Dear Sir/Madam

Wilton Interim Land Use & Infrastructure Plan

This is a submission from the NSW Department of Primary Industries (DPI). The Department of Industry – Lands has been consulted and has no comments. DPI advises that recommendations and comments for DPI Water and DPI Fisheries have been provided at Attachments A and B respectively.

Key Recommendations

- Reference to RU4 Rural Small Holdings (page 8) should use the updated standard instrument (Local Environmental Plan) terminology or RU4 Primary Production Small Lots.
- Additional technical studies are required in relation to riparian corridors and watercourses on the site.
- Groundwater monitoring and a hydrogeological assessment are required as described in Attachment A.
- Asset protection zones be located wholly within the urban development land rather than within the riparian corridors.
- The potential for impact to all threatened fish species (listed under the FM Act) needs to be formally assessed in accordance with an Assessment of Significance under section 220ZZ of the FM Act.
- The Background Analysis Report should be updated to strengthen water quality commitments as described in Attachment B.

Yours sincerely

Alison Collaros
Acting Director, Planning Policy & Assessment Advice
20 September 2017

DPI appreciates your help to improve our advice to you. Please complete this three minute survey about the advice we have provided to you, here: [https://goo.gl/o6TXWz](https://goo.gl/o6TXWz)
DPI Water has previously provided advice for the Wilton Priority Growth Area, including submissions on the North Wilton Precinct, the Wilton South East Precinct and Grovenors Hill.

**Land Use Plan - Protection of Watercourses and Riparian Land**

**Recommendation:** DPI Water requests that it is provided with technical reports relating to the watercourses/riparian corridors in this precinct, to enable it to provide comments on this area of the Land Use Plan.

**Rationale:** The Land Use Plan differs from the Wilton West Precinct Plan (Figure 6) which was included in the Wilton West Precinct Rezoning Planning proposal report (dated Jan 2017). In particular, it appears to have narrowed the conservation area around the northern boundary adjacent to the Nepean River and it proposes rural residential development instead (within part of what was to be conservation area). It is unclear if the watercourses in this location will now all be protected within the conservation area or located within the rural residential land.

Additionally, a number of the figures in the Background Analysis report (such as Figures 9, 10, 12, 14 and 15) appear to differ from the draft Wilton West Precinct Plan (Figure 6) which was included in the Wilton West Precinct Rezoning Planning proposal report (dated Jan 2017).

The Land Use Plan shows that the upstream length of Byrnes Creek is to be removed. DPI Water advised in its submission on Governors Hill that the upstream section along this creek should be maintained up to the existing dam on Byrnes Creek.

**Groundwater and Groundwater Dependent Ecosystems**

In its previous submissions on the North Wilton Precinct and Wilton South East Precinct precincts, DPI Water provided recommendations on groundwater and groundwater dependent ecosystems (GDEs), which are repeated as follows:

**Recommendation:** Groundwater monitoring is undertaken across the precincts.

**Rationale:** There is potential for impacts to GDEs to occur with development of Wilton Junction. Additional data is also required to characterise groundwater and surface water interactions.

**Recommendation:** A comprehensive hydrogeological evaluation should be undertaken to the satisfaction of DPI Water as part of precinct planning for the site which considers as a minimum:

- an established groundwater monitoring network which should be installed at the earliest opportunity preferably immediately
- a prolonged period of groundwater level and quality from the monitoring bore network
- the existing groundwater characteristics (for example standing water levels and flow directions)
- an assessment of springs or other discharge features
- the potential impact of future development of the site on the groundwater system and GDEs.

**Rationale:** The potential impact on groundwater and GDEs should be addressed as part of the precinct planning to ensure that the location of sites likely to have ongoing environmental impact (e.g. playing fields with effluent irrigation facility) have been thoroughly assessed in regard to the underlying hydrogeology, in particular consideration of potential groundwater discharge to bounding deeply incised rivers and its contribution to their base flow needs to be specifically addressed.
DPI Water notes that it is more appropriate and efficient to undertake a hydrogeological assessment of the entire site as a whole rather than require multiple repetitive and overlapping investigations by different proponents at the DA stage. DPI Water considers these investigations are essential to ensure the selected locations of effluent discharge areas are appropriate and that any potential preferential pathways for leachate to migrate to sensitive surface environments are identified.

Asset Protection Zones

**Recommendation:** DPI Water’s recommends that APZs are located wholly within the urban development land rather than within the riparian corridors.

**Rationale:** The Interim Land Use & Infrastructure Implementation Plan - Background Analysis report indicates that APZs should be located wholly within the urban suitable land for new developments and not within high biodiversity constrained land (section 7.13, page 50). The Biodiversity Assessment also indicates that APZ should be located outside of the proposed conservation lands (section 3.2, page 25).
The Nepean and Cordeaux Rivers, including the reaches adjacent to the subject site, contain habitat for the following two endangered 'fish' species listed under the Fisheries Management Act 1994 (FM Act):


- **Sydney Hawk Dragonfly (Austrocordulia leonardi).** Maldon Bridge which crosses the Nepean River at Wilton is very close to the subject site, and is one of four documented sites for this species within NSW.

There is no mention of these endangered species listed under the FM Act in the Biodiversity Technical paper (exhibited with the Land Use & Infrastructure Plan). Also, an Assessment of Significance has not been prepared for these species in accordance with Section 220ZZ of the FM Act.

**Recommendation:** DPI Fisheries recommends that the potential for impact to all threatened fish species (listed under the FM Act) needs to be formally assessed in accordance with an Assessment of Significance under section 220ZZ of the FM Act.

**Rationale:** Threatened fish species (listed under the FM Act) are threatened by poor water quality and the proposal has significant potential to impact upon these species if suitable stormwater and sewage treatment measures (that maintain or improve water quality) are not implemented, especially prior to the release of new urban land areas. The proposed storm water and sewage treatment measures will need to be formally considered in the context of an Assessment of Significance. Guidelines for this test under the FM Act can be found on: [http://www.dpi.nsw.gov.au/fishing/species-protection/info-sheet](http://www.dpi.nsw.gov.au/fishing/species-protection/info-sheet). The Wilton Land Use and Infrastructure Plan refers to a Biodiversity Certification process being undertaken in association with this proposal. It should be noted that this process does not apply to species listed under the FM Act.

The use of effective best practice erosion and sediment control measures are also necessary during construction activities.

**Background Analysis Report**

The overall aim of maintaining or improving the existing water quality (as stated in the background and assessment material accompanying the Land Use & Infrastructure Plan) is supported by DPI Fisheries. In addition to this, the following recommendations and comments relate to water quality impacts and the priority to incorporate effective water management strategies to assist in protecting the habitats of threatened and endangered species listed under the FM Act.

- **Section 5.14 - Water quality** - Given the proximity of endangered fish to the Wilton land release area, it is important that a high priority is given to establishing appropriate and effective water sensitive urban design measures at this site. DPI Fisheries notes that these need to be planned for upfront when planning subdivision footprints and given priority over other land uses.

- **Section 7.2 - Biodiversity** - DPI Fisheries recommends that a commitment to avoiding water quality impacts on the adjoining Nepean River and Cordeaux River be included in this section. This will assist in protecting the habitat of endangered species listed under the FM Act within these rivers.
• **Section 7.10 - Water quality** -
  o DPI Fisheries recommends that a clear objective to maintain or improve the water quality of the adjoining Nepean River and Cordeaux River be included in this section. This will assist in protecting the habitat of endangered species listed under the *Fisheries Management Act* (FM Act) within these rivers.
  o DPI Fisheries notes that due to the environmental sensitivity of the Nepean and Cordeaux Rivers, it is:
    ▪ highly important that any stormwater management targets set for this land release area have considered the presence of endangered fish species and their habitat in the adjoining rivers. As such, stormwater quality treatment aims will need to be established according to the findings of the Assessment of Significance (as recommended above).
    ▪ important that riparian buffer zone setbacks to these waterways also comply with DPI Fisheries *Policy and Guidelines for Fish Habitat Conservation and Management* 2013.

• **Section 9.1 - Section 117 Direction** – DPI Fisheries notes that each rezoning proposal will need to include a threatened species assessment of significance under the FM Act, as the FM Act is not included under a biodiversity assessment.

End Attachment B