Cash Flow for Brine Well - Based on 20 Year Bond

(assumes 12% annual salt increase avoidance)

		Build Year	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9	Yr10	Yr11
Cash Inflows													
	Debt Proceeds	$1,700,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Reduced Costs	$0	$180,000	$201,600	$225,792	$252,887	$283,233	$317,222	$355,288	$397,923	$445,673	$499,154	$559,053
	Year total	$1,700,000	$180,000	$201,600	$225,792	$252,887	$283,233	$317,222	$355,288	$397,923	$445,673	$499,154	$559,053
	Cumulative total	$1,700,000	$180,000	$381,600	$607,392	$860,279	$1,143,513	$1,460,734	$1,816,022	$2,213,945	$2,659,618	$3,158,772	$3,717,825
Cash Outflows													
	One time investment	($1,700,000)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	P&I on Debt	$0	$ (125,089)	$ (125,089)	$ (125,089)	$ (125,089)	$ (125,089)	$ (125,089)	$ (125,089)	$ (125,089)	$ (125,089)	$ (125,089)	$ (125,089)
	Maintenance Cost	0	(7,000)	(7,210)	(7,426)	(7,649)	(7,879)	(8,115)	(8,358)	(8,609)	(8,867)	(9,133)	(9,407)
	Year total	($1,700,000)	($132,089)	($132,299)	($132,515)	($132,738)	($132,968)	($133,204)	($133,447)	($133,698)	($133,956)	($134,222)	($134,496)
	Cumulative total	($1,700,000)	($132,089)	($264,388)	($396,903)	($529,641)	($662,609)	($795,813)	($929,260)	($1,062,958)	($1,196,915)	($1,331,137)	($1,465,634)
Net Effect on Cash													
	Annual Savings	$0	$47,911	$69,301	$93,277	$120,149	$150,266	$184,018	$221,841	$264,225	$311,717	$364,932	$424,556
	Cumulative Savings	$0	$47,911	$117,212	$210,489	$330,638	$480,904	$664,921	$886,762	$1,150,986	$1,462,703	$1,827,635	$2,252,191

	Total Cost
Brine Well	
Design	$150,000.00
Construction	$1,550,000.00
Total Investment	$1,700,000.00
Debt Proceeds	$1,700,000.00
P&I on $1,700,000 bond 20 yrs, 4%	$125,089.00

Ongoing Costs
Maintenance - Brine Well $7,000.00 3% annual increase

Reduced Costs - Water Plant
Plant Salt reduction $180,000.00 Based on 2019 Univar rate of $180 per ton and the 2001-2018 average annual per ton usage of 1,000. Assumes 12% annual increase.

Note: After examination it was determined that additional water usage from new developments would be offset by water reducing technology. Therefore this calculation assumes flat water usage.