

SEWERAGE SYSTEM - Tweed Shire Council serves a population of 77,800 (31,110 connected properties) and has 8 sewage treatment works providing secondary and tertiary treatment. The system comprises 134,550 EP treatment capacity (Intermittent and Continuous Extended Aeration (Activated Sludge) and Biological Nutrient Removal), 185 pumping stations (79 ML/d), 180 km of rising mains and 533 km of gravity trunk mains and reticulation. 9% of effluent was recycled (Indicator 27) and the treated effluent is discharged to land and river. Tweed Shire Council has 8 Pollution Incident Response Management Plans (PIRMPs) for their sewage treatment works.

BPM IMPLEMENTATION - Tweed Shire Council achieved 100% implementation of the outcomes required by the NSW BPM Framework, however, Council needs to finish preparing the 30-year IWCM Strategy, Financial Plan and Report in accordance with the July 2014 IWCM Check List (www.water.nsw.gov.au) to maintain 100% BPM Implementation.

PERFORMANCE - Residential growth for 2015-16 was 1.5% which is higher than the statewide median. The 2016-17 typical residential bill was \$805 which was above the statewide median of \$718 (Indicator 12). The economic real rate of return was 1.5% which was less than the statewide median (Indicator 46). The operating cost per property (OMA) was \$514 which was above the statewide median of \$470 (Indicator 50). Sewage odour complaints were above the statewide median of 0.9 (Indicator 21). Tweed Council reported 2 Category 2 (limited impact) environmental incidents. 5 of 8 sewage treatment works were compliant at all times. Council did not comply with the Faecal Coliforms requirements of the environmental regulator for effluent discharge. The current replacement cost of system assets was \$836M (\$24,400 per assessment), cash and investments were \$70M and revenue was \$35.9M (excluding capital works grants).

IMPLEMENTATION OF OUTCOMES REQUIRED BY THE NSW BEST-PRACTICE MANAGEMENT (BPM) FRAMEWORK

| | | | |
|---|-----|--|-------------|
| (1) Complete current strategic business plan & financial plan | YES | (2e) Pricing - DSP with commercial developer charges | Yes |
| (2) (2a) Pricing - Full Cost Recovery without significant cross subsidies | Yes | (2f) Pricing - Liquid trade waste approvals & policy | Yes |
| (2b) Pricing - Appropriate Residential Charges | Yes | (3) Complete performance reporting (by 15 September) | YES |
| (2c) Pricing - Appropriate Non-Residential Charges | Yes | (4) Integrated water cycle management strategy | YES* |
| (2d) Pricing - Appropriate Trade Waste Fees and Charges | Yes | IMPLEMENTATION OF ALL OUTCOMES | 100% |

TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS

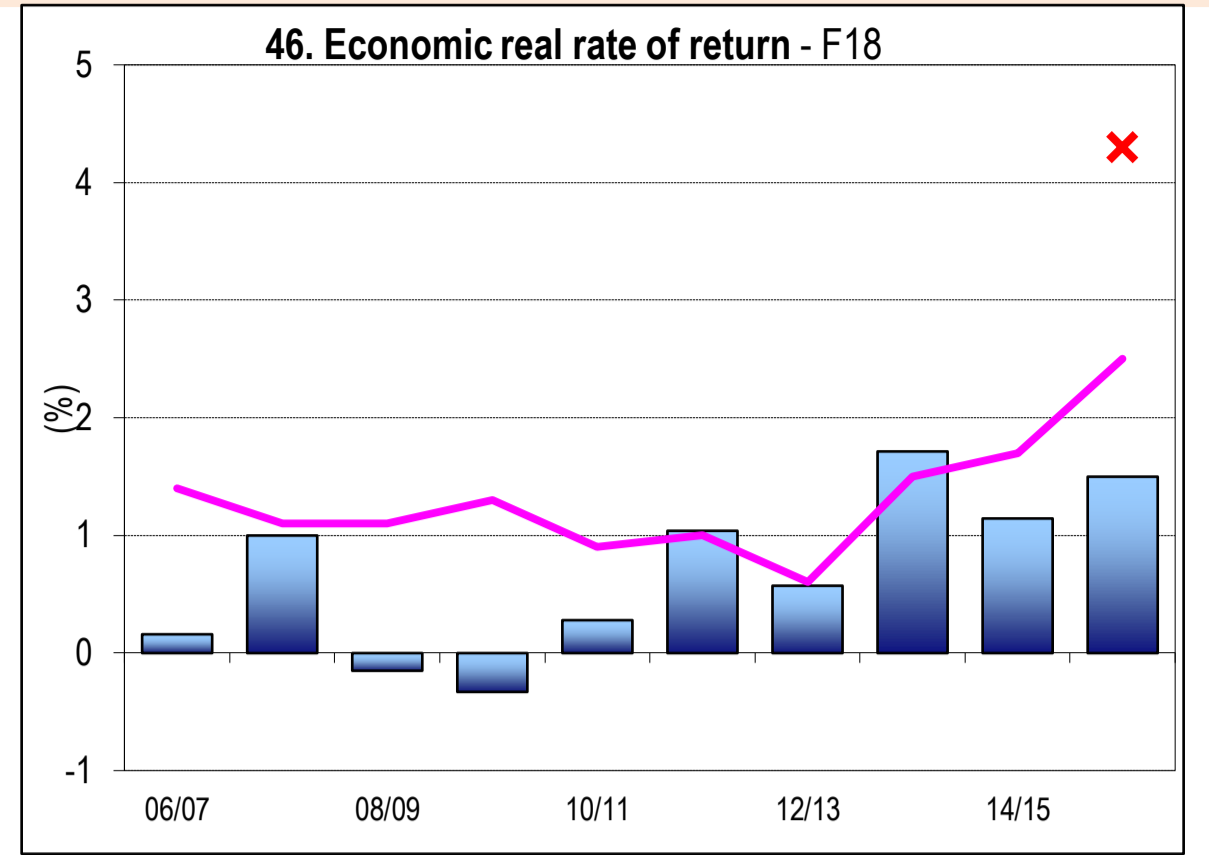
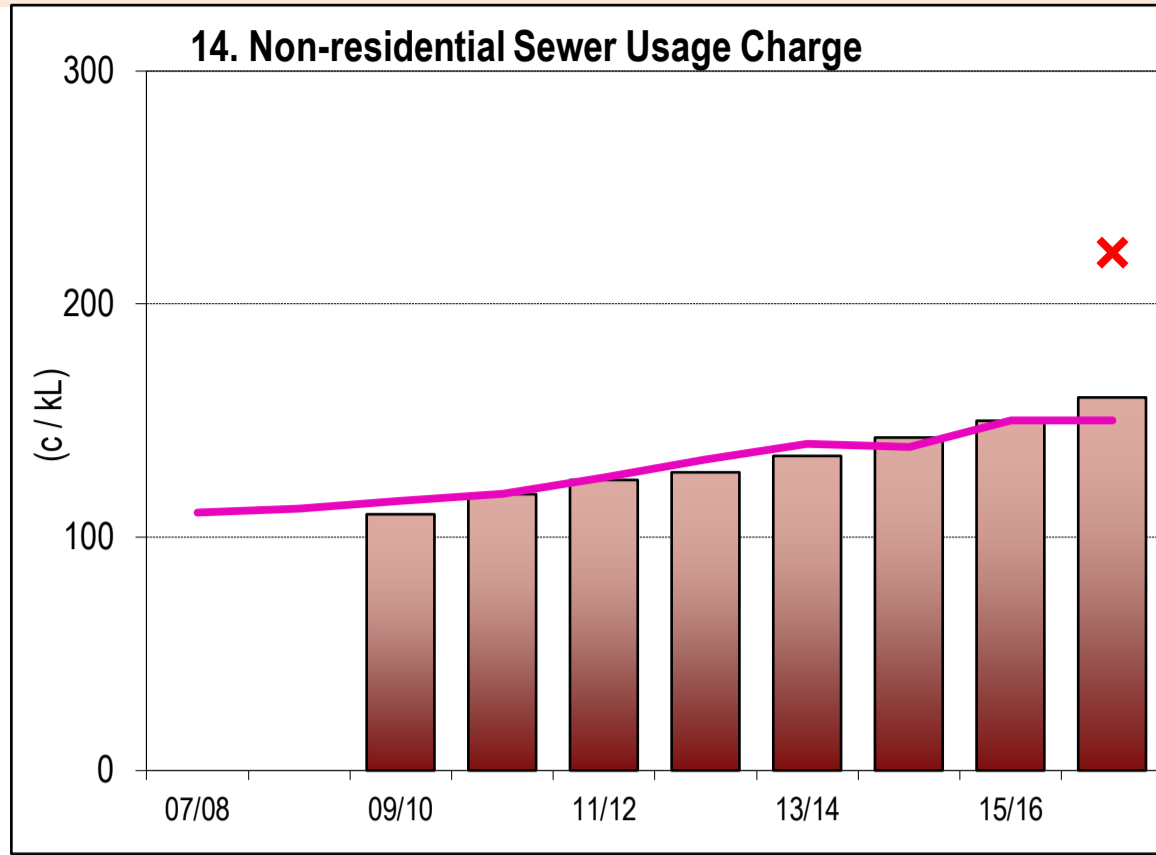
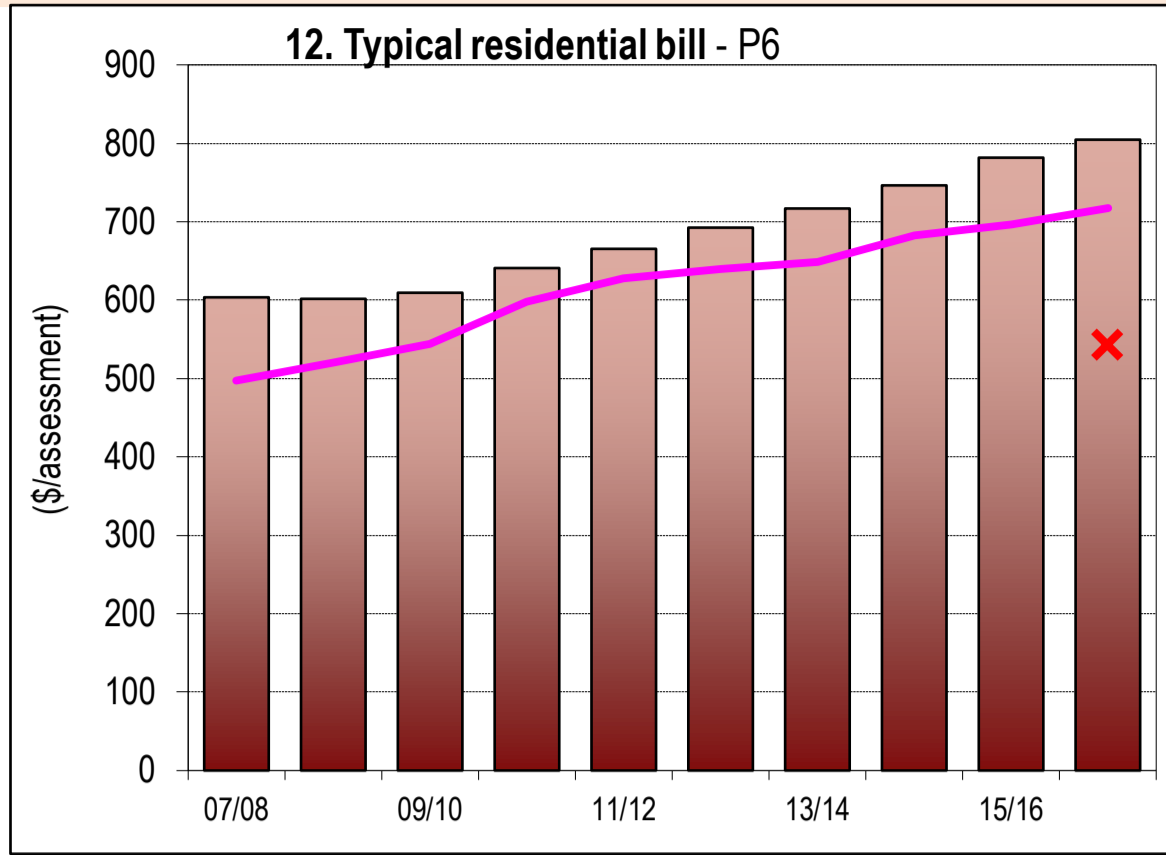
| | NWI | No. | | | RESULT | RANKING | | MEDIANS | | | |
|---------------------------|-----------------|-----------------------------|---------------------|--|--|---------------|----------|-----------|----------|-------|-------|
| | | | | | Col 1 | Size Group 1 | All LWUs | Statewide | National | | |
| | | | | | Col 1 | Col 2 | Col 3 | Col 4 | Col 5 | | |
| UTILITY | CHARACTERISTICS | C5 | 1 | Population served: 77,800 | (Number of assessments: 34,190) | | | | | | |
| | | C8 | 2 | Number of connected properties: | Council is within Size Group 1: (>10,000 properties) | 31,110 | | | | | |
| | | C6 | 3 | Residential connected properties | No. | 30,180 | | | | | |
| | | | 4 | New residences connected to sewerage | % | 1.5 | 3 | 2 | 1.2 | | |
| | | A6 | 5 | Properties served | prop/km main | 44 | | | 38 | 40 | |
| | | W18 | 6 | Volume of sewage collected | ML | 7,495 | | | 4,900 | 5,610 | |
| | | | 7 | Renewals expenditure | % CRC | 0.5 | 3 | 3 | 0.5 | | |
| | | | 8 | Employees | per 1,000 prop | 2.2 | 5 | 4 | 1.7 | | |
| SOCIAL | CHARGES & BILLS | P4 | | Description of residential tariff structure for 2016-17: | access charge/prop; independent of land value | | | | | | |
| | | P6 | 12a | Typical residential bill for 2015-16 | \$/assessment (2015-16) | 782 | 3 | 5 | 697 | 703 | |
| | | | 12 | Typical residential bill for 2016-17 | \$/assessment (2016-17) | 805 | 3 | 5 | 718 | | |
| | | | 13 | Typical developer charge for 2016-17 | \$/ET (2016-17) | 6,430 | 3 | 2 | 4,700 | | |
| | | | 14 | Non-residential sewer usage charge for 2016-17 | c/kL (2016-17) | 160 | 4 | 3 | 159 | | |
| | | F6 | 15 | Revenue - Sge | \$/prop | 1,150 | 3 | 1 | 1,095 | 1032 | |
| | HEALTH | | 16 | Sewerage Coverage (% of Urban Population with Reticulated Sge Service) | % of population | 99.0 | 1 | 1 | 97.8 | | |
| | | E3 | 17 | Percent of sewage treated to a tertiary level | % | 98 | 3 | 3 | 95 | 85 | |
| | | | 18 | Percent of sewage volume treated that was compliant | % | 89 | 4 | 4 | 100 | | |
| | SERVICE LEVELS | | 21 | Odour complaints | per 1,000 prop | 1.5 | 5 | 5 | 0.9 | | |
| | | C11 | 22 | Service complaints - Sge | per 1,000 prop | 9.3 | 3 | 3 | 5 | 1 | |
| | | C16 | 23a | Average sewerage interruption | min | 240 | 5 | 5 | 108 | 101 | |
| | | | 25 | Total days lost | % | 4.7 | 4 | 5 | 3.5 | | |
| | | | 26 | Volume of sewage collected | kL/prop | 241 | 4 | 4 | 234 | 202 | |
| | ENVIRONMENTAL | NATURAL RESOURCE MANAGEMENT | W26 | 26a | Total recycled water supplied | ML | 700 | 3 | 1 | 740 | 1,580 |
| | | | W27 | 27 | Recycled water | % of effluent | 9 | 4 | 3 | 11 | 17 |
| | | | E8 | 28 | Biosolids reuse | % | 100 | 1 | 1 | 100 | 90 |
| | | | | 30 | Energy consumption | kWh/ML | 1,134 | 4 | 5 | 810 | |
| E12 | | | 32 | Net greenhouse gas emissions - WS & Sge | t CO2 eq per 1,000 prop | 450 | 4 | 4 | 390 | 402 | |
| | | | 33 | 90 th Percentile licence limits for effluent discharge: | BOD 10 mg/L; SS 15 mg/L; Total N 10 mg/L; Total P 0.5 mg/L | | | | | | |
| ENVIRONMENTAL PERFORMANCE | | | 34 | Compliance with BOD in licence | % | 100 | 1 | 1 | 100 | | |
| | | | 35 | Compliance with SS in licence | % | 100 | 1 | 1 | 100 | | |
| | | A14 | 36 | Sewer main breaks and chokes | per 100km main | 1 | 1 | 1 | 38 | 20 | |
| | | | 37a | Sewer overflows | per 100km main | 11 | 3 | 4 | 14 | | |
| | | E13 | 37b | Sewer overflows reported to environmental regulator | per 100km main | 1.0 | 3 | 4 | 0.9 | 0.8 | |
| | | | 39 | Non residential & trade waste sewage volume | % of sewage | 29 | 2 | 1 | 20 | | |
| ECONOMIC | FINANCE | | 43 | Revenue from non-residential & trade waste charges | % of revenue | 17 | 4 | 4 | 19 | | |
| | | | 44 | Revenue from trade waste charges | % of revenue | 2.7 | 2 | 2 | 1.0 | | |
| | | F18 | 46 | Economic real rate of return - Sge | % | 1.5 | 4 | 3 | 2.5 | 2.9 | |
| | | | 46a | Return on assets - Sge | % | 1.4 | 4 | 3 | 1.8 | | |
| | | | 48a | Loan payment - Sge | \$/prop | 90 | 3 | 2 | 83 | | |
| | EFFICIENCY | | 49 | Operating cost (OMA) per 100 km of main | \$/100km | 2,250 | 5 | 5 | 1,700 | | |
| | | F12 | 50 | Operating cost (OMA) per property - Note 9 | \$/prop | 514 | 4 | 5 | 470 | 429 | |
| | | | 51 | Operating cost (OMA) per kL | c/kL | 213 | 4 | 3 | 208 | | |
| | | | 52 | Management cost | \$/prop | 176 | 3 | 4 | 164 | | |
| | | | 53 | Treatment cost | \$/prop | 174 | 3 | 4 | 159 | | |
| | | | 54 | Pumping cost | \$/prop | 95 | 4 | 5 | 59 | | |
| | 55 | Energy cost | \$/prop | 46 | 4 | 5 | 34 | | | | |
| | 56 | Sewer main cost | \$/prop | 56 | 3 | 3 | 51 | | | | |
| | F29 | 57 | Capital Expenditure | \$/prop | 170 | 3 | 3 | 186 | 212 | | |

NOTES :

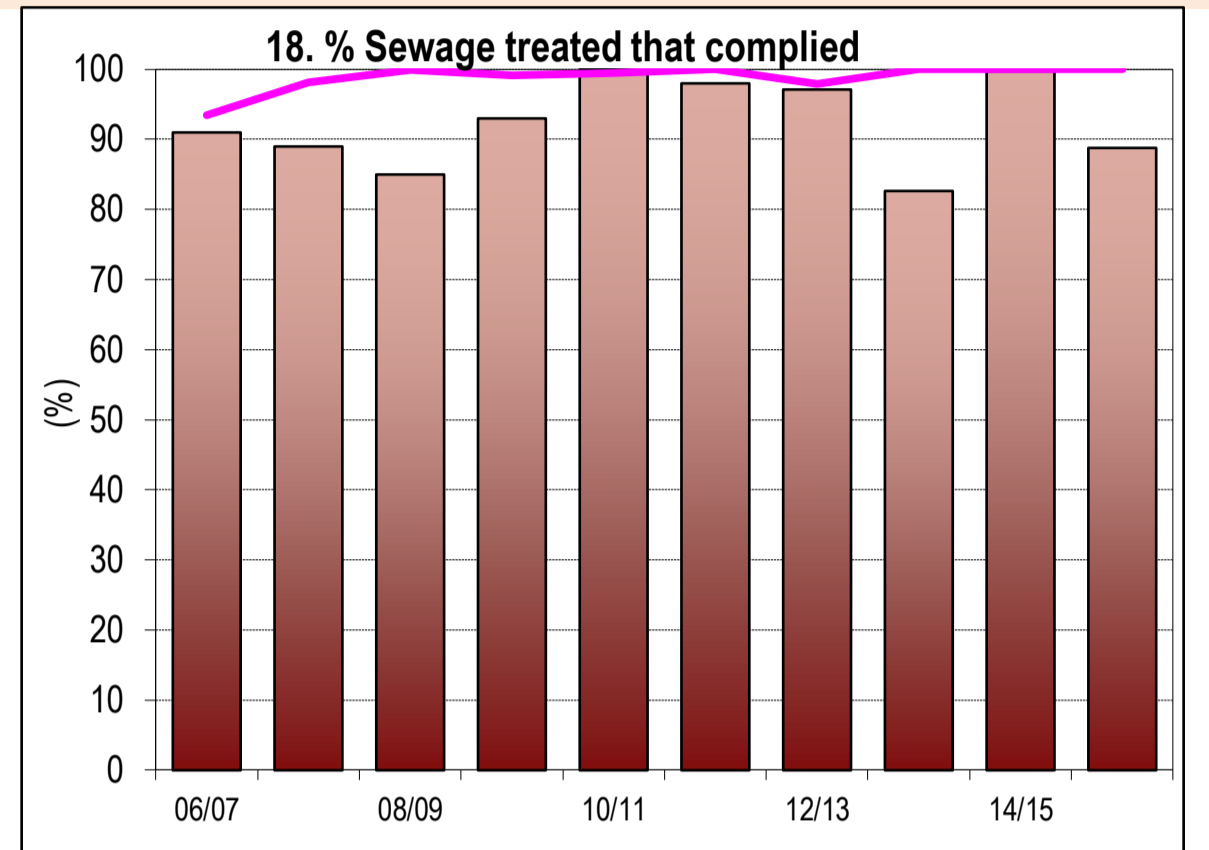
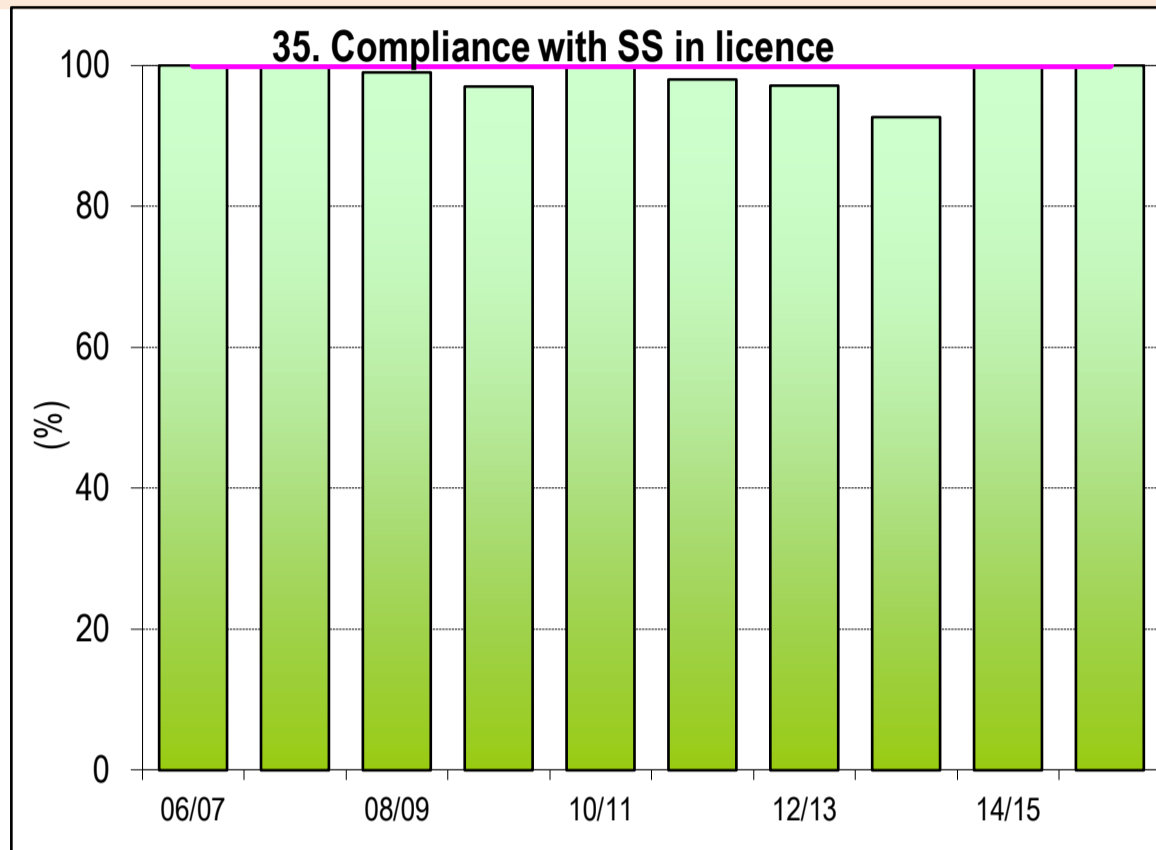
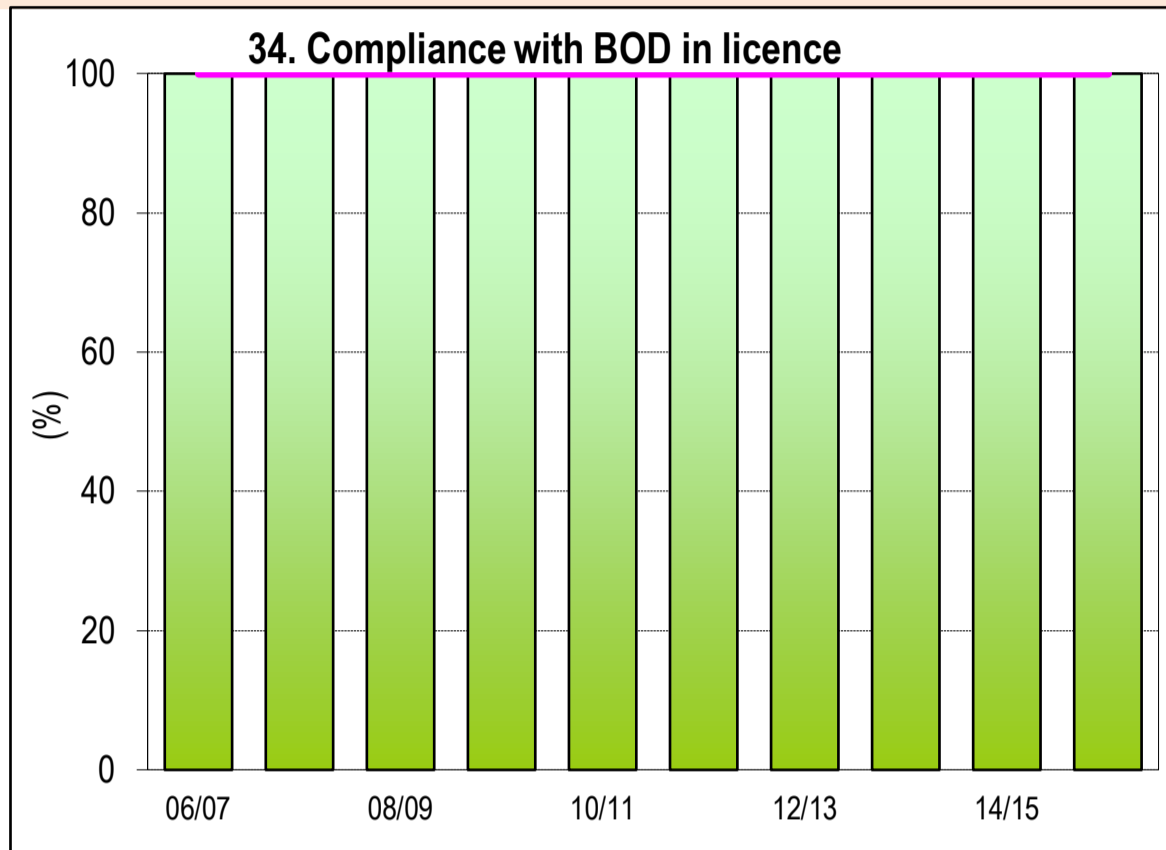
- Col 2 rankings are on a % of LWUs basis - best reveals performance compared to similar sized LWUs (ie. Result in Col 1 is compared with LWUs in Size Group 1).
- Col 3 rankings are on a % of LWUs basis - best reveals performance compared to all NSW LWUs (ie. Result in Col 1 is compared with all NSW LWUs).
- Col 4 (Statewide Median) is on a % of connected properties basis- best reveals statewide performance (gives due weight to larger LWUs & reduces effect of smaller LWUs).
- Col 5 (National Median) is the median value for the 74 utilities reporting sewerage performance in the National Performance Report 2015-16 (www.bom.gov.au).
- LWUs are required to annually review key projections and actions in the later of their IWCM Strategy and financial plan and their Strategic Business Plan and to annually 'roll forward', review and update their 30-year total asset management plan (TAMP) and 30-year financial plan.
- Non-residential access charge - \$552 (uniform access charge). Sewer usage charge - 160 c/kL.
- Non-residential and trade waste volume was 29% of total sewage collected.
Non-residential revenue was 17% of revenue from access, usage & trade waste charges.
- Compliance with Total N in Licence was 100%. Compliance with Total P in Licence was 100%.
- Operating cost (OMA)/property was \$514. Components were: management (\$176), operation (\$101), maintenance (\$140), energy (\$46), chemical (\$24) & effluent/biosolids (\$26).
- Tweed Shire Council rehabilitations included 1% of its sewerage mains and 0% of its service connections. Renewals expenditure was \$557,000/100km of main.
- Council has 9 fully qualified wastewater treatment operators who meet the NSW Certification requirements.

(Results shown for 10 years together with Statewide Median and 2015-16 Top 20%)

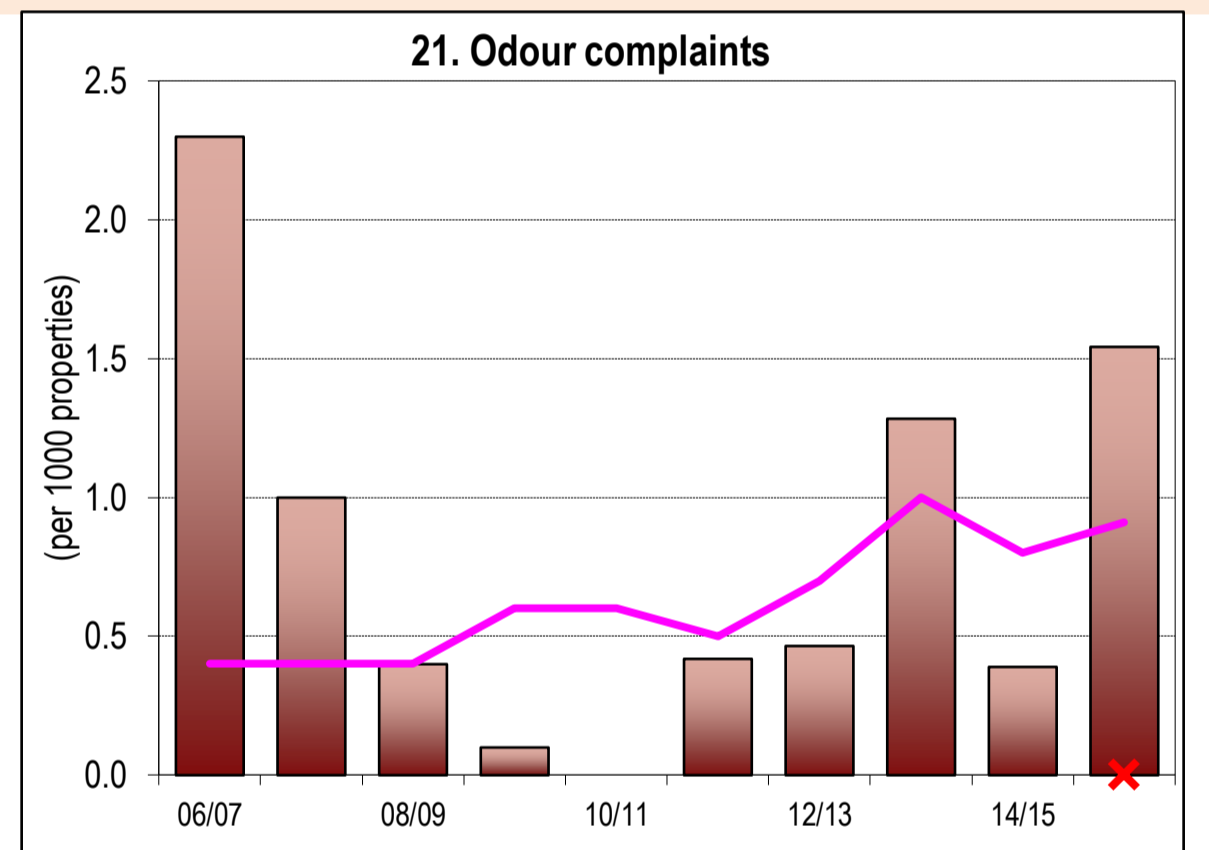
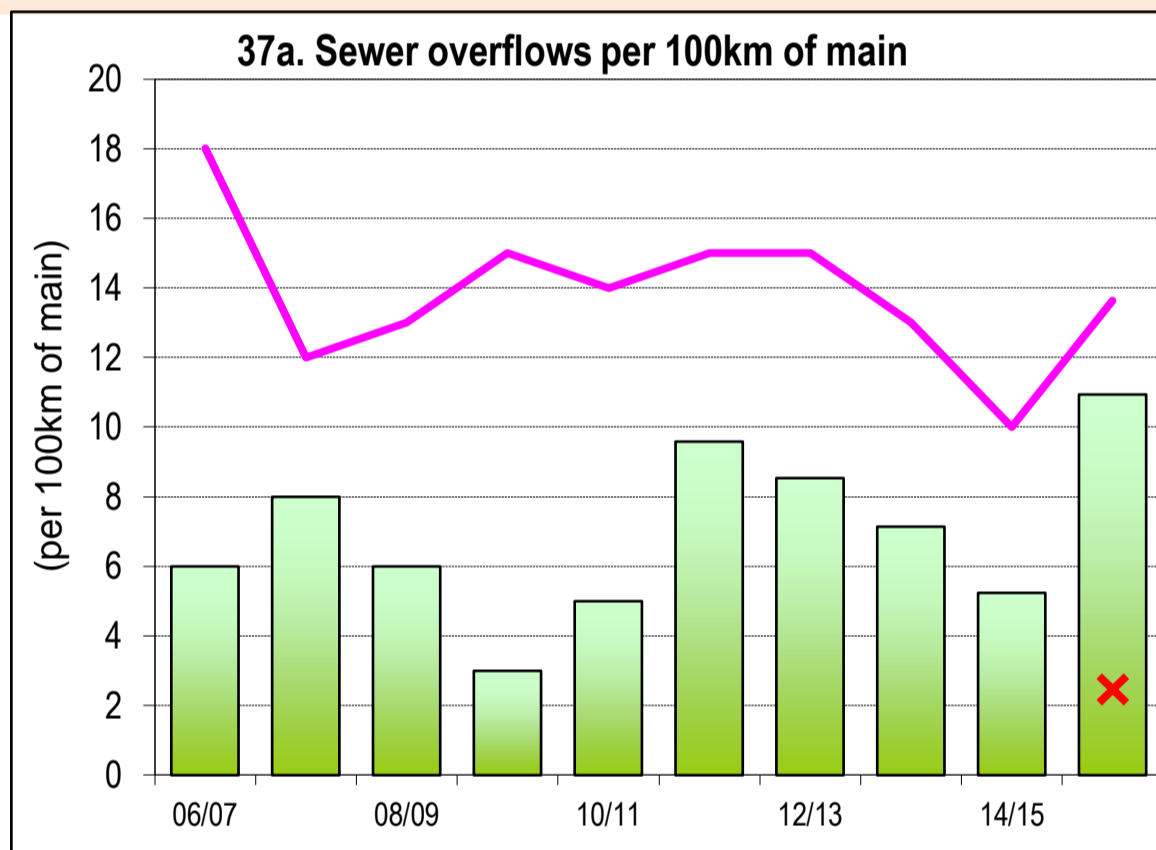
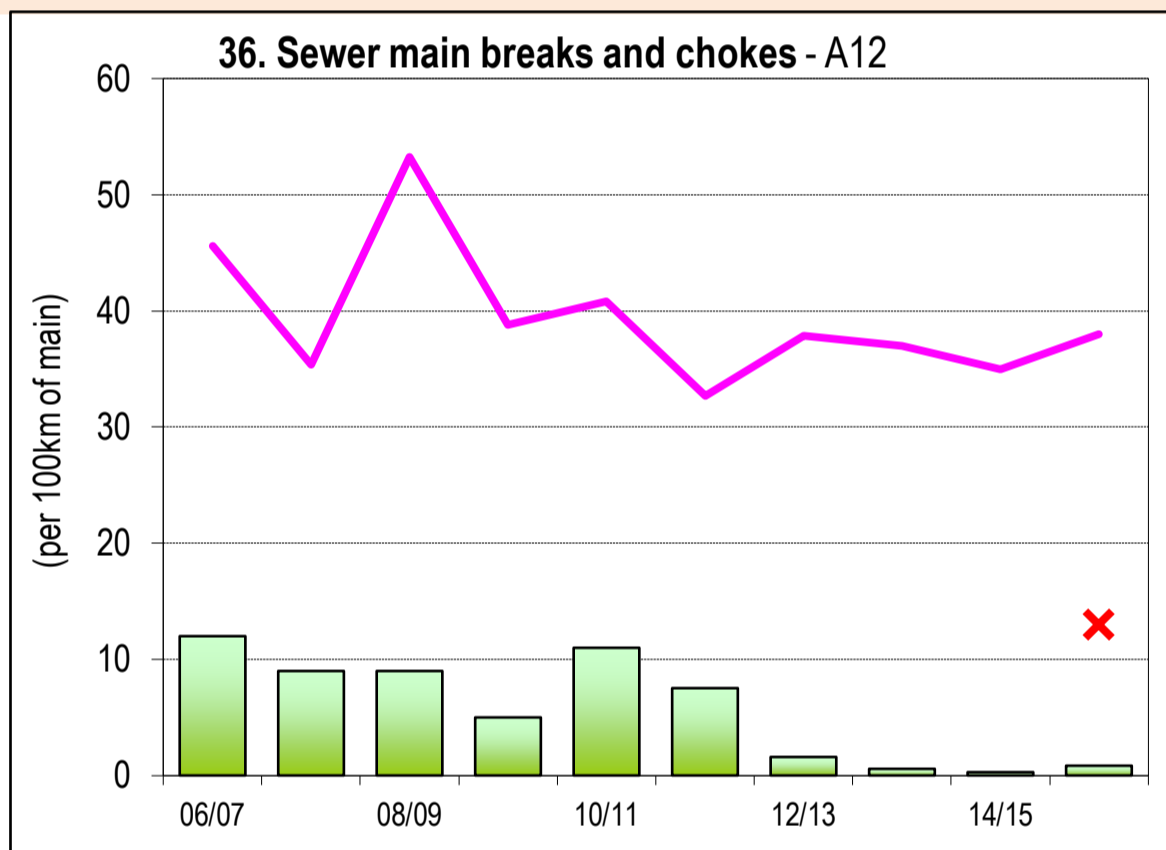
COST RECOVERY



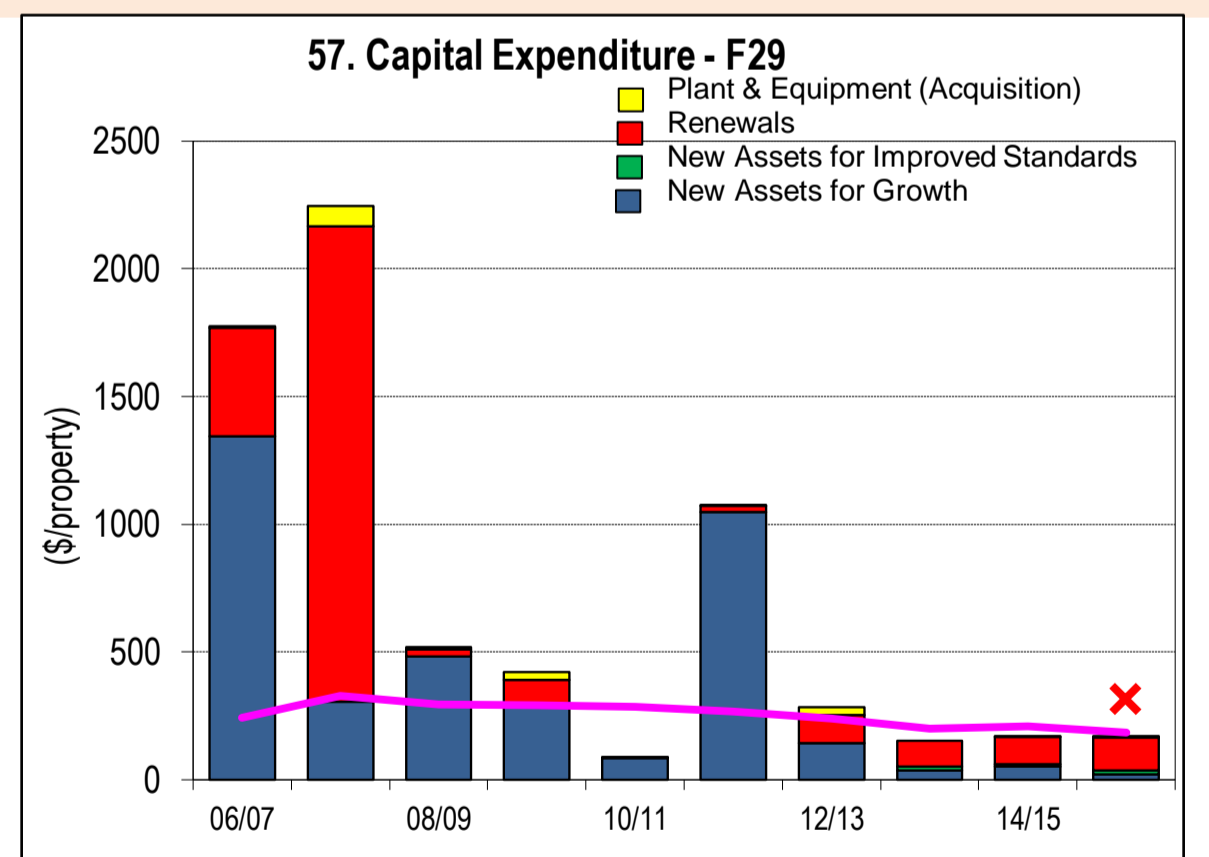
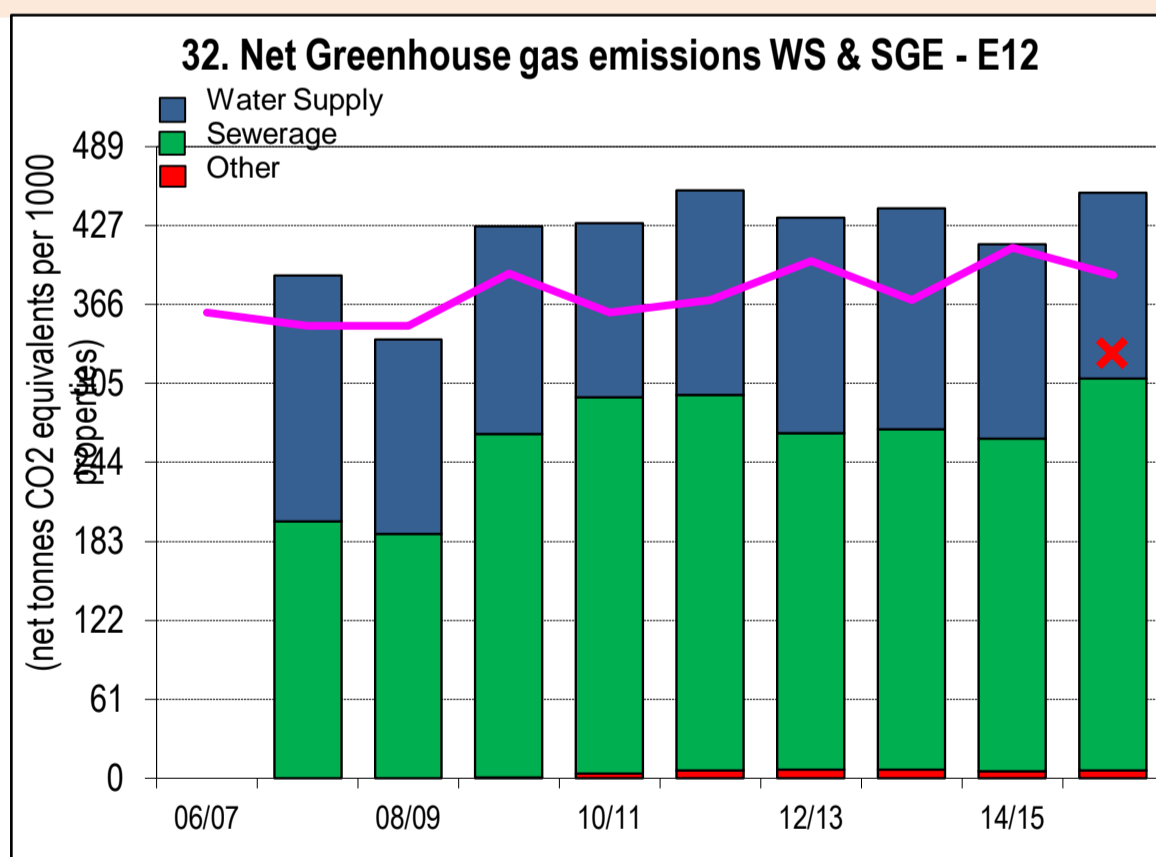
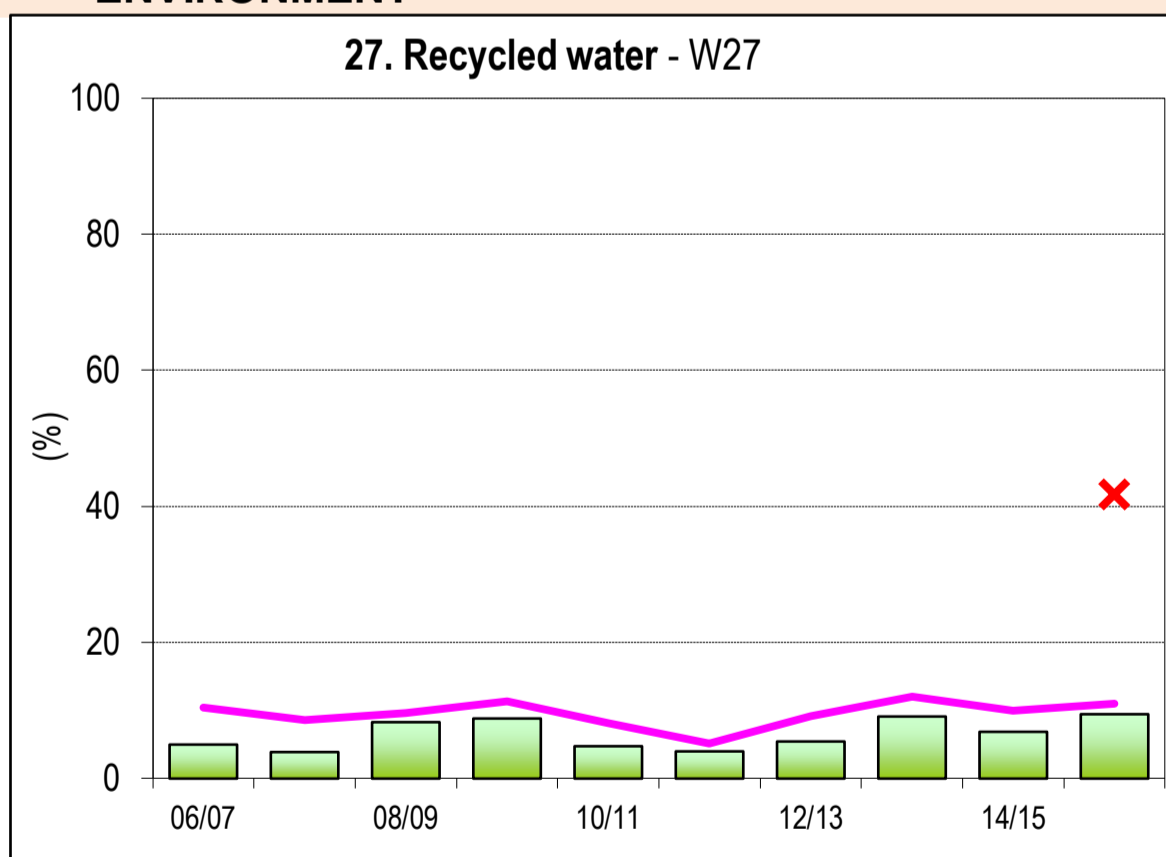
COMPLIANCE



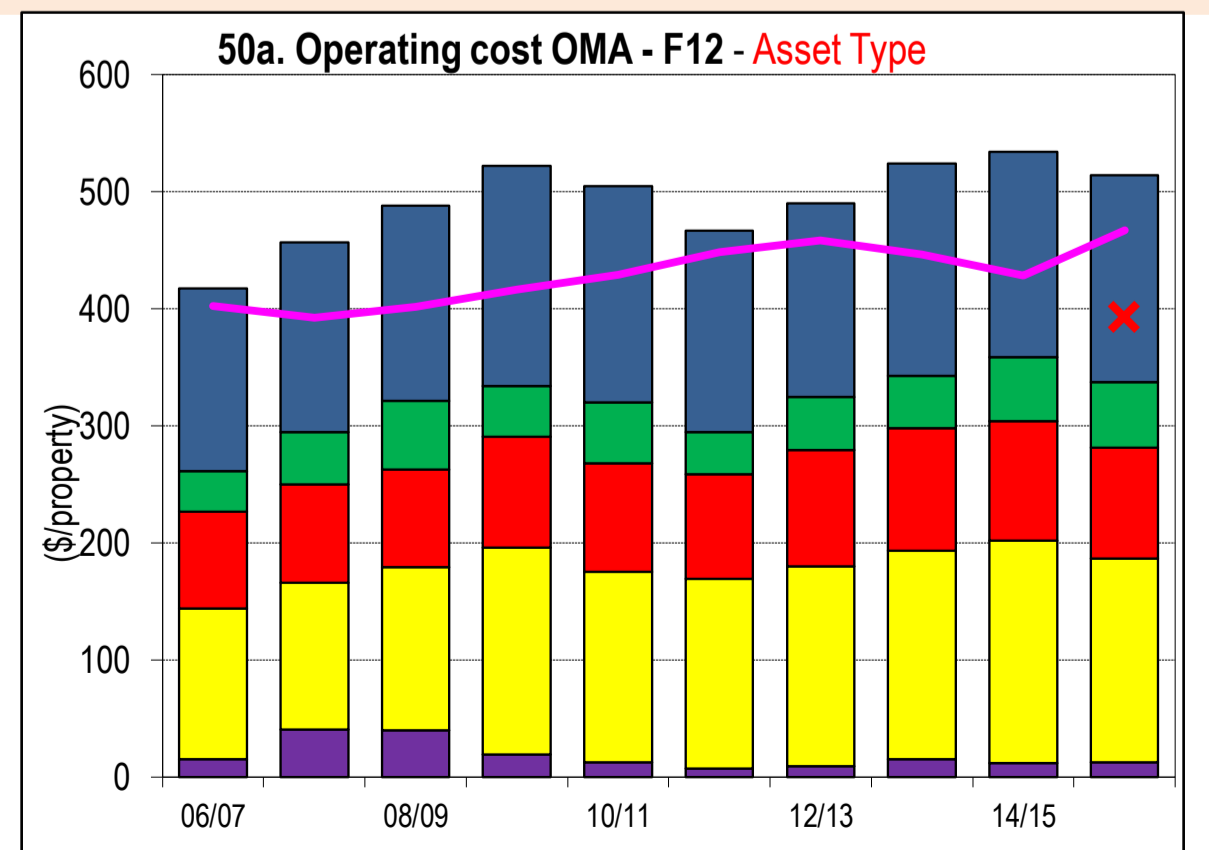
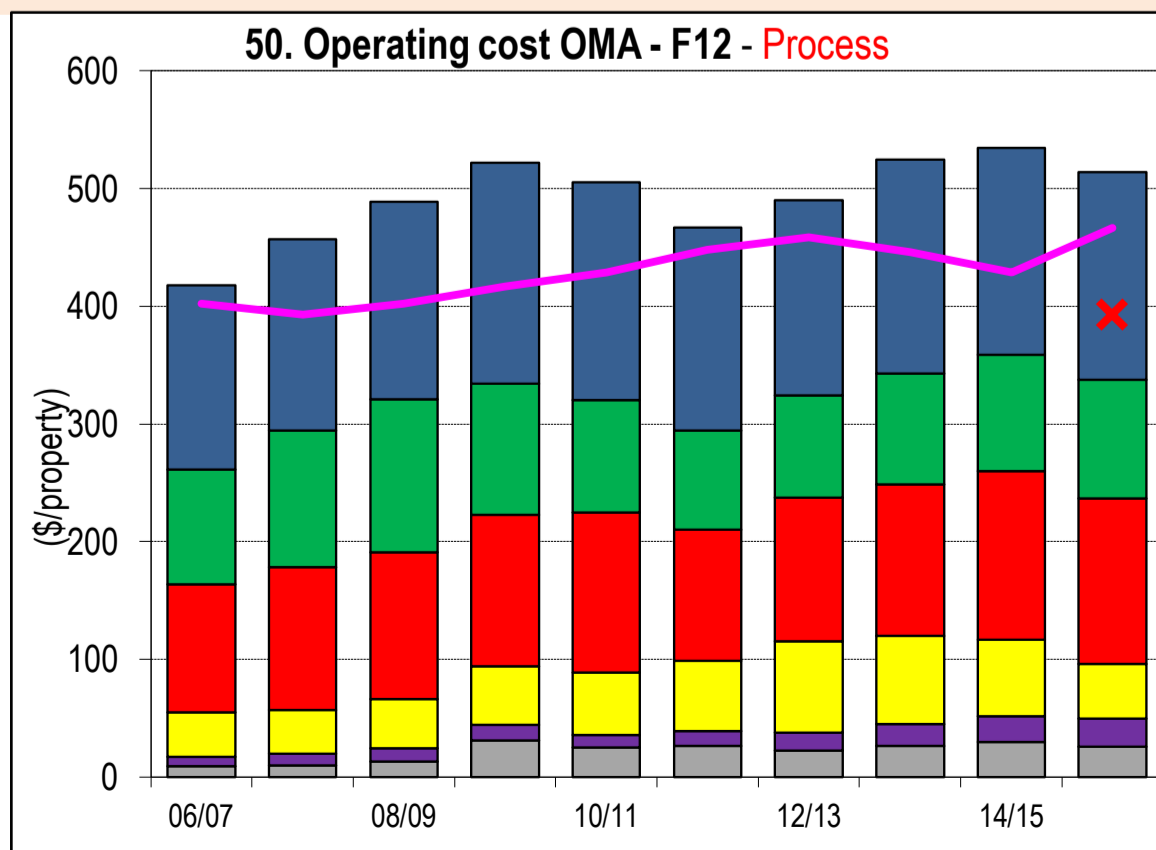
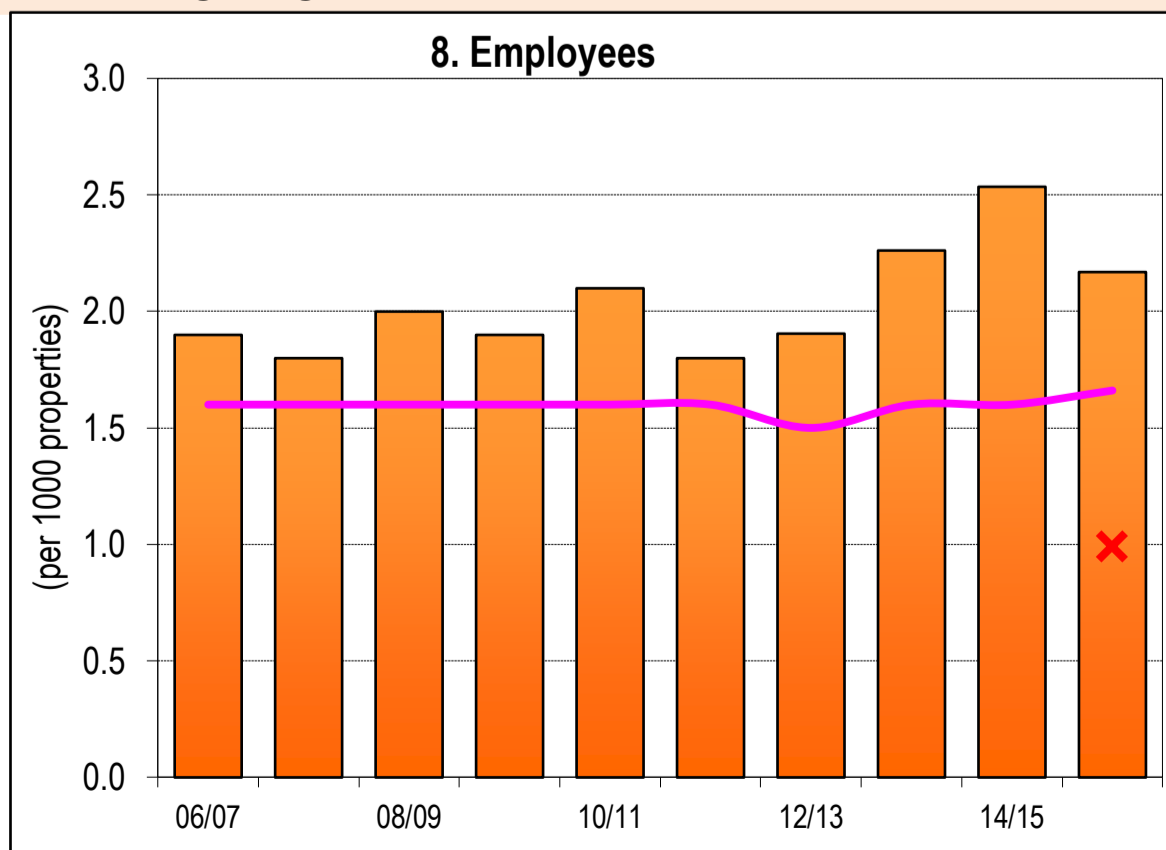
CUSTOMER SERVICE/RELIABILITY



ENVIRONMENT



EFFICIENCY



NOTES:

1 Costs are in Jan 2016\$ except for graphs 12 and 14, which are in Jan 2017\$.

LEGEND
 State Median for all years ———
 Top 20% for 2015-16 X