

HC&S Seepage Loss - East Maui System

East Maui	Location	Ditch Length Miles	Ditch Length Feet	Sq. ft water area loss/foot	Type of ditch/reservoir	Low Seepage loss factor cubic feet/sq	High Seepage loss factor cubic feet/sq	Gal/sq ft loss factor cubic feet/sq (low factor)	Gal/sq ft loss factor cubic feet/sq (high factor)	Low Seepage loss/day (gal)	High Seepage loss/day (gal)
All Ditches	Eastern Portion of HC&S	41.60	219,648.00	7.00	Lined Concrete Ditch	0.20	0.40	1.50	2.99	2,300,461.36	4,600,922.73
All Reservoirs	Eastern Portion of HC&S	-	-	9,507,841.20	Unlined	0.40	0.85	2.99	6.36	28,451,264.01	60,458,936.01
SUM >>>										30,751,725.37	65,059,858.74

East Maui	Location	Ditch Lineal (ft)	Width of water-foot	Total area in square feet	Acres	Evaporation rate of 0.40 acre-inch/day	Acre inch to gallons/day
All Ditches	Eastern Portion of HC&S	219,648.00	5.00	1,098,240.00	25.21	10.08	273,846.85
All Reservoirs	Eastern Portion of HC&S	-	-	9,507,841.20	218.27	87.31	2,370,786.31
SUM >>>							2,644,633.16

East Maui Annual Delivery Average 2008-2013 (MGD)	
Total	67,017.00
Average/Day	183.48

Low Seepage Loss Factor - MGD		Seepage and evap
Seepage loss/day	30.75	33.40
Percentage lost	16.76%	18.20%

High seepage Loss factor - MGD		Seepage and evap
Seepage loss/day	65.06	67.70
Percentage lost	35.46%	36.90%

Note 1: Reservoirs is total sq ft water area

loss

Note 2: Lined Reservoirs were not considered

Note 3: Tunnel areas on the Kauhikoa ditch was excluded

Civil No. 19-1-0019-01 (JPC)
Defendant A&B/EMI's Exhibit AB-144
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