On September 17, 2014 the U.S. Department of Agriculture (USDA) Farm Service Agency (FSA) announced additional support for commercial Florida citrus growers to manage greening. To qualify as a commercial operation, fruit needs to be marketed. Such support is in the form of an expanded Tree Assistance Program (TAP). The original program assisted growers in the event of a loss that occurred within a single year due to a natural disaster such as a hurricane. The expanded TAP recognizes that greening affects trees over time. Therefore, the program will provide growers cost-sharing financial assistance to replace trees that meet a mortality criterion within a time period of up to six years.

The starting date of the expanded TAP is retroactive to October 1, 2011. The deadline for submitting an application for cost-sharing assistance on expenses of trees pulled between October 1, 2011 and December 31, 2014 will depend on the year for which the grower applies. For example, applications for year 2013 will need to be filed by January 31, 2015. If, instead, the grower applies for assistance for 2015 — say, for cumulative losses from 2013 and 2014 — the deadline is 90 calendar days after December 31, 2014. For 2015 and subsequent years, growers need to apply by the later of 90 calendar days of the disaster event or the date the loss became apparent.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>200 boxes per acre</td>
<td>2,591</td>
<td>1,554</td>
</tr>
<tr>
<td>250 boxes per acre</td>
<td>1,131</td>
<td>829</td>
</tr>
<tr>
<td>300 boxes per acre</td>
<td>723</td>
<td>565</td>
</tr>
</tbody>
</table>

Table 1. Number of acres of an orange grove implied by an AGI of $900,000 under different yield-price combinations.
**ELIGIBILITY**

The TAP is available for individuals or legal entities with an average annual adjusted gross income (AGI), during the last three years, of $900,000 or less. AGI refers to taxable income; that is, gross income minus adjustments such as farm expenses and personal deductions and exemptions. Below we provide a rough approximation of the maximum acreage that a grower who produces oranges for the juice market would need to earn at most an annual AGI of $900,000. However, our calculations are for illustration purposes and do not apply to any single operation. Therefore, we advise growers to consult their accountants or tax specialists to check whether their operations actually meet the established AGI limit.

We estimate the size of an operation potentially eligible for the extended TAP by making the following assumptions. First, we use USDA's latest figures for Florida orange acreage (418,900 bearing acres) and production of oranges (104.6 million boxes) for 2013/14. The resulting average production per acre is 250 boxes. We use such figure as the mean of a yield bracket with a low and high of 200 and 300 boxes per acre, respectively. Assuming an average of 6 pounds solid per box, we combine yields with sensible price assumptions to obtain an estimate of gross income per acre for each yield-price combination. Finally, assuming no other income, we adjust gross income per acre by deducting farm expenses per acre ($1,500), pick and haul charges per box ($2.50), Florida Department of Citrus tax per box ($0.20), a standard deduction for a married couple ($12,200), and the self-employment tax deduction, computed as half of the applicable self-employment tax. (A personal exemption is not taken into account since it phases out completely for a couple filing jointly with income above $422,500.)

Table 1 (page 22) shows the number of acres of an orange grove implied by an AGI of $900,000 for
combinations of prices and yield. Thus, for example, assuming a price of $13.20 per box and 250 boxes per acre, a grower with up to 829 acres would earn a gross income of $900,000 or less, making that grower potentially eligible for the TAP cost-sharing.

**HOW THE PROGRAM WORKS**

The grower can choose the length of the time period for which to claim a loss due to greening. That is, growers can choose to apply for TAP during any single year in which a stand sustained a mortality loss greater than 15 percent, after adjustment for normal mortality. Or, alternatively, growers can apply for TAP after the stand has accumulated tree mortality in excess of 15 percent (again, after adjustment for normal mortality) over a period of up to six years.

To receive financial assistance in 2015 and subsequent years, growers will first need to obtain approval from FSA for the trees they intend to replace. Thus, an authorized FSA representative will visit the grove and assess the trees’ condition prior to tree removal. Citrus trees will meet the program’s mortality criterion when they are either biologically dead or no longer are commercially viable due to greening.

**PAYMENTS**

Payments will be triggered when the stand sustains damage or mortality in excess of 15 percent after adjustment for normal mortality, which is established at 3 percent. Therefore, the TAP will reimburse the grower for a proportion of the expenses incurred when replacing any number of trees greater than 18 percent for the time period for which claims are made.

The calculation for TAP payments is the lesser of the following:

- a) 65 percent of the actual cost of replanting and 50 percent of the actual cost of site preparation
- b) The maximum eligible amount established for each individual practice by FSA.

In addition, payments are subject to a mandated sequestration (i.e.: reduction) of 7.3 percent. Table 2 shows an example of the TAP payment calculations for replacing one tree, assuming the requirement for 15 percent mortality plus 3 percent adjustment has been fulfilled. Note that FSA will examine each practice individually for computing payments.

Other payment considerations include the following:

1. An annual cap of 500 acres has been established on the cumulative total quantity of acres for which a grower can receive TAP payments.
2. The total payments under TAP will be capped to a maximum of $125,000 per individual or legal entity per application.
3. There will be no partial payments. For example, growers will not receive a partial payment after site preparation is complete. They will only receive a single payment after resets are planted.
4. Resets planted under TAP that get infected by greening are not re-eligible for cost-sharing assistance due to greening for another six years.
5. The new types of trees planted may differ from those replaced if the new types have the same general end use, as determined and approved by the FSA County Committee.
6. All approved practices must be completed by the grower within 12 months of the approval of the TAP application by the FSA.
7. One-for-one. The cost-sharing program is for replacing a tree with a single tree (even if the grower replaces a tree with two or more trees to increase density).
8. There will be no financial assistance for abandoned groves.

**EXAMPLE**

The following is an example for the calculation of the payment’s trigger and its amount based on a single grove acre.

**Trigger**

To qualify for assistance, the program requires the stand to sustain cumulative tree mortality over 15 percent due to greening, adjusted by

<table>
<thead>
<tr>
<th>Individual Practice</th>
<th>(1) Grower cost per tree</th>
<th>(2) Grower cost per acre</th>
<th>(3) TAP cost sharing</th>
<th>(4) = (1) or (2) x (3) TAP $ amount of cost sharing</th>
<th>(5) Maximum FSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of reset</td>
<td>8</td>
<td>65%</td>
<td>5.20</td>
<td>&lt; 8 per tree</td>
<td></td>
</tr>
<tr>
<td>Planting cost</td>
<td>2.64</td>
<td>65%</td>
<td>1.72</td>
<td>&lt; 2 per tree</td>
<td></td>
</tr>
<tr>
<td>Site preparation</td>
<td>11.88(^1)</td>
<td>50%</td>
<td>5.94</td>
<td>&lt; 500 per acre</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td><strong>12.86</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sequestration 7.3%</td>
<td></td>
<td></td>
<td>0.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total TAP Payment</strong></td>
<td></td>
<td></td>
<td><strong>11.92</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)Includes: Tree removal $8.73; Disk tree-site $1.53; Rotovate-disk tree site $1.62
a normal mortality rate of 3 percent; that is a total of 18 percent. Assuming there are 100 trees in our single acre, cost-sharing payments will be triggered when the number of trees to be replaced is greater than 18 (=100 x 18 percent).

**Payment**

Assuming a total of 28 trees need to be replaced in our hypothetical grove, the expanded TAP will provide cost-sharing for the expenses related to the replacement of 23 trees (=28 x 100 percent -18 percent). If we further assume the grower in this example has the same costs as those described in Table 2, the TAP cost-sharing payments for each practice after sequestration are as follows:

- **TAP payment for the cost of**
  - Resets: $110.87 (=5.2 x 23 x [100 percent - 7.3 percent])
  - Planting: $36.59 (=1.72 x 23 x [100 percent - 7.3 percent])
  - Site preparation: $126.65 (=5.94 x 23 x [100 percent - 7.3 percent])

Therefore, in this example, the total TAP payment adds up to $274.10 per acre.

**SUMMARY**

The expansion of the TAP will provide Florida citrus growers with cost-sharing payments to replace trees infected with greening that are either biologically dead or no longer commercially viable. The program will take into account the multi-year effect of the disease and is targeted to small- and medium-sized citrus growers. However, any commercial operation meeting the eligibility criteria qualifies for assistance. By cost sharing the expenses related to the replacement of infected trees, the Florida citrus TAP will provide support at the farm level. However, we expect the effects of such a program to also benefit the citrus industry as a whole by contributing to prevent further downsizing.

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