UNITED STATES DEPARTMENT OF AGRICULTURE FEDERAL CROP INSURANCE CORPORATION VEGETATION INDEX PLAN APICULTURE (API) CROP PROVISIONS

For ease in the administration of the terms of this policy and to avoid the duplication of documents, as used throughout the Basic Provisions and applicable handbooks and directives, the term "acre" is replaced by "colony;" "acres" and "acreage" is replaced with "colonies;" "acreage report" is replaced with "colony report;" and "acreage reporting date" is replaced with "colony reporting date." First and second crop definitions are not applicable. If a conflict exists among the policy provisions, the order of priority is as follows: (1) the Special Provisions; (2) these Crop Provisions; and, (3) the Basic Provisions of the Vegetation Index Plan of Insurance with (1) controlling (2), etc.

1. Definitions.

Apiculture – The raising and care of honey bees for agricultural crop production purposes, to include but not limited to: honey production, collection of pollen, wax, and breeding purposes.

Colony – A group of honey bees housed in a managed hive used for apiculture, which does not include wild or feral honey bees.

Contiguous – In lieu of the definition contained in section 1 of the Basic Provisions, acreage which contains locations occupied and foraged by insurable colonies owned or controlled by you, or rented by you for cash or crop share, in a county or grid that continues into an adjoining county or grid without interruption. Acreage separated by only a public or private right-of-way, waterway, or an irrigation canal will be considered contiguous. In this definition, colonies shall not be substituted for acreage.

County – In lieu of the last sentence in the definition contained in section 1 of the Basic Provisions, county also includes any acreage that contains locations occupied by insurable colonies contained within a grid ID that crosses an adjoining county line where the acreage occupied and foraged by such colonies are contiguous.

Crop – For the purposes of these Crop Provisions, crop means apiculture with the ability to produce honey.

Crop year – In lieu of the definition contained in section 1 of the Basic Provisions, the crop year begins on January 1 and ends on December 31.

Hive – A shelter constructed for housing a colony of honey bees, also referred to as a beehive.

Honey – A sweet, viscid fluid produced by bees from the nectar collected from flowers.

Honey bees – Bees of the species *Apis mellifera, sp* which produce and store honey.

Insured colonies – In lieu of the definition "insured acres" contained in section 1 of the Basic Provisions, your insured colonies do NOT have to equal your insurable colonies. You may select the number of colonies to be insured. However, the amount of your insured colonies in the county will not exceed 100 percent of your insurable colonies in the county.

Location – The physical point or residence of hives on a tract of land.

Unit – In lieu of the definition contained in section 1 of the Basic Provisions, the insured colonies within or assigned to a grid ID, by share, and index interval in the county.

2. Insured Crop.

- (a) In addition to the provisions in section 4(a) of the Basic Provisions, the insured crop will be apiculture:
 - (1) In which you have a share;
 - (2) Located on acreage in the county listed on the accepted application; and
 - (3) Reported by the colony reporting date.
- (b) You are NOT required to insure 100 percent of the insurable colonies in the county.

3. Insured and Insurable Colonies.

- (a) In lieu of section 5(a)(2) of the Basic Provisions, you may elect to insure all or a portion of your insurable colonies in the county.
- (b) In lieu of section 5(b) of the Basic Provisions, you will have only one dollar amount of protection per colony for the county while the amount of premium and indemnity will be calculated separately for each unit.
- (c) In lieu of section 5(c) of the Basic Provisions:
 - (1) The insured colonies are only those insurable colonies, located in the county listed on your accepted application, reported on or before the colony reporting date that you elect to insure; and
 - (2) The same colonies cannot be insured under more than one plan of insurance or in more than one state during the crop year. For example, if you have 1,000 insurable colonies and you elect to insure 500 colonies under these Crop Provisions in Ochiltree County, Texas; those same colonies cannot be insured in any other state or county or under any other plan of insurance during the crop year. However, the other 500 colonies can be insured in another county or state, or under another plan of insurance, if available.
- (d) For the purposes of section 5(d) of the Basic Provisions, separate points of reference must

- be established in a grid for the insured colony locations instead of by type and practice.
- (e) In addition to section 5(d) of the Basic Provisions, insured colonies may be allocated to more than one index interval for each grid ID and share. The minimum percentage of insured colonies allowed in any one index interval, by grid ID and share, is specified in the Special Provisions.
- (f) An insured may select any index interval provided in the Special Provisions; however, no month can be included in more than one selected index interval for each grid ID and share in the county. For example: If an insured selects an index interval that contains the months of April, May and June, the producer cannot select any other index interval offered that contains any of these same months for the same grid ID and share in the county.
- (g) Sections 5(e)(2), 5(e)(3), and 5(e)(4) of the Basic Provisions are not applicable.

4. Amounts of Protection and Coverage Levels.

- (a) In lieu of section 6(a) of the Basic Provisions, catastrophic risk protection is not available under these Crop Provisions.
- (b) For the purposes of section 6(b) of the Basic Provisions, you must select only one coverage level and one protection factor per county.

5. Report of Colonies.

- (a) In addition to section 8(b) of the Basic Provisions, your colony report must include the following information:
 - (1) All colonies in which you have a share in the United States;
 - (2) A certification that:
 - The point of reference used for each grid ID is identifying the locations of your insured colonies covered under these Crop Provisions;
 - (ii) The colonies qualify as apiculture; and
 - (iii) The selected index interval(s) support the vegetation production necessary for the insured crop.
- (b) Sections 8(g), 8(h), and 8(i) of the Basic Provisions are not applicable.
- (c) In lieu of sections 8(b)(3)(v) and 8(k)(2)(iii)(A) of the Basic Provisions, FSA farm serial number, FSA tract number, FSA field number, and supporting documentation are not required for API policies.

6. Share Insured.

(a) In addition to section 9(c) of the Basic Provisions, you may still have a 100 percent share in the insured crop even if you lease the colonies for only a portion of the crop year provided you receive 100 percent of the benefits from such crop. However, under no circumstances can the share in the colonies exceed 100 percent (e.g., the landlord cannot

- insure 50 percent of colonies and the tenant insure 100 percent of the colonies during the same crop year).
- (b) In addition to section 9 of the Basic Provisions, your share in the colonies will be used to determine the minimum percentage of insured colonies that must be allocated to each index interval in accordance with section 3(e) of these Crop Provisions.

7. Annual Premium and Administrative Fees.

In accordance with section 10(a) of the Basic Provisions, the annual premium is earned and payable at the time the insured crop is reported on or before the colony reporting date.

8. Insurance Period and Program Dates.

- (a) The sales closing date for all states and counties is September 30 preceding the start of the crop year, unless otherwise specified in the Special Provisions.
- (b) The cancellation and termination date for all states and counties is September 30, unless otherwise specified in the Special Provisions.
- (c) The contract change date for all states and counties is June 30, unless otherwise specified in the Special Provisions.

9. Access to Insured Crop and Record Retention.

In addition to 16(b) of the Basic Provisions, you must also retain and provide upon our request, or the request of any employee of USDA authorized to investigate or review any matter relating to crop insurance, all applicable records for all of your colonies in the United States that were not insured, but were required to be reported.

10. Indemnity and Premium Limitations.

Section 25 of the Basic Provisions is not applicable to these Crop Provisions.

Examples Demonstrating How the Apiculture Vegetation Index Works.

Note: Many of the calculations are rounded to the nearest whole dollar.

The county base value per colony for Apiculture in this example is \$120.00.

Producer A

Producer A has a 100 percent share and selects a 90 percent coverage level and a 120 percent protection factor, resulting in \$129.60 of protection per insured colony [dollar amount of protection per colony equals county base value per colony multiplied by the coverage level selected (\$120.00 x .90 = \$108) multiplied by the protection factor selected (\$108 x 120% = \$129.60)].

Producer A:

Has a colony location in the same grid as Producer $\mathbf{R}^{\boldsymbol{\cdot}}$

Has only one grid ID;

Has 1,000 insurable colonies in the county and chooses to insure all colonies resulting in 1,000 insured colonies.

Producer A insures 50 percent of his/her insured colonies and selects April – June Index Interval (500 colonies), and 50 percent of his/her insured colonies in July – September Index Interval (500 colonies).

Note: As provided in section 3(e), insured colonies may be allocated to more than one index interval for each grid ID and share. The total of insured colonies per unit must equal the total number of elected insured colonies for each grid ID and share. In addition, an insured may select any index interval provided in the Special Provisions; however, selected index intervals cannot contain any month in more than one interval for each grid ID and share in the county. In this example (all intervals are offered in the county) an insured is not allowed to insure colonies in February - April Index Interval, March - May Index Interval, May - July Index Interval, or June - August Index Interval because each of these intervals contains one of the months included in April - June Index Interval for this grid ID and share in the county.

Producer B

Producer B has a 50 percent share and selects a 75 percent coverage level and a 100 percent protection factor, resulting in \$90.00 of protection per insured colony [dollar amount of protection per colony equals county base value per colony multiplied by the coverage level selected ($$120.00 \times 0.75 = 90.00) multiplied by the protection factor ($$90.00 \times 100\% = 90.00)].

Producer B:

Has a colony location in the same grid as Producer $\mathbf{A}^{\boldsymbol{\cdot}}$

Has only one grid ID;

Has 1,000 insurable colonies in the county and chooses to only insure 800 colonies, resulting in 800 insured colonies.

Producer B insures 50 percent of his/her insured colonies and selects April – June Index Interval (400 colonies), and insures 50 percent of his/her insured colonies and selects July – September Index Interval (400 colonies).

Insurance Information

The expected grid index is 100 for each grid ID and index interval. The premium rate for 90 percent coverage level is \$10 per hundred dollars of protection for April – June Index Interval and \$11 per hundred dollars of protection for July – September Index Interval. The premium rate for 75

percent coverage level is \$6 per hundred dollars of protection for April – June Index Interval, and \$7 per hundred dollars of protection for July – September Index Interval. The adjustment factor is 0.01.

Policy Protection and Premium: Producer A

Producer A's total policy protection is \$129,600.

Producer A's policy protection for the unit comprised of April – June Index Interval is \$64,800 [\$129.60 x 500 colonies x 1.0 share (100% share)] and for the unit comprised of July – September Index Interval is \$64,800 [\$129.60 x 500 colonies x 1.0 share (100% share)].

The total premium due is \$13,608 [(\$129.60 per colony protection x \$10 per hundred rate x 500 colonies x 0.01 adjustment factor x 1.0 share for April – June Index Interval = \$6,480) + (\$129.60 per colony protection x \$11 per hundred rate x 500 colonies x 0.01 adjustment factor x 1.0 share for July – September Index Interval = \$7,128].

Of the total premium due, FCIC pays \$7,484 [($$6,480 \times 55$ percent maximum subsidy for 90 percent coverage = \$3,564) + ($$7,128 \times 0.55 = $3,920$)].

Producer A's trigger grid index is 90 [90% coverage level x 100 expected grid index].

Producer B

Producer B's total policy protection is \$36,000.

Producer B's policy protection for the unit comprised of April – June Index Interval is \$18,000 [\$90.00 x 400 colonies (50% of the insured colonies) x 0.5 share (50% share)] and for the unit comprised of July – September Index Interval is \$18,000 [\$90.00 x 400 colonies (50% of the insured colonies) x 0.5 share].

The total premium due is \$2,340.

Producer B's premium for the unit comprised of April – June Index Interval is \$1,080 [(\$90.00 per colony protection x \$6 per hundred rate x 400 colony x 0.01 adjustment factor x 0.5), and for the unit comprised of July – September Index Interval is \$1,260 [\$90.00 per colony protection x \$7 per hundred rate x 400 colony x 0.01 adjustment factor x 0.5 share].

Of the total premium due, FCIC pays \$1,497 [($\1080×64 percent maximum subsidy for 75 percent coverage = \$691) + ($\$1,260 \times 0.64$ = \$806)].

Producer B's trigger grid index is 75 [75% coverage level x 100 expected grid index].

Scenarios for April - June Index Interval:

Scenario 1 – FCIC issues a final grid index of 120 for the grid:

The final grid index is above both producers' trigger grid index, so no indemnity payment is due even if one or both have individual NDVI values for the index interval below normal.

Scenario 2 – FCIC issues a final grid index of 80 for the grid:

Producer A's trigger grid index of 90 is higher than the final grid index so he/she is eligible for an indemnity payment determined as follows: The payment calculation factor of $0.167 \{(90 - 80)/[90 - (100 \times 0.30)]\}$ multiplied by the \$64,800 policy protection per unit = \$10,822 indemnity payment.

Note: For each unit, your payment calculation factor will be {(your trigger grid index – final grid index) ÷ [your trigger grid index – (expected grid index x total loss factor)]}. The payment calculation factor cannot exceed 1.000.

Producer B's trigger grid index of 75 is less than the final grid index so no indemnity payment is due.

Scenario 3 – FCIC issues a final grid index of 60 for the grid:

Producer A's trigger grid index of 90 is higher than the final grid index so he/she is eligible for an indemnity payment determined as follows: The payment calculation factor of $0.500 \{(90 - 60)/[90 - (100 \times 0.30)]\}$ multiplied by the \$64,800 policy protection per unit = \$32,400 indemnity payment.

Producer B's trigger grid index of 75 is higher than the final grid index so he/she is eligible for an indemnity payment determined as follows: The payment calculation factor of $0.333 \{(75 - 60)/[75 - (100 \times 0.30)]\}$ multiplied by the \$18,000 policy protection per unit = \$5,994 indemnity payment.

Scenarios for July - September Index Interval:

Scenario 1 – FCIC issues a final grid index of 105 for the grid:

The final grid index is above both producers' trigger grid index, so no indemnity payment is due.

Scenario 2 – FCIC issues a final grid index of 78 for the grid:

Producer A's trigger grid index of 90 is higher than the final grid index so he/she is eligible for an indemnity payment determined as follows: The payment calculation factor of 0.200 {(90 - 78)/[90 -

(100 x 0.30)]} multiplied by the \$64,800 policy protection per unit = \$12,960 indemnity payment.

Producer B's trigger grid index of 75 is less than the final grid index, so no indemnity payment is due.

Scenario 3 – FCIC issues a final grid index of 70 for the grid:

Producer A's trigger grid index of 90 is higher than the final grid index so he/she is eligible for an indemnity payment determined as follows: The payment calculation factor of $0.333 \{(90 - 70)/[90 - (100 \times 0.30)]\}$ multiplied by the \$64,800 policy protection per unit = \$21,578 indemnity payment.

Producer B's trigger grid index of 75 is higher than the final grid index so he/she is eligible for an indemnity payment determined as follows: The payment calculation factor of 0.111 $\{(75 - 70)/[75 - (100 \times 0.30)]\}$ multiplied by the \$18,000 policy protection per unit = \$1,998 indemnity payment.

Total Indemnities for the Insurance Period

Scenario 1 – No indemnities for either producer.

Scenario 2 – Producer A's total indemnities are \$23,782 (\$10,822 April – June Index Interval, \$12,960 July – September Index Interval).

Producer B received no indemnities.

Scenario 3 - Producer A's total indemnities are \$53,978 (\$32,400 April – June Index Interval, \$21,578 July – September Index Interval).

Producer B's total indemnities are \$7,992 (\$5,994 April – June Index Interval, \$1,998 July – September Index Interval).