

Builder's Aggregate 2018 SWSP Accounting

Constants		
Property	Value	Units
Density of mined product	2750	lb/yd ³
Density of granite	4640	lb/yd ³
Porosity	0.407	
Moisture content ¹	4%	
Density of water	62.40	lb/ft ³

Month	Exposed area, in acres	Volume of product mined, in cubic yards	Weight of mined product, in lbs	Volume of water removed with mined material, in acre-feet	Volume of water first fill, in acre-feet	Monthly Free Water Surface Evaporation, in feet ²	Evaporative Depletions, in acre-feet	First Fill Depletions, in acre-feet	Total monthly depletions
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
April	0	0	0	0.00	0.00	0.37	0.00	0.00	0.00
May	0	0	0	0.00	0.00	0.49	0.00	0.00	0.00
June	0	0	0	0.00	0.00	0.59	0.00	0.00	0.00
July	0	0	0	0.00	0.00	0.62	0.00	0.00	0.00
August	0	0	0	0.00	0.00	0.55	0.00	0.00	0.00
September	0	0	0	0.00	0.00	0.41	0.00	0.00	0.00
October	0	0	0	0.00	0.00	0.29	0.00	0.00	0.00
November	0	0	0	0.00	0.00	0.16	0.00	0.00	0.00
December	2.2	0	0	0.00	0.00	0.12	0.26	0.00	-0.26
January	2.2	0	0	0.00	0.00	0.12	0.26	0.00	-0.26
February	2.2	0	0	0.00	0.00	0.14	0.31	0.00	-0.31
March	2.2	0	0	0.00	0.00	0.23	0.51	0.00	-0.51
Total	--	0	0	0.00	0.00	4.09	1.34	0.00	-1.34

¹ Hydraulic dredging operation sorts gravels in place and allows excess water and undersized materials to return to pond immediately during processing. Water removed only results from wetted surface area of mined materials. Modified from 2% to 4% to expedite processing of SWSP.

² Based on CDSS digitized contour lines from NOAA Atlas 33 Gross evaporation.

[4] = [3] x (density of product)

[5] = [4] x (moisture content 4%) ÷ (density of water) ÷ 43560 cu. ft./AF

[7] From Table 1

[8] = [2] x [7]

[9] = [5] + [6]

[10] = -1x([8] + [9])