ESTABLISHMENT OF PREVENTED PLANTING COVERAGE FACTORS FOR THE FEDERAL CROP INSURANCE PROGRAM

Risk Management Agency (RMA)
Updated - August 2018

AN RMA EXAMINATION OF THE INDEPENDENT EVALUATION OF PREVENTED PLANTING COVERAGE FACTORS AND AN ASSESSMENT OF STAKEHOLDER COMMENTS

Methods to Determine Appropriate Changes to Prevented Planting Factors

Overview

Prevented planting is defined as the failure to plant the insured crop, by a specified final planting date, due to an insured cause of loss that is general to the surrounding area and that prevents other producers from planting acreage with similar characteristics. Coverage for prevented planting is designed to cover the entirety of normal costs associated with preparing the land up to the point of the seed going into the ground. Prevented planting coverage has historically been subject to a maximum of 60 percent of the total insurance guarantee. This helps maintain program integrity and limit any potential adverse incentives to claim prevented planting when the acreage could have been planted. It also keeps prevented planting coverage from claiming an excessive portion of overall coverage.

The Risk Management Agency (RMA) commissioned an external evaluation of its prevented planting coverage factors. These factors determine the per-acre payment that prevented planting coverage provides. The evaluation, and its recommendations, were made available to the public for comment. RMA received 27 comments from 16 commenters. In response to the comments, RMA performed additional analyses on the various data and methods presented in the evaluation as well as alternatives. Following the analysis, RMA made final determinations as to the most appropriate data and methods to use in determining prevented planting coverage factors. This document explains the analysis and final determinations.

These three principle critiques of the evaluation were raised by public comment and were the focus of RMA's additional analysis. The critiques are:

1) **Liability**. The evaluation improperly omitted the insurance deductible when estimating liability. This results in over-estimated prevented planting payments, which precipitates a recommendation to decrease prevented planting coverage factors.
2) **Time Period**. Evaluating the period 2003-2012 concerned many commenters, due to the frequency of irregularly high commodity prices.
3) **Pre-planting Cost Allocation**. The total cost of production may be allocated into stages, including the pre-planting stage. The evaluation made decisions on how to allocate costs to the pre-planting period which were challenged by commenters.

The following are the results and a discussion of the methods employed by RMA to arrive at the final determinations for the prevented planting coverage factors. RMA has determined these methods are defensible, appropriate and generally applicable to all the remaining crops for which prevented planting coverage is available. As noted below, the ratio of pre-plant cost-to-liability determined to be appropriate and defensible will be consistently applied for all crops for which prevented planting coverage factors are required. As identified by commenters, the external evaluation employed a less transparent and uniform approach in establishing recommended prevented planting coverage factors. The two significant ratios considered by the contracted study were estimated prevented planting indemnities-to-pre-planting costs of production; and pre-planting costs of production-to-total costs of production.

The prevented planting coverage factor is a percentage of the individual insurance guarantee for timely planted acreage. The factor established by RMA for each crop is based on the ratio of **pre-planting costs of production** to **insurance liability**.

Insurance Liability

Insurance liability is the product of crop price, historical yield, and the base insurance coverage level. In response to comments received from a variety of groups, we analyzed the methods the contractor used to estimate insurance liability.

A significant finding that was brought up in public comments, and confirmed by RMA, concerns the use of an unrepresentative base insurance coverage level or liability. The evaluation did not account for the insurance deductible, resulting in an estimate of the insurance liability equaling total crop value (i.e. crop price multiplied by historical yield). Effectively, this results in a deductible being applied to prevented planting coverage, so that a prevented planting payment does not cover all pre-planting costs. RMA concludes that disregarding the insurance deductible is inappropriate when determining the most reasonable prevented planting coverage factors.

Another important issue raised in the comments received concerns the period of time used to establish the average liability in determining the prevented planting coverage factor. Crop prices have a significant influence on average liability and there has been significant variability in crop prices in recent years. In the evaluation, estimated liability for the most recent ten-year period for which cost of production data could be obtained was 2003-2012. Multiple commenters representing growers argue that this period contains too many years of abnormally high commodity prices, which can result in downward bias in recommended prevented planting coverage factors. However, the influence of this bias on recommendations is not uniform across crops. In certain cases, such as soybeans, the corrected liability may not result in a recommendation which differs from the evaluation.

A couple commenters suggested an alternative approach of combining historical prices, yields, and coverage levels with forecasts of future prices and yields. This approach was tested using, for example, eight years of historical data and two years of forecast data. The difference between this alternative approach and a completely historical approach was minimal. There are additional drawbacks to a alternative timeframe: estimating future year liability can only be used for a small portion of the crops which offer prevented planting coverage, and there is an inherently high level of uncertainty in commodity price forecasts.

As a result, RMA finds the use price forecasts in the calculation of prevented planting factors to not be the most appropriate approach. Instead, historical data, specifically the most recent five years (rather than the longer time period used in the evaluation), produces a result that is more representative of current conditions. In addition, RMA has established procedure to update the prevented planting coverage factors on a five-year cycle.

Time Period

In the evaluation, the primary insurance liability and cost of production estimates are established using the years 2003-2012. A common criticism of the evaluation was that relying on commodity price data from the years 2007 to 2011, in particular, is unsound. For many of the large-acreage commodities which crop insurance covers, these years contained historically high farm-gate prices. Further, reaching

over a decade in the past masks the increases in average buy-up coverage levels, which may skew results.

In response, this analysis uses the five most recent years where complete data is available, which began in 2010 for the first set of crops, and 2011 or 2012 for the second set. This period contains both near-peak commodity price years and the resulting softening of the commodity market. Profit margins for growers have tightened significantly during the past several crop years, and this situation is worth noting in the analysis. Finally, using a five-year window is consistent with recommendations from the evaluation for revisiting the prevented planting coverage factors.

Pre-Planting Cost Allocation

Pre-planting costs are based on a pre-plant cost factor, which represents the proportion of total costs that are incurred before planting. A higher pre-plant cost factor increases the indicated prevented planting coverage factor. Conversely, any increase in the insurance liability decreases the indicated prevented planting coverage factor.

The Economic Research Service (ERS) Commodity Cost and Return accounts are the predominant source of production cost data for the prevented planting estimates in the initial review. ERS accounts are unavailable for many of the small-acreage crops, though many do offer prevented planting coverage. For these crops, state extension service budgets are utilized.

To estimate pre-planting cost of production, a pre-plant cost factor (percentage) is applied to the full-year cost of production. For the first seven crops presented, each has two sets of factors, one generated by the evaluation and one by ERS studies completed in 2007 and 2013. Our general approach is to use the factors from the more recent contracted study, unless there is disagreement between the evaluation and the ERS factors. In situations where there is disagreement, we use the factor best supported by available information.

Specific Cost Categories

Fertilizer: Multiple comments were raised concerning the factor used to determine how much fertilizer cost is incurred prior to planting. Fertilizer application timing varies greatly across crops, and was researched on an individual crop basis, utilizing available resources. These resources included ERS research reports, published university research and analysis, conversations with extension specialists, and pre-plant factors for similar crops.

Capital Recovery: This allocated overhead cost category is comprised of depreciation and interest expense on farm machinery, equipment, and facilities. Depreciation is not a cash expense, but generally an accounting technique to spread the cost of capital assets out over time, especially in prevented planting years. The evaluation did not present a convincing explanation for including the full amount of capital recovery costs in the calculation of the prevented planting coverage factor. Therefore, RMA uses the ERS factor. For those crops which do not have a complete ERS study supporting, the factor of the most closely associated crop is applied.

Land Rental (opportunity cost): One concern with the evaluation, expressed by multiple commenters, was the lack of regional differentiation in production costs, specifically for land.

The evaluation noted the administrative burden of determining appropriate coverage factors at the regional, state, or sub-state level would entail due to a lack of data. However, land prices generally reflect underlying productivity, which, in turn is reflected in the insurance guarantee; i.e. guarantees generally correlate with land prices. Since the amount of prevented planting coverage is determined by the insurance guarantee, then it will tend to also correlate with land prices; i.e. prevented planted coverage is generally greater where land prices are higher.

Given that land costs, whether rental agreements or opportunity cost of owned land, are generally fixed, this cost is fully allocated to the pre-plant period. Growers have minimal ability to recoup the sunk cost of land payments if they are prevented from planting. The alternative percentage which ERS assigns is strictly the ratio of the months considered to be pre-planting to the total months of the year. RMA concurs with the evaluation's recommendation to use 100 percent of this cost. This cost category is often the largest on the farm income statement, so the pre-plant percentage has significant influence on the determined coverage factor.

Crop Insurance: The evaluation assigned the pre-plant cost factor for crop insurance as the historical percentage of total indemnities, for each crop, for which prevented planting was the cause of loss. For example, the Evaluation estimated that prevented planting was the covered cause of loss for 13% of total corn indemnities (over time); therefore the assigned crop insurance pre-plant cost factor is 13%. That method reflects neither the true cost of crop insurance, nor prevented planting coverage. Regardless, including crop insurance premiums as a pre-plant cost would essentially amount to insuring insurance, which would not be appropriate and would be inconsistent with other RMA programs' treatment of these costs. Regardless of where the coverage factor is set, the effect is minimal given the relationship of crop insurance premiums to total cost of production.

Taxes and Insurance and General Farm Overhead: Property taxes, non-crop insurance premiums and other general overhead are one-time costs not influenced by whether a crop was planted. Yet, the expenses must be paid to keep the farm business in operation. Therefore, 100 percent of these overhead costs are considered pre-planting for RMA purposes, concurring with the approach taken in the evaluation. The effect on the determined coverage factor is minimal.

Variable Costs (seed, chemicals, custom operations, fuel, repairs, purchased irrigation water, interest on operating capital) and Allocated Overhead Costs (hired labor, unpaid labor): There is a general consensus between the evaluation, public commenters, and previous estimates provided by the Economic Research Service (ERS). Therefore, these costs were not scrutinized further. There are some slight variations in terminology, based on cost data source.

Summary

Based on RMA's analysis of the evaluation in response to comments received, RMA has revisited the recommendations provided by the evaluation, and issued new determined prevented planting factors have been revised. The following table summarizes the current prevented planting coverage factors, the evaluation's recommendation, and the final results from RMA's analysis. For the 2017 crop year, RMA reviewed the prevented planting coverage factors for corn, soybeans, wheat, cotton, grain sorghum, barley, and rice. For the 2018 crop year, RMA reviewed buckwheat, canola, dry peas, flax, hybrid sorghum seed, hybrid seed corn, mustard, oats, peanuts, rye, silage sorghum, and sunflower. For

the 2019 crop year, RMA has reviewed two crops with June 30, 2018 or later filing dates: onions, potatoes, and safflower. Remaining crops will be evaluated prior to the November 30, 2018 filing date.

Prevented Planting Coverage Factors

Crop	Previous	Recommendation from Evaluation	Final
Implemented for 2017:			
Corn	60%	50%	55%
Soybeans	60%	60%	60%
Wheat	60%	60%	60%
Cotton	50%	35%	50%
Grain Sorghum	60%	60%	60%
Barley	60%	60%	60%
Rice	45%	45%	55%
Crop	**Current**	**Recommendation from Evaluation**	**Final**
Implemented for 2018:			
Buckwheat	60%	50%	60%
Canola	60%	45%	55%
Dry Peas	60%	40%	60%
Flax	60%	45%	60%
Hybrid Sorghum Seed	60%	55%	60%
Hybrid Seed Corn	50%	40%	45%
Mustard	60%	45%	60%
Oats	60%	65%	60%
Peanuts	50%	50%	55%
Rye	60%	60%	60%
Silage Sorghum	60%	55%	50%
Sunflower	60%	45%	60%
Crop	**Current**	**Recommendation from Evaluation**	**Final**
For 2019:			
Onions (processing, fresh (storage))	35%	35%	35%
Onions (fresh (non-storage))	35%	15%	15%
Potatoes (except Imperial and Riverside Counties)	25%	40%	45%
Safflower	60%	60%	60%
For 2020:			
Potatoes (Imperial and Riverside Counties)	25%	40%	45%

Corn

Summary

The prevented planting coverage factor was decreased to 55 percent (from 60 percent) of the base policy insurance guarantee. The evaluation had recommended a larger decrease to 50 percent. While there are several differences between the evaluation's methods and the final RMA analysis, in the case of corn, there was a significant decrease in average liability and a significant increase in the cost of fertilizer incurred prior to planting. Both changes work to increase the prevented planting coverage factor needed to cover pre-planting costs.

Public Comments

One commenter cited specific concerns cover a lack of transparency in the evaluation's coverage determination, the specific time period analyzed, the unrepresentative nature of ERS numbers, and the lack of regional distinction. A couple commenters concurred with the contracted study's recommendation to decrease the prevented planting coverage factor to 50 percent.

Data Source

USDA ERS Commodity Costs and Returns – Corn – U.S.

Summary of Prevented Planting Coverage Factor Calculation for Corn			
	Full-Year Production Cost (2010-2014 Avg/acre)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$91.32	0%	$0.00
Fertilizer	$143.69	63%	$90.53
Chemicals	$27.59	21%	$5.79
Custom operations	$17.24	28%	$4.83
Fuel, lube, and electricity	$30.78	22%	$6.77
Repairs	$25.24	19%	$4.80
Purchased irrigation water	$0.11	0%	$0.00
Interest on operating capital	$0.19	32%	$0.06
Crop insurance	$19.85	0%	$0.00
Total, cash costs	**$ 356.02**		**$ 112.78**
Hired labor	$3.04	34%	$1.03
Unpaid labor (opportunity cost)	$23.62	31%	$7.32
Capital recovery	$92.83	13%	$12.07
Land Rental (opportunity cost)	$152.76	100%	$152.76
Taxes and insurance	$8.98	100%	$8.98
General farm overhead	$19.11	100%	$19.11
Total, allocated overhead	**$ 300.35**		**$ 201.28**
	Total PP Cost		**$ 314.06**
	Liability (2010-2014 Avg/Acre)		**$ 595.58**
	Calculated PP Coverage Factor		**53%**
	Determined PP Coverage Factor		**55%**

Soybeans

Summary
The prevented planting coverage factor is maintained at 60 percent of the base policy insurance guarantee, consistent with the evaluation's recommendation.

Public Comment
Several comments were supportive of the evaluation's recommendation to maintain the current prevented planting coverage factor for soybeans.

Data Source
USDA ERS Commodity Costs and Returns – Soybeans – U.S.

Summary of Prevented Planting Coverage Factor Calculation for Soybeans			
	Full-Year Production Cost (2010-2014 Avg/acre)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$57.89	0%	$0.00
Fertilizer	$30.78	80%	$24.63
Chemicals	$23.06	25%	$5.77
Custom operations	$8.81	23%	$2.03
Fuel, lube, and electricity	$20.44	24%	$4.90
Repairs	$19.10	19%	$3.63
Purchased irrigation water	$0.10	0%	$0.00
Interest on operating capital	$0.09	23%	$0.02
Crop insurance	$13.87	0%	$0.00
Total, cash costs	**$ 174.13**		**$ 40.97**
Hired labor	$2.63	31%	$0.81
Unpaid labor (opportunity cost)	$17.39	29%	$5.04
Capital recovery	$82.54	11%	$9.08
Land Rental (opportunity cost)	$136.18	100%	$136.18
Taxes and insurance	$9.81	100%	$9.81
General farm overhead	$16.74	100%	$16.74
Total, allocated overhead	**$ 265.29**		**$ 177.66**
	Total PP Cost		**$ 218.63**
	Liability (2010-2014 Avg/Acre)		**$ 376.28**
	Calculated PP Coverage Factor		**58%**
	Determined PP Coverage Factor		**60%**

Wheat

Summary
The prevented planting coverage factor is maintained at 60 percent of the base policy insurance guarantee, consistent with the evaluation's recommendation.

Public Comment
The comments received were in favor of the evaluation's recommendation to maintain the current prevented planting coverage factor for wheat.

Data Source
USDA ERS Commodity Costs and Returns – Wheat – U.S.

Summary of Prevented Planting Coverage Factor Calculation for Wheat			
	Full-Year Production Cost (2010-2014 Avg/acre)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$14.33	0%	$0.00
Fertilizer	$42.56	38%	$16.17
Chemicals	$14.11	43%	$6.07
Custom operations	$10.19	16%	$1.63
Fuel, lube, and electricity	$18.61	32%	$5.96
Repairs	$20.75	30%	$6.22
Purchased irrigation water	$0.61	30%	$0.18
Interest on operating capital	$0.07	31%	$0.02
Crop insurance	$13.73	0%	$0.00
Total, cash costs	**$ 134.96**		**$ 36.25**
Hired labor	$2.13	38%	$0.81
Unpaid labor (opportunity cost)	$16.85	37%	$6.23
Capital recovery	$80.12	17%	$13.62
Land Rental (opportunity cost)	$57.16	100%	$57.16
Taxes and insurance	$6.37	100%	$6.37
General farm overhead	$10.96	100%	$10.96
Total, allocated overhead	**$ 173.59**		**$ 95.16**
	Total PP Cost		**$ 131.41**
	Liability (2010-2014 Avg/Acre)		**$ 210.46**
	Calculated PP Coverage Factor		**62%**
	Determined PP Coverage Factor		**60%**

Cotton

Summary

The prevented planting coverage factor is maintained at 50 percent of the base policy insurance guarantee. The evaluation had recommended a decrease to 30 percent. As the evaluation noted, a drop in cotton prices would affect the decision to decrease preventing planting coverage factors. This decrease in price has occurred in the additional years added to the RMA analysis, affecting the liability estimate; in conjunction with the correction RMA used to estimate liability inclusive of the insurance deductible. The increase in fertilizer expense allocated to the pre-plant period is also significant for cotton.

Public Comment

A commenter felt that ERS costs do not reflect increases in chemical costs for certain regions of the country. RMA believes the chemical costs are adequate for much of the country, but in cases where it is not, there are options for growers in high-cost areas to increase their prevented planting coverage factor by 5 or 10 percentage points. Another comment was that including only a portion of crop insurance premiums is arbitrary. RMA's approach is to eliminate it as a pre-plant cost. Another commenter expressed support for the evaluation's recommendation to reduce the prevented planting coverage factor for cotton to 30 percent.

Data Source

USDA ERS Commodity Costs and Returns – Cotton – U.S.

Summary of Prevented Planting Coverage Factor Calculation for Cotton			
	Full-Year Production Cost (2010-2014 Avg/acre)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$95.55	0%	$0.00
Fertilizer	$91.49	43%	$39.34
Chemicals	$68.90	15%	$10.33
Custom operations	$23.70	14%	$3.32
Fuel, lube, and electricity	$61.43	15%	$9.22
Repairs	$36.40	15%	$5.46
Ginning	$108.79	0%	$0.00
Purchased irrigation water	$3.35	0%	$0.00
Interest on operating capital	$0.27	13%	$0.03
Crop insurance	$26.49	0%	$0.00
Total, cash costs	**$ 516.37**		**$ 67.70**
Hired labor	$15.11	36%	$5.44
Unpaid labor (opportunity cost)	$27.66	35%	$9.68
Capital recovery	$146.49	13%	$19.04
Land Rental (opportunity cost)	$79.93	100%	$79.93
Taxes and insurance	$8.14	100%	$8.14
General farm overhead	$16.96	100%	$16.96
Total, allocated overhead	**$ 294.30**		**$ 139.20**
	Total PP Cost		**$ 206.90**
	Liability (2010-2014 Avg/Acre)		**$ 415.04**
	Calculated PP Coverage Factor		**50%**
	Determined PP Coverage Factor		**50%**

Grain Sorghum

Summary
The prevented planting coverage factor will be maintained at 60 percent of the base policy insurance guarantee consistent with the evaluation's recommendation.

Public Comment
A commenter suggested that grain sorghum, as well as hybrid sorghum seed and silage sorghum, have similar seedbed preparation as corn and would recommend that the prevented planting coverage factor be reduced from 60 percent and be aligned with the corn prevented planting coverage factor.

Data Source
USDA ERS Commodity Costs and Returns – Grain Sorghum – U.S.

Summary of Prevented Planting Coverage Factor Calculation for Grain Sorghum			
	Full-Year Production Cost (2010-2014 Avg/acre)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$12.00	0%	$0.00
Fertilizer	$43.08	64%	$27.57
Chemicals	$22.70	40%	$9.08
Custom operations	$12.50	17%	$2.13
Fuel, lube, and electricity	$28.97	16%	$4.64
Repairs	$21.21	24%	$5.09
Purchased irrigation water	$0.17	0%	$0.00
Interest on operating capital	$16.17	0%	$0.00
Crop insurance	$0.08	27%	$0.02
Total, cash costs	**$ 156.88**		**$ 48.52**
Hired labor	$4.28	36%	$1.54
Unpaid labor (opportunity cost)	$19.01	27%	$5.13
Capital recovery	$78.36	20%	$15.67
Land Rental (opportunity cost)	$51.37	100%	$51.37
Taxes and insurance	$5.09	100%	$5.09
General farm overhead	$10.74	100%	$10.74
Total, allocated overhead	**$ 168.84**		**$ 89.54**
	Total PP Cost		**$ 138.07**
	Liability (2010-2014 Avg/Acre)		**$ 209.87**
	Calculated PP Coverage Factor		**66%**
	Determined PP Coverage Factor		**60%**

Rice

Summary
The prevented planting coverage factor be increased to 55 percent from the current 45 percent. The evaluation had recommended maintaining the factor at 45 percent, which RMA believes to be inadequate. The major difference between the evaluation and the RMA analysis is the estimate of liability. When a deductible is included, the RMA analysis shows that the average coverage carried by rice growers is significantly under the amount shown in the evaluation.

Public Comment
A commenter noted that USDA estimates of total cost of production appear to be underestimated, which would imply that the current prevented planting coverage factors are insufficient.

Data Source
USDA ERS Commodity Costs and Returns – Rice – U.S.

Summary of Prevented Planting Coverage Factor Calculation for Rice			
	Full-Year Production Cost (2010-2014 Avg/acre)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$74.82	0%	$0.00
Fertilizer	$103.31	27%	$27.89
Chemicals	$77.87	8%	$6.23
Custom operations	$52.93	25%	$13.23
Fuel, lube, and electricity	$137.77	10%	$13.78
Repairs	$30.75	23%	$7.07
Purchased irrigation water	$13.95	0%	$0.00
Interest on operating capital	$31.96	0%	$0.00
Commercial Drying	$13.80	0%	$0.00
Crop insurance	$0.28	16%	$0.05
Total, cash costs	**$ 537.44**		**$ 68.25**
Hired labor	$21.21	46%	$9.75
Unpaid labor (opportunity cost)	$48.65	49%	$23.84
Capital recovery	$134.44	27%	$36.30
Land Rental (opportunity cost)	$186.17	100%	$186.17
Taxes and insurance	$19.87	100%	$19.87
General farm overhead	$27.97	100%	$27.97
Total, allocated overhead	**$ 438.30**		**$ 303.90**
	Total PP Cost		**$ 372.15**
	Liability (2010-2014 Avg/Acre)		**$ 683.30**
	Calculated PP Coverage Factor		54%
	Determined PP Coverage Factor		**55%**

Barley

Summary
The prevented planting coverage factor be maintained at 60 percent of the base policy insurance guarantee consistent with the evaluation's recommendation.

Public Comment
No specific comments were received regarding barley prevented planting.

Data Source
USDA ERS Commodity Costs and Returns – Barley – U.S.

Summary of Prevented Planting Coverage Factor Calculation for Barley			
	Full-Year Production Cost (2010-2014 Avg/acre)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$18.78	0%	$0.00
Fertilizer	$58.42	47%	$27.46
Chemicals	$18.67	17%	$3.17
Custom operations	$12.60	29%	$3.65
Fuel, lube, and electricity	$33.11	23%	$7.62
Repairs	$28.37	20%	$5.67
Purchased irrigation water	$5.80	0%	$0.00
Interest on operating capital	$12.07	0%	$0.00
Crop insurance	$.10	25%	$0.02
Total, cash costs	$ 187.91		$ 47.60
Hired labor	$7.22	29%	$2.09
Unpaid labor (opportunity cost)	$26.59	25%	$6.65
Capital recovery	$103.63	17%	$17.62
Land Rental (opportunity cost)	$80.46	100%	$80.46
Taxes and insurance	$9.18	100%	$9.18
General farm overhead	$16.08	100%	$16.08
Total, allocated overhead	$ 243.16		$ 132.08
	Total PP Cost		**$ 179.68**
	Liability (2010-2014 Avg/Acre)		**$ 221.10**
	Calculated PP Coverage Factor		**81%**
	Determined PP Coverage Factor		**60%**

Buckwheat

Summary
The prevented planting factor will be maintained at 60%. The Evaluation had recommended a decrease to 50%.

Public Comment
No comments specifically addressing Buckwheat were received.

Data Source
North Dakota State University - Crop Budgets

Summary of Prevented Planting Coverage Factor Calculation for Buckwheat			
	Full-year Cost (2012-2016 Avg/Ac)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$32.10	0%	$0.00
Herbicides	$14.56	0%	$0.00
Fungicides	$0.00	0%	$0.00
Insecticides	$0.00	0%	$0.00
Fertilizer	$17.77	38%	$6.75
Crop Insurance	$10.67	0%	$0.00
Fuel & Lubrication	$14.55	20%	$2.91
Repairs	$16.78	20%	$3.36
Drying	$0.00	0%	$0.00
Misc	$1.50	10%	$0.15
Operating Interest	$2.38	25%	$0.60
Total, Direct	**$110.31**		**$13.77**
Misc. Overhead			
Misc. OH	$6.73	100%	$6.73
Machinery Deprec.	$19.36	17%	$3.29
Machinery Invest	$11.47	100%	$11.47
Land Charge	$55.07	100%	$55.07
Total, Indirect	**$92.63**		**$76.56**
	Total PP Cost		**$90.33**
	Liability (Avg/Ac 2012-2016)		**$155.84**
	Calculated PP Coverage Factor		**58%**
	Determined PP Coverage Factor		**60%**

Canola

Summary
The prevented planting coverage factor will be decreased to 55 percent (from 60 percent) of the base policy insurance guarantee. The evaluation had recommended a larger decrease to 45 percent.

Public Comment
A commenter noted that the assumption in the evaluation that a fertilizer pre-plant factor of 25% is significantly underestimating actual practices in the field. The commenter said total fertilizer costs are around $80, with approximately $60-$64 of this cost attributable to nitrogen, which is 75-80% of the total fertilizer cost. To address this comment, RMA revised the pre-plant factor for fertilizer from 25 percent to 50 percent. The commenter further suggested that the prevented planting coverage factor be reduced from 60% to 55%, rather than 60% to 45%, as recommended in the evaluation.

Data Source
North Dakota State University - Crop Budgets

Summary of Prevented Planting Coverage Factor Calculation for Canola			
	Full-year Cost (2012-2016 Avg/Ac)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$48.70	0%	$0.00
Herbicides	$19.90	0%	$0.00
Fungicides	$0.00	0%	$0.00
Insecticides	$0.00	0%	$0.00
Fertilizer	$70.91	50%	$35.45
Crop Insurance	$13.42	0%	$0.00
Fuel & Lubrication	$14.97	25%	$3.74
Repairs	$16.72	25%	$4.18
Drying	$0.00	0%	$0.00
Misc	$4.35	25%	$1.09
Operating Interest	$4.15	25%	$1.04
Total- Direct Costs	**$193.12**		**$45.50**
Misc. OH	$6.79	100%	$6.79
Machinery Deprec.	$19.56	11%	$2.15
Machinery Invest	$11.43	100%	$11.43
Land Charge	$58.97	100%	$58.97
Total- Indirect	**$96.75**		**$79.34**
	Total PP Cost		**$124.85**
	Liability (Avg/Ac 2012-2016)		**$229.70**
	Calculated PP Coverage Factor		**54%**
	Determined PP Coverage Factor		**55%**

Dry Peas

Summary
The prevented planting factor will be maintained at 60%. The evaluation had recommended a decrease to 40%.

Public Comment
One commenter expressed general concern with the evaluation's recommendation to decrease the dry pea coverage level . However, they provided no data specific details in support of the concern. Based on available data, the prevented planting factor is unchanged.

Data Source
North Dakota State University - Crop Budgets – Field Peas

Summary of Prevented Planting Coverage Factor Calculation for Dry Peas			
	Full-year Cost (2012-2016 Avg/Ac)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$41.29	0%	$0.00
Herbicides	$29.65	15%	$4.45
Fungicides	$1.31	0%	$0.00
Insecticides	$0.00	0%	$0.00
Fertilizer	$10.31	80%	$8.25
Crop Insurance	$10.26	0%	$0.00
Fuel & Lubrication	$16.22	15%	$2.43
Repairs	$18.54	15%	$2.78
Drying	$0.00	0%	$0.00
Misc	$8.40	15%	$1.26
Operating Interest	$2.99	25%	$0.75
Subtotal- Direct Costs	**$138.97**		**$19.92**
Misc. OH	$7.10	100%	$7.10
Machinery Deprec.	$21.93	27%	$5.92
Machinery Invest	$12.26	100%	$12.26
Land Charge	$58.97	100%	$58.97
Subtotal- Indirect	**$100.26**		**$84.25**
	Total PP Cost		**$104.16**
	Liability (Avg/Ac 2012-2016)		**$179.68**
	Calculated PP Coverage Factor		**58%**
	Determined PP Coverage Factor		**60%**

Flax

Summary
The prevented planting factor will be maintained at 60%. The evaluation had recommended a decrease to 45%.

Public Comment
One commenter expressed general concern with the evaluation's recommendation to decrease the flax coverage level. However, they provided no data specific details in support of the concern. Based on available data, the prevented planting factor is unchanged.

Data Source
North Dakota State University - Crop Budgets

Summary of Prevented Planting Coverage Factor Calculation for Flax			
	Full-year Cost (2012-2016 Avg/Ac)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$13.54	0%	$0.00
Herbicides	$22.95	25%	$5.74
Fungicides	$0.00	0%	$0.00
Insecticides	$0.00	0%	$0.00
Fertilizer	$28.50	0%	$0.00
Crop Insurance	$9.35	0%	$0.00
Fuel & Lubrication	$15.25	10%	$1.53
Repairs	$17.44	10%	$1.74
Drying	$0.00	0%	$0.00
Misc	$1.50	0%	$0.00
Operating Interest	$2.39	25%	$0.60
Total- Direct	**$110.92**		**$9.60**
Misc. OH	$6.86	100%	$6.86
Machinery Deprec.	$19.83	17%	$3.37
Machinery Invest	$11.93	100%	$11.93
Land Charge	$58.97	100%	$58.97
Total- Indirect	**$97.59**		**$81.13**
	Total PP Cost		**$90.74**
	Liability (Avg/Ac 2012-2016)		**$151.55**
	Calculated PP Coverage Factor		**60%**
	Determined PP Coverage Factor		**60%**

Hybrid Seed Corn

Summary
The prevented planting factor will be decreased to 45%, from 50%. The evaluation recommended a decrease to 40%.

Public Comment
No specific comments were received regarding hybrid seed corn.

Data Source
USDA ERS Commodity Costs and Returns – (Corn) Heartland Farm Resource Region; supplemented with data collected in independent contractor's evaluation.

Summary of Prevented Planting Coverage Factor Calculation for Hybrid Seed Corn			
	Full-Year Production Cost (2012-2016 Avg/acre)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$0.00	0	$0.00
Fertilizer	$150.03	63%	$94.52
Chemicals	$29.18	21%	$6.13
Custom operations	$16.97	28%	$4.75
Fuel, lube, and electricity	$23.27	44%	$10.24
Repairs	$23.56	40%	$9.42
Purchased irrigation water	$0.00	10%	$0.00
Interest on operating capital	$0.31	32%	$0.10
Detassling	$328.18	0%	$0.00
Crop insurance	$28.68	0%	$0.00
Subtotal, Operating	**$600.18**		**$125.16**
Hired labor	$2.89	34%	$0.98
Unpaid labor (opportunity cost)	$22.37	31%	$6.93
Capital recovery	$95.50	13%	$12.42
Land Rental (opportunity cost)	$286.24	100%	$286.24
Taxes and insurance	$9.08	100%	$9.08
General farm overhead	$18.80	100%	$18.80
Subtotal, Overhead	**$434.88**		**$334.45**
	Total PP Cost		**$459.62**
	Liability (Avg/Ac 2012-2016)		**$985.37**
	Calculated PP Coverage Factor		**47%**
	Determined PP Coverage Factor		**45%**

Hybrid Sorghum Seed

Summary
The prevented planting factor will be maintained at 60%. The evaluation had recommended a decrease to 55%.

Public Comment
No specific comments were received regarding hybrid sorghum seed.

Data Source
USDA ERS Commodity Costs and Returns – (Grain Sorghum) Prairie Gateway Farm Resource Region; supplemented with data collected in independent contractor's evaluation.

Summary of Prevented Planting Coverage Factor Calculation for Hybrid Sorghum Seed			
	Full-Year Production Cost (2012-2015 Avg/acre)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$0.00	0%	$0.00
Fertilizer	$157.56	64%	$100.84
Chemicals	$114.18	50%	$57.09
Custom operations	$30.84	50%	$15.42
Fuel, lube, and electricity	$182.72	45%	$82.22
Repairs	$21.38	45%	$9.62
Other variable expenses	$163.03	25%	$40.76
Interest on operating costs	$0.08	25%	$0.02
Crop Insurance	$31.17	0%	$0.00
Subtotal, Operating	**$700.96**		**$305.97**
Hired labor	$24.01	50%	$12.00
Unpaid labor (opportunity cost)	$17.48	50%	$8.74
Capital recovery	$77.15	20%	$15.43
Land Rental (opportunity cost)	$55.54	100%	$55.54
Taxes and insurance	$5.50	100%	$5.50
General farm overhead	$11.81	100%	$11.81
Subtotal, Overhead	**$191.49**		**$109.01**
	Total PP Cost		**$414.99**
	Liability (Avg/Ac 2012-2015)		**$687.30**
	Calculated PP Coverage Factor		**60%**
	Determined PP Coverage Factor		**60%**

Mustard

Summary
The prevented planting factor will be maintained at 60%. The evaluation had recommended a decrease to 45%.

Public Comment
No specific comments regarding mustard were received.

Data Source
North Dakota State University - Crop Budgets

Summary of Prevented Planting Coverage Factor Calculation for Mustard			
	Full-year Cost (2012-2016 Avg/Ac)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$19.89	0%	$0.00
Herbicides	$16.50	30%	$4.95
Fungicides	$0.00	0%	$0.00
Insecticides	$3.43	0%	$0.00
Fertilizer	$31.20	30%	$9.36
Crop Insurance	$10.97	0%	$0.00
Fuel & Lubrication	$14.50	20%	$2.90
Repairs	$16.90	20%	$3.38
Drying	$0.00	0%	$0.00
Misc	$3.94	20%	$0.79
Operating Interest	$2.58	25%	$0.64
Total- Direct Costs	**$119.91**		$22.02
Misc. OH	$6.76	100%	$6.76
Machinery Deprec.	$19.46	11%	$2.14
Machinery Invest	$11.70	100%	$11.70
Land Charge	$54.43	100%	$54.43
Total- Indirect	**$92.35**		**$75.03**
	Total PP Cost		**$97.05**
	Liability (Avg/Ac 2012-2016)		**154.06**
	Calculated PP Coverage Factor		**63%**
	Determined PP Coverage Factor		**60%**

Oats

Summary
The prevented planting coverage factor will remain at 60%. The evaluation also recommended 60%.

Public Comment
No specific comments regarding oats were received.

Data Source
USDA ERS Commodity Costs and Returns – Oats – U.S.

Summary of Prevented Planting Coverage Factor Calculation for Oats			
	Full-year Cost (2012-2016 Avg/Ac)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$15.87	0%	$0.00
Fertilizer	$44.54	38%	$16.92
Chemicals	$2.68	18%	$0.48
Custom operations	$9.69	15%	$1.45
Fuel, lube, and electricity	$20.11	21%	$4.22
Repairs	$14.37	18%	$2.59
Straw baling	$3.24	0%	$0.00
Interest on operating costs	$0.10	25%	$0.02
Crop Insurance	$8.51	0%	$0.00
Subtotal, Operating	**$119.11**		**$25.69**
Hired labor	$0.85	28%	$0.24
Unpaid labor (opportunity cost)	$38.65	22%	$8.50
Capital recovery	$82.88	17%	$14.09
Land Rental (opportunity cost)	$103.00	100%	$103.00
Taxes and insurance	$6.66	100%	$6.66
General farm overhead	$9.76	100%	$9.76
Subtotal, Overhead	**$241.80**		**$142.25**
	Total PP Cost		**$167.95**
	Liability (Avg/Ac 2012-2016)		**$117.76**
	Calculated PP Coverage Factor		**143%**
	Determined PP Coverage Factor		**60%**

Peanuts

Summary
The prevented planting coverage factor will be increased to 55%. The evaluation had recommended maintaining the factor at 50%.

Public Comment
No specific comments regarding peanuts were received.

Data Source
USDA ERS Commodity Costs and Returns – Peanuts – U.S.

Summary of Prevented Planting Coverage Factor Calculation for Peanuts			
	Full-Year Production Cost (2012-2016 Avg/acre)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$114.61	0%	$0.00
Fertilizer	$100.06	50%	$50.03
Chemicals	$133.05	30%	$39.92
Custom operations	$15.15	0%	$0.00
Fuel, lube, and electricity	$67.50	33%	$22.27
Repairs	$51.50	25%	$12.87
Purchased irrigation water and hay baling	$0.69	0%	$0.00
Commercial drying	$64.84	0%	$0.00
Interest on operating costs	$0.29	25%	$0.07
crop insurance	$25.45	0%	$0.00
Subtotal, Operating	**$573.14**		**$125.16**
Hired labor	$17.43	28%	$4.88
Unpaid labor (opportunity cost)	$54.08	28%	$15.14
Capital recovery	$165.36	11%	$18.19
Land Rental (opportunity cost)	$95.51	100%	$95.51
Taxes and insurance	$25.11	100%	$25.11
General farm overhead	$41.48	100%	$41.48
Subtotal, Overhead	**$398.97**		**$200.32**
	Total PP Cost		**$325.48**
	Liability (Avg/Ac 2012-2016)		**$592.34**
	Calculated PP Coverage Factor		**55%**
	Determined PP Coverage Factor		**55%**

Rye

Summary
The prevented planting coverage factor will remain at 60%. The evaluation also recommended 60%.

Public Comment
No specific comments regarding rye were received.

Data Source
North Dakota State University - Crop Budgets

Summary of Prevented Planting Coverage Factor Calculation for Rye			
	Full-year Cost (2012-2016 Avg/Ac)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$11.52	0%	$0.00
Herbicides	$5.70	43%	$2.45
Fungicides	$0.00	0%	$0.00
Insecticides	$0.00	0%	$0.00
Fertilizer	$61.39	0%	$0.00
Crop Insurance	$9.95	0%	$0.00
Fuel & Lubrication	$13.13	32%	$4.20
Repairs	$15.10	30%	$4.53
Drying	$0.00	0%	$0.00
Misc	$7.20	25%	$1.80
Operating Interest	$2.72	25%	$0.68
Subtotal- Direct Costs	**$126.71**		**$13.66**
Misc. OH	$6.43	100%	$6.43
Machinery Deprec.	$17.80	17%	$3.03
Machinery Invest	$9.83	100%	$9.83
Land Charge	$48.25	100%	$48.25
Subtotal- Indirect	**$82.31**		**$67.54**
	Total PP Cost		**$81.20**
	Liability (Avg/Ac 2012-2016)		**$104.25**
	Calculated PP Coverage Factor		**78%**
	Determined PP Coverage Factor		**60%**

Silage Sorghum

Summary
The prevented planting factor will be decreased to 50%, from 60%. The evaluation recommended a decrease to 55%.

Public Comment
No specific comments were received regarding silage sorghum.

Data Source
USDA ERS Commodity Costs and Returns – Grain Sorghum - Prairie Gateway Region

Summary of Prevented Planting Coverage Factor Calculation for Silage Sorghum			
	Full-Year Production Cost (2012-2016 Avg/acre)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$12.49	0%	$0.00
Fertilizer	$40.86	64%	$26.15
Chemicals	$26.45	40%	$10.58
Custom operations	$13.36	17%	$2.27
Fuel, lube, and electricity	$14.19	16%	$2.27
Repairs	$21.43	24%	$5.14
Other variable expenses	$0.03	0%	$0.00
Interest on operating costs	$0.11	27%	$0.03
Crop Insurance	$16.86	0%	$0.00
Subtotal, Cash Costs	**$145.78**		**$46.45**
Hired labor	$1.78	36%	$0.64
Unpaid labor (opportunity cost)	$17.75	27%	$4.79
Capital recovery	$77.81	20%	$15.56
Land Rental (opportunity cost)	$55.50	100%	$55.50
Taxes and insurance	$5.64	100%	$5.64
General farm overhead	$11.84	100%	$11.84
Subtotal, Overhead Costs	**$170.32**		**$93.97**
	Total PP Cost		**$140.42**
	Liability (Avg/Ac 2012-2016)		**$273.30**
	Calculated PP Coverage Factor		**51%**
	Determined PP Coverage Factor		**50%**

Sunflower

Summary
The prevented planting coverage factor will remain at 60%. The evaluation had recommended a decrease to 45%.

Public Comment
One comment expressed concern with the evaluation's recommendation to decrease the sunflower seed coverage level. However, they provided no data specific details in support of the concern. Based on available data, the prevented planting factor is unchanged.

Data Source
North Dakota State University - Crop Budgets

Summary of Prevented Planting Coverage Factor Calculation for Sunflower			
	Full-Year Production Cost (2012-2016 Avg/acre)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$32.41	0%	$0.00
Herbicides	$28.71	25%	$7.18
Fungicides	$0.00	25%	$0.00
Insecticides	$6.60	25%	$1.65
Fertilizer	$38.86	67%	$26.03
Crop Insurance	$14.68	0%	$0.00
Fuel & Lubrication	$16.89	25%	$4.22
Repairs	$17.40	25%	$4.35
Drying	$3.74	0%	$0.00
Misc	$12.37	33%	$4.08
Operating Interest	$3.77	25%	$0.94
Subtotal- Direct Costs	**$175.43**		**$48.46**
Misc. OH	$7.46	100%	$7.46
Machinery Deprec.	$22.04	11%	$2.42
Machinery Invest	$13.10	100%	$13.10
Land Charge	$65.18	100%	$65.18
Subtotal- Indirect Costs	**$107.78**		**$88.16**
	Total PP Cost		**$136.62**
	Liability (Avg/Ac 2012-2016)		**$235.39**
	Calculated PP Coverage Factor		**58%**
	Determined PP Coverage Factor		**60%**

Processing and Fresh (Storage) Onions

Summary
The prevented planting factor will be unchanged at 35% for processing and fresh (storage) onions. The evaluation provided the same recommendation.

Public Comment
No specific comments were received regarding onions.

Data Source
University of Idaho and Utah State University for **storage onions**; and University of California Cooperative Extension for **processing onions**.

Summary of Prevented Planting Coverage Level Factors for Processing and Fresh (Storage) Onions			
	Full-Year Production Cost (All)	**Pre-Plant Factor**	**Pre-Plant Cost (All)**
Seed	$277.60	0%	$0.00
Fertilizer	$367.15	10%	$36.72
Insecticide	$381.62	0%	$0.00
Herbicide	$85.80	67%	$57.49
Fungicide	$90.00	0%	$0.00
Custom operations	$317.04	0%	$0.00
Irrigation	$140.20	4%	$6.11
Fuel & lube	$157.33	50%	$78.67
Repair	$57.11	50%	$28.56
Labor	$393.98	10%	$39.40
Storage	$597.13	13%	$79.62
Int operating	$51.00	25%	$12.75
Crop insurance	$136.33	0%	$0.00
Marketing	$53.50	0%	$0.00
Subtotal - Direct costs	**$3,105.79**		**$339.29**
General overhead & assessments	$132.67	100%	$132.67
Misc ownership costs	$173.53	10%	$17.35
Taxes & insurance	$24.94	100%	$24.94
Equipment capital rec	$178.59	15%	$26.79
Land (cash and non-cash overhead)	$279.30	100%	$279.30
Subtotal - Indirect costs	**$789.02**		**$481.04**
	Total PP Costs		**$820.34**
	Liability (Avg/acre)		**$2,344.12**
	Calculated PP Coverage Factor		**35%**
	Determined PP Coverage Factor		**35%**

Fresh (Non-Storage) Onions

Summary
The prevented planting factor will be decreased to 15% for fresh (non-storage onions). The evaluation provided the same recommendation.

Public Comment
No specific comments were received regarding onions.

Data Source
Texas A&M University for **non-storage onions**

Summary of Prevented Planting Coverage Factor Calculation for Non-Storage Onions			
	Full-Year Production Cost (2013-2017)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$399.00	0%	$0.00
Fertilizer	$391.34	10%	$39.13
Custom ops	$3,906.00	0%	$0.00
Herbicide	$61.33	67%	$41.09
Insecticide	$39.89	0%	$0.00
Fungicide	$139.79	0%	$0.00
Other labor	$39.30	10%	$3.93
Irrigation	$118.16	0%	$0.00
Fuel	$37.04	50%	$18.52
Repair	$34.62	50%	$17.31
Subtotal - Direct Costs	**$5,166.47**		**$119.99**
Int operating	$49.24	25%	$12.31
Cap recovery	$69.43	100%	$69.43
Land	$110.00	100%	$110.00
Subtotal - Indirect Costs	**$228.67**		**$191.74**
	Total PP Cost		**$311.73**
	Liability (Avg/Ac 2013-2017)		**$2,041.66**
	Calculated PP Coverage Factor		**15%**
	Determined PP Coverage Factor		**15%**

Potatoes

Summary
The prevented planting factor will be increased to 45%, from 25%. The evaluation recommended an increase to 40%.

Public Comment
No specific comments were received regarding potatoes.

Data Source
University of Idaho

Summary of Prevented Planting Coverage Factor Calculation for Potatoes			
	Full-Year Production Cost (2013, 2015, 2017)	**Pre-Plant Factor**	**Pre-Plant Cost**
Seed	$329.42	0%	$0.00
Fertilizer	$467.11	0%	$0.00
Pesticide	$441.41	15%	$66.21
Custom	$113.73	10%	$11.37
Irrigation	$109.90	10%	$10.99
Machinery	$145.94	25%	$36.49
Sorting	$68.87	0%	$0.00
Labor	$185.28	10%	$18.53
Other	$149.23	0%	$0.00
Subtotal - Direct Costs	**$2,010.89**		**$143.59**
Oper Int	$70.88	25%	$17.72
Misc Ownership Cost	$269.32	15%	$40.40
Land	$609.44	100%	$609.44
Cap Recovery	$185.82	0%	$0.00
Subtotal - Indirect Costs	**$1,135.46**		**$667.56**
	Total PP Costs		**$811.15**
	Liability (Avg/Ac 2013, 2015, 2017)		**$1,761.09**
	Calculated PP Coverage Factor		**46%**
	Determined PP Coverage Factor		**45%**

Safflower

Summary
The prevented planting coverage factor will remain at 60%. The evaluation had also recommended the coverage factor to remain unchanged.

Public Comment
No specific comments were received regarding potatoes.

Data Source
North Dakota State University - Crop Budgets

Summary of Prevented Planting Coverage Factor Calculation for Safflower			
	Full-Year Production Cost (2013-2017)	**Pre-plant factor**	**Pre-plant cost**
Seed	$10.84	0%	$0.00
Herbicides	$21.24	100%	$21.24
Fungicides	$18.00	0%	$0.00
Insecticides	$0.00	0%	$0.00
Fertilizer	$23.44	100%	$23.44
Crop Insurance	$13.94	0%	$0.00
Fuel & Lubrication	$10.88	65%	$7.07
Repairs	$15.88	65%	$10.32
Drying	$0.00	0%	$0.00
Misc	$7.40	50%	$3.70
Operating Interest	$2.69	25%	$0.67
Subtotal - Direct Costs	**$124.30**		**$66.44**
Misc. OH	$6.47	100%	$6.47
Machinery Deprec.	$18.16	11%	$2.00
Machinery Invest	$10.03	100%	$10.03
Land Charge	$37.00	100%	$37.00
Subtotal - Indirect	**$117.20**		**$55.50**
	Total PP Costs		**$121.94**
	Liability (Avg/Ac 2013-2017)		**$139.01**
	Calculated PP Coverage Factor		**88%**
	Determined PP Coverage Factor		**60%**