

AGRICULTURE AND RURAL AREA STUDY

Agriculture Supportive and Complementary Uses

TASKS 1.D. AND 1.E.

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Summary of Table

The attached table entitled “Supportive and Complementary Uses to Agriculture and Agribusiness Uses” was prepared pursuant to Tasks 1.d. & 1.e. of the Scope of Services for the Dade County Agricultural Study. The revised table categorizes uses based on the Land Based Classification System (LBCS), with supplemental uses added to reflect local zoning standards. In addition to addressing Citizens Advisory Committee (CAC), the updated table includes a column indicating the uses authorized under existing agricultural zoning. The column shows which uses are permitted by right (P), which uses are permitted subject to conditions specified in the zoning ordinance (C), and which uses may be permitted subject to the requirement for a public hearing (PH).

The table establishes a framework for evaluating the potential compatibility of various land uses with the wide-ranging agricultural operations in Dade County. The compatibility of any given use when developed will depend on the location of the use, its site design and the characteristics of adjacent agricultural operations. The table identifies which uses should be located within or in close proximity to agricultural districts and the factors that will affect their relationship to agricultural uses.

Uses listed in the table are noted as supportive, complementary, potentially incompatible or incompatible. The word “supportive” refers to those uses that provide direct benefits to the local agriculture industry. Supportive uses can and should locate in close proximity to agriculture production areas to create symbiotic economic efficiencies. In some cases, supportive uses are associated with or accessory to farm operations. Uses that are indicated as “complementary” can operate in close proximity to commercial agriculture businesses, but do not significantly contribute to agriculture production. Complementary uses include a diverse range of activities with no significant negative impacts on the viability of most agriculture operations. In some cases, complementary uses are associated with or accessory to agricultural operations. Incompatible uses are those that tend to either significantly interfere with agriculture operations or are negatively affected by generally accepted agricultural practices on neighboring lands.

Many of the uses listed may vary in impact on agriculture depending on the specific nature of the uses and neighboring uses. When this is the case, the use classification may be marked in more than one column. Brief comments are given to describe the factors affecting compatibility. Depending on location, intensity of use, site design, niche functions and operating characteristics of adjacent agriculture, some uses may be supportive, complementary or incompatible. These uses are marked as “potentially incompatible”. The characteristics identified are based on impacts common to local agricultural practices, but the diversity of local agricultural operations makes it impossible to make blanket statements about compatibility.

The attached table should be used to review existing land use standards for agricultural zoning districts and other districts that are common to rural areas. Those uses that are indicated as supportive to agricultural operations should be authorized within the agricultural district or another appropriate district allowed within agricultural areas. Complementary uses also should be authorized in districts authorized in agricultural areas. Conditions should be established for potentially incompatible uses to ensure that potential land use conflicts are mitigated. Incompatible uses should be prohibited in agricultural districts and, when allowed within a district that may be applied within an agricultural area, conditions should be established to mitigate potential negative impacts of the uses.

Recommended Use of Table

Tasks 1.D. and 1.E. assess the potential for land uses to:

- ?? Operate adjacent to and harmoniously with commercial agriculture; and
- ?? Directly or indirectly support the viability of commercial agriculture.

This information should be used to modify local land use regulations to better support the agriculture community. Revised use and related design standards minimize land use conflicts involving agricultural operations, promote the viability of agriculture by allowing mutually beneficial uses in proximity to agriculture uses, and allow agricultural operations to diversify their activities. Amendments to zoning district regulations that affect land within the study area should examine the permitted uses within the district to determine:

- ?? If additional permitted uses should be allowed;
- ?? Whether existing permitted uses should be limited;
- ?? Which uses may be allowed subject to approval of a conditional or special exception use permit; and/or
- ?? Whether site improvement standards or other mitigation measures are needed to ensure land use compatibility.

Supportive uses would be appropriate within activity centers within or near agriculture operations provided that adequate public facilities are available. Supportive uses may be appropriate as accessory uses if the intensity of the use is consistent with site conditions and public facilities. Supportive uses generally are compatible with agriculture operations and require few nuisance mitigation measures (e.g. screening, bufferyards, landscaping, architectural controls, other site design standards).

Complementary uses either provide secondary support to agriculture operations or may provide an opportunity for agriculture to diversify (bed and breakfast, recreation facilities, fishing, food processing). These uses may be conducted as accessory uses to agriculture operations or in close proximity to agriculture without causing significant land use conflicts. These uses may be located in commercial centers within or adjacent to the agriculture areas provided adequate public facilities are available. Site design standards and use performance standards may be warranted to minimize nuisances on a case-by-case basis.

The degree to which land uses conflict with agriculture may be addressed in zoning and subdivision regulations through the adoption of site design and performance standards when uses are adjacent to agriculture operations. Land uses identified as “potentially incompatible” require site plan scrutiny in order to ensure that negative impacts are mitigated. The use of vegetative buffers, fencing, building orientation, access control and other site features may be warranted and implemented through the development review process. “Incompatible” uses should not be located in close proximity to agriculture operations.

Agriculture Zoning

The existing AU zoning district should be modified to expand the variety of accessory uses that agriculture operations may employ. Many of the supportive and complementary uses may be appropriate accessory uses to agriculture operations provided they are of appropriate design and scale. Uses that are always appropriate in the AU district should be allowed by right without undue regulatory scrutiny. Supportive and complementary uses that may be appropriate depending on the specific scope of the use, should require a Conditional Use Permit or Special Use Permit to ensure compatibility with agriculture operations.

Adjacent Zoning

Revisions to zoning districts that are in proximity to the AU district should be modified to allow supportive and complementary uses. These districts may also be modified to buffer incompatible uses from agriculture uses either by design (screening, bufferyards, etc...) or separation (setbacks, exclusion for the district, etc...). In some cases, specific supportive, complementary and potentially incompatible uses should require a Conditional Use Permit or Special Use Permit to ensure compatibility with adjacent uses.

Commercial Agriculture Centers Zoning

To facilitate a supportive land use pattern, the County could create a special zoning district or overlay district for agricultural commercial centers to focus land uses that provide goods and services to the agriculture community within or adjacent to production areas. Such a district would include many of the uses identified as supportive or complementary to the agriculture.

Supportive and Complementary Uses to Agriculture & Agribusiness

Land Based Classification System (LBCS)	LBCS Code	Supportive	Complementary	Potentially Incompatible	Incompatible	Within AU Zoning	Comments
Residence or accommodation functions	1000			X			
Private household	1100			X		P	Only compatible if it provides housing for farm workers, but buffering measures should be taken.
Single Family Residential				X		P	Only historical farm houses occupied by those involved in ag are complementary, but buffering measures should be taken.
Group Homes				X		C	Only compatible if it provides housing for farm workers, but buffering measures should be taken.
Multi-Family				X			Only compatible if it provides housing for farm workers, but buffering measures should be taken.
Clustered Housing				X			Only compatible if it provides housing for farm workers, but buffering measures should be taken.
Temporary Farm Housing		X		X		C/PH	Housing for transient farm workers is necessary, but measures should be taken to ensure negative impacts, such as chemical drift and prevailing winds are accounted for.
Housing services for the elderly	1200				X		
Hotels, motels, or other accommodation services	1300				X		
Bed and breakfast inn	1310		X	X			Complementary if tied to agri-tourism or eco-tourism.
Rooming and boarding	1320		X	X			Only compatible if it provides housing for farm workers, but buffering measures should be taken.
Hotel, motel, or tourist court	1330				X		
Casino hotel	1340				X		
General sales or services	2000						
Retail sales or service	2100						
Automobile sales or service establishment	2110	X		X			Vehicle retailers not primarily serving the agricultural population may be incompatible. Farm vehicle sales are appropriate.
Car dealer	2111			X			Vehicle retailers not primarily serving the agricultural population may be incompatible. Farm vehicle sales are appropriate.
Bus, truck, mobile homes, or large vehicles	2112			X			Vehicle retailers not primarily serving the agricultural population may be incompatible. Farm vehicle sales are appropriate.
Bicycle, motorcycle, ATV, etc.	2113			X			Only compatible if it serves as a buffer between incompatible uses.
Boat or marine craft dealer	2114			X			Only compatible if it serves as a buffer between incompatible uses.

Supportive and Complementary Uses to Agriculture & Agribusiness

Land Based Classification System (LBCS)	LBCS Code	Supportive	Complementary	Potentially Incompatible	Incompatible	Within AU Zoning	Comments
Parts, accessories, or tires	2115	X		X			Only supportive if agriculture related items are sold.
Gasoline service	2116	X		X			Only supportive if agriculture operations are a significant customer base.
Tractor Sales		X					Primary ag support activity.
Heavy consumer goods sales or service	2120						
Furniture or home furnishings	2121				X		
Hardware, home centers etc.	2122		X	X			Only complementary if agriculture related items are sold.
Lawn and garden supplies	2123		X	X			Only complementary if agriculture related items are sold.
Warehouse club or superstore	2124				X		
Electronics and Appliances	2125				X		
Lumber yard and building materials	2126			X			Only compatible if it serves as a buffer between incompatible uses.
Heating and plumbing equipment	2127				X		
Durable consumer goods sales and service	2130		X	X			Only complementary if agriculture related items are sold.
Consumer goods, other	2140		X	X			Only complementary if agriculture related items are sold.
Grocery, food, beverage, dairy, etc.	2150		X	X			Only complementary if agriculture related items are sold.
Health and personal care	2160		X	X			Only complementary if serving farm workers and their families.
Finance and Insurance	2200		X	X			May serve agri-business but does not require proximity to operations.
Real estate, and rental and leasing	2300		X	X			May serve agri-business but does not require proximity to operations.
Business, professional, scientific, and technical services	2400			X			
Professional services	2410						
Research and development services (scientific, etc.)	2416	X		X			Agriculture related research is supportive while non-AG related research and development may be incompatible as a traffic generator.

Supportive and Complementary Uses to Agriculture & Agribusiness

Land Based Classification System (LBCS)	LBCS Code	Supportive	Complementary	Potentially Incompatible	Incompatible	Within AU Zoning	Comments
Animal Hospital		X	X				Livestock's relative insignificance in total production limits demand for service.
Veterinary services	2418	X					Livestock's relative insignificance in total production limits demand for service.
Food services	2500				X		
Manufacturing and wholesale trade	3000						
Food, textiles, and related products	3100	X	X	X			Only supportive when processing agriculture products, only complementary if small scale accessory to primary agri-business use.
Wood, paper, and printing products	3200	X	X	X			Only supportive when processing agriculture products, only complementary if small scale accessory to primary agri-business use.
Chemicals and metals	3300			X			Only compatible if it serves as a buffer between incompatible uses.
Wholesale trade	3500	X		X			Only supportive when storing agriculture factors of production or farm produce.
Warehouse and storage services	3600	X		X			Only supportive when storing agriculture factors of production or farm produce.
Transportation, communication, information, and utilities	4000						
Transportation services	4100						
Air transportation	4110	X	X				Small scale airports servicing the agri-business community (airfield application).
Rail transportation	4120	X	X				May provide transportation services for ag products.
Marine and water transportation	4130			X			
Truck and freight transportation services	4140	X	X	X			Primary transportation mode for ag products.
Road, ground passenger, and transit transportation	4150			X			
Space transportation	4160			X			Only compatible if it serves as a buffer between incompatible uses.
Pipeline transportation	4170			X			
Postal services	4180	X	X	X			Supportive to on-site value added agriculture specialty products with direct marketing (example: fruit baskets sold over the internet)

Supportive and Complementary Uses to Agriculture & Agribusiness							
Land Based Classification System (LBCS)	LBCS Code	Supportive	Complementary	Potentially Incompatible	Incompatible	Within AU Zoning	Comments
Courier and messenger services	4190	x	x	x			Supportive to on-site value added agriculture specialty products with direct marketing (example: fruit baskets sold over the internet)
Communications and information	4200	x	x	x			Business communications important to agriculture, See Note 1.
Telecommunications and broadcasting	4230	x	x				Is rapidly becoming a vital support service for ag operations, See Note 1.
Utilities	4300						
Electric power	4310		x	x			Depending on type of facility.
Natural gas, petroleum, fuels, etc.	4320		x	x			Depending on type of facility.
Water, steam, air conditioning supply	4330			x			
Drinking water	4331		x	x			Depending on type of facility.
Irrigation and industrial water supply	4332	x		x			Irrigation is directly supportive of agriculture.
Sewer, solid waste, and related services	4340			x			
Hazardous waste collection	4341				x		Environmental threat to ag production.
Hazardous waste treatment and disposal	4342				x		Environmental threat to ag production.
Sewage Treatment Plants				x			Effluent may be used for non-edible ag production, attracts urban development and takes ag land out of production.
Solid waste collection (Dumps)	4343				x		Takes ag land out of production.
Solid waste combustor or incinerator	4344				x		Takes ag land out of production.
Solid waste landfill	4345				x		Takes ag land out of production.
Waste treatment and disposal	4346	x		x			Effluent may be used for non-edible ag production, attracts urban development and takes ag land out of production.
Septic tank and related services	4347			x			Many ag buildings use septic systems for on-site wastewater treatment.
Arts, entertainment, and recreation	5000						
Museum establishment	5200		x	x			Complementary if tied to agri-tourism or eco-tourism.

Supportive and Complementary Uses to Agriculture & Agribusiness							
Land Based Classification System (LBCS)	LBCS Code	Supportive	Complementary	Potentially Incompatible	Incompatible	Within AU Zoning	Comments
Amusement, sports, or recreation establishment	5300		X	X			Complementary if tied to agri-tourism or eco-tourism.
Golf Courses				X			Only compatible if it serves as a buffer between incompatible uses, otherwise golf courses take ag land out of production.
Recreation Facility			X	X			Only complementary tied to agri-tourism, eco-tourism and/or accessory to agri-business operation.
Country Clubs				X			Only compatible if it serves as a buffer between incompatible uses, otherwise country clubs take ag land out of production.
Riding Academies			X				Commonly cited as an ag related recreational use sometimes tied to agri-tourism and eco-tourism.
Camps, camping, and related establishments	5400		X	X			Complementary if tied to agri-tourism or eco-tourism.
Dude Ranches			X	X			Potentially complementary as agri-tourism or eco-tourism facility.
Education, public admin., health care, and other inst.	6000						
Educational services	6100			X		C	
Nursery and preschool	6110					C	
Grade schools	6120			X		C	Primarily an urban use but may serve children of farm workers, buffering should be required.
Elementary	6121			X		C	Primarily an urban use but may serve children of farm workers, buffering should be required.
Middle	6122			X		C	Primarily an urban use but may serve children of farm workers, buffering should be required.
Senior	6123			X		C	Primarily an urban use but may serve children of farm workers, buffering should be required.
Continuance	6124			X		C	Primarily an urban use but may serve children of farm workers, buffering should be required.
Alternative	6125			X		C	Primarily an urban use but may serve children of farm workers, buffering should be required.
Adult	6126			X		C	Primarily an urban use but may serve children of farm workers, buffering should be required.
Colleges and Universities	6130			X		C	Primarily an urban use but may serve children of farm workers, buffering should be required.
Technical, trade, and other specialty schools	6140			X			Primarily an urban use but may serve children of farm workers, buffering should be required.
Public administration	6200			X			

Supportive and Complementary Uses to Agriculture & Agribusiness							
Land Based Classification System (LBCS)	LBCS Code	Supportive	Complementary	Potentially Incompatible	Incompatible	Within AU Zoning	Comments
Other government functions	6300						
Postal	6310	X	X	X			Supportive to on-site value added agriculture specialty products with direct marketing (example: fruit baskets sold over the internet)
Military and national security	6320			X			Only compatible if it serves as a buffer between incompatible uses.
Space research and technology	6330			X			Only compatible if it serves as a buffer between incompatible uses.
Parks and recreation	6340		X	X		P	Complementary if related to agri-tourism or eco-tourism, may serve as a buffer from incompatible uses.
Public Safety	6400		X	X			While services are needed throughout the County, most facilities are designed to serve urban areas.
Fire and rescue	6410		X	X			While services are needed throughout the County, most facilities are designed to serve urban areas.
Police	6420		X	X			While services are needed throughout the County, most facilities are designed to serve urban areas.
Emergency response	6430		X	X			While services are needed throughout the County, most facilities are designed to serve urban areas.
Health and human services	6500			X			
Child day care	6562		X	X		C	Primarily an urban use but may serve children of farm workers.
Religious institutions	6600		X	X			Primarily an urban use but may serve farm workers.
Death care services	6700				X		
Cemeteries				X			Only compatible if it serves as a buffer between incompatible uses, otherwise cemeteries take ag land out of production.
Associations, nonprofit organizations, etc.	6800		X	X			Complementary dependent on the scale and mission of the use.
Construction-related businesses	7000	X		X			Only supportive if they construct agriculture structures.
Mining and extraction establishments	8000		X	X			Only compatible if it serves as a buffer between incompatible uses once quarrying operation ceases, otherwise they take ag land out of production.
Quarrying and stone cutting	8500			X			Only compatible if it serves as a buffer between incompatible uses once quarrying operation ceases, otherwise they take ag land out of production.
Agriculture, forestry, fishing and hunting	9000						

Supportive and Complementary Uses to Agriculture & Agribusiness

Land Based Classification System (LBCS)	LBCS Code	Supportive	Complementary	Potentially Incompatible	Incompatible	Within AU Zoning	Comments
Crop production	9100	x				P*	Primary agriculture use.
Grain and oilseed	9110	x				P*	Primary agriculture use.
Wheat	9111	x				P*	Primary agriculture use.
Corn	9112	x				P*	Primary agriculture use.
Rice	9113	x				P*	Primary agriculture use.
Soybean and oilseed	9114	x				P*	Primary agriculture use.
Dry pea and bean	9115	x				P*	Primary agriculture use.
Vegetables	9120	x				P*	Primary agriculture use.
Fruits and trees	9130	x				P	Primary agriculture use.
Greenhouse, nursery, and floriculture	9140	x				P	Primary agriculture use.
Food crops grown under cover	9141	x				P	Primary agriculture use.
Nursery and tree production	9142	x				P	Primary agriculture use.
Floriculture production	9143	x				P	Primary agriculture use.
All other crops	9150	x				P*	Primary agriculture use.
Tobacco crop	9151	x				P*	Primary agriculture use.
Cotton crop	9152	x				P*	Primary agriculture use.
Sugarcane crop	9153	x				P*	Primary agriculture use.
Hay	9154	x				P*	Primary agriculture use.
Peanut crop	9155	x				P*	Primary agriculture use.
Range and grasslands operations	9160	x				P	Primary agriculture use.

Supportive and Complementary Uses to Agriculture & Agribusiness							
Land Based Classification System (LBCS)	LBCS Code	Supportive	Complementary	Potentially Incompatible	Incompatible	Within AU Zoning	Comments
Animal production including slaughter	9200	x		x			May affect use of chemicals on adjacent properties and contribute animal waste pollutants.
Cattle ranch and crops	9210	x		x		P	May affect use of chemicals on adjacent properties and contribute animal waste pollutants.
Beef cattle ranch establishments	9211	x				P	Primary agriculture use.
Cattle feedlot establishment	9212	x		x			May affect use of chemicals on adjacent properties and contribute animal waste pollutants.
Dairy cattle and milk production	9220	x		x		PH	May affect use of chemicals on adjacent properties and contribute animal waste pollutants.
Hog and pig farm	9230	x		x		PH	May affect use of chemicals on adjacent properties and contribute animal waste pollutants.
Poultry and egg production and hatcheries	9240	x		x		C	May affect use of chemicals on adjacent properties and contribute animal waste pollutants.
Sheep and goat farms	9250	x		x		P	May affect use of chemicals on adjacent properties and contribute animal waste pollutants.
Fish hatcheries, fisheries, and aquaculture	9260	x				P*	Primary agricultural use
All other animal production	9270	x				P*	Primary agriculture use.
Apiculture (bees, wax, and related operations)	9271	x	x			C	Primary or accessory agricultural use - sensitive to chemical use
Horse and equine production	9272	x				P*	Primary agriculture use.
Fur-bearing animal production	9273	x				P*	Primary agriculture use.
Forestry and Logging	9300	x				P*	Primary agriculture use.
Timber tract logging	9310	x				P*	Primary agriculture use.
Forest nurseries	9320	x				P*	Primary agriculture use.
Logging	9330	x				P*	Primary agriculture use.
Timber production functions	9340		x				Should be located near adequate road and/or rail facilities in close proximity to local timber production areas, dependant on scale of processing.
Fishing, hunting and trapping	9400	x	x			P*	Complementary if related to agri-tourism or eco-tourism, may serve as a buffer from incompatible uses.
Fishing	9410	x	x			P*	Complementary if related to agri-tourism or eco-tourism, may serve as a buffer from incompatible uses.

Supportive and Complementary Uses to Agriculture & Agribusiness							
Land Based Classification System (LBCS)	LBCS Code	Supportive	Complementary	Potentially Incompatible	Incompatible	Within AU Zoning	Comments
Hunting and trapping	9420	x				P*	
Animal trapping	9421	x				P*	
Fishing preserves	9422	x				P*	
Game and hunting preserves	9423	x				P*	
Game propagation	9424	x				P*	
Game retreats	9425	x				P*	
Support functions for agriculture and forestry	9500	x					Support agricultural uses by definition
Cotton ginning, grist milling, etc.	9510	x					
Grain Mills		x	x				Should be located near adequate road and/or rail facilities in close proximity to ag production areas, dependant on scale of processing.
Support functions for agriculture	9520	x					
Blacksmithing		x	x	x			Supportive if it significantly serves agri-business.
Farm Implement Repair		x	x				Dependant on scale a specific use may be directly supportive or complementary to ag operations.
Feed Sales		x	x				Livestock's relative insignificance in total production limits demand for service.
Fertilizer Sales		x	x				Dependant on scale a specific use may be directly supportive or complementary to ag operations.
Manure Storage		x	x				Provides supply of fertilizer.
Storage Facility		x		x			Only compatible if it serves as a buffer between incompatible uses.
Weed and pest control services	9521	x					
Seeding, pollinating, and other botanical services	9522	x					
Spraying, dusting, and other related services	9523	x					
Crop harvesting (including drying, siloing, etc.)	9530	x					

Supportive and Complementary Uses to Agriculture & Agribusiness

Land Based Classification System (LBCS)	LBCS Code	Supportive	Complementary	Potentially Incompatible	Incompatible	Within AU Zoning	Comments
Food Processing		X	X			C	Should be located near adequate road and/or rail facilities in close proximity to ag production areas, dependant on scale of processing.
Packing Facility		X				C	Primary AG Support Industry.
Meat Packing Facility		X		X			May affect use of chemicals on adjacent properties and contribute animal waste pollutants.
Slaughter House		X		X			May affect use of chemicals on adjacent properties and contribute animal waste pollutants, livestock's relative insignificance in total production limits demand for service.
Farm and farm labor management services	9540	X					
Support functions for animal production	9550	X					
Support functions for forestry	9560	X					
Unclassifiable function	9900						
Not applicable to this dimension	9910						
To be determined	9990						
To be determined	9999						

DEFINITIONS:

Complementary - Complementary uses can operate in close proximity to commercial agriculture businesses but do not significantly contribute to agriculture production. Complementary uses provide diversity of activities with no significant direct impacts on most agriculture operations. In some cases, complementary uses are associated with or accessory to agricultural operations. Examples may include: telecommunications facilities, retail and service businesses used by the families of agricultural operators.

Supportive - Supportive uses either provide or receive direct benefits to or from the local agriculture industry. Supportive uses can and should locate in close proximity to agriculture production areas to create symbiotic economic efficiencies. In some cases, supportive uses are associated with or accessory to farm operations. Examples may include: agriculture machinery sales and repair, food and fiber processing and fertilizer sales.

Permitted Uses "P" - Those uses explicitly allowed within the AU zoning district without conditions or public hearings. Administrative permits are required.

Conditional Uses "C" - Those uses explicitly allowed within the AU zoning district provided specific standards listed in the zoning ordinance are met. Administrative permits are required.

Public Hearing Uses "PH" - Those uses explicitly allowed within the AU zoning district provided approval is granted after a public hearing is held. Administrative permits are required.

Assumed Permissible "P*" - Those uses not explicitly allowed within the AU zoning district. However, these uses are allowed because they are obvious primary agriculture uses.

NOTES:

1. Fairchild, Dean G., Telecommunications Convergence and Agribusiness Hypercommunication Infrastructure in S. Miami-Dade County Florida.