

Inputs		Coverage Level Calculation Examples - Assuming 80% Selected Coverage Level		
Zone 1 Yield 90 lbs per hive				
Producers Operation		No Pollination Contracts $(130 \times 2500 \times 80\%) / 2500 =$		104 lbs per hive
Total Hives	2500			
Production	Pollination			
2000	500			
80%	20%			
Individual Average Yield 130 lbs per hive		Pollination Contracts $((80\% \times 2500 \times 130) + (20\% \times 2500 \times 90)) \times 80\% / 2500 =$		97.6 lbs per hive

Example of Coverage Implications (Holding Pollination Yields Constant)				
Zone 1 Yield				
Yearly	Average			
2010	90	90 lbs per hive		
2011	90	90		
2012	90	90		
2013	90	90		
2014	90	90		
2015	90	90		
2016	90	90		
2017	90	90		
2018	90	90		
Individual Average Yield				
Yearly Yield	Average Yield			
2010	120	120 lbs per hive		
2011	125	122.5		
2012	130	125		
2013	135	127.5		
2014	140	130		
2015	145	132.5		
2016	150	135		
2017	155	137.5		
2018	160	140		
Year of Coverage				
2015		Producers Operation		
Total Hives	2500	Total Hives	2500	2019
Production	Pollination	Production	Pollination	Producers Operation
2000	500	2000	500	Total Hives 2500
80%	20%	80%	20%	Production Pollination
Coverage Levels		Coverage Levels		Coverage Levels
No Pollination		No Pollinatio		No Pollinatio
Pollination		104.0 lbs/hive		112.0 lbs/hive
		97.6 lbs/hive		Pollination 104.0 lbs/hive

Example of Coverage Implications (Holding Production Yields Constant)				
Zone 1 Yield				
Yearly Yield	Average Yield			
2010	90	90.0 lbs per hive		
2011	95	92.5		
2012	100	95.0		
2013	105	97.5		
2014	110	100.0		
2015	115	102.5		
Year of Coverage				
2015		Producers Operation		2019
Producers Operation				Producers Operation

2016	120	105.0	Total Hives	2500	Total Hives	2500	Total Hives	2500
2017	125	107.5	Production	Pollination	Production	Pollination	Production	Pollination
2018	130	110.0	2000	500	2000	500	2000	500
			80%	20%	80%	20%	80%	20%
Individual Average Yield			Coverage Levels			Coverage Levels		
Yearly Yield		Average Yield	No Pollination		96.0 lbs/hive	No Pollinatio		96.0 lbs/hive
2010	120	120.0 lbs per hive	Pollination		92.8 lbs/hive	Pollination		93.2 lbs/hive
2011	120	120.0						
2012	120	120.0						
2013	120	120.0						
2014	120	120.0						
2015	120	120.0						
2016	120	120.0						
2017	120	120.0						
2018	120	120.0						

Example of Coverage Implications (Nothing Held Constant)

Zone 1 Yield		Average Yield		Year of Coverage		2019	
Yearly Yield	Average Yield					Producers Operation	Producers Operation
2010	93	93.0	lbs per hive			Total Hives	2500
2011	94	93.5				Production	Pollination
2012	90	92.3				2000	500
2013	82	89.8				80%	20%
2014	89	89.6		2015			
2015	82	88.3		Producers Operation			
2016	80	87.1		Total Hives	2500		
2017	94	88.0		Production	Pollination		
2018	90	88.2		2000	500		
				80%	20%		
Individual Average Yield		Coverage Levels		Coverage Levels		Coverage Levels	
Yearly Yield	Average Yield	No Pollination	97.2 lbs/hive	No Pollinatio	104.3 lbs/hive	No Pollinatio	103.6 lbs/hive
2010	122	122.0	lbs per hive	Pollination	92.1 lbs/hive	Pollination	97.5 lbs/hive
2011	121	130.0					
2012	131	124.7					
2013	138	128.0					
2014	138	121.5					
2015	132	130.3					
2016	121	129.0					
2017	131	129.3					
2018	132	129.6					