

# **Publication 122**

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### Instructions for Farmland Assessments

The information in this publication is current as of the date of the publication. Please visit our website at **tax.illinois**. **gov** to verify you have the most current revision.

The contents of this publication are informational only and do not take the place of statutes, rules, or court decisions. For many topics covered in this publication, we have provided a reference to the Illinois Property Tax Code for further clarification or more detail. All of the sections and parts referenced can be found at 35 ILCS 200/1 et seq.

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#### About this publication

Pub-122, Instructions for Farmland Assessments, is issued according to Section 10-115 of the Property Tax Code which states, "The Department shall issue guidelines and recommendations for the valuation of farmland to achieve equitable assessment within and between counties."

#### **Definition of Land Use**

Section 10-125 of the Property Tax Code identifies cropland, permanent pasture, other farmland, and wasteland as the four types of farmland and prescribes the method for assessing each. State law requires cropland, permanent pasture, and other farmland to be defined according to US Bureau of Census definitions. The following definitions comply with this requirement.

- Cropland includes all land from which crops were harvested or hay was cut; all land in orchards, citrus groves, vineyards, and nursery greenhouse crops; land in rotational pasture, and grazing land that could have been used for crops without additional improvements; land used for cover crops, legumes, and soil improvement grasses, but not harvested and not pastured; land on which crops failed; land in cultivated summer fallow; and, idle cropland.
- Permanent pasture includes any pastureland except woodland pasture and pasture qualifying under the Bureau of Census' cropland definition which includes rotational pasture and grazing land that could have been used for crops without additional improvements.
- Other farmland includes woodland pasture; woodland, including woodlots, timber tracts, cutover, and deforested land; and farm building lots other than homesites.
- **Wasteland** is that portion of a qualified farm tract that is not put into cropland, permanent pasture, or other farmland as the result of soil limitations and not as the result of a management decision.

#### How is farmland assessed?

Cropland is assessed according to the equalized assessed value (EAV) of its adjusted soil productivity index (PI) as certified by the Department. Each year, the Department supplies a table that shows the EAV of cropland by PI.

Note See Page 13 for Certified Values for 2017 Farmland Assessments.

Cropland with a PI below the lowest PI certified by the Department is assessed as follows:

- **Step 1** Subtract the EAV of the lowest certified PI from the EAV for a PI that is five greater.
- Step 2 Divide the result of Step 1 by 5.
- **Step 3** Find the difference between the lowest PI for which the Department certified a cropland EAV and the PI of the cropland being assessed.
- **Step 4** Multiply the result of Step 2 by the result of Step 3.
- **Step 5** Subtract the result of Step 4 from the lowest EAV for cropland certified by the Department.
- Step 6 The EAV of the cropland being assessed will either be the result of Step 5 or one-third of the EAV of cropland for the lowest certified PI, whichever is greater.
- Permanent pasture is assessed at one-third of its adjusted PI EAV as cropland. By statute, the EAV of permanent pasture cannot be lower than one-third of the EAV per acre of cropland of the lowest PI certified by the Department.
- Other farmland is assessed at one-sixth of its adjusted PI EAV as cropland. By statute, the EAV of other farmland cannot be lower than one-sixth of the EAV per acre of cropland of the lowest PI certified by the Department.
- Wasteland is assessed according to its contributory value to the farm parcel. In many instances, wasteland contributes to the productivity of other types of farmland. Some land may be more productive because wasteland provides a path for water to run off or a place for water to collect. Wasteland that has a contributory value should be assessed at one-sixth of the EAV per acre of cropland of the lowest PI certified by the Department. When wasteland has no contributory value, a zero assessment is recommended.

#### What are the adjustment factors?

- Adjustment for slope and erosion. Use the Slope and Erosion Adjustment Table on Page 35 to make adjustments to the PI for slope and erosion.
- Adjustment for flooding. Adjust the PI of the affected acreage *only*, which suffers actual, not potential, crop loss due to flooding as prescribed in *Bulletin 810*, published by the University of Illinois, College of Agriculture, Cooperative Extension Service. The following text is taken directly from *Bulletin 810*.

"Estimated yields and productivity indices given in Table 2 apply to bottomland soils that are protected from flooding or a prolonged high water during the cropping season because of high water in stream valleys. Soils that are subject to flooding are less productive than soils that are protected by levees. The frequency and severity of flooding are often governed by landscape characteristics and management of the watershed in which a soil occurs. For this reason, factors used to adjust productivity indices for flooding must be based on knowledge of the characteristics and history of the specific site. Wide variation in the flooding hazard, sometimes within short distances in a given valley, require that each situation be assessed locally.

If the history of flooding in a valley is known to have caused 2 years of total crop failures and 2 years of 50% crop losses out of ten years, for example, the estimated yields and productivity indices of the bottomland soils could be reduced to 70% of those given in Table 2. Estimated crop yields and productivity indices for upland soils subject to crop damage from long-duration ponding have already been reduced accordingly in Table 2."

Flood adjustment procedures should

- identify the actual acres affected by flooding;
- determine, from yield data, the extent of crop loss (in bushels) caused in each flood situation;
- adjust the PI of the affected soils by a percentage equal to the percentage of crop loss caused by each flooding situation over a multi-year (preferably tenyear) period; and
- recompute the flood adjustments annually. The continuous collection and analysis of yield data is needed in order to identify and compensate for changes in a parcel's flooding history.
- Adjustment for drainage district assessments.

  The EAV of farmland acreage that is subject to a drainage district assessment must be adjusted. Divide the amount equal to 33 1/3 percent of the per acre drainage district assessment by the five-year Federal Land Bank

mortgage interest rate for that assessment year. Subtract the result from the EAV. Since drainage district assessments may vary greatly from year to year, it is advisable to use a five-year average of per-acre drainage district assessments when making this adjustment.

Adjustments for soil inclusions, droughty soil and ponding. Do not make an adjustment for soil inclusions, droughty soil, or ponding. Long-term yield averages taken at many locations already include these effects. Only unusual conditions of large amounts of inclusions with differing productivity potential would be likely to affect the productivity of a local area.

When ponding consistently produces a crop loss, make a flooding adjustment.

# What are the guidelines for alternative uses?

- Roads. Do not assign a value to acreage in dedicated roads unless a portion of the right-of-way is in a farm use. In this case, assess this portion.
- Creeks, streams, rivers, and drainage ditches. Assess acreage in creeks, streams, rivers, and drainage ditches that contribute to the productivity of a farm as contributory wasteland. Assess acreage that does not contribute to the productivity of a farm as non-contributory wasteland.
- Grass waterways and windbreaks. Assess acreage in grass waterways and windbreaks as other farmland.
- Ponds and borrow pits. Assess ponds and borrow pits used for agricultural purposes as contributory wasteland. If a pond or borrow pit is used as part of the homesite, assess it with the homesite at 33 1/3 percent of market value.
- **Power lines.** Generally, no adjustment is made.
- Lanes and non-dedicated roads. Assess acreage in lanes and non-dedicated roads the same as the adjacent land use. This could be as cropland, permanent pasture, other farmland, or wasteland.
- Assessment of land under an approved forestry management plan. Land that is being managed under the Illinois Forestry Development Act (FDA), as approved by the Illinois Department of Natural Resources, is considered "other farmland" for assessment purposes. Land assessed under the FDA is excluded from both the two-year and primary-use requirements. Any change in assessed value resulting from a newly-approved FDA plan begins on January 1 of the assessment year immediately following the plan's initial approval date (whether or not trees have been planted). Changes in assessed value resulting from amendments or cancellations of existing plans also begin as of January 1 of the assessment year following the change. If the effective

date of an FDA plan is January 1, then that plan would be eligible for an FDA assessment for that assessment year. Once the chief county assessing officer (CCAO) receives official notification that a tract has been granted approved FDA status, this status remains in effect until notified otherwise or until the property is sold. For more information, see Publication 135, Preferential Assessments for Wooded Acreage.

Assessment of land in vegetative filter strips. Land in all downstate counties that has been certified by the Soil and Water Conservation District (SWCD) as being in an approved vegetative filter strip (VFS) is eligible, upon application, to be assessed at one-sixth of its soil PI EAV as cropland. Land in Cook County that has been certified by the SWCD as being in an approved VFS is eligible, upon application, to be assessed according to Section 10-130 of the Property Tax Code. Land assessed as a VFS is excluded from both the two-year and primary-use requirements.

The effective date of the initial legislation that creates the assessment provision for a VFS is January 1, 1997. Assessment as a VFS begins in the first assessment year after 1996, for which the property is in an approved VFS use on the annual assessment date of January 1. For example, land that is in a VFS during a portion of 2016, and is certified by the SWCD as being in an approved status on January 1, 2017, is eligible for assessment as a VFS for the 2017 assessment year.

- Land in Christmas tree production. Land used for growing Christmas trees is eligible for a farmland assessment provided it has been in Christmas trees or another qualified farm use for the previous two years and that it is not part of a primarily residential parcel. If Christmas trees are grown on land that either was being cropped prior to tree plantings or land that ordinarily would be cropped, then the cropland assessment should apply until tree maturity prevents the land from being cropped again without first having to undergo significant improvements (e.g., clearing). At this point, the "other farmland" assessment should apply. If Christmas trees are grown on land that was neither in crop production prior to tree planting nor would ordinarily be cropped, then the "other farmland" assessment instantly applies.
- ▶ Land in Conservation Reserve Program (CRP). Land in the CRP is eligible for a farmland assessment provided it has been in the CRP or another qualified farm use for the previous two years and is not a part of a primarily residential parcel. CRP land is assessed according to its use. Land enrolled into the CRP can be planted in grasses or trees. If grass is planted, this land will be classified as cropland (according to the Bureau of Census' cropland definition). If trees are planted, then the cropland assessment should apply until tree maturity prevents the land from being cropped again without first having to undergo significant improvements (e.g., clearing). At this point, the "other farmland" assessment should apply.

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- ▶ Land in Conservation Reserve Enhancement Program (CREP). Land in the CREP is eligible for a farmland assessment provided it has been in the CREP or another qualified farm use for the previous two years and is not a part of a primarily residential parcel. Land in CREP is assessed the same as CRP.
- Horse boarding and training facilities. The boarding and training of horses (regardless of the use for which the horses are being raised) is generally considered to meet the "keeping, raising, and feeding" provisions of the farm definition pertaining to livestock. Therefore, such a tract would be eligible for a farmland assessment provided its sole use has been in this or another qualified farm use for the previous two years; and, it is not part of a primarily residential parcel.
- Assessment of tree nurseries. Tree nurseries are included in the statutory definition of a farm. Such a tract would be eligible for a farmland assessment provided its sole use has been in this or another qualified farm use for the previous two years and it is not part of a primarily residential parcel. If trees are grown on land that either was being cropped prior to tree planting or land that ordinarily would be cropped, then the cropland assessment should apply until tree maturity prevents the land from being cropped again without first having to undergo significant improvements (e.g., clearing). At this point, the "other farmland" assessment should apply. If trees are grown on land that was neither in crop production prior to tree planting nor would ordinarily be cropped, then the "other farmland" assessment would instantly apply.
- Assessment of greenhouse property. Greenhouses are included in the statutory definition of a farm. To qualify as a greenhouse, a building must be used for cultivating plants. A tract that qualifies as greenhouse property is eligible for a farmland assessment provided its sole use has been in this or another qualified farm use for the previous two years and it is not part of a primarily residential parcel. Greenhouses are assessed according to their contributory value, and greenhouse lots are assessed as "other farmland."
- wildlife farming. Wildlife farming is included in the statutory definition of a farm. To qualify for wildlife farming, a tract must comply with the "keeping, raising, and feeding" provisions of the farm definition. The mere keeping of a wildlife habitat does not meet these provisions. Hunting may be a component of wildlife farming; but, hunting, in itself, does not constitute wildlife farming. Neither is just the purchase and release of adult game for hunting considered wildlife farming. Land that is actively engaged in the farming of wildlife is eligible for a farmland assessment provided its sole use has been in this or another qualified farm use for the previous two years and it is not part of a primarily residential parcel. Any such land that was either previously being cropped or ordinarily would be cropped, would warrant

- a cropland assessment until additional improvements (e.g., clearing) would be required before the land could be cropped again. At this point, the other farmland assessment would apply. Any such land that neither was being cropped nor ordinarily would be cropped, would warrant an "other farmland" assessment.
- Fish farming. Fish farming is included in the statutory definition of a farm. To qualify for fish farming, a tract must comply with the "keeping, raising, and feeding" provisions of the farm definition. Fishing may be a component of fish farming; but, fishing, in itself, does not constitute fish farming. Neither is just the purchase and release of fish for fishing, a practice often referred to as "put and take," considered fish farming. Land that is actively used for the farming of fish is eligible for a farmland assessment provided its sole use has been in this or another qualified farm use for the previous two years and it is not part of a primarily residential parcel.
- Tompost sites. Composting, generally, does not meet the farm definition. However, an on-farm composting site, where the finished product is for on-farm use, does qualify for the farmland assessment. If such a composting site is situated on land that either was being cropped prior to the composting activity or that ordinarily would be cropped, then the cropland assessment applies until the composting activity would prevent the land from being cropped again without first having to undergo significant improvements. At this point, the contributory wasteland assessment should apply. If the composting site is situated on land that was neither in crop production prior to composting activity nor would ordinarily be cropped, then the contributory wasteland assessment should instantly apply.
- Sewage sludge disposal sites. Determining the proper assessment classification for farmland that is also used as a sewage sludge disposal site depends upon circumstances pertaining to the particular site, such as
  - the application rate of the sludge,
  - whether or not the application of the sludge interferes with farming operations (sludge can be applied before a crop is planted, directly to a crop, after a crop is harvested, or in a manner so intensive as to prohibit farming), or
  - whether or not the owner or operator of the site receives financial payment.

The overriding factor to determine whether such a dually-used tract is eligible for a farmland assessment is whether or not the sludge is being applied at agronomic rates (*i.e.*, rates which are suitable for the growth and development of crops). If nonfarm sludge is applied to an otherwise eligible farm tract at an agronomic rate, then the farm classification applies. If, however, cessation of farming occurs as a result of sludge being applied at a nonagronomic rate, then the farm classification may not apply. Even if application of nonfarm sludge at a nonagronomic rate does not interfere with farming

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operations, income generated from this nonfarm activity may conflict with the law's sole-use requirement.

The Illinois Environmental Protection Agency, Water Pollution Control Division, should be contacted at **217 782-0610** for information pertaining to whether or not nonfarm sludge is being applied at an agronomic rate.

#### Other guidelines

"Idle land" is land that is not put into a qualified farm use as the result of a management decision, including neglect. Idle land differs from wasteland, which is defined as "... that portion of a qualified farm tract which is not put into cropland, permanent pasture, or other farmland as the result of soil limitations and not as a result of a management decision."

How to assess idle land depends upon whether or not the idle land

- is part of a farm,
- could be cropped without additional improvements, and
- is larger or smaller than the farmed portion of the parcel or tract.

Guidelines for the assessment of idle land are as follows:

- If idle land is **not** part of a farm or not qualified for a special assessment (*i.e.*, open space), treat it as nonfarm and assess it at market value according to its highest and best use.
- If idle land is part of a farm, and could be cropped without additional improvements, it may be assessed as cropland if the idle portion of the parcel is smaller than the farmed portion of the parcel.
- If idle land is part of a farm but could not be cropped without additional improvements, it may be assessed as wasteland if the idle portion of the parcel is smaller than the farmed portion of the parcel.
- Generally, when the idle portion of the parcel is larger than the farmed portion of the parcel, the idle portion is assessed at market value according to its highest and best use. However, when a farm tract consists of multiple tax parcels, the cropland or wasteland assessment may apply to the idle portion of a predominantly (or exclusively) idle parcel if the idle portion of the overall farm tract is smaller than the farmed portion of the tract.

Distinguishing between idle land (that is not farmland) and land that may qualify under the farm definition as "forestry" may be difficult. However, to qualify as forestry, a wooded tract must be systematically managed for the production of timber.

Primary use provision of the farm definition. The statutory farm definition (35 ILCS 200/1-60) states: "For purposes of this Code, 'farm' does not include property which is primarily used for residential purposes even though some farm products may be grown or farm animals bred or fed on the property incidental to its primary use." Because the farm definition prohibits farmed portions of primarily residential parcels from receiving a farmland assessment, assessors must make primary-use determinations on parcels that contain both farm and residential uses.

The determination of primary-use must have a rational basis and be uniformly applied in the assessment jurisdiction. This recommended guideline is intended to supplement the assessor's judgment and experience and to provide advice and direction to assessors to determine whether or not a parcel with both farm and residential uses is used primarily for residential purposes. This guideline does not apply to tracts assessed under the forestry management or vegetative filter strip provisions of the Property Tax Code, nor does it apply to parcels that do not contain any residential usage.

According to this guideline, the primary use of a parcel containing only intensive farm and residential uses is residential unless the intensively-farmed portion of the parcel is larger than the residential portion of the parcel. For purposes of this guideline, "intensive farm use" refers to farm practices for which the per-acre income and expenditures are significantly higher than in conventional farm use. Intensive farm use is typically more labor-intensive than conventional farm use. According to this guideline, the primary use of a parcel containing only conventional farm and residential uses is residential unless the conventionally-farmed portion of the parcel is larger than the residential portion of the parcel. These presumptions may be rebutted by evidence received that the primary use of the parcel is not residential. For purposes of this guideline, "conventional farm use" refers to the tending of all major and minor Illinois field crops, pasturing, foresting, livestock, and other activities associated with basic agriculture.

If a parcel has a use combination of residential, conventional farm, and intensive farm, the determination of whether or not the primary use is residential must be made by applying the criteria for each type of farm use described in the preceding paragraphs and then weighing the result of all farm uses against residential use of the parcel.

If a parcel has a use combination of residential, nonresidential-nonfarm (e.g., commercial, industrial), and any type of farm use, then the relative proportion of all uses should be considered in determining whether the primary use of the parcel is residential. For example, if the primary use of the parcel is commercial, the primary use of the parcel cannot be residential and any farmed portion of the parcel meeting the two-year requirement is

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entitled to a farmland assessment even though it may be smaller than the portion of the parcel used for residential purposes.

Alternative soil mapping guideline. The Department has consistently advocated the use of Illinois Cooperative Soil Survey (ICSS) soil mapping (mapping prepared for county detailed soil surveys) for computing farmland assessments. The ICSS soil maps contain the level of accuracy needed to assure that soil productivity indices and assessed values are accurate.

The Natural Resources Conservation Service (NRCS), the agency responsible for directing the ICSS program, is a producer of Order 2 soil surveys. Order 2 soil mapping (mapping prepared at a scale of 1:12,000 to 1:20,000) is regarded by the Department as the largest, feasibly-manageable scale for which to conduct a reliable state mapping project. The ICSS does not produce Order 1 (mapping produced at a scale usually larger than 1:12,000) soil mapping for a county. Although Order 1 soil mapping could provide a more detailed account of the soils for a specific site than Order 2 mapping, its lack of national and state standards will often cause it to be less accurate.

Landowners may, however, challenge ICSS soil data (mapping) in a tax assessment complaint and submit alternative soil mapping. Such soil mapping should be prepared at the same scale or under the specifications and standards as ICSS soil mapping. When a complaint is filed, boards of review must decide whether evidence supports replacing ICSS soil mapping with alternative mapping. Evidence that supports substituting alternative soil mapping for ICSS soil mapping is the acceptance of such alternative mapping by the NRCS and a resulting change in the official record copy of the soil map. An official record copy soil map showing all approved soil surveys is maintained by the NRCS. Board of review decisions regarding the standing of alternative mapping should not be made without considering the expert opinion of the NRCS.

Through combined efforts of the Department, NRCS, and the Office of Research in the College of Agricultural, Consumer and Environmental Sciences at the University of Illinois at Champaign-Urbana, the following mechanism has been developed which will give boards of review access to such expert opinion.

The CCAO should forward any alternative Order 2 soil mapping received in a complaint to the local NRCS field office. The NRCS field office will conduct an initial evaluation of the alternative soil mapping, and, as warranted, will forward the material to the NRCS area and/or state level. The NRCS will determine if the alternative mapping warrants a change in the official record copy. Boards of review should give substantial weight to NRCS decisions when settling complaints.

Since NRCS evaluations will only be performed on alternative Order 2 soil mapping, according to this guide

line, board of review rules should be amended to require that corresponding Order 2 soil mapping must accompany any Order 1 soil mapping submitted in a complaint. Boards of review can benefit greatly from an NRCS evaluation of Order 2 soil mapping.

Since ICSS soil maps identify soils as they occur on the landscape, boards of review should not replace ICSS soil mapping with any alternative mapping for areas smaller in size than a tax parcel. The entire tax parcel should be evaluated and mapped if alternative soil mapping is done.

- Use of a tract during the assessment year. Since real property is valued according to its condition on January 1 of the assessment year, a time when most farmland is idle, an assessor will often not know if a tract will no longer be used for farming. Therefore, circumstances occurring after January 1 may be taken into consideration to determine a parcel's tax status as farm or nonfarm. For example, if a typically cropped tract previously assessed as farmland has not been planted or used in any other qualified farm use during the assessment year and building construction has begun on the tract, the tract should **not** be assessed as farmland.
- Significance of primary use on a non-residential parcel. The primary use of a non-residential parcel does not have to be agricultural in order for a tract within the parcel to be assessed as a farm. The farmed portion of primarily commercial or industrial parcels is eligible for a farm assessment provided it qualifies under the statutory definition of farm and has qualified for the previous two years. For example, if a small farmed tract on an 80-acre industrial parcel meets the farm definition and has met the definition for the previous two years, the small tract should be assessed as farmland.
- Two-year eligibility requirement. The statutory requirement that land be in a farm use for the preceding two years applies to nonfarm converted-to-farm tracts for which there was no previous farming and not to tracts converted for the purpose of adding to existing farmland. For example, the two-year requirement would not apply when the dwelling on a farmed parcel is demolished and the land is farmed. The two-year requirement also does not apply to tracts assessed under the Forestry Development Act or land assessed as a vegetative filter strip.
- Non-published modern detailed soil mapping. Modern detailed soil maps prepared by the USDA Natural Resources Conservation Service, are now complete in every county. Although the actual survey books are not yet published for every county, the mapping is finalized and available. Boards of review are advised to consider such detailed soil mapping when presented for appeal.

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- Effect of commercial retailing of farm products on preferential assessment status. Eligibility for receiving the preferential farmland assessment depends solely upon a tract's conformity with the farm definition without regard to the retailing methods of agricultural products produced on the tract. For example, a pay-to-pick strawberry patch is eligible for a preferential farmland assessment provided its sole use has been in this or another qualified farm use for the previous two years and it is not part of a primarily residential parcel. Tracts devoted to nonfarm uses (e.g., clubhouse, cabin), tracts where the use is not solely agricultural (e.g., pasture also used for commercial horseback riding or camping), or tracts used for the sale of nonfarm products are not eligible for preferential treatment.
- ▶ Effects of gubernatorial proclamation declaring county as a State of Illinois disaster area. Unless stipulated, there is no farmland assessment relief associated with a disaster area proclamation. Any crop damage caused by flooding from such a disaster, should be compensated for through the county's flood adjustment procedure.
- Use of ortho-photo base maps. Use of an ortho-photo base map is neither mandated by statute nor required by the Department. The Department recognizes certain advantages associated with ortho-photography, but is also aware of hardships the additional expense of orthophotography may impose on some local governments. The benefits of ortho-photography increase when the photo base map is used in a computer-assisted mapping system or geographic information system and increases further as the steepness and diversity of the terrain increases. Before deciding on a base map, a county should be sure that it is accurate enough to allow for proper matching of parcel boundaries and soil types. The law requires that cropland, permanent pasture, and other farmland be assessed according to its adjusted PI. This can only be accomplished when soil types are adequately identified and measured by land use.
- ➤ Effect of a designated Ag area on farmland assessments. The Agricultural Areas Conservation and Protection Act, 505 ILCS 5/1 et seq., provides for the establishment of agricultural conservation and protection areas (commonly called "Ag Areas"). The establishment of an Ag area provides the following benefits:
  - Landowners are protected from local laws or ordinances that would restrict normal farming practices, including nuisance ordinances.
  - Protection from special benefit assessments for sewer, water, lights or nonfarm drainage (unless landowners are benefited) is provided.
  - Land is protected from locally-initiated projects that would lead to the conversion of that land to other uses.

- State agencies may consider the existence of Ag Areas when selecting a site for a project; however, the Act does not prohibit these agencies from acquiring land in Ag Areas for development purposes.
- When determining farmland eligibility, no special consideration is given to a tract due to its being located within a designated Ag Area.
- Comparing actual yields to formula yields when determining flood adjustments. Sometimes the yields of flood-affected farms and upland farms of similar PIs are similar; but, once adjusted for flood, the flood-affected farms carry a lower assessment. In order to keep the PIs and assessments of flood-affected soils and similarproducing upland soils consistent, a proposal was presented for comparing actual yields to formula yields and not assigning a flood adjustment when the yield of a particular soil meets or exceeds the average yield for the soil's PI. The Department advises against comparing actual yields to formula yields as a way of determining if a flood adjustment is warranted. The Farmland Assessment Law presupposes average yield potential under an average level of management. It would be inappropriate to penalize farmers who achieve higher-than-average yields through the employment of higher and costlier management practices. Refer to the instructions for flood adjustment.

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#### Assessment of Farmland

The Farmland Assessment Law establishes capitalized net income as the basis for the EAV of farmland. Each year, the net income is determined for each PI of cropland. The net income is then capitalized by the five-year Federal Land Bank rate to determine an agricultural economic value (AEV) for each PI. The AEV for each PI is then multiplied by 33 1/3 percent, the product of which is the EAV. A listing of the 2017 EAVs of cropland by PI is given in Table 1. By law, the EAV of permanent pasture should be at one-third and the EAV of other farmland should be at one-sixth of these values.

To assess cropland, permanent pasture, or other farmland, determine the PI of each soil type. Because wasteland is assessed based on its contributory value as described in the guidelines, it is not necessary to determine the PI of wasteland in a farm parcel.

The degree of difficulty and accuracy in assessing farmland is determined by the type of soil maps available. The easiest and most accurate soil map to use is the detailed soil map prepared by the *USDA Natural Resources Conservation Service (NRCS)* for modern detailed soil surveys. A modern detailed soil map is an aerial base map showing the delineation of each soil type based on numerous soil samples and other field and laboratory analyses. Currently, all 102 counties have been mapped.

#### Individual soil weighting method

#### Using a detailed soil survey

Procedural steps and example assessments for implementing the individual soil weighting method using a detailed soil survey are given in Steps 1 through 10.

**Step 1** — Obtain adequate aerial base tax maps. This step can be accomplished by acquiring or developing a set of aerial base tax maps as outlined in the Tax Maps and Property Index Number section of the Illinois Tax Mapping Manual.

**Step 2** — Obtain detailed soil maps showing the distribution of each soil type. Detailed maps are prepared by the NRCS, in cooperation with the University of Illinois. These maps provide an inventory of the soil types found in a specific area. The various soil types are delineated on the soil map and are numerically coded for identification.

Reproduce detailed soil maps as overlays and at the same scale as the aerial base tax maps. This will allow you to easily identify soil types by land-use category. Make any necessary corrections for map distortion.

The aerial base tax map is shown as Figure 1. The parcel used in this example is 01-29-400-001-0011. This parcel consists of 158 acres, all the land in the SE ¼ of section 29 south of the center line of the road. An overlay of the detailed soil survey map is shown on the aerial photograph.

**Step 3** — Determine, from aerial photograph interpretation

and on-site inspection of the parcel, the portions of the tract to be classified as cropland, permanent pasture, other farmland, wasteland, road, and homesite. Cropland, permanent pasture, and other farmland will each have an assessment based upon soil productivity. Refer to the land use guidelines to determine into which category a specific land use falls. Also determine which portions of the wasteland contribute to the productivity of the farm. Delineate all land-use categories on the aerial photograph.

It was determined that the uses listed under Figure 1 were present. As outlined in the guidelines, the farm building site and the grass waterway will be assessed as other farmland and the creek will be assessed as wasteland. The creek contributes to the productivity of the farm by facilitating the drainage of the entire parcel. The homesite is assessed based upon the market value just as any other residential land.

#### Steps 4, 5, and 6 are illustrated in the example after Step 6.

Step 4 — Determine the acreage of each soil type within each land use category that will be assessed by productivity. The measurement may be made using a planimeter, grid, electronic calculator, or computerized mapping system (GIS, autocad, map info, etc.) whereby the various maps (soil, aerial, tax) may be digitized or scanned-in as layers. For noncomputerized mapping systems, outline the areas to be measured when the detailed soil survey map is laid over the aerial tax map. For this example, the acreage of each soil type was measured using an electronic area calculator and is shown under the headings "Soil I.D." and "# Acres" on the property record card (PRC).

**Step 5** — Determine soil PI ratings for each soil type identified. Table 2 lists the average management PI for soil types mapped in Illinois. To use the table, locate a soil's identification number in the left-hand column and find its corresponding PI in the right-hand column.

The PIs of the soil on this parcel listed below are also shown under the heading "PI" on the PRC.

Soil ID	PI	Soil ID	PI
8	81	107	123
17	105	119	99
43	126	280	108
74	120		

Note For information on assigning PIs to soil complexes, refer to the section titled "Soil complex adjustments".

**Step 6** — Adjust the PIs for slope and erosion. The indexes given in Table 2 are for 0 to 2 percent slopes and uneroded conditions. Therefore, adjust these PIs for the negative influence of actual slope and erosion conditions.

Table 3 shows percentage adjustments for common slope and erosion conditions for favorable and unfavorable subsoil. Soil types with unfavorable subsoils are indicated in Table 2 under subsoil rooting. To use Table 3, select the proper subsoil type and correlate the percentage slope on the left-hand side of the table with the degree of erosion at the top of the table. The number taken from this table is a percentage that is multiplied by the PI taken from Table 2. The result is the PI under average level management adjusted for slope and erosion.

Slope is indicated on a detailed soil survey map by the letter following the soil number. In this particular soil survey, the slopes are identified as follows:

% slope used	% slope used in
	Table 3
0-2% slope	1%
2-4% slope	3%
4-7% slope	6%
7-12% slope	10%
12-18% slope	15%
18-35% slope	27%
	0-2% slope 2-4% slope 4-7% slope 7-12% slope 12-18% slope

Letter codes and percentage of slope vary between detailed soil surveys and between soil types within surveys. Consult your soil survey for the correct percentage of slope for each soil type.

Because Table 3 cannot be used with slope ranges, use a central point of the slope ranges unless a better determinant of slope is available. For the slope ranges used in the example, the central points are given above.

Erosion is indicated on a detailed soil survey map by a number following the letter indicating slope. Erosion is indicated below.

No number or 1	uneroded
2	moderate erosion
3	severe erosion

Given the information above, the designation of a soil as 280C2 indicates soil #280 with 4-7 percent slope and moderate erosion.

Using Table 3 to find the percentage adjustment to the PI of a soil designated as "C" slope "2" erosion, read down the "slope" column to 6 percent and across to the "moderate erosion" column to find the number 93, or 93 percent adjustment. Applying

this 93 percent adjustment to the PI of soil #280 given in Table 2 results in a PI adjustment for slope and erosion of 100 for the 280C2 soil  $(108 \times 93\% = 100)$ .

The designation of a soil as 8F indicates soil #8 with 18-35 percent slope and uneroded.

Using Table 3 to find the percentage adjustment to the PI of a soil designated as "F" slope and uneroded, read down the "slope" column to 27 percent and across to the "uneroded" column to find the number 71 or 71 percent adjustment. Applying this adjustment to the PI of soil #8 given in Table 2 results in an adjusted PI of 58 for the 8F soil ( $81 \times 71\% = 58$ ).

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The PI adjustments and the adjusted PIs of all soils in the parcel are shown under the headings "Adj. Factor(s)" and "Adj. P.I." on the PRC.

#### Example — Steps 4, 5, and 6

Γ	Property Record —						
Ownership/Mailing Address	& Abbr. Legal					Year <b>2</b>	2017_
Г	Soil ID	PI	Adj. Factor(s)	Adj. Pl	No. Acres	Cert. Value	Asmt.
	17	105		105			
ı	43	126		126	35		
EAV)	119D	99	0.94 (S)	93			
	280B	108	0.99(S)	107			
Cropland (Full	280C2	108	0.93(S & E)	100	5		
g							
pla							
S							
ı							
ı			Subtotal:		83		
⊢			Subtotal.		00		
≨		-					
3 E/	8F	81	0.71(S)	58			
Permanent Pasture (1/3 EAV	43	126		126			
nre	74 107	120 123		120 123	12 4		
ast	119D	99	0.94 (S)	93			
Ę	119E3	99	0.75 (S & E)	74			
aue	280B	108	0.99 (S)	107	6		
Ĕ	280C2	108	0.93 (S & E)	100			
ď		.00	Subtotal:		56		
Н					- 00		
S	10	100		100	4		
EA	43 280C2	126 108	0.03 (0.0 5)	126 100			
1/6	20002	IUS	0.93 (S & E)	100	3		
Other Farmland (1/6 EAV)							
mla							
Far							
Je.							
ਰੋ							
L	Subtotal: 7						
С	Contributory Wasteland 1/6 Lowest EAV 6						
	Non-Contributory Wasteland 2					0	0
	Dedicated Roads 2					0	0
To	Total All Farmland 156  No. Acres Value Level As						
	No. Acres						Level Asmt.
	Homesite						
	Residential Bldgs.						
	Farm Bldgs. 33 <sup>1</sup> / <sub>3</sub> BC-1F (R-6/99)						

PRC-1F (R-6/99)

#### Steps 7 through 10 are illustrated on the PRC example following Step 10.

**Step 7** — Determine the EAV per acre of each soil type for each land use category. To do this, locate the adjusted PI of each soil type in Table 1. The EAV per acre for a soil type in the cropland category is found directly from the table. For soil types in the permanent pasture and other farmland categories, determine the EAV per acre for each soil in the same manner as for cropland; then, multiply this value times one-third for permanent pasture and one-sixth for other farmland.

For example, soil #17 in the cropland category has an adjusted PI of 105. By locating the PI of 105 in Table 1, the EAV per acre is found to be \$216.19. To determine the EAV per acre for a soil included in the permanent pasture and other farmland categories, multiply the value as cropland by one-third and one-sixth respectively. Soil 119D in the permanent pasture category has an adjusted PI of 93 which has a cropland value from Table 1 of \$118.00. After multiplying this value by one-third, the EAV for this soil in the permanent pasture category is equal to \$39.33. The EAV per acre of a soil included in the other farmland category is determined by multiplying its value as cropland from Table 1 by one-sixth.

The six acres of creek are considered to contribute to the productivity of the farm and are assessed as contributory wasteland at one-sixth of the value of the lowest PI of cropland certified by the Department. For 2017, the lowest PI of cropland certified by the Department was 82. The EAV per acre for cropland of PI 82 is \$76.50. The EAV per acre of the wasteland that is a creek is \$76.50 x  $^{1}$ / $_{6}$  = \$12.75 per acre. An EAV per acre of zero is assigned to both the two acres of non-contributory wasteland and the two acres of public road. All EAVs by soil type are shown under the heading "Cert. Val." on the PRC.

**Step 8** — Calculate the assessed value for each soil type in each land-use category by multiplying the EAV per acre (from Step 7) by the number of acres for each corresponding soil type. For example, the assessed value for soil #43 in the cropland category is 35 (acres) x \$595.64/acre = \$20,847.40 These calculations are shown under the heading "Asmt." on the PRC.

**Step 9** — Subtotal the number of acres and assessed values of the soil types within each land-use category to obtain the total number of acres and total EAVs for the cropland, permanent pasture, and other farmland categories. In the example, the total EAV for the 83 acres of cropland is \$31,112. These calculations are shown on the "Subtotal" line under their respective headings on PRC.

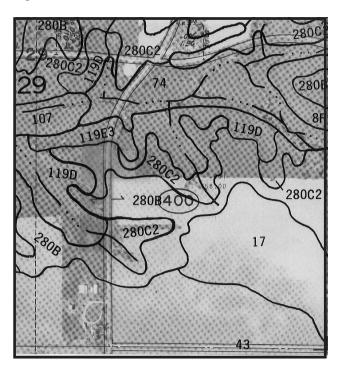
**Step 10** — Determine the total EAV for farmland by adding the previously determined subtotals for cropland, permanent pasture, and other farmland to the assessed value of wasteland.

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#### Property Record — Year **2017** PI Adj. Factor(s) Soil ID Adj. Pl No. Acres Cert. Value 105 216.19 6053 17 105 28 595.64 20,847 43 126 126 35 118.00 118 0.94 (S) 119D 99 93 1 3261 280B 108 0.99(S) 107 232.90 14 166.79 834 280C2 108 0.93(S & E) 100 5 Subtotal: 83 31,113 (1/3 EAV) 8F 81 0.71(S) 58 4 25.50 102 43 74 126 126 198.53 199 120 12 120 74 107 119 123.82 1486 123 123 4 159.21 637 0.94 (S) 119D 99 93 17 39.33 669 119E3 99 0.75 (S'& E) 74 4 25.50 102 280B 108 0.99 (S) 107 6 77.63 466 280C2 108 0.93 (S & E) 100 8 55.59 445 56 4,106 Subtotal: 99.29 4 397 43 126 126 3 27.80 280C2 108 0.93 (S & E) 100 480 12.75 Contributory Wasteland 77 1/6 Lowest EAV 6 Non-Contributory Wasteland 0 0 0 0 **Dedicated Roads** 156 35,776 Total All Farmland No. Acres Value Level Asmt. Homesite Residential Bldgs 331/3 Farm Bldgs

PRC-1F (R-6/99)

Figure 1



Use	Ac	res	Use Ac	res
Cropland		83	Grass Waterway	3
Permanent Pa	sture	56	Wasteland	2
Farm Building	Site	4	Creek	6
Homesite		2	Road	2

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### Soil complex adjustments

Occasionally, two or more soils occur together in a pattern that is too intricate for the individual soils to be delineated on the soil map at the scale being used. These groups of soils are called soil complexes. When this situation occurs, the PI of the complex is calculated by weighting or averaging the individual indexes of the soils in the complex. When the percentage of each type of soil in the complex is known, a weighted PI is calculated. The method for weighting is outlined below using the Cisne-Huey complex for a county in which percentages of each soil is known. If the percentages of each soil type cannot be obtained, the PIs for the individual soil types may be averaged to get a PI for the complex.

Cisne-Huey	PI x percent	=	Contribution
Cisne (2)	97 x 60%	=	58.2
Huey (120)	79 x <u>40%</u>	=	<u>31.6</u>
Total	100%	=	89.8 = 90 = PI

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verage Management PI						* 2017
PI	Gross	Non-Land	Net Land	Agricultural	Equalized	* 2017 Certifie
	Income	Production Costs	Return	Economic Value	Assessed Value	Value
82	\$603.07	\$481.38	\$121.69	\$2,668.64	\$889.60	\$76.50
83	\$609.10	\$484.75	\$124.35	\$2,726.97	\$909.00	\$78.11
84	\$615.13	\$488.11	\$127.02	\$2,785.53	\$928.50	\$79.72
85	\$621.15	\$491.47	\$129.68	\$2,843.86	\$948.00	\$81.39
86	\$627.18	\$494.84	\$132.34	\$2,902.19	\$967.40	\$83.07
87	\$633.21	\$498.20	\$135.01	\$2,960.75	\$986.90	\$84.68
88	\$639.24	\$501.56	\$137.68	\$3,019.30	\$1,006.40	\$86.18
89	\$645.26	\$504.92	\$140.34	\$3,077.63	\$1,025.90	\$92.38
90	\$651.29	\$508.29	\$143.00	\$3,135.96	\$1,045.30	\$98.78
91	\$657.32	\$511.65	\$145.67	\$3,194.52	\$1,064.80	\$105.1
92	\$663.34	\$515.01	\$148.33	\$3,252.85	\$1,084.30	\$111.5
93	\$669.37	\$518.38	\$150.99	\$3,311.18	\$1,103.70	\$118.0
94	\$675.40	\$521.74	\$153.66	\$3,369.74	\$1,123.20	\$124.4
95	\$681.42	\$525.10	\$156.32	\$3,428.07	\$1,142.70	\$130.8
96	\$687.45	\$528.47	\$158.98	\$3,486.40	\$1,162.20	\$137.2
97	\$693.48	\$531.83	\$161.65	\$3,544.96	\$1,181.60	\$143.6
98	\$699.50	\$535.19	\$164.31	\$3,603.29	\$1,201.10	\$150.0
99	\$705.53	\$538.56	\$166.97	\$3,661.62	\$1,220.60	\$157.1
100	\$711.56	\$541.92	\$169.64	\$3,720.18	\$1,240.10	\$166.7
101	\$717.59	\$545.28	\$172.31	\$3,778.73	\$1,259.50	\$177.0
102	\$723.61	\$548.65	\$174.96	\$3,836.84	\$1,279.00	\$187.5
103	\$729.64	\$552.01	\$177.63	\$3,895.39	\$1,298.50	\$198.1
104	\$735.67	\$555.37	\$180.30	\$3,953.95	\$1,317.90	\$207.9
105	\$741.69	\$558.74	\$182.95	\$4,012.06	\$1,337.40	\$216.1
106	\$747.72	\$562.10	\$185.62	\$4,070.61	\$1,356.90	\$224.5
107	\$753.75	\$565.46	\$188.29	\$4,129.17	\$1,376.40	\$232.9
108	\$759.77	\$568.82	\$190.95	\$4,187.50	\$1,395.80	\$240.3
109	\$765.80	\$572.19	\$193.61	\$4,245.83	\$1,415.30	\$247.7
110	\$771.83	\$575.55	\$196.28	\$4,304.39	\$1,434.80	\$255.1
111	\$777.85	\$578.91	\$198.94	\$4,362.72	\$1,454.20	\$264.5
112	\$783.88	\$582.28	\$201.60	\$4,421.05	\$1,473.70	\$275.0
113	\$789.91	\$585.64	\$204.27	\$4,479.61	\$1,493.20	\$285.7
114	\$795.94	\$589.00	\$206.94	\$4,538.16	\$1,512.70	\$296.5
115	\$801.96	\$592.37	\$209.59	\$4,596.27	\$1,532.10	\$307.5
116	\$807.99	\$595.73	\$212.26	\$4,654.82	\$1,551.60	\$318.7
117	\$814.02	\$599.09	\$214.93	\$4,713.38	\$1,571.10	\$330.1
118	\$820.04	\$602.46	\$217.58	\$4,771.49	\$1,590.60	\$341.6
119	\$826.07	\$605.82	\$220.25	\$4,830.04	\$1,610.00	\$353.3
120	\$832.10	\$609.18	\$222.92	\$4,888.60	\$1,629.50	\$371.4
121	\$838.12	\$612.55	\$225.57	\$4,946.71	\$1,649.00	\$418.2
122	\$844.15	\$615.91	\$228.24	\$5,005.26	\$1,668.40	\$462.5
123	\$850.18	\$619.27	\$230.91	\$5,063.82	\$1,687.90	\$477.6
124	\$856.20	\$622.63	\$233.57	\$5,122.15	\$1,707.40	\$499.5
125	\$862.23	\$626.00	\$236.23	\$5,180.48	\$1,726.90	\$546.9
126	\$868.26	\$629.36	\$238.90	\$5,239.04	\$1,746.30	\$595.6
127	\$874.29	\$632.72	\$241.57	\$5,297.59	\$1,765.80	\$645.6
128	\$880.31	\$636.09	\$244.22	\$5,355.70	\$1,785.30	\$666.7
129	\$886.34	\$639.45	\$246.89	\$5,414.25	\$1,804.70	\$686.8

10% Increase of 2016 certified value at PI 111 IS \$24.05

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<sup>\*</sup>These values reflect the statutory changes to 35 ILCS 200/10-115(e) under Public Act 98-0109.

<sup>\*</sup>Farmland values are as certified by the Farmland Assessment Technical Advisory Board. Any differences in calculations are due to rounding at different stages of calculations.

# **Table 2 Information and Acknowledgement**

This table replaces Table 2 in Bulletin 810. Duplicate IL Map Symbols are in bold typeface. Use the appropriate soil type name to determine the proper productivity index.

Acknowledgement: Soil productivity indices and other required data for each Illinois soil were transferred to this web site. From 1996 to present, the Illinois crop yields estimates and productivity indices by soil type were created by a University of Illinois Urbana-Champaign, College of Agricultural, Consumer and Environmental Sciences task force of soil scientists, agronomists, crop scientists and agricultural economists under the direction of Dr. Kenneth R. Olson, Professor of Soil Science in the Department of NRES. If you have an Illinois soil type symbol that is not in this Table or have other soil productivity questions please contact Dr. Kenneth R. Olson at the following e-mail address: krolson@illinois.edu.

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# Productivity of Illinois Soils Under Average Management Slightly Eroded, 0 to 2 Percent Slopes

Revised January 1, 2012

IL map symbol	Soil type name	Subsoil rooting	B 810 Productivity Index (PI)
			Average management
2	Cisne silt loam	Favorable	97
3	Hoyleton silt loam	Favorable	96
4	Richview silt loam	Favorable	98
5	Blair silt loam	Unfavorable	92
6	Fishhook silt loam	Unfavorable	86
7	Atlas silt loam	Unfavorable	79
8	Hickory loam	Favorable	81
9	Sandstone rock land	Crop yield data not available	
10	Plumfield silty clay loam	Unfavorable	72
12	Wynoose silt loam	Favorable	86
13	Bluford silt loam	Favorable	90
14	Ava silt loam	Unfavorable	89
15	Parke silt loam	Favorable	97
16	Rushville silt loam	Favorable	97
17	Keomah silt loam	Favorable	105
18	Clinton silt loam	Favorable	107
19	Sylvan silt loam	Favorable	98
21	Pecatonica silt loam	Favorable	100
22	Westville silt loam	Favorable	100
23	Blount silt loam	Favorable	93
24	Dodge silt loam	Favorable	108
25	Hennepin loam	Unfavorable	80
26	Wagner silt loam	Favorable	96
27	Miami silt loam	Favorable	99
28	Jules silt loam	Favorable	108
29	Dubuque silt loam	Unfavorable	85
30	Hamburg silt loam	Favorable	95
31	Pierron silt loam	Favorable	90
34	Tallula silt loam	Favorable	116
35	Bold silt loam	Favorable	97
36	Tama silt loam	Favorable	123
37	Worthen silt loam	Favorable	126
38	Rocher loam	Favorable	96
40	Dodgeville silt loam	Favorable	92
41	Muscatine silt loam	Favorable	130
42	Papineau fine sandy loam	Favorable	91
43	Ipava silt loam	Favorable	126
44	Pella silty clay loam, bedrock substratum	Favorable	100
45	Denny silt loam	Favorable	105
46	Herrick silt loam	Favorable	118
47	Virden silt loam	Favorable	122
48	Ebbert silt loam	Favorable	111
49	Watseka loamy fine sand	Favorable	82

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# Productivity of Illinois Soils Under Average Management Slightly Eroded, 0 to 2 Percent Slopes

Revised January 1, 2012

IL map	0	C. L. III. C.	B 810 Productivity Index (PI)
symbol	Soil type name	Subsoil rooting	Average management
50	Virden silty clay loam	Favorable	119
51	Muscatune silt loam	Favorable	130
53	Bloomfield fine sand	Favorable	75
54	Plainfield sand	Favorable	67
55	Sidell silt loam	Favorable	117
56	Dana silt loam	Favorable	116
57	Montmorenci silt loam	Favorable	103
59	Lisbon silt loam	Favorable	121
60	La Rose silt loam	Favorable	104
61	Atterberry silt loam	Favorable	117
62	Herbert silt loam	Favorable	116
63	Blown-out land	Crop yield data not available	
64	Parr fine sandy loam	Favorable	95
67	Harpster silty clay loam	Favorable	117
	Sable silty clay loam	Favorable	126
69	Milford silty clay loam	Favorable	113
	Beaucoup silty clay loam	Favorable	116
71	Darwin silty clay	Favorable	98
72	Sharon silt loam	Favorable	108
73	Ross loam	Favorable	119
74	Radford silt loam	Favorable	120
75	Drury silt loam	Favorable	112
	Otter silt loam	Favorable	123
77	Huntsville silt loam	Favorable	127
78	Arenzville silt loam	Favorable	115
79	Menfro silt loam	Favorable	106
81	Littleton silt loam	Favorable	126
82	Millington loam	Favorable	111
83	Wabash silty clay	Favorable	103
	Okaw silt loam	Favorable	85
	Jacob clay	Favorable	73
	Osco silt loam	Favorable	125
	Dickinson sandy loam	Favorable	92
	Sparta loamy sand	Favorable	81
	Maumee fine sandy loam	Favorable	83
	Bethalto silt loam	Favorable	118
	Swygert silty clay loam	Unfavorable	104
	Sarpy sand	Favorable	74
	Rodman gravelly loam	Unfavorable	74
	Limestone rock land	Crop yield data not available	
	Shale rock land	Crop yield data not available	
	Eden silty clay loam	Unfavorable	72
	Houghton peat	Favorable	107
	Ade loamy fine sand	Favorable	91
99	Sandstone and limestone roo	Crop yield data not available	

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# **Productivity of Illinois Soils Under Average Management** Slightly Eroded, 0 to 2 Percent Slopes Revised January 1, 2012

Revised January 1, 2012					
IL map	Soil type name	Subsoil rooting	B 810 Productivity Index (PI)		
symbol		_	Average management		
	Palms muck	Favorable	104		
	Brenton silt loam, bedrock substratum	Favorable	111		
	La Hogue loam	Favorable	107		
	Houghton muck	Favorable	115		
	Virgil silt loam	Favorable	117		
	Batavia silt loam	Favorable	114		
	Hitt sandy loam	Favorable	100		
107	Sawmill silty clay loam	Favorable	123		
	Bonnie silt loam	Favorable	98		
109	Racoon silt loam	Favorable	94		
111	Rubio silt loam	Favorable	101		
	Cowden silt loam	Favorable	103		
113	Oconee silt loam	Favorable	105		
114	O'Fallon silt loam	Unfavorable	89		
115	Dockery silt loam	Favorable	114		
116	Whitson silt loam	Favorable	103		
119	Elco silt loam	Favorable	99		
120	Huey silt loam	Unfavorable	79		
122	Colp silt loam	Unfavorable	87		
123	Riverwash	Crop yield data not available			
124	Beaucoup gravelly clay loam	Favorable	116		
125	Selma loam	Favorable	114		
126	Bonpas silt loam, overwash	Favorable	117		
127	Harrison silt loam	Favorable	115		
128	Douglas silt loam	Favorable	112		
131	Alvin fine sandy loam	Favorable	98		
132	Starks silt loam	Favorable	106		
134	Camden silt loam	Favorable	106		
136	Brooklyn silt loam	Favorable	99		
137	Clare silt loam, bedrock substratum	Favorable	113		
138	Shiloh silty clay loam	Favorable	115		
138+	Shiloh silt loam, overwash	Favorable	111		
141	Wesley fine sandy loam	Favorable	100		
142	Patton silty clay loam	Favorable	117		
145	Saybrook silt loam	Favorable	117		
146	Elliott silt loam	Favorable	111		
147	Clarence silty clay loam	Unfavorable	95		
148	Proctor silt loam	Favorable	120		
149	Brenton silt loam	Favorable	125		

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# Productivity of Illinois Soils Under Average Management Slightly Eroded, 0 to 2 Percent Slopes

#### Revised January 1, 2012

Revised January 1, 2012						
IL map	Soil type name	Subsoil rooting	B 810 Productivity Index (PI)			
symbol	oon type name	Guboon rooming	Average management			
150	Onarga sandy loam	Favorable	97			
151	Ridgeville fine sandy loam	Favorable	101			
152	Drummer silty clay loam	Favorable	127			
153	Pella silty clay loam	Favorable	120			
154	Flanagan silt loam	Favorable	127			
155	Stockland loam	Unfavorable	82			
157	Symerton loam	Favorable	114			
159	Pillot silt loam	Favorable	106			
162	Gorham silty clay loam	Favorable	115			
164	Stoy silt loam	Favorable	96			
165	Weir silt loam	Favorable	94			
166	Cohoctah loam	Favorable	118			
167	Lukin silt loam	Favorable	96			
171	Catlin silt loam	Favorable	122			
172	Hoopeston sandy loam	Favorable	97			
173	McGary silt loam	Unfavorable	89			
174	Chaseburg silt loam	Favorable	107			
175	Lamont fine sandy loam	Favorable	86			
176	Marissa silt loam	Favorable	109			
178	Ruark fine sandy loam	Favorable	88			
179	Minneiska loam	Favorable	92			
180	Dupo silt loam	Favorable	116			
182	Peotone mucky silty clay loam, marl substratum	Favorable	106			
183	Shaffton loam	Favorable	102			
184	Roby fine sandy loam	Favorable	98			
188	Beardstown loam	Favorable	100			
189	Martinton silt loam	Favorable	115			
191	Knight silt loam	Favorable	107			
192	Del Rey silt loam	Favorable	100			
193	Mayville silt loam	Favorable	98			
194	Morley silt loam	Favorable	92			
197	Troxel silt loam	Favorable	124			
198	Elburn silt loam	Favorable	127			
199	Plano silt loam	Favorable	126			

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# Productivity of Illinois Soils Under Average Management Slightly Eroded, 0 to 2 Percent Slopes Revised January 1, 2012

	Revised January 1, 2012				
IL map	Soil type name	Subsoil	B 810 Productivity Index (PI)		
symbol	oon type name	rooting	Average management		
200	Orio sandy loam	Favorable	97		
201	Gilford fine sandy loam	Favorable	98		
204	Ayr sandy loam	Favorable	96		
205	Metea silt loam	Favorable	86		
206	Thorp silt loam	Favorable	112		
208	Sexton silt loam	Favorable	102		
210	Lena muck	Favorable	111		
212	Thebes silt loam	Favorable	98		
213	Normal silt loam	Favorable	118		
214	Hosmer silt loam	Unfavorable	93		
216	Stookey silt loam	Favorable	102		
217	Twomile silt loam	Favorable	93		
218	Newberry silt loam	Favorable	101		
219	Millbrook silt loam	Favorable	114		
221	Parr silt loam	Favorable	105		
223	Varna silt loam	Favorable	103		
224	Strawn silt loam	Favorable	93		
225	Holton silt loam	Favorable	89		
226	Wirt silt loam	Favorable	94		
227	Argyle silt loam	Favorable	108		
228	Nappanee silt loam	Unfavorable	78		
229	Monee silt loam	Favorable	88		
230	Rowe silty clay	Favorable	98		
	Evansville silt loam	Favorable	114		
232	Ashkum silty clay loam	Favorable	112		
233	Birkbeck silt loam	Favorable	108		
234	Sunbury silt loam	Favorable	116		
	Bryce silty clay	Favorable	107		
	Sabina silt loam	Favorable	108		
	Rantoul silty clay	Favorable	96		
	Dorchester silt loam	Favorable	113		
	Plattville silt loam	Favorable	106		
	Chatsworth silt loam	Unfavorable	69		
	Kendall silt loam	Favorable	110		
	St. Charles silt loam	Favorable	108		
	Hartsburg silty clay loam	Favorable	119		
	McFain silty clay	Favorable	105		
249	Edinburg silty clay loam	Favorable	112		

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# **Productivity of Illinois Soils Under Average Management** Slightly Eroded, 0 to 2 Percent Slopes Revised January 1, 2012

	Revised January 1, 2012					
IL map	Soil type name	Subsoil	B 810 Productivity Index (PI)			
symbol	oon type name	rooting	Average management			
250	Velma loam	Favorable	100			
252	Harvel silty clay loam	Favorable	111			
256	Pana silt loam	Favorable	102			
257	Clarksdale silt loam	Favorable	114			
258	Sicily silt loam	Favorable	110			
259	Assumption silt loam	Favorable	106			
261	Niota silt loam	Favorable	87			
262	Denrock silt loam	Favorable	102			
264	El Dara silt loam	Favorable	89			
265	Lomax loam	Favorable	102			
266	Disco sandy loam	Favorable	96			
267	Caseyville silt loam	Favorable	112			
268	Mt. Carroll silt loam	Favorable	119			
270	Stronghurst silt loam, sandy substratum	Favorable	111			
271	Timula silt loam	Favorable	100			
272	Edgington silt loam	Favorable	109			
274	Seaton silt loam	Favorable	106			
	Joy silt loam	Favorable	127			
277	Port Byron silt loam	Favorable	127			
	Stronghurst silt loam	Favorable	111			
	Rozetta silt loam	Favorable	106			
	Fayette silt loam	Favorable	108			
	Chute fine sand	Favorable	66			
	Downsouth silt loam	Favorable	120			
	Tice silty clay loam	Favorable	118			
	Carmi loam	Favorable	95			
	Carmi sandy loam	Favorable	94			
	Chauncey silt loam	Favorable	105			
	Petrolia silty clay loam	Favorable	103			
	Warsaw silt loam	Favorable	105			
	Xenia silt loam	Favorable	104			
	Wallkill silt loam	Favorable	109			
	Andres silt loam	Favorable	120			
	Symerton silt loam	Favorable	116			
	Mokena silt loam	Favorable	111			
	Washtenaw silt loam	Favorable	116			
	Ringwood silt loam	Favorable	115			
298	Beecher silt loam	Favorable	101			

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### Productivity of Illinois Soils Under Average Management Slightly Eroded, 0 to 2 Percent Slopes Revised January 1, 2012

	Revised January 1, 2012				
IL map	Soil type name	Subsoil rooting	B 810 Productivity Index (PI)		
symbol			Average management		
	Westland clay loam	Favorable	107		
	Grantsburg silt loam	Unfavorable	90		
	Ambraw clay loam	Favorable	101		
	Landes fine sandy loam	Favorable	89		
	Allison silty clay loam	Favorable	120		
	Iona silt loam	Favorable	105		
	Alford silt loam	Favorable	107		
310	McHenry silt loam	Favorable	101		
311	Ritchey silt loam	Unfavorable	74		
_	Edwards muck	Favorable	97		
313	Rodman Ioam	Unfavorable	74		
314	Joliet silty clay loam	Favorable	87		
315	Channahon silt loam	Unfavorable	71		
316	Romeo silt loam	Unfavorable	43		
317	Millsdale silty clay loam	Favorable	97		
318	Lorenzo loam	Unfavorable	93		
319	Aurelius muck	Favorable	85		
320	Frankfort silt loam	Unfavorable	90		
321	Du Page silt loam	Favorable	111		
322	Russell silt loam	Favorable	103		
323	Casco silt loam	Unfavorable	91		
324	Ripon silt loam	Favorable	98		
325	Dresden silt loam	Favorable	102		
326	Homer silt loam	Favorable	101		
327	Fox silt loam	Favorable	96		
328	Holly silt loam	Favorable	96		
329	Will silty clay loam	Favorable	115		
	Peotone silty clay loam	Favorable	108		
	Haymond silt loam	Favorable	117		
	Billett sandy loam	Favorable	88		
	Wakeland silt loam	Favorable	114		
334	Birds silt loam	Favorable	103		
	Robbs silt loam	Favorable	92		
	Wilbur silt loam	Favorable	113		
	Creal silt loam	Favorable	98		
	Hurst silt loam	Unfavorable	88		
	Wellston silt loam	Unfavorable	80		
	Zanesville silt loam	Unfavorable	84		
	Ambraw silty clay loam, sandy su		101		
	Matherton silt loam	Favorable	101		
	Kane silt loam	Favorable	110		
	Harvard silt loam	Favorable	111		
	Elvers silt loam	Favorable	104		
	Dowagiac silt loam	Favorable	99		
	Canisteo silt loam	Favorable	111		
	Wingate silt loam	Favorable	107		
	Zumbro sandy loam	Favorable	87		
349	Zumbio sandy idam	i avuiabie	O/		

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### **Productivity of Illinois Soils Under Average Management** Slightly Eroded, 0 to 2 Percent Slopes Revised January 1, 2012

Revised January 1, 2012				
IL map symbol	Soil type name	Subsoil rooting	B 810 Productivity Index (PI)	
_			Average management	
350	Drummer silty clay loam, gravelly substratum	Favorable	122	
351	Elburn silt loam, gravelly substratum	Favorable	120	
352	Palms silty clay loam, overwash	Favorable	112	
353	Toronto silt loam	Favorable	114	
354	Hononegah loamy coarse sand	Favorable	74	
355	Binghampton sandy loam	Favorable	93	
356	Elpaso silty clay loam	Favorable	127	
357	Vanpetten loam	Favorable	94	
359	Fayette silt loam, till substratum	Favorable	105	
360	Slacwater silt loam	Favorable	100	
361	Kidder silt loam	Favorable	91	
362	Whitaker variant loam	Favorable	105	
363	Griswold loam	Favorable	103	
365	Aptakisic silt loam	Favorable	102	
366	Algansee fine sandy loam	Favorable	83	
367	Beach sand	Crop yield data not available		
368	Raveenwash silty clay loam	Favorable	95	
369	Waupecan silt loam	Favorable	123	
370	Saylesville silt loam	Favorable	94	
371	St. Charles silt loam, sandy substratum	Favorable	100	
372	Kendall silt loam, sandy substratum	Favorable	104	
373	Camden silt loam, sandy substratum	Favorable	96	
	Proctor silt loam, sandy substratum	Favorable	108	
375	Rutland silt loam	Favorable	118	
376	Cisne silt loam, bench	Favorable	97	
377	Hoyleton silt loam, bench	Favorable	96	
	Lanier fine sandy loam	Favorable	72	
	Dakota silt loam	Favorable	99	
380	Fieldon silt loam	Favorable	101	
381	Craigmile sandy loam	Favorable	102	
	Belknap silt loam	Favorable	104	
383	Newvienna silt loam	Favorable	119	
384	Edwardsville silt loam	Favorable	124	
385	Mascoutah silty clay loam	Favorable	125	
	Downs silt loam	Favorable	119	
	Ockley silt loam	Favorable	102	
	Wenona silt loam	Favorable	114	
389	Hesch loamy sand, shallow variant	Unfavorable	50	
	Hesch fine sandy loam	Unfavorable	89	
	Blake silty clay loam	Favorable	103	
	Urban land, loamy Orthents complex	Crop yield data not available		
393	Marseilles silt loam, gravelly substratum	Unfavorable	96	
	Haynie silt loam	Favorable	105	
	Ceresco Ioam	Favorable	104	
	Vesser silt loam	Favorable	109	
397	Boone loamy fine sand	Unfavorable	61	
	Wea silt loam	Favorable	115	
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### Productivity of Illinois Soils Under Average Management Slightly Eroded, 0 to 2 Percent Slopes

Name		Revised January 1, 2012				
Average management	IL map	Soil type name	Subsoil rooting	_		
A00   Calco sitty clay loam	symbol	Con type name	Cubson rooting			
401   Okaw sitty clay loam	400	Calco silty clay loam	Favorable			
402 Colo silty clay loam         Favorable         122           403 Elizabeth silt loam         Unfavorable         54           404 Titus silty clay loam         Favorable         104           405 Zook silty clay         Favorable         103           406 Paxico silt toam         Favorable         106           407 Udifluvents, Ioamy         Crop yield data not available           408 Aquents, Ioamy         Crop yield data not available           409 Aquents, clayey         Crop yield data not available           410 Woodbine silt loam         Favorable           411 Ashdale silt loam         Favorable           412 Ogle silt loam         Favorable           413 Gale silt loam         Favorable           414 Myrtle silt loam         Favorable           415 Orion silt loam         Favorable         116           415 Orion silt loam         Favorable         112           417 Derinda silt loam         Favorable         112           418 Schapville silt loam         Favorable         94           419 Flagg silt loam         Favorable         96           420 Piopolis silty clay loam         Favorable         97           421 Kell silt loam         Favorable         91           422 Shoals silt l						
403   Elizabeth silt loam						
404   Titus sitty clay loam						
405   Zook silfy clay						
406						
407         Udifluvents, loamy         Crop yield data not available Aquents, loamy         Crop yield data not available Crop yield data not available Crop yield data not available Aquents, clayey           410         Woodbine silt loam         Favorable         87           411         Ashdale silt loam         Favorable         110           412         Ogie silt loam         Favorable         116           413         Gale silt loam         Favorable         89           414         Myrle silt loam         Favorable         110           415         Orion silt loam         Favorable         116           416         Durand silt loam         Favorable         111           417         Derinda silt loam         Favorable         91           418         Schapville silt loam         Favorable         94           419         Flagg silt loam         Favorable         94           419         Flagg silt loam         Favorable         95           421         Kell silt loam         Favorable         95           422         Cape silty clay loam         Favorable         91           423         Millstadt silt loam         Favorable         97           424         Shoals silt loam         Fav						
408         Aquents, loamy         Crop yield data not available           409         Aquents, clayey         Crop yield data not available           410         Woodbine silt loam         Favorable           411         Ashdale silt loam         Favorable         110           412         Ogle silt loam         Favorable         116           413         Gale silt loam         Favorable         110           414         Myrlie silt loam         Favorable         110           415         Orion silt loam         Favorable         110           416         Durand silt loam         Favorable         112           417         Derinda silt loam         Favorable         112           418         Schapville silt loam         Favorable         94           419         Flags silt loam         Favorable         106           420         Piopolis silt y clay loam         Favorable         95           421         Kell silt loam         Favorable         91           422         Cape silty clay loam         Favorable         91           423         Mullistact silt loam         Favorable         91           424         Shoals silt loam         Favorable         91<				100		
409 Aquents, clayey         Crop yield data not available           410 Woodbine silt loam         Favorable           411 Ashdale silt loam         Favorable           412 Ogle silt loam         Favorable           413 Gale silt loam         Favorable           414 Myrtle silt loam         Favorable           415 Orion silt loam         Favorable           416 Durand silt loam         Favorable           417 Derinda silt loam         Unfavorable           418 Schapville silt loam         Unfavorable           419 Flagg silt loam         Favorable           419 Flagg silt loam         Favorable           410 Flagg silt loam         Favorable           420 Piopolis silty clay loam         Favorable           421 Kell silt loam         Favorable           422 Cape silty clay loam         Favorable           423 Millstadt silt loam         Favorable           424 Shoals silt loam         Favorable           425 Muskingum stony silt loam         Favorable           426 Karnak silty clay         Favorable           427 Burnside silt loam         Favorable           428 Coffeen silt loam         Favorable           429 Palsgrove silt loam         Favorable           430 Raddle silt loam         F		-	, -			
410   Woodbine silt loam						
Ashdale silt loam				07		
412         Ogle silt loam         Favorable         89           413         Gale silt loam         Favorable         89           414         Myrtle silt loam         Favorable         110           415         Orion silt loam         Favorable         116           416         Durand silt loam         Favorable         112           417         Derinda silt loam         Unfavorable         84           418         Schapville silt loam         Unfavorable         94           419         Flagg silt loam         Favorable         106           420         Pipopolis silty clay loam         Favorable         95           421         Kell silt loam         Favorable         83           422         Cape silty clay loam         Favorable         95           421         Kell silt loam         Favorable         91           422         Cape silty clay loam         Favorable         97           423         Mullistadt silt loam         Favorable         97           424         Shoals silt loam         Favorable         113           425         Muskingum stony silt loam         Favorable         89           427         Burnside silt loam						
413         Gale silt loam         Favorable         89           414         Myrtle silt loam         Favorable         110           415         Orion silt loam         Favorable         116           416         Durand silt loam         Favorable         112           417         Derinda silt loam         Unfavorable         84           418         Schapville silt loam         Unfavorable         94           419         Fiagg silt loam         Favorable         94           420         Piopolis silty clay loam         Favorable         95           421         Kell silt loam         Favorable         95           421         Kell silt loam         Favorable         91           422         Cape silty clay loam         Favorable         91           423         Millstadt silt loam         Favorable         91           423         Millstadt silt loam         Favorable         97           424         Shoals silt loam         Favorable         89           425         Marnak silty clay         Favorable         89           427         Burnside silt loam         Favorable         85           428         Coffeen silt loam         Favora				-		
414         Myrtle silt loam         Favorable         110           415         Orion silt loam         Favorable         116           416         Durand silt loam         Favorable         112           417         Derinda silt loam         Unfavorable         84           418         Schapville silt loam         Unfavorable         94           419         Flagg silt loam         Favorable         95           420         Piopolis silty clay loam         Favorable         95           421         Kell silt loam         Favorable         95           421         Kell silt loam         Favorable         91           422         Cape silty clay loam         Favorable         91           423         Mulskingum stony silt loam         Favorable         97           424         Shoals silt loam         Favorable         61           425         Muskingum stony silt loam         Unfavorable         61           426         Karnak silty clay         Favorable         89           427         Burnside silt loam         Favorable         85           428         Coffeen silt loam         Favorable         117           429         Palsgrove silt loam <td></td> <td>_</td> <td></td> <td></td>		_				
415         Orion silt loam         Favorable         116           416         Durand silt loam         Favorable         112           417         Derinda silt loam         Unfavorable         84           418         Schapville silt loam         Unfavorable         94           419         Flagg silt loam         Favorable         95           420         Piopolis silty clay loam         Favorable         83           421         Kell silt loam         Favorable         91           422         Cape silty clay loam         Favorable         91           423         Millstadt silt loam         Favorable         97           424         Shoals silt loam         Favorable         97           425         Muskingum stony silt loam         Unfavorable         61           425         Muskingum stony silt loam         Favorable         89           427         Burnside silt loam         Favorable         89           427         Burnside silt loam         Favorable         117           429         Palsgrove silt loam         Favorable         92           430         Raddle silt loam         Favorable         122           431         Gerf silt loam<						
416         Durand silt loam         Favorable         112           417         Derinda silt loam         Unfavorable         84           418         Schapville silt loam         Unfavorable         94           419         Flagg silt loam         Favorable         95           420         Piopolis silty clay loam         Favorable         95           421         Kell silt loam         Favorable         91           422         Cape silty clay loam         Favorable         91           423         Millstadt silt loam         Favorable         97           424         Shoals silt loam         Favorable         61           425         Muskingum stony silt loam         Unfavorable         61           425         Muskingum stony silt loam         Favorable         89           425         Muskingum stony silt loam         Favorable         89           427         Burnside silt loam         Favorable         89           427         Burnside silt loam         Favorable         85           428         Coffeen silt loam         Favorable         92           430         Raddle silt loam         Favorable         111           432         Geff silt						
417         Derinda silt loam         Unfavorable         84           418         Schapville silt loam         Unfavorable         94           419         Flagg silt loam         Favorable         106           420         Piopolis silty clay loam         Favorable         95           421         Kell silt loam         Favorable         83           422         Cape silty clay loam         Favorable         91           423         Millstadt silt loam         Favorable         97           424         Shoals silt loam         Favorable         113           425         Muskingum stony silt loam         Unfavorable         61           426         Karnak silty clay         Favorable         89           427         Burnside silt loam         Favorable         85           428         Coffeen silt loam         Favorable         117           429         Palsgrove silt loam         Favorable         92           430         Raddle silt loam         Favorable         122           431         Gerf silt loam         Favorable         111           432         Geff silt loam         Favorable         90           433         Floraville silt loam						
418         Schapville silt loam         Unfavorable         94           419         Flagg silt loam         Favorable         106           420         Piopolis silty clay loam         Favorable         95           421         Kell silt loam         Favorable         83           422         Cape silty clay loam         Favorable         91           423         Millstadt silt loam         Favorable         97           424         Shoals silt loam         Favorable         113           425         Muskingum stony silt loam         Unfavorable         61           426         Karnak silty clay         Favorable         89           427         Burnside silt loam         Favorable         85           428         Coffeen silt loam         Favorable         92           430         Raddle silt loam         Favorable         117           429         Palsgrove silt loam         Favorable         122           431         Genesee silt loam         Favorable         111           432         Geff silt loam         Favorable         111           433         Floraville silt loam         Favorable         104           435         Streator silty clay						
Flagg silt loam						
420         Piopolis silty clay loam         Favorable         95           421         Kell silt loam         Favorable         83           422         Cape silty clay loam         Favorable         91           423         Millstadt silt loam         Favorable         97           424         Shoals silt loam         Favorable         113           425         Muskingum stony silt loam         Favorable         89           426         Karnak silty clay         Favorable         89           427         Burnside silt loam         Favorable         85           428         Coffeen silt loam         Favorable         117           429         Palsgrove silt loam         Favorable         92           430         Raddle silt loam         Favorable         122           431         Genesee silt loam         Favorable         111           432         Geff silt loam         Favorable         97           433         Floraville silt loam         Favorable         90           434         Ridgway silt loam         Favorable         116           435         Streator silty clay loam         Favorable         121           437         Redbud silt loam <td></td> <td>•</td> <td></td> <td></td>		•				
421         Keil silt loam         Favorable         83           422         Cape silty clay loam         Favorable         91           423         Millstadt silt loam         Favorable         97           424         Shoals silt loam         Favorable         97           424         Shoals silt loam         Favorable         61           425         Muskingum stony silt loam         Unfavorable         61           426         Karnak silty clay         Favorable         89           427         Burnside silt loam         Favorable         85           428         Coffeen silt loam         Favorable         117           429         Palsgrove silt loam         Favorable         92           430         Raddle silt loam         Favorable         122           431         Genesee silt loam         Favorable         111           432         Geff silt loam         Favorable         97           433         Floraville silt loam         Favorable         90           434         Ridgway silt loam         Favorable         116           435         Streator silty clay loam         Favorable         121           437         Redbud silt loam						
422       Cape silty clay loam       Favorable       91         423       Millstadt silt loam       Favorable       97         424       Shoals silt loam       Favorable       113         425       Muskingum stony silt loam       Unfavorable       61         426       Karnak silty clay       Favorable       89         427       Burnside silt loam       Favorable       85         428       Coffeen silt loam       Favorable       117         429       Palsgrove silt loam       Favorable       92         430       Raddle silt loam       Favorable       122         431       Genesee silt loam       Favorable       111         432       Geff silt loam       Favorable       97         433       Floraville silt loam       Favorable       90         434       Ridgway silt loam       Favorable       104         435       Streator silty clay loam       Favorable       116         436       Meadowbank silt loam       Favorable       121         437       Redbud silt loam       Favorable       121         438       Aviston silt loam, sandy substratum       Favorable       101         439       Jasper						
423       Millstadt silt loam       Favorable       97         424       Shoals silt loam       Favorable       113         425       Muskingum stony silt loam       Unfavorable       61         426       Karnak silty clay       Favorable       89         427       Burnside silt loam       Favorable       85         428       Coffeen silt loam       Favorable       117         429       Palsgrove silt loam       Favorable       92         430       Raddle silt loam       Favorable       122         431       Genese silt loam       Favorable       97         433       Floraville silt loam       Favorable       97         433       Floraville silt loam       Favorable       90         434       Ridgway silt loam       Favorable       104         435       Streator silty clay loam       Favorable       116         436       Meadowbank silt loam       Favorable       121         437       Redbud silt loam       Favorable       121         438       Aviston silt loam       Favorable       121         439       Jasper silt loam, sandy substratum       Favorable       115         441       Waken						
424         Shoals silt loam         Favorable         1113           425         Muskingum stony silt loam         Unfavorable         61           426         Karnak silty clay         Favorable         89           427         Burnside silt loam         Favorable         85           428         Coffeen silt loam         Favorable         92           430         Palsgrove silt loam         Favorable         92           430         Raddle silt loam         Favorable         111           432         Geff silt loam         Favorable         97           433         Floraville silt loam         Favorable         90           434         Ridgway silt loam         Favorable         104           435         Streator silty clay loam         Favorable         116           436         Meadowbank silt loam         Favorable         121           437         Redbud silt loam         Favorable         121           438         Aviston silt loam, sandy substratum         Favorable         121           439         Jasper silt loam, sandy substratum         Favorable         123           441         Wakenda silt loam         Favorable         123           442 <td>422</td> <td>Cape silty clay loam</td> <td></td> <td></td>	422	Cape silty clay loam				
425       Muskingum stony silt loam       Unfavorable       61         426       Karnak silty clay       Favorable       89         427       Burnside silt loam       Favorable       85         428       Coffeen silt loam       Favorable       117         429       Palsgrove silt loam       Favorable       92         430       Raddle silt loam       Favorable       122         431       Genesee silt loam       Favorable       97         432       Geff silt loam       Favorable       97         433       Floraville silt loam       Favorable       90         434       Ridgway silt loam       Favorable       104         435       Streator silty clay loam       Favorable       116         436       Meadowbank silt loam       Favorable       121         437       Redbud silt loam       Favorable       121         438       Aviston silt loam, sandy substratum       Favorable       121         439       Jasper silt loam, sandy substratum       Favorable       115         441       Wakenda silt loam       Favorable       123         442       Mundelein silt loam       Favorable       115         443						
426       Karnak silty clay       Favorable       89         427       Burnside silt loam       Favorable       85         428       Coffeen silt loam       Favorable       117         429       Palsgrove silt loam       Favorable       92         430       Raddle silt loam       Favorable       122         431       Genesee silt loam       Favorable       97         432       Geff silt loam       Favorable       90         434       Ridgway silt loam       Favorable       104         435       Streator silty clay loam       Favorable       116         436       Meadowbank silt loam       Favorable       121         437       Redbud silt loam       Favorable       101         438       Aviston silt loam       Favorable       121         439       Jasper silt loam, sandy substratum       Favorable       115         440       Jasper silt loam       Favorable       123         441       Wakenda silt loam       Favorable       123         442       Mundelein silt loam       Favorable       115         445       Newhaven loam       Favorable       111         446       Springerton loam	424	Shoals silt loam	Favorable			
427       Burnside silt loam       Favorable       85         428       Coffeen silt loam       Favorable       117         429       Palsgrove silt loam       Favorable       92         430       Raddle silt loam       Favorable       122         431       Genesee silt loam       Favorable       97         432       Geff silt loam       Favorable       97         433       Floraville silt loam       Favorable       90         434       Ridgway silt loam       Favorable       104         435       Streator silty clay loam       Favorable       116         436       Meadowbank silt loam       Favorable       121         437       Redbud silt loam       Favorable       121         438       Aviston silt loam       Favorable       121         439       Jasper silt loam, sandy substratum       Favorable       115         441       Wakenda silt loam       Favorable       123         442       Mundelein silt loam       Favorable       115         443       Barrington silt loam       Favorable       115         445       Newhaven loam       Favorable       111         446       Springerton loam<	425	Muskingum stony silt loam	Unfavorable			
428       Coffeen silt loam       Favorable       117         429       Palsgrove silt loam       Favorable       92         430       Raddle silt loam       Favorable       122         431       Genesee silt loam       Favorable       91         432       Geff silt loam       Favorable       97         433       Floraville silt loam       Favorable       90         434       Ridgway silt loam       Favorable       104         435       Streator silty clay loam       Favorable       116         436       Meadowbank silt loam       Favorable       121         437       Redbud silt loam       Favorable       121         438       Aviston silt loam       Favorable       121         439       Jasper silt loam, sandy substratum       Favorable       104         440       Jasper silt loam       Favorable       115         441       Wakenda silt loam       Favorable       123         442       Mundelein silt loam       Favorable       115         443       Barrington silt loam       Favorable       115         445       Newhaven loam       Favorable       117         446       Springerton loam </td <td></td> <td></td> <td>Favorable</td> <td></td>			Favorable			
429       Palsgrove silt loam       Favorable       92         430       Raddle silt loam       Favorable       122         431       Genesee silt loam       Favorable       111         432       Geff silt loam       Favorable       97         433       Floraville silt loam       Favorable       90         434       Ridgway silt loam       Favorable       104         435       Streator silty clay loam       Favorable       116         436       Meadowbank silt loam       Favorable       121         437       Redbud silt loam       Favorable       101         438       Aviston silt loam       Favorable       121         439       Jasper silt loam, sandy substratum       Favorable       115         440       Jasper silt loam       Favorable       115         441       Wakenda silt loam       Favorable       123         442       Mundelein silt loam       Favorable       115         443       Barrington silt loam       Favorable       115         445       Newhaven loam       Favorable       111         446       Springerton loam       Favorable       117         447       Canisteo silt loam	427	Burnside silt loam	Favorable	85		
430       Raddle silt loam       Favorable       122         431       Genesee silt loam       Favorable       111         432       Geff silt loam       Favorable       97         433       Floraville silt loam       Favorable       90         434       Ridgway silt loam       Favorable       104         435       Streator silty clay loam       Favorable       116         436       Meadowbank silt loam       Favorable       121         437       Redbud silt loam       Favorable       101         438       Aviston silt loam       Favorable       121         439       Jasper silt loam, sandy substratum       Favorable       115         440       Jasper silt loam       Favorable       115         441       Wakenda silt loam       Favorable       123         442       Mundelein silt loam       Favorable       115         443       Barrington silt loam       Favorable       115         445       Newhaven loam       Favorable       117         446       Springerton loam       Favorable       105         448       Mona silt loam       Favorable       104	428	Coffeen silt loam	Favorable			
431       Genesee silt loam       Favorable       111         432       Geff silt loam       Favorable       97         433       Floraville silt loam       Favorable       90         434       Ridgway silt loam       Favorable       104         435       Streator silty clay loam       Favorable       116         436       Meadowbank silt loam       Favorable       121         437       Redbud silt loam       Favorable       101         438       Aviston silt loam       Favorable       121         439       Jasper silt loam, sandy substratum       Favorable       104         440       Jasper silt loam       Favorable       115         441       Wakenda silt loam       Favorable       123         442       Mundelein silt loam       Favorable       115         443       Barrington silt loam       Favorable       115         445       Newhaven loam       Favorable       111         446       Springerton loam       Favorable       117         447       Canisteo silt loam, sandy substratum       Favorable       105         448       Mona silt loam       Favorable       104	429	Palsgrove silt loam	Favorable	92		
432       Geff silt loam       Favorable       97         433       Floraville silt loam       Favorable       90         434       Ridgway silt loam       Favorable       104         435       Streator silty clay loam       Favorable       116         436       Meadowbank silt loam       Favorable       121         437       Redbud silt loam       Favorable       101         438       Aviston silt loam       Favorable       121         439       Jasper silt loam, sandy substratum       Favorable       104         440       Jasper silt loam       Favorable       115         Wakenda silt loam       Favorable       123         Mundelein silt loam       Favorable       115         443       Barrington silt loam       Favorable       115         445       Newhaven loam       Favorable       111         446       Springerton loam       Favorable       117         447       Canisteo silt loam, sandy substratum       Favorable       105         448       Mona silt loam       Favorable       104	430	Raddle silt loam	Favorable	122		
Floraville silt loam Favorable	431	Genesee silt loam	Favorable	111		
434       Ridgway silt loam       Favorable       104         435       Streator silty clay loam       Favorable       116         436       Meadowbank silt loam       Favorable       121         437       Redbud silt loam       Favorable       101         438       Aviston silt loam       Favorable       121         439       Jasper silt loam, sandy substratum       Favorable       104         440       Jasper silt loam       Favorable       115         441       Wakenda silt loam       Favorable       123         442       Mundelein silt loam       Favorable       123         443       Barrington silt loam       Favorable       115         445       Newhaven loam       Favorable       111         446       Springerton loam       Favorable       117         447       Canisteo silt loam, sandy substratum       Favorable       105         448       Mona silt loam       Favorable       104	432	Geff silt loam	Favorable	97		
Streator silty clay loam  Meadowbank silt loam  Favorable  Redbud silt loam  Favorable  Favorable  Favorable  121  Favorable  101  Favorable  122  Favorable  123  Favorable  124  Favorable  125  Favorable  126  Favorable  127  Favorable  128  Favorable  129  Favorable  120  Favorable  121  Favorable  121  Favorable  122  Favorable  123  Favorable  123  Favorable  124  Favorable  125  Favorable  126  Favorable  127  Favorable  128  Favorable  129  Favorable  120  Favorable  121  Favorable  121  Favorable  122  Favorable  123  Favorable  124  Favorable  125  Favorable  126  Favorable  127  Favorable  128  Favorable  129  Favorable  120  Favorable  121  Favorable  123  Favorable  124  Favorable  125  Favorable  126  Favorable  127  Favorable  128  Favorable  129  Favorable  110  Favorable  111  Favorable  111  Favorable  112	433	Floraville silt loam	Favorable	90		
436Meadowbank silt loamFavorable121437Redbud silt loamFavorable101438Aviston silt loamFavorable121439Jasper silt loam, sandy substratumFavorable104440Jasper silt loamFavorable115441Wakenda silt loamFavorable123442Mundelein silt loamFavorable123443Barrington silt loamFavorable115445Newhaven loamFavorable111446Springerton loamFavorable117447Canisteo silt loam, sandy substratumFavorable105448Mona silt loamFavorable104		9 ,	Favorable	104		
437Redbud silt loamFavorable101438Aviston silt loamFavorable121439Jasper silt loam, sandy substratumFavorable104440Jasper silt loamFavorable115441Wakenda silt loamFavorable123442Mundelein silt loamFavorable123443Barrington silt loamFavorable115445Newhaven loamFavorable111446Springerton loamFavorable117447Canisteo silt loam, sandy substratumFavorable105448Mona silt loamFavorable104	435	Streator silty clay loam	Favorable	116		
438Aviston silt loamFavorable121439Jasper silt loam, sandy substratumFavorable104440Jasper silt loamFavorable115441Wakenda silt loamFavorable123442Mundelein silt loamFavorable123443Barrington silt loamFavorable115445Newhaven loamFavorable111446Springerton loamFavorable117447Canisteo silt loam, sandy substratumFavorable105448Mona silt loamFavorable104	436	Meadowbank silt loam	Favorable	121		
439Jasper silt loam, sandy substratumFavorable104440Jasper silt loamFavorable115441Wakenda silt loamFavorable123442Mundelein silt loamFavorable123443Barrington silt loamFavorable115445Newhaven loamFavorable111446Springerton loamFavorable117447Canisteo silt loam, sandy substratumFavorable105448Mona silt loamFavorable104			Favorable			
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441Wakenda silt loamFavorable123442Mundelein silt loamFavorable123443Barrington silt loamFavorable115445Newhaven loamFavorable111446Springerton loamFavorable117447Canisteo silt loam, sandy substratumFavorable105448Mona silt loamFavorable104	439	Jasper silt loam, sandy substratum	Favorable	104		
442Mundelein silt loamFavorable123443Barrington silt loamFavorable115445Newhaven loamFavorable111446Springerton loamFavorable117447Canisteo silt loam, sandy substratumFavorable105448Mona silt loamFavorable104	440	Jasper silt loam	Favorable	115		
443Barrington silt loamFavorable115445Newhaven loamFavorable111446Springerton loamFavorable117447Canisteo silt loam, sandy substratumFavorable105448Mona silt loamFavorable104	441	Wakenda silt loam	Favorable	123		
445Newhaven loamFavorable111446Springerton loamFavorable117447Canisteo silt loam, sandy substratumFavorable105448Mona silt loamFavorable104	442	Mundelein silt loam	Favorable	123		
446Springerton loamFavorable117447Canisteo silt loam, sandy substratumFavorable105448Mona silt loamFavorable104	443	Barrington silt loam	Favorable	115		
447 Canisteo silt loam, sandy substratum Favorable 105 448 Mona silt loam Favorable 104	445	Newhaven loam	Favorable	111		
448 Mona silt loam Favorable 104	446	Springerton loam	Favorable	117		
	447	Canisteo silt loam, sandy substratum	Favorable	105		
440   Amelication m. Ocument according	448	Mona silt loam	Favorable	104		
449 Amiesburg - Sarpy complex   Favorable   100	449	Amiesburg - Sarpy complex	Favorable	100		

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### Productivity of Illinois Soils Under Average Management Slightly Eroded, 0 to 2 Percent Slopes Revised January 1, 2012

	Revised January 1, 2012				
IL map symbol	Soil type name	Subsoil rooting	B 810 Productivity Index (PI)		
		<u> </u>	Average management		
	Brouillett silt loam	Favorable	118		
_	Lawson silt loam	Favorable	124		
	Riley silty clay loam	Favorable	112		
	Muren silt loam	Favorable	105		
	Iva silt loam	Favorable	110		
	Mixed alluvial land	Crop yield data not available			
	Ware silt loam	Favorable	104		
	Booker silty clay	Favorable	79		
	Fayette silt loam, sandy substratum	Favorable	104		
	Tama silt loam, sandy substratum	Favorable	120		
	Ginat silt loam	Favorable	95		
	Weinbach silt loam	Favorable	93		
	Sciotoville silt loam	Favorable	93		
	Wheeling silt loam	Favorable	96		
	Wallkill silty clay loam	Favorable	97		
	Montgomery silty clay loam	Favorable	98		
466	Bartelso silt loam	Favorable	112		
467	Markland silt loam	Unfavorable	93		
468	Lakaskia silt loam	Favorable	107		
469	Emma silty clay loam	Favorable	98		
470	Keller silt loam	Unfavorable	101		
471	Clarksville cherty silt loam	Unfavorable	54		
472	Baylis silt loam	Favorable	96		
473	Rossburg loam	Favorable	117		
474	Piasa silt loam	Unfavorable	92		
475	Elsah cherty silt loam	Favorable	97		
476	Biddle silt loam	Unfavorable	103		
477	Winfield silt loam	Favorable	105		
479	Aurelius muck, sandy substratum	Favorable	92		
480	Moundprairie silty clay loam	Favorable	103		
481	Raub silt loam	Favorable	119		
482	Uniontown silt loam	Favorable	104		
483	Henshaw silt loam	Favorable	104		
484	Harco silt loam	Favorable	124		
485	Richwood silt loam	Favorable	120		
486	Bertrand silt loam	Favorable	101		
487	Joyce silt loam	Favorable	117		
	Hooppole loam	Favorable	107		
	Hurst silt loam, sandy substratum	Unfavorable	83		
	Odell silt loam	Favorable	114		
	Ruma silt loam	Favorable	103		
492	Normandy silt loam	Favorable	109		
	Bonfield silt loam	Favorable	108		
	Kankakee fine sandy loam	Favorable	102		
	Corwin silt loam	Favorable	108		
	Fincastle silt loam	Favorable	107		
	Fella silty clay loam	Favorable	119		
	<u>, , , , , , , , , , , , , , , , , , , </u>	1			

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# Productivity of Illinois Soils Under Average Management Slightly Eroded, 0 to 2 Percent Slopes

Revised January 1, 2012

IL map symbol	Soil type name	Subsoil rooting	B 810 Productivity Index (PI)
Syllibol			Average management
501	Morocco fine sand	Favorable	77
503	Rockton loam	Favorable	90
504	Sogn silt loam	Unfavorable	54
505	Dunbarton silt loam	Unfavorable	66
506	Hitt silt loam	Favorable	105
508	Selma loam, bedrock substratum	Favorable	112
509	Whalan loam	Favorable	79
511	Dunbarton silt loam, cherty variant	Unfavorable	53
512	Danabrook silt loam	Favorable	122
513	Granby loamy sand	Favorable	96
515	Bunkum silty clay loam	Favorable	98
516	Faxon clay loam	Favorable	102
517	Marine silt loam	Favorable	92
518	Rend silt loam	Unfavorable	93
523	Dunham silty clay loam	Favorable	117
524	Zipp silty clay loam	Favorable	91
525	Joslin loam, bedrock substratum	Unfavorable	84
526	Grundelein silt loam	Favorable	122
527	Kidami silt loam	Favorable	102
528	Lahoguess loam	Favorable	111
529	Selmass loam	Favorable	107
530	Ozaukee silt loam	Favorable	96
531	Markham silt loam	Favorable	101
533	Urban land	Crop yield data not available	
534	Urban land, clayey Orthents complex	Crop yield data not available	
535	Orthents, stony	Crop yield data not available	
536	Dumps, mine	Crop yield data not available	
537	Hesch fine sandy loam, gray subsoil variant	Unfavorable	99
538	Emery silt loam	Favorable	112
539	Wenona silt loam, loamy substratum	Favorable	116
540	Frankville silt loam	Favorable	86
541	Graymont silt loam	Favorable	119
542	Rooks silt loam	Favorable	122
543	Piscasaw silt loam	Favorable	108
544	Torox silt loam	Favorable	109
545	Windere silt loam	Favorable	112
546	Keltner silt loam	Favorable	104
547	Eleroy silt loam	Favorable	93
548	Marseilles silt loam, moderately wet	Unfavorable	94
549	Marseilles silt loam	Unfavorable	94

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### **Productivity of Illinois Soils Under Average Management** Slightly Eroded, 0 to 2 Percent Slopes Revised January 1, 2012

	Revised	January 1, 2012	D 040 D 1 414 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1
IL map	Soil type name	Subsoil rooting	B 810 Productivity Index (PI)
symbol	0 1 311		Average management
	Gosport silt loam	Unfavorable	75
	Drummer silty clay loam, till substratum	Favorable	120
	Bryce-Calamine variant complex	Favorable	103
	Kernan silt loam	Favorable	100
	Shadeland silt loam	Favorable	85
	High Gap loam	Unfavorable	84
	Millstream silt loam	Favorable	115
558	Breeds silty clay loam	Favorable	105
	Lindley loam	Favorable	83
560	St. Clair silt loam	Unfavorable	83
561	Whalan and NewGlarus silt loams	Favorable	85
562	Port Byron silt loam, sandy substratum	Favorable	115
563	Seaton silt loam, sandy substratum	Favorable	101
564	Waukegan silt loam	Favorable	106
565	Tell silt loam	Favorable	99
566	Rockton and Dodgeville soils	Favorable	91
567	Elkhart silt loam	Favorable	111
568	Niota silty clay loam, clayey subsurface variant	Favorable	78
569	Medary silty clay loam	Favorable	76
570	Martinsville silt loam	Favorable	101
571	Whitaker silt loam	Favorable	106
572	Loran silt loam	Favorable	107
573	Tuscola loam	Favorable	90
574	Ogle silt loam, silt loam subsoil variant	Favorable	102
	Joy silt loam, sandy substratum	Favorable	119
576	Zwingle silt loam	Favorable	94
	Terrace escarpment	Crop yield data not available	
578	Dorchester silt loam, cobbly substratum	Favorable	93
	Beavercreek loam	Unfavorable	75
580	Fayette silty clay loam, karst	Favorable	96
	Tamalco silt loam	Unfavorable	82
582	Homen silt loam	Favorable	96
583	Pike silt loam	Favorable	103
	Grantfork silty clay loam	Unfavorable	77
	Negley loam	Favorable	90
	Nokomis silt loam	Favorable	100
	Terril loam	Favorable	116
	Sparta loamy sand, loamy substratum	Favorable	83
	Bowdre silty clay	Favorable	98
	Cairo silty clay	Favorable	105
	Fults silty clay	Favorable	102
	Nameoki silty clay	Favorable	106
	Chautauqua silty clay loam	Favorable	106
	Reddick silty clay loam	Favorable	115
	Coot loam	Favorable	97
	Marbletown silt loam	Favorable	115
	Armiesburg silty clay loam	Favorable	117
	Bedford silt loam	Favorable	83
	Baxter cherty silt loam	Favorable	73
599	Buntor Orienty Silt Iballi	1 avoiable	13

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## **Productivity of Illinois Soils Under Average Management** Slightly Eroded, 0 to 2 Percent Slopes Revised January 1, 2012

IL map	IL map Solitone name Subscript B 810 Productivity Index (PI)				
symbol	Soil type name	Subsoil rooting	Average management		
	Huntington silt loam	Favorable	122		
	Nolin silty clay loam	Favorable	102		
	Newark silty clay loam	Favorable	92		
	Blackoar silt loam	Favorable	116		
604	Sandy alluvial land	Crop yield data not available			
	Ursa silt loam	Unfavorable	76		
	Goss gravelly silt loam	Unfavorable	58		
	Monterey silty clay loam	Favorable	114		
608	Mudhen clay loam	Favorable	95		
	Crane silt loam	Favorable	110		
610	Tallmadge sandy loam	Favorable	109		
611	Sepo silty clay loam	Favorable	114		
613	Oskaloosa silt loam	Favorable	92		
614	Chenoa silt loam	Favorable	114		
615	Vanmeter silty clay loam	Favorable	69		
618	Senachwine silt loam	Favorable	95		
619	Parkville silty clay	Favorable	110		
620	Darmstadt silt loam	Unfavorable	82		
621	Coulterville silt loam	Unfavorable	98		
622	Wyanet silt loam	Favorable	106		
623	Kishwaukee silt loam	Favorable	119		
624	Caprell silt loam	Favorable	101		
625	Geryune silt loam	Favorable	121		
626	Kish loam	Favorable	110		
627	Miami fine sandy loam	Favorable	92		
628	Lax silt loam	Favorable	81		
629	Crider silt loam	Favorable	100		
630	Navlys silty clay loam	Favorable	92		
631	Princeton fine sandy loam	Favorable	96		
632	Copperas silty clay loam	Favorable	107		
633	Traer silt loam	Favorable	104		
634	Blyton silt loam	Favorable	112		
635	Lismod silt loam	Favorable	122		
636	Parmod silt loam	Favorable	110		
	Muskego silty clay loam, overwash	Favorable	113		
	Muskego muck	Favorable	110		
639	Wynoose silt loam, bench	Favorable	84		
	Bluford silt loam, bench	Favorable	90		
	Quiver silty clay loam	Favorable	93		
	Rennsselaer loam	Favorable	98		
	Fluvaquents, loamy	Crop yield data not available			
	Lawler loam	Favorable	104		
	Clyde clay loam	Favorable	123		
649	Nachusa silt loam	Favorable	121		

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### **Productivity of Illinois Soils Under Average Management** Slightly Eroded, 0 to 2 Percent Slopes Revised January 1, 2012

	Revised January 1, 2012				
IL map			B 810 Productivity Index		
symbol	Soil type name	Subsoil rooting	(PI)		
			Average management		
	Prairieville silt loam	Favorable	116		
	Keswick loam	Favorable	74		
	Passport silt loam	Favorable	84		
654	Moline silty clay	Favorable	98		
	Ursa silt loam, moderately wet	Unfavorable	78		
656	Octagon silt loam	Favorable	104		
657	Burksville silt loam	Favorable	95		
658	Sonsac very cobbly silt loam	Unfavorable	71		
660	Coatsburg silt loam	Unfavorable	86		
661	Atkinson loam	Favorable	100		
662	Barony silt loam	Favorable	111		
663	Clare silt loam	Favorable	118		
665	Stonelick fine sandy loam	Favorable	91		
667	Kaneville silt loam	Favorable	113		
668	Somonauk silt loam	Favorable	104		
669	Saffell gravelly sandy loam	Unfavorable	71		
670	Aholt silty clay	Favorable	81		
671	Biggsville silt loam	Favorable	126		
672	Cresent loam	Favorable	104		
673	Onarga fine sandy loam, till substratum	Favorable	98		
	Dozaville silt loam	Favorable	121		
675	Greenbush silt loam	Favorable	119		
678	Mannon silt loam	Favorable	118		
679	Blackberry silt loam	Favorable	126		
	Campton silt loam	Favorable	105		
	Dubuque-Orthents-Fayette complex	Crop yield data not available			
	Medway silty clay loam	Favorable	116		
	Lawndale silt loam	Favorable	127		
	Broadwell silt loam	Favorable	122		
	Middletown silt loam	Favorable	103		
	Parkway silt loam	Favorable	122		
	Penfield loam	Favorable	115		
	Braidwood loam	Unfavorable	76		
	Coloma loamy sand	Favorable	67		
	Brookside stony silty clay loam	Unfavorable	82		
	Beasley silt loam	Favorable	75		
	Menfro - Wellston silt loams	Favorable	95		
	Menfro - Baxter complex	Favorable	94		
	Fosterburg silt loam	Favorable	110		
	Zurich silt loam	Favorable	105		
	Wauconda silt loam	Favorable	117		
	Grays silt loam	Favorable	110		
	Timewell silt loam	Favorable	122		
099	THICWOII SIIL IOAIII	I avoiable	144		

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# **Productivity of Illinois Soils Under Average Management** Slightly Eroded, 0 to 2 Percent Slopes Revised January 1, 2012

	Revised January 1, 2012  B 810 Productivi				
IL map	Soil type name	Subsoil rooting	Index (PI)		
symbol	Son type name	oubson rooting	Average management		
700	Westmore silt loam	Favorable	87		
701	Menfro - Hickory silt loams	Favorable	97		
	Ruma - Hickory silt loams	Favorable	95		
	Pierron - Burksville silt loams	Favorable	93		
705	Buckhart silt loam	Favorable	126		
706	Boyer sandy loam	Favorable	88		
709	Osceola silt loam	Favorable	101		
711	Hatfield silt loam	Favorable	100		
712	Spaulding silty clay loam	Favorable	118		
713	Judyville fine sandy loam	Unfavorable	57		
715	Arrowsmith silt loam	Favorable	124		
717	Stockey - Clarksville complex	Favorable	84		
718	Marsh	Crop yield data not available			
720	Aetna silt loam	Favorable	118		
721	Drummer and Elpaso silty clay loams	Favorable	127		
722	Drummer - Milford silty clay loams	Favorable	121		
723	Reesville silt loam	Favorable	110		
724	Rozetta-Elco silt loams	Favorable	103		
725	Otter-Lawson silt loams	Favorable	123		
726	Elburn silt loam, sandy substratum	Favorable	120		
727	Waukee loam	Favorable	97		
728	Winnebago silt loam	Favorable	108		
730	Bethesda channery silty clay loam	Crop yield data not available			
731	Nasset silt loam	Favorable	100		
732	Appleriver silt loam	Favorable	93		
737	Tama silt loam, sandy substratum	Favorable	123		
738	Milton silt loam	Unfavorable	57		
739	Milton silt loam	Unfavorable	57		
740	Darroch silt loam	Favorable	114		
741	Oakville fine sand	Favorable	73		
742	Dickinson sandy loam, loamy substratum	Favorable	95		
743	Ridott silt loam	Favorable	99		
745	Shullsburg silt loam	Unfavorable	100		
746	Calamine silt loam	Favorable	97		
747	Milford silty clay loams	Favorable	113		
748	Plano silt loam, sandy substratum	Favorable	119		
749	Buckhart silt loam, till substratum	Favorable	126		

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## **Productivity of Illinois Soils Under Average Management** Slightly Eroded, 0 to 2 Percent Slopes Revised January 1, 2012

	Revised January 1, 2012				
IL map	<b>.</b>	<b>.</b>	B 810 Productivity		
symbol	Soil type name	Subsoil rooting	Index (PI)		
750	0. 11 5	<u> </u>	Average management		
	Skelton fine sandy loam	Favorable	93		
	Crawleyville loam	Favorable	94		
	Oneco silt loam	Favorable	97		
	Massbach silt loam	Favorable	98		
	Fairpoint gravelly clay loam	Crop yield data not available			
	Lamoille silt loam	Favorable	75		
	Wyanet fine sandy loam	Favorable	101		
	Senachwine fine sandy loam	Favorable	90		
	Udolpho loam, sandy substratum	Favorable	90		
	Marshan loam, sandy substratum	Favorable	109		
	Eleva sandy loam	Unfavorable	76		
763	Joslin silt loam	Favorable	115		
764	Coyne fine sandy loam	Favorable	93		
765	Trempealeau silt loam	Favorable	100		
766	Lamartine silt loam	Favorable	118		
767	Prophetstown silt loam	Favorable	122		
768	Backbone loamy sand	Favorable	77		
769	Edmund silt loam	Unfavorable	79		
770	Udolpho loam	Favorable	91		
771	Hayfield loam	Favorable	100		
772	Marshan loam	Favorable	110		
774	Saude loam	Favorable	96		
776	Comfrey clay loam	Favorable	122		
777	Adrian muck	Favorable	97		
779	Chelsea loamy fine sand	Favorable	68		
780	Grellton sandy loam	Favorable	93		
781	Friesland sandy loam	Favorable	105		
782	Juneau silt loam	Favorable	116		
783	Flagler sandy loam	Favorable	85		
784	Berks loam	Unfavorable	56		
785	Lacrescent cobbly silty clay loam	Favorable	73		
786	Frondorf loam	Unfavorable	77		
787	Banlic silt loam	Favorable	94		
789#	Ambraw-Ceresco-Sarpy complex	Favorable	97		
	Volney silt loam, bedrock substratum	Unfavorable	76		
	Rush silt loam	Favorable	96		
	Bowes silt loam	Favorable	115		
	Berks, Muskingum and Wiekert soils	Unfavorable	55		
	Huey-Burksville silt loam	Unfavorable	85		
	Hickory-Homen silty clay loam	Favorable	87		
	Arents, loamy	Crop yield data not available			

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### Productivity of Illinois Soils Under Average Management Slightly Eroded, 0 to 2 Percent Slopes Revised January 1, 2012

Revised January 1, 2012						
IL map	Soil type name	Subsoil rooting	B 810 Productivity Index (PI)			
symbol	· ·		Average management			
800	Psamments	Crop yield data not available				
801	Orthents, silty	Crop yield data not available				
	Orthents, loamy	Crop yield data not available				
	Orthents	Crop yield data not available				
804	Orthents, acid	Crop yield data not available				
805	Orthents, clayey	Crop yield data not available				
	Orthents, clayey-skeletal	Crop yield data not available				
	Aquents-Orthents complex	Crop yield data not available				
	Orthents, sandy-skeletal	Crop yield data not available				
	Orthents, loamy - skeletal, acid, steep	Crop yield data not available				
	Oil-brine damaged land	Crop yield data not available				
	Aquolls	Crop yield data not available				
	Typic Hapludalfs	Crop yield data not available				
	Orthents, bedrock subs.,silty, pits, complex	Crop yield data not available				
	Muscatune-Buckhart complex	Favorable	128			
	Udorthents, silty	Favorable	95			
			95			
	Stookey-Timula-Orthents complex	Crop yield data not available Unfavorable	78			
	Channahon-Hesch fine sandy loam	Favorable	_			
	Flanagan-Catlin silt loams		125			
	Hennepin-Vanmeter complex	Unfavorable	76			
	Hennepin-Casco complex	Unfavorable	84			
	Morristown silt loam	Favorable	71			
	Schuline silt loam	Favorable	86			
	Swanwick silt loam	Favorable	82			
	Lenzburg silt loam, acid substratum	Favorable	59			
	Orthents, silty, acid substratum	Crop yield data not available				
	Broadwell-Onarga complex	Favorable	112			
	Broadwell-Sparta complex	Favorable	106			
	Biggsville-Mannon silt loams	Favorable	123			
	Landfill	Crop yield data not available				
832	Menfro - Clarksville complex	Favorable	86			
	Menfro - Goss complex	Favorable	87			
834	Wellston - Westmore silt loams	Unfavorable	83			
	Earthen dam	Crop yield data not available				
836	Hamburg - Lacrescent complex	Favorable	86			
837	Limestone rockland - Lacrescent complex	Crop yield data not available				
838	Fayette - Goss complex	Favorable	88			
840	Zurick and Ozaukee silt loams	Favorable	101			
841	Carmi - Westland complex	Favorable	99			
843	Bonnie and Petrolia soils	Favorable	101			
844	Ava-Blair complex	Unfavorable	90			
845	Darwin and Jacob silty clays	Favorable	89			
846	Kamak and Cape silty clays	Favorable	91			
847	Fluvaquents - Orthents complex	Crop yield data not available				
	Drummer - Barrington - Mundelein complex	Favorable	123			
	Milford - Martinton complex	Favorable	114			

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### **Productivity of Illinois Soils Under Average Management** Slightly Eroded, 0 to 2 Percent Slopes Revised January 1, 2012

	Revised January 1, 2012							
IL map symbol	' I Soil type name ISUBSOII rooting		B 810 Productivity Index (PI)					
Symbol			Average management					
850	Hickory-Hosmer silt loams	Unfavorable	86					
851	Mefro-Ursa silt loams	Favorable	95					
852	Mefro-Wellston silt loams	Favorable	95					
853	Alford-Westmore silt loams	Favorable	99					
854#	Markham-Ashkum-Beecher complex	Favorable	105					
854#	Menfro - Westmore complex	Favorable	99					
855#	Timewell and Ipava soils	Favorable	123					
855#	Ruma-Westmore silt loams	Favorable	96					
856	Stookey and Timula soils	Favorable	101					
857	Strawn-Hennepin loams	Unfavorable	88					
858#	Port Byron-Mt. Carroll-Urban land	Crop yield data not available						
858#	Port Byron-Mt. Carroll silt loams	Favorable	123					
859	Blair-Ursa silt loams	Unfavorable	87					
860#	Hosmer-Ursa silt loams	Unfavorable	87					
860#	Homen - Atlas silt loams	Favorable	90					
861	Ursa-Hickory complex	Unfavorable	78					
862	Pits, sand	Crop yield data not available						
863	Pits, clay	Crop yield data not available						
864	Pits, quarries	Crop yield data not available						
865	Pits, gravel	Crop yield data not available						
866	Dumps, slurry	Crop yield data not available						
867	Oil-waste land	Crop yield data not available						
868	Pits, organic	Crop yield data not available						
869	Pits, quarries-Orthents complex	Crop yield data not available						
870	Blake-Beaucoup complex	Favorable	108					
871	Lenzburg silt loam	Favorable	80					
872	Rapatee silty clay loam	Favorable	97					
873	Dunbarton-Dubuque complex	Unfavorable	73					
874	Dickinson-Hamburg complex	Favorable	93					
875	Lenzlo silty clay loam	Favorable	85					
876	Lenzwheel silty clay loam	Favorable	75					
877	Blake - Slacwater silt loams	Favorable	102					
878	Coulterville-Grantfork silty clay loams	Unfavorable	90					
880	Coulterville-Darmstadt complex	Unfavorable	92					
881	Coulterville-Hoyleton-Darmstadt complex	Unfavorable	94					
882	Oconee-Darmstadt-Coulterville silt loams	Unfavorable	97					
883	Senachwine - Hennepin complex	Favorable	89					
884	Bunkum-Coulterville silty clay loams	Unfavorable	98					
885	Virden-Fosterburg silt loams	Favorable	116					
886	Ruma-Ursa silty clay loams	Unfavorable	93					
887	Darmstadt-Grantfork complex	Unfavorable	81					
888	Passport-Grantfork complex	Unfavorable	83					
889	Bluford-Darmstadt complex	Unfavorable	87					
890	Ursa-Atlas complex	Unfavorable	78					
891	Cisne-Piasa complex	Unfavorable	96					
892	Sawmill-Lawson complex	Favorable	123					
893	Catlin-Saybrook complex	Favorable	120					
894	Herrick-Biddle-Piasa silt loams	Unfavorable	108					
895	Fayette-Westville complex	Favorable	105					
896	Wynoose-Huey complex	Unfavorable	83					
897	Bunkum-Atlas silty clay loams	Unfavorable	92					
898	Hickory-Sylvan complex	Favorable	88					
899	Raddle-Sparta complex	Favorable	106					

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### **Productivity of Illinois Soils Under Average Management** Slightly Eroded, 0 to 2 Percent Slopes Revised January 1, 2012

			B 810 Productivity
IL map	Soil type name	Subsoil rooting	Index (PI)
symbol	, , , , , , , , , , , , , , , , , , ,		Average management
900	Hickory-Wellston silt loams	Unfavorable	80
	Ipava-Osco complex	Favorable	126
	Ipava-Sable complex	Favorable	126
	Muskego and Houghton mucks	Favorable	112
	Muskego and Peotone soils, ponded	Favorable	109
	NewGlarus-Lamoille complex	Favorable	86
	Redbud-Hurst silty clay loams	Unfavorable	97
	Redbud-Colp silty clay loams	Unfavorable	96
	Hickory-Kell silt loams	Favorable	83
	Coulterville-Oconee silt loams	Unfavorable	101
	Timula-Miami complex	Favorable	100
	Timula-Hickory complex	Favorable	93
	Hoyleton-Darmstadt complex	Unfavorable	91
	Marseilles-Hickory complex	Unfavorable	89
	Atlas-Grantfork complex	Unfavorable	80
	Elco-Ursa silt loams	Unfavorable	90
	Darmstadt-Oconee silt loams	Unfavorable	92
	Oakville-Tell complex	Favorable	84
	Marseilles-Atlas complex	Unfavorable	89
	Rodman-Fox complex	Unfavorable	83
	Rushville-Huey silt loams	Unfavorable	91
	Faxon-Ripon complex	Favorable	101
	Alford-Hurst silty clay loams	Unfavorable	100
	Urban land-Markham-Ashkum complex	Crop yield data not available	
	Urban land-Milford-Martinton complex	Crop yield data not available	
	Urban land-Frankfort-Bryce complex	Crop yield data not available	
	Urban land- Drummer-Barrington complex	Crop yield data not available	
	Blair-Atlas silt loams	Unfavorable	88
	NewGlarus-Palsgrove silt loams	Favorable	93
929	Ava-Hickory complex	Unfavorable	87
	Goss-Alford complex	Unfavorable	78
	Seaton-Goss complex	Unfavorable	87
	Clinton-El Dara complex	Favorable	100
	Hickory-Clinton complex	Favorable	92
	Blair-Grantfork complex	Unfavorable	87
	Miami-Hennepin complex	Unfavorable	92
	Fayette-Hickory complex	Favorable	98
	Seaton-Hickory complex	Favorable	96
	Miami-Casco complex	Unfavorable	96
	Rodman-Warsaw complex	Unfavorable	87
	Zanesville-Westmore silt loams	Unfavorable	85
941	Virden-Piasa silt loams	Unfavorable	108
942	Seaton-Oakville complex	Favorable	93
	Seaton-Timula silt loams	Favorable	104
944	Velma-Coatsburg silt loams	Unfavorable	95
945	Hickory-High Gap silt loams	Unfavorable	82
946	Hickory-Atlas complex	Unfavorable	81
947	Lamont, Tell and Bloomfield soils	Favorable	88
948	Fayette-Clarksville complex	Unfavorable	87
949	Eleroy and Derinda soils	Unfavorable	89

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# Productivity of Illinois Soils Under Average Management Slightly Eroded, 0 to 2 Percent Slopes

Revised January 1, 2012

Revised January 1, 2012						
IL map			B 810 Productivity			
symbol	Soil type name	Subsoil rooting	Index (PI)			
			Average management			
	Dubuque and Palsgrove soils	Unfavorable	88			
	Palsgrove and Woodbine soils	Favorable	90			
	Tell-Lamont complex	Favorable	95			
	Hosmer-Lax silt loams	Unfavorable	88			
	Alford-Baxter complex	Favorable	94			
	Muskingum and Berks soils	Unfavorable	59			
	Brandon and Saffell soils	Unfavorable	83			
957	Elco-Atlas silt loams	Unfavorable	91			
958	Hickory and Hennepin soils	Unfavorable	81			
959	Strawn-Chute complex	Favorable	82			
960	Hickory-Sylvan-Fayette silt loams	Favorable	92			
961	Burkhardt-Saude complex	Favorable	82			
962	Sylvan-Bold complex	Favorable	98			
963	Hickory and Sylvan soils	Favorable	88			
964#	Hennepin and Miami soils	Unfavorable	88			
964#	Miami and Hennepin soils	Favorable	92			
965	Tallula-Bold silt loams	Favorable	109			
966	Miami-Russell silt loams	Favorable	101			
967	Hickory-Gosport complex	Unfavorable	79			
	Birkbeck-Miami silt loams	Favorable	105			
	Rodman-Casco complex	Unfavorable	81			
	Keller-Coatsburg complex	Unfavorable	95			
	Fishhook-Atlas complex	Unfavorable	84			
	Casco-Fox complex	Unfavorable	93			
	Dubuque and Dunbarton soils	Unfavorable	78			
	Dickinson-Onarga complex	Favorable	94			
	Alvin-Lamont complex	Favorable	93			
	Neotoma-Rock outcrop complex	Crop yield data not available				
	Neotoma-Wellston complex	Unfavorable	74			
	Wauconda and Beecher silt loams	Favorable	111			
		Favorable	106			
	Grays and Markham silt loams	Favorable	100			
	Zurich and Morley silt loams					
	Wauconda and Frankfort silt loams	Unfavorable	106			
	Aptakisic and Nappanee silt loams	Unfavorable	92			
	Zurich and Nappanee silt loams	Unfavorable	94			
	Barrington and Varna silt loams	Favorable	110			
	Alford-Bold complex	Favorable	103			
	Wellston-Berks complex	Unfavorable	70			
	Atlas-Grantfork variant complex	Unfavorable	77			
	Westmore-Neotoma complex	Unfavorable	80			
	Mundelein and Elliott soils	Favorable	118			
990	Stookey-Bodine complex	Unfavorable	90			
	Cisne-Huey complex	Unfavorable	90			
992	Hoyleton-Tamalco complex	Unfavorable	90			
993	Cowden-Piasa complex	Unfavorable	99			
994	Oconee-Tamalco complex	Unfavorable	96			
995	Herrick-Piasa complex	Unfavorable	107			
996	Velma-Walshville complex	Unfavorable	93			
997	Hickory-Hennepin complex	Unfavorable	81			
998	Hickory-Negley complex	Favorable	86			
999	Alford-Hickory complex	Favorable	97			

# Duplicate IL Map Symbols are in Bold Print (use the appropriate soil type name)

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<sup>+</sup> Overwash phase

Table 3

BULLETIN 810 SLOPE & EROSION ADJUSTMENT TABLE

FAVORABLE SUBSOIL			UNFAVORABLE SUBSOIL							
Percent	Slight	Moderate	Severe	Percent	Percent Slight Moderate Severe					
of Slope	Erosion	Erosion	Erosion	of Slope	Erosion	Erosion	Erosion			
-										
0	1.00	.96	.89	0	1.00	.94	.79			
1	1.00	.96	.88	1	1.00	.93	.78			
2	1.00	.96	.87	2	1.00	.92	.77			
3	.99	.95	.86	3	.99	.91	.76			
4	.99	.95	.86	4	.98	.91	.75			
5	.98	.94	.85	5	.97	.90	.74			
6	.98	.93	.85	6	.96	.89	.73			
7	.97	.92	.84	7	.95	.88	.72			
8	.96	.91	.83	8	.95	.87	.71			
9	.95	.90	.82	9	.94	.86	.70			
10	.94	.89	.81	10	.93	.85	.69			
11	.93	.88	.80	11	.92	.84	.68			
12	.92	.87	.79	12	.91	.83	.67			
13	.91	.86	.77	13	.89	.81	.66			
14	.90	.85	.76	14	.88	.80	.65			
15	.89	.84	.75	15	.87	.79	.64			
16	.88	.82	.74	16	.86	.78	.63			
17	.87	.81	.73	17	.85	.77	.62			
18	.86	.79	.72	18	.83	.76	.60			
19	.84	.78	.71	19	.82	.74	.59			
20	.83	.76	.69	20	.80	.72	.57			
21	.82	.75	.68	21	.79	.71	.56			
22	.80	.73	.66	22	.77	.70	.55			
23	.78	.71	.64	23	.75	.68	.53			
24	.76	.69	.63	24	.73	.66	.51			
25	.74	.68	.61	25	.71	.64	.49			
26	.73	.66	.60	26	.69	.63	.48			
27	.73	.64	.58	27	.68	.61	.46			
28	.69	.62	.56	28	.66	.59	.44			
29	.67	.60	.54	29	.64	.57	.42			
30	.65	.58	.52	30	.62	.55	.39			
31	.62	.56	.50	31	.59	.52	.38			
32	.60	.56	.47	31	.57	.50	.35			
33	.58	.52	.47	33	.55	.48	.33			
33 34	.58 .57	.51	.43	33	.53	.47	.32			
35	.55	.50	.42	35	.52	.47	.30			
				36	.50	.43				
36	.53	.48	.40	36	.49	.43	.28 .27			
37	.52	.47	.39	38	.49	.42				
38	.51	.45	.38				.26			
39	.50	.45	.37	39	.47	.40	.25			
40	.49	.44	.36	40	.46	.39	.24			
41	.48	.43	.35	41	.45	.38	.23			
42	.47	.42	.34	42	.44	.37	.22			
43	.46	.42	.33	43	.43	.36	.22			

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# **Assessment of Farm Homesites** and Rural Residential Land

A farm homesite is the part of the farm parcel used for residential purposes and includes the lawn and land on which the residence and garage are situated. Areas in gardens, non-commercial orchards, and similar uses of land are also included.

Rural residential land may include farmland that is incidental to the primary residential use. It is generally comparable in value to the farm homesite. Both are subject to the state equalization factor and both should be assessed at the same percentage of market value as urban property. Whenever possible, use the sales comparison approach to value farm homesites and rural residential land.

#### Assessment of farm residences

Assess farm residences according to market value in the same manner as urban residences are assessed. Refer to the Residential section of the Publication 123, Instructions for Residential and Condominium Schedules for valuation of farm residences.

#### Assessment of farm buildings

The valuation of farm buildings is the final component in the assessment of farm real estate. The law requires farm buildings, which contribute in whole or in part to the operation of the farm, to be assessed as part of the farm. They are valued upon the current use of those buildings and their respective contribution to the productivity of the farm. Farm buildings are assessed at 33½ percent of their contributory value. The state equalization factor is not applied to farm buildings.

Valuation of farm buildings based upon contribution relies on theory as well as reality. Farm buildings are usually an integral part of the farm. When farms are sold, the land and improvements are valued together. The portion of this value attributable to farm buildings depends upon the degree to which they contribute to farming operations. Some farm buildings, even though they are in good physical condition, may play a minor role in the operation of the farm and have little value. These same buildings on another farm may be vitally important to the farming operation. The value of the farm buildings in these two instances is different.

The sales comparison, or market approach, and income approach to value are difficult to apply. The sales comparison, or market approach, is inadequate because farm buildings are rarely sold in isolation. The land and buildings are considered together in valuing the farm. The same problem arises in using the income approach. It is difficult to attribute a portion of the farm income solely to the buildings.

Value must be based on cost. This entails a third problem — depreciation. Since most farm buildings are constructed in the hopes of increasing efficiency or productivity, the undepreciated cost of the building will approximate market value

when the building is new. The undepreciated cost of the building may be quite different than the value as the building ages. This difference between actual cost of replacement and the value of the building is **depreciation**.

Replacement cost is the cost of replacing an existing structure with an equally desirable structure having similar, if not the same, utility. The difference between replacement cost and reproduction cost is essentially that reproduction cost is the cost of constructing a replica of the building with the same design, materials, and quality of workmanship, while replacement cost is the cost of a contemporary building of equal utility. The concept of replacement cost evolves from the Principle of Substitution that value of property is no more than the cost of acquiring an equally desirable substitute. Replacement cost is the upper limit of building value.

Depreciation is the difference between the replacement cost new (RCN) and current value. Depreciation can be in the form of physical deterioration, functional obsolescence, or economic obsolescence.

**Physical deterioration** is a loss in the physical ability of a building to withstand normal use. Deterioration results from use, wear and tear, structural defects, and decay. Physical depreciation is observable and identifiable.

**Functional obsolescence** is a loss in value due to characteristics of the building which cause a failure of the building to serve the purpose for which it was intended. Inadequacy may result from poor design, surplus capacity, and changes in farming techniques. Functional inadequacy causes a loss in desirability and usefulness.

**Economic obsolescence** is a loss in value due to changes in the economic environment of the farm. Economic obsolescence results from external influences such as land-use changes, government regulations, and farm market conditions. Economic obsolescence causes loss in desirability and utility.

Depreciation reflects loss in value due to all possible factors. Value of contribution to productivity can be determined by deducting all depreciation from replacement costs. This value will reflect such factors as improper design (functional obsolescence), neglect of repairs (physical deterioration), and more stringent government regulations (economic obsolescence).

Estimation of farm buildings' contribution to the operation of the farm first requires a thorough inspection of the buildings. The inspection should include the structural components of the buildings and their functional capacity. Record the following structural details:

- measurements,
- excavation,
- foundation,
- framing exterior walls,
- floors,
- roof,
- interior partitions,

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- · electric wiring,
- · plumbing,
- heating,
- ventilation.
- built-in equipment, and
- any other permanent features.

Functional features to note include:

- relative location,
- · current use,
- capacity (e.g. too large, too small),
- · design, and
- other possible uses.

Physical deterioration is observed during the inspection of the property. Economic obsolescence will require investigation into such factors as government regulation changes, current market fluctuations, and any land use changes of the surrounding property.

The cost tables in this section are provided as an aid in the development of replacement costs of typical farm buildings. The application of the cost tables is much the same as the cost tables in other sections of the manual. Select the costs for a comparable building and adjust this cost for variations from the model buildings.

To estimate the farm building's contribution to productivity of the farm, follow the procedure below.

#### Step 1

Estimate RCN of the building, in its current use.

- Measure the square feet of area being used.
- Decide the type of structure that provides the same utility for the current use.
- Multiply the square foot area by the replacement cost per square foot for a building of the same utility.

This step in the procedure allows for both function and economic depreciation. Remember that the existing type of structure may well provide the highest utility.

#### Step 2

Estimate the remaining physical life of the existing structure. This step allows for physical depreciation.

#### Step 3

Compute remaining economic life (REL) factor.

- Select a typical life expectancy figure from the typical life expectancies table on Page 40 for the existing structure.
- Divide the remaining physical life by typical life expectancy, giving REL.

#### Step 4

Multiply the RCN by the REL factor to find the value of the farm building according to its contribution to the productivity of the farm. Remember, this procedure does not apply to farm residences.

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#### **Summary**

Since the passage of the Farmland Assessment Law (P.A. 82-121) in 1981, the assessment of farmland has been based upon net income to the farmland as determined by land productivity and use. Land use is determined through the use of aerial photographs and visual inspection. Land productivity is determined through the use of soil maps, productivity indexes, and all other available data.

Farmland is separated into the four categories — cropland, permanent pasture, other farmland, and wasteland. Cropland, permanent pasture, and other farmland are assessed based upon PI which involves the identification of soil types; selection of PIs for average level management; adjustment of PIs for slope, erosion, and subsoil conditions; measurement of areas of soil types; selection of per acre assessed values for individual soil types or for weighted PIs from the table of values certified each year by the Illinois Department of Revenue; adjustment of assessed values for land use; and summation of assessed values for all farmland. Wasteland is assessed based on its contributory value.

Rural residential land and farm homesites are appraised according to market value. Customary appraisal procedures, such as the sales comparison, or market, approach and the income approach, are used in the valuation of these types of rural land. Farm residences are valued as part of the farm, using the same methodology as urban residences.

Farm buildings are valued according to current use and contribution to the productivity of the farm. All buildings are inspected, measured, and sketched on a property record card (PRC). In most cases, they are shown in the sketch space in their proper relative location to each other. Buildings are numbered consecutively with the number designation carried over to a summary of buildings, types, sizes, general descriptions, and tabulation of values.

Building replacement costs are computed from cost schedules developed for each type of structure and used uniformly throughout the jurisdiction. Depreciation allowances are carefully determined based upon the condition, desirability, and degree of usefulness of each structure. The total of all building valuations should represent the value which their presence contributes to the productivity of the farm.

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# **General Purpose Barns**

One-story barns (per SFFA)  Based on 10' height at eaves								
Base specifications; Foundation — concrete Roof — double pitch gable style; Floor — d	irt; Electric and wiring	Wood	Construc	tion type	Pole			
minimal service; Plumbing — two or less     Interior construction — two or less stalls an	d portioned feed room.	frame	Masonry	frame	frame			
Base price + OR - for each eave height variance		\$26.50 .51	\$25.97 .50	\$23.75 .46	\$23.40 .45			
Base costs reflect the following basic exteri steel frame, and pole frame are board and standard gauge corrugated metal. Masonry crete block and average quality brick.	patten, wood siding or							
	Adjus	stments						
Continuous concrete foundations and f Concrete floor No electricity + or - for no water service or extensive	3.21 -0.56	Gothic style roof			3.81 4.50 7.50			
Size adjustments								
Floor Factor	Floor	Factor		Floor	Factor			
Less than 1,000 1.000 2,000 .965 2,400 .930 3,000 .905 3,600 .890	2,000 .965 4,400 2,400 .930 5,000 3,000 .905 5,600			7,000 8,000 9,000 10,000	.800 .780 .765 .750			

Two-story barns (per total SFFA)  Based on 10' average floor height								
Base specifications; Foundation — concr Roof — double pitch gable style; Floor —			Construc	tion type				
wood planks over wood frame; Electric all vice; Plumbing — two or less cold water tion — two or less stalls and portioned fe	Wood frame	Masonry	Steel frame	Pole frame				
Base price + OR - for each eave height variance		\$20.37 .46	\$19.72 .44	\$18.33 .36	\$17.36 .38			
Base costs reflect the following basic ext steel frame, and pole frame are board an standard gauge corrugated metal. Masor crete block and average quality brick.	d batten, wood siding or							
	Adjus	stments						
Continuous concrete foundations and Concrete floor No electricity + or - for no water service or extensive	1.62 -0.56	Gambrel style roof Gothic style roof Wood floor loft (per SF loft area)			1.91 2.25 7.50			
Size adjustments								
Floor Factor	Floor	Factor		Floor	Factor			
Less than 2,000 1.000 3,000 .905 4,000 .870 4,400 .850 5,000 .840	5,600 6,000 7,000 8.000 9,000	.830 .810 .800 .780 .765		10,000 12,000 14,000 15,000	.750 .746 .726 .719			

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0.50

\$39,494.40

Typical life expectancies				
Grain bins Silos Barns Stables Poultry houses Confinement barns Equipment storage sheds Miscellaneous sheds Pole buildings Dairy barns Corn cribs	30 30 30 20 20 20 20			

### Sample Appraisal - Barn

**Subject** – Two-story barn **Grade** – C

Remaining physical life – 15 years Specifications – 34' x 60' x 20' height to eaves Foundation – concrete wall and footings Walls – Vertical wood siding on wood framing, wood sash windows, and wood batten door Floor – Concrete	s	
Step 1 — Base square foot price from schedule	\$	20.37
Step 2 — Base price adjustments		
Foundation, continuous concrete wall		0.82
Floors main floor concrete		1.62
Electricity and wiring, no service		-0.56
Total	\$	22.25
Step 3 — Wall height adjustment		
Base price includes a 10' avg. story height, subject 20' two-story, no adjustment		
Step 4 — Size adjustment percentage		
Calculate SFFA.		
34' X 60' X 2 = 4,080 SF		
Use the size adjustments table to find the adjustment percentage for 4,080 SF	Χ	.870
Total base price	\$	19.36
Step 5 — Replacement cost new		
Multiply total base price by the SFFA to obtain replacement cost new	Х	4,080
	\$78	8,988.80
Step 6 — REL factor		
Divide the remaining physical life by the typical life from the Typical life expectancy table.		
15 years ÷ 30 years = 0.50 REL factor		
Step 7 — Full value of the building		

Multiply the REL factor by the RCN from Step 5 to find the full value

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#### Pole frame buildings

Price per SF of ground area

Base price is for pole buildings with wood poles 15' to 20' o.c., wood truss roof, wood or metal siding, earth floor, one large sliding door, one service door, and minimum electric.

	Eave					FII	e per s	or oi gi	ouriu a	irea						
Туре	height	600	850	1,000	1,200	1,500	2,000	2,500	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000
Four sides closed	8' 10' 12' 14' 16' 18'	16.50	14.10 14.60 15.15	13.05 13.50 14.05	11.55 12.05 12.50 12.95 13.40 14.70	11.75 11.80 12.25 12.65 13.20 14.25	11.85 12.20 12.70	10.70 11.10 11.50 12.05	10.10 10.55 10.90 11.30 11.75 12.25	9.40 9.80 10.10 10.45 10.90 12.00	9.20 9.60 10.00 10.30 10.70 11.60	9.75	8.50 8.80 9.25 9.50 9.80 10.60	8.45 8.75 9.10 9.45 9.70 10.15	8.40 8.75 9.10 9.40 9.65 10.10	8.20 8.50 8.80 9.10 9.45 9.75
One side open	8' 10' 12' 14' 16' 18'	12.25 12.70 13.15 13.70	11.85 12.25 12.70	10.70 11.10 11.50 11.95	10.15 10.35 10.75 11.15 11.50 12.60	9.95 10.30 10.70 11.10 11.45 12.55	11.30	8.95 9.30 9.45 10.30 10.55 10.80		8.55 8.90 9.20 9.50 9.90 10.60	8.10 8.45 8.90 9.10 9.40 10.20	7.60 8.00 8.30 8.60 8.85 9.70	7.55 7.90 8.10 8.45 8.80 9.55	7.50 7.85 8.00 8.35 8.75 9.55	7.45 7.85 8.00 8.30 8.70 9.00	7.40 7.65 7.90 8.20 8.50 8.80
Four sides open	8' 10' 12' 14' 16' 18'	6.40 6.65 6.90 7.15 7.10 7.95	6.40 6.65 6.90 7.15 7.10 7.95	6.40 6.65 6.90 7.15 7.10 7.95	6.20 6.45 6.60 6.85 7.50 7.75	6.20 6.45 6.60 6.85 7.50 7.75	6.20 6.45 6.60 6.85 7.50 7.75	6.05 6.20 6.40 6.70 7.40 7.55	6.05 6.20 6.40 6.70 7.40 7.55	6.05 6.20 6.40 6.70 7.40 7.55	5.85 6.15 6.30 6.55 7.35 7.10	5.85 6.15 6.30 6.55 7.35 7.10	5.85 6.15 6.30 6.55 7.35 7.10	5.70 5.95 6.10 6.30 6.55 6.85	5.70 5.95 6.10 6.30 6.55 6.85	5.70 5.95 6.10 6.30 6.55 6.85
	Floor adjustments based on per SF Misc. adjustments based on building SF Door adjustments based of door area					ed on	SF									
Crust	rete floo ned rock alt floor	<	\$0	3.80 0.67 2.38		Insulat No ele Water			\$0	.95 .62 .55		Extra sli Service		or	\$15.5 \$45.0	

\$1.20

Space heaters

#### Lean-tos

Base costs include: Pier foundation, vertical wall siding or corrugated metal walls; shed type roof of single pitch; earth floor, minimum electric. Walls from 8' to 12' rise average 10' at center.

SF area	Wood frame	Pole frame				
240	\$12.85	\$9.30				
300	11.20	8.20				
400	11.10	8.10				
500	10.95	8.00				
600	10.65	7.75				
800	10.35	7.55				
1,000	10.00	7.30				
1,200	9.40	6.85				
1,400	9.00	6.60				
Ac	djustments to base	costs				
Concrete floor and foundation \$2.10						
No electric	No electric - 0.47					
Height adj	ustment for each for	ot avg. 0.20				

#### Wood frame corn cribs

Foundation — Concrete walls and footings; Walls — Spaced boards on wood frame; Roof — Gable style roof with composition or wood shingles; Drive through; No mechanicals.

SF ground area	Wood spaced boards on wood frame	Wire mesh on wood frame
80 100 150 175 200 250 300 400 500 700 1,000 1,500 2,000 2,500	\$49.05 43.50 37.85 33.05 32.15 30.80 27.35 23.15	\$36.35 35.55 28.25 26.80 24.15 23.35 22.80 22.15 20.95

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### **Poultry buildings**

Single-story egg laying buildings (SFFA)  Based on 8' eave height						
Base price includes concrete or masonry foundation; Concrete slab floor with manure trenches; Gable roof; electrical		Construction type				
wiring and lighting.  SF floor area	Wood frame	Masonry	Steel frame	Pole frame		
1,000 1,500 2,000 3,000 4,000 5,000 7,500 10,000 15,000 20,000 25,000 over 25,000	\$20.25 18.60 18.00 17.65 17.35 17.00 16.50 15.95 15.35 14.70 14.55 14.20	\$25.25 23.80 22.45 22.05 21.65 21.20 20.55 19.90 19.15 18.30 18.15 17.70	\$21.50 19.60 18.80 18.75 18.40 18.05 17.50 16.95 16.30 15.60 15.45	\$17.30 15.45 15.05 14.90 14.80 14.55 14.10 13.65 13.10 12.55 12.40 12.10		
Add or subtract for each foot of height	.40	.50	.45	.35		
Additional adjustments per SFFA						
Cage equipment systems include single deck cages, V trough watering and feeding systems and fogging cooling.	10.70	10.70	10.70	10.70		
For automatic feeders, water cup systems, and egg collection system add an addition to the \$10.70 equipment cost.	4.90	4.90	4.90	4.90		

Multi-story egg laying buildings (based on ground SF)  Based on 8' average height per story					
Base price includes concrete or masonry foundation; Concrete slab floor with manure trenches on 1st floor and wood plank or wire cage catwalk upper floors; Gable roof; electrical wiring and lighting.					
For multi-story buildings, use 75% of the base SF cost from the single-story cost tables for each story over one.	Example: Two-story wood frame building with 1,500 SF on each floor. Average height is 8' per floor.  1st floor base cost from single-story table = \$ 18.60				
	2nd floor base cost factor 75% x 18.60 = 13.95 Total multi-story cost = 32.55 Ground floor area 1,500 x 32.55 x 1,500 Equals total cost for building before adjustments 48,825				

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Single-story broiler building (SFFA)  Based on 8' eave height				
Base price includes dirt floor, galvanized metal or wood siding on frame, partial curtain wall, insulated walls and ceiling, gable roof, electrical wiring and lighting, water service, and some subdivision.	Construction type			
SF floor area	Steel frame	Pole frame		
1,000 1,500 2,000 3,000 4,000 5,000 7,500 10,000 15,000 20,000 25,000 30,000 40,000 over 40,000	\$13.60 12.20 12.10 11.85 11.65 11.40 11.10 10.70 10.30 9.90 9.80 9.75 9.65 9.55	\$12.65 11.00 10.90 10.70 10.50 10.30 10.15 10.00 9.65 9.30 8.90 8.80 8.65 8.60		
Add or subtract for each foot of height	.23	.21		
Additional adjustments pe				
Equipment systems include feeders, waterers, suspended infrared heaters, curtains, automatic ventilation control.	3.75	3.75		

Concrete liquid manure tanks			
Size	Gallon	Cost	
cubic feet	capacity	each	
4,000	30,000	\$16,160	
8,000	60,000	26,560	
12,000	90,000	43,440	
16,000	120,000	56,400	

Steel frame round wire mesh corn crib				
Diameter	Height to eave	Bushel capacity	Cost each	
10'	12'	315	\$1,010	
	16'	419	1,310	
	20'	524	1,610	
12'	12'	452	1,405	
	16'	603	1,835	
	20'	754	2,265	
	24'	905	2,690	
14'	16'	821	2,450	
	20'	1,026	3,030	
	24'	1,232	3,605	
16'	16'	1,072	3,150	
	20'	1,340	3,900	
	24'	1,609	4,660	
	28'	1,876	5,415	

Cylindrical wire mesh with metal cone roof, steel frame, concrete slab.

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# **Confinement buildings**

Swine farrowing barns  Based on 10' eave height						
Base price includes concrete or masonry foundation; Concrete slab floor; Gable roof; Electrical wiring and lighting; Water service; Insulation, vents, and feed storage room.		Construction type				
SF floor area	Wood frame	Masonry	Steel frame	Pole frame		
800 1,000 1,500 2,000 2,400 3,000 4,000 5,000 6,000 8,000 10,000 12,000 15,000 20,000 25,000 30,000 and higher	\$35.40 33.85 31.05 30.15 29.60 29.00 28.40 27.80 27.50 27.25 27.05 26.85 26.75 26.65 26.55 26.45	\$40.80 39.00 35.80 34.80 34.10 33.45 32.75 32.10 31.75 31.40 31.15 30.95 30.85 30.70 30.60 30.50	\$34.95 33.30 30.55 29.70 29.10 28.50 27.95 27.35 27.10 26.75 26.60 26.40 26.30 26.20 26.10 26.00	\$34.95 33.30 30.55 29.70 29.10 28.50 27.95 27.35 27.10 26.75 26.60 26.40 26.30 26.20 26.10 26.00		
Add or subtract for each foot of height	.62	.70	.60	.55		
Adjustments						
Concrete slotted floor Equipment of crates, waterers, and feeder per SFFA Pit, 6' deep per SF	5.55 6.60 13.20	5.55 6.60 13.20	5.55 6.60 13.20	5.55 6.60 13.20		

Swine finishing barns  Based on 10' eave height						
Base price includes concrete or masonry foundation; Concrete slab floor; Gable roof; Electrical wiring and lighting;		Construction type				
Water service; Insulation, vents, and feed storage room.						
SF floor area	Wood frame	Masonry	Steel frame	Pole frame		
800 1,000 1,500 2,000 2,400 3,000 4,000 5,000 6,000 8,000 10,000 12,000 15,000 20,000 25,000 30,000 and higher	\$26.35 25.20 23.10 22.45 22.00 21.60 21.15 20.70 20.50 20.25 20.10 20.00 19.90 19.85 19.75 19.70	\$31.70 30.30 27.80 27.00 26.50 25.95 25.45 24.90 24.65 24.40 24.20 24.05 23.95 23.85 23.75 23.65	\$25.80 24.65 22.65 22.00 21.55 21.15 20.70 20.30 20.05 19.85 19.70 19.55 19.50 19.40 19.35 19.25	\$ 24.30 23.25 21.35 20.75 20.30 19.95 19.50 19.10 18.95 18.70 18.55 18.45 18.35 18.35 18.35		
Add or subtract for each foot of height	.46	.55	.45	.43		
Adjustments						
Concrete slotted floor Equipment of crates, waterers, and feeder per SFFA Pit, 6' deep per SF	6.90 5.55 13.20	6.90 5.55 13.20	6.90 5.55 13.20	6.90 5.55 13.20		

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	Steel grain bins (including concrete slab floor)						
	ameter & height	Bushel capacity	Cost		meter & eight	Bushel capacity	Cost
15'	11' 15' 18'	1,728 2,377 2,957	\$6,975 8,300 9,340	36'	18' 26' 33' 40'	18,501 25,010 30,604 37,048	30,145 38,605 43,455 47,480
18'	11' 15' 18' 22' 26' 32' 40'	1,665 3,475 4,320 5,020 5,860 7,318 8,880	7,790 9,520 10,710 12,520 14,050 17,040 21,170	42'	18' 26' 33' 40' 48'	25,791 34,645 42,795 50,868 59,832	39,725 47,630 56,080 65,755 76,100
21'	18' 22' 26' 33' 40'	5,890 6,916 7,955 10,040 12,200	13,145 15,170 17,005 20,905 23,550	48'	18' 22' 26' 33' 37' 48'	34,473 39,543 46,036 56,820 62,254 79,169	48,025 54,710 61,170 74,465 82,430 102,245
24'	11' 15' 18' 22' 26' 33' 40'	4,976 6,368 7,535 8,957 10,505 13,100 16,075	10,870 13,080 15,905 18,160 20,610 24,040 27,065	54'	36' 46'	79,238 100,280	101,685 126,225
27'	11' 15' 18' 27' 32' 40'	6,430 8,193 10,010 14,025 16,110 20,500	13,025 15,705 18,375 23,725 28,215 31,465	60'	40' 48'	108,410 124,695	136,165 156,845
30'	18' 22' 26' 33' 40'	12,575 14,510 17,133 20,900 25,400	21,985 25,140 27,955 33,695 36,945				

Aeration systems add \$0.12 per bushel

Dryer bins add 45% to costs or factor costs by 1.45

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# Steel Silos (glass lined)

Includes concrete foundation, steel roof, breather bag, ladder, and platform.

Diameter	Height	Cost
14'	30' 40' 50'	\$36,600 43,370 45,600
Add for sweep	arm auger	6,610
17'	30' 40' 50'	50,755 56,875 62,525
Add for sweep	arm auger	7,500
20'	30' 40' 50' 60' 70' 80' 90'	65,800 73,245 80,360 88,370 102,910 107,610 120,585
Add for sweep	Add for sweep arm auger	
	Add for chain unloader	
25'	40' 50' 60' 70' 80' 90'	112,570 126,290 131,120 145,840 157,430 177,050
Add for chain t	44,500	

# Steel Silos (non-glass lined)

Includes concrete foundation, steel roof, ladder, and platform.

Diameter	Height	Cost
14'	30' 40' 50'	\$22,920 26,440 29,970
Add for sweep	arm auger	6,610
17'	30' 40' 50'	29,820 34,230 39,078
Add for sweep	arm auger	7,500
20'	30' 40' 50' 60' 70' 80' 90'	40,840 47,160 53,620 59,940 66,255 70,810 77,775
	Add for sweep arm auger Add for chain unloader	
25'	40' 50' 60' 70' 80' 90'	78,750 88,410 91,380 98,725 104,895 114,500
Add for chain i	44,500	

#### **Concrete Silos** Per foot of height. Includes concrete foundation Add for Diameter Stave **Poured** unloader 12' 405 10,750 510 14' 450 565 10,750 16' 490 730 11,635 11,635 18' 530 740 13,355 13,355 13,355 20' 610 830 24' 1030 740 30' 1065 1340

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