

Engineering & Technical Support

Consulting Spend Context

The Consulting budget in Engineering and Technical Support (ETS) is allocated for specialist services and projects within the individual teams. For FY15, the following has been adopted:

Natural Account Code	Natural Account Title	Description
522207	Consultancy - Others	ETS use this Natural Account for Spatial Systems and Asset Information Management specialist services and projects where no direct supervision is provided by Seqwater, independent research/investigation is conducted, and expert advice with written recommendation/s is provided.
522213	Consultancy - Engineering	ETS use this Natural Account for specialist engineering services and projects where no direct supervision is provided by Seqwater, independent research/investigation is conducted, and expert advice with written recommendation/s is provided.

A brief description of the Consultancy related costs identified for FY15, the related account code and estimated costs are included as Attachment A.

FY14 and FY15 Reconciliation

The QCA Draft report identified consultancy costs changes as presented in Table 1 below.

APDD - Engineering and Technical Support	FY14A	FY15 Q1	Change
522200 - Consultants	55,155	-	(55,155)
522207 - Consultancy - Others	42,400	334,460	292,060
522213 - Consultancy - Engineering	15,847	270,000	254,153
Grand Total	113,402	604,460	491,058

Table 1: APDD - Engineering and Technical Support consultancy summary

A number of Consultancy related expenditure items are not recognised in the above assessment of actuals as the account codes did not directly align with the descriptions of consulting services. It is important to note that these codes are not used in the Engineering and Technical Support Team forecasts for FY15 and as such there is no double-counting. This additional consultancy related FY14A expenditure is identified in Table 2 below.

APDD - Engineering and Technical Support	FY14A	Comment
522348 - ICT Software Licenses	27,033	Expenditure is largely related to Spatial Systems Support that is included as Consultancy Other (522207) in FY15 Q1.
522342 - ICT Other Expenses	3,594	Expenditure associated with Spatial Data Purchases that are included as Consultancy Other (522207) in FY15 Q1
522065 - Contractor Mtce	117,682	Expenditure related to Specialist Spatial Services that are included as Consultancy Other (522207) in FY15 Q1
522226 - Contract Labour FTE	99,059	Expenditure associated with Asset Management Consultancy Works that is included as Consultancy Other (522207) in FY15 Q1
Total Unrecognised FY14A	247,368	

Table 2: APDD - Engineering and Technical Support unrecognised FY14 actual consultancy related expenditure

The above unrecognised FY14A expenditure must be added to the FY14 actuals to enable a like-for-like comparison. In presenting a like-for-like comparison between FY14A and the FY15 forecast it should be noted that the 522200 – Consultants natural account has not been used in FY15. FY14A expenditure against the 522200 – Consultants natural account was related to 522207 – Consultancy other (specifically Asset Management) and 522213 - Consultancy Engineering and has been budgeted for accordingly in FY15. The revised comparison between FY14A and FY15 Q1 is presented in Table 3.

Natural Account	FY14A	FY15 Q1	Change
522200 - Consultants	55,155	-	(55,155)
522207 - Consultancy - Others	289,768	334,460	44,692
522213 - Consultancy - Engineering	15,847	270,000	254,153
Revised Total	360,770	604,460	243,690

Table 3: APDD - Engineering and Technical Support consultancy summary (like-for-like basis)

When the above expenditure is taken in to account, the actual change in expenditure on total Consultancy related work for FY14 to FY15 Q1 is \$243,690 of which \$44,692 relates to 522207 - Consultancy - Others.

In considering this change it is important to note that the original FY14 budget for the Engineering and Technical Support (ETS) Team was established based on initiatives from the LinkWater Strategic Asset Management, Seqwater Engineering Services and Seqwater Asset Management budgets. When the ETS team was established, between July and September 2013, a review of the budget was undertaken to ensure:

- There were no overlaps
- The work proposed was still prudent and required at that time
- The methodology proposed was the most efficient
- The procurement methodology was still the most efficient in the prevailing market conditions

Through the review some duplication was eliminated, part of the consultancy budget for engineering services was reduced as the work could be undertaken internally more efficiently, a number of asset information management and Spatial Services (GIS) initiatives, where budgets were based on the initial scoping and establishment work being undertaken by Consultants, were able to be managed and undertaken by internal resources.

A review of procurement exercises was also undertaken which established that, in the prevailing market, the most cost effective means of engaging external resources was through fixed term employment contracts. Having permanent team members directly supervising these resources was also considered to be the most efficient way of delivering the initiatives and ensuring that knowledge is retained within the business. Consequently, rather than using Consultants, fixed term employees were engaged as Contractors (522225 - Contract Labour Non FTE, FY15 forecast \$145,000 and 522203 - Contractor Other, FY15 forecast \$145,000).

The change between FY14A and FY15 Q1 of \$243,690 reflects the work deferred from FY14 to undertake the abovementioned review, specifically asset and spatial (GIS) data and information improvement initiatives.

FY15 Justification

Attachment A lists Consultancy related projects and services proposed for FY15. The drivers for each item are included as is a brief description of the scope of work proposed and reference document numbers.

Post FY15 Forecast

Consultancy forecasts beyond FY15 are based on information and service requirements that will be required in order to conduct business. These include:

- Dial-Before-You-Dig (DBYD) Referrals
- GIS Data Purchases
- Assets Standards & Advice – Drafting Services
- Purchase of Standards
- Tech One Assets and Maintenance Support
- Consultancy - Spatial Technical Support
- Engineering Support

Consultancy forecasts for specific projects beyond FY15 are based on Spatial Systems and Asset Information programs detailed in:

- Seqwater - Spatial Improvement Initiative - Delivery Plan (D14/84267)
- Asset Information Strategy (D14/23027)

As mentioned above a review of procurement exercises was undertaken in preparing the FY14 budget which established that the most cost effective means of engaging external resources at that time was through fixed term employment contracts and included as 522203– Contractor Other and 522225 – Contract Labour non-FTE.

The intention is to review market conditions as current contract arrangements expire to ensure the most efficient procurement option is adopted. Consequently the resources required to support

programs of work have been included as 522207 - Consultancy - Others in forward years as contract arrangements expire.

Forecast Engineering and Technical Support Team consulting spend is presented below.

Natural Account (\$ nominal pa)	FY15 Q1	FY16	FY17	FY28
522207 - Consultancy - Others	334,460	342,821	351,392	461,057
522213 - Consultancy - Engineering	270,000	535,313	863,883	1,133,489
Revised Total	604,460	878,134	1,215,275	1,594,546

Table 4: APDD - Engineering and Technical Support forecast consultancy summary

ATTACHMENT A - ETS Consultancy related costs - FY15 Q1

Natural Account Code	Natural Account	Description	Budget FY15 Q1	Reference Document	Driver(s)	Summary
522207	Consultancy - Others	Tech one Assets and Maintenance Support	\$45,000	Refer TRIM D13/83890	Service, Compliance	The organisation's Technology One Computerised Maintenance Management System (CMMS) relies on system specific expertise to configure functionality and reporting to support the management of Seqwater's assets. Although staff within the team do have some skills in system configuration, there are a number of specific initiatives that are being undertaken that will require significant and complex changes to be made. The allocation is based on 24 days of consulting effort to undertake these changes. The change in the budget identified in the supporting documentation to FY15Q1 is based on driving more efficient delivery.
522207	Consultancy - Engineering	Consultancy - DBYD Referrals	\$6,960	Refer TRIM D14/8222	Service	Dial-Before-You-Dig (DBYD) is a service that provides the location of assets, including Seqwater's buried assets, to parties undertaking works. An automated response DBYD service is currently provided to Seqwater by a third party, MipelaGeosolutions, which charges Seqwater \$1.17 for each instance where an enquiry is within the buffer distance of our nominated assets. These instances are called DBYD referrals. The purpose of the service is to automatically advise third parties of the location of Seqwater assets so that they are not damaged.
522207	Consultancy - Others	Consultancy - Ground Truthing Project	\$130,000	Refer TRIM D14/111716	Service	The information currently available within the GIS data for raw water and some treated water buried pipelines has positional inaccuracies and little or no metadata to indicate how reliable it is. Consultation was undertaken with the land management, asset capability and sustainability and asset planning managers, who expressed their interest and confirmed that improving this information will enhance work efficiency and reduce risks and delays. It has been noted historically some incidents had occurred on our assets, to which Seqwater was not able to respond effectively due to the lack of accurate information available. The purpose of this work is to: <ul style="list-style-type: none"> - Improve location accuracy and attributes of Seqwater underground pipelines and related valves, and enhance the level of asset protection. - Improve the asset location search capability during operational incidents, provide accurate mapping for Dial Before You Dig requests, improve network management and other business activities requiring pipeline location information. The change in the budget identified in the supporting documentation to FY15Q1 is based on driving more efficient delivery.

Natural Account Code	Natural Account	Description	Budget FY15 Q1	Reference Document	Driver(s)	Summary
522207	Consultancy - Others	Consultancy - Spatial Technical Support	\$95,000	Refer TRIM D14/1869	Service	Seqwater does not have all the required software, hardware or capability to deliver all its spatial information system needs. Although these specialist services are a fundamental input, it is considered more efficient to procure the services rather than investing in the software, hardware and the development of technical expertise in-house. These services include for, example, raster processing, SQL, Python Scripting and Web Application Development. This initiative supports the Spatial Systems Unit in maintaining applications that are currently used by Seqwater staff during daily activities, such as when assessing potential asset conflicts, and in emergency situations. The change in the budget identified in the supporting documentation to FY15Q1 is based on driving more efficient delivery.
522207	Consultancy - Engineering	GIS DATA Purchases	\$52,500	Refer TRIM D14/1867	Service	Aerial photos, cadastre, contours, property addresses, regional ecosystem and others GIS data developed by others agencies, but relevant to management of Seqwater assets, requires periodic updates to assist with asset related decisions. This budget has been allocated for the purchase of this information and the estimate is based on: - \$30,000 Spatial Imagery Subscription Program (SISP) – updated high resolution aerial photos for SEQ Queensland yearly. - \$10,000 for 1m contour once per year. - \$7,500 for cadastral (property boundary and easements) data once per year - \$5,000 for property addresses once per year
522213	Consultancy - Engineering	ET: AA - Engineering Support	\$70,000	Refer TRIM D14/6512	Service	Timely and accurate advice is required to ensure quality and consistency in the delivery of the Seqwater capital program and generally, where this specialist advice is required for the project, it is included in project budgets. There are however some areas, not specifically related to projects, that are highly specialised and not covered within the skill set of the EAA team, for which external advice or verification is sought. These specialist services largely relate to management of assets post-delivery and are often a component of the overall analysis and/or advice provided by the EAA unit. They include: - Cathodic protection - Geotechnical analysis - Landslide and slope stability studies Further, when Third Party works are to be constructed near Seqwater assets, it is sometimes necessary to obtain an expert opinion on the effect of those works on the associated Seqwater asset. The change in the budget identified in the supporting documentation to FY15Q1 is based on driving more efficient delivery.

Natural Account Code	Natural Account	Description	Budget FY15 Q1	Reference Document	Driver(s)	Summary
522213	Consultancy - Engineering	Civil Design Review	\$155,000	Refer TRIM D14/111850	Service	The resources initially allocated to 'protection' of the mainly pipeline assets, were determined on the basis of Network (Grid related) pipelines. The scope of this team's work now also includes raw water and additional treated water assets associated with non-grid connected systems. The team also provides Engineering advice on an increasing number of civil engineering and pipeline projects that would otherwise have to be procured and provided by external consultants. To ensure an appropriate and cost-effective service with regard to third party works and Civil Engineering input is provided, an additional Civil Engineering resource is required. The change in the budget identified in the supporting documentation to FY15Q1 is a result of actual costs from the market engagement process.
522213	Consultancy - Engineering	ET: STA - Net. Assets Standards & Advice	\$45,000	Refer TRIM D13/83658	Service, Compliance	Seqwater does not have internal technical drafting capability. This initiative is to source drafting services to update plans as required e.g. to update an original "as constructed" drawings where subsequent amendments have been undertaken By having up-to-date As-Constructed plans Seqwater will be better able to manage risks associated with undertaking work on or related to its assets as it will have a better understanding of how any new assets relate to previously built assets. This is particularly important when assets are not readily accessible or visible as in the case for pipelines. Drafting Services will also assist Seqwater in developing standard drawings which will allow our requirements to be conveyed clearly both within and outside the organisation and minimising financial, installation and maintenance risks associated with non-standard equipment.
522207	Consultancy - Engineering	Purchase of Standards	\$5,000	Refer TRIM D13/84046	Compliance, Service	There is a need to provide appropriate published standards (e.g. Australian Standards) such that the design, construction and management of assets are completed in accordance with appropriate standards adopted by Seqwater. This allocation is for the non-project specific standards that are required for Engineering purposes
TOTAL			\$604,460			