



Australian Controlled Traffic Farming Association

## Regional Planning Interests Regulation 2014

### Submission

#### Australian Controlled Traffic Farming Association Inc. (ACTFA)

We wish to make a submission to the Parliamentary Committee on behalf of our many members in Queensland for your consideration.

ACTFA was formed in 2006 to increase the adoption and development of Controlled Traffic Farming (CTF) and to support Australian farmers wishing to improve. ACTFA has over 500 members in all States and overseas, including 90 members in Queensland. ACTFA has held nine National CTF Conferences, will hold the 2014 Conference in Mildura this month with industry sponsorships of \$27,000. ACTFA also manages R&D projects and 4 current projects with budgets totalling \$ 5,795,494.

Controlled Traffic Farming (CTF) is a new farming system developed in Queensland during the 1990s by DPI officers as a world first, and is now adopted by 13% of grain growers across eastern Australia. I was leader of these projects. Many CTF farmers have reported a doubling of annual grain production. CTF is an essential basis for cropping to achieve the Government's targets for agriculture. With nearly 25 years of farm and farmer experience, CTF is now proven in the grains, cotton and cane industries. CTF has 5 key practices – permanent wheel tracks, designed positive drainage layouts, zero tillage, GPS guidance and continuous improvement. See end of submission for more detail.

**While CTF is clearly an essential component of Government policy contributing to the Agricultural Pillar goals, it is also clearly not compatible with mining and CSG development.**

Our submission contributes to Schedule 2 Parts 2 and 4, but we will focus on Schedule 3.

#### **Schedule 3. Overview.**

The whole management of CTF farms depends on the **designed** infrastructure of roads, paddock layout and drainage. **Our members in Queensland, and the Association, are concerned that mining exploration and subsequent development will impact on the CTF infrastructure layout and this is likely to destroy the functionality of the whole farm.** While the five practices are accepted standards, there is no compromise; they must work together across the farm.

**All CTF farms and farms developing the five CTF practices should be in some way protected, possibly regarded as Priority Agricultural Areas or Strategic Cropping Land.**

CSG exploration and installation on a CTF farm will massively compromise the operations of the farmer and potentially make his farming system inoperable. I.e. roads, pipelines, water disposal etc.

While some development for CSG on CTF farms could be possible on non-cropping paddocks, with careful designs by appropriately skilled professionals, very early consultation with the landholder is required because all mining/CSG infrastructures will impact on the farm plan, to varying extents.

**Ownership of cropping land by mining and CSG companies.** This is a conflict of interest and, we understand could already be hundreds of thousands of hectares. The poor management subsequently used will reduce productivity, create major bio-security issues, impact on neighboring properties and threaten CTF farms. Leasing back to the previous owner is not acceptable. With no long-term outlook, management could be more “rape and pillage”. This issue needs to be considered.

### **Schedule 3 Criteria for land.**

Current farm management practices, e.g. CTF, have not been incorporated into Schedule 3. With farm management such as CTF, high productivity at the farm, district and State scales, can be achieved on grain farms across Queensland with 5% slope, water storage of 60mm, soil depth of 450mm and subsoil chloride content of more than 1,100 mg/kg. CTF soils will also provide much more profile drainage due to the higher infiltration from compaction control and zero till, and will leach salinity deeper during large rainfall. These limits are already in the Criteria for other districts and industries. The salinity values will often determine soil depth and then water storage. These limits are critical to define suitable land and our proposed limits will increase the area of Priority Agricultural Area and Strategic Cropping Land, further contributing to the Agriculture Pillar goals.

Our concerns are based on the criteria being soil capability as determined by laboratory analyses and field assessment for out-dated management systems, e.g. cultivation, low cover, random traffic and contour banks. These criteria are not appropriate for modern farming systems such as CTF.

Inconsistencies in the criteria, particularly across regions, do not take account of recent science and the benefits that are now provided by better management systems.

**Division 2 Drainage.** The important issue here is not subsoil colour as the result of hundreds of years of wetness but is surface drainage where transient wetness for a few days will delay farm operations (timeliness is a major determinant of productivity), reduce plant establishment and growth, and create large variability. Positive drainage is a critical factor in CTF drainage design and will be highly impacted by mining related activities. Gilgai has a similar impact but most surface waterlogging is not associated with gilgai.

**Division 4. 14. Soil depth.** What is the justification for a limit of 1000mm when roots are known to penetrate to at least 2000mm?

**Division 4.16. Soil water storage.** Are the pedotransfer functions applicable to the much improved soil structure and water holding of CTF soils? We know that soils are much improved.

**Part 2 Criteria. Criterion 1 Slope.** A limit of 5% across all cropping land is applicable; there is no reason for the inconsistency of 3% in the Western Cropping Zone

**Criterion 4 Soil depth.** 450mm is applicable with CTF.

**Criterion 7.** At a soil depth of 450mm the salinity listed above (chloride of 1,100 mg/kg) should be the limit.

**Criterion 8.** The soil water storage should be 60mm or more. At a fallow storage efficiency of 20% this requires 300mm rainfall to fill, higher limits are not appropriate with CTF.

**CTF involves five key practices:**

1. Permanent wheeltracks for all machinery to confine compaction to 15% of the area, increase machine efficiencies (fuel use less than half), and over-all a major improvement in soil health in the plant zone.
2. Designed positive drainage paddock layouts to manage runoff, reduce erosion and eliminate waterlogging.
3. Zero till. The guidance from #1 ensures no spray misses or overlaps, a perfect job every time, and effective management of weed resistance and other bio-security issues.
4. GPS guidance, which was developed by the Maillers to do their CTF in the dark.
5. Continuous improvement (now 20 years experience) particularly with new agronomy, new spatial technologies and internal financing of development from grower's profitability.

Thankyou for your consideration. We are available for any clarification or expansion of this submission. This material is core to the success of ACTFA.

On behalf of the Executive Committee

Yours sincerely



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Executive Committee  
ACTFA Inc

