

Palmdale Water District Self-Certified Conservation Standard

District Staff has analyzed the data covering available supplies in the event that water years 2013 -2015 were to repeat themselves during 2017-2019. Through this analysis it was determined that a conservation standard of 15% reduction, compared to water usage in 2013, would provide assurance of uninterrupted and cost effective water supply to the District's customers should drought conditions worsen.

Certification of Self-Certified Conservation Standard

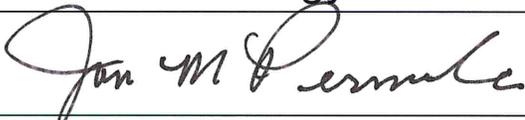
Certification of Self-Certified Conservation Standard Form

I hereby certify that: **Palmdale Water District**

1. I will oversee, review, and take full responsibility for the completeness and accuracy of all data submitted to the State Water Resources Control Board as part of the reporting required pursuant to California Code of Regulations, title 23, section 864.5, subdivisions (a)(3) and (h);
2. I have the authority to make the aforesaid certifications on behalf of

Palmdale Water District

I acknowledge that submitting any information required by California Code of Regulations, title 23, section 864.5, including this certification, that I know or should know to be materially false is a violation punishable by civil liability of up to five hundred dollars (\$500) for each day in which the violation occurs. Every day that the error goes uncorrected constitutes a separate violation. Civil liability for the violation is in addition to, and does not supersede or limit, any other remedies, civil or criminal.

Printed Name	Jon Pernula
Title (General Manager or equivalent)	Water and Energy Resource Director
Signature	
Date	06/22/2016
Email Address	JPernula@palmdalewater.org
Phone Number	(661) 947-4111 ext.1005

Please print, sign and submit completed form and upload the form to this weblink (see Step 5 of the online form): <http://drinc.ca.gov/dnn/applications/publicwatersystems/waterreliabilitycertification.aspx>

Worksheet 1 : Total available water supply for individual water supplier

Step 2 of Water Supply Reliability Certification and Data Submission Form

Palmdale Water District

<< Enter name of urban water supplier

User Input Instructions

- (1) Please select units of measure from the dropdown menu.
- (2) Enter information on available water supplies and supplies committed to other uses.

LEGEND:

User Input or Selection	
Linked from User Input	

acre feet (AF)

<< Select units of measure

Available Water Supplies

Sources of Supply	Name of Provider(s) or Description	Source used in prior years?	Water Available in			Wholesaler information Direct Web Link	Wholesaler Water System Number**
			WY 2017 *	WY 2018 *	WY 2019		
WHOLESALER SUPPLIED >> Provide direct web link(s) to information on the volume of water the wholesaler expects to deliver to the retailer water supplier in each year.							
Wholesaler 1		Select Y/N					
Wholesaler 2		Select Y/N					
Wholesaler 3		Select Y/N					
Wholesaler 4		Select Y/N					
Wholesaler 5		Select Y/N					
SELF-SUPPLIED							
Water Recycling (potable)		Select Y/N					
Surface water: SWP	SWP Table A	Yes	44.0	1,009.0	4,260.0		
Surface water: CVP		Select Y/N					
Surface water: Colorado River		Select Y/N					
Surface water: other (describe)	SWP Table A Carryover	Yes	4,500.0	7,411.0	56.0		
Surface water: other (describe)	Littlerock Dam	Yes	-	-	2,198.0		
Local Groundwater		Yes	12,000.0	12,010.0	10,740.0		<< Complete groundwater tab
Seawater Desalination		Select Y/N					
Transfers	SWP Table A Lease Butte County	Yes	3,952.0	65.0	1,300.0		
Exchanges		Select Y/N					
Other (describe):		Select Y/N					<< To add more self-supplied sources, insert as many row.
SUBTOTAL of available supplies (in units selected)			20,496.0	20,495.0	18,554.0		

* Any carryover from one year is incorporated in the supply of the following year, as legally allowed.

** Look up Water system number at this link: <https://sdwis.waterboards.ca.gov/PDWW/>

Rows can be inserted to account for other sources of supply (e.g., desalination of brackish water, banked water)

① If a source has not been used in prior years, e.g., a new treatment facility will be constructed, supporting documentation must document when the new source will be fully implemented.

Water Supplies Committed to Other Uses (Not Available)

Other Uses	Describe	Quantity in WY 2017	Quantity in WY 2018	Quantity in WY 2019
Agriculture				
Commercial, industrial or institutional				
New residential customers				
Transfers				
Other:				
Other:				
SUBTOTAL of supplies not available (in units selected)		-	-	-

TOTAL available water supply (in units selected)	20,496.0	20,495.0	18,554.0
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(Subtotal of available supplies minus subtotal of supplies committed to other uses)

>>> Please enter values calculated below in Step 2 of the online form

TOTAL available water supply converted to acre feet	20,496	20,495	18,554
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>> If error, verify you have selected units of measure

Narrative

Palmdale Water District has a Table allotment of 21,300 Acre feet from the State Water Project. Water Years 2013, 2014, and 2015 had respective allotment percentages of 35%, 5% and 20%. PWD is opting not to project the 4000 acre feet of supply that will exist at the beginning of 2017 or the probable available water through SWP dry year exchanges and purchases. PWD will begin 2017 with 4,500 acre feet of available Table A carryover from the 2016 water year. The anticipated total available in this scenario is 17280 acre feet.

Data-Historical Table A Allotment in acre feet

Year	Allot %	Table A
2013	35%	7455
2014	5%	1065
2015	20%	4260
Carry over		
2017		4500
Total		17280

Narrative

PWD sounds the wells monthly. All wells below with the exception of #4 are available for use. Well # 8 is the greatest producer and is sited in the groundwater worksheet.

Static Water Level

(depth to water table - feet)

Site #	Jun-2016	Jun-2013	change in feet from 2013 to 2016
2	570	547	-23
3	594	568	-26
4	Out-of-Service	620-OOS	
6	564	557	-7
7	563	545	-18
8	564	545	-19
10	438	417	-21
11	can't sound	off line	
14	584	559	-25
15	off line	536	
16	185	185	0
18	can't sound	can't sound	
19	56	73	17
21	182	175	-7
22	120	111	-9
23	595	577	-18
25	off line	can't sound	
26	off line	198	
29	137	128	-9
30	194	194	0
32	260	255	-5
33	off line	219	
35	214	231	17

Narrative

PWD's groundwater supply comes from 22 active wells. Below is historical pumping from 2013-2015. Production from the wells is captured on a daily basis through SCADA.

Projected pumping is based on the maximum allowed through Antelope Valley Groundwater Basin Adjudication. 2013 had lower production due to abundant surface water supply.

Historical-Production in acre feet

Year	Production
2013	9377.872
2014	12397.32
2015	11226.69

Total 33001.89

Projected use 2017-2019 in acre feet

2017	12000
2018	12011
2019	10740

Total 34751

Narrative

Average anticipated annual supply from Littlerock Dam is 3,000 AF. Littlerock Dam during 2013 -2015 water years produced 1650 acre feet of surface water. Additionally the reservoir is storing 548 acre feet which will be carried over until 2017. The total projected available supply is 2198 acre feet. These level readings are collected daily through SCADA.

Year	Production AF	Starting Level ft.	Start Volume AF	End level	End Volume in AF	Net Water AF
2013	1,557.60	3249.19	1331	3205.85	20	246.60
2014	741.5315926	3205.85	20	3208.3	46	767.53
2015	571.9380459	3208.3	46	3213.97	110	635.94
Total for Period						1,650.07

Current available supply to be carried over to 2017

6/1/2016 Level ft.	Storage in AF
3233	548

Littlerock Reservoir

WATER SURFACE ELEVATION, in Feet	RESERVOIR VOLUME, in Acre Feet	WATER SURFACE ELEVATION, in Feet	RESERVOIR VOLUME, in Acre Feet
3186.5	-	3241	890
3212	97	3242	936
3213	110	3243	990
3214	123	3244	1,045
3215	136	3245	1,099
3216	149	3246	1,153
3217	161	3247	1,207
3218	179	3248	1,269
3219	196	3249	1,331
3220	213	3250	1,394
3221	230	3251	1,456
3222	248	3252	1,518
3223	270	3253	1,588
3224	293	3254	1,659
3225	315	3255	1,729
3226	338	3256	1,799
3227	360	3257	1,869
3228	390	3258	1,948
3229	420	3259	2,026
3230	450	3260	2,104
3231	479	3261	2,183
3232	509	3262	2,261
3233	548	3263	2,345
3234	587	3264	2,429
3235	625	3265	2,513
3236	664	3266	2,601
3237	703	3267	2,690
3238	750	3268	2,784
3239	796	3269	2,877
3240	843	3270	2,970

Narrative

The Butte Table A Lease agreement would provide 5316 acre feet in the specified scenario.
Calculation Methodology

Butte County "Annual Leased Table A Allocated Amount"¹ Calculation Methodology

There are two different methods of calculating the "Annual Leased Table A Allocated Amount"¹, one method is for when the South of Delta (SOD) allocations are 0 to 20% and another method for when SOD allocations are above 20%

Allocation Method for South of Delta (SOD) Allocations 0 to 20% (Conference Years)

Total "Annual Leased Table A Allocated Amount" = Maximum Amount Available for Lease (AF)²
+ (3,500 AF - Butte County's in-County used amount of its 3,500 AF)(SOD Allocation)

Example: Assume a SOD allocation of 20% and an in-County use of 205 AF

Total "Annual Leased Table A Allocated Amount" = 2,500 AF + (3,500 AF - 205 AF)(0.2) = 3,159 AF

Allocation Method for South of Delta (SOD) Allocations Above 20% (Non-Conference Years)

Total "Annual Leased Table A Allocated Amount" = (Butte County's Total Table A Amount -
Butte County's in-County used amount of its 3,500 AF)(SOD Allocation)

Example: Assume a SOD allocation of 40% and an in-County use of 2,668 AF

Total "Annual Leased Table A Allocated Amount" = (27,500 AF - 2,668 AF) (0.40) = 9,932.8 AF

Dudley Partners	58.33%
PWD	41.67%
	<hr/>
	100.00%

Notes:

1) Total "Annual Leased Table A Allocated Amount" refers to Article 2.4.1 page 4 of the SETTLEMENT AGREEMENT AND RELEASE REGARDING BUTTE COUNTY.

2) The "Maximum Amount Available for Lease (AF)" Refers to Column 5, Exhibit B, page 17 of the SETTLEMENT AGREEMENT AND RELEASE REGARDING BUTTE COUNTY.

EXHIBIT B-EXAMPLE MAXIMUM BC TABLE AMOUNT

(1) Table A SOD Allocation (%)	(2) Existing Conditions (Table A Allocation) (af)	(3) BC Table Allocation (af)	(4) Maximum BC Table Amount Available for In- county Use (af)	(5) Maximum Amount Available for Lease (af)
0	0	3,000	3,000	0
5	1,375	3,000	3,000	0
10	2,750	4,000	3,500	500
15	4,125	5,000	3,500	1,500
20	5,500	6,000	3,500	2,500
25	6,875	15,125	3,500	6,000
30	8,250	16,500	3,500	7,200
35	9,625	17,875	3,500	8,400
40	11,000	19,250	3,500	9,600
45	12,375	20,625	3,500	10,800
50	13,750	22,000	3,500	12,000
55	15,125	23,375	3,500	13,200
60	16,500	27,500	3,500	14,400
65	17,875	27,500	3,500	15,600
70	19,250	27,500	3,500	16,800
75	20,625	27,500	3,500	18,000
80	22,000	27,500	3,500	19,200
85	23,375	27,500	3,500	20,400
90	24,750	27,500	3,500	21,600
95	26,125	27,500	3,500	22,800
100	27,500	27,500	3,500	24,000

	Max AF available	fc AF available	In County	In County Uses	SWP Allotment	Total Available	PWD %	PWD Total AF
2013	27500			405	35%	9483.25	0.4167	3951.670275
2014	0		3000	405	5%	154.75	0.4167	64.484325
2015	2500		3500	405	20%	3119	0.4167	1299.6873

5315.8419