Agricultural Land Assessments

Chris Wilkening
Assessment Field Representative
January 2020
Today’s class will cover

• Review of IC 6-1.1-4-13
• Valuing Agricultural Land
• FAQ’s
• Resources
• Questions
Agricultural Land Assessments

- IC 6-1.1-4-13
- Agricultural land; assessment; soil productivity factors
- Sec. 13. (a) In assessing or reassessing land, the land shall be assessed as agricultural land only when it is devoted to agricultural use.
  
  (b) For purposes of this section, and in addition to any other land considered devoted to agricultural use, any:
Agricultural Land Assessments

(1) land enrolled in:

(A) a land conservation or reserve program administered by the United States Department of Agriculture;

(B) a land conservation program administered by the United States Department of Agriculture's Farm Service Agency; or
(C) a conservation reserve program or agricultural easement program administered by the United States Department of Agriculture's National Resources Conservation Service; (2) land enrolled in the department of natural resources‘ classified forest and wildlands program (or any similar or successor program);
(3) land classified in the category of other agriculture use, as provided in the department of local government finance's real property assessment guidelines; or
(4) land devoted to the harvesting of hardwood timber; is considered to be devoted to agricultural use. Agricultural use for purposes of this section includes but is not limited to the uses included in the definition of "agricultural use" in IC 36-7-4-616(b), such as the production of livestock or livestock products, commercial aquaculture, equine or equine products, land designated as a conservation reserve plan, pastureland, poultry or poultry products, horticultural or nursery stock, fruit, vegetables, forage, grains, timber, trees, bees and apiary products, tobacco, other agricultural crops, general farming operation purposes, native timber lands, or land that lays fallow.
Agricultural Land Assessments

Agricultural use may not be determined by the size of a parcel or size of a part of the parcel. This subsection does not affect the assessment of any real property assessed under IC 6-1.1-6 (assessment of certain forest lands), IC 6-1.1-6.2 (assessment of certain windbreaks), or IC 6-1.1-6.7 (assessment of filter strips).

(c) The department of local government finance shall give written notice to each county assessor of:
Agricultural Land Assessments

(1) the availability of the United States Department of Agriculture's soil survey data; and
(2) the appropriate soil productivity factor for each type or classification of soil shown on the United States Department of Agriculture's soil survey map.
Agricultural Land Assessments

• All assessing officials and the property tax assessment board of appeals shall use the data in determining the true tax value of agricultural land. However, notwithstanding the availability of new soil productivity factors and the department of local government finance's notice of the appropriate soil productivity factor for each type or classification of soil shown on the United States Department of Agriculture's soil survey map for the March 1, 2012, assessment date, the soil productivity factors used for the March 1, 2011, assessment date shall be used for the January 1, 2016, assessment date and each assessment date thereafter.
(d) The department of local government finance shall by rule provide for the method for determining the true tax value of each parcel of agricultural land.
Agricultural Land Assessments

- Programs by the USDA Farm Service Agency

- Programs by the USDA National Resources Conservation Service
Agricultural Land Assessments

Valuing Agricultural Land:


• The agricultural land assessment formula involves the identification of agricultural tracts using data from detailed soil maps, aerial photography, and local plat maps.
Agricultural Land Assessments

Each variable in the land assessment formula is measured using appropriate devices to determine its size and effect on the parcel’s assessment. Uniformity is maintained in the assessment of agricultural land through the proper use of soil maps, interpreted data, and unit values.
Agricultural Land Assessments

As illustrated in the following equation, the market value of agricultural land is calculated by dividing the net income of each acre by the appropriate capitalization rate.

Market value = Net Income ÷ Capitalization Rate
Agricultural Land Assessments

There is a subtle distinction between residential acreage tracts and land valued using the agricultural soil productivity method. The basis for this distinction is the different valuation methods used to determine land value for the two types of land.

- Agricultural land is valued using a statewide base rate and a soil productivity index system. All land utilized for agricultural purposes is valued in this manner.
- Residential land is land that is utilized or zoned for residential purposes.
“Assessors are directed that all acres enrolled in programs of the United States Department of Agriculture (USDA), Farm Services Agency, and Natural Resources Conservation Service and have received a “farm number” are eligible for classification as “agricultural”. Those acres have been determined by those administering federal programs to be a part of an “agricultural operation”. This applies to non-homestead acreage.”
Parcel Size:
The issue of parcel size has no bearing on the appropriate classification or pricing method of agricultural land, whether the parcel is wooded or used for other agricultural activities.
Agricultural Land Assessments

Agricultural land is categorized according to its land use type and soil identification. The following land use types, described in the sections below, apply to agricultural acreage:

- Type 2—classified land
- Type 4—tillable land
- Type 5—nontillable land
- Type 6—woodland
- Type 7—other farmland
- Type 8—agricultural support land
- Type 9—homesite
Agricultural Land Assessments

Type 2—Classified Land:
Classified land is land that has been applied for and approved for specific programs administered by the Indiana Department of Natural Resources (DNR) or the county surveyor. A 100% influence factor deduction applies to classified land. The following table describes the subtypes of classified land.
Agricultural Land Assessments

• Table 2-20. Classified Land Subtypes
• This subtype Indicates
• Type 21 Classified forest
• Type 22 Wildlands
• Type 24 Windbreak
• Type 25 Filter strip
Agricultural Land Assessments

Type 4—Tillable Land: Tillable land is land used for cropland or pasture that has no impediments to routine tillage. Cropland is:

- land used for production of grain or horticultural crops such as:
  - corn
  - soybeans
  - wheat
  - rotation pasture
  - hay
Agricultural Land Assessments

- vegetables
- orchard crops
- land used for cover crops
- land in summer fallow
- idle cropland
- land used for Christmas tree plantations
- land used for nursery plantings.
• Table 2-21. Tillable Land Subtypes
• This subtype Indicates
• Type 41 Land flooded occasionally—damaging floods occur two to four times in a ten-year period. A 30% influence factor deduction applies to this land use type.
Agricultural Land Assessments

- Table 2-21. Tillable Land Subtypes
- This subtype Indicates
- Type 42 Land flooded severely - damaging floods occur five times or more in a ten-year period. A 50% influence factor deduction applies to this land use type.
Agricultural Land Assessments

• Table 2-21. Tillable Land Subtypes
• This subtype Indicates
• Type 43 Farmed wetlands—land that the U.S. Department of Agriculture has designated as farmed wetlands. This land type applies only to areas of contiguous land measuring 2.5 acres or more.
Agricultural Land Assessments

- Table 2-21. Tillable Land Subtypes
- This subtype indicates
- Type 43: This land use type must be verified through records obtained from the U.S. Department of Agriculture, Farm Service Agency. A 50% influence factor deduction applies to this land use type.
Agricultural Land Assessments

- Farmable Wetlands Program (USDA)

- State Offices – Indiana (USDA)
  - https://www.fsa.usda.gov/state-offices/Indiana/index
Agricultural Land Assessments

• Type 5 - Nontillable Land
• Nontillable land is land covered with brush or scattered trees with less than 50% canopy cover, or permanent pasture land with natural impediments that deter the use of the land for crop production. A 60% influence factor deduction applies to nontillable land.
Agricultural Land Assessments

• Type 6 - Woodland
• Woodland is land supporting trees capable of producing timber or other wood products. This land has 50% or more canopy cover or is a permanently planted reforested area. This land use type includes land accepted and certified by the Indiana Department of Natural Resources (DNR) as forest plantation under guidelines established to minimize soil erosion. An 80% influence factor deduction applies to woodland.
Agricultural Land Assessments

A wooded parcel of land less than 10 acres may be assessed using the agricultural soil productivity method upon evidence of timber production or other agricultural use. In addition, smaller than 10 acre parcels not contiguous with other wooded parcels under the same ownership may qualify as — agricultural.
“Of assistance to the assessor in determining the classification is evidence of enrollment in programs which assign a “farm number” or programs designed to foster timber production management.” The determining factors are provided in Indiana Code section 6-1.1-4-13, the Manual, and Guidelines. Of particular interest to the assessing official is the reason for the purchase of the land.”
Agricultural Land Assessments

While not controlling in the assessing official’s determination, the following factors may be of assistance:

(1) the acreage is designated by the DNR as qualifying for one of their classified programs. The DNR has established a 10 acre minimum for its programs; and

(2) the owner can show an active timber management program in place which will improve the marketability of the forest for an eventual harvest; and
(3) the owner possesses a DNR management plan to further enhance the forest quality; and
(4) the owner can show that regular forest harvests have occurred over a long time period.
Agricultural Land Assessments

• Table 2-22. Other Farmland Subtypes
  This subtype Indicates
• Type 71 Land used for farm buildings and barn lots. This land use subtype does not include homesites. The value is determined using the appropriate soil map productivity factor and a 40% influence factor deduction.
Agricultural Land Assessments

• Table 2-22. Other Farmland Subtypes
• This subtype Indicates
• Type 72 Land covered by a farm pond or running water. The value is determined using a productivity factor of .50 and a 40% influence factor deduction.
Agricultural Land Assessments

- Table 2-22. Other Farmland Subtypes
- This subtype Indicates
- Type 73 2.5 contiguous acres of land designated by the U.S. Department of Agriculture as wetlands. This land use type must be verified through records obtained from the U.S. Department of Agriculture, Farm Service Agency. The value is determined using a productivity factor of .50 and a 40% influence factor deduction.
Agricultural Land Assessments

• Table 2-23. Agricultural Support Land Subtypes
  This subtype Indicates
• Type 81 A legal ditch. The area used and occupied as part of a legal drainage ditch is considered to have no value and is deducted from the total parcel acreage. This area also includes the area adjacent to the ditch that cannot be farmed because of the need for access to the ditch.
• Table 2-23. Agricultural Support Land Subtypes
• This subtype Indicates
• Type 82 A public road. The right-of-way area dedicated for public roads is deducted from the total parcel acreage.
Agricultural Land Assessments

• Table 2-23. Agricultural Support Land Subtypes
• This subtype Indicates
• Type 83 Land on which public utility transmission towers are situated. The area of .125 (1/8) acre is deducted from the parcel acreage. The transmission line right-of-way is assessed according to the land use of the acreage and is not deducted from the parcel acreage.
Agricultural Land Assessments

- Type 9 - Homesite
- One acre per dwelling on an agricultural property is classified as agricultural homesite land. The base rate for an agricultural homesite acre is a flat rate determined by the assessing official. A soil map productivity factor is not applied. Information about valuing an agricultural homesite is provided in the section *Valuing Residential Acreage and Agricultural Homesites*. Type 92 is a subtype of Type 9.
Agricultural Land Assessments

• Type 92 Indicates agricultural excess acres. This land area is presently dedicated to a non-agricultural use normally associated with the homesite. Areas containing a large manicured yard over and above the accepted one acre homesite would qualify for the agricultural excess acre designation. The agricultural excess acre rate is the same rate that is established for the residential excess acre category. These rates are determined by the assessing official.
Agricultural Land Assessments

• Using Soil Maps
• The agricultural land assessment formula values farmland, in part, based on the productivity of each parcel’s soil resources. More productive land is rated higher than less productive land. Therefore, more productive land has a higher value. To evaluate and categorize land according to its productivity, measurements are calculated from detailed soil maps published by the U.S. Department of Agriculture.
Agricultural Land Assessments

- Soil maps show where different soils are located within the landscape and narrative text describes the various soil characteristics. Soils are classified based on soil series and soil map units.
Agricultural Land Assessments

• Soil Series
  • A soil series is a basic classification of soils. A soil series is a group of soil units that are similar according to such characteristics as:
    • horizons (soil layering)
    • drainage class
    • water holding capacity
    • organic matter content
    • various other soil characteristics
Agricultural Land Assessments

• Soil series are named with names such as Miami, Crosby, Fox, and Brookston. Each soil series is formed in a type of parent material and is generally found in a particular type of location in landscapes. For example, the poorly drained Brookston series generally is found in depressions or wide, flat areas. The soil series classification system used in the United States is national in scope.
Agricultural Land Assessments

• Therefore, the soil categorized in a particular soil series, such as Miami, is the same across counties throughout the state.

• Soil properties, such as depth, water holding capacity, and organic matter content, are used to help estimate the productivity of the soil. Because soils are naturally occurring, not all soils categorized in a particular soil series are exactly alike.
When defining a soil series, a range is defined for the characteristics noted above to account for variations. However, these variations do not greatly affect the productivity of the soil.
Agricultural Land Assessments

• Soil Map Units
  • Each soil series is further subdivided into soil map units. After soil scientists identify a soil series, they further subdivide the series by identifying soil map units based on variations in:
    • surface texture, such as silt loam or sandy loam
    • slope class
    • amount of previous erosion
Agricultural Land Assessments

• Soil scientists draw lines around each soil map unit on aerial photographs based on their best estimate of where the soil series or soil map unit changes. In reality, the change from one soil map unit to another is gradual.
Agricultural Land Assessments

- Understanding the Calculation of the Soil Productivity Index
- For the purpose of defining the agricultural land assessment formula, each of the approximately 2,400 soil map units in Indiana is assigned a productivity rating. This rating is based on average estimated crop yields, which in turn are based on the physical properties of the soil, such as:
Agricultural Land Assessments

- slope
- moisture holding capacity
- natural drainage class
- depth of rooting
- amount of surface soil remaining
- organic matter content
- various other soil characteristics
Agricultural Land Assessments

• Soil productivity ratings in Indiana are based on corn yield estimates. Estimated corn yields are the most convenient and reliable yield estimates since no other crop is grown on a wider range of soils or over a larger area in the state. Estimated corn yields are based on an average level of crop management and reflect a 10-year average.
Agricultural Land Assessments

• Estimates of corn yields for particular soil map units are tested using data collected by Purdue University and the U.S. Department of Agriculture, Natural Resource Conservation Service from field trials, yield tests, and producer experiences. An average level of crop management is assumed to account for variations in the amount of fertilizer used, time of planting, hybrid performance, and tillage systems--crop management factors that can cause yield differences.
Agricultural Land Assessments

- Thus, the soil productivity ratings reflect the yield differences caused by the properties of the soil, not the crop management decisions made by agricultural producers.
- The productivity factor for a soil map unit is calculated by dividing the estimated 10-year average corn yield (calculated in bushels per acre) by 100. Productivity factors do not accurately predict the actual yields for a particular year since weather has a great influence on actual yields.
Agricultural Land Assessments

• However, you can think of the soil productivity index as a relative ranking of soil map units. The more productive the soil, the higher the rating. The best soil in the state has a productivity factor of approximately 1.28; the poorest soil has a productivity factor of .50.
Agricultural Land Assessments

• Valuing Strip Mined Agricultural Land
  • If coal has been strip mined from agricultural land subsequent to the creation of the detailed soil map for the area, the assessor must apply a special productivity factor to that land:
  • “For land strip mined on or before December 31, 1977, identify the “Soil I.D.” as “SBD7” and apply a productivity factor of .75.”
Agricultural Land Assessments

- Valuing Strip Mined Agricultural Land
  - “For land strip mined after December 31, 1977, identify the “Soil I.D.” as “SAD7" and apply a productivity factor of .68.
Agricultural Land Assessments

• Table 2-24. Agricultural Land Use Types
• This type Indicates
• 21 Classified forest land
• 22 Wildlands
• 24 Classified windbreak land
• 25 Classified filter strip land
• 4 Tillable land
• 41 Tillable land that floods occasionally
Agricultural Land Assessments

• Table 2-24. Agricultural Land Use Types
• This type Indicates
• 42 Tillable land that floods severely
• 43 Designated farmed wetlands
• 5 Nontillable land
• 6 Woodland
• 71 Other farmland: land used for farm buildings and barn lots.
Agricultural Land Assessments

• Table 2-24. Agricultural Land Use Types
• This type Indicates
• 72 Other farmland: land covered with a farm pond or running water
• 73 Other farmland: designated wetlands
• 81 Agricultural support land: legal ditch
Agricultural Land Assessments

- Table 2-24. Agricultural Land Use Types
- This type Indicates
- 82 Agricultural support land: public road right-of-way
- 83 Agricultural support land: land on which public utility transmission towers are situated
- 9 One-acre homesite
- 92 Agricultural excess acres
### Agricultural Land Assessments

- Table 2-25. Influence Factors for Agricultural Acreage
- For this land use type Use this influence factor deduction

<table>
<thead>
<tr>
<th>Factor</th>
<th>Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>- 100%</td>
</tr>
<tr>
<td>22</td>
<td>- 100%</td>
</tr>
<tr>
<td>24</td>
<td>- 100%</td>
</tr>
<tr>
<td>25</td>
<td>- 100%</td>
</tr>
<tr>
<td>4</td>
<td>None</td>
</tr>
<tr>
<td>41</td>
<td>- 30%</td>
</tr>
</tbody>
</table>
Agricultural Land Assessments

• For this land use type

• Use this influence factor deduction

• 42
  - 50%

• 43
  - 50%

• 5
  - 60%

• 6
  - 80%

• 71
  - 40%

• 72
  - 40%

• 73
  - 40%
Agricultural Land Assessments

- Indiana Board of Tax Review (IBTR)
- *St. Joseph County Assessor v. Martin Blad Farms, Inc.*
• Assessor’s Contentions
• Parcels in question rose in value solely due to the increase of the agricultural land base rate mandated by the Department.
  • 2013 - $1,750 per acre
  • 2014 - $2,050 per acre
• Taxpayer requested a negative 50% influence factor the parcels in question but some are already receiving this due to the soil type and associated soil productivity factor.
• Each parcel was assessed in the same manner using soil maps and associated soil productivity factors with each soil type.
“Taxpayers’s Contentions”

Taxpayer contended that the value was too high for a “muck farm” which according to the USDA as “very poorly drained.”

Taxpayer contended that the Department relies on Purdue University’s Dideriksen model which assumes drainage tiles on the land but the subject property had no such drainage, the cost-to-cure would be too great to place these tiles.

Taxpayer used a cap rate taken from the Department, farm income, and developed a land value (only meant to be illustrative) which was well below the adjusted base rate.
Agricultural Land Assessments

• “Taxpayers’s Contentions contd.”
• Taxpayer also contended that the farm floods consistently and should be changed from a type 4 to 42, and show two instances of flooding through insurance claims.
Agricultural Land Assessments

• Burden of Proof and Analysis
• Assessor had the burden of proof due to the total value increasing by more than 5% under IC 6-1.1-15-17.2(d).
• Assessor made a prima facie case with relevant soil maps and PRCs.
• The Board addressed two assertions from the taxpayer: (1) the statutory process for assessing agricultural land is not accurate for the subject property; (2) the increased base rate is too much for farmers.
• Burden of Proof and Analysis contd.
  • “It is the legislature’s prerogative to decide how real property is assessed...As the legislature has laid out specific guidelines for agricultural land, we are bound to enforce them.”
  • The Board also addressed the claims of flooding and determined that there was little evidence to support this claim and that there were only two instances of flooding whereas the threshold for Type 42 land is at least five times within ten years.
  • The Board ruled in favor of the assessor.
Question: I have a taxpayer who is questioning whether or not a rye field would be considered agricultural or not. They have permits for a brewery & so the rye would be used for this purpose. I assume it would qualify such as grapes, lavender etc. Please let me know your thoughts on this.
• Answer: My understanding is that rye is a grass grown extensively as a grain, a cover crop and a forage crop. Hence, I would consider the land being used to grow the rye to be agricultural land. Of course each situation should be reviewed separately, and the specific use of the property. If you do not believe it should be assessed as agricultural land, that is your prerogative. If the taxpayer does not agree with his assessment, in this case the classification of his land, he could file an appeal.
Question: My father is a farmer in XXX County and I'm trying to help him find the answer to a question concerning a woods he owns. The question is this...what percentage of a woods must have tree coverage to qualify that piece of property as a woods?

Answer: As part of the property tax assessment process, land that has at least a 50% canopy cover or is a permanently planted reforested area can receive an 80% influence factor.
Agricultural Land Assessments

• Answer: con’t: Additionally, the DNR has a “Classified Forest and Wildlands Program” ([http://www.in.gov/dnr/forestry/files/fo-ClassifiedForestBrochure.pdf](http://www.in.gov/dnr/forestry/files/fo-ClassifiedForestBrochure.pdf)). I have copied some pertinent information below:

• A Classified Forest and Wildlands tract is an area of at least 10.0 contiguous acres of forest or non-forest wildlife habitat where the landowner has agreed (by application) to be a good steward of the land and its natural resources.
• In return, the State of Indiana agrees to see that the assessed value of the land is significantly reduced and taxed on that preferential assessment. The land is managed for timber production, wildlife habitat, and the protection of watersheds, while conserving other natural resources and values.
Agricultural Land Assessments

- Eligible lands may be either native forests containing at least 40 square feet of basal area per acre or at least 1,000 timber-producing trees (any size) per acre. Tree plantations with at least 400 well-established timber-producing trees are also eligible to be classified. Wildlands can include natural or planted grasslands, wetlands, native woody vegetation, or areas of open water averaging less than 4 feet in depth or less than 2 acres in size.
Agricultural Land Assessments

- Question: This parcel is 133.5 acres classified forest. How is this value from $100 to $2,000 going to affect the tax bill for 2017 pay 2018? The 2016 pay 2017 tax bill was $5.00. Why such a drastic increase in one year?
- Answer: In 2016, Senate Enrolled Act 308 – 2016, changed the assessment rate of classified forest land from $1 per acre to $13.29 per acre, effective for the January 1, 2017 assessment date.
Answer con’t: In regard to the constituent’s question about the tax implications as a result of the change in assessed value, depending on the tax rate, the tax bill will go from $5 (which is the minimum tax bill amount) to no more than $40 (it may be less than $40). The $40 amount is derived by taking the $2,000 times the 2% circuit breaker for agricultural land ($2,000 x 2% = $40).
Agricultural Land Assessments

- Classified land rates per acre through the years.
  - 2016 - $1
  - 2017 - $13.29 (Changed mandated by SEA 308 – 2016)
  - 2018 - $13.57
  - 2019 - $13.85
  - 2020 - TBD
Agricultural Land Assessments

- Resources:
Agricultural Land Assessments

• Resources con’t.:  
Questions
Contact Us

• Chris Wilkening
  • Telephone: 317-767-5402
  • Email: cwilkening@dlgf.in.gov
  • Website: www.in.gov/dlgf
  • “Contact Us” http://www.in.gov/dlgf/2338.htm