

ZAVALA COUNTY APPRAISAL DISTRICT

AGRICULTURAL POLICIES & PROCEDURES

Compiled with the assistance of the
Agricultural Advisory Board for Zavala CAD

Approved by the Zavala CAD Board of Directors
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Table of Contents

Introduction	2
Qualified Open-Space	2
Qualifications	2-3
Application	4
Rollback	4
Types of Agricultural Operations	5
Cow and Calf Grazing	5
Stocker and Feeder Calf	5
Sheep	5
Goat	5
Horse	6
Exotic Animal	6
Cropland	6
Hay land	6
Orchard and Vineyard	6
Wildlife Management	7
Governmental Programs	8
Appraisal of Agricultural Lands	8
An Effective Productivity Appraisal System Involves Five Steps	9
Steps in a Typical Cash Lease Approach	9-10
Appendix 1. Minimum Acreage Requirements by Category	11
Appendix 2. Use of Subclasses in Determining Ag Values	11
Appendix 3 Degree of Intensity Standards	11
Typical Management Practices in Zavala County	12
Improved Pastureland	13
Native Pasture	13
Degree of Intensity for Beekeeping	14-15

ZAVALA COUNTY APPRAISAL DISTRICT AGRICULTURAL POLICIES AND PROCEDURES

INTRODUCTION

Agricultural valuation is a special use appraisal for land that is devoted primarily to agricultural production. It is not an exemption. This special use valuation only applies if the land meets specific requirements defining farm and ranch use. Agriculture or productivity value, also referred to as ag value, is based on the land's capacity to produce food, feed, seed or fiber instead of the land's real estate value. In 1966 voters approved the first agricultural appraisal law for ad valorem (property) taxes in the State of Texas. This first law, known as "ag use" or "I-d", intended to protect the family farm from being taxed out of existence as Texas became more urbanized and market prices of agricultural land steadily rose. Section I-d is very restrictive as it applies only to land owned by families or individuals. Under I-d, agriculture must be the owner's primary occupation and primary source of income. Zavala County does not have any land appraised as I-d.

As Texas became more urbanized and the number of agricultural producers began to drop, a new section was added to the Texas Constitution in 1978. The law was amended to allow a second, more liberal agricultural appraisal law known as "open space" or "I-d-1". Section I-d-1 substantially expanded eligibility for productivity appraisal by individuals as well as corporations, and also must meet the minimum requirement of 30 acres. Income and primary occupation do not apply under I-d-1.

In 1996, Wildlife Management Use was added as a subsection of I-d-1 which allows the management of native indigenous species as a qualification for productivity value. Due to the many different types of agricultural operations, only the most common for the area will be covered in these guidelines.

QUALIFIED OPEN-SPACE USE

Section 23.51 of the Property Tax Code sets the standard for determining whether the land qualifies for an agricultural evaluation under I-d-1. This section states "Qualified open-space land means land that is currently devoted principally to agricultural use to the degree of intensity generally accepted in the area and that has been devoted principally to agricultural use or to production of timber or forest products for five years of the preceding seven years." Further information on activities that are included as "agricultural use" is found in Section 23.51(2) of the Texas Property Tax Code.

QUALIFICATIONS

1. Agricultural appraisal applies only to land

It does not apply to improvements on land such as barns, storage tanks, and farm or ranch outbuildings. These items are appraised separately at market value. Appurtenances to the land such as fences, stock tanks, and roads are included in the land value and are not separately appraised.

2. The land must be currently devoted to agricultural use

The use must be current, meaning active management is currently taking place on the land. Land will not qualify simply because "it is rural" or "open land" or because the owner intends to use the land for an agricultural purpose. The land must be in agricultural use as of January 1st, or be used for agricultural purposes a minimum of six months

out of the year. Refer to Appendix 1 for the minimum acres or stocking rate requirement by agricultural category to qualify for 1-d-1 appraisal.

3. The use must be agricultural

Examples of agricultural use include, but are not limited to the following:

- Cultivating the soil.
- Producing crops for human food, animal feed, or planting seed or for the production of fibers.
- Floriculture — cultivation/management of ornamental and flowering plants.
- Viticulture — cultivation of grapes.
- Horticulture — cultivation of fruits, vegetables, flowers, herbs and other plants.
- Raising or keeping livestock.
- Raising exotic game for commercial use.
- Participation in a government program and normal crop or livestock rotation.
- Use of land for wildlife management.

4. The principal use of the land must be agricultural

If the land is used for more than one purpose, its primary or most important use must be agriculture. For example, the primary use of a half-acre of land with a home and garden is probably residential. Secondary uses should not prevent land from qualifying if the primary use is agriculture. For example, land used primarily to graze livestock could also be used for hunting or recreation, provided the most important or primary use of the (and is grazing livestock. Raising and breeding horses is a qualifying land use. Land used primarily to keep, train, show, race, or ride horses does not qualify.

5. Agricultural land must meet degree of intensity standards

The level of use must be to the degree of intensity that is typical in this area. The degree of intensity test measures whether the land is being farmed or ranched to the extent that is typical for similar operations in the area generally. This test is intended to exclude land on which token agricultural use occurs in an effort to obtain tax relief. The law does not state what degree of intensity qualifies a particular type of land. In a state, as large as Texas, no statutory definition could cover all the possible agricultural uses. The chief appraiser is responsible for setting degree of intensity standards for the types of commodity production in the area, with the assistance of the agricultural advisory board, which is made up of five local farmers and ranchers. Our current standards for pasturing livestock are generally these:

- adequate fences must be maintained
- stock water must be supplied
- there must be systematic marketing practices in place, that is, herd management procedures to get the animals to market
- there needs to be proper land management to provide long-term forage

- there must be sufficient animal units to match the carrying capacity of the land.

Required animal units will be determined by dividing the acres of native pasture or improved pastureland by subclass by the corresponding minimum stocking rate expressed as acres per animal unit year (Ac/AUY) for the respective subclass. The result will be the number of animal units required to match the carrying capacity. **Properties with a result of less than two (2) animal units will be required to maintain a minimum of 2 animal unit.**

- 6. Land must have been devoted principally to agricultural use for any five of the preceding seven years** Land must have been used for five out of the past seven years for agricultural production. This is in addition to the requirement that the land be devoted currently to agriculture. As long as agriculture was the principle use in the preceding years, the land qualifies even if the use did not meet the degree of intensity in all or some of the years. The level or intensity of use during this time is not considered.

APPLICATION

A property owner must file an application for I-d-1 Open Space Agricultural Appraisal between January 1 and April 30 of the tax year. Property owners may obtain an application from the Appraisal District Office. If you require more time, you may file a written request with the chief appraiser for up to 60 days if you have a good reason for needing extra time. If you miss the April 30 deadline, you may file an application before the appraisal review board approves the appraisal records, which is usually about July 20. In this case, the property owner will be charged a late penalty of 10% of the tax savings he obtained by getting agricultural appraisal for his land. The penalty is 10% of the difference between tax imposed at market value and the tax imposed at the ag value. Failure to file an application before the appraisal review board approves the appraisal roll makes the land ineligible for an ag appraisal in that tax year. The application must be re-filed the following year for the land to be considered for open space appraisal.

You are not required to file a new application each year once your land is approved; however, if we notify you in writing that you are to file a new application, you must reapply or the special appraisal will be automatically removed. Once approved, you must notify the appraisal district if you stop using the land for agriculture, or if you change the type of use of the land. If the use of qualified land is changed to a nonagricultural use, the land will be subject to a tax rollback for the previous five years, plus interest.

Each first-time application for I-d-1 special appraisal will be inspected in the field before the special appraisal can be granted. After receiving your application, the chief appraiser will review the application, and make a determination as to whether all the qualifications have been met. You may be contacted and asked to provide further information and/or documentation to support your application. Information and/or documentation may include the following:

- Sworn statements from lessors of subject property, owners of surrounding properties, or other person's knowledge of ag use. Statements should describe how the property has been used and the period of time used. Statements should be notarized.
- Invoices for feed, veterinarian services, seed, fertilizer, etc.
- Receipts for sale of livestock, hay or farm products.
- Income tax return showing farm income — **Schedule F**
- Current active lease

If the agricultural use is granted, you'll see it reflected on your notice of value mailed out in May. If the application is denied, you will be notified in writing by certified mail of the reason(s). You then have the opportunity to file a protest of the decision and appeal the denial to the Appraisal Review Board. The Review Board usually meets in June or July.

ROLLBACK

The law imposes a rollback tax on I-d-1 land when it is taken out of agricultural use. A property owner can trigger a rollback by ending ag operations or diverting the property to a non-ag use, such as a commercial use. The rollback tax equals the difference between the taxes the owner actually paid in the three years preceding the change in use and the

taxes the owner would have paid on the property's market value. Five percent (5%) interest is charged for each year from the date the taxes would have been due.

TYPES OF AGRICULTURAL OPERATIONS

There are several types of typical agricultural operations in Zavala County. Some of these operations include one or more types of operations. Agricultural operations include grazing operations, farming operations which include tilling the soil, orchard and vineyard operations, livestock breeding operations, exotic animal operations and wildlife management operations. Each of these operations follows the same criteria for eligibility for I-d-l productivity use except for wildlife management. Wildlife management eligibility requirements will be covered under that section of this guideline. Many operations in the Zavala County Appraisal District have a combination of two or more of the listed operations.

COW AND CALF GRAZING OPERATIONS

This type of operation is commonly found in the District. The operators of cow and calf grazing operations are in the business of raising beef cattle for sale to either processors or other operators as breeding stock. These include purebred operations as well as the commercial breeder who sells calves to the local livestock markets. This may include cows and bulls of breeding age that are bred annually. Some small operators may lease or borrow a bull to impregnate their cows rather than keeping a bull year-round.

STOCKER AND FEEDER CALF OPERATIONS

This operation is in the business of raising beef for processors or for the feedlot. This operation involves acquiring calves at a certain weight from cow and calf operators or the livestock auction. The calves are then raised until they grow large enough for the feedlot or for slaughter; or are sold as replacement breeding heifers. Both heifers and steer calves are found in these types of operations with steers being the most common sex when sold for slaughter or to a feedlot.

SHEEP OPERATIONS

This operation is in the business of providing two products. These products are wool which is produced from the fleece of the animal and meat being either lamb or mutton. Sheep operations may be purebred or commercial in nature. A commercial operation would not require any particular breed and may be in the business of meat production only. Purebred operations are normally in the business of producing wool, meat or animals to sell to other producers as breeding stock.

BEE OPERATIONS

This operation includes the use of land to raise or keep bees for pollination or for the production of human food or other tangible products having a commercial value, provided that the land used is not less than 5 acres or more than 20 acres.

GOAT OPERATIONS

This operation is in the business of producing primarily three products: mohair, meat, and milk. Typical mohair production is usually limited to the Angora breed, although there has been some Cashmere goat breeding in the area which may be sheared for their hair. The Nubian and other similar breeds are milk producers. This milk is sold for human consumption or fed to orphan goats or sheep. Most other breeds are involved in the production of meat called cabrito which is the meat from a young kid goat. This breed of goat is usually referred to as Spanish Goats

The Boer Goat breed from South Africa has recently been introduced as a meat producer. This breed has been interbred with many of the Spanish as well as the Nubian goat herds in the area to increase the size of the animals. There are some producers that breed the pure Boer Goats for sale to other producers for breeding. Proper fencing is required. Miniature goats also follow the same guidelines as regular goats but the animal unit basis is different from regular goats.

HORSE OPERATIONS

This type of operation is limited to breeding operations. A breeding operation involves having brood mares and either a stud (stallion) on location or using artificial insemination for breeding the mares. This type of operation might include some training of colts or fillies. The operation may involve any number of breeds and is not limited to only Thoroughbred or Quarter Horse breeds. Breeding associations have suggested that a minimum amount of acres for a typical breeder is in the 15-20 acre range in order to support a breeding operation. Supplemental feeding is a given fact of a breeding horse operation. Donkeys, mules and burros are also included under horse operations and the same guidelines pertain to these animals. Land used primarily to train, show, or race horses, to ride for recreation, or to keep and use horses in some other matter that is not incidental to breeding or raising horses does not qualify.

EXOTIC ANIMAL OPERATIONS

This type of operation involves the raising of deer, antelope, and other types of animals not native to Texas. Some exotic animal operations supply meat for consumption or leather or plumage for clothing or industrial use. Some byproducts of exotic animals are used in cosmetics or for medicinal purposes. Some exotic animal operations supply animals for breeding purposes. This type of operation, depending on the type of animals, may require a seven to eight feet high fenced perimeter. Usually a management program is in place to closely monitor animal numbers. An animal unit for this type of operation depends on the size of animal being raised. Many of the exotic deer species will follow the same per unit size as our native White-tailed deer.

CROPLAND OPERATIONS

The most common type of cropland operation in the District is row and broadcast. These two types of operations usually are a part of a farm/ranch operation but not in all cases. The types of crops planted in row crop farming are usually onions, grain, sorghum, milo, cantaloupe and wheat. Cropland in the District requires supplemental fertilization and is usually a part of the typical operation. Methods of irrigation include: flood, side row and center pivot. Much of the land that is not irrigated is grazed during part of the year. Small farm operators will normally plant their fields on an annual basis. Landowners should follow practices that are typical for the area. The same qualifications for I-d-1 productivity apply to cropland operations.

HAYLAND OPERATIONS

This is land used to grow perennial, improved grasses which are cut and baled for livestock consumption. The most common type of grasses include: Coastal Bermuda and Klein grass. These grasses are usually baled in the spring and early summer if irrigation is not available. If the land is irrigated, it may be baled until early fall. Hayland in the District requires supplemental fertilization and is usually part of the typical operation. Landowners should follow practices that are typical for the area. The same qualifications for Id-1 productivity apply to hayland operations. Hayland will be classed the same as Improved Pastureland.

ORCHARD AND VINEYARD OPERATIONS

These operations are in the business of growing trees or grapevines to produce crops of nuts (usually pecans), or fruits (usually olives, citrus, black berry) which are sold commercially. A regular schedule of pruning and spraying and cultivation as well as keeping the ground under the trees and vines closely mowed and brush control in the orchard and vineyard is a typical practice for this type of operation. This operation can yield abundant harvests off small acreage.

WILDLIFE MANAGEMENT

Wildlife management is the last major change to occur in agricultural use qualifications in recent history. Wildlife management is an agricultural use under the law. The first criterion of wildlife management use is that the land must currently be under agricultural use valuation to be eligible for wildlife management use. Texas Administrative Code Title 34, Part 1, Chapter 9, Subchapter G, Rule §9.2005 defines how to determine eligibility of land for wildlife management. It states,

- "(a) A tract of land's wildlife use requirement is a number expressed as a percentage and calculated by subtracting one from the total number of acres in the tract of land and dividing the result by the total number of acres in the tract of land. The following formula expresses the calculation, with "x" representing the tract of land's total acreage: $(x-1) \div x = \text{wildlife use requirement}$.
- (b) If the number of acres in the tract of land is equal to or greater than the number of acres in the tract of land on January 1 of the preceding tax year, the tract of land is not subject to the wildlife use requirement.
- (c) If the number of acres in the tract of land is fewer than the number of acres in the tract of land on January 1 of the preceding tax year, the wildlife use requirement the tract of land must meet to qualify for agricultural appraisal based on wildlife management use shall be selected by the chief appraiser, with the advice and consent of the Appraisal District Board of Directors, from the wildlife use requirement ranges specified for the wildlife use appraisal region in which the tract of land is located as follows:
- (d) Texas Parks and Wildlife Department Region 2 at least 95% but not more than 98%."

The Board of Directors for Zavala County Appraisal District voted to adopt the .98 or 98% value. The smallest acreage that will qualify using the 98 percent test is 50 acres.

$$(50-1) \div 50 = 0.98 \text{ or } 98\%$$

Second, the landowner must be actively using the land at the time the wildlife management begins. The land can be appraised as qualified open-spaced land if at least three of the following ways are used to propagate a sustaining breeding, migrating, or wintering populations of indigenous wild animals for human use, including food, medicine, or recreation:

- habitat control — using the land to create or promote an environment that is beneficial to wildlife
- erosion control — practices that attempt to reduce or control soil erosion
- predator control — practices intended to manage the population of predators to benefit target wildlife population
- provision of supplemental supplies of water — owner actively provides water in addition to natural resources
- provision of supplemental supplies of food - owner actively provides food in addition to the level produced naturally on land
- provision of shelters - creating or maintaining vegetation or artificial structures that provide shelter from the weather, escape cover from enemies or nesting and breeding sites
- census counts — periodic surveys to determine number and composition of target wildlife population and effectiveness of management program

A wildlife management plan (state form PWD 885-W7000) must be submitted in addition to your 1-d-1 Application for Agricultural Appraisal. Applications are available at the Appraisal District. The Texas Parks & Wildlife Department website can provide the guidelines and state forms for wildlife management.

A wildlife property association may prepare a single wildlife management plan, provided all required information is included for each tract of land in the wildlife management property association and the plan is signed by each landowner or an agent of the landowner. Each property owner must be applying a minimum of three (3) activities from the list of seven (7) wildlife management activities.

An appraisal district may require, for each tract of land qualified for agricultural appraisal based on wildlife management use, that an annual report be filed showing how the wildlife management plan was implemented in any given year. A wildlife management property association may file a single annual report, if the report shows how the wildlife management plan was implemented on each tract of land in the wildlife management property association. If the report is required, it shall be completed on the form prescribed by TPWD and shall be signed by the landowner or an agent of the landowner. If a single annual report is filed by a wildlife management property association, the report shall be signed by each landowner or an agent for each landowner. A copy of the annual report form may be obtained by contacting Texas Parks and Wildlife Department, 4200 Smith School Road, Austin, Texas 78744-3291 or online through www.tpwd.state.tx.us.

In accordance with Texas Administrative Code the chief appraiser shall determine if land qualifies for agricultural appraisal based on wildlife management use in compliance with, the Manual for the Appraisal of Agricultural Land, the Guidelines for Qualification of Land in Wildlife Management Use, and the Comprehensive Wildlife Planning Guidelines for the Edwards Plateau Ecoregion.

The Comptroller of Public Accounts is also another source for wildlife management information. Refer to [Guidelines for Qualifications of Agricultural Land in Wildlife Management Use](#).

GOVERNMENTAL PROGRAMS

Currently, there are two governmental programs that will qualify for 1-d-1 productivity: The Conservation Reserve Program (CRP) and the Continuous Conservation Reserve Program (CCRP) conservation buffer program. CRP allows producers to put cropland back into grassland. The landowner is paid to participate in this program. CCRP allows producers to create a riparian buffer to allow for vegetation establishment. Landowners are also paid to participate in this program. Other governmental programs such as brush, cedar control or crop subsidies are normal and prudent ranch/farm maintenance. These programs alone, with no other agricultural use, are not considered a qualifying use.

APPRAISAL OF AGRICULTURAL LANDS

Under the Property Tax Code all property has to be appraised at its market value. Category (D) acres are appraised at market value and at its productivity value. Market value is the price a buyer would pay in an ordinary market transaction. A constitutional amendment provides that certain kinds of farm and ranch land be appraised not at their market value, but at their productivity value. Productivity value is based solely on the land's capacity to produce agricultural products. There are two methods set out in the Manual for the Appraisal of Agricultural Land, April 1990: the cash lease and the share lease method. Zavala CAD uses the cash lease method. The agricultural use value of land arises only from its agricultural production.

A productivity appraisal uses a modified income approach and converts an estimate of the property's income into an estimate of the property's value. The appraisal considers the five-year period preceding the year before the year of the appraisal. For example, the 2016 value considers years 2010-2014. The appraiser determines the net income the land would have generated under a typical owner of ordinary prudence during each year of the five-year period. The appraiser then averages the annual net income for each of these years. The resulting average, or "net to land" is the amount capitalized in the appraisal. The amount capitalized is the productivity value. The capitalization rate is set by law. It is the greater of 10% or the interest rate specified on the previous December 31st by the Farm Credit Bank of Texas plus 2-1/2%.

AN EFFECTIVE PRODUCTIVITY APPRAISAL SYSTEM INVOLVES FIVE STEPS:

- 1) Develop a land classification system. The categories shall be divided into subclasses according to soil capability, irrigation, geographical factors, and other factors that influence the land's productive capacity.
 - Irrigated Cropland
 - Dry Cropland
 - Orchard/Vineyards
 - Improved Pastureland
 - Native Pastureland
- 2) Estimate the "net to land" per acre for each category by subclass.
- 3) Divide the "net to land" by the year's capitalization rate to find the value per acre in each subclass.
- 4) Classify all qualified agricultural land according to the land classification system.
- 5) Use the schedule to calculate the productivity value of individual parcels of land. The number of acres times the per acre value determines the Ag use value.

Until 1987, appraisers based "net to land" primarily on owner-operated budgets. The law now requires "net to land" to be calculated using a cash or share lease method. The Zavala County Appraisal District develops its "net to land" values using the cash lease method. A cash lease is an agreement between landowner and tenant to lease for a fixed cash payment. This payment is usually in terms of dollars per acre for a period of one or more years. When the landowner leases on a cash lease basis, he ordinarily has no labor or operating capital cost. If the landowner has no expenses relating to the agricultural use of the land, the cash lease payment is virtually equivalent to the return to the land. Typical expenses are deducted from the cash lease to determine "net to land".

STEPS IN A TYPICAL CASH LEASE APPROACH

- 1) Gather cash lease rates from knowledgeable persons in the area.
 - Agricultural Advisory Board
 - County Extension Agent
 - Natural Resource Conservation Service Office (NRCS)
 - Landowner Income/Expense Surveys
 - FSA Director
- 2) Gather as many leases as possible for each year of the five-year period. Determine the typical lease rate for each year in dollars per acre.

The typical lease rate is the most common or most likely lease rate. Don't assume the typical rate is the average of the leases collected. Typical leases usually fall within a narrow dollar range. If hunting is a typical income for the land class, it should be included in the calculations of "net to land". In Zavala County, native pastureland is typically leased for deer hunting. A prudent manager would supplement his agricultural income with hunting lease income.
- 3) Property Taxes Ag Value x Tax Rate/100 Determine the typical landowner expenses, price per acre. The following are expenses allowed by the Zavala CAD:

- **Property Taxes**
Property taxes are calculated based on ag use values, not market value. The ag value for each year multiplied by that year's tax rate equals the property taxes. To calculate the tax rate for each year, the Zavala CAD will combine the tax rates for the following entities: Zavala County, Winter Garden Water District, City of Crystal City, Southwest Texas Junior College and Crystal City ISD. The typical ranch pays taxes to these entities.
 - **Fence Depreciation:** Zavala County's typical fence construction is 1/2 gauge net wire mesh with 1 or 2 strands of barb wire installed on pipe H braces at the ends of the fence plus at gate openings. Pipe posts are installed at 100 foot intervals with 4steel t-posts installed at 20 foot intervals between pipe posts. Pipe pull-post assemblies are constructed at 1,320 foot intervals for stretching wire. The depreciation of fences is calculated by determining the linear feet of perimeter and cross fencing paid by the landowner times the cost per linear foot for typical fencing divided by the typical years of life (30 years) divided by the typical ranch size. Typical ranch size will be determined by using the USDA agricultural census.
 - **Well cost** is determined by dividing the total cost of supplying water on the typical ranch by the life expectancy of a well and then by the number of acres in a typical ranch.
 - **Brush control** is typical for some of the property in Zavala County. The expense for brush is based on the Comptroller's calculations: typical cost per acre (\$25) multiplied by acres treated (1.25%) multiplied by percent paid by landowner (100%).
 - **Management** covers activities such as finding a tenant, keeping records and making sure the tenant meets the contractual agreement. 7% of the gross income is allowed as a management expense.
- 4) For each of the five base years, subtract the expenses from the typical lease rate. The remainder is the "net to land" value. Average the five "net to land" values to obtain the "overall net to land" value for the land class for the five-year period. Divide by the capitalization rate to obtain the agricultural use value for the class of land.

The capitalization rate is published by the Comptroller's Office. It is the greatest of 10% or the interest rate specified on the previous December 31st by the Farm Credit Bank of Texas plus 2.5%.

APPENDIX 1. MINIMUM REQUIREMENTS

- Native Pasture — 10 Acres minimum + proof of typical management practices
- Cropland, Dry or Irrigated — 5 Acres + proof of typical management practices
- Improved Pastureland— 5 Acres + proof of typical management practices
- Orchard & Vineyard — 5 Acres + proof of typical management practices

APPENDIX 2. USE OF SUBCLASSES IN DETERMINING AG VALUE

Texas Property Tax Code Section 23.51 (3) states, "Category" means the value classification of land considering the agricultural use to which the land is principally devoted. The chief appraiser shall determine the categories into which land in the appraisal district is classified. In classifying land according to categories, the chief appraiser shall distinguish between irrigated cropland, dry cropland, improved pasture, native pasture, orchard, and waste. The chief appraiser may establish additional categories. The chief appraiser shall further divide each category according to soil capability, irrigation, geographical factors, and other factors that influence the productive capacity of the category. The chief appraiser shall obtain information from the Texas Agricultural Extension Service, the Natural Resources Conservation Service of the United States Department of Agriculture, and other recognized agricultural sources for the purposes of determining the categories of land existing in the appraisal district.

APPENDIX 3. DEGREE OF INTENSITY STANDARDS

The Zavala County Appraisal District has determined a commercial livestock operation must meet the degree of intensity standards to be considered for special valuation or the land must be actively producing in conjunction with a larger livestock operation that meets or exceeds the minimum requirements. A property owner/operator should be able to verify purchases and sales of livestock and/or farm products by bill of sale, sales receipt or other documentation.

The degree of intensity standards are guidelines to serve as a tool to assist the Appraisal District in determining general qualifications for qualifying land for agricultural valuation. Each application should be considered on its own merit, as there may be other circumstances in an operation which would allow a tract of land to qualify for an open space use appraisal.

TYPICAL MANAGEMENT PRACTICES IN ZAVALA COUNTY

Production of Grain Sorghum, and other row crops

1. Land must be free of brush
2. Deep broke, chiseled and/or plowed three times
3. Apply fertilizer according to soil test or typical for area
4. Apply herbicides and pesticides as needed
6. Cultivate
7. Must try to harvest average county yield
8. Shred and/or disk to destroy stalks and form a mulch

Production of Wheat, Oats, Rye, etc.

1. Land preparation — chisel or plow. Disk as needed to keep land clean (Conservation till is acceptable with proof of chemicals used)
2. If wheat is planted for grain, must plant 50 — 100 lbs. of seed per acre If wheat is planted for forage, must plant 80 — 100 lbs. of seed per acre
3. Fertilize according to soil test or typical for area
4. Apply herbicide and pesticides as needed
5. If harvested, must try to harvest average county yield
6. If grazed, must support 1 animal unit per 1 1/2 acres

Orchards & Vineyards

1. Typically planted on grid system
2. Managed to maximize nut or grape production sales. Home use does not qualify
3. Spraying as recommended by Texas Agri-life Extension Service
4. Mechanical or chemical weed control
5. Fertilization according to soil test or typical for the area
6. Drip or some other means of adequate irrigation for establishment and production of grapes
7. Prune trees and vines
8. Harvesting techniques to maximize yields for commercial sales

Improved Pastureland

1. Normally associated with Bermuda grasses, Klein grass, or other native and introduced grasses that are managed more intensively than Native Pasture.
2. Weeds and insects controlled
3. Fertilized as typical for area
4. Cutting and baling:
 - a. Dry land — minimum 2 times per year
 - b. Irrigated — minimum 3 times per year
5. If cut less than minimum, should be used for grazing for remaining growing season
6. Minimum yield: 1 % tons per acre

Native Pasture

1. Property stocked in accordance with Minimum Intensity Stocking Rates for predominate subclass(es) as listed in Table 1
2. Adequate fencing — suitable to contain livestock, securable gate
3. Stock water
4. Economic return — sale of livestock
5. Management of land for long-run forage

ZAVALA COUNTY APPRAISAL DISTRICT

DEGREE OF INTENSITY FOR BEEKEEPING

Beekeeping is an agricultural use and shall qualify for agricultural use productivity valuation if used for pollination or for the production of human food or other tangible products having a commercial value. (Sec. 23.51 (2) Tax Code)

Acreage requirement: The State of Texas has set a minimum of 5 acres and a maximum of 20 acres to qualify beekeeping as an agricultural use.

Zavala CAD's degree of intensity standard is set at a minimum of six (6) colonies and five (5) acres. The minimum degree of intensity was established using Section 131.001 Texas Agriculture Code's definition of an apiary, which is a place where six or more colonies of bees or nuclei of bees are kept. A colony is a hive and its equipment and appurtenances including bees, comb, honey, pollen and brood.

For each additional 2.5 acres one additional hive is required. If additional acreage is less than 2.5 acres, no additional hive is required. For example, if a property owner has 14.6 acres of land used for beekeeping nine hives would be needed to qualify.

First 5 acres	6 hives
Additional 7.5 acres	3 hives
<u>Remaining 2.1 acres</u>	<u>0 hives</u>
Total Hives Required	9 hives

When property owners initially qualify for agricultural appraisal they must show proof of history for agricultural use/beekeeping for any of the five preceding seven years. One way to do this is to ask for export, import or intra-state permits, which are required by the Texas Apiary Inspection Service to transport hives.

ZAVALA COUNTY APPRAISAL DISTRICT

PRODUCTIVITY VALUE FOR BEEKEEPING

Under Open-Space productivity valuation, values are calculated using a modified income approach to determine the per acre value. This is done using cash lease rates that are collected each year through surveys mailed to lessees. The challenge with determining a productivity value for beekeeping using the cash lease method is usually beekeepers do not lease the land on which the hives are located. In most instances, a property owner who has hives located on his land has an open-space valuation on their property.

Using the basic Income/Rate/Value (IRV) formula for developing an income approach to value, Zavala CAD has developed a productivity value in beekeeping.

In Texas, it is estimated that a hive will produce an average of 74 pounds of honey per year. With the assistance of local beekeepers we estimated an average of \$60 per hive of expenses per year. The average wholesale price for honey in 2011 was \$3.78 per pound. The following is Zavala County Appraisal District's 2013 calculation.

Total Income per Hive	$74 \text{ lbs.} \times \$3.78 = \279.72
Total Expenses per Hive per year	\$60.00
Net Operating Income (NOD	$\$279.72 - \$60.00 = \$219.72$
Productivity Value per Hive	$\$219.72 / .10 \text{ cap rate} = \$2,197.20$

Zavala CAD's degree of intensity is 6 hives on the first 5 acres with 1 hive for every 2.5 acres up to 20 acres. This would yield a range of 6-12 hives minimum requirement. The productivity value is applied on a per-acre basis; therefore, the following formula was used.

Zavala CAD's minimum requirement on 20 acres is 12 hives. Therefore, the average hives per acre is $12/20 = .60$ hives.

Productivity Value per Acre	$\$2,197.20 \times .6 \text{ (minimum hives)} = \$1,318.32, \text{ or } \$1,318.00 \text{ per acre.}$
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References:

Mr. Paul Jackson
Chief Apiary Inspector
State of Texas
979-845-9714

Todd Youngblood
Youngblood Apiaries
830-334-7631

Clint Walker
Walker Honey Farm
254-721-0096

Ryan Thomas
Thomas & Langdon Honey Farms
936-334-7823

Kenny Reed
Reed Honey Company
281-620-5626

TABLE 1

ANIMAL UNIT EQUIVALENTS/ 25 ACRES

ANIMAL TYPE	ANIMAL UNIT
COW OR COW & UNWEANED CALF	1.00
COWS OVER 1,000 LBS.	WEIGHT/1,000
MATURE BULL	1.25
WEANED CALF TO ONE YEAR	0.60
STEER – ONE YEAR OLD	0.70
STEER – TWO YEAR OLD	0.90
HORSE	1.25
MINIATURE HORSE	0.50
MULE	1.25
DONKEY	0.75
5 EWES WITH OR WITHOUT LAMBS	1.00
4 RAMS	1.00
8 LAMBS WEANED TO 1 YEAR	1.00
6 NANNY GOATS OR DOES WITH KIDS	1.00
5 BUCKS	1.00
10 KID GOATS WEANED TO 1 YEAR	1.00
6 MATURE MUTTON	1.00
3 LIAMAS	1.00
7 WHITE – TAILED DEER	1.00
5 AXIS, AOUDAD, FALLOW OR MOUFLON	1.00
9 BLACKBUCK ANTELOPE	1.00
7 SIKA DEER	1.00
2.5 RED DEER/ ELK	1.00
1 ELAND	1.00
BISON (BUFFALO)	1.10
2 OSTRICHES	1.00