

**Industry Feedback**

***qldwater*** *consolidated feedback*

**Feedback on the third draft Point Source Water Quality Offsets Policy**

**August 2018**

# Summary

The Queensland Water Directorate (***qldwater***) is the central advisory and advocacy body within the Queensland urban water sector representing public Water and Sewerage Service Providers, from small local governments up to major utilities including Queensland Urban Utilities and Unitywater. ***qldwater*** works with its members to provide safe, secure and sustainable urban services to Queensland communities.

***qldwater*** has reflected feedback from the sector on the latest Point Source Water Quality Offsets Policy (the Policy) which is essential to the future environmental sustainability of Queensland communities. Flexible options are urgently needed to improve environmental protection with more efficient use of limited public funding. The Policy could provide an essential foundation for such options including recognition of the need for risk sharing and

incentives to reduce risks and costs.

The current draft policy is a marked improvement on the previous version and allows for more flexibility and innovation within the sector, greater partnership with the Department, and provides clarification on several issues identified in previous drafts. The following summary feedback provides suggestions to clarify some remaining issues and a commentary on the new Draft Guideline. A marked-up version of the Policy is attached to support the comments and suggest points of clarification and minor typographical errors.

The sector would still like to see an industry panel or working group established by DES, to help with the implementation of offsets policy and potential trials. Given the importance and innovative nature of the Policy, consideration should be given to a second industry review once it has been implemented for a period of time (say 24 months).

# Background

In 2017 the Environment Department sought to upgrade the existing ‘[Voluntary market-based mechanism for nutrient management](https://www.ehp.qld.gov.au/water/monitoring/documents/market-based-nutrient-managment-pilot.pdf)’ and released the [Draft Point Source Water Quality Offsets Policy](https://www.ehp.qld.gov.au/water/monitoring/documents/draft-point-source-water-quality-offsets-policy.pdf). Following engagement with the urban water sector the Department called for a [request for submissions](https://www.ehp.qld.gov.au/water/monitoring/point-source-water-quality-offsets/) and ***qldwater*** provided a [collated industry response](http://www.qldwater.com.au/LiteratureRetrieve.aspx?ID=234017&A=SearchResult&SearchID=126724303&ObjectID=234017&ObjectType=6) in September 2017. The response expressed concern about gaps in the draft Policy and the need for a stronger partnership between the sector and the Department if offsets were to be a viable mechanism for improving environmental health.

In March 2018, an updated draft Policy was released with further engagement sessions for the urban water industry. At this time, it was also announced that a Guideline was being developed independently to support the Policy. [A response was submitted](https://www.qldwater.com.au/LiteratureRetrieve.aspx?ID=241480&A=SearchResult&SearchID=134280903&ObjectID=241480&ObjectType=6) collating feedback from the engagement sessions and responses provided by Service Providers. It expressed disappointment with the lack of cooperative development and clarification of the difficult/contentious issues the mechanism entailed including case studies and mechanisms to reduce uncertainty and enable water quality offsets to be readily implemented across the State. A new version of the Draft Policy was released for comment on 4 July 2018 and this document collates water sector responses to this draft.

# Comments on the latest Draft Policy document

**Ratios:**

The explanation about expected ratios has been expanded and is much improved but the most common response from the sector was “I still find delivery ratio and offset equivalency ratio confusing”. The following suggestions are provided to help improve clarity.

* p. 11/17: “Increases in delivery or equivalency ratios from the ‘normal ratios’ will be considered only where there is no evidence and there is significant uncertainty that net improvement in water quality will be achieved in the near field or far field catchment receiving waters.” This sentence is somewhat convoluted an alternative could be: “The default environmental equivalence ratio (1.5:1) will be increased only when there is significant uncertainty/lack of evidence about projected water quality improvements in the receiving environment (either near the discharge or in the downstream catchment).”
* p. 12/17 - Bubble licenses – although the ratio may also be raised for bubble licenses (in the case of significant uncertainty) the underlined text on this page is interpreted to mean that: under strict conditions, the default environmental equivalency ratio may be reduced (though never to a 1:1 ratio). This reduction is strongly supported given the potential equivalency of similar discharge types considered in STP bubble licenses and the need for scientific evidence.
* p. 12/17 - the example given for bubble licences of 2 STPs each discharging 20 t/annum is a combined bubble license of 30 t/annum. The Policy states a “bubble condition” combines the individual load limits of point source entities into a single load limit that is less than the sum of the individual load limits” (Policy Section 7.3.1 p. 9). It is not clear how the total load has been calculated using the offset ratio(s). Also, can a further example be provided where two STPs have disparate discharges (e.g. 30 and 10 t/annum)?
* s. 5 – The definitions of the delivery ratio and offset equivalency ratio overlap markedly (e.g. both include “uncertainty” and “attenuation” factors). Moreover, the equivalence ratio does not really reflect the definition provided for ‘environmental equivalence”. Further, section 7.3.2 indicates “in-stream processing” is part of the equivalency ratio, but this factor would surely be considered already in the ‘delivery ratio’?

It would be better to have only a single ratio. If this is not possible, the definition for the equivalency ratio should be changed, perhaps to: “Provides a precautionary factor to account for environmental equivalence (e.g. chemical form, temporal factors) with a default value of ???”.

* It is not clear how the two ratios will be applied (e.g. which will be multiplied first or will they be combined in some other way?). This is not discussed in the text but the first diagram indicates they will be added and multiplied twice! In Figure 2, an equivalence ratio is not applied or is assumed to be x1 which contrasts to the x1.1 indicated elsewhere in the text.

Presumably the intent is to have a ‘default’ ratio of x1.5 and then add 0.1 for each level of increase deemed necessary to reflect environmental equivalence? If so, the Water Sector’s suggestion to remove one of the ratios (and instead include all factors to within a single ratio) would be clearer and more workable. If this is not possible the way the two ratios will be applied needs clarification.

**Wet vs Dry Weather.**

Section 7.4 The concept of wet versus dry weather days is not entirely workable[[1]](#footnote-1) and limits the available offset options significantly. The policy seeks to balance daily loads rather than annual loads which is sensible for toxicants but contradicts the aim load-based licensing for nutrients and sediments. It does not automatically follow that chronic daily loads cause more harm than large (but less frequent) wet weather loads and total loads provide a more useful indicator of net impact (and e.g. progress towards reef and WQIP targets). The needs and capacity of the receiving environment and risks of environmental harm would provide a sounder foundation for this determination than the adopted ‘like-for-like’ principle indicated by the wet-dry weather requirement. This need could be recognised by amending the relevant section of the Policy to read:

“Offsets proposed for discharge to waters on defined dry weather days, should preferably counterbalance point source discharge on dry weather days however discharge to waters on defined dry weather days may be counterbalanced by offsets associated with wet weather events where significant ecological benefits can be achieved.”

**Other Comments**

p. 10/17: “The policy does not allow for water quality offsets in the form of a direct financial contribution to an entity” essentially ruling out opportunities for offsets to be managed by third party or for offset trading. This position is not supported by the sector and at the very least, the ability to fund external agents (such as local NRM bodies) to assist with offset activities should be clarified in the Policy.

s. 4 and s 7.3.2. The reference to dissolved inorganic nitrogen (DIN) is confusing. It would be simpler for the Policy to retain TN as the ‘nutrient currency’ to avoid confusion (see e.g. comments on confusion generated by this topic in the Draft Guideline, below).

p. 13/17 indicates that prescribed contaminants include ammonia, BOD and ‘heavy’ metals but these are not specifically listed in Schedule 9 of the Environmental Protection Regulation 2008. If they are intended to be addition to this list (or perhaps to clarify the list of ‘chemical toxicants’ under ANZECC guidelines), then the text should be amended. A suggestion is: “All offsets should account for release of Prescribed Contaminants and any toxicants (including BOD, ammonia and relevant elements) that may cause environmental harm at increased concentrations (because of accumulation or a dose-response relationship).”

# Comments on the Draft Point Source Offsets Guideline

The guideline would benefit greatly from a professional edit to improve logical flow and correct numerous typos and inconsistencies (and add page and section numbers). The guideline also contradicts the new Policy in several places including the following.

* wet and dry weather discussion appears to differ between the two documents.
* the last paragraph of the nutrient section which refers to DIN as “the equivalence measure” which appears to contradict all previous engagement about the Policy which focussed on TN (and see comments above).
* Figure 2 in the Guideline differs from the similar figure in the Policy. These comments assume the Policy diagram is the correct one. The offset examples given in the Guideline (e.g. p. 11) follow the ratios given in Figure 2 of the Guideline.
* uncertainty ratio is used in the Bubble licenses (page 10) section whereas the policy refers to ‘delivery ratio’.
* p. 5 “Best practice in the Environmental Protection Act 1994 (EP Act) (Section 5)…” should be Section 21 not Section 5.
* In a few locations, “Environmental Protection Act 1994 (EP Act) (Section 5)” is used, but it should be “Point Source Water Quality Offset Policy 2018 (Section 5)”. For example, p. 9 “Wet weather days as stated in the Environmental Protection Act 1994 (Section 5)…” should reference the Policy not the Act and an incorrect section of the Act is referenced.

The guideline would be more useful if it were structured as step-by-step guidance for a proponent so that they can understand the key steps, current accepted methods and required information needed for a nutrient offset project. This could include a list of the

information required to seek amendment of an EA to include a nutrient offset. A stronger emphasis on landowner aspects of offset development would be warranted as this can be a critical barrier or cause majors to a project.

A greater number of examples of the application of the policy in the guidelines would be welcome along with further examples. It is acknowledged that these may need to be developed over time. However, the guideline lacks clear examples of potential dry weather offsets in areas where there is no significant agricultural or farming activity suggesting that dry-weather offsets are not likely under the Policy.

1. For example, dry and wet weather days are inappropriate surrogates for nutrient mobility in the natural environment. Better alternatives are “period when a relevant non-point source water flow doesn’t trigger pollutant mobility” for dry weather and “period when a relevant non-point source water flow does trigger pollutant mobility” for wet weather. For a streambank restoration project, on any day the stream has erosive flows in the offset project area, the offset is valid. This could be a day in quite a dry period. For a stormwater WQ improvement project, the stormwater flows may occur for several “dry weather” days after the wet weather day and therefore the offset is valid on these dry days [↑](#footnote-ref-1)