



FIP-SI

**Fire Insurance Protection –
Smoke Index**

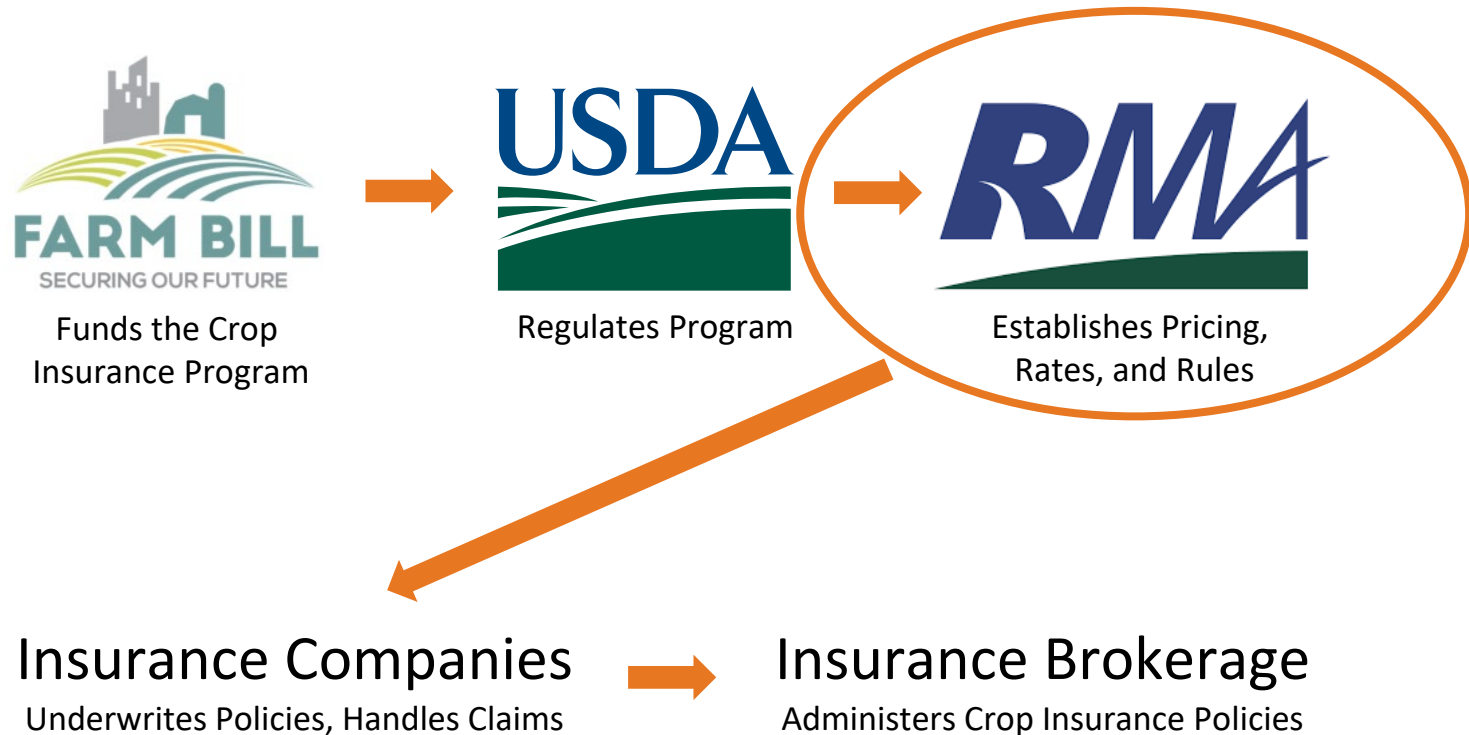
This presentation has been prepared solely for informational purposes and does not purport to be all inclusive or to contain all of the information that may be desired by a recipient. None of the projections, data, statements, examples, materials or other information (“Materials”) contained herein are or should be relied upon as a promise or representation (whether as to the future or otherwise). Portions of the Materials include examples, projections and estimated or forecasted financial information that are forward looking statements. Such forward looking statements are based upon hypothetical situations that are inherently subject to substantial and numerous uncertainties, as well as unanticipated events and circumstances, that will inevitably result in some assumptions not materializing. Moreover, there is no representation, warranty or other assurance that any of the projections, examples or forward looking statements will be realized.

Nothing contained herein is or should be construed as tax, legal, business, accounting or any other advice, and you should conduct your own investigation and analysis of the information, projections, examples and other Materials contained herein and consult with your tax, legal, business, accounting and other advisors. The Materials do not constitute investment advice. Relation Insurance Services and its related parties and affiliates (collectively, “Relation”) make no representations or warranties, expressed or implied, as to the accuracy, fairness, correctness, or completeness of the Materials and shall not be liable for the content of any of the Materials contained herein or omitted herefrom or from any other written or oral communications transmitted in connection with this presentation, the Materials or any related matters. Relation makes no representations or warranties, expressed or implied, guarantees, or conditions of compliance with applicable laws or regulations, and such compliance is ultimately the responsibility of the recipient. Relation expressly disclaims any and all liability with respect to any actions taken or not taken based upon the information contained in this presentation or with respect to any error or omissions contained in such information.

This presentation and the Materials contained herein are being furnished on a confidential basis and may not be reproduced, used or distributed to others, at any time, in any manner, in whole or in part for any other purpose without the prior written consent of Relation. All recipients agree they will keep confidential all Materials contained herein not already in the public domain. Receipt of this presentation constitutes your agreement to be bound by the foregoing terms.

Fire Insurance Protection – Smoke Index (FIP-SI)

Relationships Matter.

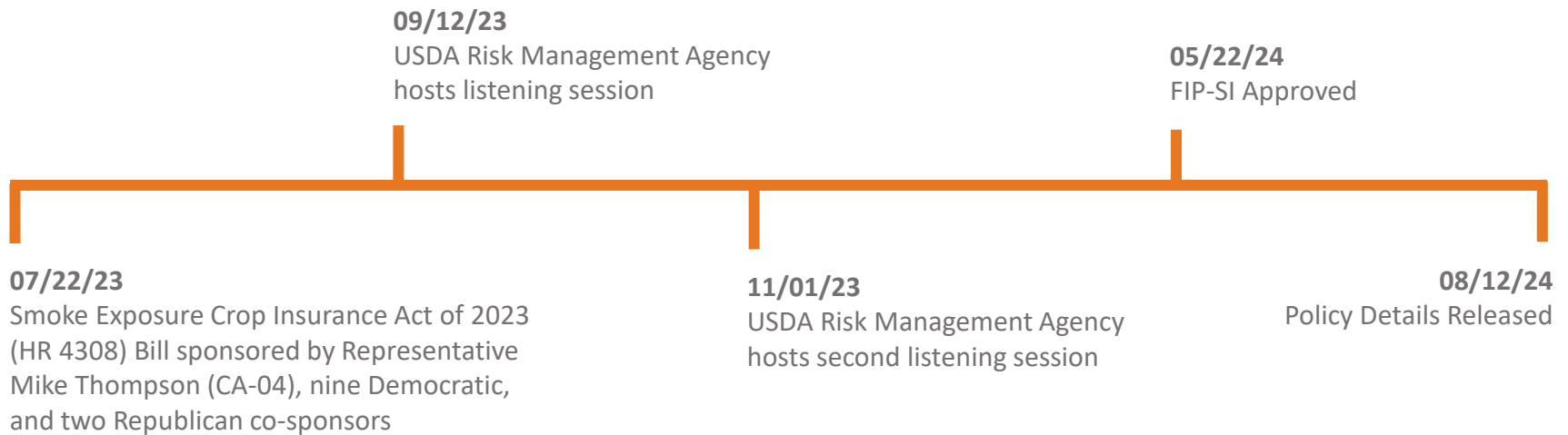


Fire Insurance Protection – Smoke Index (FIP-SI)

Relation *ships* Matter.

Development Timeline:

2020 and 2022 wildfires spurred interest in policy change



Fire Insurance Protection – Smoke Index (FIP-SI)

Relationships Matter.

Multiperil Crop Insurance (MPCI) Covers:

- ✓ Adverse weather
- ✓ Earthquake
- ✓ Fire (smoke)
- ✓ Volcanic eruption
- ✓ Wildlife
- ✓ Failure of irrigation water supply (due to a covered peril)
- ✓ Insects, plant disease (unless insufficient or improper application of control measures occurs)



FIP-SI Covers:

- ✓ Smoke Events

Fire Insurance Protection – Smoke Index (FIP-SI)

Relationships Matter.

FIP-SI Endorsement – NEW for 2025

- ✓ Endorsement establishes a separate coverage for smoke events.
- ✓ Endorsement is added to the underlying Multiperil Crop Insurance (MPCI) policy; cannot be purchased as a stand-alone coverage.
 - **Smoke Losses on MPCI are still covered and assessed separately.**
 - Can be purchased with CAT coverage
- ✓ This is a county loss triggered coverage; individual vineyard losses are not considered.
- ✓ Available in CA counties where the grape MPCI policy is offered; no Written Agreement exceptions for FIP-SI.



FIP-SI Endorsement – Key Benefits vs. MPCl Smoke Coverage

- ✓ No additional reporting other than the underlying policy needs.
- ✓ No lab testing or claims adjustment process.
- ✓ Indemnities are automatically paid; no notice of loss needs to be filed.
- ✓ Source of smoke does not matter; controlled burns are also included.
 - MPCl required loss to be caused by naturally occurring fires.
- ✓ Grapes can be off the vine when the smoke event occurs; if it is during the FIP-SI coverage period it will still count.
- ✓ Indemnities are calculated and paid quickly.

Smoke Events Trigger Claims

- ✓ Insurance period is June 1st – November 10th.
- ✓ Only smoke events are covered.
- ✓ Coverage is based off the liability of underlying MPCl coverage including other endorsements.
- ✓ Factor is applied to FIP-SI liability based off number of cumulative smoke events.
 - **Must surpass 13 cumulative smoke events** before factor begins to apply.
 - Increased factor applied based on increased number of smoke events.
- ✓ Uses two data sources to determine smoke events:
 - NOAA's Hazard Mapping System's (HMS) smoke density dataset.
 - U.S. Census Bureau's geometry of counties TIGER/Line Shapefile.

Fire Insurance Protection – Smoke Index (FIP-SI)

Relationships Matter.

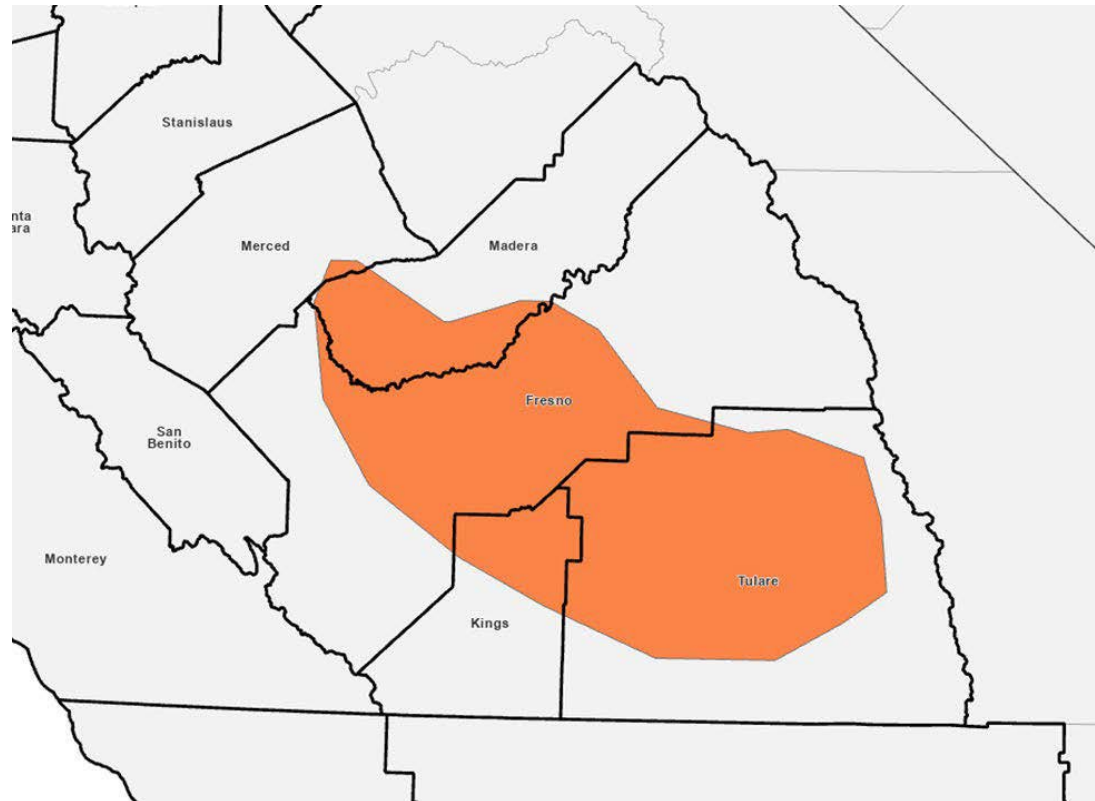
Smoke Events Trigger Claims

- ✓ **Heavy smoke** in any area of the county triggers a smoke event for entire county.

Smoke Event For:

- Tulare Co.
- Kings Co.
- Fresno Co.
- Madera Co.
- Merced Co.

Must exceed 13 days of smoke events

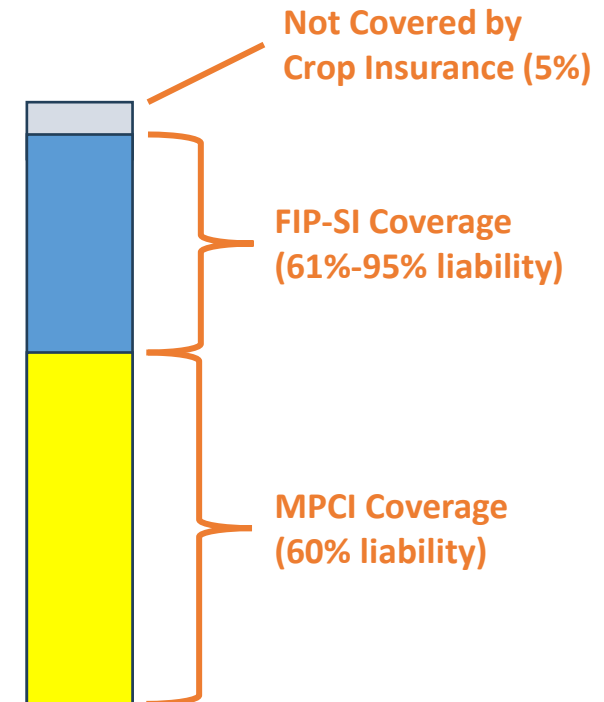


Fire Insurance Protection – Smoke Index (FIP-SI)

Relation *ships* Matter.

Coverage Amount

- ✓ FIP-SI covers the liability between the MPCl coverage percentage and 95% of the crop liability.
 - The greater your MPCl coverage, the lower your FIP-SI coverage, and the lower your MPCl coverage, the greater your FIP-SI coverage.
- ✓ Adjustments to underlying liability will automatically apply to the FIP-SI liability: adjustments to insured acres, contract prices.



Fire Insurance Protection – Smoke Index (FIP-SI)

Relation *ships* Matter.

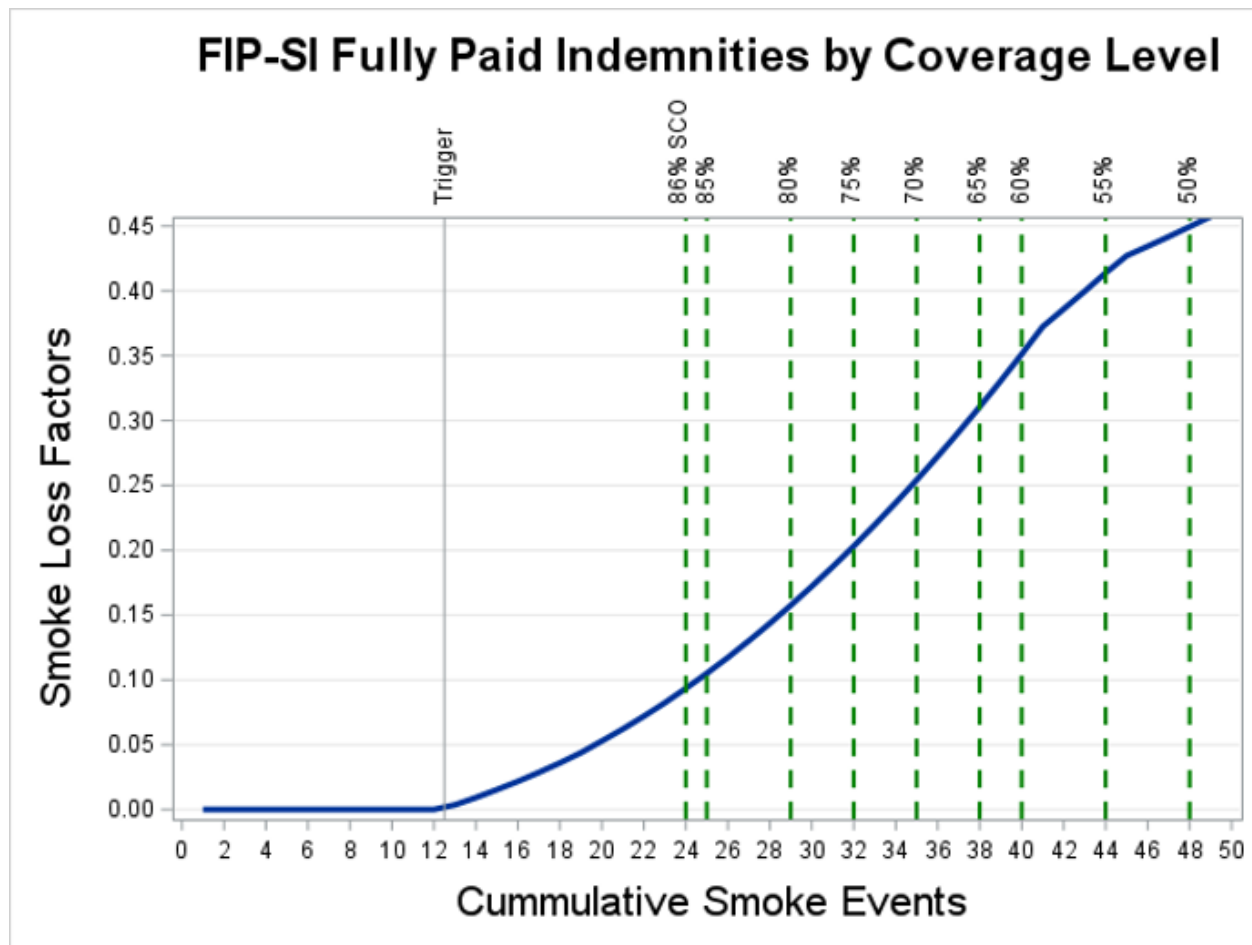
Indemnity Payout –Smoke Loss Factor by Days

Cumulative Number of Smoke Events	Smoke Loss Factor		Cumulative Number of Smoke Events	Smoke Loss Factor		Cumulative Number of Smoke Events	Smoke Loss Factor
Less than 13	0		25	0.1050		38	0.3106
13	0.0036		26	0.1172		39	0.3306
14	0.0092		27	0.1301		40	0.3512
15	0.0153		28	0.1435		41	0.3724
16	0.0217		29	0.1575		42	0.3860
17	0.0286		30	0.1721		43	0.3997
18	0.0359		31	0.1873		44	0.4139
19	0.0438		32	0.2031		45	0.4271
20	0.0528		33	0.2196		46	0.4344
21	0.0621		34	0.2366		47	0.4418
22	0.0719		35	0.2542		48 and above	0.4500
23	0.0823		36	0.2724			
24	0.0934		37	0.2912			

Fire Insurance Protection – Smoke Index (FIP-SI)

Relation *Matters* Matter.

Indemnity Payout –Smoke Loss Factor with Coverage Level



Fire Insurance Protection – Smoke Index (FIP-SI)

Relationships Matter.

Coverage Amount Calculation – By Variety

60% MPCCI Coverage Example

Determine Smoke Coverage Range:

0.95 (Maximum liability covered)

- 0.60 (MPCCI Coverage)

0.35 **Smoke Coverage Range**

Determine Expected Crop Value of MPCCI Policy

\$600,000 (MPCCI Liability)

÷ 0.60 (MPCCI Coverage)

÷ 1.0 (MPCCI Percent of Price)

\$1,000,000 Expected Crop Value

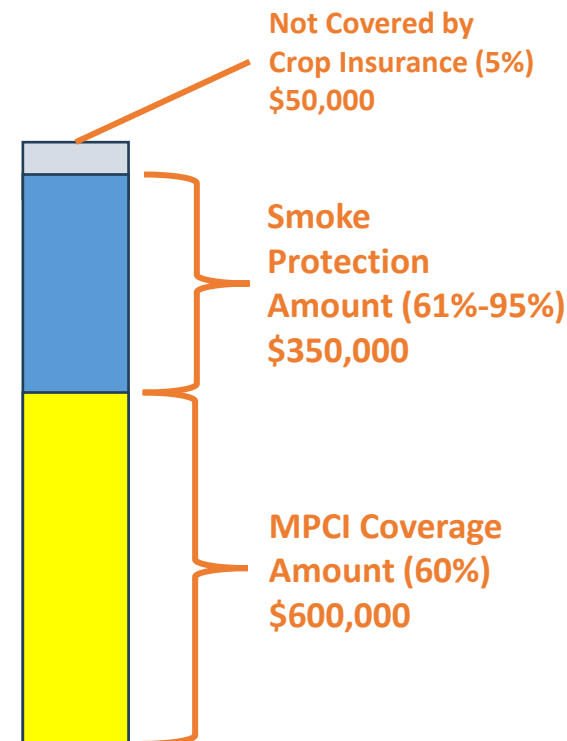
Determine the Smoke Protection Amount

\$1,000,000 (expected Crop Value)

X 0.35 (Smoke Coverage Range)

X 1.0 (FIP-SI Coverage Level)

\$350,000 Smoke Protection Amount



Smoke Loss Factor / Smoke Coverage Range = Payment Factor

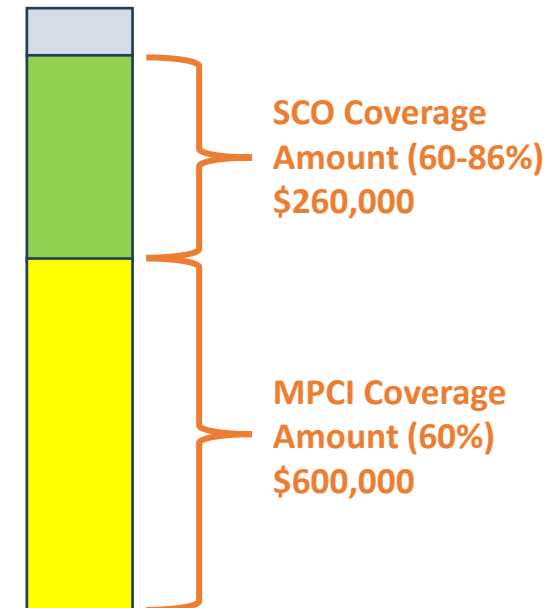
Payment Factor X Smoke Protection Amount = Indemnity

Fire Insurance Protection – Smoke Index (FIP-SI)

Relation *ships* Matter.

FIP-SI with Supplemental Coverage Option (SCO)

- ✓ SCO is an additional endorsement stacked on top of your MPCl.
- ✓ Released in 2020 for Grapes.
- ✓ Indemnities paid on county yield losses.
 - Individual vineyard performance is not considered.
- ✓ SCO adds additional covered liability to the MPCl policy that cannot be covered by FIP-SI.
- ✓ SCO covers the liability between your MPCl coverage level and 86%



Fire Insurance Protection – Smoke Index (FIP-SI)

Relationships Matter.

Coverage Amount with Supplemental Coverage Option (SCO)

60% MPCl Coverage Example with SCO Endorsement

Determine Smoke Coverage Range:

0.95 (Maximum liability covered)

- 0.86 (MPCl and SCO Coverage)

0.09 **Smoke Coverage Range**

Determine Expected Crop Value of MPCl Policy

\$600,000 (MPCl Liability)

÷ 0.60 (MPCl Coverage)

÷ 1.0 (MPCl Percent of Price)

\$1,000,000 Expected Crop Value

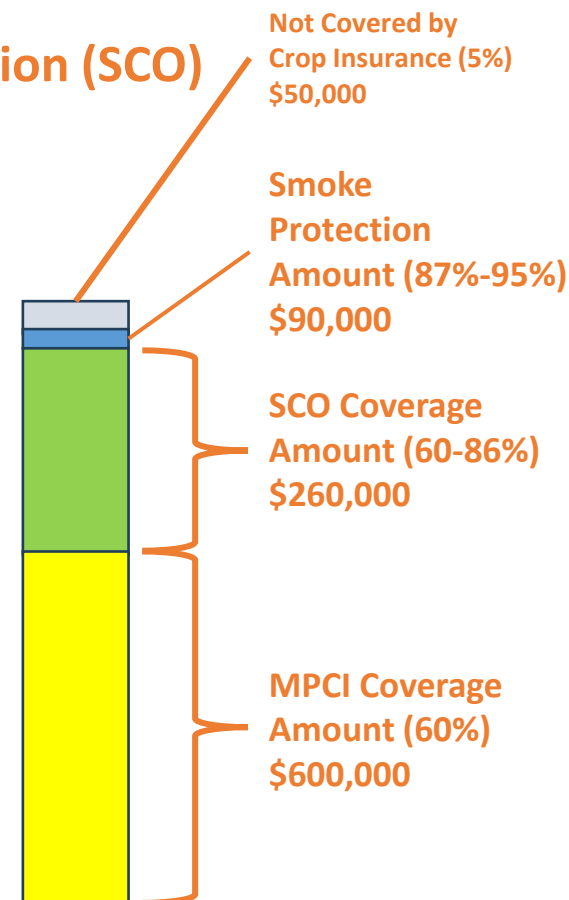
Determine the Smoke Protection Amount

\$1,000,000 Expected Crop Value

X 0.09 (Smoke Coverage Range)

X 1.0 (FIP-SI Coverage Level)

\$90,000 Smoke Protection Amount



Smoke Loss Factor / Smoke Coverage Range = Payment Factor

Payment Factor X Smoke Protection Amount = Indemnity

Fire Insurance Protection – Smoke Index (FIP-SI)

Relation *ships* Matter.

Indemnity Payout –Smoke Loss Factor by Days

Smoke Loss Factor X **Smoke Coverage Range** = Payment Factor

Payment Factor X **Smoke Protection Amount** = Indemnity

Cumulative Number of Smoke Events	Smoke Loss Factor	Cumulative Number of Smoke Events	Smoke Loss Factor	Cumulative Number of Smoke Events	Smoke Loss Factor
Less than 13	0	25	0.1050	38	0.3106
13	0.0036	26	0.1172	39	0.3306
14	0.0092	27	0.1301	40	0.3512
15	0.0153	28	0.1435	41	0.3724
16	0.0217	29	0.1575	42	0.3860
17	0.0286	30	0.1721	43	0.3997
18	0.0359	31	0.1873	44	0.4139
19	0.0438	32	0.2031	45	0.4271
20	0.0528	33	0.2196	46	0.4344
21	0.0621	34	0.2366	47	0.4418
22	0.0719	35	0.2542	48 and above	0.4500
23	0.0823	36	0.2724		
24	0.0934	37	0.2912		

Fire Insurance Protection – Smoke Index (FIP-SI)

Relation *ships* Matter.

Claim Example – 60% MPCl Coverage

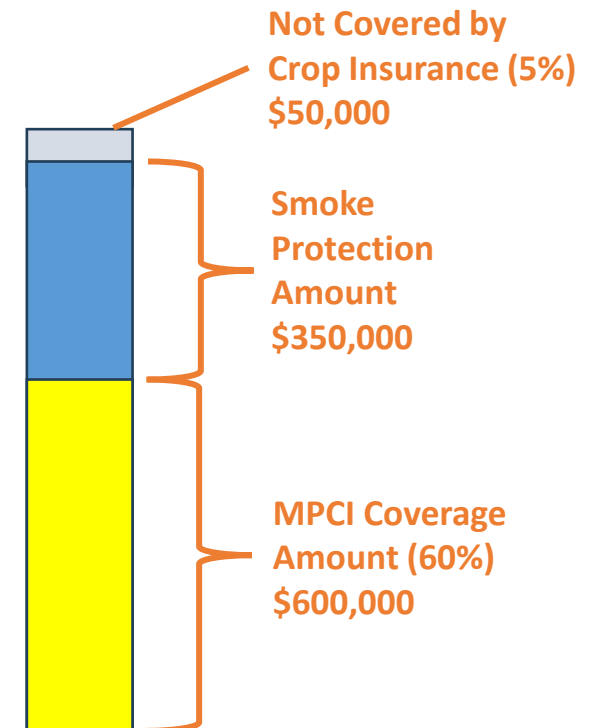
\$1,000,000 Expected Crop Value

MPCl Grape Policy

- Triggered by tonnage losses due to natural perils
- Liability = \$600,000 (60% of \$1,000,000)

FIP-SI Endorsement

- Triggered by cumulative heavy smoke days
- Liability aka **Smoke Protection Amount** = \$350,000 (**35%** of \$1,000,000)
 - Top 5% of liability cannot be covered by crop insurance



Smoke Loss Factor / **Smoke Coverage Range** = Payment Factor
Payment Factor X **Smoke Protection Amount** = Indemnity

Fire Insurance Protection – Smoke Index (FIP-SI)

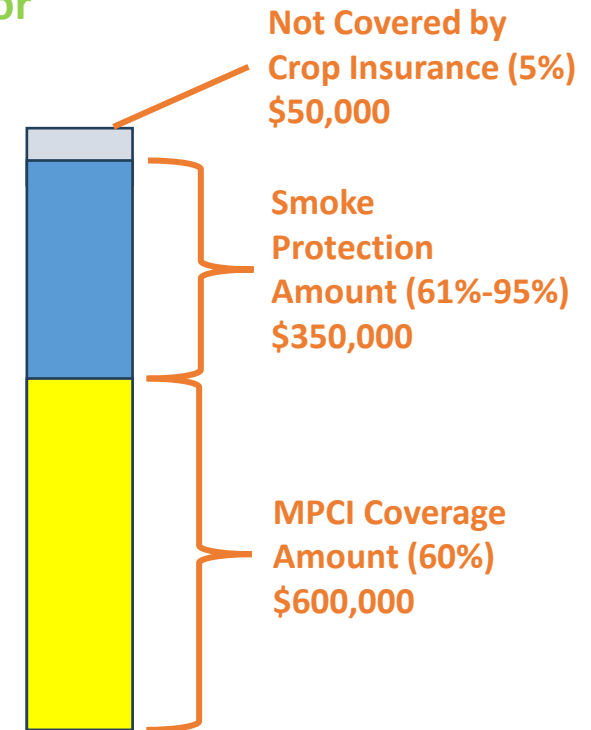
Relation *ships* Matter.

Claim Example – 60% MPCl Coverage

25 Cumulative Smoke Events = 0.1050 **Smoke Loss Factor**

FIP-SI Claim Calculation

- Determine Payment Factor
 - **.1050** / **35%** = 0.3 payment factor
- Determine Indemnity
 - 0.3 X **\$350,000** Smoke Protection Amount = \$105,000 FIP-SI Indemnity



Smoke Loss Factor / **Smoke Coverage Range** = Payment Factor
Payment Factor X **Smoke Protection Amount** = Indemnity

Fire Insurance Protection – Smoke Index (FIP-SI)

Relation *ships* Matter.

FIP-SI Premium

Based on:

- Underlying MPCl coverage level (CAT – 85%)
- MPCl liability by variety (\$)
- County
- Premium is subsidized by 65%

BASE RATES BY COUNTY

Alameda		Kern		Napa		Santa Barbara	
0.0686	0.1786	0.1629	0.2105	0.1211	0.2366	0.0429	0.1404
Amador		Kings		Nevada		Santa Clara	
0.167	0.2518	0.104	0.1706	0.1688	0.2272	0.0683	0.1601
Calaveras		Lake		Riverside		Santa Cruz	
0.156	0.2632	0.192	0.2573	0.0095	0.0476	0.0274	0.1008
Colusa		Madera		Sacramento		Solano	
0.2112	0.25	0.1809	0.3306	0.1243	0.21	0.1079	0.2366
Contra Costa		Marin		San Benito		Sonoma	
0.0769	0.203	0.0515	0.1407	0.1074	0.2272	0.0898	0.2366
El Dorado		Mendocino		San Diego		Stanislaus	
0.182	0.2688	0.1876	0.2995	0.0039	0.0197	0.118	0.2183
Fresno		Merced		San Joaquin		Tulare	
0.2388	0.4254	0.1158	0.2183	0.0973	0.1949	0.2509	0.5646
Glenn		Monterey		San Luis Obispo		Yolo	
0.2259	0.2632	0.1647	0.2272	0.0683	0.177	0.1628	0.2435

KEY	
County	
50%	86% SCO

Fire Insurance Protection – Smoke Index (FIP-SI)

Relationships Matter.

MPCI and FIP-SI Coverage Correlations

50 Acres X 3.4 tons per acre X \$7,798 price per ton = **\$1,325,660** FULL Liability

95% - 100%
Portion Not Covered
\$185,592

50% - 95%
FIP-SI Coverage
\$477,238 in Liability
\$9,270 in Premium

1% - 50%
MPCI Coverage
\$662,830 in Liability
\$4,937 Premium

TOTAL PREMIUM \$14,207
(plus \$30 admin fee for MPCI
And \$30 admin fee for FIP-SI)



95% - 100%
Portion Not Covered
\$185,592

75% - 95%
FIP-SI Coverage
\$145,823 in Liability
\$6,839 in Premium

1% - 75%
MPCI Coverage
\$994,245 in Liability
\$24,723 Premium

TOTAL PREMIUM \$31,562
(plus \$30 admin fee for MPCI
And \$30 admin fee for FIP-SI)



FIP-SI Historical Data Since 2010

- Santa Barbara
 - 80 Smoke Events
 - 2016, 2020, and 2021 would have triggered indemnities
- Sonoma
 - 116 Smoke Events
 - 2018, 2020, and 2021 would have triggered indemnities
- Mendocino
 - 192 Smoke Events
 - 2012, 2015, 2018, 2020, and 2021 would have triggered indemnities
- Napa
 - 126 Smoke Events
 - 2018, 2020, and 2021 would have triggered indemnities (2020 was at 42 days)
- San Joaquin
 - 103 Smoke Events
 - 2018, 2020, and 2021 would have triggered indemnities
- Tulare / Fresno
 - 288 / 270 Smoke Events
 - Tulare Co. had 8 years that would have triggered indemnities – 2 years at the maximum (48 days)
 - Fresno Co. had 7 years that would have triggered indemnities – 1 year at the maximum (48 days)

MPCI Grape Policy STILL Pays for Individual Smoke

- Grower still must submit claim within 72 hours of damage.
- Grower must have pre-harvested samples tested by variety and location.
- Results must show elevated levels of 4MG and/or G.
- Grower may sell at reduced price or be rejected by winery.
- Letter from winery/market required stating the cause of price reduction/rejection.
- Quality Adjustment Factor applied for grapes harvested and sold at a reduced price.
- Unharvested Cost Deduction applied to tonnage not harvested.

Important Grape Deadlines

January 31st	Deadline to apply for, adjust coverage, and add the FIP-SI endorsement
March 15th	Deadline to provide prior years production
May 15th	Deadline to update insured acres and provide contracts (optional)
June 1st	<i>FIP-SI coverage period begins, smoke events begin tracked</i>
September 30th	Policy premium is due

Insurance ends for the **MPCI crop policy** on the earlier of:

- **November 10th**
- Harvest, destruction, or abandonment of the crop

Insurance ends for the **FIP-SI endorsement** on:

- **November 10th** regardless of harvest, destruction, or abandonment of the crop



Contact

Kristine Fox, AFIS

Vice President

Cell: (559) 381-8981

kristine.fox@relationinsurance.com