A. This table presents the range of predicted model drawdown for different time periods. These numbers were obtained from the Groundwater Quantity section of Chapter 3 of the FEIS.

a. "Low" indicates the smallest drawdown from any of the modeling runs for all three models, including best-fit modeling runs and sensitivity modeling runs.

b. "High" indicates the highest drawdown from any of the modeling runs for all three models, including best-fit modeling runs and sensitivity modeling runs.

c. "Best fit" indicates the drawdown from each of the three models. Out of the many modeling runs conducted, only one was considered to best calibrated to real-world measurements. The three numbers shown represent the outcomes from each of the three models.

Predicted Model Drawdown									
Location	**Near-term = 50 years after closure**			**Long-term = 150 years after closure**			**Long-term = 1,000 years after closure**		
	Low	**Best Fit**	**High**	**Low**	**Best Fit**	**High**	**Low**	**Best Fit**	**High**
Upper Cienega Creek	<0.1	<0.1, <0.1, <0.1	0.15	<0.1	<0.1, <0.1, 0.25	0.35	<0.1	<0.1, 0.2, 0.5	0.5
Empire Gulch	<0.1	<0.1, 0.2, 0.5	1.8	0.1	0.3, 0.3, 2.5	5.0	2.3	3.3, 4.3, 6.0	6.0
Gardner Canyon	<0.1	<0.1, <0.1, <0.1	0.15	<0.1	<0.1, 0.1, 0.2	0.4	<0.1	<0.1, 0.5, 2.2	2.2

B. The probability of the stream going dry under existing baseline conditions is: <u>0.7%, or an average of 3 days per year</u>. This was obtained from Attachment 2, using all depths of water with a value of zero.

C. The probability of the stream experiencing extremely low flow conditions, defined as flow of 0.2 feet or less, under existing baseline conditions is: <u>1%, or an average of 4 days per year</u>. This was obtained from Attachment 2, using all depths of water with a value of 0.2 or less. Since "0.2" did not appear in the ranking table, the value of 0.21 was used to select these probabilities.

D. This table shows whether additional drawdown needs to be applied to the Upper Cienega Creek predicted model drawdowns in Table A, because of loss of contributing surface flow from Empire Gulch or Gardner Canyon. Additional drawdown is imposed if a drawdown of 0.3 feet or greater is experienced in either Empire Gulch or Gardner Canyon. The additional drawdown to be superimposed on the predicted model drawdown is 0.05 feet for Empire Gulch, and 0.13 feet for Gardner Canyon.

Additional Drawdown because of losses from Empire Gulch (11% of flow in Upper Cienega Creek) and Gardner Canyon (26% of flow in Upper Cienega Creek)									
Location	**Near-term = 50 years after closure**			**Long-term = 150 years after closure**			**Long-term = 1,000 years after closure**		
	Low	**Best Fit**	**High**	**Low**	**Best Fit**	**High**	**Low**	**Best Fit**	**High**
Empire Gulch	0	0, 0, **0.05**	**0.05**	0	**0.05, 0.05, 0.05**	**0.05**	**0.05**	**0.05, 0.05, 0.05**	**0.05**
Gardner Canyon	0	0, 0, 0	0	0	0, 0, 0	**0.13**	0	0, **0.13, 0.13**	**0.13**
Total additional drawdown to apply to Upper Cienega Creek	**0**	**0, 0, 0.05**	**0.05**	**0**	**0.05, 0.05, 0.05**	**0.18**	**0.05**	**0.05, 0.18, 0.18**	**0.18**

E. This table shows the "revised predicted drawdown", which is the combination of Table A (predicted model drawdown) and Table D (additional drawdown because of losses from Empire Gulch or Gardner Canyon). Where a predicted model drawdown is <0.1 feet, a value of 0.1 is assumed for the calculation.

Revised Predicted Model Drawdown									
Location	**Near-term = 50 years after closure**			**Long-term = 150 years after closure**			**Long-term = 1,000 years after closure**		
	Low	**Best Fit**	**High**	**Low**	**Best Fit**	**High**	**Low**	**Best Fit**	**High**
Upper Cienega Creek	<0.1	<0.1, <0.1, 0.05	0.20	<0.1	0.15, 0.15, 0.30	0.53	0.15	0.15, 0.38, 0.68	0.68
Empire Gulch	<0.1	<0.1, 0.2, 0.5	1.8	0.1	0.3, 0.3, 2.5	5.0	2.3	3.3, 4.3, 6.0	6.0
Gardner Canyon	<0.1	<0.1, <0.1, <0.1	0.15	<0.1	<0.1, 0.1, 0.2	0.4	<0.1	<0.1, 0.5, 2.2	2.2

F. This table shows the probability of the stream going dry under each revised predicted model drawdown scenario (Table E). This was obtained from Attachment 2, using all depths of water with a value equal to the revised predicted model drawdown or less. If the actual drawdown does not appear in the ranking list, the next highest water level was used to assign probability.

Impacts from Mine – Probability of Dry Conditions Occurring given Revised Predicted Model Drawdown									
Location	**Near-term = 50 years after closure**			**Long-term = 150 years after closure**			**Long-term = 1,000 years after closure**		
	Low	**Best Fit**	**High**	**Low**	**Best Fit**	**High**	**Low**	**Best Fit**	**High**
Upper Cienega Creek	0.7%	0.7%, 0.7%, 0.7%	1.0%	0.7%	0.9%, 0.9 %, 8.8%	85.7%	0.9%	0.9%, 34.1%, 96.2%	96.2%
Empire Gulch	0.7%	0.7%, 1%, 77.5%	98.9%	0.7%	8.8%, 8.8%, 99.5%	99.9%	99.4%	99.7%, 99.9%, 100%	100%
Gardner Canyon	0.7%	0.7%, 0.7%, 0.7%	0.9%	0.7%	0.7%, 0.7%, 1%	40.1%	0.7%	0.7%, 77.5%, 99.3%	99.3%

G. This table shows the average number of days of the year the stream would experience dry conditions under each revised predicted model drawdown scenario (Table E). This was obtained from Attachment 2, using all depths of water with a value equal to the revised predicted model drawdown or less. If the actual drawdown does not appear in the ranking list, the next highest water level was used to assign probability.

Impacts from Mine – Average Dry Days per Year given Revised Predicted Model Drawdown									
Location	**Near-term = 50 years after closure**			**Long-term = 150 years after closure**			**Long-term = 1,000 years after closure**		
	Low	**Best Fit**	**High**	**Low**	**Best Fit**	**High**	**Low**	**Best Fit**	**High**
Upper Cienega Creek	3	3, 3, 3	4	3	3, 3, 32	313	3	3, 125, 351	351
Empire Gulch	3	3, 4, 283	361	3	32, 32, 363	365	363	364, 365, 365	365
Gardner Canyon	3	3, 3, 3	3	3	3, 3, 4	146	3	3, 283, 363	363

H. This table shows the probability of the stream experiencing extremely low flow conditions, defined as 0.2 feet or less, or dry conditions, under each revised predicted model drawdown scenario (Table E). This was obtained from Attachment 2, using all depths of water with a value equal to the revised predicted model drawdown plus 0.2 feet.

Impacts from Mine – Probability of Dry Conditions or Extremely low-flow conditions Occurring given Revised Predicted Model Drawdown									
Location	**Near-term = 50 years after closure**			**Long-term = 150 years after closure**			**Long-term = 1,000 years after closure**		
	Low	**Best Fit**	**High**	**Low**	**Best Fit**	**High**	**Low**	**Best Fit**	**High**
Upper Cienega Creek	1.0%	1.0%, 1.0%, 1.0%	40.1%	1.0%	24.2%, 24.2 %, 77.5%	96.5%	24.2%	24.2%, 92.8%, 96.9%	96.9%
Empire Gulch	1.0%	1.0%, 40.1%, 96.3%	99.1%	1.0%	77.5%, 77.5%, 99.6%	99.9%	99.5%	99.8%, 99.9%, 100%	100%
Gardner Canyon	1.0%	1.0%, 1.0%, 1.0%	24.2%	1.0%	1.0%, 8.8%, 40.1%	95.5%	1.0%	1.0%, 96.3%, 99.4%	99.4%

I. This table shows the average number of days per year the stream would experience extremely low flow conditions, defined as 0.2 feet or less, or dry conditions, under each revised predicted model drawdown scenario (Table E). This was obtained from Attachment 2, using all depths of water with a value equal to the revised predicted model drawdown plus 0.2 feet.

Impacts from Mine – Average Dry Days or Extremely low flow days per Year given Revised Predicted Model Drawdown									
Location	**Near-term = 50 years after closure**			**Long-term = 150 years after closure**			**Long-term = 1,000 years after closure**		
	Low	**Best Fit**	**High**	**Low**	**Best Fit**	**High**	**Low**	**Best Fit**	**High**
Upper Cienega Creek	4	4, 4, 4	146	4	88, 88, 283	352	88	88, 339, 354	354
Empire Gulch	4	4, 146, 352	362	4	283, 283, 364	365	363	364, 365, 365	365
Gardner Canyon	4	4, 4, 4	88	4	4, 32, 146	349	4	4, 352, 363	363