



## Weekly Farm Economics: Reductions in Insurance Guarantees Due to Lower 2013 Yields

Gary Schnitkey

Department of Agricultural and Consumer Economics  
University of Illinois

July 2, 2013

*farmdoc daily* (3):127

---

Recommended citation format: Schnitkey, G. "[Reductions in Insurance Guarantees Due to Lower 2013 Yields.](#)" *farmdoc daily* (3):127, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, July 2, 2013.

Permalink: <http://farmdocdaily.illinois.edu/2013/07/reductions-insurance-guarantees.html>

---

Late planting of soybeans could cause low 2013 yields. Low 2013 actual yields then could lower future Actual Production History (APH) yields. Since these lower APH yields are used to set crop insurance guarantees, this year's low APH yields could cause lower insurance guarantees in future years.

### Prevented Planting Decisions

The possibility of lower APH yields may be a consideration when making prevented planting decisions. If a farmer takes a prevented planting payment and does not plant a crop following the late planting period, there is no impact on the APH yield as prevented planting acres do not enter into the calculation of the APH yields (see [here](#) for a more complete discussion and the exception for planting after the late planting period. Conversely, yields from soybeans planted late will enter into the calculation of APH yield, potentially leading to reductions in APH yields. While this year's expected returns from prevented planting and late planting should have the largest impact on decisions, the potential for lower APH yields could be a consideration and favors taking the prevented planting payment.

### Low Yields and APH

When calculating APH yield reductions, note that there is a lowest yield that is used in calculating an APH yield. If an actual yield is below 60% of the T-yield, the producer can request to have the actual yield replaced with 60% of the T-yield. Each county has its own T-yield. In LaSalle County, for example, the T-yield is 44 bushel per acre. This means that the lowest yield used in calculating an APH yield is 27.6 bushels per acre (46 bushel T-yield x .6)

Also, the APH yield cannot decline by more than 10% from one year to the next. For a farm with a 50 bushel APH yield, this means that the yield cannot decrease by more than 5 bushels.

For many insurable units, a ten year yield history is used to determine APH yields. In these cases, the 2013 yield will replace the earliest yield in the yield history. For a ten-year yield history, it is straight forward to calculate the potential yield reduction: the APH yield will change by the difference in the 2013 and earliest yield divided by 10. As an example, suppose the earliest yield is 50 bushels per acre and the

---

*We request all readers, electronic media and others follow our citation guidelines when re-posting articles from farmdoc daily. Guidelines are available [here](#). The farmdoc daily website falls under University of Illinois copyright and intellectual property rights. For a detailed statement, please see the University of Illinois Copyright Information and Policies [here](#).*

2013 yield is 30 bushels per acre. The 30 bushel yield is above 60% of the T-yield. The 2013 yield is 20 bushels below the earliest yield (20 bushel reduction = 50 bushel earliest yield – 30 bushel yield in 2013). In this case, the APH yield will be reduced 2 bushels (20 bushel yield reduction / 10 years). If 2 bushels is less than 10% of the APH yield, then the reduction in the APH yield next year will be 2 bushels per acre.

For a yield history with less than 10 yields, the 2013 yield will add to the history. In these cases, an average before and after the 2013 yield provides an indication of impacts of 2013 yields.

A low 2013 yield will have a fairly long impact on APH yields. The 2013 yield will remain in the yield history until 10 later yields have been added to the yield history.

### **Lower Yields and Chance of Payments**

Lower APH yields will impact the chance of payments in future years. It is difficult to pinpoint the exact size of the reduction. Under typical situations, an evaluation of iFarm results suggests that a reduction of an APH yield by 2 bushels per acre will reduce the chance of payments by between 4 and 5 percent at an 85% coverage level for a Revenue Protection (RP) policy. The same 2 bushels reduction will have between a 2 and 3 percent reduction at a 75 percent coverage level. Reductions will decline with lower APH yields relative to expected yields. Reductions also will decline with lower coverage levels.

### **Summary**

Low 2013 actual yields could result in lower APH yields in future years. Lower APH yields then lower insurance guarantees in future years. The possibility of low yields could be a reason that favors taking a prevented planting payment. It would also be a factor in deciding not to plant a crop after the late planting period.