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Know-how for Horticulture™

Horticulture Australia Limited

Peri-urban horticulture and land
use planning

Tool Kit

October 2008

Tool kit Guide

Why does industry need this tool kit?

Land use planning and its impacts on horticulture in Australia have for many years been identified by farming organisations around Australia as being in the 'top 5' policy issues facing the sector. The issue is important to many intensive agricultural industries and has been on the government planning 'radar' as a result of the increasing incidence of land use conflict in peri-urban areas as competition for finite land and water resources continues to intensify over time.

Industry associations, state farming organisations and a wide range of affected stakeholders have struggled to come to grips with the issues surrounding land use planning and conflict, and agreement on how to address them is rare, often due to the conflicting aims and priorities associated with individual land ownership. The Industry Management Committee of Horticulture Australia Limited considered that a fresh review of the literature, and the production of a toolkit consisting of short and informative fact sheets was required.

How to best utilise this tool kit

This tool kit provides a series of fact sheets which each address a specific issue of importance to anyone seeking to understand and deal with land use planning in the peri-urban regions of Australia. The different tools are presented *not as recommendations for action* but rather as information to improve understanding of the planning process and provide a basis for involvement at the local level to ensure horticultural issues have been properly considered.

What is included¹?

The tool kit contains a fact sheet on each of the following topic areas:

A. The basics of peri-urban land use planning in its current form in Australia

1. **Understanding the land use planning system** – a quick guide to the Australian planning system which outlines the various levels of legislation and how this affects peri-urban stakeholders.
2. **Zoning** – anyone seeking to develop their land or preserve it for agricultural use needs to understand how governments use zoning controls and the limitations of the current system.

B. The challenges for peri-urban horticulturalists and typical sources of conflict

3. **Land use conflict** – an outline of some of the sources of disputes between neighbours in peri-urban areas and some possible practical and broad policy approaches through which these can be proactively addressed
4. **Buffers** – the pros and cons of using buffers as one of the practical ways to reduce conflict

¹ To assist the reader to gain full understanding and benefit from the tool kit, two glossaries of terms (international and domestic) are included.

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C. What options does industry have to address these challenges?

5. **Urban Growth Boundaries** - an urban containment policy designed to control urban development within well-defined limits and thus protect peri-urban horticulture
6. **Transfer of Development Rights** - allows landowners to transfer the right to develop one parcel of land to a different parcel of land thus allowing horticulture production while protecting investment opportunities
7. **'Right to farm'** – outlines a legislative approach used in the United States to deal with conflicts with neighbours and discusses the pros and cons of this option.

Understanding the land use planning system in Australia

Introduction:

Legislative control of planning and development of land in Australia rests with the three levels of government: federal, state and local. Generally, the major legislative control is at the state government level and is administered by the various state Departments of Planning (or similar) but with many of the functions of the legislation performed by local governments.

In addition to planning legislation per se, there are various other pieces of legislation and numerous policies and guidelines which guide planning and development. Each state has differing legislation, policies and guidelines which add to the complexity of understanding peri-urban planning.

The following provides an overview of the legislation, policies and guidelines of each level of government, with emphasis on peri-urban planning.

Federal legislation

The major areas of Federal Government legislation that impact on the planning process concern the protection and conservation of natural resources and heritage that are considered to be of national importance. The key federal acts requiring consideration in the planning process are:

Australian Heritage Council Act 2003

Environmental Protection and Biodiversity Conservation Act 1999

Apart from the direct legislative approach, the Federal Government can affect land use planning by:

- § co-operation and agreement with the states (and local government); and
- § by using its funding powers.

Funding powers extend to provision of infrastructure including major roads which influence land use in peri-urban areas.

State legislation

Each state and territory in Australia has overriding legislation governing the planning process for that state and territory. The name of the instruments may vary in each state, but the objectives with respect to land use planning are generally similar.

The states also have a range of policies, strategies and guidelines regarding land use planning that have been developed as a requirement under the planning legislation or to assist local governments to complete their responsibilities.

The relevant planning legislation for each state is shown below: plus the objectives of the legislation that relates to peri-urban land use.

Table 1 State legislation

State	Legislation
NSW	<i>Environmental Planning and Assessment Act 1979</i>
Queensland	<i>Integrated Planning Act 1997</i>
Victoria	<i>Planning and Environment Act 1987</i>
South Australia	<i>Development Act 1993</i>
Tasmania	<i>Land Use Planning and Approvals Act 1993</i>
Western Australia	<i>Planning and Development Act 2005</i>

Although the individual objectives of each of the above Acts differ, they have similar overall objectives that could be summarised as follows:

1. promotion of ecologically sustainable development;
2. a strategic planning approach (at regional and local levels) that considers a combination of economic, social and environmental issues; and
3. integration of the planning process between the responsible agencies (especially local government).

The legislation generally allows for both regional and local environmental land use plans to be developed. The planning of peri-urban land is guided by a range of instruments within the legislation including:

- § zoning of land, including rural lands;
- § subdivision and development in rural zones; and
- § minimum residential allotment sizes within zones.

While the various state land planning Acts provide what appear to be suitable directions to enable the orderly planning of peri-urban land, the implementation of the legislation is complex because of the many policies and guidelines which form part of the legislation.

For example, in NSW the legislation provides for numerous policies known as State Environmental Planning Policies (SEPP) on a range of issues. The most pertinent with respect to peri-urban lands is the newly created SEPP (Rural Lands) 2008. The principles of the SEPP in turn align with the NSW Department of Primary Industries' Policy for Protection of Agricultural Land (2004)

State planning legislation generally allows for the development of regional plans which enable a cross-sectoral approach to planning and development. This enables policy development and implementation to be undertaken as close as possible to local communities, but consistent with agreed objectives at the regional, state and national levels.

An example of a regional approach is the South East Queensland Regional Plan 2005-2025, the first statutory regional plan for the State, which is binding on all local governments in the region and on all state government agencies.

Local Government

Within each state there are many local governments (also known as local councils) that have a range of responsibilities, including land use planning. From a planning perspective, local governments are responsible for preparing plans which determine land use within their boundaries. These local plans are named differently in each state, for example Local Environmental Plans in NSW, Planning Schemes in Queensland and Victoria, and Development Plans in South Australia. Local plans guide planning decisions through zoning and development controls which then allow councils to supervise the ways in which land is used. Development control plans provide specific, comprehensive requirements for certain types of development or locations.

Zoning is the main tool used in land use planning within the local plans and is further described in Toolkit Number X.

Further reading:

Detailed treatment of policy approaches including zoning and minimum lot size is included in the accompanying Tool Kit. Other useful references are as follows:

American Farmland Trust (2002) *The Farmland Protection Toolbox*
http://www.farmlandinfo.org/documents/27761/fp_toolbox_02-2008.pdf

Armstrong, H, Squires, W and Emtage, N. (2005) *The Protection of Production on Rural Lands: A review of tools and techniques for rural planning*, Centre for Rural and Regional Innovation Queensland (CRRIQ)

Buxton, M, Tieman, G, Bekessy, S, Budge, T, Mercer, D, Coote, M, and Morcombe, J, (2006) *Change and Continuity in Peri-urban Australia, State of the Peri-urban Regions: A Review of the Literature*, RMIT University, Melbourne.

Sinclair, I. (2003) *Growth Management and Rural Land*, University of NSW Faculty of the Built Environment Planning Law and Practice Short Course. Buxton et al 2006)

Forster, C. A. (1999) *Australian Cities: Continuity and Change*, (2nd Edition) Oxford University Press, Oxford.

Spiller, M. (2004) "Liveable Communities: How the Commonwealth can Foster Sustainable Cities and Regions", in 2004 National Congress of the Planning Institute of Australia

Zoning controls and minimum lot size

Background:

Zoning is used to divide a local government area into zones determined by restrictions on types of use. Land use zoning entails placing restrictions on the use of the land by way of statute. This is the principal method for controlling the development of land in Australia. Land is designated for a principal use and uses not considered to be suitable or compatible with the principal use are prohibited. In the US, Agricultural Protection Zoning designates areas where farming is the primary land use, and discourages other land uses in those areas.

Zoning is the main tool that local governments use for land use planning. All land in a local government area is designated as a specific zone such as rural or primary production, residential, industrial, business or environmental. The plan provides a description of land use within each zone including:

- § objectives of the zone;
- § permitted (with or without consent) or prohibited development within the zone; and
- § subdivision in rural areas, including minimum lot size for a dwelling.

The table below is an extract of zone descriptions for NSW related to rural and peri-urban areas.

Zone	Objectives of zone	Permitted w/o consent	Permitted w consent
RU1 Primary Production	<p>To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.</p> <p>To encourage diversity in primary industry enterprises and systems appropriate for the area.</p> <p>To minimise the fragmentation and alienation of resource lands.</p> <p>To minimise conflict between land uses within the zone and with adjoining zones.</p>	Extensive agriculture	Dwelling houses; Extractive activities; Mining
RU2 Rural Landscape	<p>To maintain the rural landscape character of the land.</p> <p>To provide for a range of compatible land uses, including extensive agriculture</p>	Extensive agriculture	Dwelling houses
RU4 Rural Small Holdings	<p>To enable small-scale sustainable primary industry and other compatible land uses.</p> <p>To maintain the rural and scenic character of the land.</p> <p>To ensure that development does not unreasonably increase the demand for public services or public facilities.</p> <p>To minimise conflict between land uses within the zone and adjoining zones</p>		Dwelling houses

RU6 Transition	<p>To protect and maintain land that provides a transition between rural and other land uses of varying intensities or environmental sensitivities.</p> <p>To minimise conflict between land uses within the zone and adjoining zones</p>	Dwelling houses
R5 Large Lot Residential	<p>To provide residential housing in a rural setting while preserving environmentally sensitive locations and scenic quality</p> <p>To ensure that large residential allotments do not hinder the proper and orderly development of urban areas in the future</p> <p>To ensure that development in the area does not unreasonably increase the demand for public services or public facilities</p> <p>To minimise conflict between land uses within the zone and adjoining zones</p>	Dwelling houses

The preparation of plans by local governments enables specific local elements to be considered in the planning process. However, the existence of many, relatively small local government units can potentially lead to fragmentation, inefficiency and uncoordinated development.

Advantages:

- § allows local governments to plan for land use with minimal expense; and
- § provides certainty for future development

Disadvantages:

- § inflexible, detaches similar land uses and limits interaction between them;
- § potentially restricts innovation (i.e. restricts densities of projects that may have a market for a greater density, prevents mixed land uses);
- § requires accurate and relevant data about the relevant land and community prior to designating an area as an agricultural zone. Such information includes physical constraints, land use (tenure, size, cover, quality) and social and economic factors;
- § zoning tools suitable for one region will not necessarily be suitable for others;
- § zoning has been used for an extensive period and has not always proven to be an effective mechanism for protection of a land base/use;
- § restricts landowner ability to capitalise on their asset;
- § requires forecast into future of region to determine best use of land (does not take into account dynamic nature of land use and communities); and
- § may increase property values for some landowners but adversely affect others.

Issues to address:

The United States has been using zoning as a means of maintaining rural land for decades. It has been found that zoning's effectiveness is limited, however, by legal and political challenges from landowners who wish to use their land for more intensive and profitable purposes. The effectiveness of zoning is additionally limited by the data that it is founded upon. A useful foundation for rural land protection is not provided by the ad hoc designation of zones, and the disregard of land attributes, land uses and socio-economic considerations.

Local Government traditionally use zoning to control the subdivision of rural land and the expansion of urban land use. This may be via minimum lot size or prohibition of subdivision in some areas. Many landholders view such regulation as an infringement of their rights to profit from their asset. As high population pressure and demand for new residential land drives peri-urban farmland prices well beyond the agricultural land price, community conflict arises from anti-subdivision regulations.

Landholders nearing retirement age regard such legislation as discriminatory, preventing them from receiving the perceived equivalent of the superannuation lump sum. It is also argued by some that limiting subdivision of agricultural land could inhibit the emergence of new forms of agriculture, (i.e. intensification), that may contribute to regional economic development. In contrast to this view, other stakeholders believe that there is an excessively high degree of subdivision which renders productive agricultural land unviable.

Another concern is that land division based on minimum lot size fails to take into account the dynamic interplay between economic and social forces that contribute to a constantly evolving and transforming agricultural sector.

Barriers to adoption and/or possible alternatives:

The approach taken by the Wollondilly Shire Council (south-western Sydney) in the development of its 'Rural Living Zones' is worth noting. Following a review of Wollondilly Shire Council's Local Environmental Plan and Development Control Plans, three new zones were introduced: Agriculture Zone, Agricultural Landscape Zone and Rural Living Zone. The zone names recognise use rather than character (i.e. agriculture is use, rural is character). The zone boundaries are delineated by physical boundaries rather than a road boundary to reduce the incidence of rural land use conflict. The rationale for the new zones is outlined below:

Agriculture Zone: The primary objective of this zone is to preserve agricultural production and to allow for new agricultural production in appropriate locations. A secondary objective of the zone is to reduce the incidence of rural land use conflict. New dwelling houses within the zone are permitted only in conjunction with a legitimate and sustainable agricultural enterprise. Likewise, any agricultural enterprise which is proposed for land adjacent to an existing dwelling house, which is used for residential use, will have to take into consideration the use of the land for residential purposes and provide steps to reduce potential conflict. The minimum subdivision size is 20 hectares within the zone. Subdivisions must also undergo a Total Farm Management Assessment, which includes a Property Plan, and an Agricultural Sustainability Assessment.

Agricultural Landscape Zone: The primary objective of this zone is to preserve the agricultural landscape of Wollondilly area whilst also providing for agricultural production. Existing productive agricultural enterprises will be encouraged to continue within this zone, however it is not anticipated that a great deal of intensive agriculture will be carried out. The areas set aside are generally areas which have a fair amount of extensive agriculture practised in the form of grazing and dairying. The minimum subdivision size for this zone is 40 hectares.

Environmental Protection Rural Living Zone: The primary objective of this zone is to provide for rural living opportunities whilst having regard to the preservation of the landscape character as well as the constraints of the land. Rural Urban Fringe: development is within the servicing catchments and in close proximity to the urban centre. The lot size is generally between 4000 square metres – 1 hectare.

Rural Living: Residential use development within a rural environment. Lots are generally around 4 hectares. Any subdivision must be carried out having due regard to the constraints of the land.

Council is currently in the process of reviewing the implementation of this plan as a result of the NSW Government's introduction of standard zones in the state as shown in the Table above.

Further reading

American Farmland Trust (2002) *The Farmland Protection Toolbox*

http://www.farmlandinfo.org/documents/27761/fp_toolbox_02-2008.pdf

Armstrong, H, Squires, W and Emtage, N. (2005) *The Protection of Production on Rural Lands: A review of tools and techniques for rural planning*, Centre for Rural and Regional Innovation Queensland (Crr.i.q)

Buxton, M, Tieman, G, Bekessy, S, Budge, T, Mercer, D, Coote, M, and Morcombe, J, (2006) *Change and Continuity in Peri-urban Australia, State of the Peri-urban Regions: A Review of the Literature*, RMIT University, Melbourne.

Sinclair, I. (2003) *Growth Management and Rural Land*, University of NSW Faculty of the Built Environment Planning Law and Practice Short Course.

Land use conflict

Background:

There is a continuing trend in Australia for urban dwellers to 'downshift' and move to outer metropolitan fringe areas to seek an improved lifestyle. At the same time, agricultural producers in these areas are seeing land values increase and are subdividing their properties, in many cases to fund a well-earned retirement. The resulting mix of lifestyle and commercial agriculture can sometimes produce land use conflict around issues of smell, noise, visual amenity and so on and if not resolved quickly can result in legal action between the parties involved. Table 1 lists some of the typical areas of conflict which occur.

Table 1 Potential points of conflict between agriculture and adjoining land uses

Conflict	Description
Noise	Dogs, livestock Farming equipment, pumps, spray machines, transport, frost fans, hail cannons Ancillary equipment associated with on- farm processing
Odour	Agricultural fertilisers (particularly manures) and chemicals Intensive animal industries Application of effluent to pasture
Health concerns	Chemicals Spray drift Smoke
Water	Access Pumping Quantity
Smoke and ash	Burning of pasture, stubble or "rubbish"
Visual intrusion	Hail netting Polyhouses
Nuisance	Stray dogs Vandalism Trespass Noxious and environmental weeds

Source: NSW DPI (2004)

Policy approaches:

Failure to effectively mitigate land use conflict can be extremely costly to landholders, the community and government. It is preferable to avoid land use conflict in the first instance by effective forward planning and

development control, rather than attempting to resolve land use planning problems via litigation after development has taken place and disputes arise. A suggested hierarchy of actions for mitigating and managing conflict is listed below. Note that the financial and social costs of mitigating conflict tends to increase down the hierarchy:

1. Strategic planning. Involves the analysis of conflict when assessing future development, settlement options and zoning of lands.
2. Statutory control. Development control mechanisms, including buffer distances, which reduce the potential for conflict and allow for approaches that suit local circumstances.
3. Best management and practice. Government support and farmer adoption of best practice which reduces the environmental impact of agriculture.
4. Education. Increasing the awareness of residents who live in a rural area, or in a residential area which adjoins a rural area, as to the typical agricultural practices that may impact on residential amenity. An example is for Goulburn Mulwaree Council in NSW which has produced "The Rural Living Handbook 2007 – 2009: A guide for rural residential landholders". This lets rural residents know about the many resources available as well as their responsibilities (particularly legislative requirements).
5. Mediation and negotiation. Bringing conflicting parties together to share concerns and information in order to find solutions.
6. Litigation. Seeking legal intervention by utilising either environmental or common law actions.

Some of the policy approaches which could be used to pre-emptively address and minimise the occurrence of land use conflict are outlined below.

Transfer of development rights (TDR)

Transfer of Development Rights, or 'TDRs', allow landowners to transfer the right to develop one parcel of land to a different parcel of land. Generally established through local zoning ordinances, TDR programs can protect farmland by shifting development from agricultural areas to areas planned for growth. When the development rights are transferred from a piece of property, the land is typically restricted with a permanent agricultural conservation easement.

Under the US model, buying development rights generally allows landowners to build at a higher density than ordinarily permitted by the base zoning in designated receiving areas. Counties, cities, towns and townships use TDR. Local governments approve transactions and monitor easements. A few jurisdictions have created "TDR banks" that buy development rights with public funds and sell them to developers and other private landowners.

Urban Growth Boundaries (UGB)

Studies have shown that there is a definite link between increased population density and farmland loss. This may be the reason why strategies for containment of urban growth have proven successful in the protection of agricultural land in Europe as they ensure the population density is restrained to a particular area and cannot move into surrounding lands.

Strategies widely employed include urban growth boundaries, urban service area declaration and land zoning restrictions.

Urban growth boundaries are a form of urban containment policy that are designed to control urban development beyond a well-defined limit. They are a form of planning tool that can be combined with other mechanisms such as designated zones.

If established in a proper manner, an urban boundary will lead to certainty in the minds of decision-makers and landholders. There will be greater predictability and direction in planning at the local and regional levels, and most importantly, protection of agricultural/rural land.

A growth boundary must be open to review and modification at certain intervals, in order to accommodate urban growth and changes in the use of the land. Modification should only occur however, once there has been a complete assessment of housing demand, conservation requirements, resource use and implications for urban services.

Zoning

From a planning perspective, local governments are responsible for preparing plans which determine land use within their boundaries. These local plans are named differently in each state, for example Local Environmental Plans in NSW, Planning Schemes in Queensland and Victoria, and Development Plans in South Australia. Local plans guide planning decisions through zoning and development controls which then allow councils to supervise the ways in which land is used. Development control plans provide specific, comprehensive requirements for certain types of development or locations .

Zoning is the main tool used in land use planning within the local plans. All land in a local government area is designated as a specific zone such as rural, residential, industrial, business or environmental. The plan provides a description of land use within each zone including:

- § objectives of the zone;
- § permitted (with or without consent) or prohibited development within the zone; and
- § subdivision, including minimum lot size for a dwelling.

The preparation of plans by local governments enables specific local elements to be considered in the planning process.

‘Right to farm’

Right-to-farm laws are generally designed to accomplish one or both of the following objectives:

- § to strengthen the legal position of farmers when neighbours sue them for private nuisance; and
- § to protect farmers from anti-nuisance ordinances and unreasonable controls on farming operations.

‘Right to farm’ laws are strongly embedded in the United States approach to farmland protection and are in force in all 50 States, with locally enforced provisions also in many regions. Right-to-farm laws are intended to discourage neighbours from suing farmers.

‘Right to farm’ laws are not in force in Australia excepting for Tasmania, which has very low rates of population growth and its productive farmland is under much lower levels of threat from urban development than in other States.

Further reading:

Detailed fact sheets on each of the policy approaches outlined here are presented in the accompanying Tool Kit. Other references include the following:

American Farmland Trust (2002) *The Farmland Protection Toolbox*

http://www.farmlandinfo.org/documents/27761/fp_toolbox_02-2008.pdf

Armstrong, H, Squires, W and Emtage, N. (2005) *The Protection of Production on Rural Lands: A review of tools and techniques for rural planning*, Centre for Rural and Regional Innovation Queensland (Crr.i.q).

Buxton, M, Tieman, G, Bekessy, S, Budge, T, Mercer, D, Coote, M, and Morcombe, J, (2006) *Change and Continuity in Peri-urban Australia, State of the Peri-urban Regions: A Review of the Literature*, RMIT University, Melbourne

Goulburn Mulwaree Council (2006) *The Rural Living Handbook 2007 – 2009*. <http://www.goulburn.nsw.gov.au>

NSW DPI (2004) *Buffers - planning for sustainable agriculture*

<http://www.dpi.nsw.gov.au/agriculture/resources/land/planning/buffers>

Queensland Government Natural Resources and Water (2006) *Buffer areas -minimising conflict between agricultural and residential areas* <http://www.nrw.qld.gov.au/factsheets/pdf/land/l49.pdf>

Buffers

Background:

The occurrence of agriculture and non-rural land use in close proximity can sometimes lead to conflict due to their potential incompatibility. Agricultural activities such as crop spraying, dust or odours can affect adjoining small rural lots which are used essentially for residential purposes. The presence of small rural lots can also create an adverse influence on the continued operation of the agricultural enterprise. The potential for conflict is heightened where there is no separation between incompatible uses.

One method that is used extensively to separate potentially conflicting agricultural activities and residential land uses is the use of buffers. While buffer areas can be an effective method of separating conflicting land uses, they will not eliminate all impacts of activities.

Why use buffers?

The Queensland Government's guidelines on the use of buffers are acknowledged as the most detailed and relevant for planning purposes. The objectives for the use of buffers listed are:

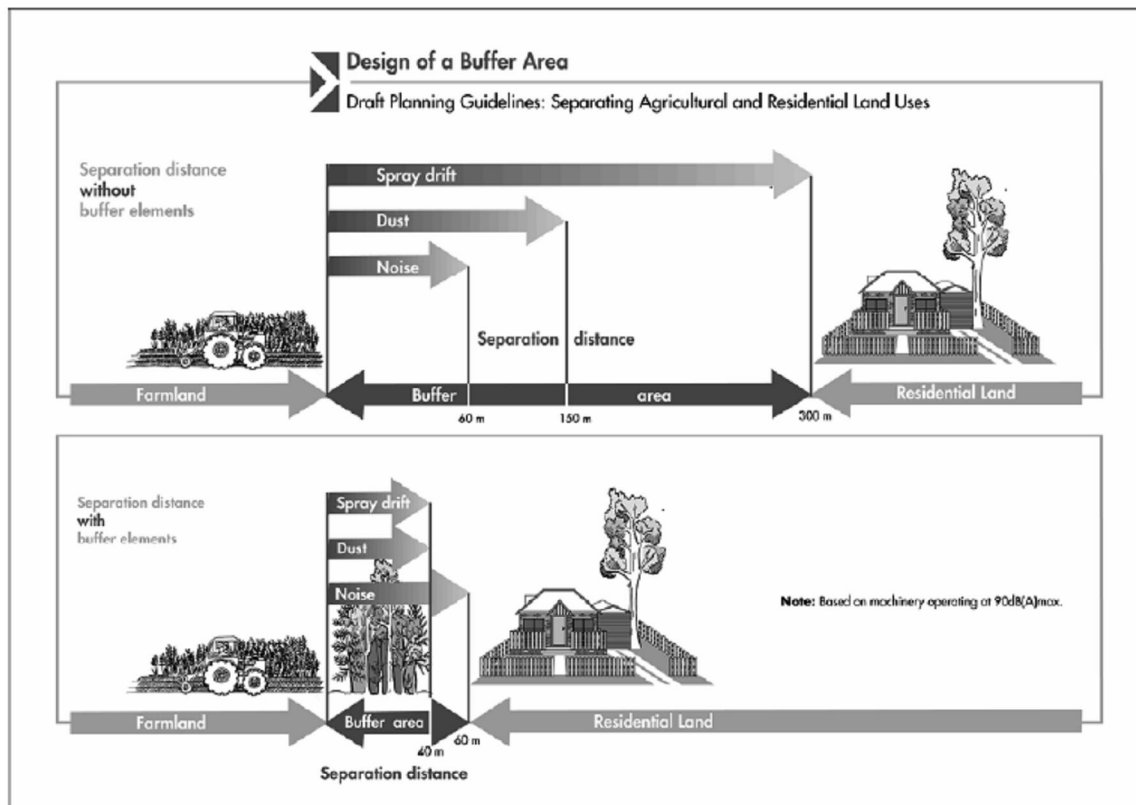
1. To protect the use of reasonable and practicable farming measures that are practised in accordance with the Environmental Code of Practice for Agriculture (Queensland) and associated industry-specific guidelines.
2. To minimise scope for conflict by developing, where possible, a well-defined boundary between agricultural and residential areas as opposed to interspersing agricultural and residential areas.
3. To minimise the impacts of residential development on agricultural production activities and land resources.
4. To minimise the potential for complaints about agricultural activities from residential areas.
5. To provide residents with acceptable environmental conditions in residential areas that are located adjacent to agricultural production areas.

Issues to consider when assessing the need for buffers

- § Determine the farming activity with the potential to cause most problems for adjacent residential uses and which is reasonably likely to occur on the subject land
- § Identify the elements (e.g. spray drift, odour, noise, dust, sediment and stormwater runoff) that may cause conflict and the extent of the conflict
- § Where possible, quantify the elements in terms of frequency and duration of activities to determine their impact
- § Consider residential area design, size of lots, separation widths, tree planting, acoustic barriers etc. to minimise land use conflict
- § Propose the means by which the proposed measures will be monitored and maintained.

Figure 1 illustrates designs of buffer areas appropriate for a range of activities that may cause conflict.

Figure 1 Design of buffer areas



Source: Queensland Natural Resources and Water (2006)

The limitations of buffers in addressing land use conflict

Buffers should not be expected to eliminate all problems or risks. Realistically, buffers are a safety measure in land use planning and do not take the place of proper and strategic planning or application of best management practice. Buffers assist to minimise risk and protect the interests of all parties. In most cases, the width and design of the buffer is a compromise between the needs and aspirations of the adjoining land users, and the cost.

To provide the necessary separation and 'protection' where a real risk is likely, the buffer design should take into account:

- § site-specific details;
- § the nature of operations;
- § the sensitivity of neighbours and adjacent land uses rather than relying on a generalised design and a 'minimum width' criterion.

There is no single or 'magical' buffer distance or design that will eliminate all chance of conflict or complaint without also being economically or physically unfeasible.

Further reading:

The detailed listing of buffer distances and types, and the various State requirements are not covered in this fact sheet. The publications listed here provide greater detail on these issues; otherwise it is recommended that you contact the relevant agency in your local area.

NSW DPI (2004) *Buffers - planning for sustainable agriculture*

<http://www.dpi.nsw.gov.au/agriculture/resources/land/planning/buffers>

Queensland Natural Resources and Water (2006) *Minimising conflict between agricultural and residential areas* <http://www.nrw.qld.gov.au/factsheets/pdf/land/l49.pdf>

Urban Growth Boundaries (UGB)

Background:

Studies have shown that there is a definite link between increased population density and farmland loss. This may be the reason why strategies for containment of urban growth have proven successful in the protection of agricultural land in Europe as they ensure the population density is restrained to a particular area and cannot move into surrounding lands.

Strategies widely employed include urban growth boundaries, urban service area declarations and land zoning restrictions.

Urban growth boundaries are a form of urban containment policy that are designed to control urban development within a well-defined limit. They are a form of planning tool that can be combined with other mechanisms such as zoning.

If established in a proper manner, an urban boundary will lead to certainty in the minds of decision-makers and landholders. There will be greater predictability and direction in planning at the local and regional levels, and most importantly, protection of agricultural/rural land is likely to be an outcome.

A growth boundary must be open to review and modification at certain intervals, in order to accommodate urban growth and changes in the use of the land. Modification should only occur however, once there has been a complete assessment of housing demand, conservation requirements, resource use and implications for urban services.

Advantages:

- § establishes certainty for future land use;
- § minimises necessity for other resource intensive rural land protection programs; and
- § provides opportunities for infill development (development of unused or abandoned sites in urban areas).

Disadvantages:

- § potential for political agendas and influences;
- § need for coordination between multiple local governments;
- § housing price impacts;
- § have been observed to slow economic growth by deflecting it to regional growth centres;
- § urban transit congestion increases as densities increase; and
- § residential development of open spaces within the urban centre.

Issues to address:

The issue of prime importance arising from urban growth boundaries is delineating where the boundary lies. An additional issue exists where potential boundaries straddle multiple Local Governments. It should also be

noted that urban growth boundaries result in housing price inflation in areas where they are imposed, regardless of the method used to implement them. Planners play a significant role in determining the severity of housing price inflation. What may be needed is a land supply monitoring system.

An additional issue observed in the US is the emergence of “hobby farmers” who circumvent restrictions by buying ‘farming’ properties outside the boundary while their primary purpose is for residential use. There is also a general community resistance to high-density housing.

Barriers to adoption and/or possible alternatives:

- § inflexibility leading to lack of ability to adapt to changing operating environments;
- § complexity;
- § lack of mapping data;
- § collaboration between local governments; and
- § the need for state control and monitoring;

Further reading

American Farmland Trust (2002) *The Farmland Protection Toolbox*

http://www.farmlandinfo.org/documents/27761/fp_toolbox_02-2008.pdf

Armstrong, H, Squires, W and Emtage, N. (2005) *The Protection of Production on Rural Lands: A review of tools and techniques for rural planning*, Centre for Rural and Regional Innovation Queensland (Crr.i.q).

Buxton, M, Tieman, G, Bekessy, S, Budge, T, Mercer, D, Coote, M, and Morcombe, J, (2006) *Change and Continuity in Peri-urban Australia, State of the Peri-urban Regions: A Review of the Literature*, RMIT University, Melbourne

Transfer of Development Rights (TDR)

Background:

The movement of urban dwellers into peri-urban areas in Australia continues to increase as does demand for rural lifestyle properties. At the same time agricultural producers in these areas are seeing land values increase and are sub-dividing their properties, in many cases to fund their retirement. However, minimum lot size provisions that restrict subdivision may limit producers from capitalising on the demand for sub-division.

One option, which is fairly widely used in the US, is Transfer of Development Rights or 'TDRs'. TDRs allow landowners to transfer the right to develop one parcel of land to a different parcel of land. Generally established through local zoning ordinances, TDR programs can protect farmland by shifting development from agricultural areas to areas planned for growth. When the development rights are transferred from a piece of property, the land is typically restricted with a permanent agricultural conservation easement.

Under the US model, buying development rights generally allows landowners to build at a higher density than ordinarily permitted by the base zoning in designated receiving areas. Counties, cities, towns and townships use TDR. Local governments approve transactions and monitor easements. A few jurisdictions have created "TDR banks" that buy development rights with public funds and sell them to developers and other private landowners.

Advantages:

- § TDR protects farmland permanently, while keeping it in private ownership.
- § Participation in TDR programs is voluntary - landowners are never required to sell their development rights.
- § TDR promotes orderly growth by concentrating development in areas with adequate public services.
- § TDR programs allow landowners in agricultural protection zones to retain their equity without developing their land.
- § TDR programs are market-driven - private parties pay to protect farmland, and more land is protected when development pressure is high.
- § TDR programs can accomplish multiple goals, including farmland protection, protection of environmentally sensitive areas, the development of compact urban areas, the promotion of downtown commercial growth and the preservation of historic landmarks.

Disadvantages:

- § TDR programs are technically complicated and require a significant investment of time and staff resources to implement.
- § TDR is an unfamiliar concept. A lengthy and extensive public education campaign is generally required to explain TDR to citizens.
- § The pace of transactions depends on the private market for development rights. If the real estate market is depressed, few rights will be sold, and little land will be protected.

Issues to address:

The complexity of the program and the lack of understanding by landowners, and the lack of effectiveness where non-TDR land is available for development are two major issues which need to be addressed in order for TDRs to have any chance of success. There also needs to be sufficient development pressure and the capacity for the local government to absorb additional densities to drive the program's success.

Barriers to adoption and/or possible alternatives:

The majority of development processes and approvals in Australia are currently administered by local governments which have limited resources and which are already stretched in assessing development approvals under the zoning and lot size approach used in the majority of cases. The added complexity of TDRs and the significant community education requirement in the start up phase may prohibit its introduction under the current system.

Further reading

American Farmland Trust (2002) The Farmland Protection Toolbox
http://www.farmlandinfo.org/documents/27761/fp_toolbox_02-2008.pdf

Armstrong, H, Squires, W and Emtage, N. (2005) The Protection of Production on Rural Lands: A review of tools and techniques for rural planning, Centre for Rural and Regional Innovation Queensland (Crr.i.q)

Buxton, M, Tieman, G, Bekessy, S, Budge, T, Mercer, D, Coote, M, and Morcombe, J, (2006) Change and Continuity in Peri-urban Australia, State of the Peri-urban Regions: A Review of the Literature, RMIT University, Melbourne.

Walls, M & McConnell, V.(2007) Transfer of Development Rights in U.S. Communities evaluating program design, implementation, and outcomes
http://www.rff.org/documents/Walls_McConnell_Sep_07_TDR_Report.pdf

‘Right to farm’ laws

Background:

The mix of lifestyle and commercial agriculture often found in peri-urban areas can sometimes produce land use conflict around issues of smell, noise, visual amenity and so on and if not resolved quickly can result in legal action between the parties involved. The United States has a long established federal and state legislative approach to addressing some of the issues around this conflict which is often referred to under the blanket description of ‘right to farm’.

Right-to-farm laws are generally designed to accomplish one or both of the following objectives:

- § to strengthen the legal position of farmers when neighbours sue them for private nuisance; and
- § to protect farmers from anti-nuisance ordinances and unreasonable controls on farming operations.

‘Right to farm’ laws are strongly embedded in the United States approach to farmland protection and are in force in all 50 States, with locally enforced provisions also in many regions. Right-to-farm laws are intended to discourage neighbours from suing farmers.

‘Right to farm’ laws are not in force in Australia except for Tasmania, which has very low rates of population growth and its productive farmland is under much lower levels of threat from urban development than in other States.

Advantages:

- § help established farmers who use good management practices prevail in private nuisance lawsuits.
- § document the importance of farming to the state or locality and put rural residents on notice that generally accepted agricultural practices are reasonable activities to expect in farming areas.
- § reduce the burden on the legal system, by removing disputes between agricultural and residential landholders from the courts; and
- § provide landholders with a degree of certainty

Disadvantages:

- § place administrative burden on local councils in resolving disputes that cannot be litigated;
- § do not address the concerns of residential landholders; and
- § do not directly protect agricultural land.

Issues to address:

There is a need to formulate the legislation in a way that allows farms to adopt and develop new technologies and advanced farming techniques while not allowing the legislation to be a shield or protection for those not acting responsibly. Additionally, the US experience has been that more challenges are being seen against ‘right-to-farm’ legislation from farmers with conflicting farming enterprises than rural-urban conflicts. It follows that there is a need to legislate in a way that does not allow farmers to use the provisions as a shield against other farmers or, alternatively, for policy makers to promote the use of non-regulatory policy tools.

Barriers to adoption and/or possible alternatives:

'Right to farm' legislation in the US form is not likely to be adopted in Australia as most planning authorities see it as being ineffective and unsuited to the highly concentrated urbanised population of Australia. Most state governments have been reluctant to prevent major development proposals that affect the agricultural value of land.

The Western Australian State Government introduced an alternative to 'right to farm' laws in the form of the ***Agricultural Practices (Disputes) Act 1995 (WA)***. This is an alternative process involving dispute resolution which attempts to achieve the same result as 'right to farm' legislation without the removal of common law rights. This Act endeavours to resolve land use conflict between farmers and rural residents through:

- § mediation
- § tribunal hearings; and
- § an Agricultural Disputes Board which rules on normal farming practices.

The Act does not represent "right to farm" legislation as disputing parties do not lose the right to pursue litigation. This right is merely postponed while mediation occurs. By providing such a formal arena for dispute resolution mediators may be able to direct participants to identify possible solutions or make participants aware of modern farming practices, including increasing intensification and vertical integration.

The Act's stated object is to ensure that any normal farm practice which is alleged to create a nuisance, or otherwise to be detrimental to the interests of persons nearby, by reason merely of the carrying out or management of that farm practice, shall not be impeded by avoidable litigation. The Act established the Agricultural Practices Board, to which disputes arising from allegations of nuisance are referred. Mediation is adopted where appropriate in an attempt to solve the dispute.

This process has been adopted in order to prevent premature litigation over normal farm practices, due to a lack of understanding or because of unwillingness on the part of the farmer to modify such practice. Normal farm practices refer to practices that are carried out in a manner consistent with proper and accepted customs and standards or in compliance with the requirements of a Code of Practice approved by the relevant government department. Complaints related to odour, noise, dust, smoke and spray drift are encompassed by the Act.

Further reading:

American Farmland Trust (2002) The Farmland Protection Toolbox
http://www.farmlandinfo.org/documents/27761/fp_toolbox_02-2008.pdf

Armstrong, H, Squires, W and Emtage, N. (2005) The Protection of Production on Rural Lands: A review of tools and techniques for rural planning, Centre for Rural and Regional Innovation Queensland (Criei.q)

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NSW DPI (2004) Buffers - planning for sustainable agriculture
<http://www.dpi.nsw.gov.au/agriculture/resources/land/planning/buffers>

Glossary of land use planning terms used in Australia

Agricultural zoning. Some local governments have specified 'agriculture zones' as part of their local planning instruments. Very few of these zones in Australia are designed to preserve the agricultural use, but are often land 'awaiting development' in future. These zones are primarily used to limit subdivision and fragmentation of land by using minimum lot sizes.

Buffer. The purpose of a buffer is to separate conflicting land use activities and thereby lessen the potential impact of one activity or series of activities on an adjoining activity or land user.

In land use planning, 'activities' are typically land uses of one form or another and the manner in which those land uses are undertaken. Agriculture is a series of industries and activities that can be in conflict with adjoining land uses:

- § the common 'clash' between residential use and agriculture;
- § conflict between agricultural enterprises (e.g. 'organic' versus 'non-organic');
- § conflict between agriculture and sensitive environments such as waterways, native habitats, wetlands, schools and public places

Building Code of Australia: The national technical document which sets the standards for building work within Australia

Community Supported Agriculture (CSA). A form of direct marketing of farm products that involves customers paying the farmer in advance for a weekly share of the harvest. Customers are often called shareholders. In some cases, shareholders may participate in farm work and farm decisions. Farms that use this marketing strategy are called "CSA farms" or "CSAs." CSA is also known as subscription farming.

Community Title: A community title divides land into lots (of which there must be a least two) and common property. Community Title can be a community scheme or a community strata scheme.

Conservation easement. A conservation easement is a voluntary agreement between a private landowner and a municipal agency or qualified not-for-profit corporation to restrict the development, management, or use of the land. In return for conservation of the land rate rebates and/or tax concessions are available in some parts of Australia.

Differential tax regimes. Farmland is taxed on the basis of its value for farming or conservation rather than its potential value for urban development.

Easement. An easement involves the right to use a parcel of land to benefit an adjacent parcel of land, such as to provide vehicular or pedestrian access to a road or sidewalk.

Environmental Impact Statements (EIS). An EIS provides a means for agencies, project sponsors, and the public to systematically consider significant adverse environmental impacts, alternatives, and mitigation strategies. An EIS facilitates the weighing of social, economic, and environmental factors in the planning and decision-making process.

Land use conflict. The mix of lifestyle rural residential land owners and commercial agriculture in the peri-urban zone can sometimes produce land use conflict around issues of smell, noise, visual amenity and so on and if not resolved quickly can result in legal action between the parties involved.

Lot. A lot is a portion of a subdivision, plat, tract, or other parcel of land considered as a unit for the purpose of transferring legal title from one person or entity to another.

Minimum lot size. The minimum size of lot as determined by local councils (in most cases) which is determined to be appropriate for a particular zoning use e.g. in parts of NSW, 40 hectares is the minimum lot size for intensive agriculture (including horticulture).

Non – Complying: Non-Complying developments are listed in the Development Plan and are land uses which are not envisaged or encouraged within a particular area.

Peri-urban. Land adjacent to the edge of an urban area, extending from the built up edge of the city to the rural hinterland.

Rezoning. An act of the local legislature that changes the principal uses permitted on one or more parcels of land or throughout one or more zoning districts. Rezoning includes the amendment of the zoning map, as well as the use provisions in the district regulations applicable to the land that is rezoned.

Right to farm. A state law or local ordinance that protects farmers and farm operations from public and private nuisance lawsuits. A private nuisance interferes with an individual's use and enjoyment of his or her property. Public nuisances involve actions that injure the public at large. Tasmania is the only Australian state to have this legislation in place.

Service funding arrangements. Development contribution plans, which require developers to subsidise infrastructure to support the community.

Strata Title: A sub division involving at least two units and a common area.

Subdivision. The subdivision of land involves the legal division of a parcel into a number of lots for the purpose of development and sale. The subdivision and development of individual parcels must conform to the provisions of local zoning which contain use and dimensional requirements for land development.

Torrens Title: An example of Torrens Title is a home on its own block of land. There is a separate Certificate of Title for each separate piece of land.

Transfer of development rights (TDR). Provisions in a zoning law that allow for the purchase of the right to develop land located in a sending area and the transfer of these rights to land located in a receiving area.

Urban Growth Boundary (UGB) A theoretical line drawn around a community that defines an area to accommodate anticipated growth for a given period of time, generally 20 years. Urban growth boundaries are a growth management technique designed to prevent sprawl. They are often used to guide decisions on infrastructure development, such as the construction of roads and the extension of municipal water and sewer services.

Zoning. Zoning is used to divide a city into areas determined by restrictions on types of use. Land use zoning entails placing restrictions on the use of the land by way of statute. This is the principal method for controlling the development of land in Australia. Land is designated for a principal use and uses not considered to be suitable or compatible with the principal use are prohibited (Sinclair, 2003).



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Further reading

Land Use Law Center Pace University School of Law (1998) *Universal Glossary of Land Use Terms and Phrases* <http://www.nymir.org/zoning/Glossary.html>

NSW DPI (2004) *Buffers - planning for sustainable agriculture*
<http://www.dpi.nsw.gov.au/agriculture/resources/land/planning/buffers>

Planning Institute of Australia SA Division *Fact Sheets Glossary key terms used in the planning process*
http://www.planning.org.au/index.php?option=com_content&task=view&id=68&Itemid=630

Glossary of land use planning terms used in other countries

Agricultural district. A legally recognized geographic area formed by one or more landowners and approved by one or more government agencies, designed to keep land in agriculture. Agricultural districts are created for fixed, renewable terms. Enrolment is voluntary; landowners receive a variety of benefits that may include eligibility for differential assessment, limits on annexation and eminent domain, protection against unreasonable government regulation and private nuisance lawsuits, and eligibility for purchase of agricultural conservation easement programs. Also known as agricultural preserves, agricultural security areas, agricultural preservation districts, agricultural areas, agricultural incentive areas, agricultural development areas and agricultural protection areas.

Buffer. A buffer is a designated area of land that is controlled by local regulations to protect an adjacent area from the impacts of development

Cluster Subdivision. A cluster subdivision is the modification of the arrangement of lots, buildings, and infrastructure permitted by the zoning law to be placed on a parcel of land to be subdivided. This modification results in the placement of buildings and improvements on a part of the land to be subdivided in order to preserve the natural and scenic quality of the remainder of the land.

Community Supported Agriculture (CSA). A form of direct marketing of farm products that involves customers paying the farmer in advance for a weekly share of the harvest. Customers are often called shareholders. In some cases, shareholders may participate in farm work and farm decisions. Farms that use this marketing strategy are called “CSA farms” or “CSAs.” CSA is also known as subscription farming.

Conservation Easement. A conservation easement is a voluntary agreement between a private landowner and a municipal agency or qualified not-for-profit corporation to restrict the development, management, or use of the land. That agency holds the interest and is empowered to enforce its restrictions against the current landowner and all subsequent owners of the land.

Cost of Community Services (COCS) Study. A case study method of allocating local revenues and expenditures to different land use categories. COCS studies reveal the net contribution of residential, commercial, industrial, forest and agricultural lands to local budgets.

Circuit breaker tax relief . A tax abatement program that permits eligible landowners to take some or all of the property tax they pay on farmland and farm buildings as a credit to offset their state income tax. Generally, farmers are eligible for a credit when property taxes exceed a set percentage of their income.

Differential tax regimes. Farmland is taxed on the basis of its value for farming or conservation rather than its potential value for urban development.

Downzoning. A change in the zoning for a particular area that results in lower residential densities. For example, a change from a zoning ordinance that requires 4 hectares per dwelling to an ordinance that requires 20 hectares per dwelling is a downzoning.

Dwelling Units. This is defined as the measure of development density under the US zoning system e.g. the number of dwelling units per unit area is limited for each zone. Transfer of Development Rights

allows developers to increase the number of dwellings in an area by transferring the rights from a low density area ('sending area' - see definition further into this document).

Easement. An easement involves the right to use a parcel of land to benefit an adjacent parcel of land, such as to provide vehicular or pedestrian access to a road or sidewalk. Technically known as an easement appurtenant.

Environmental Impact Statements (EIS). An EIS provides a means for agencies, project sponsors, and the public to systematically consider significant adverse environmental impacts, alternatives, and mitigation strategies. An EIS facilitates the weighing of social, economic, and environmental factors in the planning and decision-making process.

Farm link. A program that matches retiring farmers who want to keep their land in agriculture with beginning farmers who want to buy a farm. Farm Link programs are designed to facilitate farm transfer, usually between farmers who are not related to each other. Also known as Land Link.

Lot. A lot is a portion of a subdivision, plot, tract, or other parcel of land considered as a unit for the purpose of transferring legal title from one person or entity to another.

Receiving area. Areas designated to accommodate development transferred from agricultural or natural areas through a transfer of development rights program.

Rezoning. An act of the local legislature that changes the principal uses permitted on one or more parcels of land or throughout one or more zoning districts. Rezoning includes the amendment of the zoning map, as well as the use provisions in the district regulations applicable to the land that is rezoned.

Right to farm. A state law or local ordinance that protects farmers and farm operations from public and private nuisance lawsuits. A private nuisance interferes with an individual's use and enjoyment of his or her property. Public nuisances involve actions that injure the public at large. Tasmania is the only Australian state to have this legislation in place.

Sending area. Area to be protected through a transfer of development rights program. Landowners may sell their development rights to private individuals or a public agency; the rights are used to build homes in a designated receiving area.

Subdivision. The subdivision of land involves the legal division of a parcel into a number of lots for the purpose of development and sale. The subdivision and development of individual parcels must conform to the provisions of local zoning which contain use and dimensional requirements for land development.

Transfer of Development Rights ("TDR"). Provisions in a zoning law that allow for the purchase of the right to develop land located in a sending area and the transfer of these rights to land located in a receiving area.

Urban Growth Boundary. A theoretical line drawn around a community that defines an area to accommodate anticipated growth for a given period of time, generally 20 years. Urban growth boundaries are a growth management technique designed to prevent sprawl. They are often used to guide decisions on infrastructure development, such as the construction of roads and the extension of municipal water and sewer services.

Zoning. Zoning is used to divide a city into areas determined by restrictions on types of use. Land use zoning entails placing restrictions on the use of the land by way of statute. This is the principal method for controlling the development of land in Australia. Land is designated for a principal use and uses not considered to be suitable or compatible with the principal use are prohibited (Sinclair, 2003).

Further reading:

American Farmland Trust (2002) The Farmland Protection Toolbox
http://www.farmlandinfo.org/documents/27761/fp_toolbox_02-2008.pdf

American Farmland Trust (1998). Glossary .http://www.farmlandinfo.org/documents/37109/Glossary_11-02.pdf

Land Use Law Center Pace University School of Law (1998) Universal Glossary of Land Use Terms and Phrases <http://www.nymir.org/zoning/Glossary.html>