Table 4.8-1 Water Depletion Calculation

Revised (PR-11, 2022) Estimate of Annual Use and Evaporative Loss of Surface Waters Discharged From Trapper Mine

Evaporative Depletion From Impoundments

o	Assume annual evaporative loss is 24 inches.		
o	41 existing sediment ponds average 0.63 acres surface area at high water mark = 41 * 0.63 ac * 2'	=	51.66 ac-ft
o	Coyote Dam @ high water mark = 1* 12.00 ac * 2'	=	24.00 ac-ft
o	Future life-of-mine sediment ponds = (3 * .68) ac * 2'	=	4.08 ac-ft
o	Existing stock ponds (55) @ average 0.13 ac = 55 * 0.13 ac * 2'	=	14.30 ac-ft
o	Future life-of-mine stock ponds (10) = 10 * 0.13 ac * 2'	=	2.60 ac-ft
		Total =	96.64 ac-ft

Depletion Due to Road Watering

o	Average annual quantity used for road watering.	Total =	123.79 ac-ft

Total Estimated Depletion =	96.64	ac-ft
	123.79	ac-ft
	220.43	ac-ft

Augmentation Due to Deep Wells/Pit Pumpage

o	Assume 10% of pit water originates from surface runoff.		
o	Average annual Trapper well dewatering.	=	37.06 ac-ft
o	Average annual Trapper pit dewatering = 44.30 * 0.9	=	39.87 ac-ft
		Total Augmentation =	76.93 ac-ft

Total Adjusted Depletion Due to Mining - 2022 Estimate (PR-11):	220.43	ac-ft
	-76.93	ac-ft
	143.50	ac-ft

Total Adjusted Depletion Due to Mining - 2012 Estimate (PR-07):*	160.10	ac-ft

*Highest previous value.

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