

Cost Benefit Analysis – Quality Loss Adjustment Program

Executive Summary

The U.S. Department of Agriculture (USDA) is implementing the Quality Loss Adjustment (QLA) Program to provide financial assistance to crop producers who suffered quality losses that were caused by qualifying disaster events in calendar years 2018 and 2019. The QLA Program is authorized by the Further Consolidation Appropriations Act, 2020 (Pub. L. 116–94, henceforth “Appropriations Act”), Sec. 791. Qualifying disaster events include hurricanes, floods, tornados, typhoons, volcanic activity, snowstorms, wildfires, excessive moisture, qualifying drought, and related conditions that occurred in the 2018 or 2019 calendar year. Crop quality losses due to insects, events occurring after a crop was harvested, crop deterioration while in storage, or that could have been mitigated by the producer, are not eligible for QLA Program payments.

The Appropriations Act contained provisions which augmented the Additional Supplemental Appropriations for Disaster Relief Act of 2019 (Pub. L. 116-20, henceforth “Disaster Relief Act”), which provided aid to agricultural producers who suffered significantly from natural disasters in 2018 and 2019. In response to the widespread disasters, the Disaster Relief Act authorized the Wildfire, Hurricane, and Indemnity Program Plus (WHIP+), which provided approximately \$3 billion in supplemental assistance to producers for qualifying agricultural production losses.

With the Appropriations Act, Congress changed provisions of the Disaster Relief Act as follows:

1. Extended eligibility under WHIP+ to also cover¹—
 - a. Crop production losses due to excessive moisture in calendar years 2018 and 2019;
 - b. Crop production losses due to drought in calendar years 2018 and 2019 if the area within the county in which the loss occurred was rated by the U.S. Drought Monitor as having a D3 (extreme drought) or higher level of drought intensity during the applicable calendar year;
2. Provided assistance for sugar beet losses in 2018 and 2019 to be paid through cooperative processors;² and
3. Authorized assistance for *crop quality losses* that occurred in calendar years 2018 and 2019 (implemented as the QLA Program, the focus of this cost-benefit analysis).

Eligible crops under the QLA Program include crops for which federal crop insurance or Noninsured Disaster Assistance Program (NAP) coverage is available.³ To be eligible for the QLA Program, a crop must have suffered a quality loss due to a qualifying disaster event and had at least a 5 percent quality loss due to all eligible disaster events. Quality loss, as defined in the final rule is for forage crops, a reduction in an applicable nutrient factor for the crop; and for crops other than forage, a reduction in

¹ The addition of excessive moisture and certain drought conditions as qualifying causes of loss under WHIP+ as directed by the Appropriations Act (Pub. L. 116–94) is specific, not open to interpretation, and is therefore self-enacting. Accordingly, this provision of the Appropriations Act was previously implemented. FSA began the sign-up period on March 23, 2020, and sign-up ended on October 30, 2020.

² Assistance for sugar beet losses for members of cooperative processors is provided through a separate program.

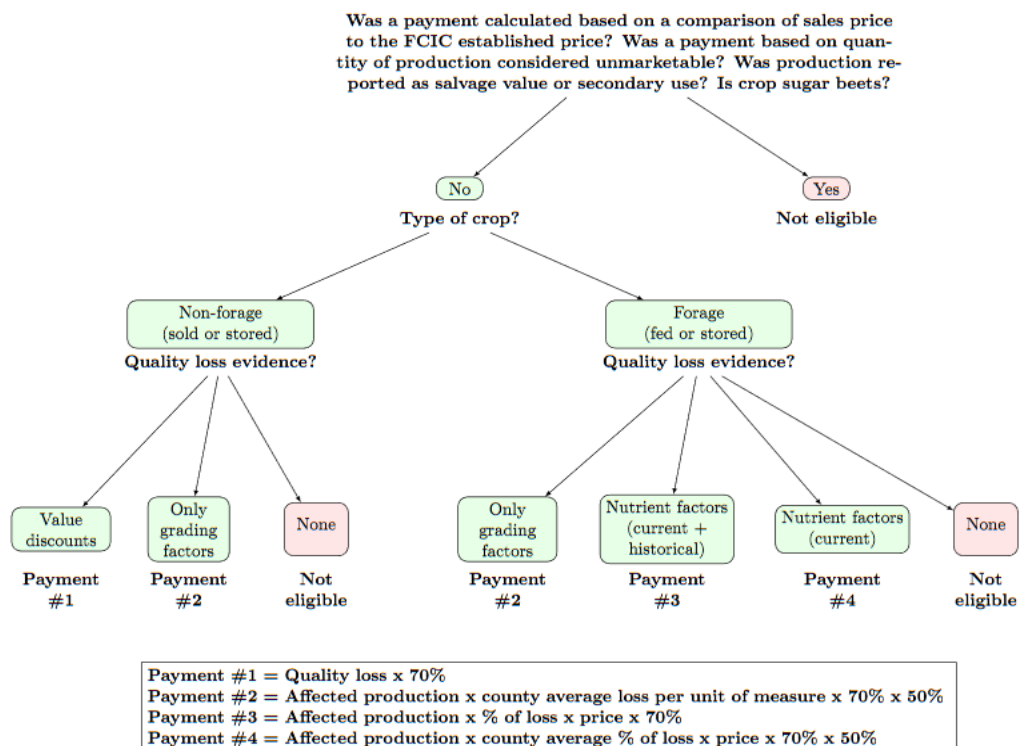
³ Value loss crops, honey, and maple sap, because of the way normal losses are measured for those crops, are not eligible.

the total dollar value of the crop due to reduction in the physical condition of the crop indicated by an applicable grading factor. Eligible crops may have been sold, fed to livestock, or been in storage at the time of application.

USDA estimates that after other disaster assistance payments have been finalized, including payments to eligible agricultural producers for crop production losses due to excessive moisture and extreme drought, an estimated \$500 million will be available for QLA Program payments from disaster appropriations. However, the amount of funding ultimately available for the QLA Program will not be known until those other payments are indeed finalized.

The QLA Program payment calculation depends on several factors, as shown in Figure 1. A producer is ineligible for a QLA Program payment if they received a crop insurance indemnity, NAP payment, or WHIP+ payment for a crop that was unmarketable, reported as salvage value or secondary use, or if the payment was based on a comparison of the producer's sales price of the affected production to the Federal Crop Insurance Corporation (FCIC) established price. Otherwise, payments or benefits received under the federal crop insurance, NAP or WHIP+ programs do not affect a producer's eligibility or payment received from the QLA Program. The payment calculation depends on the use of production (non-forage or forage) and evidence at hand of the crop quality loss. Producers who do not have evidence of the quality loss are ineligible.

Figure 1. Eligibility and Payment Calculation



Background and Program Design

Existing Safety Net for Quality Losses

The QLA Program targets crop producers who experienced at least a 5 percent reduction in crop quality due to a qualifying disaster event in the 2018 or 2019 calendar year. Federal assistance for quality losses is currently available to producers through the federal crop insurance program administered by the Risk Management Agency (RMA) through the FCIC. Federal crop insurance protects against losses due to natural causes (e.g., excessive moisture, drought, cold, etc.) resulting in a production loss, quality loss, or prevented planting.⁴

Federal crop insurance participants elect a coverage level to guarantee against future losses. If the final value of the insured crop drops below the amount guaranteed by the coverage level, whether due to low yields, low price⁵, or reduced quality, an indemnity payment is issued for the difference between the final value and the insurance guarantee. Federal crop insurance paid out \$7.3 billion in indemnities for crop year 2018 losses and \$10.5 billion in indemnities for crop year 2019 losses.⁶ Indemnities paid for quality losses through federal crop insurance cannot be readily separated out as reductions in quality are captured as adjustments to production for policies based on a producer's Actual Production History (APH), which typically account for over 85 percent of program premium and liability. Absent an accompanying production loss, reductions due to losses in quality must generally be quite severe to trigger an indemnity payment because of the large deductible. For example, the most common APH-based coverage level is 75 percent, which means a producer must experience a loss of greater than 25 percent in order to receive an indemnity payment.

NAP also provides coverage for losses due to natural causes, but is only available in counties for which federal crop insurance does not offer catastrophic coverage.⁷ With the exception of the Quality Loss Option that may be offered with buy-up coverage for certain crops/locations, NAP does not provide quality loss protection unless the damage is so severe as to leave the crop unmarketable for its intended use.

With a 5 percent loss threshold to qualify for assistance, the QLA Program will potentially cover a broader spectrum of quality losses than federal crop insurance or NAP.

Funding

The Appropriations Act provides that funding for assistance for production losses due to excessive moisture and drought under WHIP+, and for quality loss payments under the QLA Program is derived from two sources:

- It appropriates an amount equal to the unobligated balances provided under the Bipartisan Budget Act of 2018 (Pub. L. 115–123, henceforth “Budget Act”) for losses due to Hurricanes

⁴ In addition, some FCIC insurance policies offer revenue coverage, which covers losses due to low yields, reduced quality, and low prices, or some combination thereof.

⁵ For FCIC policies that offer revenue coverage.

⁶ <https://prodwebnrb.rma.usda.gov/apps/SummaryOfBusiness/PreparedReports>, accessed November 5, 2020.

⁷ Exceptions are for crops/locations for which the only available crop insurance coverage is a pilot program, an insurance plan with coverage for intervals based on weather indexes, or the Whole Farm plan of insurance.

Harvey, Irma, Maria, and other hurricanes and wildfires occurring in calendar year 2017 (implemented as the Wildfire and Hurricane Indemnity Program 2017 (WHIP 2017)). Unobligated balances from WHIP 2017 were previously folded into WHIP+.

- It also appropriates an amount equal to the unobligated balances provided under the Disaster Relief Act for losses due to Hurricanes Michael and Florence, other hurricanes, floods, tornadoes, typhoons, volcanic activity, snowstorms, and wildfires occurring in calendar years 2018 and 2019 (implemented as WHIP+).

The application window for excessive moisture and extreme drought losses under WHIP+ closed October 30, 2020, and payments continue to be processed. The application period for the QLA Program is January 6, 2021 through March 5, 2021 with payments determined once the application period has closed based on the amount of funding remaining at that time.

USDA estimates the Further Consolidated Appropriations Act, 2020 will provide approximately \$950 million, in addition to other funds provided in PL 116-20, for the continuation of disaster assistance program delivery, including payments to eligible producers for production losses due to excessive moisture and extreme drought under WHIP+ and for quality losses covered by the QLA Program. Of that amount, USDA anticipates that up to \$500 million will be available for QLA Program payments. In the event that, within the limits of the funding made available by the Secretary, approval of eligible applications would result in payments in excess of the amount available, FSA will prorate payments by a national factor to reduce the payments to an amount that is less than available funds as determined by the Secretary.

Qualifying Disaster Events

The QLA Program provides assistance for crop quality losses due to disaster events that occurred in calendar years 2018 or 2019. As with WHIP+, qualifying disaster events include hurricanes, excessive moisture, floods, certain drought conditions described below, tornadoes, typhoons, volcanic activity, snowstorms, wildfires, and related conditions. Except for drought, the QLA Program Assistance will be available for eligible farms located in counties that received a qualifying Presidential Emergency Disaster Declaration or Secretarial Disaster Designation. While producers from the primary disaster counties automatically qualify for the QLA Program; producers in contiguous counties can apply if they provide supporting documentation to establish that the crop was directly affected by a primary disaster county's qualifying event. Quality losses due to drought will only be eligible for QLA Program assistance if an area within the county was rated by the U.S. Drought Monitor as having a D3 (extreme drought) or higher level of drought intensity during the applicable calendar year.

Table 1 presents the number and type of disaster declarations by year, indicating the most commonly declared disaster was flood/flash flooding followed by drought, severe storms/thunderstorms, and excessive rain/moisture/humidity.

Table 1. Declarations by the President and Disaster Designations by the U.S. Secretary of Agriculture by Year

Disaster	Qualifying Disaster Event for QLA	Presidential Major Disasters and Presidential Emergency Declarations by Crop Year			Disaster Designation Made by the U.S. Secretary of Agriculture		
		2018	2019	2020	2018	2019	2020
Drought	Yes*	0	0	0	504	472	135
Flood, flash flooding	Yes	309	1067	24	261	655	1
Excessive rain, moisture, humidity	Yes	0	0	0	254	833	6
Severe storms, thunderstorms	Yes**	293	793	8	0	0	0
Ground saturation, standing water	Yes**	0	0	0	0	3	0
Hail	Yes**	0	0	0	19	84	0
Wind, high winds	Yes**	136	514	0	92	84	3
Fire, wildfire	Yes	14	0	0	2	0	0
Heat, excessive heat High temp. (incl. low humidity)	Yes**	0	0	0	3	57	0
Winter storms, ice storms, snow, blizzard	Yes	51	247	0	3	86	3
Frost, freeze	Yes**	0	0	0	30	96	3
Hurricanes, typhoons, tropical storms	Yes	235	93	0	196	19	0
Tornadoes	Yes	134	366	0	5	72	0
Volcanic activity	Yes	1	0	0	0	0	0
Mudslides, debris flows, landslides	Yes**	132	286	33	2	0	0
Heavy surf	Yes**	0	0	0	0	0	0
Ice jams	Yes**	0	0	0	0	0	0
Insects	No	0	0	0	0	0	0
Storm, tidal surges	Yes**	0	0	0	0	0	0
Cold, wet weather	Yes**	0	0	0	0	0	0
Cool and cold, below-normal temperatures	Yes**	0	0	0	2	92	0
Lightning	Yes**	0	0	0	5	70	0
Disease	No	0	0	0	0	0	0
Insufficient chill hours	No	0	0	0	0	0	0

Source: Data from USDA Farm Service Agency.

Note: Table only includes disasters which occurred in calendar years 2018 and 2019. For example, designated disasters for crop year 2020 occurred prior to January 1st, 2020. If a crop suffered at least a portion of its loss from a qualifying disaster event, FSA will consider the total quality loss caused by all eligible disaster events.

* If rated D3 or worse by the U.S. Drought Monitor.

** Denotes “related condition,” meaning damage occurring as a direct result of a qualifying disaster event, as determined by the Deputy Administrator.

Eligibility under the QLA Program

Eligible crops for assistance under the QLA Program include crops for which federal crop insurance coverage or NAP coverage is available. Eligible crops may have been sold, fed to livestock, or be in storage at the time of application. Subsequent crops grown on double-cropped acreage are only eligible if the crops have been approved as an eligible double-cropping practice by the FSA State committee. To be eligible, a crop must have suffered a quality loss due to a qualifying disaster, had at least a 5 percent quality loss (due to a combination of the qualifying disaster event and any other eligible causes of loss), and have a disaster designation (or other trigger) as indicated above.

Except for grain crops that have been sold, documentation of the quality loss (for example, from settlement sheets or laboratory test results) must be obtained within 30 days of harvest to preclude any quality damage or deterioration that might occur in storage.

Ineligible under the QLA Program:

- Production of multiple market crops already compensated under crop insurance, NAP, or WHIP+;
- Crops for which production used to calculate a crop insurance indemnity or WHIP+ payment was adjusted based on a comparison of sales price to the FCIC established price;
- Crops which received a crop insurance indemnity, NAP payment, or WHIP+ payment based on the quantity of production that was considered unmarketable;
- Crops for which production was reported as salvage value or secondary use;
- Sugar beets that were compensated through agreements with cooperative processors;
- Value loss crops, honey and maple sap because the yield and quality components of a loss cannot be readily separated; and
- Crop losses due to disaster events occurring after a crop was harvested or due to crop deterioration while in storage, and crop losses which could have been mitigated.

QLA Program Payment Calculations

Base QLA Program payments equal 70 percent of the producer’s quality-related loss as calculated according to QLA Program provisions. Depending on records submitted by the producer, an additional 50 percent reduction in the QLA Program payment may apply. In addition, QLA Program payments may be subject to a further reduction if funds are not sufficient to cover the aggregate claims for quality losses.

Except for the situations described as “ineligible” above, payments or benefits received under the federal crop insurance, NAP or WHIP+ programs do not affect a producer’s eligibility or payment received from the QLA Program.

QLA Program payments will be calculated using different formulas depending on the type of crop (forage or non-forage) and on the documentation available to verify the quality loss. Producers who do

not have verifiable documentation of the value discount, grading factors, or nutrient factors, as required for the crop year in which the loss occurred, are not eligible for a QLA Program payment. For crops in storage or forage crops, documentation must be dated and come from tests or analysis completed within 30 days of harvest. For crops without verifiable documentation of either the value discount due to a loss or historical nutrient factors (that is, payments calculated with either a county average loss per unit of measure or a county average percentage of loss), payments will be reduced by 50 percent. The general payment categories are as follows:

1. Non-forage crops that were sold with verifiable documentation of value discount due to quality: Payments will be equal to the dollar value of the loss on the affected production of the crop, multiplied by the QLA Program payment factor of 70 percent.
2. Non-forage crops without verifiable documentation of value discount but with verifiable documentation of the quality factors (includes both crops that were sold and crops that are stored on-farm and off-farm): If the documentation provided by the producer shows only the grading factors (e.g., broken kernels, grade, etc., but not the associated dollar value of the loss), the producer's QLA Program payment will be based on the county average quality loss for the crop, times the 70 percent QLA Program payment factor, times 50 percent. The county average loss per unit of measure for a crop is based on the weighted average sales price, net of loss discounts, in a county if at least 5 producers applied for payment with verifiable documentation of the value discount due to quality in that county. If the minimum 5 applications are not available, the FSA county committee may use application data from a contiguous county to establish the county average loss. If the contiguous county data are not sufficient, the FSA county committee may determine that a county average loss cannot be determined and producers in that county are ineligible for a QLA payment.
3. Forage crops with verifiable documentation of the nutrient factors for the crop year of the quality loss and the 3 preceding crop years: If the producer has verifiable documentation of the nutrient factors for the crop year of loss and the 3 preceding crop years, the QLA Program payment will equal the amount of affected production times the percentage of loss times the price established by FSA times the 70 percent QLA Program payment factor. The percent loss will be calculated by comparing the nutrient value of the affected production (for example, relative feed value, total digestible nutrients, etc.) to the nutrient value of the producer's crop for the 3 preceding crop years.
4. Forage crops with verifiable document of the nutrient factors for the crop year of the quality loss but without verifiable documentation for the 3 preceding crop years: If the producer does not have nutrient values for the 3 preceding crop years, the QLA Program payment will equal the product of affected production, the county average percentage of loss for the crop, the average market price established by FSA, the 70 percent QLA Program payment factor, and 50 percent. The county average percent loss for a crop is the average percent loss from producers applying for payment with verifiable documentation of nutritional factors from the 3 preceding years if that includes at least 5 producers in a county. If the minimum 5 applications are not available, the FSA county committee may use application data from a contiguous county to establish the county average loss. If the contiguous county data are not sufficient, the FSA

county committee may determine that a county average percentage of loss cannot be determined and producers in that county are ineligible for a QLA Program payment.

A person or legal entity, other than a joint venture or general partnership, is eligible to receive, directly or indirectly, up to \$125,000 per year in QLA Program payments per crop year. The direct attribution provisions in 7 CFR part 1400 apply to QLA Program payments. An average adjusted gross income (AGI) limitation of \$900,000 will apply unless more than 75 percent of AGI is derived from farming.

Payments for the QLA Program will not be issued until after the application period has ended. If the total amount of calculated QLA Program payments exceeds the amount of funding available, FSA will prorate all QLA Program payments by a national factor.

The Disaster Relief Act requires all participants who receive QLA Program payments to purchase crop insurance or NAP coverage for the next 2 available crop years at the 60 percent coverage level or higher. The latest year for meeting compliance with this provision will be the 2023 crop year. If the two consecutive years of coverage are not met by the 2023 coverage year, the participant must refund QLA Program payments with interest. If the farmer rotates the crop (e.g., does not plant corn the next year), they are not required to purchase insurance for that year.

General eligibility requirements, including recordkeeping requirements and required compliance with Highly Erodible Land Conservation and Wetland Conservation provisions, are similar to those for the previous ad hoc crop disaster programs and current permanent disaster programs. All information provided to FSA for program eligibility and payment calculation purposes, including production records, is subject to spot check.

Examples of Payments to Producers

The QLA Program is intended to assist producers that experienced eligible quality-reducing disasters. Meaningful data do not exist to generate an estimate of the magnitude of quality losses, the number of producers or crops that may qualify for assistance under the QLA program, or expected QLA Program payments. Crop insurance data, as previously discussed, do not capture any claim information that would allow identification of policies with quality losses for the APH-based insurance plans that comprise the bulk of FCIC policies. Table 1 above provides details on the number of declared disasters for calendar years 2018 and 2019, but provides no indication regarding the number of affected producers and crops, the magnitude of quality losses, etc.

Below, we illustrate QLA Program payment calculations for the following six examples:⁸

1. Non-forage crop, producer did not purchase crop insurance or participate in NAP, provides documentation of dollar value of loss.
2. Non-forage crop, producer did not purchase crop insurance or participate in NAP, provides only grading factors for quality loss.
3. Non-forage crop that was sold, producer purchased crop insurance, received indemnity payment for quality loss, provides documentation of dollar value of loss.

⁸ The crop insurance examples would largely apply analogously for NAP coverage with respect to the QLA payment.

4. Non-forage crop, producer purchased crop insurance, crop was unmarketable due to quality considerations, received indemnity payment for full insured value of crop.
5. Forage crop fed on the farm, producer provided nutrient factors for crop year of loss and 3 preceding crop years.
6. Forage crop fed on the farm, producer provided nutrient factors only for the crop year of loss.

All farmers are required by the Disaster Relief Act to purchase crop insurance (or NAP if applicable) for the next two available crop years at a minimum of a 60 percent coverage level, provided that they plant the same crop in the subsequent years. In the examples below, if the farmer is not compliant for the next two crop years (meaning the farmer grew corn but did not purchase crop insurance), the farmer must refund the QLA payment. Alternatively, if the farmer's county did not have federal crop insurance available, the farmer would instead pay the NAP premium, calculated as the product of 5.25 percent, the elected coverage level, approved yield, average market price, and producer's share of the crop.

Example 1.

In this example, the Adair County, Iowa corn producer did not purchase a federal crop insurance policy.⁹ The producer harvested 1,000 acres of corn and achieved a yield of 154 bushels per acre, for total production of 154,000 bushels. The market price was \$4 per bushel. At the local elevator, the production tested Sample Grade with 16 percent damaged kernels, and was discounted by 28 cents per bushel for damaged kernels and an additional 15 cents per bushel for testing Sample Grade. The dollar value of the loss equal was therefore equal to \$66,220 (154,000 bushels x \$0.43/bushel), which exceeds the 5 percent QLA Program threshold. At the time of QLA Program application, the producer submits appropriate documentation provided by the elevator showing the dollar value of the loss equal to \$66,220 due to reduced quality. As a result, the producer qualifies for an individual quality loss QLA Program payment equal to 70 percent of the dollar value of the loss or \$46,354.

Example 1. Corn Producer in Adair County, IA: Did Not Purchase Crop Insurance, Provides Documentation for Dollar Value of the Loss

A.	Actual production	Acreage x yield	154,000
B.	Value of production	Production x price	\$616,000
C.	Reduction in value due to reduced quality (actual production x quality discounts)	A x (\$0.28 + \$0.15)	\$66,220
D.	QLA 5 percent payment threshold	B x 5%	\$30,800
E.	QLA payment factor		70%
F.	2019 QLA payment	C x E if > D, otherwise \$0	\$46,354

⁹ Because federal crop insurance at the catastrophic level of coverage was available for the crop in the county, NAP coverage was not offered by FSA.

Example 2.

This example is similar to Example 1, except that the producer is only able to provide the grading factors as evidence of the quality loss, not the dollar value of the loss associated with discounts for the grading factors. In this situation, the QLA payment for which the producer is eligible will be based on the county average loss per unit as determined from QLA applications with acceptable documentation of the dollar value of the loss.

Additionally, assume the county average dollar value of the loss for corn in Adair County, Iowa (based on documentation from the QLA Program applications) was 36 cents per bushel. With affected production of 154,000 bushels, the dollar value of the loss experienced by the producer based on the county average loss per unit is \$55,440, which exceeds the 5 percent loss threshold for a QLA Program payment. The producer will therefore receive a QLA Program payment equal to the dollar value of the loss (\$55,440) times the 70 percent QLA payment factor times 50 percent, or \$19,404.

Example 2 would also apply for stored crops for which grading factors apply, whether stored on-farm or off-farm. Thus, the QLA payment would be based on the county average loss per unit calculated from QLA Program applications for sold production, again with a 50 percent reduction. Thus, in this example a producer holding the corn in storage would be eligible for a QLA payment of \$19,404.

Example 2. Corn Producer in Adair County, IA: Did Not Purchase Crop Insurance, Provides Only Grading Factors

A.	Actual production	Acreage x yield	154,000
B.	Value of production	Production x price	\$616,000
C.	Reduction in value due to reduced quality (actual production x quality discounts)	County average loss x A	\$55,440
D.	QLA 5 percent payment threshold	B x 5%	\$30,800
E.	QLA payment factor		70%
F.	Reduction for not having dollar value of loss		50%
G.	2019 QLA payment	C x E x F if (C x E) > D, otherwise \$0	\$19,404

Example 3.

In this example, a corn producer in Adair County, Iowa purchased a Yield Protection crop insurance policy in 2019 at the 85 percent coverage level with a 100 percent price election. According to the RMA actuarial documents, the projected price for corn in Adair County was \$4.00 per bushel, identical to the actual market price in the previous examples. With a coverage level of 85 percent, the insurance guarantee is 130,900 bushels. Following harvest, actual production was equal to expected production (154,000 bushels), but quality suffered as the crop tested Sample Grade and kernel damage was estimated at 16 percent as in the previous examples. From the RMA actuarial documents, the discount factor (DF) for Sample Grade is 0.085 and the DF for 16 percent kernel damage is 0.118, for a cumulative

DF of 0.203.¹⁰ The resulting quality adjustment factor (QAF) is 0.797 ($1.000 - 0.203$) and production to count (PTC) is 122,738 bushels (actual production x QAF). Because the insurance guarantee exceeded production to count, the producer received a crop insurance indemnity payment for the reduced quality equal to \$32,648.

At the time of the QLA Program application, the producer submits verifiable documentation provided by the elevator attesting to the \$66,220 loss. The dollar value of the loss is approximately double the 5 percent threshold (\$30,800) for a QLA Program payment. Because the crop was marketable and the indemnity payment for the quality loss was not based on a comparison of sales price to established price, the QLA Program payment amount is not affected by the crop insurance indemnity payment. Given the documentation and that the loss exceeds the 5 percent threshold, the producer qualifies for a QLA Program payment based on their individual quality loss of \$66,220. Thus, with the 70 percent QLA Program payment factor, the producer is eligible to receive a QLA Program payment equal to \$46,354.

Example 3. Corn Producer in Adair County, IA: Received Crop Insurance Indemnity Payment for Quality Loss, Provides Documentation for Dollar Value of the Loss

A.	Expected production	Acreage x yield	154,000
B.	Expected crop value	A x price	\$616,000
C.	Coverage level		85%
D.	Crop insurance guarantee	A x C	130,900
E.	Actual production		154,000
F.	Quality adjustment factor	$1.000 - (0.118 + 0.085)$	0.797
G.	Production to count	E x F	122,738
H.	Crop insurance indemnity	$\text{Max}(0, D - G) \times \text{price}$	\$32,648
I.	Reduction in value due to reduced quality (actual production x quality discounts)	$E \times (\$0.28 + \$0.15)$	\$66,220
J.	QLA 5 percent payment threshold	B x 5%	\$30,800
K.	QLA payment factor		70%
L.	2019 QLA payment	$I \times K \text{ if } > J, \text{ otherwise } \0	\$46,354

Example 4.

Example 4 is similar to Example 3, except the quality is so poor due to a qualifying disaster event that there is no buyer for the crop. In this situation, “Zero Market Value” (ZMV) crop insurance procedures apply for settling the claim. A ZMV determination will result in a DF of 1.000, a QAF of 0.000, and zero PTC for claims purposes, assuming the production is destroyed in an acceptable manner. The crop insurance indemnity is therefore equal to the amount of insurance for the crop (\$462,000). Because the crop was unmarketable and the producer was fully compensated (up to the amount of insurance) for the quality loss, the producer is not eligible for a QLA Program payment. Similarly, payments received

¹⁰ See <https://www.rma.usda.gov/en/Fact-Sheets/National-Fact-Sheets/Corn-Quality-Adjustment>

under WHIP+ and NAP because the crop was either unmarketable or sold for salvage value/secondary use, would also make the producer ineligible for assistance under the QLA Program.

Example 4. Corn Producer in Adair County, IA: Crop is Unmarketable Due to Quality Loss

A.	Expected production	Acreage x yield	154,000
B.	Expected crop value	A x price	\$616,000
C.	Coverage level		85%
D.	Crop insurance guarantee	A x C	130,900
E.	Actual (appraised) production		154,000
F.	Quality adjustment factor	$1.000 - (1.000)$	0.000
G.	Production to count	E x F	0
H.	Crop insurance indemnity	$\text{Max}(0, D - G) \times \text{price}$	\$523,600
I.	Reduction in value due to reduced quality (actual production x quality discounts)	B	\$616,000
J.	QLA 5 percent payment threshold	B x 5%	\$30,800
K.	QLA payment factor		70%
L.	2019 QLA payment	Not eligible	\$0

Example 5.

In this example, a cattle producer in Cheyenne County, Colorado grows forage to feed livestock. Because of inclement weather during the 2018 growing season, the relative feed value of the producer's 2018 forage crop was 75 percent of its historical average (a percentage loss of 25 percent), which exceeds the 5 percent QLA Program threshold. Total production was 1,000 tons and the price established by the FSA state committee for 2018 forage was \$200 per ton. The producer submits acceptable documentation of current and historical nutrient values at the time of QLA Program application. The producer's QLA Program payment is then calculated as affected production (1,000 tons) times the 25 percent reduction in nutrient value times \$200 per ton times the 70 percent QLA Program payment factor, or \$35,000.

The QLA Program payment calculations of Example 6 would extend analogously to stored production of forage crops with current and historical nutrient factors.

Example 5. Forage Producer in Cheyenne County, CO: Provides Current and Historical Nutrient Values for Forage Crops

A.	Affected production	Tons	1,000
B.	Forage price established by FSA state committee	\$/ton	\$200
C.	Percentage of loss	Percent	25%
D.	QLA payment threshold	Percent	5%
E.	QLA payment factor		70%
F.	2018 QLA payment	$A \times B \times C \times E$ if $C > D$, otherwise \$0	\$35,000

Example 6.

This example is similar to Example 5, except that the producer is unable to provide nutrient factors for the preceding 3 crop years. Thus, the county average percentage of loss would be used in the payment calculation, with a 50 percent reduction for not having historical records. Assume the county average percentage of loss based on QLA Program applications with acceptable documentation of current and historical nutrient factors was 20 percent. Thus, the producer's QLA Program payment would be equal to the product of the county average percent of loss (20 percent), affected production (1,000 tons), price (\$200 per ton) the QLA Program payment factor (70 percent), and 50 percent, or \$14,000 (.20 x 1,000 x \$200 x .70 x .50)

The QLA Program payment calculations of Example 6 would extend analogously to stored production of forage crops with nutrient factors for only the current crop year of affected production.

Example 6. Forage Producer in Cheyenne County, CO: Provides Only Current Nutrient Values

A.	Affected production	Tons	1,000
B.	Forage price established by FSA state committee	\$/ton	\$200
C.	Percentage of loss	Percent	20%
D.	QLA payment threshold	Percent	5%
E.	QLA payment factor	Percent	70%
F.	Reduction for not having historical records	Percent	50%
G.	2018 QLA Payment	A x B x C x E x F if C > D, otherwise \$0	\$14,000

Alternatives Considered

As discussed above, USDA estimates that after other disaster assistance payments have been finalized, including payments to eligible agricultural producers for crop production losses due to excessive moisture and extreme drought, about \$500 million will be available for the QLA Program.

As previously noted, there are no solid data or other credible information on which to base estimates of the magnitude or dollar value of the quality losses in calendar years 2018 or 2019. However, given the limited amount of funding expected to be available and the 5 percent quality loss threshold for a QLA Program payment, USDA believes it is likely that calculated payments based on QLA Program applications will exceed the available funding, and QLA Program payments will have to be prorated. Thus, alternative QLA Program provisions may change the distribution of payments among individual producers, but not change the aggregate QLA Program payment.

For example, the Disaster Relief Act limits the payment amount a producer may receive to 90 percent of the loss for insured producers or producers who obtained NAP coverage, and 70 percent of the loss for uninsured producers. However, the QLA payment factor was set equal to 70 percent of the loss regardless of crop insurance or NAP participation. Had the payment factor instead been set equal to 90 percent for insured producers and for producers with NAP coverage, individual QLA Program payments to such producers would be approximately 28.6 percent larger, subject to any applicable payment limit

restrictions. However, this may ultimately require a larger pro rata adjustment applied to all QLA Program payments to stay within the available funding. Insured producers and producers with NAP coverage would receive a larger share of the available funding at the expense of those producers who chose not to participate in crop insurance or NAP, as applicable.

Consider the following illustration. Assume the funding available for QLA Program payments is \$500 million as currently estimated, eligible quality-related losses for uninsured crops are \$250 million, and eligible quality related losses for insured crops and crops with NAP coverage are \$500 million. With a 70 percent QLA payment factor for all losses, calculated QLA Program payments are \$525 million, which results in QLA proration factor of approximately 95.2 percent (\$500 million in QLA funding divided by \$525 million in calculated QLA payments). Thus, QLA Program payments to producers of uninsured crops are about \$166.7 million and payments to producers of insured and NAP crops are about \$333.3 million.

However, if the QLA payment factor for insured and NAP crops were instead set to 90 percent, calculated QLA Program payments would equal \$625 million, resulting in a proration factor of 80.0 percent. Actual QLA program payments to producers of uninsured crops would then equal \$140.0 million and payments to producers of insured and NAP crops would equal \$360.0 million. Because the QLA Program is not offsetting other payments (crop insurance, NAP and WHIP+)¹¹, USDA has chosen to adopt a single QLA payment factor regardless of crop insurance and NAP participation.

Table 2. Effect of QLA Payment Factors on Payments for Uninsured vs. Insured Crops

	Uninsured Crops	Insured & NAP Crops	Total	National Pro-rata Factor
\$ Millions				
Eligible QLA Losses	\$250.0	\$500.0	\$750.0	
Equal QLA Payment Factors				
QLA Payment Factor	70%	70%		
Gross QLA Payments	\$175.0	\$350.0	\$525.0	95.2%
Prorated QLA Payments	\$166.7	\$333.3	\$500.0	
Different QLA Payment Factors				
QLA Payment Factor	70%	90%		
Gross QLA Payments	\$175.0	\$450.0	\$625.0	80.0%
Prorated QLA Payments	\$140.0	\$360.0	\$500.0	

Respondent Reporting Cost Estimate

¹¹ Unless the other payments were because the crop was unmarketable, sold for salvage value or secondary use, or based on a comparison of sales price to a reference price.

The value of the total annual burden on respondents is based on the estimated number of total annual responses, the estimated average time per response, and the respondent cost per hour.

The estimated number of respondents is 180,000. The public reporting for this information collection is estimated to average approximately 0.65184 hour per response, including the time associated with the potential for producer spot check.

Type of Respondents: Producers or farmers.

Estimated Number of Respondents: 180,000.

Estimated Number of Responses Per Respondent: 1.3117 (includes multiple forms).

Estimated Total Responses: 236,100.

Estimated Average Time Per Response: 0.65184 hours.

Estimated Total Time for Responses: 153,900 hours.

Respondent cost per hour was estimated using U.S. Bureau of Labor Statistics Occupational Employment and Wages data—specifically, NAICS code 11-9013 for Farmers, Ranchers, and Other Agricultural Managers.¹² The U.S. mean hourly wage for this category, as measured by the Bureau of Labor Statistics, is \$41.35. Fringe benefits for all private industry workers are an additional 29.9 percent, or \$12.36, resulting in a total of \$53.71 per hour.

The estimated cost is \$8.27 million (\$53.71 per hour times 153,900 hours).

¹² See: https://www.bls.gov/oes/current/naics2_11.htm