limit per speaker is three-minutes. Please refrain from public displays or outbursts such as unsolicited applause, comments, or cheering. Any disruptive activities that substantially interfere with the ability of the District to carry out its meeting will not be permitted and offenders will be requested to leave the meeting.

Each item on the agenda shall be deemed to include any appropriate motion, resolution, or ordinance to take action on any item.

1) Roll call.

2) Adoption of agenda.

3) Public comments.

4) Action Items: (The public shall have an opportunity to comment on any action item as each item is considered by the Committee prior to action being taken.)

4.1) Consideration and possible action on approval of minutes of meeting held August 30, 2013.

4.2) Consideration and possible action on proposal received from Kennedy/Jenks Consultants for preparation of Palmdale Water District's Littlerock Creek Groundwater Recharge and Recovery Project Feasibility Study. ($899,493.00 - Budgeted – 2013A Water Revenue Bonds – Water Resources Manager Pernula/Engineering Manager Knudson)

4.3) Presentation of monthly water demand and supply status. (Water & Energy Resources Manager Pernula)

4.4) Discussion of the District's water banking opportunities. (Chair Dexter)

4.5) Status on the operations of the State Water Project. (Water & Energy Resources Manager Pernula)

4.6) Discussion and review of the desalination process. (Committee Member Dizmang)

5) Project updates.

5.1) Palmdale Recycled Water Authority. (General Manager LaMoreaux)

5.2) Water purchase opportunities. (Water & Energy Resources Manager Pernula)

5.3) Littlerock Dam Sediment Removal Project. (Engineering Manager Knudson)

6) Information items.

7) Board members' requests for future agenda items.

8) Adjournment.

DENNIS D. LaMOREAUX,
General Manager

DDL/dd

PALMDALE WATER DISTRICT
BOARD MEMORANDUM

DATE: September 18, 2013 **September 23, 2013**

TO: WATER SUPPLY & RELIABILITY COMMITTEE **Committee Meeting**

FROM: Jon M. Pernula, Water and Energy Resources Manager
Mr. Matthew Knudson, Engineering Manager

VIA: Mr. Dennis D. LaMoreaux, General Manager

RE: ***AGENDA ITEM NO. 4.2 – CONSIDERATION AND POSSIBLE ACTION ON PROPOSAL RECEIVED FROM KENNEDY/JENKS CONSULTANTS FOR PREPARATION OF PALMDALE WATER DISTRICT'S LITTLEROCK CREEK GROUNDWATER RECHARGE AND RECOVERY PROJECT FEASIBILITY STUDY***

Recommendation:

Staff recommends Committee concurrence of approval of the contract with Kennedy/Jenks Consultants for preparation of Palmdale Water District's Littlerock Creek Groundwater Recharge and Recovery Project Feasibility Study in a not-to-exceed amount of $899,493.00.

Background:

In June, the District distributed Requests for Proposals (RFP's) to prepare a Feasibility Study for the proposed Littlerock Creek Groundwater Recharge and Recovery Project. The District initially received proposals from six respondents, out of which four firms were selected to be invited back to participate in a workshop/interview with the Water Supply and Reliability Committee. The purpose of the interview was to provide the selected firms a forum for presentations and further clarification on their individual proposals. District staff has reviewed the proposals and interview results with careful evaluation and due consideration of response to the listed tasks in the RFP. After detailed consideration, it is staff's recommendation to select Kennedy/Jenks Consultants to perform this work.

The not-to-exceed amount shown above incorporates the proposed base study cost of $798,643.00 and further includes potential optional task costs as follows:

INSAR Investigation	@	$ 36,885.00
Water infiltration Tests	@	$ 41,220.00
Geophysical Testing	@	$ 22,745.00
Total Cost Optional Tasks		$100,850.00

The necessity of engagement in the listed optional tasks will be evaluated concurrent with progress of the Study, and if deemed requisite and intrinsic to completion of the Study, these tasks will be brought before the Water Supply and Reliability Committee for approval prior to initiating any optional work.

The total cost including optional tasks is not-to-exceed $899,493.00.

Strategic Plan Element:

The specific elements of the Strategic Plan addressed are (Ensure adequate water supplies for future and existing customers) Strategic Goal 2.1, (Improve reliability of groundwater) Strategic Goal 2.2, (Develop recycled water as a water source) Strategic Goal 2.3.

Budget:

This project is funded through the 2013A Water Revenue Bonds.

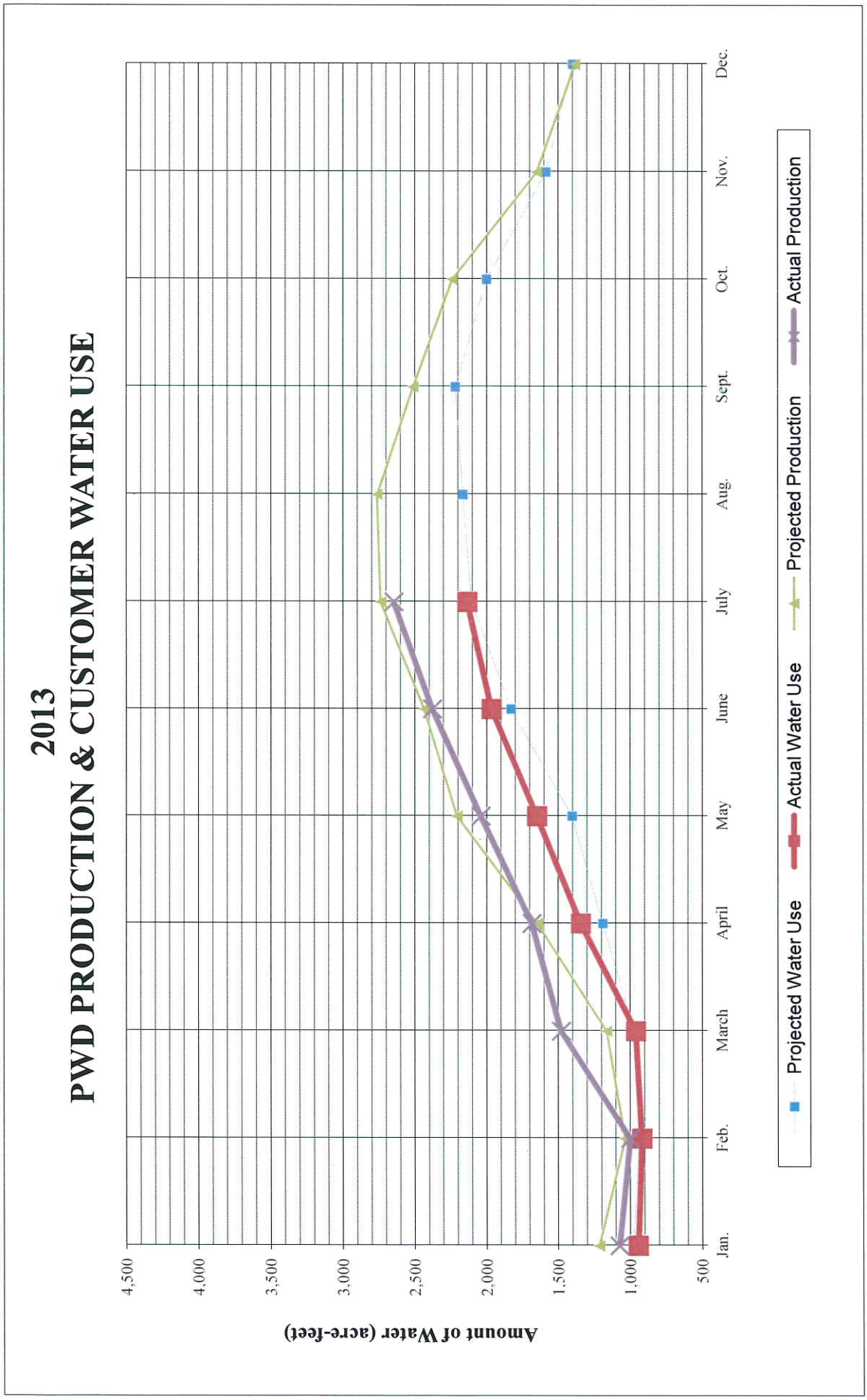
Supporting Documents:

- LCGRRP Feasibility Study Summary of Proposals

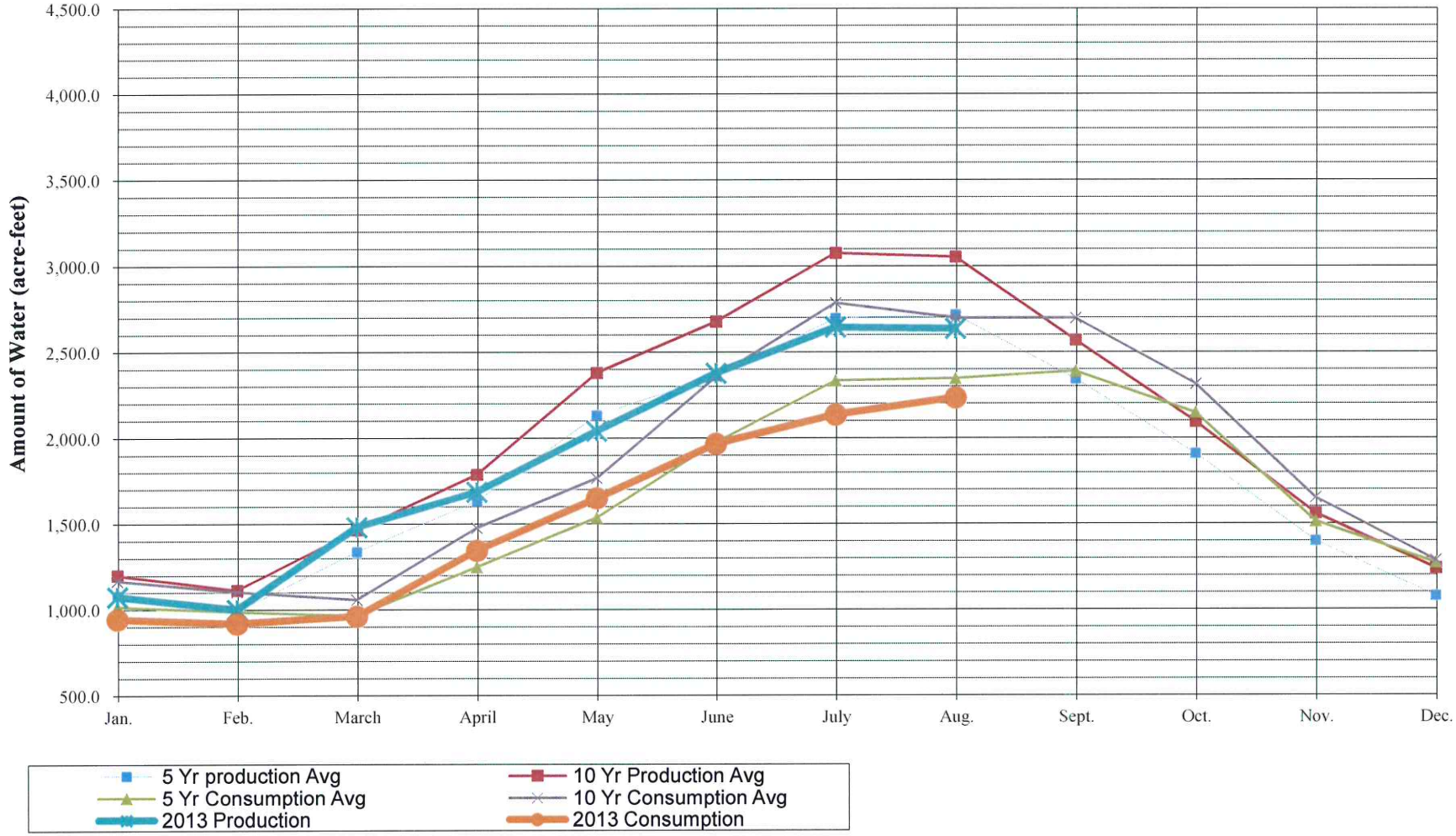
Littlerock Creek Groundwater Recharge and Recovery Project (LCGRRP) - Feasibility Study
Summary of Proposals

Consultant	Total Fee	Schedule	Key Staff	Sub-Consultant	Sub-Consultant Scope	Sub-Consultant Fee	Optional Tasks
Black & Veatch	$1,188,500	16 -Months	Steve Foellmi - PD Andrew Lazenby - PM Alan Rimer - Advisor James Strayer - QA/QC	Wildermuth	Hydrogeology	$388,720	InSAR - $102,200
				Cardno ENTRIX	Geophysics	$115,500	Website - $8,700
				Geo Digital	LiDAR		Stakeholder Interview - $20,700
				Katz	Public Relations	$58,200	
				Neva Ridge	InSAR	Optional	
				ESA	CEQA	$77,700	
					Total Sub-Costs:	**$640,120**	
Carollo	$899,536	22 - Months	Tom West - PIC David Rydman - PE Dennis Williams - Advisor Inge Wiersema - Advisor	Geoscience	Hydrogeology	$255,160	Monitoring Well Inst. - $242,252
				Provost & Pritchard	Advisor	$27,480	Local Scale Model - $39,382
				ESA	Environmental	$74,038	
				Geophysics	Geophysics	$150,000	
					Total Sub-Costs:	**$506,678**	
GEI	$1,427,846	20 - Months	Ron Schnabel - PM Marc Rozman - PIC	ESA	Environmental	$66,045	
				Cardno ENTRIX	Geophysics	$80,000	
				eurofinsUS	Water Quality	$27,500	
					Total Sub-Costs:	**$173,545**	
Kennedy/Jenks	$798,643	15 - Months	David Ferguson - PM Harold Glaser - PIC Lynn Takaichi - QA/QC	HELIX	Environmental	$48,150	InSAR - $36,885
				Mark Thomas & Company	LiDAR	$34,700	Water Infiltration Tests - $41,220
				Christensen Associates, Inc.	Flood Control & Road	$6,000	Geophysical - $22,745
				Foxall	InSAR	$15,000	
				earthforensics, inc.	Subsidence Modeling	$10,000	
				MIG, Inc.	Public Outreach	$32,900	
				Weck / Lawrence	Water Quality	$35,000	
					Total Sub-Costs:	**$181,750**	
MWH	$1,393,303	18 - Months	Victor Harris - PM Bill Swanson - Advisor Bill Leever - Advisor	Brown and Caldwell	Hydrogeology	$356,875	InSAR - $117,810
				Provost & Pritchard	Advisor	$127,765	Well Sampling - $31,065
				Paleo	Environmental Data	$5,750	Geophysics - $111,820
				Aspen	Environmental	$103,500	Field Surveys - $103,440
				Fugro	LiDAR	$34,500	
					Total Sub-Costs:	$628,390	
RMC	$1,328,511	18 - Months	Lyndel Melton - PM Brian Dietrick - DPM Dennis Williams - Advisor Tom Richardson - Advisor	Geoscience	Hydrogeology	$425,160	Monitoring Well Inst. - $217,490
				Nellor Environmental	Permitting	$20,900	Local Scale Model - $35,640
				ESA	Environmental	$66,045	
				M. Cubed	Economics	$30,000	
					Total Sub-Costs:	**$542,105**	

MRK - 8/19/13

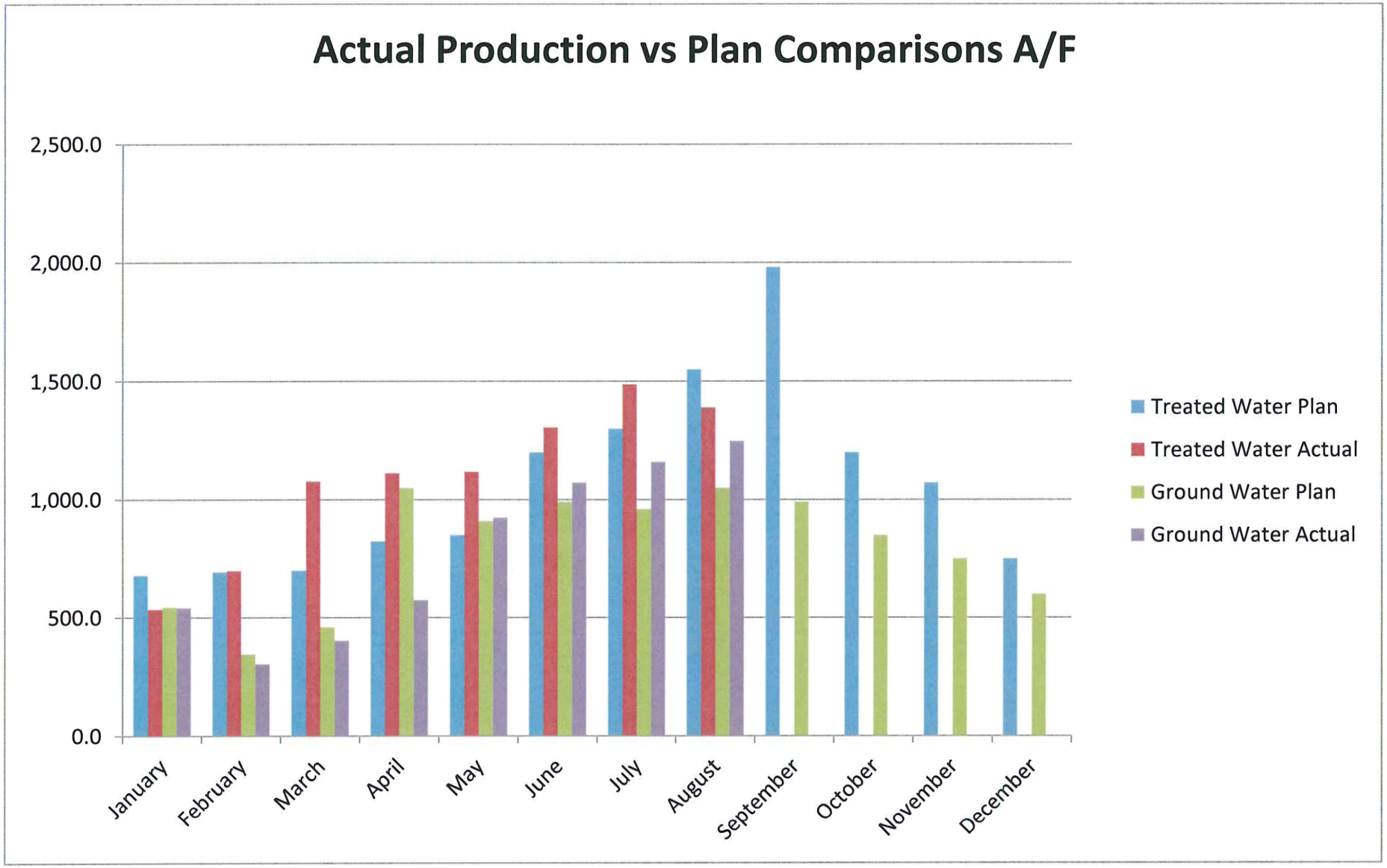

2013
PWD PRODUCTION & CUSTOMER WATER USE
Amount of Water (acre-feet)
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
Jan.
Feb.
March
April
May
June
July
Aug.
Sept.
Oct.
Nov.
Dec.
Projected Water Use
Actual Water Use
Projected Production
Actual Production

2013
PWD PRODUCTION & CUSTOMER WATER USE



Month	Five-Year Aver. Consumption (ac.-ft.)	Budgeted 2013 Consumption (ac.-ft.)	Actual 2013 Consumption (ac.-ft.)	Difference (Act. - Pred.) (ac.-ft.)	
Jan.	1018.1	979	**944.3**	**-34.8**	
Feb.	987.5	941	**918.3**	**-22.4**	
March	966.0	970	**960.7**	**-9.8**	
April	1248.3	1,191.5	**1,344.2**	**152.7**	
May	1535.9	1,405.0	**1,649.6**	**244.6**	
June	1974.0	1,830.7	**1,966.9**	**136.2**	
July	2335.5	2,104.6	**2,135.7**	**31.1**	
Aug.	2347.3	2,165.7	**2,234.8**	**69.1**	
Sept.	2389.4	2,219.2	0.0	0.0	
Oct.	2149.1	2,002.1	0.0	0.0	
Nov.	1513.5	1,588.3	0.0	0.0	
Dec.	1272.0	1,402.5	0.0	0.0	
	19,736.6	11,587.9	**12,154.5**	**566.6**	**4.7%**
	2008 thru 2012	20,000.0			

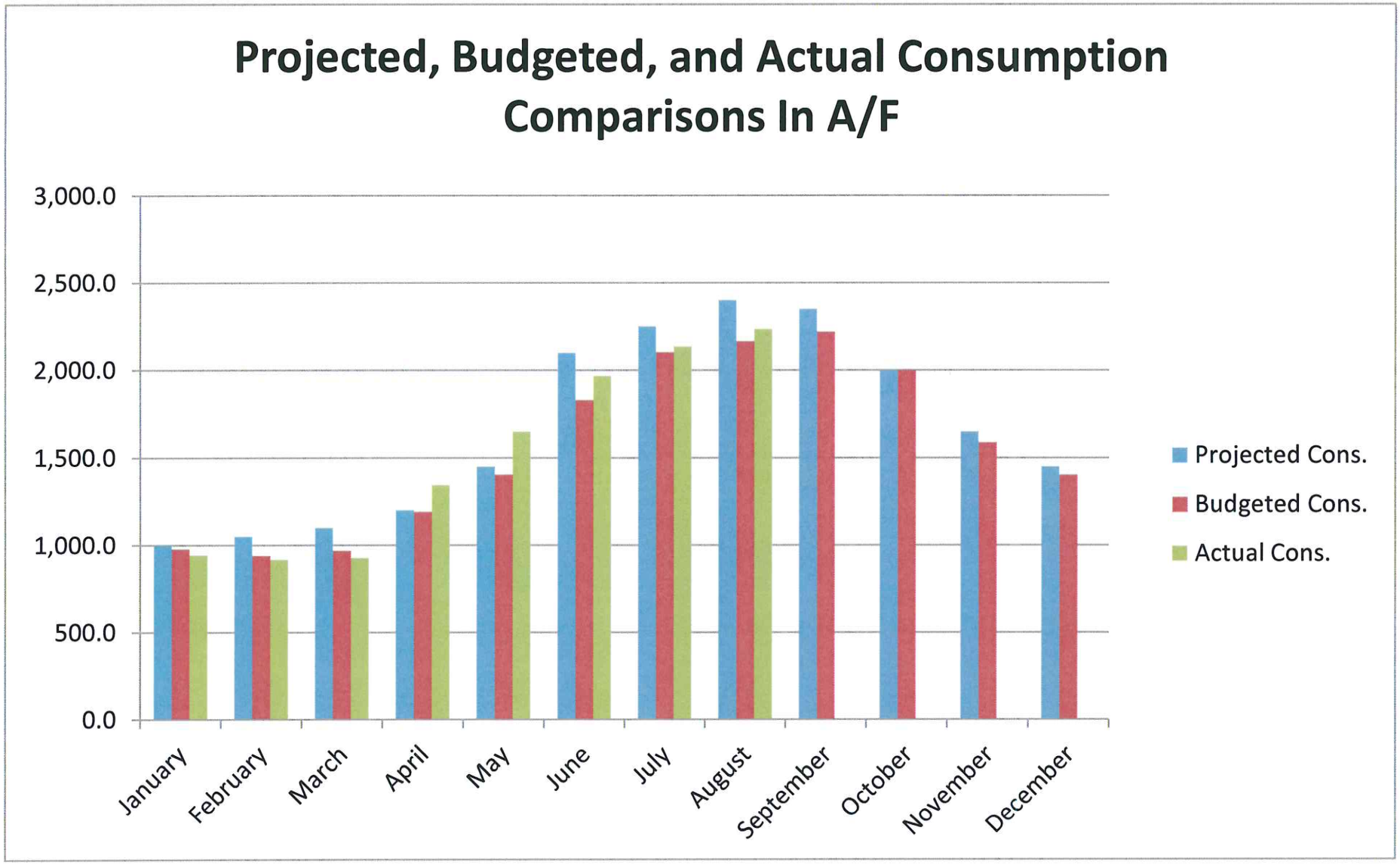
Month	Five-Year Aver. Production (ac.-ft.)	Projected 2013 Production (ac.-ft.)	Actual 2013 Production (ac.-ft.)	Difference (Act. - Pred.) (ac.-ft.)	
Jan.	1082.4	1,217.8	**1,076.7**	**-141.2**	
Feb.	990.3	1,036.3	**1,001.2**	**-35.1**	
March	1336.7	1,164.9	**1,481.1**	**316.2**	
April	1633.2	1,646.4	**1,686.0**	**39.6**	
May	2134.5	2,207.1	**2,042.1**	**-165.0**	
June	2362.4	2,434.8	**2,378.8**	**-56.0**	
July	2696.4	2,736.8	**2,645.7**	**-91.1**	
Aug.	2717.7	2,763.3	**2,637.0**	**-126.3**	
Sept.	2344.3	2,512.8	**0.0**	**0.0**	
Oct.	1910.8	2,241.9	**0.0**	**0.0**	
Nov.	1399.4	1,652.2	**0.0**	**0.0**	
Dec.	1078.2	1,385.6	**0.0**	**0.0**	
	21,686.3	15,207.5	**14,948.6**	**-258.9**	**-1.7%**
		23,000.0			
	2008 thru 2012				


Actual Production vs Plan Comparisons A/F
2,500.0
2,000.0
1,500.0
1,000.0
500.0
0.0
January
February
March
April
May
June
July
August
September
October
November
December
Treated Water Plan
Treated Water Actual
Ground Water Plan
Ground Water Actual

2013

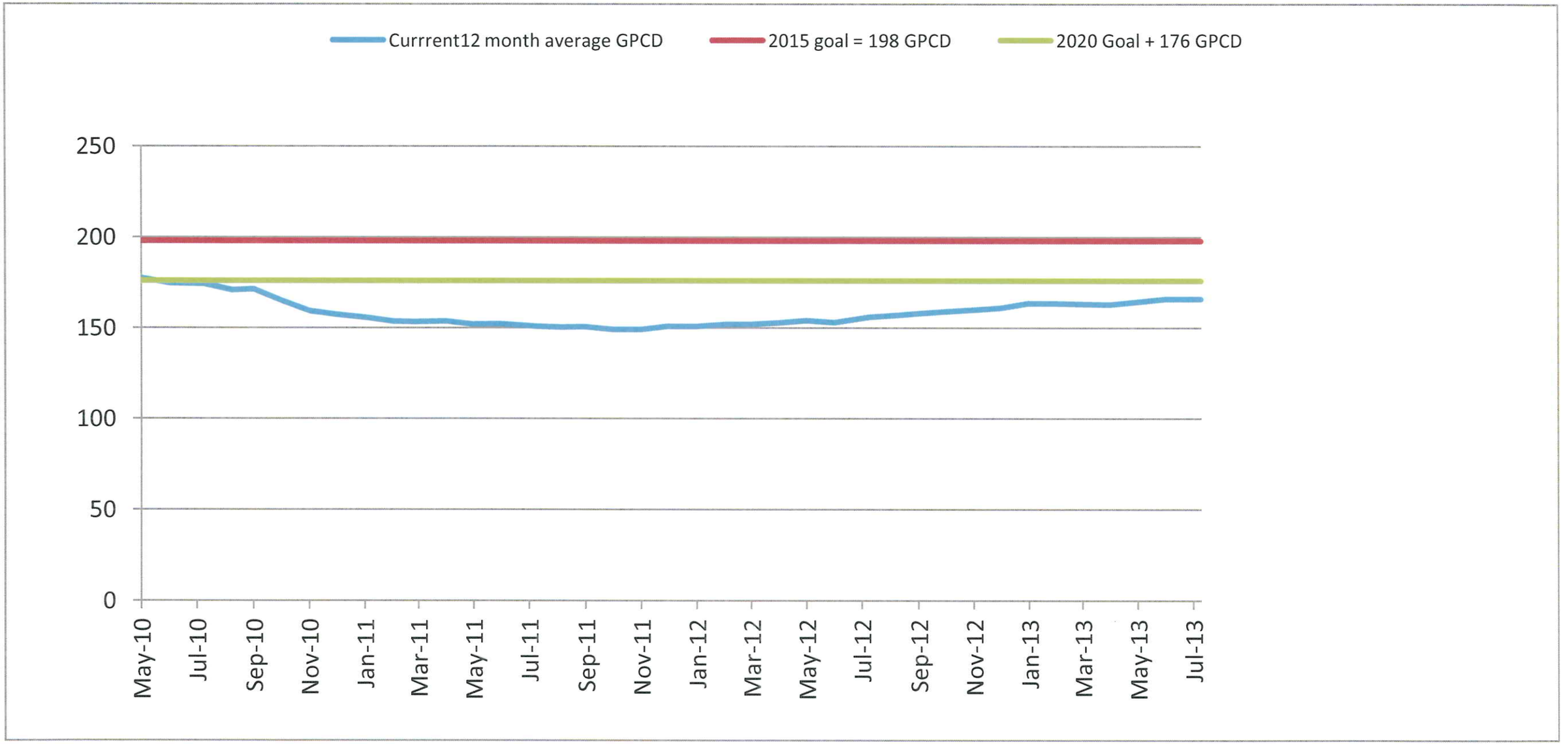
MONTHLY TOTALS					
MONTH	TOTAL af	SW af	GW af	SW %	GW%
January	1,076.7	534.50	542.2	49.64%	50.36%
February	1,001.3	697.60	303.7	69.67%	30.33%
March	1,481.0	1077.9	403.1	72.78%	27.22%
April	1,686.0	1111.8	574.2	65.94%	34.06%
May	2,042.1	1118.1	924.0	54.75%	45.25%
June	2,378.8	1305.5	1073.3	54.88%	45.12%
July	2,646.20	1486.90	1159.30	56.19%	43.81%
August	2,637.0	1389.2	1247.8	52.68%	47.32%
September	0.00	0.00	0.00		
October	0.00	0.00	0.00		
November	0.00	0.00	0.00		
December	0.00	0.00	0.00		

Running Averages	SW	GW
January	49.64%	50.36%
Jan. thru February	59.66%	40.34%
Jan. thru March	64.03%	35.97%
Jan. thru April	64.51%	35.49%
Jan. thru May	62.56%	37.44%
Jan. thru June	61.28%	38.72%
Jan. thru July	60.55%	39.45%
Jan. thru August	59.57%	40.43%
Jan. thru September	0.00%	0.00%
Jan. thru October	0.00%	0.00%
Jan. thru November	0.00%	0.00%
Jan. thru December	0.00%	0.00%


Projected, Budgeted, and Actual Consumption Comparisons In A/F
3,000.0
2,500.0
2,000.0
1,500.0
1,000.0
500.0
0.0
January
February
March
April
May
June
July
August
September
October
November
December
Projected Cons.
Budgeted Cons.
Actual Cons.

2013 BILLED CONSUMPTION

	PROJECTED	BUDGETED	ACTUAL
January	**1,000.0**	**979.1**	**944**
February	**1,050.0**	**940.7**	**918**
March	**1,100.0**	**970.5**	**927**
April	**1,200.0**	**1,191.5**	**1,344**
May	**1,450.0**	**1,405.0**	**1,650**
June	**2,100.0**	**1,830.7**	**1,967**
July	**2,250.0**	**2,104.6**	**2,136**
August	**2,400.0**	**2,165.7**	**2,235**
September	2,350.0	2,219.2	0
October	2,000.0	2,002.1	0
November	1,650.0	1,588.3	0
December	1,450.0	1,402.5	0
Totals	12,550.0	11587.9	12,121
	20,000.0	18,800	
Running total	**12,550.0**	**11,587.9**	**12,121**


Currrent12 month average GPCD
2015 goal = 198 GPCD
2020 Goal + 176 GPCD
250
200
150
100
50
0
May-10
Jul-10
Sep-10
Nov-10
Jan-11
Mar-11
May-11
Jul-11
Sep-11
Nov-11
Jan-12
Mar-12
May-12
Jul-12
Sep-12
Nov-12
Jan-13
Mar-13
May-13
Jul-13

2013 Water Production Plan @ 35% Allocation

Month	Raw Surface Water Sources							Water Production						Metered Water	
	Surface			Water		Evaporation	Total	WTP		Groundwater		Total			
	Carry Over (ac-ft) *	Banking & Exchange (ac-ft) from CO *	**Butte (ac-ft)**	PWD/SWP (ac-ft)	LrD (ac-ft)	Plan (ac-ft)	Plan (ac-ft)	Plan (ac-ft)	Actual (ac-ft)	Plan (ac-ft)	Actual (ac-ft)	Plan (ac-ft)	Actual (ac-ft)	Plan (ac-ft)	Actual (ac-ft)
January	544.0	***0.0***	0.0	0.0	**0.0**	**0.00**	**544.00**	680.0	**534.5**	545.0	**542.2**	1,225.0	**1,076.7**	1,000.0	**944**
February	0.0	**0.0**	0.0	680.0	**0.0**	**0.00**	**680.00**	694.0	**697.6**	345.0	**303.7**	1,039.0	**1,001.3**	1,050.0	**918**
March	0.0	**0.0**	1100.0	0.0	**0.0**	**0.00**	**1100.00**	700.0	**1077.9**	460.0	**403.1**	1,160.0	**1,481.0**	1,100.0	**961**
April	1297.0	**0.0**	0	0.0	**0.0**	**-75.00**	**1222.00**	824.0	**1111.8**	1,050.0	**574.2**	1,874.0	**1,686.0**	1,200.0	**1,344**
May	1273.0	**0.0**	0	0.0	**39.5**	**-50.00**	**1262.50**	850.0	**1118.1**	910.0	**924.0**	1,760.0	**2,042.1**	1,450.0	**1,650**
June	0.0	**0.0**	0	749.0	**963.9**	**-135.00**	**1577.90**	1,200.0	**1305.5**	990.0	**1073.3**	2,190.0	**2,378.8**	2,100.0	**1,967**
July	**0.0**	**0.0**	**1209.3**	**0.0**	**322.9**	**-285.00**	**1247.20**	1,300.0	**1486.9**	960.0	**1159.3**	2,260.0	**2,646.2**	2,250.0	**2,136**
August	**0.0**	**0.0**	**1190**	**426.0**	**0.0**	**-135.00**	**1481.00**	1,550.0	**1389.2**	1,050.0	**1247.8**	2,600.0	**2,637.0**	2,400.0	**2,235**
September	0.0	0.0	0.0	1700.0	600.0	-210.00	2090.00	1,980.0	0.0	990.0	0.0	2,970.0	0.0	2,350.0	0
October	0.0	0.0	0.0	1516.0	0.0	-136.00	1380.00	1,200.0	0.0	850.0	0.0	2,050.0	0.0	2,000.0	0
November	0.0	0.0	0.0	1172.0	0.0	-50.00	1122.00	1,072.0	0.0	750.0	0.0	1,822.0	0.0	1,650.0	0
December	0.0	0.0	0.0	842.0	0.0	-39.00	803.00	750.0	0.0	600.0	0.0	1,350.0	0.0	1,450.0	0
	3,114.00	**0.0**	**3499.3**	**1,855.0**	**1,326.3**	**(680.00)**	**9,114.60**	**7,798.0**	**8,721.4**	**6,310.0**	**6,227.60**	**14,108.0**	**14,949.0**	**12,550.0**	**12,155**
Allocated Total Use:	2,577.0	2,000.0	**3,500.0**	**7,455.0**	**3,000.0**	1,250.0	13,000.0	13,000.0	11,000.0	9,500.0	9,000.00	23,000.0	21,500.00	20,000.0	19,999.0
Actual Planned Use	3,114.0		3,499.3	7,927.0			14,509.6								
Remaining Allotment:	**-537.0**	**2,000.0**	**0.7**	**5,600.0**	**1,673.7**	**570.0**	**3,885.4**	5,202.00	2,278.6	3,190.0	-2,772.40	8,892.0	6,550.96	7,450.0	7,844.1
WK returned Nov/Dec 2012		2,500.0		7,085.0		1,467.5		13,916.0		7,542.0		22,500.0	21,459.0	17,800.0	19,258
Total:	3,896.0	0.0	3,500.0	7,455.0	0.0	-1,250.0									
UNUSED TO DATE	**782.0**	**0.0**	**0.7**	**5,600.0**	**0.0**		6,382.7					3,424.0			
Planned Available for Carryover							1,733.00								