

7. BUFFER ZONES

This plan, which may be cited as "Dungog Development Control Plan No. 1" - Buffer Zones, constitutes a Development Control Plan as provided for by Section 72 of the Environmental Planning and Assessment Act, 1979.

7.1 AIM OF THE PLAN

The aim of the Development control Plan is to provide certainty to residents and developers in locations where development may be constrained by adjoining land uses.

7.2 OBJECTIVES

This Development Control Plan seeks to:-

- Minimise conflicts between land uses that are potentially incompatible by developing well-defined boundaries and protecting the prior rights of lawful development.
- Minimise potential land use conflict by limiting uses regarded as inappropriate in areas of prime agricultural land.
- Ensure that, where development is likely to cause conflict with either existing or future adjoining land uses that the Buffer Zone will be provided on land upon which the encroaching development is located.
- In cases where the provisions of this DCP conflict with standards in other Planning Controls adopted by Council the provisions of this DCP will apply,

7.3 DEFINITIONS

Agriculture

Means the primary production of food, fibre and ornamentals not for personal consumption purposes and includes the cultivation of crops, and the keeping and breeding of livestock, bees or poultry and other birds for commercial purposes, but does not include an intensive agricultural pursuit or aquaculture;

Animal boarding, breeding or training establishment

Means a building or place used for the purposes of the boarding, nurturing, breeding or training of animals for gain or reward (other than purposes relating to agriculture), and includes riding schools, kennels and the like;

Intensive Agriculture

Means the use of land for agricultural purposes, which include market gardening, mushroom growing, fruit growing, flower growing, viticulture, milking in a shed designed for that purpose, aquaculture or intensive animal industry, but does not include an animal boarding or training establishment or the keeping of livestock or poultry for the personal enjoyment or consumption of its produce by the owner or occupier of the land;

Intensive animal industry

Means agricultural animal production where cattle, horses, goats, poultry or other livestock are held in buildings or in a confined area wholly or substantially for feeding and without limiting the generality of the above, may consist of or include agricultural industries such as – a feedlot containing more than five (5) cattle, dairy farm, horse training and boarding establishment containing more than five (5) horses, piggery (including free range) containing more than five (5) pigs, poultry farm (including free range) containing more than twenty (20) birds, rabbit farm or a building or place used for fish farming [which may consist of or include farming crustaceans], - but is not a building or place used for keeping of livestock intended solely for personal consumption or enjoyment by the owner or occupier of the building or place or a building or place used only for drought or similar relief;

Buffer Area

Area of land separating adjacent land uses that is used for mitigating the impacts of one land use upon another;

Buffer Element

A natural or artificial feature within a buffer area that mitigates an adverse impact;

Development - means:-

- (a) The use of land;
- (b) The subdivision of land; and
- (c) The erection of a building; and
- (d) The carrying out of a work; and
- (e) The demolition of a building or work; and

Drift

Airborne movement of agricultural chemicals onto a non-target area.

Encroaching Development

Any development including the carrying out of any activity on land to which this Plan applies, any building or work or any subdivision proposed on land adjacent to an existing development or land use that has been lawfully commenced.

Residential Development

For the purposes of this Development Control Plan "Residential Development" shall include any place of permanent or temporary occupation (including tourist uses).

7.4 VACANT LAND

Lawfully created vacant land parcels within a buffer zone of an existing lawfully commenced development will not be sterilised and single residential dwellings will be permitted on these parcels. The location of single resident dwellings will be subject to consideration of the effect of residing within the buffer area. A buffer element that takes the form of immature landscape planting cannot be relied on in all cases.

7.5 LAND USE CONFLICT

Conflict occurs where established land use practices associated with a particular land use or activity leads to a real or perceived loss of amenity for residents.

These conflicts may occur in instances where individual tolerances differ in relation to noise, dust, odour, chemical sprays or where legislative requirements in relation to emissions are not satisfied. These conflicts typically occur when "Residential Development" encroaches into non-residential areas.

The most appropriate method of minimising potential conflict between Non-Residential land uses and Residential land uses is to provide for separation of those uses by implementation of buffer zones. The purpose of a buffer zone is to provide sufficient separation so that conflicts do not arise.

Dungog Shire Council supports the rights of persons in rural areas to carry out agricultural activities within the boundaries of existing legislative and advisory requirements. In an effort to address these commitments, a notice to intending purchasers (see 7.13) as attached will be appended to all S149 Certificates.

7.6 BUFFER AREA DESIGN

In investigating the need for appropriate buffer areas, the following investigation should be made by an applicant for encroaching development:-

- Identify the elements that are a potential cause of conflict. These elements should be quantified, where possible in terms of the frequency and duration of the offending activity.
- Identify the means by which the applicant will address each issue to achieve an acceptable outcome in terms of separation widths, landscaped areas, acoustic barriers,
- Propose means by which proposed ameliorative measures will be monitored and maintained. This should include responsibility for implementing and maintaining the specific features of the buffer area to ensure continued effectiveness.

7.7 BUFFER ELEMENT

Minimum distances for Buffer Areas are recommended as a lineal means of separation between "Residential" and agricultural areas. The addition of Buffer Elements may vary the requirement relating to minimum separation distances. Buffer Elements are features which assist in the amelioration of potential adverse impact on one landuse upon another. One type of Buffer Element is the Vegetation Buffer and these may, in some cases offer an alternative to the lineal separation requirement.

Buffer elements are to be located within the property boundaries of the lot or lots on which the development is proposed. Topographical buffer elements will be assessed by Council on individual merit. (# Amendment No. 3)

(#Amendment No. 3 Minute No. 32719 Adopted 16/8/2005)

Vegetated buffers have other advantages in that they:-

- Create habitat and corridors for wildlife;
- Increase the biological diversity of an area, thus assisting in pest control;
- Favourably influence the microclimate;
- Are aesthetically pleasing;
- Provide opportunities for recreation uses;
- Contribute to the reduction of noise and dust impacts

Applications for development, where Vegetated Buffer Elements are proposed, are to include a landscape plan indicating the extent of the buffer element, the location and spacing of proposed and existing trees and shrubs and a list of tree and shrub species to be planted.

As a general rule, Buffer Elements are to be properly designed to avoid special maintenance requirements whilst achieving their maximum desired effect of separation conflicting land uses. However, it will be necessary to ensure ongoing maintenance of buffer elements, including replanting, thinning, management for fire protection, herbicide damage, noxious weeds, feral animals, litter build-up etc so that the buffer elements may continue to be effective in reducing conflict.

A buffer element may also be an existing topographical feature. In this instance there is a need to specify type/height/location/density/etc.

7.8 INFORMATION TO ACCOMPANY DEVELOPMENT APPLICATIONS

The minimum level of information required in support of an encroaching development is to follow:-

- (1) Plan to scale of the land indicating distances for surrounding landuses;
- (2) Location of proposed development on the allotment.

Application for impacting development must:-

- (1) State exact type and site of development indicating numbers of acres under production or number of animals.
- (2) Identify potential adverse impact or residential development in the locality including, noise, odour, hours of operation, number of employees, number of traffic movements per day.
- (3) Nominate proposed methods of mitigating adverse impact.
- (4) Applications for residential development within the buffer zone of an existing impacting development must also address the level of perceived impact likely to be experienced and locate so as to minimise conflict.

PART 2 - BUFFER AREA SEPARATION DISTANCES

7.9 SPRAY DRIFT

Based on the available research on chemical spray drift, buffer areas must be a minimum of 300m where open ground conditions apply and a minimum of 40m where a vegetated buffer element designed by a suitably qualified consultant can be satisfactorily implemented and maintained including a suitable watering system. These dimensions may vary according to local topographical or climatic conditions.

Where chemical sprays are applied aurally, the Pesticides and Allied Chemical Act requires that the person authorising the use of the sprays obtain the prior written consent of all owners of dwellings or public premises whose boundaries are located within 150m of the spray area.

Research into the behaviour of pesticide spray drift has shown that Buffer Elements in the form of vegetation screens can prove effective barriers to spray drift where they meet the following criteria:-

- Are a minimum total width of 40m;
- Contain random plantings of a variety of tree and shrub species of differing growth habits, at spacings of 5m for a minimum width of 40m;
- Include species with long, thin and rough foliage which facilitates the more efficient capture of spray droplets;
- Provide a permeable barrier which allows air to pass through the buffer.
- Foliage is from the base to the crown;
- Include species which are fast growing and hardy;
- Have a mature tree height 1.5 times the spray release height or target vegetation height, whichever is higher;
- Have mature height and width dimensions which do not detrimentally impact upon adjacent cropped land;
- Include an area of at least 10m clear of vegetation or other flammable material to either side of the vegetated area.

7.10 ENVIRONMENTAL PROTECTION ZONE BUFFERS

Dungog Shire has many recognised natural attributes and this has been reflected in many cases by specific zonings in the Dungog Local Environmental Plan. In some cases however, where Threatened Species are known to exist and the zoning of land has not been changed, specific management practices are required and Buffer Zones will be applied as if the land were zoned Environmental Protection.

- 7(a) - Environment;
- 8(a) - National Parks.

Residential development has the potential to impact on these areas by predation of wildlife by domestic animals, exotic weed invasion, and nutrient enrichment from storm water runoff. In order to protect the integrity of areas recognised as Environmentally Significant, a setback of zone between new residential development and the boundary of an environmentally sensitive area is required. The distance is to be determined upon assessment of an Environmental Impact Report prepared by the applicant.

7.11 RIVERS & WATERCOURSES

Buffers between rivers & watercourses and Residential Development are required to ensure that water quality is maintained. Setbacks will also ensure that the aesthetic, recreational and habitat values of the riparian zone are protected as a result of separation of impacting landuses.

Development requiring effluent disposal will need a minimum 100m setback to permanent surface waters (eg river, streams, lakes etc) or 40m to other waters (eg farm dams, intermittent waterways and drainage channels etc) and 250m from any domestic groundwater well.

All Development within 40m of a watercourse is Integrate Development and subject to separate assessment and subsequent consent from the Department of Infrastructure, Planning and Natural Resources under the provisions of the Rivers & Foreshore Improvement Act.

Any variation to the 40m setback must be supported by information addressing the merits of the variation and measures taken to mitigate potential adverse impact.

7.12 INTENSIVE LIVESTOCK INDUSTRIES

Residential Development must be located a minimum distance specified below or incorporate measures to minimise the impact of noise and odour generated as a result of activities associated with intensive livestock listed as follows:-

- Dairies
- Poultry
- Piggeries
- Feedlots

Intensive Livestock Industries have the potential to have a significant environmental impact on adjoining properties through the generation of odours, dust and noise. These impacts may also be generated as a result of truck movements and feed mill operation.

All Intensive Livestock Industries must achieve a 140m setback from any building to a public road.

7.12.1 DAIRY FARMS

Dairy farms must provide a vegetated buffer between dairy complex (including solids and effluent areas) and streams, rivers and watercourses. A minimum buffer between neighbouring residential development and a pond or manure heap is 200m.

7.12.2 POULTRY FARMS

Poultry sheds shall have a minimum buffer to adjacent residential development of 500m. Litter shall not be stockpiled within 400m of any public road or any neighbouring residential development.

A buffer of 400m to any public road or residential development be applied to the bulk storage of Poultry Litter, sawdust and other products that may cause nuisance by way of odour, vapour dust, noise, vibration, waste water, waste products or otherwise. [*Amendment No 1*]

7.12.3 PIGGERIES

Piggeries shall have a minimum buffer to adjacent residential development of 500m and a buffer of 750m from any school, shop, church public hall or premises used for the manufacture or preparation of food.

7.12.4 CATTLE FEEDLOTS

Cattle confined to a yard area with watering and feeding facilities where they are fed and watered are considered to be in a feedlot.

Large feedlots greater than 500 head will require a buffer zone of 1500m.
Smaller operations 50 - 500 head will require a buffer of 1000m.

7.12.5 OTHER INTENSIVE LIVESTOCK OPERATIONS

Buffers will also be required to other intensive livestock operations, which are likely to impact on residential development in the locality. These operations will be assessed individually on the basis of the size, nature and characteristics of the operation. Generally the minimum separation distance of 500m is to apply between the livestock operation and any neighbouring residential development.

7.12.6 INTENSIVE AGRICULTURE

Potential conflict with adjacent development is dependent on the nature of the intensive agricultural activity and also on the management practices adopted by the producer. The greatest potential for conflict arises in cases where commercial operations involve the regular or intermittent use of chemical sprays or where noise from equipment or machinery is generated.

This conflict is likely to increase in Dungog as the agricultural sector undergoes restructuring and alternatives to traditional agricultural practice are put into place.

A minimum buffer between intensive agricultural and neighbouring residential development is to be 150m.

7.12.7 ANIMAL BOARDING & BREEDING ESTABLISHMENTS:

Potential conflict with residential development generally arises as a result of noise from animals, smell from kennels/ exercise yards, waste disposal and contamination of surface water. Dust and noise from client's vehicles may also be an issue. A minimum separation distance of 500m is required from neighbouring residential development.

This distance may however be increased where the potential for noise is likely to cause disturbance to residents in the locality.

7.12.8 EXTRACTIVE INDUSTRY

Extractive Industries usually involve an extensive range of both plant & equipment that may create noise and dust during the normal extraction, processing and loading of material. The degree of impact generated is largely based on the type of material being won and the level of processing of the material prior to sale. Quarrying activities are incompatible with many land uses, particularly residential land uses and it is therefore desirable to mitigate potential conflict and prevent the sterilisation of extractive resources as a result of encroaching residential development.

A minimum buffer zone to extractive resources shall be 500 metres although this may increase if blasting is a part of the operational regime.

7.12.9. RAILWAY

Buffers between rail lines and residential development are required to minimise impacts on residential amenity caused by railway operations. All residential and other noise sensitive proposals within 60 metres of an operational railway require a detailed acoustic assessment. However, Council may use discretion to extend the acoustic assessment requirement to areas that are:

- Located outside, but within reasonable proximity to the 60m distance;
- In the vicinity of steel bridges;
- Near sections of high speed tracks; or
- In locations where there is no acoustic shielding by topography or buildings, between the track and the potential noise receivers.

A detailed Acoustic and Vibration Study is to be carried out by a suitably qualified professional and must accompany an application to Council. (Recommendations from Rail and Infrastructure Corporation, State Rail Authority, *Interim Guidelines for Councils – Consideration of rail noise and vibration in the planning process*. November 2003).

7.13 WIND ENERGY GENERATION FACILITIES

Refer to Part C Section 19 – Wind Energy Generation Facilities for information on buffer areas for this type of development.

7.14 NOTICE TO PURCHASERS OF LAND IN RURAL AREAS IN DUNGOG SHIRE

Dungog Shire Council supports the right of persons in rural areas to carry out agricultural production using reasonable and practicable measures to avoid environmental harm.

Intending purchasers are advised that agricultural production practises may include some of the following activities and some activities may have implications for occupiers of adjacent land:-

- Logging and milling of timber
- Dairies
- Intensive livestock production (feedlots, piggeries and poultry farms)
- Intensive Agriculture
- Vegetation clearing
- Cultivation and harvesting
- Bush fire hazard reduction burning
- Construction of firebreaks
- Construction of dams, drains and contour banks
- Fencing
- Use of agricultural machinery (tractors, chainsaws, motor bikes etc)
- Pumping and irrigation
- Pesticide spraying
- Aerial spraying
- Animal husbandry practices
- Droving livestock on roads
- Silage production
- Construction of access roads and tracks
- Slashing and mowing vegetation
- Planting of wood lots.

Please refer to Part C Section 19 for Wind Turbine buffer zones.

Intending purchasers of land in rural areas may have difficulty with some of these activities or the impact of these activities when they are being carried out on land near their proposed purchase. If so, they should seek independent advice and consider their position.

This notice is not intended to affect the rights of individuals to take action under the common law or legislation.

This notice is provided for information purposes only