

**ORIGINAL**

N.H.P.U.C. Case No. DW 10-141

Exhibit No. LRW 17

Witness John Skelton

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**1612010 Moultonborough, Paradise Shores-Balmoral / Suissevale water system**

Design Flow and Source Capacity Review by C.Klevens, P.E. / S. Roy, P.G.

Prepared, March 4, 2011

Description	Paradise Shores - Balmoral	Suissevale POASI	Combined Water System
PWS #	1612010	1612130 (PORS)	1612010
# Services (current)	375	352	727
Population (current)	993	888	1881
# Services (build-out)	425	402	900 projected
Population (build-out)	1060 est	1000 est	2250 projected
Well sources	006 BRW 5 - 75 gpm 007 BRW 6 - 35 gpm	10 inactive wells	
Storage (gallons)	325000	24000	325000
<b>Design Requirements</b>	Env-Ws 372 Small CWS	(Env-Ws 372)	Env-Ws 374 Large systems
Min source reqts	2 x design flow	2 x design flow	Avg day w/largest well offline Peak day w/all wells online
Min storage reqts	Design flow	Design flow	Avg day
<b>Meter Records 2007 (1)</b>			
Max Day, gallons	50000	78000	128000
gpm	35	54	89
Avg Day Summer, gal	35028	44026	79054
gpm	24	31	55
<b>Meter Records 2010 (2)</b>			
Max Day, gallons ESTIM	60000	92000	152000
gpm ESTIM	42	64	106
Avg Day Summer, gal	53755	69527	123282
gpm	37	48	86
<b>Design Flow based on Meter Records 2007</b>			
Based on Max Day	50000	78000	128000
gpm	35	54	89
<b>Min SOURCE Capacity 2007</b>	69	108	55 gpm w/largest well offline
<b>Min Storage Capacity 2007</b>	50000	78000	79,054 Avg Day Summer
<b>Min SOURCE Capacity 2010</b>	83	128	86 gpm w/largest well offline
<b>Min Storage Capacity 2010</b>	60000	92000	123282 Avg Day Summer
a) Is more source capacity reqd?	NO (2007 or 2010)	n/a	YES (2007 and 2010)
b) Is more storage reqd?	no	yes	no

References

(1) Lewis Engineering response to LOD DWGB 08-033 Item 2, Assessment of Present and Future Water Demands, 4/28/08

(2) LRWC response to DES request for flowmeter records, 3/2/11