|  |
| --- |
| SWIM Indicator Definitions 2017-18 |
|  |





**STATEWIDE WATER INFORMATION MANAGEMENT SYSTEM**

[www.qldwater.com.au/SWIM](http://www.qldwater.com.au/SWIM)



Table of Contents

[Annual Water and Sewerage Indicators 12](#_Toc519099400)

[SWIM Code: AS1 12](#_Toc519099401)

[SWIM Code: AS2 12](#_Toc519099402)

[SWIM Code: AS3 13](#_Toc519099403)

[SWIM Code: AS4 14](#_Toc519099404)

[SWIM Code: AS5 14](#_Toc519099405)

[SWIM Code: AS6 15](#_Toc519099406)

[SWIM Code: AS8 15](#_Toc519099407)

[SWIM Code: AS9 15](#_Toc519099408)

[SWIM Code: AS10 16](#_Toc519099409)

[SWIM Code: AS11 17](#_Toc519099410)

[SWIM Code: AS14 18](#_Toc519099411)

[SWIM Code: AS32 19](#_Toc519099412)

[SWIM Code: AS38 20](#_Toc519099413)

[SWIM Code: AS39 20](#_Toc519099414)

[SWIM Code: AS40 21](#_Toc519099415)

[SWIM Code: AS41 22](#_Toc519099416)

[SWIM Code: AS44 22](#_Toc519099417)

[SWIM Code: AS45 23](#_Toc519099418)

[SWIM Code: AS45.1 23](#_Toc519099419)

[SWIM Code: AS46 24](#_Toc519099420)

[SWIM Code: AS47 24](#_Toc519099421)

[SWIM Code: AS48 25](#_Toc519099422)

[SWIM Code: AS49 25](#_Toc519099423)

[SWIM Code: AS52 26](#_Toc519099424)

[SWIM Code: AS54 27](#_Toc519099425)

[SWIM Code: CS1 27](#_Toc519099426)

[SWIM Code: CS2 28](#_Toc519099427)

[SWIM Code: CS3 28](#_Toc519099428)

[SWIM Code: CS4 29](#_Toc519099429)

[SWIM Code: CS6 30](#_Toc519099430)

[SWIM Code: CS7 31](#_Toc519099431)

[SWIM Code: CS8 32](#_Toc519099432)

[SWIM Code: CS9 32](#_Toc519099433)

[SWIM Code: CS10 33](#_Toc519099434)

[SWIM Code: CS11 33](#_Toc519099435)

[SWIM Code: CS12 34](#_Toc519099436)

[SWIM Code: CS13 34](#_Toc519099437)

[SWIM Code: CS14 35](#_Toc519099438)

[SWIM Code: CS15 35](#_Toc519099439)

[SWIM Code: CS17 36](#_Toc519099440)

[SWIM Code: CS18 37](#_Toc519099441)

[SWIM Code: CS19 37](#_Toc519099442)

[SWIM Code: CS20 38](#_Toc519099443)

[SWIM Code: CS21 39](#_Toc519099444)

[SWIM Code: CS22 40](#_Toc519099445)

[SWIM Code: CS23 41](#_Toc519099446)

[SWIM Code: CS24 42](#_Toc519099447)

[SWIM Code: CS48 43](#_Toc519099448)

[SWIM Code: CS49 43](#_Toc519099449)

[SWIM Code: CS61 44](#_Toc519099450)

[SWIM Code: CS62 45](#_Toc519099451)

[SWIM Code: CS64 46](#_Toc519099452)

[SWIM Code: CS65 47](#_Toc519099453)

[SWIM Code: CS66 47](#_Toc519099454)

[SWIM Code: CS67 48](#_Toc519099455)

[SWIM Code: EN1 49](#_Toc519099456)

[SWIM Code: EN2 49](#_Toc519099457)

[SWIM Code: EN3 50](#_Toc519099458)

[SWIM Code: EN8 51](#_Toc519099459)

[SWIM Code: EN9 51](#_Toc519099460)

[SWIM Code: EN9.1 52](#_Toc519099461)

[SWIM Code: EN10 52](#_Toc519099462)

[SWIM Code: EN11 53](#_Toc519099463)

[SWIM Code: EN11.1 53](#_Toc519099464)

[SWIM Code: EN12 54](#_Toc519099465)

[SWIM Code: EN12.1 55](#_Toc519099466)

[SWIM Code: EN14 55](#_Toc519099467)

[SWIM Code: EN15 56](#_Toc519099468)

[SWIM Code: EN16 56](#_Toc519099469)

[SWIM Code: EN17 57](#_Toc519099470)

[SWIM Code: EN17.1 57](#_Toc519099471)

[SWIM Code: EN18 57](#_Toc519099472)

[SWIM Code: EN19 58](#_Toc519099473)

[SWIM Code: EN20 58](#_Toc519099474)

[SWIM Code: FN1 59](#_Toc519099475)

[SWIM Code: FN2 60](#_Toc519099476)

[SWIM Code: FN3 60](#_Toc519099477)

[SWIM Code: FN4 61](#_Toc519099478)

[SWIM Code: FN5 62](#_Toc519099479)

[SWIM Code: FN5.1 62](#_Toc519099480)

[SWIM Code: FN6 63](#_Toc519099481)

[SWIM Code: FN7 63](#_Toc519099482)

[SWIM Code: FN7.1 63](#_Toc519099483)

[SWIM Code: FN9 64](#_Toc519099484)

[SWIM Code: FN10 64](#_Toc519099485)

[SWIM Code: FN11 65](#_Toc519099486)

[SWIM Code: FN11.1 66](#_Toc519099487)

[SWIM Code: FN12 67](#_Toc519099488)

[SWIM Code: FN13 68](#_Toc519099489)

[SWIM Code: FN14 68](#_Toc519099490)

[SWIM Code: FN15 69](#_Toc519099491)

[SWIM Code: FN16 70](#_Toc519099492)

[SWIM Code: FN17 70](#_Toc519099493)

[SWIM Code: FN18 71](#_Toc519099494)

[SWIM Code: FN19 72](#_Toc519099495)

[SWIM Code: FN20 73](#_Toc519099496)

[SWIM Code: FN21 73](#_Toc519099497)

[SWIM Code: FN22 74](#_Toc519099498)

[SWIM Code: FN23 74](#_Toc519099499)

[SWIM Code: FN24 75](#_Toc519099500)

[SWIM Code: FN25 75](#_Toc519099501)

[SWIM Code: FN26 77](#_Toc519099502)

[SWIM Code: FN27 77](#_Toc519099503)

[SWIM Code: FN32 78](#_Toc519099504)

[SWIM Code: FN33 79](#_Toc519099505)

[SWIM Code: FN34 80](#_Toc519099506)

[SWIM Code: FN34.1 80](#_Toc519099507)

[SWIM Code: FN35 81](#_Toc519099508)

[SWIM Code: FN36 81](#_Toc519099509)

[SWIM Code: FN37 81](#_Toc519099510)

[SWIM Code: FN38 82](#_Toc519099511)

[SWIM Code: FN39 82](#_Toc519099512)

[SWIM Code: FN40 83](#_Toc519099513)

[SWIM Code: FN42 84](#_Toc519099514)

[SWIM Code: FN44 84](#_Toc519099515)

[SWIM Code: FN45 85](#_Toc519099516)

[SWIM Code: FN46 85](#_Toc519099517)

[SWIM Code: FN47 86](#_Toc519099518)

[SWIM Code: FN48 86](#_Toc519099519)

[SWIM Code: FN49 87](#_Toc519099520)

[SWIM Code: FN50 88](#_Toc519099521)

[SWIM Code: FN51 88](#_Toc519099522)

[SWIM Code: FN52 89](#_Toc519099523)

[SWIM Code: FN52.1 89](#_Toc519099524)

[SWIM Code: FN53 90](#_Toc519099525)

[SWIM Code: FN58 90](#_Toc519099526)

[SWIM Code: FN59 91](#_Toc519099527)

[SWIM Code: FN60 91](#_Toc519099528)

[SWIM Code: FN61 92](#_Toc519099529)

[SWIM Code: FN62 93](#_Toc519099530)

[SWIM Code: FN63 93](#_Toc519099531)

[SWIM Code: FN64 94](#_Toc519099532)

[SWIM Code: FN65 94](#_Toc519099533)

[SWIM Code: FN66 95](#_Toc519099534)

[SWIM Code: FN67 95](#_Toc519099535)

[SWIM Code: FN68 96](#_Toc519099536)

[SWIM Code: FN69 97](#_Toc519099537)

[SWIM Code: FN70 97](#_Toc519099538)

[SWIM Code: FN71 98](#_Toc519099539)

[SWIM Code: FN74 98](#_Toc519099540)

[SWIM Code: FN75 99](#_Toc519099541)

[SWIM Code: FN76 99](#_Toc519099542)

[SWIM Code: FN77 100](#_Toc519099543)

[SWIM Code: FN78 101](#_Toc519099544)

[SWIM Code: FN79 102](#_Toc519099545)

[SWIM Code: FN80 102](#_Toc519099546)

[SWIM Code: FN81 103](#_Toc519099547)

[SWIM Code: FN82 103](#_Toc519099548)

[SWIM Code: FN83 104](#_Toc519099549)

[SWIM Code: FN84 105](#_Toc519099550)

[SWIM Code: FN85 105](#_Toc519099551)

[SWIM Code: FN86 106](#_Toc519099552)

[SWIM Code: FN87 106](#_Toc519099553)

[SWIM Code: HL1 107](#_Toc519099554)

[SWIM Code: HL3 107](#_Toc519099555)

[SWIM Code: HL5 108](#_Toc519099556)

[SWIM Code: HL8 108](#_Toc519099557)

[SWIM Code: HL9 109](#_Toc519099558)

[SWIM Code: PR1 109](#_Toc519099559)

[SWIM Code: PR3 110](#_Toc519099560)

[SWIM Code: PR4 110](#_Toc519099561)

[SWIM Code: PR5 110](#_Toc519099562)

[SWIM Code: PR6 111](#_Toc519099563)

[SWIM Code: PR8 111](#_Toc519099564)

[SWIM Code: PR10 112](#_Toc519099565)

[SWIM Code: PR12 112](#_Toc519099566)

[SWIM Code: PR14 113](#_Toc519099567)

[SWIM Code: PR16 113](#_Toc519099568)

[SWIM Code: PR23 114](#_Toc519099569)

[SWIM Code: PR25 114](#_Toc519099570)

[SWIM Code: PR27 114](#_Toc519099571)

[SWIM Code: PR31 115](#_Toc519099572)

[SWIM Code: PR32 115](#_Toc519099573)

[SWIM Code: PR33 116](#_Toc519099574)

[SWIM Code: PR34 116](#_Toc519099575)

[SWIM Code: PR40 116](#_Toc519099576)

[SWIM Code: PR43 117](#_Toc519099577)

[SWIM Code: PR44 117](#_Toc519099578)

[SWIM Code: PR45 118](#_Toc519099579)

[SWIM Code: PR46 119](#_Toc519099580)

[SWIM Code: PR47 119](#_Toc519099581)

[SWIM Code: PR48 120](#_Toc519099582)

[SWIM Code: PR49 120](#_Toc519099583)

[SWIM Code: PR50 121](#_Toc519099584)

[SWIM Code: PR51 121](#_Toc519099585)

[SWIM Code: PR52 122](#_Toc519099586)

[SWIM Code: PR53 122](#_Toc519099587)

[SWIM Code: PR54 123](#_Toc519099588)

[SWIM Code: WA1 123](#_Toc519099589)

[SWIM Code: WA2 125](#_Toc519099590)

[SWIM Code: WA4 125](#_Toc519099591)

[SWIM Code: WA7 126](#_Toc519099592)

[SWIM Code: WA8 127](#_Toc519099593)

[SWIM Code: WA9 127](#_Toc519099594)

[SWIM Code: WA10 128](#_Toc519099595)

[SWIM Code: WA11 129](#_Toc519099596)

[SWIM Code: WA12 130](#_Toc519099597)

[SWIM Code: WA13 130](#_Toc519099598)

[SWIM Code: WA15 131](#_Toc519099599)

[SWIM Code: WA16 132](#_Toc519099600)

[SWIM Code: WA17 132](#_Toc519099601)

[SWIM Code: WA18 133](#_Toc519099602)

[SWIM Code: WA19 134](#_Toc519099603)

[SWIM Code: WA20 134](#_Toc519099604)

[SWIM Code: WA21 135](#_Toc519099605)

[SWIM Code: WA22 135](#_Toc519099606)

[SWIM Code: WA23 136](#_Toc519099607)

[SWIM Code: WA26 137](#_Toc519099608)

[SWIM Code: WA27 137](#_Toc519099609)

[SWIM Code: WA30 138](#_Toc519099610)

[SWIM Code: WA31 138](#_Toc519099611)

[SWIM Code: WA32 139](#_Toc519099612)

[SWIM Code: WA34 140](#_Toc519099613)

[SWIM Code: WA36 140](#_Toc519099614)

[SWIM Code: WA40 141](#_Toc519099615)

[SWIM Code: WA41 142](#_Toc519099616)

[SWIM Code: WA45 143](#_Toc519099617)

[SWIM Code: WA46 144](#_Toc519099618)

[SWIM Code: WA61 144](#_Toc519099619)

[SWIM Code: WA64 145](#_Toc519099620)

[SWIM Code: WA65 146](#_Toc519099621)

[SWIM Code: WA66 147](#_Toc519099622)

[SWIM Code: WA67 147](#_Toc519099623)

[SWIM Code: WA68 148](#_Toc519099624)

[SWIM Code: WA69 148](#_Toc519099625)

[SWIM Code: WA73 149](#_Toc519099626)

[SWIM Code: WA74 150](#_Toc519099627)

[SWIM Code: WA82 151](#_Toc519099628)

[SWIM Code: WA83 151](#_Toc519099629)

[SWIM Code: WA84 152](#_Toc519099630)

[SWIM Code: WA85 152](#_Toc519099631)

[SWIM Code: WA86 153](#_Toc519099632)

[SWIM Code: WA88 153](#_Toc519099633)

[SWIM Code: WA91 154](#_Toc519099634)

[SWIM Code: WA92 154](#_Toc519099635)

[SWIM Code: WA93 155](#_Toc519099636)

[SWIM Code: WA95 156](#_Toc519099637)

[SWIM Code: WA96 156](#_Toc519099638)

[SWIM Code: WA98 157](#_Toc519099639)

[SWIM Code: WA101 157](#_Toc519099640)

[SWIM Code: WA108 158](#_Toc519099641)

[SWIM Code: WA109 159](#_Toc519099642)

[SWIM Code: WA110 159](#_Toc519099643)

[SWIM Code: WA110.1 160](#_Toc519099644)

[SWIM Code: WA111 160](#_Toc519099645)

[SWIM Code: WA112 161](#_Toc519099646)

[SWIM Code: WA113 161](#_Toc519099647)

[SWIM Code: WA114 162](#_Toc519099648)

[SWIM Code: WA115 162](#_Toc519099649)

[SWIM Code: WA116 163](#_Toc519099650)

[SWIM Code: WA117 163](#_Toc519099651)

[SWIM Code: WA118 164](#_Toc519099652)

[SWIM Code: WA119 165](#_Toc519099653)

[SWIM Code: WA120 165](#_Toc519099654)

[SWIM Code: WA120.1 166](#_Toc519099655)

[SWIM Code: WA121 166](#_Toc519099656)

[SWIM Code: WA122 167](#_Toc519099657)

[SWIM Code: WA123 168](#_Toc519099658)

[SWIM Code: WA124 168](#_Toc519099659)

[SWIM Code: WA135 169](#_Toc519099660)

[SWIM Code: WA137 169](#_Toc519099661)

[SWIM Code: WA139 170](#_Toc519099662)

[SWIM Code: WA140 171](#_Toc519099663)

[SWIM Code: WA141 171](#_Toc519099664)

[SWIM Code: WA142 172](#_Toc519099665)

[SWIM Code: WA143 172](#_Toc519099666)

[SWIM Code: WA144 173](#_Toc519099667)

[SWIM Code: WA145 173](#_Toc519099668)

[SWIM Code: WA146 174](#_Toc519099669)

[SWIM Code: WA147 174](#_Toc519099670)

[SWIM Code: WA148 175](#_Toc519099671)

[SWIM Code: WA149 175](#_Toc519099672)

[SWIM Code: WA150 176](#_Toc519099673)

[SWIM Code: WA150.1 176](#_Toc519099674)

[SWIM Code: WA151 177](#_Toc519099675)

[SWIM Code: WA152 177](#_Toc519099676)

[SWIM Code: WA158 178](#_Toc519099677)

[SWIM Code: WA158.1 179](#_Toc519099678)

[SWIM Code: WA163 179](#_Toc519099679)

[SWIM Code: WA166 180](#_Toc519099680)

[SWIM Code: WA167 180](#_Toc519099681)

[SWIM Code: WA168 181](#_Toc519099682)

[SWIM Code: WA171 181](#_Toc519099683)

[SWIM Code: WA172 182](#_Toc519099684)

[SWIM Code: WA173 183](#_Toc519099685)

[SWIM Code: WA174 184](#_Toc519099686)

[SWIM Code: WA175 185](#_Toc519099687)

[SWIM Code: WA176 185](#_Toc519099688)

[SWIM Code: WA177 186](#_Toc519099689)

[SWIM Code: WA178 186](#_Toc519099690)

[SWIM Code: WA179 187](#_Toc519099691)

[SWIM Code: WA180 188](#_Toc519099692)

[SWIM Code: WA181 188](#_Toc519099693)

[SWIM Code: WA182 188](#_Toc519099694)

[SWIM Code: WA183 189](#_Toc519099695)

[SWIM Code: WA184 189](#_Toc519099696)

[SWIM Code: WA185 190](#_Toc519099697)

[SWIM Code: WA186 191](#_Toc519099698)

[SWIM Code: WA187 191](#_Toc519099699)

[SWIM Code: WA189 192](#_Toc519099700)

[SWIM Code: WA190 193](#_Toc519099701)

[SWIM Code: WA191 193](#_Toc519099702)

[SWIM Code: WA192 194](#_Toc519099703)

[SWIM Code: WA197 195](#_Toc519099704)

[SWIM Code: WA201 195](#_Toc519099705)

[SWIM Code: WA202 196](#_Toc519099706)

[SWIM Code: WA203 196](#_Toc519099707)

[SWIM Code: WA204 197](#_Toc519099708)

[SWIM Code: WA205 197](#_Toc519099709)

[SWIM Code: WA206 198](#_Toc519099710)

[SWIM Code: WA207 198](#_Toc519099711)

[SWIM Code: WA208 199](#_Toc519099712)

[SWIM Code: WA209 199](#_Toc519099713)

[SWIM Code: WA210 200](#_Toc519099714)

[SWIM Code: WA211 201](#_Toc519099715)

[SWIM Code: WA212 201](#_Toc519099716)

[SWIM Code: WA213 202](#_Toc519099717)

[SWIM Code: WA214 202](#_Toc519099718)

[SWIM Code: WA215 203](#_Toc519099719)

[SWIM Code: WA216 204](#_Toc519099720)

[SWIM Code: WA217 204](#_Toc519099721)

[SWIM Code: WA218 205](#_Toc519099722)

[SWIM Code: WA219 205](#_Toc519099723)

[SWIM Code: WA220 206](#_Toc519099724)

[SWIM Code: WF1 206](#_Toc519099725)

[SWIM Code: WS1 207](#_Toc519099726)

[SWIM Code: WS2 208](#_Toc519099727)

[SWIM Code: WS3 209](#_Toc519099728)

[SWIM Code: WS4 210](#_Toc519099729)

[SWIM Code: WS5 211](#_Toc519099730)

[SWIM Code: WS6 212](#_Toc519099731)

[SWIM Code: WS7 213](#_Toc519099732)

[SWIM Code: WS9 214](#_Toc519099733)

[SWIM Code: WS10 215](#_Toc519099734)

[BoM ‘daily’ reported indicators 216](#_Toc519099735)

[SWIM Code: GW1 216](#_Toc519099736)

[SWIM Code: GW2 216](#_Toc519099737)

[SWIM Code: GW3 216](#_Toc519099738)

[SWIM Code: MT1 216](#_Toc519099739)

[SWIM Code: MT2 217](#_Toc519099740)

[SWIM Code: ST1 217](#_Toc519099741)

[SWIM Code: ST2 217](#_Toc519099742)

[SWIM Code: ST3 218](#_Toc519099743)

[SWIM Code: ST4 218](#_Toc519099744)

[SWIM Code: ST4.1 218](#_Toc519099745)

[SWIM Code: ST5 219](#_Toc519099746)

[SWIM Code: SW1 219](#_Toc519099747)

[SWIM Code: SW2 219](#_Toc519099748)

[SWIM Code: WQ1 219](#_Toc519099749)

[SWIM Code: WQ2 220](#_Toc519099750)

[SWIM Code: WQ3 220](#_Toc519099751)

[SWIM Code: WQ4 221](#_Toc519099752)

[SWIM Code: WQ5 221](#_Toc519099753)

[SWIM Code: WQ6 221](#_Toc519099754)

[SWIM Code: WQ7 222](#_Toc519099755)

[SWIM Code: WQ8 222](#_Toc519099756)

[SWIM Code: WQ9 222](#_Toc519099757)

# Annual Water and Sewerage Indicators

## SWIM Code: AS1

**Indicator short title:** Number water treatment plants: providing full treatment

**Units:** Count

**Title:** Number of water treatment plants providing full treatment.

**Definition:** Generally, the water treatment plant is a substantial structure involving multiple treatment methods to achieve high quality water. The treatment plant would generally include processes that remove colour and/or turbidity as well as providing filtration and disinfection. In addition to the above, it may include processes for taste and/or odour reduction, softening, pH correction and the targeted removal of elements and compounds such as iron, manganese, nitrates and pesticides.

*Includes:*

 - BOOT (Built, Owned, Operated, and Transferred) schemes

*Excludes:*

 - disinfection only schemes

 - secondary disinfection plants even when there is pH correction as well

*Notes:*

 - typical full treatment processes include coagulation, flocculation, sedimentation, filtration, disinfection, membrane filtration and reverse osmosis

 - if your response to this indicator is 0, i.e. you have no WTPs providing full treatment, then AS47 (Capacity of WTPs - QG1.4b) should be reported as "NR" (Not Relevant)

**SWIM category:** Water Treatment and Supply Assets

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** DEFAULT

**QG KPI code:** QG1.4a

**NPR code:** A1

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: AS2

**Indicator short title:** Length water mains

**Units:** km

**Title:** Length of water mains (km) (including recycled water except for non-urban uses such as agriculture, or when not direct to customers)

**Definition:** The total length of water mains including; all transfer, distribution, reticulation mains and recycled water distribution and reticulation mains delivering water for urban areas.

*Includes:*

 - transfer, distribution and reticulation mains

 - recycled water distribution and reticulation mains (except for non-urban uses such as agriculture, or when not direct to customers)

*Excludes:*

 - mains associated with property water service (mains to meter) connections

 - mains delivering recycled water for non-urban uses, e.g. agriculture re-use

 - disused pipe lengths should not be counted, even if they are maintained by the water utility for possible future use

 - privately owned mains

 - mains associated with source works, e.g. borefield mains

 - mains and channels associated with sources which transfer water to treatment facilities or from scheme to scheme

 - mains associated with facilities, e.g. mains within pump stations, storage facilities or treatment plants

*Notes:*

 - utilities that provide water services to a number of urban centres either within a region, local government, or state-wide and are reporting the performance of these urban centres as part of the national performance framework either separately or aggregated must also report length of water mains used in providing the services to those urban centres. If the assets are used for multiple urban centres which are reported separately then they must be apportioned in a manner which is consistent with their use. Apportionment in line with the volume of water supplied to the urban centre reported is an acceptable way to apportion the length of these mains

 - the definition for length of water mains refers to delivery of potable water and non-potable water to customers

 - Ferrule is part of the service connection

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Water Treatment and Supply Assets

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** DEFAULT

**QG KPI code:** QG1.1

**NPR code:** A2

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: AS3

**Indicator short title:** Connections served per km water main

**Units:** Connections/km

**Title:** Properties served per km of water main.

**Definition:** Properties served per km of water main is calculated from the total water connected properties divided by the total length of water mains.

**SWIM category:** Water Treatment and Supply Assets

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** AS3:wsp+potable+raw+recycled=(CS4\*1000)/AS2

**NPR code:** A3

**Required by:** Large SPs with >10,000 connections

## SWIM Code: AS4

**Indicator short title:** Number sewage treatment plants

**Units:** Count

**Title:** Number of sewage treatment plants.

**Definition:** The total number of sewage treatment plants providing sewage services to customers.

*Includes:*

 - all primary, secondary and tertiary level treatment plants

*Notes:*

 - BOOT (Built, Owned, Operated, and Transferred) schemes should be included

**SWIM category:** Sewerage Assets

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** DEFAULT

**QG KPI code:** QG1.3

**NPR code:** A4

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: AS5

**Indicator short title:** Length sewerage mains and channels

**Units:** km

**Title:** Length of sewerage mains and channels.

**Definition:** The total length of mains and channels, including all trunk, pressure and reticulation mains. It does not include lengths associated with property connection sewers or conduits carrying treated effluent.

*Includes:*

 - combined sewerage and stormwater mains

*Excludes:*

 - lengths associated with property connection sewers or conduits carrying treated effluent

 - conduits and pipelines, (e.g. feeding paddocks for grass and land filtration), downstream from the treatment plant

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Sewerage Assets

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** DEFAULT

**QG KPI code:** QG1.2

**NPR code:** A5

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: AS6

**Indicator short title:** Connections served per km sewer main

**Units:** Connections/km

**Title:** Properties served per km of sewer main.

**Definition:** Properties served per km of sewer main is calculated from the total number of sewerage connected properties divided by the total length of sewer mains and channels.

**SWIM category:** Sewerage Assets

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** AS6:wsp+sewage=(CS8\*1000)/AS5

**NPR code:** A6

**Required by:** Large SPs with >10,000 connections

## SWIM Code: AS8

**Indicator short title:** Water main breaks per 100 km water main

**Units:** per 100 km water main

**Title:** Number of water main breaks per 100 km water main.

**Definition:** Number of water main breaks per 100 km water mains is calculated as the total number water main breaks divided by the total length water mains multiplied by 100.

*Notes:*

 - where a component of the water main breaks has been caused by direct physical damage, e.g. digging/excavation by third-parties, this may be detailed as a comment against the data (e.g. '33% of all water mains breaks were caused by third parties and/or physical (e.g. digging/excavation) damage')

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Asset Performance - Water

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** AS8:wsp+potable+raw+recycled=(AS14/AS2)\*100

**QG KPI code:** QG4.5

**NPR code:** A8

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: AS9

**Indicator short title:** Infrastructure Leakage Index (ILI)

**Units:** Index

**Title:** Infrastructure Leakage Index (ILI).

**Definition:** Real losses cannot be totally eliminated from pressurised distribution systems. The lowest technically achievable annual volume of 'real losses' for well-maintained and well-managed systems is known as the Unavoidable Annual Real Losses (UARL). System-specific values of UARL can be calculated using the component-based methodology developed by the first Water Losses Task Force (Lambert A., Brown T.G., Takizawa M. and Weimer D. (1999). A Review of Performance Indicators for Real Losses from Water Supply Systems. AQUA, Vol. 48 No 6.). The Infrastructure Leakage Index (ILI) is an indicator of how effectively real losses in the distribution system are being managed at the current operating pressures. The Infrastructure Leakage Index (ILI) is the ratio of the Current Annual Real Losses (AS32) to the Unavoidable Annual Real Losses (UARL).

*Calculation:*

Infrastructure Leakage Index = CARL (AS32: Current Annual Real Losses (ML)) / UARL (Unavoidable Annual Real Losses (ML))

The equation for calculating UARL (ML), for systems where the customer meters are located close to the property line, is:

UARL = ((((18 x km of water mains (AS2)) + (0.8 x number of service connections (CS64 x 1000))) x the average water pressure (m)) / 1000000) x 365

*Example:*

So if a utility has 100 km of water mains, 200,000 service connections and an average 30 m of pressure then:

UARL = ((((18 x 100) + (0.8 x 200000)) x 30) / 1000000) x 365 = (((1800 + 160000) x 30) / 1000000) x 365 = ((161800 x 30) / 1000000) x 365 = (4854000 / 1000000) x 365 = 4.854 x 365 = 1771.71 ML

So if a utility has a CARL of 2581.6 and a UARL of 1771.71 then:

Infrastructure Leakage Index = CARL / UARL = 2581.6 / 1771.71 = 1.46

*Notes:*

 - an Infrastructure Leakage Index of less than 1 is likely to be an error and should be rechecked

 - under some circumstances an ILI of less than 1 may occur, e.g. low service connection densities and small lengths of water mains

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Asset Performance - Water

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** A9

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: AS10

**Indicator short title:** Real water losses: service connections

**Units:** L/service connection/day

**Title:** Real water losses per service connection.

**Definition:** Real losses are leakage and overflows from mains, service reservoirs and service connections prior to customer meters. They represent a wasted resource, reduce the effective capacity of a water supply system, and may result in unnecessary operating costs. Real losses per service connection per day is an indicator of effective management that is influenced by pressure, condition or age of the infrastructure, or a combination of all of these factors.

*Includes:*

 - potable water only

*Calculation:*

Real water losses (L/service connection/day) = ((CARL (AS32: Current Annual Real Losses) x 1000000) / number of service connections (CS64 x 1,000)) / 365

*Example:*

So if a utility has a CARL of 13,047 ML and 200,000 service connections then:

Real water losses = ((13,047 x 1000000) / 200,000) / 365 = 65,235 / 365 = 178.73 L/service connection/day

*Notes:*

 - the number of service connections is not the same as the number of metered accounts or connected properties. The number of service connections can be taken as being the number of metered accounts, minus the total of any sub-meters (after master meters, e.g. to shops and flats), plus the estimated number of unmetered service connections (e.g. fire service connections). It is not acceptable to use the total connected properties value for calculating 'Real Losses' performance indicators

 - for comparison purposes water utilities with more than 20 service connections/km report this Real water losses per service connection (L/service connection/day) indicator (not Real water losses per km water main (L/km water main/day))

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Asset Performance - Water

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** AS10:wsp+potable=AS52\*1000000/(CS64\*1000)/365

**NPR code:** A10

**Required by:** Large SPs with >10,000 connections

## SWIM Code: AS11

**Indicator short title:** Real water losses: water mains

**Units:** kL/km water main/day

**Title:** Real water losses per km of water main.

**Definition:** Real losses are leakage and overflows from mains, service reservoirs and service connections prior to customer meters. They represent a wasted resource, reduce the effective capacity of a water supply system, and may result in unnecessary operating costs. Real losses per km of water main per day is an indicator of effective management that is influenced by pressure, condition or age of the infrastructure, or a combination of all of these factors.

*Includes:*

 - potable water only

*Calculation:*

Real water losses (kL/km water mains/day) = ((CARL (AS32: Current Annual Real Losses) x 1000000) / km of water mains (AS2)) / 365

*Example:*

So if a utility has a CARL of 13,047 ML and 1500 km of water mains then:

Real water losses = ((13,047 x 1000) / 1500) / 365 = 65,235 / 365 = 23.83 kL/km water mains/day.

*Notes:*

 - for comparison purposes water utilities with less than 20 service connections/km report this Real water losses per km water main (L/km water main/day) indicator (not Real water losses per service connection (L/service connection/day))

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Asset Performance - Water

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** AS11:wsp+potable=(AS52\*1000/AS54)/365

**NPR code:** A11

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: AS14

**Indicator short title:** Number of water main breaks, bursts and leaks

**Units:** Count

**Title:** Number of water main breaks, bursts and leaks (total).

**Definition:** The total number of main breaks, bursts and leaks in all diameter water distribution and reticulation mains.

*Includes:*

 - breaks caused by physical damage (e.g. digging/excavation) and third parties

 - all breaks, burst and leaks even if it doesn't result in an interruption

*Excludes:*

 - those in the property service (i.e. mains to meter connection)

 - weeps or seepages associated with above ground mains that can be fixed without shutting down the main

*Notes:*

 - the 'property service' includes any water infrastructure between the water main and the internal plumbing of the property. It may be owned by the water utility, and is often referred to as the 'mains to meter' service or connection. All water plumbing downstream of the meter is usually the property owner's asset

 - underground hydrants are not considered to be part of the water main and as such leaks in hydrants are excluded from this measure

 - where a component of total water main breaks has been caused by direct physical damage, e.g. digging/excavation by third-parties, this may be detailed as a comment against the data (e.g. '23 of the reported water mains breaks were caused by third parties and/or physical (e.g. digging/excavation) damage')

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Asset Performance - Water

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IA8

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: AS32

**Indicator short title:** Current Annual Real Losses (CARL): potable+non-potable

**Units:** ML

**Title:** Current Annual Real Losses (CARL).

**Definition:** Refers to the volume of potable and non-potable water lost from the water supply system, up to the point of measurement of consumption, due to all types of leaks, bursts and overflows. The total volume depends on frequencies, flow rates and average duration of individual leaks, bursts and overflows.

*Excludes:*

 - any consumption (even if unbilled)

*Calculation:*

Current Annual Real Losses = Total water supplied - Total water consumed - Total authorised unbilled/unmetered consumption - Total apparent losses

Total water supplied = Total water produced by the utility + any water imported from another utility - any water exported to another utility

Total water consumed = total amount of metered (billed) consumption + any billed but unmetered water consumption

Total apparent losses (AS44) = all unauthorised consumption + any under-registration/errors of retail meters

For authorised unbilled/unmetered consumption, water utilities may elect to use the default values prescribed below (as per National Performance Report (NPR) guidelines), or utilities may determine the actual values for their own operations:

 - Authorised unbilled/unmetered consumption = 0.5% of total water supplied

*Example:*

Current Annual Real Losses = Total water supplied - Total water consumed - Total authorised unbilled/unmetered consumption (= Total water supplied x 0.5%) - Total apparent losses

So if a utility supplies 100 ML of water for which 90 ML is consumed (billed) then:

Current Annual Real Losses = 100 - 90 - (100 x 0.005) - 1.9 = 100 - 90 - 0.5 - 1.9 = 7.6 ML

*Notes:*

 - Current Annual Real Losses (CARL) can also be referred to as Total real losses; Volumetric leakage level; or Current water leakage

 - the water utility should be consistent across reporting years in calculating its 'Real losses' and, where appropriate, have supporting documentation to verify assumptions for the purpose of auditing.

 - if a water utility uses values greater than the above defaults for 'authorised unbilled/unmetered consumption', sufficient data must be provided to satisfy an auditor about the accuracy of those values used.

 - Total apparent losses = Unauthorised consumption (= Total water supplied x 0.1%) + Under-registration of retail meters (= Total water consumed x 2.0%) as per indicator AS44

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Asset Performance - Water

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 62

**BoM Cat 7 code:** U12.2

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: AS38

**Indicator short title:** Number sewerage mains breaks/chokes

**Units:** Count

**Title:** Number of sewerage mains breaks and chokes.

**Definition:** Total number of sewerage main breaks and chokes. Chokes are a confirmed partial or total blockage that may or may not result in a spill to the external environment from the sewer system. Breaks or leaks are a failure of the sewer which results in an interruption to the sewerage service.

*Includes:*

 - all gravity sewer mains

 - all pressure mains (including common effluent pipelines, rising mains, etc.)

 - all vacuum system mains of any diameter

 - breaks caused by physical damage (e.g. digging/excavation) and third parties

 - all breaks and chokes even if it doesn't result in an interruption

*Excludes:*

 - property connection sewers

 - pipelines carrying treated effluent

 - recycled water distribution and reticulation mains delivering water for urban areas; such mains are to be reported as water mains

*Notes:*

 - where a component of the sewerage main breaks has been caused by direct physical damage, e.g. digging/excavation by third-parties, this may be detailed as a comment against the data (e.g. '7 of the reported sewerage main breaks were caused by third parties and/or physical (e.g. digging/excavation) damage')

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Asset Performance - Sewerage

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IA14

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: AS39

**Indicator short title:** Sewerage mains breaks/chokes per 100 km sewer main

**Units:** per 100 km sewer mains

**Title:** Number of sewerage mains breaks and chokes per 100 km sewer main.

**Definition:** The number of sewerage main breaks and chokes per 100 km of sewer main is calculated as the total number of sewerage mains breaks and chokes divided by the total length of sewer main multiplied by 100.

*Notes:*

 - where a component of the sewerage mains breaks has been caused by direct physical damage, e.g. digging/excavation by third-parties, this may be detailed as a comment against the data (e.g. '15% of all sewerage mains breaks were caused by third parties and/or physical (e.g. digging/excavation) damage')

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Asset Performance - Sewerage

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** AS39:wsp+sewage=AS38/AS5\*100

**QG KPI code:** QG4.6

**NPR code:** A14

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: AS40

**Indicator short title:** Number property connection sewer breaks/chokes

**Units:** Count

**Title:** Number of property connection sewer breaks and chokes.

**Definition:** Total number of property connection sewer breaks and chokes. A choke is a confirmed partial or total blockage that may or may not result in a spill to the external environment from the sewer system. Breaks or leaks are a failure of the sewer which results in an interruption to the sewerage service. The property connection is a short sewer owned and operated by the sewerage agency, which connects the sewer main and the customer sanitary drain. It includes a junction on the sewer main, a property connection fitting, a vertical riser (in some cases) and sufficient straight pipes to ensure the property connection fitting is within the lot to be serviced (refer to the WSAA 02 Sewerage Code of Australia).

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Asset Performance - Sewerage

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IA15

**Required by:** Large SPs with >10,000 connections

## SWIM Code: AS41

**Indicator short title:** Property connection sewer breaks/chokes per 1000 connections

**Units:** per 1000 connections

**Title:** Number of property connection sewer breaks and chokes per 1000 properties.

**Definition:** Number of property connection sewer breaks and chokes per 1000 properties is calculated as the total number property connections breaks and chokes divided by the total number of sewerage connections (units are already in 1000's).

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Asset Performance - Sewerage

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** AS41:wsp+sewage=AS40/CS8

**NPR code:** A15

**Required by:** Large SPs with >10,000 connections

## SWIM Code: AS44

**Indicator short title:** Total apparent losses: potable+non-potable

**Units:** ML

**Title:** Total apparent losses.

**Definition:** Refers to the sum of all unbilled potable and non-potable water due to unauthorised consumption or meter errors. This will include but not limited to water theft, illegal water connections, illegal water use (e.g. illegal use of fire connections), under registration of customer meters and errors in system meters. Unauthorised consumption generally refers to illegal use.

*Excludes:*

 - any authorised but unbilled water use (i.e. fire-fighting and mains flushing)

*Calculation:*

Total apparent losses = all unauthorised consumption + any under-registration/errors of retail meters

For unauthorised consumption and customer metering errors, water utilities may elect to use the default values prescribed below (as per National Performance Report (NPR) guidelines), or utilities may determine the actual values for their own operations:

 - Unauthorised consumption = 0.1% of total water supplied

 - Under-registration of retail meters = 2.0% of total water consumption

Total water supplied = Total water produced by the utility + any water imported from another utility - any water exported to another utility

Total water consumed = total amount of metered (billed) consumption + any billed but unmetered water consumption

*Example:*

Total apparent losses = Unauthorised consumption (= Total water supplied x 0.1%) + Under-registration of retail meters (= Total water consumed x 2.0%)

So if a utility supplies 100 ML of water for which 90 ML is consumed (85 ML is consumed (billed/metered) and 5 ML is consumed (authorised unbilled/unmetered)) then:

Apparent losses = (100 x 0.001) + (90 x 0.02) = 0.1 + 1.8 = 1.9 ML

*Notes:*

 - the water utility should be consistent across reporting years in calculating its 'Apparent losses' and, where appropriate, have supporting documentation to verify assumptions for the purpose of auditing

 - if a water utility uses values greater than the above defaults, sufficient data must be provided to satisfy an auditor about the accuracy of those values used. As a minimum, for under-registration of retail meters, the following must be provided:

 - a profile of the meter fleet, including age and type

 - the sampling regime used to determine accuracy

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Asset Performance - Water

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 61

**BoM Cat 7 code:** U12.4

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: AS45

**Indicator short title:** Other water losses

**Units:** ML

**Title:** Other water losses.

**Definition:** Water losses not specified elsewhere.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Asset Performance - Water

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 63

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: AS45.1

**Indicator short title:** Nature/amounts of 'other' water losses

**Units:** Text

**Title:** Description of the nature and amounts of 'other water losses'.

**Definition:** Please provide a text description of the nature and amounts (ML) of the two largest items included in indicator AS45 'Other water losses'.

**SWIM category:** Asset Performance - Water

**Scheme type(s):** WSP

**Data type:** TEXT

**Source of data:** USER

**ABS code:** 63.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: AS46

**Indicator short title:** Volume water lost

**Units:** ML

**Title:** Total volume of water lost.

**Definition:** This the sum of all apparent, real and other water losses in the supply system.

*Notes:*

 - supply system includes water delivery infrastructure but excludes water storages

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Asset Performance - Water

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** AS46:wsp+potable+raw=AS44+AS32+AS45

**ABS code:** 64

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: AS47

**Indicator short title:** Capacity of water treatment plants

**Units:** ML/day

**Title:** Capacity of water treatment plants.

**Definition:** Daily reliable production capacity of water treatment plants providing full water treatment and providing potable water.

*Excludes:*

 - disinfection only plants

 - secondary disinfection plants even when there is pH correction

*Notes:*

 - if AS1 (Number of water treatment plants: providing full treatment - QG1.4a) is reported as 0 then this indicator should be reported as “NR” (Not Relevant)

 - where applicable capacity is to be expressed based on designed capacity and a 20 hour operational timeframe

 - for schemes operating 24/7 or less than 20 hours per day, capacity should be the best estimate of the reliable daily production capacity

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Water Treatment and Supply Assets

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.4b

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections (outside SEQ); GAWB

## SWIM Code: AS48

**Indicator short title:** Total drinking water storage volume

**Units:** ML

**Title:** Total drinking water storage volume.

**Definition:** Total available (full capacity) storage of potable (treated/drinking) water (assuming no further production).

*Notes:*

 - the total treated/drinking water stored is to represent the volume of treated water that could be provided to the water supply network in the scheme if no further production/treatment were available

 - if potable water production stopped for any reason, what storage capacity is available to supply to customers (use full capacity of storage infrastructure, not current storage volumes)

 - if there is no treated/drinking water storage then report 0 (zero)

 - does not include pipe capacity

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Water Treatment and Supply Assets

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.7

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: AS49

**Indicator short title:** Service connections per km water main

**Units:** Service connections/km

**Title:** Service connections per km of water main.

**Definition:** Service connections per km of water main is calculated from the total water service connections divided by the total length of water mains.

*Includes:*

 - Potable water only

*Calculation:*

 - Service connections per km of water main = Number service connections (CS64 x 1,000) / km of water main

*Example:*

 - So if a utility has 234,000 service connections and 1500 km of water mains then: Service connections per km of water main = 234,000 / 1500 = 156

*Notes:*

 - the number of service connections is not the same as the number of metered accounts or connected properties. The number of service connections can be taken as being the number of metered accounts, minus the total of any sub-meters (after master meters, e.g. to shops and flats), plus the estimated number of unmetered service connections (e.g. fire service connections). It is not acceptable to use the total connected properties value for calculating 'Real Losses' performance indicators

 - For comparison purposes water utilities with more than 20 service connections/km report the Real water losses (L/service connection/day) indicator (not Real water losses (L/km water main/day))

**SWIM category:** Water Treatment and Supply Assets

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** AS49:wsp+potable=CS64/AS54\*1000

**NPR code:** IA10IA11

**Required by:** Large SPs with >10,000 connections

## SWIM Code: AS52

**Indicator short title:** Current Annual Real Losses (CARL): potable water

**Units:** ML

**Title:** Current Annual Real Losses (CARL): potable water only.

**Definition:** Refers to the volume of potable water lost from the water supply system, up to the point of measurement of consumption, due to all types of leaks, bursts and overflows. The total volume depends on frequencies, flow rates and average duration of individual leaks, bursts and overflows. Potable water is intended for use as drinking water and should materially meet the Australian Drinking Water Guidelines 2004, or equivalent.

*Excludes:*

 - any non-potable water consumption (even if unbilled)

*Notes:*

 - you don't need to enter any data for this indicator as it automatically takes values from AS32

 - it is used for the calculation of other indicator values only

**SWIM category:** Asset Performance - Water

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** Derived

**Calculated as:** AS52:potable=AS32

**NPR code:** IA10IA11

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: AS54

**Indicator short title:** Length potable water mains only

**Units:** km

**Title:** Length of potable water mains (km) only

**Definition:** The total length of potable water mains. This indicator value is taken directly from AS2 and is need for the calculation of other derived indicators.

*Notes:*

 - you don't need to enter any data for this indicator as it automatically takes values from AS2

 - it is used for the calculation of other indicator values only

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Water Treatment and Supply Assets

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** AS54:potable=AS2

**NPR code:** IA11IA49

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: CS1

**Indicator short title:** Population receiving water services

**Units:** 000s

**Title:** Population receiving water supply services.

**Definition:** The total population receiving water/sewerage services from the water business. The figure may be premised on census data obtained from the Australian Bureau of Statistics.

*Example:*

This indicator is reported in Units of thousands (000s) and to 3 decimal places so if you have a population of 3,675 people you would report that as “3.675”.

*Notes:*

 - the owner and tenant of a rented property are not counted as separate properties

 - a sewerage property which is also a trade sewerage property counts as one non-residential connected property

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Connections

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** C1

**ABS code:** 57

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: CS2

**Indicator short title:** Connected residential properties: water

**Units:** 000s

**Title:** Connected residential properties - water supply.

**Definition:** A connected residential water property is:

 - connected to the licensed water system

 - the subject of billing for water supply collection - fixed and/or consumption

 - any property which, at the end of the reporting period, is connected to the water system and is separately billed for the water services - fixed and/or consumption

*Includes:*

 - a connected rateable residential property

 - a connected non-rateable residential property

 - a connected but unmetered residential property

*Excludes:*

 - a body corporate

 - a rated but unconnected property

 - a non-real property or strata garages, i.e. a master meter for a block of separately metered strata title flats

*Example:*

This indicator is reported in Units of thousands (000s) and to 3 decimal places so if you have 3,675 connected properties you would report that as “3.675”.

Non-strata title flats or units: Where a utility has 10% or less of its properties as non-strata title flats or units, it is acceptable to report each such block of flats or units as one property. Where this is the case the utility should report this as a comment.

*Notes:*

 - if only the total number of connections is available (not residential separate from non-residential), report that total at CS4 (Total connected properties (overwrite the formula)), and enter MD (for Missing Data) for connected residential and non-residential properties

 - properties are classified according to their main purpose

 - the owner and tenant of a rented property are not counted as separate properties

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Connections

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.13

**NPR code:** C2

**ABS code:** 54

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: CS3

**Indicator short title:** Connected non-residential properties: water

**Units:** 000s

**Title:** Connected non-residential properties - water supply.

**Definition:** A connected non-residential water property is:

 - connected to the licensed water system

 - the subject of billing for water supply collection - fixed and /or consumption

 - any property which, at the end of the reporting period, is connected to the water system and is separately billed for the water services - fixed and/or consumption

*Includes:*

 - a connected non-rateable non-residential property

 - a connected but unmetered non-residential property

 - standpipe

 - public facilities

*Excludes:*

 - a body corporate

 - a rated but unconnected property

 - a non-real property or strata garages i.e. a master meter for a block of separately metered strata title flats

*Example:*

This indicator is reported in Units of thousands (000s) and to 3 decimal places so if you have 3,675 connected properties you would report that as “3.675”.

Non-strata title flats or units: where a utility has 10% or less of its properties as non-strata title flats or units, it is acceptable to report each such block of flats or units as one property. Where this is the case the utility should report this as a footnote and comment.

*Notes:*

 - if only the total number of connections is available (not residential separate from non-residential), report that total at CS4 (Total connected properties (overwrite the formula)), and enter MD (for Missing Data) for connected residential and non-residential properties.

 - properties are classified according to their main purpose

 - the owner and tenant of a rented property are not counted as separate properties

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Connections

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.14

**NPR code:** C3

**ABS code:** 55

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: CS4

**Indicator short title:** Total connected properties: water

**Units:** 000s

**Title:** Total connected properties - water supply.

**Definition:** The total number residential and non-residential properties connected to a water supply.

*Example:*

This indicator is reported in Units of thousands (000s) and to 3 decimal places so if you have 3,675 connected properties you would report that as “3.675”.

*Notes:*

 - if the number of residential and non-residential connections cannot be reported separately, please manually report (overwrite formula) the total number of connections

 - AVOID DOUBLE COUNTING in WSP-wide value. The WSP-wide calculation for this indicator adds all potable+raw-PT scheme values (it excludes recycled water scheme values as in almost all cases a property receiving recycled water also receives potable and/or raw-PT water as well). So, if a property shares both a potable and raw-PT connection (i.e. dual reticulation) then make sure that the WSP-wide value only includes this property once and not twice. You will need to overwrite the formula with the correct value

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Connections

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** CS4:wsp+potable+raw+recycled=CS2+CS3

**NPR code:** C4

**ABS code:** 56

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: CS6

**Indicator short title:** Connected residential properties: sewerage

**Units:** 000s

**Title:** Connected residential properties - sewerage.

**Definition:** A connected residential sewerage property is:

 - connected to the licensed sewerage system

 - the subject of billing for sewerage collection - fixed and/or consumption

 - any property which, at the end of the reporting period, is connected to the sewerage system and is separately billed for the sewerage services - fixed and/or consumption

*Includes:*

 - a connected rateable residential property

 - a connected non-rateable residential property

 - a connected but unmetered residential property

*Excludes:*

 - a body corporate

 - a rated but unconnected property

 - a non-real property or strata garages i.e. a master meter for a block of separately metered strata title flats

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

*Example:*

This indicator is reported in Units of thousands (000s) and to 3 decimal places so if you have 3,675 connected properties you would report that as “3.675”.

Non-strata title flats or units: where a utility has no more than 10% of its properties as non-strata title flats or units, it is acceptable to report each such block of flats or units as one property.

*Notes:*

 - if only the total number of connections is available (not residential separate from non-residential), report that total at CS8 (Total connected properties (overwrite the formula)), and enter MD (for Missing Data) for connected residential and non-residential properties

 - properties are classified according to their main purpose

 - the owner and tenant of a rented property are not counted as separate properties

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Connections

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.15

**NPR code:** C6

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: CS7

**Indicator short title:** Connected non-residential properties: sewerage

**Units:** 000s

**Title:** Connected non-residential properties - sewerage.

**Definition:** A connected non-residential sewerage property is:

 - connected to the licensed sewerage system

 - the subject of billing for sewerage collection - fixed and/or consumption

 - any property which, at the end of the reporting period, is connected to the sewerage system and is separately billed for the sewerage services - fixed and/or consumption

*Includes:*

 - a connected non-rateable non-residential property

 - a connected but unmetered non-residential property

 - public facilities

*Excludes:*

 - a body corporate

 - a rated but unconnected property

 - a non-real property or strata garages i.e. a master meter for a block of separately metered strata title flats

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

*Example:*

This indicator is reported in Units of thousands (000s) and to 3 decimal places so if you have 3,675 connected properties you would report that as “3.675”.

Non-strata title flats or units: where a utility has no more than 10% of its properties as non-strata title flats or units, it is acceptable to report each such block of flats or units as one property.

*Notes:*

 - if only the total number of connections is available (not residential separate from non-residential), report that total at CS8 (Total connected properties (overwrite the formula)), and enter MD (for Missing Data) for connected residential and non-residential properties

 - properties are classified according to their main purpose

 - the owner and tenant of a rented property are not counted as separate properties

 - a sewerage property that is also a trade waste sewerage property counts as one non-residential property

**SWIM category:** Connections

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.16

**NPR code:** C7

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: CS8

**Indicator short title:** Total connected properties: sewerage

**Units:** 000s

**Title:** Total connected properties - sewerage.

**Definition:** The total number residential and non-residential properties connected to sewerage services.

*Example:*

This indicator is reported in Units of thousands (000s) and to 3 decimal places so if you have 3,675 connected properties you would report that as “3.675”.

*Notes:*

 - if the number of residential and non-residential connections cannot be reported separately, please manually report (overwrite formula) the total number of connections here

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Connections

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** CS8:wsp+sewage=CS6+CS7

**NPR code:** C8

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: CS9

**Indicator short title:** Water quality complaints per 1000 connections

**Units:** per 1000 connections

**Title:** Number of water quality complaints per 1000 properties.

**Definition:** Number of water quality complaints per 1000 properties is calculated as the total number of water quality complaints divided by the total number of water connected properties (units are already in 1000's).

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - water

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** CS9:wsp+potable+raw+recycled=CS20/CS4

**QG KPI code:** QG4.10

**NPR code:** C9

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: CS10

**Indicator short title:** Water service complaints per 1000 connections

**Units:** per 1000 connections

**Title:** Number water service complaints per 1000 properties.

**Definition:** The number of water service complaints per 1000 properties is calculated as the total number of water service complaints divided by the total number of water connected properties (units are already in 1000's).

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - water

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** CS10:wsp+potable+raw+recycled=CS22/CS4

**NPR code:** C10

**Required by:** Large SPs with >10,000 connections

## SWIM Code: CS11

**Indicator short title:** Sewerage service complaints per 1000 connections

**Units:** per 1000 connections

**Title:** Sewerage service complaints (sewerage service quality and reliability) per 1000 properties.

**Definition:** Sewerage service complaints (sewerage service quality and reliability) per 1000 properties is calculated as the number of sewerage service complaints (sewerage service quality and reliability) divided by the total number of sewage connected properties (units are already in 1000's).

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - sewerage

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** CS11:wsp+sewage=CS21/CS8

**NPR code:** C11

**Required by:** Large SPs with >10,000 connections

## SWIM Code: CS12

**Indicator short title:** Water and sewerage billing and account complaints per 1000 connections

**Units:** per 1000 connections

**Title:** Billing and account complaints - water and sewerage per 1000 properties.

**Definition:** The number of billing and accounts complaints (water and sewerage) per 1000 properties is calculated as the total number of billing and account (water and sewerage) complaints divided by the total number of connected water properties (units are already in 1000's).

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - overall

**Scheme type(s):** Potable/Raw/Recycled/Sewage

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** CS12:sewage=CS23/CS8; CS12:wsp+potable+raw+recycled=CS23/CS4

**NPR code:** C12

**Required by:** Large SPs with >10,000 connections

## SWIM Code: CS13

**Indicator short title:** Water and sewerage complaints (all) per 1000 connections

**Units:** per 1000 connections

**Title:** Total water and sewerage complaints per 1000 properties.

**Definition:** The total number of water and sewerage complaints per 1000 properties is calculated as the total number of water and sewerage complaints divided by the total number of water connected properties (units are already in 1000's).

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - overall

**Scheme type(s):** Potable/Raw/Recycled/Sewage

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** CS13:sewage=CS62/CS8; CS13:wsp+potable+raw+recycled=CS62/CS4

**QG KPI code:** QG4.11

**NPR code:** C13

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: CS14

**Indicator short title:** Per cent calls answered within 30 seconds

**Units:** %

**Title:** Per cent of calls answered by an operator within 30 seconds.

**Definition:** Total number of calls to an operator are the total number of calls received by a retailer that were handled by an operator or customer service operator, and in the case of an IVR system covers the number of calls where the customer has selected the relevant operator option (i.e. indicated they wish to be connected to an operator or customer service officer). This excludes all calls that do not require operator attention, e.g. IVR calls where the customer does not select an operator option; calls that are abandoned before the operator option is selected. Calls after the operator option is selected but are abandoned before 30 seconds should be included in the total number of calls to an operator, but excluded from the calls answered within 30 seconds.

*Calculation:*

Per cent of calls answered by an operator within 30 seconds = (sum of individual calls answered <30 seconds / the total number of calls to an operator) x 100.

*Notes:*

 - only include calls that are answered by an operator who is able to respond to the customers enquiry rather place the customer in a queue

 - for IVR systems, the measurement period is calculated from the time that the customer selects an operator option. If the callers question is answered by the IVR, meaning they don't need to speak to an operator, the call is not counted

 - for non-IVR systems, the measurement period commences when the call is received by the switchboard until the call is answered by an operator

 - calls that are abandoned before 30 seconds are excluded from the calculation

 - after business hours to be included in calculation

**SWIM category:** Customer Service - overall

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** C14

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: CS15

**Indicator short title:** Average duration unplanned interruptions: water

**Units:** mins

**Title:** Average duration of an unplanned potable water supply interruption (weighted by number of customers affected).

**Definition:** The average duration for which a customer is without water supply due to an unplanned interruption. A water supply interruption is any event causing a total loss of water supply due to any cause. Interruptions do not include those caused by bursts or leaks in the property service (mains to meter connection), unless the property connections are owned or maintained by the water utility or the burst or leak requires the mains to be shut down for repair. An unplanned water supply interruption is when the customer has not received at least 24 hours notification (or as otherwise prescribed by regulatory requirements) of the interruption. It also includes situations where the duration of a planned interruption exceeds that which was originally notified. In this circumstance the length of the entire interruption is counted. All un-notified interruptions caused by third parties should be included.

The duration of an unplanned water supply interruption commences when the water utility is aware that water supply is no longer available at the customers first cold water tap and ceases when normal service is restored (OFWAT Return Reporting Requirements) i.e. when the last valve has been opened. Where the utility is aware of a water supply interruption via internal systems alarms, the duration commences when the alarm is raised. If a customer notifies the water utility they are without water, the duration commences at the time of notification. If the water utility is responding to a notification of a broken main, unless this notification also indicates a loss of supply, the duration commences once the break is isolated (if repairs are not being done under pressure).

*Calculation:*

The average duration of an unplanned water supply interruption = minutes off supply / total number of customers affected. Where 'minutes off supply' = the SUM of the (total unplanned water supply interruption time (minutes) x number of customers affected) for each unplanned water supply interruption that occurred. For example, if unplanned interruption one lasted 64 mins and affected 200 connections, unplanned interruption two lasted 113 mins and affected 134 connections, then the average duration would be = (64x200 + 113x134) / (200 + 134) = 83.7 minutes.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - water

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** C15

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: CS17

**Indicator short title:** Average frequency unplanned interruptions: water

**Units:** per 1000 connections

**Title:** Average frequency of unplanned potable water supply interruptions per 1000 properties.

**Definition:** Average frequency of unplanned water supply interruptions per 1000 properties is calculated as the total number of customers affected by unplanned water supply interruptions divided by the total number of water connected properties (units are already in 1000's).

*Notes:*

 - where a component of the interruptions has been caused by third-parties, this may be detailed as a comment against the data (e.g. '55% of the reported unplanned interruptions were caused by third parties')

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - water

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** CS17:wsp+potable=CS61/CS67

**QG KPI code:** QG4.7

**NPR code:** C17

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: CS18

**Indicator short title:** Restrictions applied for non-payment of water bill per 1000 connections

**Units:** per 1000 connections

**Title:** Number of restrictions applied for non-payment of water bill per 1000 properties.

**Definition:** The number of customers to which restrictions have been applied for non-payment of water bill per 1000 properties is calculated as the total number of customers to which restrictions have been applied for non-payment of water bill divided by the total number of water connected properties (units are already in 1000's).

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - water

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** CS18:wsp=CS48/CS4

**NPR code:** C18

**Required by:** Large SPs with >10,000 connections

## SWIM Code: CS19

**Indicator short title:** Customers which legal action applied for non-payment of water bill per 1000 connections

**Units:** per 1000 connections

**Title:** Number of customers to which legal action applied for non-payment of water bill per 1000 properties.

**Definition:** The number of legal actions applied for non-payment of water bill per 1000 properties is calculated as the total number of customers to which legal actions applied for non-payment of water bill divided by the total number of water connected properties (units are already in 1000's).

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - water

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** CS19:wsp=CS49/CS4

**NPR code:** C19

**Required by:** Large SPs with >10,000 connections

## SWIM Code: CS20

**Indicator short title:** Number water complaints: water quality

**Units:** Count

**Title:** Number of water quality complaints.

**Definition:** The total number of complaints received by the water utility that relate to water quality, including water quality complaints resulting from operational practices. Australian Standards define a complaint as an expression of dissatisfaction made to an organization, related to its products, or the complaints-handling process itself, where a response or resolution is explicitly or implicitly expected. (AS ISO 10002-2006). A complaint can be a written or verbal expression of dissatisfaction about an action, proposed action or failure to act by the water utility, its employees or contractors.

*Includes:* Any complaint regarding:

 - discolouration

 - taste

 - odour

 - stained washing

 - illness

 - cloudy water (e.g. caused by oxygenation), etc.

 - complaints about water quality received by the water utility in person, by mail, fax, phone, email, website or text messaging

*Excludes:* Any complaints regarding:

 - service interruption

 - adequacy of service

 - restrictions

 - pressure, etc.

 - customer queries or notifications that are informing the service provider of an issue that needs attention but is not an 'expression of dissatisfaction'

(It excludes complaints related to these issues, however, a complaint where this issue is one component that leads to another issue may be included as a complaint in this or another complaint category)

*Example:*

Complaint: If a customer rings to complain about the government's or service provider's media comments on water quality because they have suffered poor water quality, this is counted as a complaint.

Not a complaint: If a customer rings to ask about the health standards that apply for water quality, this is counted as a query, not a complaint.

*Notes:*

 - whilst complaints about third parties over which the utility has no control should not be counted as complaints, complaints about third parties where the water utility does have control (i.e. contractors) should be included

 - complaints from separate customers arising from the same cause count as separate complaints

 - a water utility must be able to differentiate a query versus a complaint in order to be materially compliant for this indicator. An enquiry can be defined as 'a request by a customer for information about a product or service provided by the service provider that does not reflect dissatisfaction'

 - Australian Standards define a complaint as an ‘expression of dissatisfaction made to an organisation, related to its products or the complaints handling process itself, where a response or resolution is explicitly or implicitly implied’ (AS ISO 100002-2006)

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - water

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IC9

**Required by:** Large SPs with >10,000 connections

## SWIM Code: CS21

**Indicator short title:** Number sewerage complaints: service

**Units:** Count

**Title:** Sewerage service complaints (sewerage service quality and reliability).

**Definition:** This includes all complaints received by the sewerage utility that relate to sewerage service quality and reliability, except in the instance that the utility can prove beyond reasonable doubt that the cause of the issue was attributable to an external source. Australian Standards define a complaint as an expression of dissatisfaction made to an organization, related to its products, or the complaints-handling process itself, where a response or resolution is explicitly or implicitly expected (AS ISO 10002-2006). A complaint can be a written or verbal expression of dissatisfaction about an action, proposed action or failure to act by the water utility, its employees or contractors.

*Includes:* All complaints concerning:

 - sewer blockages and spills

 - trade waste services

 - sewage odours

 - sewerage system reliability

 - all other sewerage issues

 - complaints received by the utility in person, by mail, fax, phone, email, website or text messaging

*Excludes:* All complaints concerning:

 - billing and accounts (such as account payment, financial loss or overcharging, billing errors or affordability)

 - customer queries or notifications that are informing the service provider of an issue that needs attention but is not an 'expression of dissatisfaction'

*Notes:*

 - whilst complaints about third parties over which the utility has no control should not be counted as complaints, complaints about third parties where the water utility does have control (i.e. contractors) should be included

 - complaints from separate customers arising from the same cause count as separate complaints

 - a water utility must be able to differentiate a query versus a complaint in order to be materially compliant for this indicator. An enquiry can be defined as 'a request by a customer for information about a product or service provided by the service provider that does not reflect dissatisfaction'

 - Australian Standards define a complaint as an ‘expression of dissatisfaction made to an organisation, related to its products or the complaints handling process itself, where a response or resolution is explicitly or implicitly implied’ (AS ISO 100002-2006)

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - sewerage

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IC11

**Required by:** Large SPs with >10,000 connections

## SWIM Code: CS22

**Indicator short title:** Number water complaints: service

**Units:** Count

**Title:** Number water service complaints.

**Definition:** This includes all complaints received by the water utility that relate to the quality or reliability of the water service, except in the instance that the utility can prove beyond reasonable doubt that the cause of the issue was attributable to an external source. Australian Standards define a complaint as an expression of dissatisfaction made to an organization, related to its products, or the complaints-handling process itself, where a response or resolution is explicitly or implicitly expected (AS ISO 10002-2006). A complaint can be a written or verbal expression of dissatisfaction about an action, proposed action or failure to act by the water utility, its employees or contractors.

*Includes:* Any water complaint concerning:

 - bursts

 - leaks

 - service interruptions (this is not counted as a complaint unless the customer expresses dissatisfaction about the interruption)

 - adequacy of service

 - water pressure

 - water reliability

 - complaints received by the utility in person, by mail, fax, phone, email, website or text messaging

*Excludes:* Any water complaint concerning:

 - water quality

 - billing and accounts

 - government pricing policy

 - tariff structures

 - customer queries or notifications that are informing the service provider of an issue that needs attention but is not an 'expression of dissatisfaction'

*Notes:*

 - whilst complaints about third parties over which the utility has no control should not be counted as complaints, complaints about third parties where the water utility does have control (i.e. contractors) should be included

 - complaints from separate customers arising from the same cause count as separate complaints

 - a water utility must be able to differentiate a query versus a complaint in order to be materially compliant for this indicator. An enquiry can be defined as 'a request by a customer for information about a product or service provided by the service provider that does not reflect dissatisfaction'

 - Australian Standards define a complaint as an ‘expression of dissatisfaction made to an organisation, related to its products or the complaints handling process itself, where a response or resolution is explicitly or implicitly implied’ (AS ISO 100002-2006)

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - water

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IC10

**Required by:** Large SPs with >10,000 connections

## SWIM Code: CS23

**Indicator short title:** Number water and sewerage complaints: billing and accounts

**Units:** Count

**Title:** Number of billing and account complaints - water and sewerage.

**Definition:** This includes all complaints received by the utility that relate to both water and sewerage billing and accounts. Australian Standards define a complaint as an expression of dissatisfaction made to an organization, related to its products, or the complaints-handling process itself, where a response or resolution is explicitly or implicitly expected (AS ISO 10002-2006). A complaint can be a written or verbal expression of dissatisfaction about an action, proposed action or failure to act by the water utility, its employees or contractors.

Where a customer rings to query an account (e.g. could you explain how my bill is calculated) this is not to be recorded as a complaint unless the customer identifies that they have rung to make a complaint. If the customer rings to make an enquiry but remains dissatisfied or the enquiry identifies an error in the bill this should be recorded as a complaint. If a customer makes repeated contact on the same billing issue this should be recorded as a complaint. If an operator is doubtful whether the customer is making an enquiry or a complaint they should ask the customer if they want a complaint to be recorded.

*Includes:* Any water or sewerage complaint concerning:

 - account payment

 - financial loss or overcharging

 - billing errors

 - affordability

 - complaints received by the utility in person, by mail, fax, phone, email, website or text messaging

*Excludes:* Any water or sewerage complaint concerning:

 - other water or sewerage issues (e.g. water supply or sewerage services such as bursts, leaks, blockages, quality, odour, etc.)

 - government pricing policy

 - tariff structures

 - a correctly calculated bill that is questioned as incorrect or 'too high'

It excludes complaints related to these issues, however, a complaint where this issue is one component that leads to another issue may be included as a complaint in this or another complaint category.

*Notes:*

 - whilst complaints about third parties over which the utility has no control should not be counted as complaints, complaints about third parties where the water utility does have control (i.e. contractors) should be included

 - complaints from separate customers arising from the same cause count as separate complaints

 - a water utility must be able to differentiate a query versus a complaint in order to be materially compliant for this indicator. An enquiry can be defined as 'a request by a customer for information about a product or service provided by the service provider that does not reflect dissatisfaction'

 - Australian Standards define a complaint as an ‘expression of dissatisfaction made to an organisation, related to its products or the complaints handling process itself, where a response or resolution is explicitly or implicitly implied’ (AS ISO 100002-2006)

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - overall

**Scheme type(s):** Potable/Raw/Recycled/Sewage

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IC12

**Required by:** Large SPs with >10,000 connections

## SWIM Code: CS24

**Indicator short title:** Number water and sewerage complaints: all other

**Units:** Count

**Title:** Other water and sewerage complaints not reported elsewhere.

**Definition:** These are all other water and sewerage complaints that have not been reported elsewhere. Australian Standards define a complaint as an expression of dissatisfaction made to an organization, related to its products, or the complaints-handling process itself, where a response or resolution is explicitly or implicitly expected (AS ISO 10002-2006). A complaint can be a written or verbal expression of dissatisfaction about an action, proposed action or failure to act by the water utility, its employees or contractors. If an operator is doubtful whether the customer is making an enquiry or a complaint they should ask the customer if they want a complaint to be recorded.

*Includes:*

 - complaints received by the utility in person, by mail, fax, phone, email, website or text messaging

*Excludes:*

 - complaints previously reported about water service

 - complaints previously reported about sewerage service

 - complaints previously reported about water quality

 - complaints previously reported about billing and accounts

 - complaints about tariff structures

 - complaints about government policy

 - customer queries or notifications that are informing the service provider of an issue that needs attention but is not an 'expression of dissatisfaction'

*Notes:*

 - whilst complaints about third parties over which the utility has no control should not be counted as complaints, complaints about third parties where the water utility does have control (i.e. contractors) should be included

 - complaints from separate customers arising from the same cause count as separate complaints

 - a water utility must be able to differentiate a query versus a complaint in order to be materially compliant for this indicator. An enquiry can be defined as 'a request by a customer for information about a product or service provided by the service provider that does not reflect dissatisfaction'

 - Australian Standards define a complaint as an ‘expression of dissatisfaction made to an organisation, related to its products or the complaints handling process itself, where a response or resolution is explicitly or implicitly implied’ (AS ISO 100002-2006)

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - overall

**Scheme type(s):** Potable/Raw/Recycled/Sewage

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IC13.1

**Required by:** Large SPs with >10,000 connections

## SWIM Code: CS48

**Indicator short title:** Number restrictions applied for non-payment of water bill

**Units:** Count

**Title:** Number of restrictions applied for non-payment of water bill.

**Definition:** The total number of restrictions (or disconnections) applied for non-payment of water bills in the reporting period.

*Includes:*

 - all cases where restriction devices are fitted to reduce water flows to a customer due to non-payment of accounts

 - all disconnection due to non-payment of accounts

 - both residential and non-residential customers

*Excludes:*

 - any disconnections or restrictions caused by reasons other than non-payment of water bills

 - where a business threatens to restrict a supply, but does not undertake the fitting of a restrictor

 - disconnections carried out due to unsafe infrastructure connected to the water utility's system

 - customers who choose to disconnect from the water utilities supply (e.g. a due to preference for a tank water supply)

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - water

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IC18

**Required by:** Large SPs with >10,000 connections

## SWIM Code: CS49

**Indicator short title:** Number customers which legal action applied for non-payment of water bill

**Units:** Count

**Title:** Number of customers to which legal action has been applied for non-payment of water bill.

**Definition:** The total number of legal actions applied for non-payment of water bills in the reporting period. Legal action commences from issue of summons.

*Includes:*

 - both residential and non-residential customers

*Excludes:*

 - where a utility threatens to take legal action, but does not proceed

*Notes:*

 - multiple restrictions, disconnections/legal actions for one customer should be counted as separate occasions

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - water

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IC19

**Required by:** Large SPs with >10,000 connections

## SWIM Code: CS61

**Indicator short title:** Number customers affected by unplanned interruptions

**Units:** Count

**Title:** Number of customers affected by unplanned water interruptions.

**Definition:** Customers affected is the count of individual customers who experience loss of water supply due to an unplanned water supply interruption. A water supply interruption is any event causing a total loss of water supply due to any cause. Interruptions do not include those caused by bursts or leaks in the property service (mains to meter connection), unless the property connections are owned or maintained by the water utility or the burst or leak requires the mains to be shut down for repair. An unplanned water supply interruption is when the customer has not received at least 24 hours notification (or as otherwise prescribed by regulatory requirements) of the interruption. It also includes situations where the duration of a planned interruption exceeds that which was originally notified. In this circumstance the length of the entire interruption is counted. All un-notified interruptions caused by third parties should be included. It is calculated as the sum of their number of affected customers/connections for each unplanned water supply interruption. For example, a water supply interruption which causes loss of supply to 100 customers is 100 customers affected. For two interruptions, where say 1000 connections were affected by the first, and 500 affected by the second, this would give a total of 1500 affected customers/connections.

*Includes:*

 - planned water supply interruptions which exceed the times that which was originally notified

 - all un-notified interruptions caused by third parties (include a comment on the proportion of third-party caused interruptions if possible)

*Excludes:*

 - property service connection interruptions (unless the burst or leak requires the water main to be shut down for repair and therefore affects multiple customers)

 - interruptions that cause some reduction to the level of service but where normal activities (shower, washing machine, toilet flushing, etc.) are still possible

 - breaks in house connection branches

 - planned water supply interruptions (i.e. an interruption for which the utility has provided at least 24 hours advanced notification (or as otherwise prescribed by regulatory requirements))

*Notes:*

 - where a component of the interruptions has been caused by third-parties, this may be detailed as a comment against the data (e.g. '55 of the reported customers affected by unplanned interruptions were caused by third parties')

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - water

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IC17

**Required by:** Large SPs with >10,000 connections

## SWIM Code: CS62

**Indicator short title:** Number water and sewerage complaints: all

**Units:** Count

**Title:** Total water and sewerage complaints.

**Definition:** This is the total number of complaints received by the utility that relate to water or sewerage services. Australian Standards define a complaint as an expression of dissatisfaction made to an organization, related to its products, or the complaints-handling process itself, where a response or resolution is explicitly or implicitly expected (AS ISO 10002-2006). A complaint can be a written or verbal expression of dissatisfaction about an action, proposed action or failure to act by the water utility, its employees or contractors. If an operator is doubtful whether the customer is making an enquiry or a complaint they should ask the customer if they want a complaint to be recorded.

*Includes:* any complaints regarding:

 - bursts, leaks, blockages, chokes

 - service interruptions (where the customer expresses dissatisfaction about the interruption, i.e. not just reporting the incident)

 - adequacy of service

 - water pressure

 - water quality or reliability

 - sewerage service complaints

 - sewage odours

 - affordability

 - billings

 - behaviour of staff or agents

 - any other water or sewerage issues

 - complaints received by the utility in person, by mail, fax, phone, email, website or text messaging

*Excludes:*

 - complaints regarding government pricing policy

 - complaints regarding tariff structures

 - customer queries or notifications that are informing the service provider of an issue that needs attention but is not an 'expression of dissatisfaction'

*Example:*

Complaint: If a customer rings to complain about the government's or service provider's media comments on water quality because they have suffered poor water quality, this is counted as a complaint.

Not a complaint: If a customer rings to ask about the health standards that apply for water quality, this is counted as a query, not a complaint.

*Notes:*

 - whilst complaints about third parties over which the utility has no control should not be counted as complaints, complaints about third parties where the water utility does have control (i.e. contractors) should be included

 - complaints from separate customers arising from the same cause count as separate complaints

 - a water utility must be able to differentiate a query versus a complaint in order to be materially compliant for this indicator. An enquiry can be defined as 'a request by a customer for information about a product or service provided by the service provider that does not reflect dissatisfaction'

 - Australian Standards define a complaint as an ‘expression of dissatisfaction made to an organisation, related to its products or the complaints handling process itself, where a response or resolution is explicitly or implicitly implied’ (AS ISO 100002-2006)

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - overall

**Scheme type(s):** Potable/Raw/Recycled/Sewage

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** CS62:potable+raw+recycled=CS20+CS22+CS23+CS24; CS62:sewage=CS21+CS23+CS24; CS62:wsp=CS20+CS21+CS22+CS23+CS24

**NPR code:** IC13

**Required by:** Large SPs with >10,000 connections

## SWIM Code: CS64

**Indicator short title:** Total service connections: water

**Units:** 000s

**Title:** Total service connections.

**Definition:** The total number of water service connections. The number of service connections is not the same as the number of metered accounts or connected properties (CS4). The number of service connections can be taken as being the number of metered accounts, minus the total of any sub-meters (after master meters, e.g. to shops and flats), plus the estimated number of unmetered service connections (e.g. fire service connections). For the purposes of water loss/leakage index calculations, to avoid the over-estimation of service connection estimations in systems with multiple residential and commercial properties on common service connections (main to property line), the number of service connections should be calculated as the sum of the following:

The number of service connections to single properties + the number of service connections to multiple properties (1 service connection to 20 apartments = 1 not 20 service connections) + number of service connections to commercial and industrial properties + any other service connections not previously counted.

*Notes:*

 - it is not acceptable to use the total connected properties value (CS4) for calculating real losses performance indicators

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Connections

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IA10

**Required by:** Large SPs with >10,000 connections

## SWIM Code: CS65

**Indicator short title:** Percent CSS response target met: sewerage incidents

**Units:** %

**Title:** Percentage of sewerage incidents (including main breaks and chokes) that were responded to that met the times detailed within your Customer Service Standard Targets.

**Definition:** This is the percentage of time that you respond to a sewerage service incidents, regardless of whether the incident causes an interruption to customers, within the times stated in your Customer Service Standard (CSS) Targets.

*Notes:*

 - a break or choke is a failure of the sewer which may or may not result in an interruption to the sewerage service

 - customer service standards or service performance standards must set targets for response time for sewerage incidents. This indicator aims to demonstrate how well the provider meets those targets

*Example:*

Your CSS targets state the following 'sewerage incident' targets:

1. Priority 1: respond within 1 hr

2. Priority 2: respond within 24 hrs

3. Priority 3: respond within 7 days

During the reporting period you have had 20 priority 1 incidents (19 responded to within 1 hr); 43 priority 2 incidents (40 responded to within 24 hrs); and 87 priority 3 incidents (77 responded to within 7 days). So in total you have responded to 19+40+77=136 sewerage incident within target CSS time out of a total of 20+43+87=150 sewerage incidents. Therefore the per cent of incidents responded to with CSS targets is 136/150\*100=90.7%

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - sewerage

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG4.9

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: CS66

**Indicator short title:** Percent CSS response target met: water incidents

**Units:** %

**Title:** Percentage of water service incidents (including bursts and leaks) that were responded to that met the times detailed within your Customer Service Standard Targets.

**Definition:** This is the percentage of time that you respond to a water service incidents, regardless of whether the incident causes an interruption to customers, within the times stated in your Customer Service Standard (CSS) Targets.

*Example:*

Your CSS targets state the following 'water incident' targets:

1. Priority 1: respond within 1 hr

2. Priority 2: respond within 24 hrs

3. Priority 3: respond within 7 days

During the reporting period you have had 20 priority 1 incidents (19 responded to within 1 hr); 43 priority 2 incidents (40 responded to within 24 hrs); and 87 priority 3 incidents (77 responded to within 7 days). So in total you have responded to 19+40+77=136 water incident within target CSS time out of a total of 20+43+87=150 water incidents. Therefore the per cent of incidents responded to with CSS targets is 136/150\*100=90.7%

*Notes:*

 - a burst or leak is a failure of the network which may or may not result in an interruption to the water service

 - customer service standards or service performance standards must set targets for response time for water incidents. This indicator aims to demonstrate how well the provider meets those targets

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Customer Service - water

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG4.8

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: CS67

**Indicator short title:** Total connected properties: potable water only

**Units:** 000s

**Title:** Total connected properties - potable only water supply.

**Definition:** The total number residential and non-residential properties connected to a potable water supply.

*Notes:*

 - this indicator is purely used to calculate other indicators

 - you don't need to enter any data for this indicator as it automatically takes values from the potable component of CS4

**SWIM category:** Connections

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** CS67:potable=CS4; CS67:wsp=sum\_of\_schemes(potable)

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: EN1

**Indicator short title:** Per cent sewage treated: maximum primary level only

**Units:** %

**Title:** Per cent of sewage treated to a maximum primary level only.

**Definition:** The per cent of sewage treated to a primary level only is calculated as the total volume of sewage treated receiving only primary treatment divided by the total volume of sewage treated multiplied by 100.

*Notes:*

 - primary treatment is the first major treatment process in a sewage treatment facility, principally designed to remove a substantial amount of suspended matter, but little or no colloidal or dissolved matter. Typical primary sewage treatment processes may include clarification (with or without chemical treatment, to accomplish solid-liquid separation), grease removal and screens

 - the sum of the indicators reporting per cent of sewage treated to a 'primary level only' plus 'secondary level only' plus 'tertiary level' should equal 100% (i.e. not more than 100%)

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Compliance & treatment - sewerage

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** EN1:wsp+sewage=EN18/WA31\*100

**NPR code:** E1

**ABS code:** 121

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: EN2

**Indicator short title:** Per cent sewage treated: maximum secondary level only

**Units:** %

**Title:** Per cent of sewage treated to a maximum secondary (and primary) level only.

**Definition:** The per cent of sewage treated to a secondary level only is calculated as the total volume of sewage collected receiving a maximum of secondary treatment divided by the total volume of sewage treated multiplied by 100.

*Notes:*

 - secondary treatment is the first major treatment process in a sewage treatment facility, typically, a biological treatment process that is designed to remove approximately 85 per cent of the Biological Oxygen Demand (BOD) and influent suspended solids. Some nutrients may incidentally be removed, and ammonia may be converted to nitrate. Typical secondary sewage treatment processes may include sand filtration, disinfection, a polishing step (to lower suspended solids and bacterial levels), activated-sludge processes, anaerobic plus aerobic processes, biological filters and lagoons (aerated, facultative, maturation or polishing)

 - the sum of the indicators reporting per cent of sewage treated to a 'primary level only' plus 'secondary level only' plus 'tertiary level' should equal 100% (i.e. not more than 100%)

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Compliance & treatment - sewerage

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** EN2:wsp+sewage=EN19/WA31\*100

**NPR code:** E2

**Required by:** Large SPs with >10,000 connections

## SWIM Code: EN3

**Indicator short title:** Per cent sewage treated: tertiary level

**Units:** %

**Title:** Per cent of sewage treated to a tertiary level.

**Definition:** The per cent of sewage treated to a tertiary level is calculated as the total volume of sewage collected receiving tertiary treatment divided by the total volume of sewage treated multiplied by 100.

*Notes:*

 - tertiary or advanced treatment is principally designed to remove nutrients, such as phosphorus (typically <2 mg/L) and/or nitrogen (typically <15 mg/L). A high percentage of effluent suspended solids (typically >95 per cent) are also removed. Tertiary treatment may additionally target other contaminants of concern, e.g. toxicants and salt for discharges into sensitive waterways or reuse applications where high quality recycled water is required. Typical tertiary sewage treatment processes may include biological nutrient removal plants, chemical dosing of secondary plants for nutrient removal (including lagoons), enhanced pond treatment systems for nutrient removal, reverse osmosis and advanced filtration systems, membrane bioreactors and secondary treatment plus grass plots or wetlands for nutrient removal

 - the sum of the indicators reporting per cent of sewage treated to a 'primary level only' plus 'secondary level only' plus 'tertiary level' should equal 100% (i.e. not more than 100%)

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Compliance & treatment - sewerage

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** EN3:wsp+sewage=EN20/WA31\*100

**NPR code:** E3

**Required by:** Large SPs with >10,000 connections

## SWIM Code: EN8

**Indicator short title:** Per cent biosolids reused

**Units:** %

**Title:** Per cent of biosolids reused.

**Definition:** What per cent of your biosolids produced are reused? Biosolids are the stabilised organic solids derived from sewage treatment processes. Biosolids reuse involves managing biosolids safely and sustainably to beneficially utilise their nutrient, energy, or other values. This may include biosolids beneficially used for agriculture (e.g. fertiliser), soil conditioning, mine rehabilitation, and other applications recognised as reuse. The dry weight of biosolids reused may be greater than the dry weight of biosolids produced if the business is also reusing existing stockpiles.

Total dry weight tonnes of biosolids produced: for mechanical or other sewage treatment processes where the biosolids are available for reuse within a short time frame (e.g. less than one month) the volumes produced for the financial year should be included. For sewage treatment processes where the biosolids are not available for reuse within a short time frame (e.g. lagoon processes of 10-30 years) the utility should account for the accumulation of solids over a financial year. It is suggested that the volume accumulated be calculated using one of the following methodologies: a) Using appropriate sampling techniques, determine the volume of solids entering the lagoon process (or equivalent) per annum. After accounting for those solids consumed due to biological activity, determine the total accumulation of solids for the financial year; or, b) Assess the existing depth of accumulated solids in all lagoons to determine an average annual rate of accumulation. This average figure should then be used.

*Calculation:*

Per cent of biosolids reused = (Total dry weight tonnes of biosolids reused / Total dry weight tonnes of biosolids produced) x 100.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Biosolids

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** E8

**Required by:** Large SPs with >10,000 connections

## SWIM Code: EN9

**Indicator short title:** Greenhouse gas emissions: water per 1000 connections

**Units:** t CO2eq/1000 connections

**Title:** Greenhouse gas emissions (net tonnes CO2-equivalents) - Water (per 1000 connected water properties).

**Definition:** Greenhouse gas emissions (net tonnes CO2-e) (water) per 1000 properties is calculated as the greenhouse gas emissions (net tonnes CO2-e) (water) divided by the total number of water connected properties (units are already in 1000's). The greenhouse gas emissions generated by the water utility, directly and indirectly, through all its operations relating to water supply. Conversion factors should be based on those provided by the Department of Climate Change - National Greenhouse Accounts (NGA) Factors specific to the water utility's location. Includes bore fields, pipelines and water mains and channels associated with water sources and for the transfer of water from scheme to scheme.

*Notes:*

 - CO2-e refers to carbon dioxide equivalents, i.e. greenhouse gases expressed as carbon dioxide

**SWIM category:** Greenhouse Gas Emissions

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** EN9:wsp=EN14/CS4

**NPR code:** E9

**Required by:** Large SPs with >10,000 connections

## SWIM Code: EN9.1

**Indicator short title:** Greenhouse gas emissions: water per ML

**Units:** t CO2eq/ML

**Title:** Greenhouse gas emissions (net tonnes CO2-equivalents) - Water (per ML - bulk utilities).

**Definition:** Greenhouse gas emissions (net tonnes CO2-e) (water) per ML is calculated as the greenhouse gas emissions (net tonnes CO2-e) (water) divided by the total volume of water supplied in ML. The greenhouse gas emissions generated by the water utility, directly and indirectly, through all its operations relating to water supply. Conversion factors should be based on those provided by the Department of Climate Change - National Greenhouse Accounts (NGA) Factors specific to the water utility's location. Includes bore fields, pipelines and water mains and channels associated with water sources and for the transfer of water from scheme to scheme.

*Notes:*

 - Reported by Bulk Water Utilities only

 - CO2-e refers to carbon dioxide equivalents, i.e. greenhouse gases expressed as carbon dioxide

**SWIM category:** Greenhouse Gas Emissions

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** EN9.1:wsp=EN14/WA110

**NPR code:** E9.1

**Required by:** GAWB

## SWIM Code: EN10

**Indicator short title:** Greenhouse gas emissions: sewage per 1000 connections

**Units:** t CO2eq/1000 connections

**Title:** Greenhouse gas emissions (net tonnes CO2-equivalents) - Sewage (per 1000 connected sewage properties).

**Definition:** Greenhouse gas emissions (net tonnes CO2-e) (sewage) per 1000 properties is calculated as the greenhouse gas emissions (net tonnes CO2-e) (sewage) divided by the total number of sewage connected properties (units are already in 1000's). The greenhouse gas emissions generated by the water utility, directly and indirectly, through all its operations relating to sewerage. Conversion factors should be based on those provided by the Department of Climate Change - National Greenhouse Accounts (NGA) Factors specific to the water utility's location.

*Notes:*

 - CO2-e refers to carbon dioxide equivalents, i.e. greenhouse gases expressed as carbon dioxide

**SWIM category:** Greenhouse Gas Emissions

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** EN10:wsp=EN15/CS8

**NPR code:** E10

**Required by:** Large SPs with >10,000 connections

## SWIM Code: EN11

**Indicator short title:** Greenhouse gas emissions: other per 1000 water connections

**Units:** t CO2eq/1000 connections

**Title:** Net greenhouse gas emissions (net tonnes CO2-equivalents) - Other (per 1000 connected water properties).

**Definition:** Net greenhouse gas emissions (net tonnes CO2-equivalents) (other) per 1000 connected water properties is calculated as the net greenhouse gas emissions (net tonnes CO2-e) (other) divided by the total number of connected water properties (units are already in 1000's). This indicator is a balancing item, which reports the net greenhouse gas emissions generated by the water utility, directly and indirectly relating to other activities such as transport (vehicles and air travel) and office buildings. This other category should also include all sequestration activities (*Notes:* reporting a negative figure is appropriate in the case that the amount of carbon sequestered is greater than the carbon emissions from transport and office buildings). Conversion factors should be based on those provided by the Department of Climate Change - National Greenhouse Accounts (NGA) Factors specific to the water utility's location.

*Notes:*

 - CO2-e refers to carbon dioxide equivalents, i.e. greenhouse gases expressed as carbon dioxide

**SWIM category:** Greenhouse Gas Emissions

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** EN11:wsp=EN16/CS4

**NPR code:** E11

**Required by:** Large SPs with >10,000 connections

## SWIM Code: EN11.1

**Indicator short title:** Greenhouse gas emissions: other per ML

**Units:** t CO2eq/ML

**Title:** Net greenhouse gas emissions (net tonnes CO2-equivalents) - Other (per ML - bulk utilities).

**Definition:** Net greenhouse gas emissions (net tonnes CO2-equivalents) (other) per ML is calculated as the net greenhouse gas emissions (net tonnes CO2-e) (other) divided by the total volume of water supplied in ML. This indicator is a balancing item, which reports the net greenhouse gas emissions generated by the water utility, directly and indirectly relating to other activities such as transport (vehicles and air travel) and office buildings. This other category should also include all sequestration activities (*Notes:* reporting a negative figure is appropriate in the case that the amount of carbon sequestered is greater than the carbon emissions from transport and office buildings). Conversion factors should be based on those provided by the Department of Climate Change - National Greenhouse Accounts (NGA) Factors specific to the water utility's location.

*Notes:*

 - Reported by Bulk Water Utilities only

 - CO2-e refers to carbon dioxide equivalents, i.e. greenhouse gases expressed as carbon dioxide

**SWIM category:** Greenhouse Gas Emissions

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** EN11.1:wsp=EN16/WA110

**NPR code:** E11.1

**Required by:** GAWB

## SWIM Code: EN12

**Indicator short title:** Greenhouse gas emissions: all per 1000 water connections

**Units:** t CO2eq/1000 connections

**Title:** Total net greenhouse gas emissions (net tonnes - CO2-equivalents) - All (per 1000 water connected properties).

**Definition:** The total net greenhouse gas emissions (net tonnes CO2-e) (all) per 1000 properties is calculated as the total net greenhouse gas emissions (net tonnes CO2-e) (all) divided by the total number of water connected properties (units are already in 1000's). This indicator is the total net greenhouse emissions from water, sewerage and other. Conversion factors should be based on those provided by the Department of Climate Change - National Greenhouse Accounts (NGA) Factors specific to the water utility's location.

*Notes:*

 - CO2-e refers to carbon dioxide equivalents, i.e. greenhouse gases expressed as carbon dioxide

**SWIM category:** Greenhouse Gas Emissions

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** EN12:wsp=EN17/CS4

**NPR code:** E12

**Required by:** Large SPs with >10,000 connections

## SWIM Code: EN12.1

**Indicator short title:** Greenhouse gas emissions: all per ML

**Units:** t CO2eq/ML

**Title:** Total net greenhouse gas emissions (net tonnes - CO2-equivalents) - All (per ML - bulk utilities).

**Definition:** The total net greenhouse gas emissions (net tonnes CO2-e) (all) per ML is calculated as the total net greenhouse gas emissions (net tonnes CO2-e) (all) divided by the total volume of water supplied in ML. This indicator is the total net greenhouse emissions from water, sewerage and other. Conversion factors should be based on those provided by the Department of Climate Change - National Greenhouse Accounts (NGA) Factors specific to the water utility's location.

*Notes:*

 - Reported by Bulk Water Utilities only

 - CO2-e refers to carbon dioxide equivalents, i.e. greenhouse gases expressed as carbon dioxide

**SWIM category:** Greenhouse Gas Emissions

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** EN12.1:wsp=EN17.1/WA110

**NPR code:** E12.1

**Required by:** GAWB

## SWIM Code: EN14

**Indicator short title:** Greenhouse gas emissions: water

**Units:** t CO2eq

**Title:** Greenhouse gas emissions (net tonnes CO2-equivalents) - Water (total).

**Definition:** The greenhouse gas emissions generated by the water utility, directly and indirectly, through all its operations relating to water supply. Conversion factors should be based on those provided by the Department of Climate Change - National Greenhouse Accounts (NGA) Factors specific to the water utility's location. Includes bore fields, pipelines and water mains and channels associated with water sources and for the transfer of water from scheme to scheme.

*Notes:*

 - CO2-e refers to carbon dioxide equivalents, i.e. greenhouse gases expressed as carbon dioxide

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Greenhouse Gas Emissions

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IE9

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: EN15

**Indicator short title:** Greenhouse gas emissions: sewage

**Units:** t CO2eq

**Title:** Greenhouse gas emissions (net tonnes CO2-equivalents) - Sewage (total).

**Definition:** The greenhouse gas emissions generated by the water utility, directly and indirectly, through all its operations relating to sewerage. Conversion factors should be based on those provided by the Department of Climate Change - National Greenhouse Accounts (NGA) Factors specific to the water utility's location.

*Notes:*

 - CO2-e refers to carbon dioxide equivalents, i.e. greenhouse gases expressed as carbon dioxide

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Greenhouse Gas Emissions

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IE10

**Required by:** Large SPs with >10,000 connections

## SWIM Code: EN16

**Indicator short title:** Greenhouse gas emissions: other

**Units:** t CO2eq

**Title:** Net greenhouse gas emissions (net tonnes CO2-equivalents) - Other (total).

**Definition:** This indicator is a balancing item, which reports the net greenhouse gas emissions generated by the water utility, directly and indirectly relating to other activities such as transport (vehicles and air travel) and office buildings. This other category should also include all sequestration activities (*Notes:* reporting a negative figure is appropriate in the case that the amount of carbon sequestered is greater than the carbon emissions from transport and office buildings). Conversion factors should be based on those provided by the Department of Climate Change - National Greenhouse Accounts (NGA) Factors specific to the water utility's location.

*Notes:*

 - CO2-e refers to carbon dioxide equivalents, i.e. greenhouse gases expressed as carbon dioxide

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Greenhouse Gas Emissions

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IE11

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: EN17

**Indicator short title:** Greenhouse gas emissions: all

**Units:** t CO2eq

**Title:** Total net greenhouse gas emissions (net tonnes - CO2-equivalents) - All (total).

**Definition:** This indicator is the total net greenhouse gas emissions from water, sewerage and other. Conversion factors should be based on those provided by the Department of Climate Change - National Greenhouse Accounts (NGA) Factors specific to the water utility's location.

*Notes:*

 - CO2-e refers to carbon dioxide equivalents, i.e. greenhouse gases expressed as carbon dioxide

**SWIM category:** Greenhouse Gas Emissions

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** EN17:wsp=EN14+EN15+EN16

**NPR code:** IE12

**Required by:** Large SPs with >10,000 connections

## SWIM Code: EN17.1

**Indicator short title:** Greenhouse gas emissions: all (Bulk Water Utility)

**Units:** t CO2eq

**Title:** Total net greenhouse gas emissions (net tonnes - CO2-equivalents) - All (Bulk Water Utility - total).

**Definition:** This indicator is the total net greenhouse gas emissions from water, sewerage and other. Conversion factors should be based on those provided by the Department of Climate Change - National Greenhouse Accounts (NGA) Factors specific to the water utility's location.

*Notes:*

 - CO2-e refers to carbon dioxide equivalents, i.e. greenhouse gases expressed as carbon dioxide

**SWIM category:** Greenhouse Gas Emissions

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** EN17.1:wsp=EN14+EN16

**NPR code:** IE12.1

**Required by:** GAWB

## SWIM Code: EN18

**Indicator short title:** Volume sewage treated: maximum primary level only

**Units:** ML

**Title:** Volume of sewage treated to a maximum primary level only.

**Definition:** This is the volume of sewage that is treated to a maximum of primary level only (i.e. no further treatment). Primary treatment is the first major treatment process in a sewage treatment facility, principally designed to remove a substantial amount of suspended matter, but little or no colloidal or dissolved matter. Typical primary sewage treatment processes may include clarification (with or without chemical treatment, to accomplish solid-liquid separation), grease removal and screens.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Compliance & treatment - sewerage

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IE1

**ABS code:** 120

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: EN19

**Indicator short title:** Volume sewage treated: maximum secondary level only

**Units:** ML

**Title:** Volume of sewage treated to a maximum secondary level only.

**Definition:** This is the volume of sewage that is treated to a maximum of secondary level only (i.e. it received primary and secondary treatment, but not tertiary treatment). Secondary treatment is the first major treatment process in a sewage treatment facility, typically, a biological treatment process that is designed to remove approximately 85 per cent of the Biological Oxygen Demand (BOD) and influent suspended solids. Some nutrients may incidentally be removed, and ammonia may be converted to nitrate. Typical secondary sewage treatment processes may include sand filtration, disinfection, a polishing step (to lower suspended solids and bacterial levels), activated-sludge processes, anaerobic plus aerobic processes, biological filters and lagoons (aerated, facultative, maturation or polishing).

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Compliance & treatment - sewerage

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IE2

**Required by:** Large SPs with >10,000 connections

## SWIM Code: EN20

**Indicator short title:** Volume sewage treated: tertiary level

**Units:** ML

**Title:** Volume of sewage treated to a tertiary level.

**Definition:** This is the volume of sewage that is treated to a tertiary level (i.e. it also received primary and secondary treatment). Tertiary or advanced treatment is principally designed to remove nutrients, such as phosphorus (typically <2 mg/L) and/or nitrogen (typically <15 mg/L). A high percentage of effluent suspended solids (typically >95 per cent) are also removed. Tertiary treatment may additionally target other contaminants of concern, e.g. toxicants and salt for discharges into sensitive waterways or reuse applications where high quality recycled water is required. Typical tertiary sewage treatment processes may include biological nutrient removal plants, chemical dosing of secondary plants for nutrient removal (including lagoons), enhanced pond treatment systems for nutrient removal, reverse osmosis and advanced filtration systems, membrane bioreactors and secondary treatment plus grass plots or wetlands for nutrient removal.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Compliance & treatment - sewerage

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IE3

**Required by:** Large SPs with >10,000 connections

## SWIM Code: FN1

**Indicator short title:** Revenue: all (NPR) water

**Units:** $,000

**Title:** Total revenue - water.

**Definition:** The utility should report total water revenue. Water revenue will include, but may not be limited to, the following:

 - revenue from pay for use and base rate charges for provision of water supply (including recycled water) to residential and non-residential customers

 - special levies related to water supply services

 - all contributed cash and water supply assets (otherwise known as gifted assets, developer charges or headworks contributions)

 - receipts from governments for specific agreed water supply services (e.g. Community Service Obligations)

 - other revenue from water supply operations which would otherwise be included

 - revenue from bulk water sales (including recycled water)

*Excludes:*

 - funds received for specific capital works from governments or other parties

 - equity contributions from governments

 - investment activities

 - non-core utility activities (e.g. consulting, agriculture, property leases)

 - income from net asset sales

*Notes:*

 - exclusions include possible and material revenues (in assessing materiality, refer to AASB1031)

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG3.9

**NPR code:** F1

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN2

**Indicator short title:** Revenue: all (NPR) sewerage

**Units:** $,000

**Title:** Total revenue - sewerage.

**Definition:** The utility should report total sewerage revenue. Revenue will include, but may not be limited to, the following:

 - revenue from pay-for-use and base-rate charges for provision of sewerage services to residential and non-residential customers

 - special levies related to sewerage services

 - all contributed cash and sewerage assets (otherwise known as gifted assets, developer charges or headworks contributions)

 - receipts from governments for specific agreed sewerage services (e.g. Community Service Obligations)

 - other revenue from sewerage operations which would otherwise be included

 - sewerage service charges (including trade waste)

*Excludes:*

 - funds received for specific capital works from governments or other parties

 - equity contributions from governments

 - investment activities

 - non-core utility activities (e.g. consulting, agriculture, property leases)

 - income from net asset sales

*Notes:*

 - exclusions include possible and material revenues (in assessing materiality, refer to AASB1031)

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG3.10

**NPR code:** F2

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN3

**Indicator short title:** Revenue: whole of utility

**Units:** ,000

**Title:** Total income for whole of utility.

**Definition:** The utility should report total water and sewerage revenue. Revenue will include, but may not be limited to, the following:

 - revenue from pay for use and base rate charges for provision of water (including recycled water) and sewerage services to residential and non-residential customers

 - special levies

 - all contributed cash and assets (otherwise known as gifted assets, developer charges or headworks contributions)

 - receipts from governments for specific agreed services (e.g. Community Service Obligations)

 - other revenue from operations which would otherwise be included

 - revenue from bulk water sales

 - sewerage service charges (including trade waste)

*Excludes:*

 - funds received for specific capital works from governments or other parties

 - equity contributions from governments

 - investment activities

 - non-core utility activities (e.g. consulting, agriculture, property leases)

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** F3

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: FN4

**Indicator short title:** Revenue: per cent residential revenue from water usage charges

**Units:** %

**Title:** Per cent residential revenue from water usage charges.

**Definition:** The utility should report the residential revenue from water usage charges as a percentage of the total residential revenue from water usage charges, access charges, special levies and any environmental levies for water supply.

Calculations:

Per cent residential revenue from water usage charges = (Residential revenue from water usage charges / All residential revenue (i.e. from water usage charges, access charges, special and environmental levies, etc. for water supply)) x 100.

*Notes:*

 - spikes in revenues caused by large asset sales or by building booms (i.e. unusual amounts of revenues from developer charges) or falls in revenues due to water restrictions may be explained by the use of comments on the data

 - previously any abnormal revenue, as described by the relevant accounting standard, was overtly excluded under AASB 1031. Given the recent change to AASB 1031, exclusion of these revenues is problematic. If they are excluded, then this should be reflected through a comment on the data

 - interest charged on late payments from customers is included

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** F4

**Required by:** Large SPs with >10,000 connections

## SWIM Code: FN5

**Indicator short title:** Revenue: water supply per connection

**Units:** /connection

**Title:** Revenue per property for water supply services.

**Definition:** Revenue per property for water supply services is calculated as the total revenue (water) divided by the total number of water connected properties.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN5:wsp=FN1/CS4

**NPR code:** F5

**Required by:** Large SPs with >10,000 connections

## SWIM Code: FN5.1

**Indicator short title:** Revenue: water supply per ML

**Units:** $/ML

**Title:** Revenue per ML for bulk water supply services.

**Definition:** Revenue per ML for bulk water supply services is calculated as the total revenue (water) divided by the total amount (ML) of water supplied.

*Notes:*

 - reported by Bulk Water Utilities only

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN5.1:wsp=(FN1/WA110)\*1000

**NPR code:** F5.1

**Required by:** GAWB

## SWIM Code: FN6

**Indicator short title:** Revenue: sewerage services per connection

**Units:** $/connection

**Title:** Revenue per property for sewerage services.

**Definition:** Revenue per property for sewerage services is calculated as the total revenue (sewerage) divided by the total number of sewerage connected properties.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN6:wsp=FN2/CS8

**NPR code:** F6

**Required by:** Large SPs with >10,000 connections

## SWIM Code: FN7

**Indicator short title:** Revenue: whole of utility per connection

**Units:** $/connection

**Title:** Income per property for utility.

**Definition:** Income per property for utility is calculated as the total income for utility divided by the total number of water connected properties.

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN7:wsp=FN3/CS4

**NPR code:** F7

**Required by:** Large SPs with >10,000 connections

## SWIM Code: FN7.1

**Indicator short title:** Revenue: whole of bulk utility per ML

**Units:** $/ML

**Title:** Income per ML for bulk utility.

**Definition:** Income per ML for bulk utility is calculated as the total income for the bulk utility divided by the total volume (ML) of water supplied.

*Notes:*

 - reported by Bulk Water Utilities only

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN7.1:wsp=(FN3/WA110)\*1000

**NPR code:** F7.1

**Required by:** GAWB

## SWIM Code: FN9

**Indicator short title:** Nominal written down replacement cost: fixed water assets

**Units:** $,000

**Title:** Nominal written down replacement cost of fixed water supply assets.

**Definition:** This indicator provides information on the value of the utility's water assets. The written down replacement cost represents the value of the fixed water assets of the utility to deliver services, and hence derive income. Written down replacement cost of fixed water assets is the current cost of replacing the service potential of fixed water supply assets based on current technology.

The current cost of replacing fixed water supply assets with modern equivalent assets that would deliver the same service potential (capacity), written down by the accumulated depreciation since the asset was installed plus any residual value.

*Notes:*

 - nominal written-down replacement costs of fixed water supply assets should be estimated for 30 June, i.e. the last day of the year for the annual financial reporting period

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG3.5

**NPR code:** F9

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN10

**Indicator short title:** Nominal written down replacement cost: fixed sewerage assets

**Units:** $,000

**Title:** Nominal written down replacement cost of fixed sewerage assets.

**Definition:** This indicator provides information on the value of the utility's sewerage assets. The written down replacement cost represents the value of the fixed sewerage assets of the utility to deliver services, and hence derive income. Written down replacement cost of fixed sewerage assets is the current cost of replacing the service potential of fixed sewerage business assets based on current technology. The written down replacement cost may not be the same value as reported in the utility's annual financial statements.

The current cost of replacing fixed sewerage assets with modern equivalent assets that would deliver the same service potential (capacity), written down by the accumulated depreciation since the asset was installed plus any residual value.

*Notes:*

 - nominal written-down replacement costs of fixed sewerage assets should be estimated for 30 June, i.e. the last day of the year for the annual financial reporting period

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG3.6

**NPR code:** F10

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN11

**Indicator short title:** Costs: operating water per connection

**Units:** $/connection

**Title:** Operating costs for the water supply component of the utility per property.

**Definition:** The operating costs (operation, maintenance, administration) for the water supply component of the utility per property is calculated as the total operating cost (water supply) divided by the total number of water connected properties.

*Includes:*

 - water resource access charge or resource rent tax

 - purchases of raw, treated or recycled water

 - salaries and wages including proportion of salaries and wages for FTEs shared across local governments

 - overheads on salaries and wages including proportion of overheads on salaries and wages for FTEs shared across local governments

 - materials, chemicals and energy used

 - contracts

 - accommodation

 - all other operating costs that would normally be reported

 - items expensed from work in progress (capitalised expense items) and pensioner remission expenses (CSOs). (CSOs are likely to have an equivalent inclusion in revenue)

 - competitive neutrality adjustments, which include but are not limited to land tax, debits tax, stamp duties and council rates

 - indirect costs should be apportioned to water and sewerage services

*Excludes:*

 - depreciation

 - any write-downs of assets to recoverable amounts

 - write-offs, retired or scrapped assets

 - the written-down value of assets sold

 - interest

*Notes:*

 - possible or material operating costs are to be included. Materiality as per accounting standards

 - the write-offs could be equated to accelerated depreciation and therefore should be included within current cost depreciation

 - costs associated with BOOT (Built, Owned, Operated, and Transferred) schemes should be reported according to accounting standards. All infrastructure should be treated as if owned and operated by the water utility

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN11:wsp=FN32/CS4

**QG KPI code:** QG3.11

**NPR code:** F11

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN11.1

**Indicator short title:** Costs: operating water per ML

**Units:** $/ML

**Title:** Operating costs for the water supply component of the bulk utility per ML.

**Definition:** The operating costs (operation, maintenance, administration) for the bulk utility per ML is calculated as the total operating cost (water supply) divided by the total volume of water supplied (ML).

*Includes:*

 - water resource access charge or resource rent tax

 - purchases of raw, treated or recycled water

 - salaries and wages including proportion of salaries and wages for shared FTEs shared across the bulk utility

 - overheads on salaries and wages including proportion of overheads on salaries and wages for FTEs shared across the bulk utility

 - materials, chemicals and energy used

 - contracts

 - accommodation

 - all other operating costs that would normally be reported

 - items expensed from work in progress (capitalised expense items) and pensioner remission expenses (CSOs). (CSOs are likely to have an equivalent inclusion in revenue)

 - competitive neutrality adjustments, which include but are not limited to land tax, debits tax, stamp duties and council rates

 - indirect costs should be apportioned to water and sewerage services

*Excludes:*

 - depreciation

 - any write-downs of assets to recoverable amounts

 - write-offs, retired or scrapped assets

 - the written-down value of assets sold

 - interest

*Notes:*

 - possible or material operating costs are to be included. Materiality as per accounting standards

 - the write-offs could be equated to accelerated depreciation and therefore should be included within current cost depreciation

 - costs associated with BOOT (Built, Owned, Operated, and Transferred) schemes should be reported according to accounting standards. All infrastructure should be treated as if owned and operated by the water utility

 - reported by Bulk Water Utilities only

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN11.1:wsp=(FN32/WA110)\*1000

**QG KPI code:** QG3.11

**NPR code:** F11.1

**Required by:** GAWB

## SWIM Code: FN12

**Indicator short title:** Costs: operating sewerage per connection

**Units:** $/connection

**Title:** Operating costs for the sewerage service component of the utility per property.

**Definition:** The operating cost (operation, maintenance, administration) for the sewerage service component of the utility per property is calculated as the total operating cost (sewerage services) divided by the total number of sewerage connected properties.

*Includes:*

 - charges for bulk treatment/transfer of sewage

 - salaries and wages including proportion of salaries and wages for FTEs shared across local government

 - overheads on salaries and wages including proportion of overheads on salaries and wages for FTEs shared across local government

 - materials, chemicals and energy used

 - contracts

 - accommodation

 - all other operating costs that would normally be reported

 - items expensed from work in progress (capitalised expense items) and pensioner remission expenses (CSOs). (CSOs are likely to have an equivalent inclusion in revenue)

 - competitive neutrality adjustments, which include but are not limited to land tax, debits tax, stamp duties and council rates

 - indirect costs should be apportioned to water and sewerage services

*Excludes:*

 - depreciation

 - any write-downs of assets to recoverable amounts

 - write-offs, retired or scrapped assets

 - the written-down value of assets sold

 - interest

*Notes:*

 - possible or material operating costs are to be included. Materiality as per accounting standards

 - the write-offs could be equated to accelerated depreciation and therefore should be included within current cost depreciation

 - costs associated with BOOT (Built, Owned, Operated, and Transferred) schemes should be reported according to accounting standards. All infrastructure should be treated as if owned and operated by the service provider

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN12:wsp=FN33/CS8

**QG KPI code:** QG3.12

**NPR code:** F12

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN13

**Indicator short title:** Costs: operating water+sewerage per connection

**Units:** $/connection

**Title:** Combined operating costs for the water supply and sewerage services component of the utility per property.

**Definition:** Combined operating costs per property is calculated as the operating cost (water supply) per property plus the operating cost (sewerage services) per property.

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN13:wsp=FN11+FN12

**NPR code:** F13

**Required by:** Large SPs with >10,000 connections

## SWIM Code: FN14

**Indicator short title:** Capital expenditure: water supply

**Units:** $,000

**Title:** Total water supply capital expenditure (including recycled water assets capital expenditure).

**Definition:** The actual capital expenditure on water supply infrastructure for the reporting year.

*Includes:*

 - potable and non-potable recycled water assets capital expenditure

 - new works

 - renewals or replacements

 - other water supply expenditure that would otherwise be referred to as capital

 - plant and equipment

 - sewer mining assets

*Excludes:*

 - gifted/development assets

 - urban stormwater assets

*Notes:*

 - capital expenditure is recognised in the year that it is incurred

 - recycled water is defined by DEWS in the KPI Definitions Guidelines as: sewage effluent that has been treated for specific re-use purposes and supplements water supply

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Capital Expenditure

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG3.1

**NPR code:** F14

**ABS code:** 28

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN15

**Indicator short title:** Capital expenditure: sewerage

**Units:** $,000

**Title:** Total sewerage services capital expenditure (excluding recycled water assets capital expenditure).

**Definition:** The actual capital expenditure on sewerage infrastructure for the reporting year. This indicator excludes recycled water assets capital expenditure.

*Includes:*

 - new works

 - renewals or replacements

 - other sewerage services expenditure that would otherwise be referred to as capital

 - plant and equipment

*Excludes:*

 - recycled water assets capital expenditure (this should be included in values reported in FN14 (QG3.1) 'Capital expenditure: water supply')

 - gifted/development assets

 - urban stormwater assets

 - sewer mining assets

*Notes:*

 - capital expenditure is recognised in the year that it is incurred

 - recycled water is defined by DEWS in the KPI Definitions Guidelines as: sewage effluent that has been treated for specific re-use purposes and supplements water supply

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Capital Expenditure

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG3.2

**NPR code:** F15

**ABS code:** 29

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN16

**Indicator short title:** Capital expenditure: water+sewerage

**Units:** $,000

**Title:** Total water supply and sewerage services capital expenditure.

**Definition:** The actual capital expenditure on water supply and sewerage infrastructure for the reporting year. This indicator is calculated as the capital expenditure on water supply plus the capital expenditure on sewage services.

*Includes:*

 - new works

 - renewals or replacements

 - other expenditure that would otherwise be referred to as capital

 - recycling water assets

*Excludes:*

 - gifted/development assets

*Notes:*

 - capital expenditure is recognised in the year that it is incurred

**SWIM category:** Capital Expenditure

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN16:wsp=FN14+FN15

**NPR code:** F16

**Required by:** Large SPs with >10,000 connections

## SWIM Code: FN17

**Indicator short title:** Economic real rate of return: water

**Units:** %

**Title:** Economic real rate of return - water.

**Definition:** Economic real rate of return (ERRR) for the water supply business portion of the utility.

*Calculation:*

 Economic real rate of return (water) = (Revenue from water business operations - Operating expenses (Operation, maintenance and administration expenses (OMA) + current cost depreciation) for the water business) x 100 / written down replacement cost of operational assets for the water business.

*Notes:*

 - revenue from operations includes all developer cash and asset contributions for the water and sewerage business

 - revenue from operations excludes interest income, grants for acquisition of assets and gain/loss on disposal of assets for the water and sewerage business

 - current cost depreciation: expense should be based on the change in the written down replacement cost of the fixed assets over the reporting period

 - written down replacement cost of fixed assets is the current cost of replacing the service potential of fixed water business assets based on current technology. The written down replacement cost may not be the same value as reported in the utility's annual financial statements

 - it is recognised that not all urban water utilities will be able to report on the basis of written down replacement cost, in which case the utility should note the approach used to value assets

 - utilities should allocate corporate overheads on a reasonable basis

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Financial

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN17:wsp=((FN1-FN32-FN78)\*100)/FN9

**NPR code:** F17

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: FN18

**Indicator short title:** Economic real rate of return: sewerage

**Units:** %

**Title:** Economic real rate of return - sewerage.

**Definition:** Economic real rate of return (ERRR) for the sewerage business portion of the utility.

*Calculation:*

 Economic real rate of return (sewerage) = (Revenue from sewerage business operations - Operating expenses (Operation, maintenance and administration expenses (OMA) + current cost depreciation) for the sewerage business) x 100 / written down replacement cost of operational assets for the sewerage business.

*Notes:*

 - revenue from operations includes all developer cash and asset contributions for the water and sewerage business

 - revenue from operations excludes interest income, grants for acquisition of assets and gain/loss on disposal of assets for the water and sewerage business

 - current cost depreciation: expense should be based on the change in the written down replacement cost of the fixed assets over the reporting period

 - written down replacement cost of fixed assets is the current cost of replacing the service potential of fixed sewerage business assets based on current technology. The written down replacement cost may not be the same value as reported in the utility's annual financial statements

 - it is recognised that not all urban water utilities will be able to report on the basis of written down replacement cost, in which case the utility should note the approach used to value assets

 - utilities should allocate corporate overheads on a reasonable basis

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Financial

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN18:wsp=((FN2-FN33-FN79)\*100)/FN10

**NPR code:** F18

**Required by:** Large SPs with >10,000 connections

## SWIM Code: FN19

**Indicator short title:** Economic real rate of return: water+sewerage

**Units:** %

**Title:** Economic real rate of return - water and sewerage.

**Definition:** Economic real rate of return (ERRR) for the utility.

*Calculation:*

 Economic real rate of return (utility) = (Revenue from utility operations - Operating expenses (Operation, maintenance and administration expenses (OMA) + current cost depreciation) for the utility) x 100 / written down replacement cost of operational assets for the utility.

*Notes:*

 - revenue from operations includes all developer cash and asset contributions for the water and sewerage business

 - revenue from operations excludes interest income, grants for acquisition of assets and gain/loss on disposal of assets for the water and sewerage business

 - current cost depreciation: expense should be based on the change in the written down replacement cost of the fixed assets over the reporting period

 - written down replacement cost of fixed assets is the current cost of replacing the service potential of fixed sewerage business assets based on current technology. The written down replacement cost may not be the same value as reported in the utility's annual financial statements

 - it is recognised that not all urban water utilities will be able to report on the basis of written down replacement cost, in which case the utility should note the approach used to value assets

 - utilities should allocate corporate overheads on a reasonable basis

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Financial

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN19:wsp=(((FN1+FN2)-(FN32+FN33)-(FN78+FN79))\*100)/(FN9+FN10)

**NPR code:** F19

**Required by:** Large SPs with >10,000 connections

## SWIM Code: FN20

**Indicator short title:** Dividend

**Units:** $,000

**Title:** Dividend.

**Definition:** This amount relates to dividends paid, payable or proposed to be paid in relation to current year profit for the water and sewerage business for the whole utility. This refers to the interim dividend paid during the financial year and the final dividend for the current financial year which is proposed to be paid in relation to the current year profit. Where appropriate, this will include non-metropolitan businesses.

*Notes:*

 - historical data for Australian utilities will be reported in real terms using the 8-state average CPI for the reporting year. Only nominal figures are to be entered here. Calculations of real figures are completed automatically in the NPR database

 - data for this indicator should reflect the figures for the water and sewerage business for the whole utility. This is done in recognition of the inappropriateness of apportioning dividend payments across the business products. Accordingly, net profit after tax used in determining the dividend payout ratio should also be that for the whole utility

 - declared dividend refers to the interim dividend paid during the financial year and the final dividend for the current financial year which is proposed to be paid in relation to the current year profit

 - dividend payable refers to monies paid in the year

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Financial

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** F20

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: FN21

**Indicator short title:** Dividend payout ratio

**Units:** %

**Title:** Dividend payout ratio.

**Definition:** This is calculated as the dividend (paid or payable or proposed) divided by the net profit after tax multiplied by 100.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Financial

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN21:wsp=FN20/FN24\*100

**NPR code:** F21

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: FN22

**Indicator short title:** Net debt to equity

**Units:** %

**Title:** Net debt to equity.

**Definition:** Net debt is the net debt for the water and sewerage businesses of the whole utility for the reporting year. Net debt equals the long and short term borrowings minus any cash and investments. Equity is the total assets less total liabilities for the whole utility.

Debt includes:

 - interest bearing repayable borrowings

 - non-interest bearing repayable borrowings

 - interest bearing non-repayable borrowings

 - redeemable preference shares

 - finance leases

Debt excludes:

 - creditors and provisions, but off-setting assets, such as contributions to sinking funds, are not deducted

*Calculation:*

Net debt to equity = Net debt x 100 / (Total assets - Total liabilities).

*Notes:*

 - the data for this indicator should reflect the figures for the whole utility. This is done in recognition of the inappropriateness of apportioning debt across the business products

 - pre-payment of debts are included in the investment component of the debt calculation

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Financial

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** F22

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: FN23

**Indicator short title:** Interest cover ratio

**Units:** Ratio

**Title:** Interest cover ratio.

**Definition:** Interest cover is the earnings before interest and tax (EBIT) divided by net interest expense for the whole utility. The data for this indicator should reflect the figures for the water and sewerage businesses of the whole water utility's activities. This is done in recognition of the inappropriateness of apportioning interest across the business products. The interest cover is '0' for a loss-making utility. Similarly, if net interest expense is zero ('0') (i.e. no interest expense or interest income is greater than interest expense) for a profit-making utility, then the interest cover is infinite but should be reported as >100.

*Calculation:*

Interest cover = Earnings before interest and tax / Net interest expense.

*Notes:*

 - if EBIT (earnings before interest and tax) is <0 then report the interest cover as '0'

 - if net interest expense is zero and EBIT>0 then report the interest cover as '>100'

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Financial

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** F23

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: FN24

**Indicator short title:** Net profit after tax (NPAT)

**Units:** $,000

**Title:** Net profit after tax (NPAT).

**Definition:** Report the net profit after tax disclosed in the utility's annual financial statements.

*Notes:*

 - historical data for Australian utilities will be reported in real terms using the 8-state average CPI for the reporting year. Only nominal figures are to be entered here. Calculations of real figures are completed automatically in the NPR database

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Financial

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** F24

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: FN25

**Indicator short title:** Community service obligations

**Units:** $,000

**Title:** Community Service Obligations.

**Definition:** A community service obligation (CSO) payment is a subsidy provided by government to allow for the provision of a good and/or service at less than total cost, e.g. small regional community provided with water at less than total cost.

A CSO must be:

1. A non-commercial product or service. It should be clearly established that a CSO relates to the provision of non-commercial products or services, that is, products and services whose provision is not in the commercial interests of a commercial business entity. That is, to qualify as CSOs, activities must be ones that would otherwise not be undertaken, or would be priced differently, by commercial entities (based on the entity earning normal commercial profit levels and the products or services being delivered on a cost-effective basis). In some instances, the delivery of products and services may be commercially viable at levels below those desired by the Government. Therefore, such services will contain both commercial and non-commercial elements. Clearly, CSOs should only relate to the non-commercial element of the product or service.

2. Purchased by the Government on behalf of the Community. To qualify as a CSO, a product or service needs to be clearly purchased by the Government for delivery to the community on its behalf to achieve a specific social or economic objective that has been established by the Government.

3. Purchased from a commercial business entity. To qualify as a CSO, a product or service must be purchased by the government from an appropriate commercial business entity.

On the basis of the criteria outlined above, the following four categories of activities would qualify as CSO payments:

 - payment by government for delivery of services to final consumers or industry at uniform prices, regardless of variations in the cost of supply (e.g. uniform water tariff)

 - payment by government for delivery, at no charge or below cost, of services or service levels which would not be provided on purely commercial grounds (e.g. remote community water services)

 - payment by government towards the cost of price concessions to particular groups of customers (e.g. various pensioner/senior concessions), and

 - payment by government towards the cost of purchase of inputs at levels or types that differ from purely commercial levels in order to achieve other objectives (e.g. employing additional apprentices).

*Notes:*

 - the data for this indicator should reflect the figures for the water and sewerage businesses of the WHOLE water utility. This is done in recognition of the inappropriateness of apportioning CSO payments across the business products. Consistent with other references in the Handbook WHOLE water utility is defined as the particular scheme or geographic area being reported. State-wide water utilities should also report the CSO for their state-wide operations in a footnote.

 - reductions in charges for services to any consumers, including pensioners and seniors which are provided without payment for the reduction by government would be a cross subsidy and not a CSO

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** F25

**ABS code:** 122

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN26

**Indicator short title:** Capital works grants: water

**Units:** $,000

**Title:** Capital works grants - water.

**Definition:** Capital works grants are funds received within the reported financial year from governments for specific capital works.

*Includes:*

 - grants for water recycling

*Example:*

A grant of $1M for a backlog water supply scheme for a town without a reticulated water supply is a capital works grant.

A grant for construction of a new weir, which will not be owned by the water utility is not a capital works grant.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Capital Expenditure

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG3.3

**NPR code:** F26

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN27

**Indicator short title:** Capital works grants: sewerage

**Units:** $,000

**Title:** Capital works grants - sewerage.

**Definition:** Capital works grants are funds received within the reported financial year from governments for specific capital works.

*Excludes:*

 - grants for water recycling (this should be included in values reported in FN26 (QG3.3) 'Capital works grants: water')

*Example:*

A grant of

1M for a backlog sewerage scheme for a town without sewerage services supply is a capital works grant.

A grant for construction of a new holding pond for recycled sewage water is not a sewerage capital works grant.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Capital Expenditure

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG3.4

**NPR code:** F27

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN32

**Indicator short title:** Costs: operating water (NPR)

**Units:** $,000

**Title:** Operating costs for the water supply component of the utility.

**Definition:** Operating costs (water supply) include costs related to the operation, maintenance and administration (OMA) of the water supply component of the utility.

*Includes:*

 - water resource access charge or resource rent tax

 - purchases of raw, treated or recycled water

 - salaries and wages

 - overheads on salaries and wages

 - materials/chemicals/energy

 - contracts

 - accommodation

 - all other operating costs that would normally be reported

 - items expensed from work in progress (capitalized expense items) and pensioner remission expenses (Community Service Obligations (CSOs)). (CSOs are likely to have an equivalent inclusion in revenue)

 - competitive neutrality (CN) adjustments, they may include but not be limited to, land tax, debits tax, stamp duties and council rates

*Excludes:*

 - all non-core business operating costs

 - depreciation

 - any write-downs of assets to recoverable amounts

 - write-offs retired or scrapped assets

 - the written down value of assets sold

*Notes:*

 - these write-offs could be equated to accelerated depreciation, and therefore should be included within current cost depreciation. This will then be included as part of the calculation of total costs for the relevant period

 - when assets are sold, their book value should be included in current cost depreciation (as it may be accelerated depreciation) and selling expenses, whilst expected to be immaterial, should be included in operating costs

 - in apportioning indirect costs, the business should apply a consistent methodology for all reporting years

 - interest should be excluded from operating costs as it is reported separately

 - indirect costs should be apportioned to water and sewerage services

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IF11

**ABS code:** 144

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN33

**Indicator short title:** Costs: operating sewerage

**Units:** $,000

**Title:** Operating costs for the sewerage service component of the utility.

**Definition:** Operating costs (sewerage services) include costs related to the operation, maintenance and administration (OMA) of the sewerage services component of the utility.

*Includes:*

 - charges for bulk treatment/transfer of sewerage

 - salaries and wages

 - overheads on salaries and wages

 - materials/chemicals/energy

 - contracts

 - accommodation

 - all other operating costs that would normally be reported

 - items expensed from work in progress (capitalized expense items) and pensioner remission expenses (Community Service Obligations (CSOs)). (CSOs are likely to have an equivalent inclusion in revenue)

 - competitive neutrality (CN) adjustments, they may include but not be limited to, land tax, debits tax, stamp duties and council rates

*Excludes:*

 - all non-core business operating costs

 - depreciation

 - any write-downs of assets to recoverable amounts

 - write-offs retired or scrapped assets

 - the written down value of assets sold

*Notes:*

 - these write-offs could be equated to accelerated depreciation, and therefore should be included within current cost depreciation. This will then be included as part of the calculation of total costs for the relevant period

 - when assets are sold, their book value should be included in current cost depreciation (as it may be accelerated depreciation) and selling expenses, whilst expected to be immaterial, should be included in operating costs

 - in apportioning indirect costs, the business should apply a consistent methodology for all reporting years

 - interest should be excluded from operating costs as it is reported separately

 - indirect costs should be apportioned to water and sewerage services

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** IF12

**ABS code:** 23

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN34

**Indicator short title:** Capital expenditure: water per connection

**Units:** $/connection

**Title:** Water supply capital expenditure per property.

**Definition:** This indicator is calculated as the total water capital expenditure divided by the total number of water connected properties.

**SWIM category:** Capital Expenditure

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN34:wsp=FN14/CS4

**NPR code:** F28

**Required by:** Large SPs with >10,000 connections

## SWIM Code: FN34.1

**Indicator short title:** Capital expenditure: water per ML

**Units:** $/ML

**Title:** Water supply capital expenditure per ML (Bulk Utility).

**Definition:** This indicator is calculated as the total water capital expenditure divided by the total volume of water produced.

*Notes:*

 - reported by Bulk Water Utilities only

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Capital Expenditure

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN34.1:wsp=(FN14/WA110)\*1000

**NPR code:** F28.1

**Required by:** GAWB

## SWIM Code: FN35

**Indicator short title:** Capital expenditure: sewerage per connection

**Units:** $/connection

**Title:** Sewerage capital expenditure per property.

**Definition:** This indicator is calculated as the total sewerage capital expenditure divided by the total number of sewerage connected properties.

**SWIM category:** Capital Expenditure

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN35:wsp=FN15/CS8

**NPR code:** F29

**Required by:** Large SPs with >10,000 connections

## SWIM Code: FN36

**Indicator short title:** Net profit after tax ratio

**Units:** %

**Title:** Net profit after tax (NPAT) ratio.

**Definition:** This indicator is calculated as the net profit after tax divided by the total income for whole utility multiplied by 100.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Financial

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN36:wsp=FN24/FN3\*100

**NPR code:** F30

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: FN37

**Indicator short title:** Revenue: sale bulk potable+raw-PT water

**Units:** $,000

**Title:** Total revenue from the sale of potable and/or raw-PT bulk water to another infrastructure operator, water supplier or utility (excluding recycled water).

**Definition:** Revenue generated by this utility or entity from pay for use and base rate charges for provision of bulk potable, raw or partially treated water to other infrastructure operator, water supplier or utility outside your geographic area of jurisdiction.

*Excludes:*

 - revenue from bulk recycled sewage or stormwater sales

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN38

**Indicator short title:** Revenue: sale bulk recycled water

**Units:** $,000

**Title:** Total revenue from the sale of bulk recycled water to another infrastructure operator, water supplier or utility.

**Definition:** Revenue generated by this utility or entity from pay for use and base rate charges for provision of bulk recycled water to another infrastructure operator, water supplier or utility outside your geographic area of jurisdiction.

*Includes:*

 - recycled water sourced from sewage or stormwater

*Excludes:*

 - revenue from bulk potable and/or raw or partially-treated water sales

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 2

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN39

**Indicator short title:** Revenue: sale potable+raw-PT water (retail supply)

**Units:** $,000

**Title:** Total revenue from retail sale of potable and/or raw-PT water to residential and non-residential properties (excludes recycled water and any bulk water).

**Definition:** Revenue generated by this utility or entity from pay for use and/or base rate charges for provision of potable, raw or partially-treated water to residential and non-residential properties during the reporting period. This will include revenue from access/infrastructure charges, volumetric or user charges.

*Excludes:*

 - revenue from the sale of recycled water to residential and non-residential properties during the reporting period

 - sale of bulk water to other water suppliers

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 4

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN40

**Indicator short title:** Revenue: sale recycled sewage water (retail supply)

**Units:** $,000

**Title:** Total revenue from the retail sale of recycled water to residential and non-residential properties (excludes any bulk water).

**Definition:** Revenue generated by this utility or entity from pay for use and/or base rate charges for provision of recycled water to residential and non-residential properties during the reporting period. This will include revenue from access/infrastructure charges, volumetric or user charges.

*Includes:*

 - recycled water sourced from sewage or stormwater

*Excludes:*

 - revenue from the retail sale of potable and/or raw-PT water to residential and non-residential properties during the reporting period

 - sale of bulk water to other water suppliers

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 5

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN42

**Indicator short title:** Revenue: all (ABS) water

**Units:** $,000

**Title:** Total revenue from the water business.

**Definition:** This is the sum of revenue generated from all bulk water sales, all retail water supply sales to residential and non-residential customers, government grants for non-capital purposes and other revenue that would otherwise be included.

*Excludes:*

 - funds received for specific water related capital works from governments or other parties

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN42:wsp=FN58+FN59+FN60+FN61

**ABS code:** 9

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN44

**Indicator short title:** Costs: purchase bulk potable+raw-PT water

**Units:** $,000

**Title:** Total expense for the purchase of potable, raw or partially-treated (PT) water from an external supplier (excluding recycled water).

**Definition:** Refers to cost incurred in purchasing potable, raw or partially-treated water from another infrastructure operator, utility or supplier either for your own use or distribution purposes.

*Excludes:*

 - cost incurred in the extraction, treatment or processing of the purchased potable, raw or partially-treated bulk water

 - costs incurred in purchase of recycled water (including that from sewage or stormwater) from another water supplier

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 19

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN45

**Indicator short title:** Costs: purchase bulk recycled water

**Units:** $,000

**Title:** Total expense for the purchase of recycled water from an external supplier.

**Definition:** Refers to cost incurred in purchasing recycled water (including recycled water from sewage and/or stormwater sources) from another infrastructure operator, utility or supplier either for your own use or distribution purposes.

*Excludes:*

 - cost incurred in the treatment or transfer of bulk recycled water

 - costs incurred in purchase of potable, raw or partially-treated (non-recycled) bulk water from another water supplier for your own use or distribution purposes

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 20

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN46

**Indicator short title:** Costs: purchase of all bulk water

**Units:** $,000

**Title:** Total expense for the purchases of all bulk water from an external supplier.

**Definition:** This comprises the sum of costs incurred in purchasing potable, raw or partially-treated and recycled water (including recycled water from sewage and/or stormwater sources) from another infrastructure operator, utility or supplier either for your own use or distribution purposes. Includes water resource access charge or resource rent tax for bulk water not delivered through reticulated supply. It is calculated as the sum of the total expense purchase of potable and raw or partially-treated (PT) water and the total expense purchase of recycled water.

*Excludes:*

 - cost incurred in the extraction, treatment or processing of bulk water (i.e. potable and raw-PT water, recycled water)

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN46:wsp=FN44+FN45

**ABS code:** 21

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN47

**Indicator short title:** Costs: operating water (ABS)

**Units:** $,000

**Title:** Operating costs for the water supply component of the utility (excluding the costs to purchase water).

**Definition:** Refers to the total water supply operation, maintenance and administration (OMA) costs (excluding the cost of purchasing potable, raw or partially-treated (PT), and/or recycled water).

*Includes:*

 - engineering and supervision costs (i.e. salaries and wages of engineering, technical and supervision staff including employment overheads)

 - operation and maintenance of mains, dams and weirs, reservoirs, pumping stations and treatment facilities

 - materials, chemicals and energy used

 - contracts

 - other water supply operating costs that would normally be reported

*Excludes:*

 - purchase of potable, raw-PT and recycled water

 - water resource access charge or resource rent tax related to water bulk imports

 - all non-core water supply business operating costs

 - depreciation and amortisation of water supply assets

 - any write-downs of assets to recoverable amounts

 - interest expenses

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN47:wsp=FN32-FN46

**ABS code:** 22

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN48

**Indicator short title:** Costs: operating stormwater

**Units:** $,000

**Title:** Operating costs for the stormwater services component of the utility.

**Definition:** Refers to the stormwater services operation, maintenance and administration (OMA) costs (excluding the cost of purchasing potable, raw-PT and/or recycled water).

*Includes:*

 - engineering and supervision costs (i.e. salaries and wages of engineering, technical and supervision staff including employment overheads)

 - operation and maintenance of stormwater infrastructures including pumping stations and treatment facilities

 - materials, chemicals and energy used

 - contracts

 - other stormwater services operating costs that would normally be reported by a stormwater utility

*Excludes:*

 - purchase of recycled water including stormwater

 - charges for bulk treatment/transfer of sewerage

 - all non-core stormwater business operating costs

 - depreciation and amortisation of stormwater assets

 - any write-downs of assets to recoverable amounts

 - interest expenses

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 24

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN49

**Indicator short title:** Costs: any other water

**Units:** $,000

**Title:** Total other expenses for the water supply component of the utility.

**Definition:** Refers to all other water supply expenses incurred by this utility or entity not reported elsewhere.

*Includes:*

 - all non-core water supply business operating costs

 - depreciation and amortisation of water supply assets

 - any write-downs of water supply assets to recoverable amounts

 - interest expenses

*Excludes:*

 - all expenses incurred on provision of sewerage and stormwater services

 - all water supply expenses reported elsewhere

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 25

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN50

**Indicator short title:** Costs: any other sewerage

**Units:** $,000

**Title:** Total other expenses for the sewerage services component of the utility.

**Definition:** Refers to all other sewerage services expenses incurred by this utility or entity not reported elsewhere.

*Includes:*

 - all non-core sewerage business operating costs

 - depreciation and amortisation of sewerage assets

 - any write-downs of sewerage assets to recoverable amounts

 - interest expenses

*Excludes:*

 - all expenses incurred on provision of water supply and stormwater services

 - all sewerage service expenses reported elsewhere

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 26

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN51

**Indicator short title:** Capital expenditure: stormwater

**Units:** $,000

**Title:** Total stormwater capital expenditure.

**Definition:** The actual capital expenditure on stormwater infrastructure for the reporting year.

*Includes:*

 - new works

 - renewals or replacements

 - other expenditure that would otherwise be referred to as capital

*Excludes:*

 - gifted/development assets

*Notes:*

 - capital expenditure is recognised in the year that it is incurred

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Capital Expenditure

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 30

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN52

**Indicator short title:** Capital expenditure: any other

**Units:** $,000

**Title:** Total other capital expenditure.

**Definition:** Includes all other actual capital expenditure incurred by this utility during the reporting year not reported elsewhere.

*Excludes:*

 - capital expenditure on stormwater, water supply and sewerage that is reported elsewhere

 - gifted/development assets

*Notes:*

 - capital expenditure is recognised in the year that it is incurred

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Capital Expenditure

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 31

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN52.1

**Indicator short title:** Nature/amount of 'other' capital expenditure

**Units:** Text

**Title:** Nature and amounts of 'other' capital expenditure.

**Definition:** Please provide a text description of the nature and amount ($,000) of the items included in the indicator 'total other capital expenditure'.

**SWIM category:** Capital Expenditure

**Scheme type(s):** WSP

**Data type:** TEXT

**Source of data:** USER

**ABS code:** 31.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN53

**Indicator short title:** Capital expenditure: total

**Units:** $,000

**Title:** Total capital expenditure.

**Definition:** This comprises the sum of all capital expenditure incurred by this utility or entity during the reporting year. This indicator is calculated as the capital expenditure on water supply plus the capital expenditure on sewerage plus the capital expenditure on stormwater plus the capital expenditure on other services.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Capital Expenditure

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN53:wsp=FN14+FN15+FN51+FN52

**ABS code:** 32

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN58

**Indicator short title:** Revenue: sale all bulk water

**Units:** $,000

**Title:** Total revenue from the sale of all bulk water to another infrastructure operator, water supplier or utility.

**Definition:** This is the sum of all revenue generated by this utility or entity from the sale of bulk potable, raw or partially-treated, and recycled water to another infrastructure operator, water supplier or utility outside your geographic area of jurisdiction.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN58:wsp=FN37+FN38

**ABS code:** 3

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN59

**Indicator short title:** Revenue: sale potable+raw-PT+recycled water (retail supply)

**Units:** $,000

**Title:** Total revenue from the retail sale of all water supplied to residential and non-residential properties.

**Definition:** This is the sum of revenue generated by this utility or entity from retail sale of potable, raw or partially-treated, and/or recycled water to residential and non-residential properties during the reporting period.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN59:wsp=FN39+FN40

**ABS code:** 6

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN60

**Indicator short title:** Government grants/subsidies (non-capital purposes): water

**Units:** $,000

**Title:** Total revenue received from government grants for non-capital purposes related to water supply.

**Definition:** This refers to funds, receipts or payments received by this utility from the government for this utility's provision or delivery of non-commercial or community services for water supply on behalf of the government.

*Includes:*

 - government payments towards the cost of price concessions to particular groups of water supply service customers (e.g. Community Service Obligations, various pensioner/senior rebates and concessions, remote community water services and Rural Water payment)

 - government payments towards the delivery of water supply services to final consumers at uniform prices

 - government payments towards the delivery of any other water supply services which would not be provided on purely commercial grounds (e.g. flood operations, environmental flows, stock and domestic supply, salinity program and water savings program)

*Excludes:*

 - government grants for acquisition of water supply assets

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 7

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN61

**Indicator short title:** Revenue: any other water supply

**Units:** $,000

**Title:** Total revenue received from other sources related to your water supply business not reported elsewhere (i.e. interest income, developer contributions, grants for acquisition of assets).

**Definition:** This refers to all other revenue from the utility's water supply operations that would otherwise be included as revenue/income.

*Includes:*

 - equity contributions from government

 - investment revenue (e.g. interest income, capital gains, dividends, sale of securities)

 - revenue from non-core utility water supply activities (e.g. consulting, agriculture, property leases)

 - net water supply assets sales (revenue from sale or disposal of assets)

 - all contributed cash and water supply assets (e.g. gifted assets, developer charges, head works contribution)

*Excludes:*

 - revenue from any bulk water sales to another infrastructure operator, water supplier or utility outside your geographic area of jurisdiction

 - revenue from any retail sales of water to residential and non-residential properties

 - revenue received from government grants for non-capital purposes related to water supply (e.g. Community Service Obligations, rebates, concessions)

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 8

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN62

**Indicator short title:** Revenue: residential and non-residential sewerage

**Units:** $,000

**Title:** Total revenue from sewerage service charges to residential and non-residential properties (excluding trade waste).

**Definition:** Revenue generated by this utility or entity from any charges (i.e. access, infrastructure, volumetric or user charges) levied to residential and non-residential properties for the provision of sewerage services during the reporting period.

*Excludes:*

 - revenue from provision of stormwater services to residential and non-residential properties during the reporting period

 - trade waste

 - revenue from governments for specific agreed sewerage services (e.g. Community Service Obligations, rebates, concessions)

 - other revenue from sewerage services operations (i.e. not service charges to residential and non-residential properties) such as capital work grants, equity contributions from government, investment revenues, revenues from non-core utility activities and from net sewerage asset sales, and all contributed cash and sewerage assets

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 10

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN63

**Indicator short title:** Revenue: trade waste sewerage

**Units:** $,000

**Title:** Total revenue from sewerage charges for trade waste conveyance and disposal.

**Definition:** Revenue generated by this utility or entity from charges imposed on commercial or industrial properties for the reception, conveyance or disposal of trade waste. These charges will include trade waste volume charges, quality charges, annual fees, re-inspection fees.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 11

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN64

**Indicator short title:** Government grants/subsidies (non-capital purposes): sewerage

**Units:** $,000

**Title:** Total revenue from governments grants for non-capital purposes related to sewerage services.

**Definition:** This refers to funds, receipts or payments received by this utility from the government for this utility's provision or delivery of non-commercial or community services for sewerage services on behalf of the government.

*Includes:*

 - government payments towards the cost of price concessions to particular groups of sewerage services customers (e.g. Community Service Obligations, various pensioner/senior rebates, concessions)

 - government payments towards the delivery of sewerage services to final consumers at uniform prices

 - government payments towards the delivery of any other sewerage services which would not be provided on purely commercial grounds

*Excludes:*

 - government grants for acquisition of sewerage assets

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 12

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN65

**Indicator short title:** Revenue: any other sewerage

**Units:** $,000

**Title:** Total revenue received from other sources related to your sewerage service business not reported elsewhere (i.e. interest income, developer contributions, grants for acquisition of assets).

**Definition:** This refers to all other revenue from the utility's sewerage services operations that would otherwise be included as revenue/income.

*Includes:*

 - equity contributions from government

 - investment revenue (e.g. interest income, capital gains, dividends, sale of securities)

 - revenue from non-core utility sewerage activities (e.g. consulting, agriculture, property leases)

 - net sewerage assets sales (revenue from sale or disposal of assets)

 - all contributed cash and sewerage assets (e.g. gifted assets, developer charges, head works contribution)

*Excludes:*

 - revenue from bulk and retail recycled water and/or wastewater sales

 - revenue from stormwater services

 - revenue received from government grants for non-capital purposes related to sewerage services (e.g. Community Service Obligations, rebates, concessions)

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 13

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN66

**Indicator short title:** Revenue: all (ABS) sewerage

**Units:** $,000

**Title:** Total revenue from the sewerage business.

**Definition:** This is the sum of revenues generated from sewerage charge, trade waste charges, government grants for non-capital purposes and other revenue that would otherwise be generated from provision of Sewerage services.

*Excludes:*

 - funds received for specific sewerage capital works from governments or other parties

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN66:wsp=FN62+FN63+FN64+FN65

**ABS code:** 14

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN67

**Indicator short title:** Revenue: stormwater charges

**Units:** $,000

**Title:** Total revenue from stormwater charges to residential and non-residential properties.

**Definition:** Revenue generated by this utility or entity from any charges (i.e. access, infrastructure, volumetric or user charges) levied to residential and non-residential properties for the provision of stormwater services.

*Excludes:*

 - revenue from provision sewerage services to residential and non-residential properties

 - revenue from governments for specific agreed stormwater services (e.g. Community Service Obligations, rebates, concessions)

 - other revenue from stormwater services operations (i.e. not charges to residential and non-residential properties) such as capital work grants, equity contributions from government, investment revenues, revenues from non-core utility activities and from net stormwater asset sales, and all contributed cash for stormwater assets

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 15

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN68

**Indicator short title:** Government grants/subsidies (non-capital purposes): stormwater

**Units:** $,000

**Title:** Total revenue from governments grants for non-capital purposes related to stormwater services.

**Definition:** This refers to funds, receipts or payments received by this utility from the government for this utility's provision or delivery of non-commercial or community services on stormwater services on behalf of the government.

*Includes:*

 - government payments towards the cost of price concessions to particular groups of customers (e.g. Community Service Obligations, various pensioner/senior rebates, concessions)

 - government payments towards the delivery of services to final consumers at uniform prices

 - government payments towards the delivery of any other stormwater services which would not be provided on purely commercial grounds

*Excludes:*

 - government grants for acquisition of stormwater assets

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 16

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN69

**Indicator short title:** Revenue: other stormwater

**Units:** $,000

**Title:** Total revenue received from other sources related to your stormwater service business not reported elsewhere (i.e. interest income, developer contributions, grants for acquisition of assets).

**Definition:** This refers to all other revenue from the utility's stormwater services operations that would otherwise be included as revenue/income.

*Includes:*

 - equity contributions from government

 - investment revenue (e.g. interest income, capital gains, dividends, sale of securities)

 - revenue from non-core utility sewerage activities (e.g. consulting, agriculture, property leases)

 - net stormwater assets sales (revenue from sale or disposal of assets)

 - all contributed cash and stormwater assets (e.g. gifted assets, developer charges, head works contribution)

*Excludes:*

 - funds received for specific stormwater capital works from governments or other parties

 - revenue from bulk and retail recycled water and/or wastewater sales

 - revenue from sewerage services

 - revenue received from government grants for non-capital purposes related to stormwater services (e.g. Community Service Obligations, rebates, concessions)

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 17

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN70

**Indicator short title:** Revenue: all stormwater

**Units:** $,000

**Title:** Total revenue from the stormwater business.

**Definition:** This is the sum of revenues generated from stormwater charges, government grants for non-capital purposes and other revenue that would otherwise be generated from provision of stormwater services.

*Excludes:*

 - funds received for specific stormwater related capital works from governments or other parties

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN70:wsp=FN67+FN68+FN69

**ABS code:** 18

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN71

**Indicator short title:** Costs: any other stormwater

**Units:** $,000

**Title:** Total other expenses for the stormwater services component of the utility.

**Definition:** Refers to all other stormwater expenses incurred by this utility or entity not reported elsewhere.

*Includes:*

 - all non-core stormwater business operating costs

 - depreciation and amortisation of stormwater assets

 - any write-downs of stormwater assets to recoverable amounts

 - interest expenses

*Excludes:*

 - all expenses incurred on provision of water supply and sewerage services

 - all stormwater service expenses reported elsewhere

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 27

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN74

**Indicator short title:** Current replacement costs: fixed water assets

**Units:** $,000

**Title:** Current replacement costs of fixed water supply assets.

**Definition:** Current replacement costs of fixed water supply assets is the lowest it would cost to replace the existing water assets with new (i.e. not second hand), modern equivalent assets.

*Notes:*

 - current replacement costs of fixed water supply assets should be estimated for 30 June, i.e. the last day of the year for the annual report

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG3.7

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN75

**Indicator short title:** Current replacement costs: fixed sewerage assets

**Units:** $,000

**Title:** Current replacement costs of fixed sewerage assets.

**Definition:** Current replacement costs of fixed sewerage assets is the lowest it would cost to replace the existing water assets with new (i.e. not second hand), modern equivalent assets.

*Notes:*

 - current replacement costs of fixed sewerage assets should be estimated for 30 June, i.e. the last day of the year for the annual report

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG3.8

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN76

**Indicator short title:** Costs: maintenance water

**Units:** $,000

**Title:** Annual maintenance costs for the water supply component of the utility.

**Definition:** Is a component of the 'operating costs for the water supply component of the utility' reported elsewhere, report here on the routine, operational and preventative maintenance costs only.

Includes all costs for the following that relate to routine, operational and preventative maintenance ONLY costs:

 - water resource access charge or resource rent tax

 - purchases of raw, treated or recycled water

 - salaries and wages including proportion of salaries and wages for FTEs shared across local governments

 - overheads on salaries and wages including proportion of overheads on salaries and wages for FTEs shared across local governments

 - materials, chemicals and energy used

 - contracts

 - accommodation

 - all other operating costs that would normally be reported

 - items expensed from work in progress (capitalised expense items) and pensioner remission expenses (CSOs). (CSOs are likely to have an equivalent inclusion in revenue)

 - competitive neutrality adjustments, which include but are not limited to land tax, debits tax, stamp duties and council rates

 - indirect costs should be apportioned to water and sewerage services

*Excludes:*

 - depreciation

 - any write-downs of assets to recoverable amounts

 - write-offs, retired or scrapped assets

 - the written-down value of assets sold

 - interest

*Notes:*

 - possible or material operating costs are to be included. Materiality as per accounting standards

 - the write-offs could be equated to accelerated depreciation and therefore should be included within current cost depreciation

 - costs associated with BOOT (Built, Owned, Operated, and Transferred) schemes should be reported according to accounting standards. All infrastructure should be treated as if owned and operated by the water utility

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG3.13

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN77

**Indicator short title:** Costs: maintenance sewerage

**Units:** $,000

**Title:** Annual maintenance costs for the sewerage service component of the utility.

**Definition:** Is a component of the 'operating cost for the sewerage service component of the utility' reported elsewhere, here report on the routine, operational and preventative maintenance costs only.

Includes all costs for the following that relate to routine, operational and preventative maintenance ONLY costs:

 - charges for bulk treatment/transfer of sewage

 - salaries and wages including proportion of salaries and wages for FTEs shared across local government

 - overheads on salaries and wages including proportion of overheads on salaries and wages for FTEs shared across local government

 - materials, chemicals and energy used

 - contracts

 - accommodation

 - all other operating costs that would normally be reported

 - items expensed from work in progress (capitalised expense items) and pensioner remission expenses (CSOs). (CSOs are likely to have an equivalent inclusion in revenue)

 - competitive neutrality adjustments, which include but are not limited to land tax, debits tax, stamp duties and council rates

 - indirect costs should be apportioned to water and sewerage services

*Excludes:*

 - depreciation

 - any write-downs of assets to recoverable amounts

 - write-offs, retired or scrapped assets

 - the written-down value of assets sold

 - interest

*Notes:*

 - possible or material operating costs are to be included. Materiality as per accounting standards

 - the write-offs could be equated to accelerated depreciation and therefore should be included within current cost depreciation

 - costs associated with BOOT (Built, Owned, Operated, and Transferred) schemes should be reported according to accounting standards. All infrastructure should be treated as if owned and operated by the service provider

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG3.14

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN78

**Indicator short title:** Current cost depreciation: water

**Units:** $,000

**Title:** Current cost depreciation - water supply.

**Definition:** Expenses incurred relating to change in value of the fixed water supply assets, plant and equipment during the reporting period. Current cost depreciation relates to the current value (as opposed to original purchase price) of the fixed assets, plant and equipment during the reporting period.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG3.15

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN79

**Indicator short title:** Current cost depreciation: sewerage

**Units:** $,000

**Title:** Current cost depreciation - sewerage services

**Definition:** Expenses incurred relating to change in value of the fixed sewerage services assets, plant and equipment during the reporting period. Current cost depreciation relates to the current value (as opposed to original purchase price) of the fixed assets, plant and equipment during the reporting period.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG3.16

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN80

**Indicator short title:** Previous 5 year average annual renewals expenditure: water

**Units:** $,000

**Title:** Previous 5 year average annual renewals expenditure - water supply.

**Definition:** The average of the annual renewals expenditures for the last 5 years (i.e. the reporting year and the 4 years previous) in nominal year dollars for water services. Renewals expenditure is defined as expenditure on asset replacement, refurbishment or rehabilitation works which returns the asset to its original size, capacity or condition. It does not increase the size or capacity of the asset.

*Example:*

A service provider's water supply renewals expenditure in the reporting year was $180,000. In the four years before the reporting year, a service provider's annual water supply renewals expenditure (nominal dollars) was $160,000, $162,000, $600,000 and $180,000. The previous 5 year average annual water supply renewals expenditure is then ($160,000 + $162,000 + $600,000 + $180,000 + $180,000) / 5 = $256,400.

*Notes:*

 - renewals expenditure should be reported irrespective of the source of the funding

 - where renewals expenditure is irregular, detail in a comment against the data

 - expenditure that increases the size or capacity of the asset should be reported as FN14 (QG3.1) 'Capital expenditure: water supply'

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG3.17

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN81

**Indicator short title:** Previous 5 year average annual renewals expenditure: sewerage

**Units:** $,000

**Title:** Previous 5 year average annual renewals expenditure - sewerage services

**Definition:** The average of the annual renewals expenditures for the last 5 years (i.e. the reporting year and the 4 years previous) in nominal year dollars for sewerage services. Renewals expenditure is defined as expenditure on asset replacement, refurbishment or rehabilitation works which returns the asset to its original size, capacity or condition. It does not increase the size or capacity of the asset.

*Example:*

A service provider's sewerage services renewals expenditure in the reporting year was

180,000. In the four years before the reporting year, a service provider's annual sewerage services renewals expenditure (nominal dollars) was $160,000, $162,000, $600,000 and $180,000. The previous 5 year average annual sewerage services renewals expenditure is then ($160,000 + $162,000 + $600,000 + $180,000 + $180,000) / 5 = $256,400.

*Notes:*

 - renewals expenditure should be reported irrespective of the source of the funding

 - where renewals expenditure is irregular, detail in a comment against the data

 - expenditure that increases the size or capacity of the asset should be reported as FN15 (QG3.2) 'Capital expenditure: sewerage'

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG3.18

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN82

**Indicator short title:** Forecast 5 year average annual renewals expenditure: water

**Units:** $,000

**Title:** Forecast 5 year average annual renewals expenditure - water supply.

**Definition:** The average annual renewals expenditures planned for 5 years after the reporting year for water services. Renewals expenditure is defined as expenditure on asset replacement, refurbishment or rehabilitation works which returns the asset to its original size, capacity or condition. It does not increase the size or capacity of the asset. The expenditure is at current year dollars.

*Example:*

A service provider's planned water supply renewals expenditure for the next 5 years (in current year dollars) is $140,000, $160,000, $380,000, $60,000 and $90,000. The forecast 5 year average annual water supply renewals expenditure is then ($140,000 + $160,000 + $380,000 + $60,000 + $90,000) / 5 = $166,000.

*Notes:*

 - renewals expenditure should be reported irrespective of the source of the funding

 - where renewals expenditure is irregular, detail in a comment against the data

 - expenditure that increases the size or capacity of the asset should be reported as FN14 (QG3.1) 'Capital expenditure: water supply'

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG3.19

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: FN83

**Indicator short title:** Forecast 5 year average annual renewals expenditure: sewerage

**Units:** $,000

**Title:** Forecast 5 year average annual renewals expenditure - sewerage services.

**Definition:** The average annual renewals expenditures planned for 5 years after the reporting year for sewerage services. Renewals expenditure is defined as expenditure on asset replacement, refurbishment or rehabilitation works which returns the asset to its original size, capacity or condition. It does not increase the size or capacity of the asset. The expenditure is at current year dollars.

*Example:*

A service provider's planned sewerage services renewals expenditure for the next 5 years (in current year dollars) is $140,000, $160,000, $380,000, $60,000 and $90,000. The forecast 5 year average annual sewerage services renewals expenditure is then ($140,000 + $160,000 + $380,000 + $60,000 + $90,000) / 5 = $166,000.

*Notes:*

 - renewals expenditure should be reported irrespective of the source of the funding

 - where renewals expenditure is irregular, detail in a comment against the data

 - expenditure that increases the size or capacity of the asset should be reported as FN15 (QG3.2) 'Capital expenditure: sewerage'

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Costs

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG3.20

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: FN84

**Indicator short title:** Operating ratio

**Units:** %

**Title:** Operating ratio.

**Definition:** Operating ratio is calculated as the net operating result before tax divided by the total operating revenue. It indicates the extent to which operational revenues raised cover operational expenses.

*Calculation:*

Operating ratio = (Net operating result before tax / Total operating revenue) x 100.

*Notes:*

 - a smaller result (percentage) indicates an operating loss. The lower the percentage the worse the result. Operating losses cannot be sustained in the long term. A larger percentage indicates that surplus revenue may be available to support the funding of capital expenditure, or to be held in reserve to offset past or expected future operating losses

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Financial

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG5.1

**Required by:** QUU and Unitywater

## SWIM Code: FN85

**Indicator short title:** Capital replenishment ratio

**Units:** Count

**Title:** Capital replenishment ratio.

**Definition:** Capital replenishment ratio is calculated as the purchases of non-current assets divided by depreciation expense. It provides a comparison of the rate of net spending on assets with depreciation.

*Calculation:*

Capital replenishment ratio = Purchases of non-current assets / Depreciation expense.

*Notes:*

 - a ratio greater than one means that an entity is replacing and/or growing its property, plant and equipment and intangible asset base at a rate faster than it is being depreciated and amortised

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Financial

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG5.2

**Required by:** QUU and Unitywater

## SWIM Code: FN86

**Indicator short title:** Debt to revenue ratio

**Units:** %

**Title:** Debt to revenue ratio.

**Definition:** The debt to revenue ratio is calculated as the total loans and borrowings divided by total operating revenue. It indicates the extent to which your operating revenues (including grants and subsidies) can cover your loans and other borrowings.

*Calculation:*

Debt to revenue ratio = (Total loans and borrowings / Total operating revenue) x 100.

*Notes:*

 - entities with a high debt to revenue ratio (percentage) are generally most at risk of not being able to pay the principal and interest on borrowings as and when they fall due. For entities with a shareholder guarantee, a high debt to revenue ratio can impact an entity's ability to pay other operational expenses

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Financial

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG5.3

**Required by:** QUU and Unitywater

## SWIM Code: FN87

**Indicator short title:** Community service obligations ratio

**Units:** ratio

**Title:** Community Service Obligations ratio.

**Definition:** The purpose is to report the proportion of the utility's revenue that is obtained from Community Service Obligations (CSOs). The ratio of revenue from CSOs is calculated as the total CSO revenue received divided by the total income for the utility (including CSOs).

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Revenue

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** FN87:wsp=FN25/FN3

**NPR code:** F8

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: HL1

**Indicator short title:** Water quality compliance guidelines used

**Units:** Text

**Title:** Water quality guidelines used/required.

**Definition:** The water quality guidelines (standard) specified in the licence (or franchise agreement) or required by the health regulatory agency or government against which the water utility measures verification of water quality. In the absence of a formal requirement on the water utility, the requirements of the Australian Drinking Water Guidelines 2004 (ADWG, 2004) should be used.

**SWIM category:** Compliance - Drinking Water

**Scheme type(s):** WSP

**Data type:** TEXT

**Source of data:** DEFAULT

**NPR code:** H1

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: HL3

**Indicator short title:** Per cent population where microbiological compliance achieved

**Units:** %

**Title:** Per cent of total population where microbiological compliance was achieved.

**Definition:** The per cent of total population where microbiological compliance was achieved is calculated as the population living with those zones where compliance with the microbiological requirements of the water quality guidelines was achieved in each zone of the water supply scheme divided by the total population living within the water supply scheme (i.e. the per cent of the total population served being within the complying microbial zones).

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Compliance - Drinking Water

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** H3

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: HL5

**Indicator short title:** Risk based drinking water management plan assessed externally

**Units:** yes/no

**Title:** Risk based Drinking Water Management Plan assessed externally?

**Definition:** Are your risk based Drinking Water Management Plan assessed externally? For interpretation, a water utility may answer yes to this indicator when it has been audited by an external accredited assessor and received certification for ISO 9001, HACCP or assessed against the requirements of the WSAA ADWG A quality assessment by a RABQSA certified auditor, or assessed by an external assessor against the requirements of the ADWG Framework for Management of Drinking Water Quality. For each of these systems, external third party accredited assessment must have taken place within the past 12 months or as specified by the requirements of the risk management system in place or as specified by the relevant health regulator. The scope of these quality systems must cover the entire scope of water business water quality management systems. If the quality system covers a more limited area, the indicated quality system must be footnoted with a description of the area covered.

*Notes:*

 - NATA certification of laboratory analyses is not an approved water quality personnel management system. NATA accreditation applies to laboratory analytical work which comprises a small area of the total water quality management system

**SWIM category:** Compliance - Drinking Water

**Scheme type(s):** WSP

**Data type:** TEXT

**Source of data:** USER

**NPR code:** H5

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: HL8

**Indicator short title:** Number zones chemical compliance achieved

**Units:** Count

**Title:** Number of zones where chemical compliance was achieved.

**Definition:** Number of zones where compliance with the chemical requirements of the water quality guidelines/standard in each zone of the water supply system.

*Calculation:*

Evaluation of a system with 30 zones shows that there is a failure (non-compliance) of THMs in two zones and a failure of selenium in a source water supplying six zones (one of which overlaps with the zone failing THMs), making a total of seven zones failing (five zone with THMs only, one zone with selenium only and one zone failing both THMs and Selenium). Results would be reported as 23 zones meeting requirements.

*Notes:*

 - zones may or may not equate to sample sites (e.g. a zone may have multiple sample site within it or just one)

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Compliance - Drinking Water

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** H4

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: HL9

**Indicator short title:** Number chemical compliance zones tested

**Units:** Count

**Title:** Total number of zones where chemical compliance was tested.

**Definition:** Number of zones where compliance with the chemical requirements of the water quality guidelines/standard of the water supply system was tested.

*Example:*

Evaluation of a system with 30 zones - results would be reported 30 zones tested.

*Notes:*

 - zones may or may not equate to sample sites (e.g. a zone may have multiple sample site within it or just one)

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Compliance - Drinking Water

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** H4a

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: PR1

**Indicator short title:** Water pricing tariff structure

**Units:** Text

**Title:** Water pricing tariff structure description.

**Definition:** Please provide a text description of the water pricing tariff structure. Where pricing tariff structures differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** TEXT

**Source of data:** DEFAULT

**NPR code:** P1

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: PR3

**Indicator short title:** Fixed charge: water value

**Units:** $/annum

**Title:** Value of the fixed water charge per annum.

**Definition:** The fixed amount the business levies on a residential property per year for water supply charges. This is the component of each residential property's bill that does not vary with the amount of water used. Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG4.1(value)

**NPR code:** P1.2

**ABS code:** 123

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: PR4

**Indicator short title:** Sewerage pricing tariff structure

**Units:** Text

**Title:** Sewerage pricing tariff structure description.

**Definition:** Please provide a text description of the sewerage pricing tariff structure. Where pricing tariff structures differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most sewerage connections.

**SWIM category:** Sewerage Pricing

**Scheme type(s):** Sewerage scheme

**Data type:** TEXT

**Source of data:** DEFAULT

**NPR code:** P4

**Required by:** Large SPs with >10,000 connections

## SWIM Code: PR5

**Indicator short title:** Fixed charge: water description

**Units:** Text

**Title:** Description of the basis of fixed water charge.

**Definition:** Please provide a text description of the basis of the fixed water charge. Where the basis of the fixed water charge differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

*Example:*

Per cent of property value, meter size, pipe size, etc.

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** TEXT

**Source of data:** USER

**QG KPI code:** QG4.1(text)

**ABS code:** 124

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: PR6

**Indicator short title:** Usage charge 1st Step: value

**Units:** $/kL

**Title:** Water usage charge 1st step: value of charge.

**Definition:** The actual dollar ($) charge per kL for usage in this step. If you have a ‘Free water allowance’ it should be captured as the first step of the tariff structure and associated with a $0 price for ‘X’ kL (“Usage upper bound of 1st step”). So for example, if you have a two tier charge for water (a ‘free’ component (no charge for first 250 kL) and then an excess usage charge ($1.09 per kL for every kL >250)) then you would report thus: PR6 (Usage charge 1st step: value ($)) = “0”, PR49 (Usage upper bound 1st step: kL) = “250”, and PR8 (Usage charge 2nd step: value ($)) = “1.09”, PR9 (Usage upper bound 2nd step: kL) = “>250”. Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P1.3

**ABS code:** 125

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR8

**Indicator short title:** Usage charge 2nd Step: value

**Units:** $/kL

**Title:** Water usage charge 2nd step: value of charge.

**Definition:** The actual dollar ($) charge per kL for usage in this step. Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

*Notes:*

 - if there are no usage charges at this step then 'NR' should be entered

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P1.4

**ABS code:** 127

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR10

**Indicator short title:** Usage charge 3rd Step: value

**Units:** $/kL

**Title:** Water usage charge 3rd step: value of charge.

**Definition:** The actual dollar ($) charge per kL for usage in this step. Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

*Notes:*

 - if there are no usage charges at this step then 'NR' should be entered

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P1.5

**ABS code:** 129

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR12

**Indicator short title:** Usage charge 4th Step: value

**Units:** $/kL

**Title:** Water usage charge 4th step: value of charge.

**Definition:** The actual dollar ($) charge per kL for usage in this step. Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

*Notes:*

 - if there are no usage charges at this step then 'NR' should be entered

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P1.6

**ABS code:** 131

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR14

**Indicator short title:** Usage charge 5th Step: value

**Units:** $/kL

**Title:** Water usage charge 5th step: value of charge.

**Definition:** The actual dollar ($) charge per kL for usage in this step. Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

*Notes:*

 - if there are no usage charges at this step then 'NR' should be entered

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P1.7

**ABS code:** 133

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR16

**Indicator short title:** Usage charge 6th Step: value

**Units:** $/kL

**Title:** Water usage charge 6th step: value of charge.

**Definition:** The actual dollar ($) charge per kL for usage in this step. Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

*Notes:*

 - if there are no usage charges at this step then 'NR' should be entered

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P1.8

**ABS code:** 135

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR23

**Indicator short title:** Special levies: water value

**Units:** $/kL

**Title:** Special levies - water: value.

**Definition:** The actual dollar value ($) of any special levies that may apply to residential customers of the water supply portion of the business. Special levies are any charges that are directly levied upon properties, and are neither a fixed or pay for use charge for water (e.g. environmental improvement levy). Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P1.12

**Required by:** Large SPs with >10,000 connections

## SWIM Code: PR25

**Indicator short title:** Revenue from water special levies retained by utility

**Units:** yes/no

**Title:** Income from special water levies retained by the utility?

**Definition:** Is the income from any water supply special levies retained by the utility? Provide a 'yes' or 'no' response. If only some of the levy is retained, please answer 'yes' and note how much is retained in a comment against the data.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** TEXT

**Source of data:** USER

**NPR code:** P1.13

**Required by:** Large SPs with >10,000 connections

## SWIM Code: PR27

**Indicator short title:** Annual residential water supplied per connection

**Units:** kL

**Title:** Average annual residential water supplied per connection.

**Definition:** This is the same as the value reported for indicator WA12 'Annual residential water supplied per connection' reported elsewhere.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** PR27:wsp+potable+raw+recycled=WA12

**Required by:** Large SPs with >10,000 connections

## SWIM Code: PR31

**Indicator short title:** Fixed charge: sewerage value

**Units:** $/annum

**Title:** Value of the fixed sewerage charge per annum.

**Definition:** The fixed amount the business levies on a residential property per year for sewerage services charges. This is the component of each residential property's bill that does not vary with the amount of sewerage produced. Where fixed sewerage charges differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most sewerage connections.

**SWIM category:** Sewerage Pricing

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG4.2(value)

**NPR code:** P4.1

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR32

**Indicator short title:** Usage charge: sewerage value

**Units:** $/kL

**Title:** Sewerage usage charge - value.

**Definition:** The actual dollar ($) charge levied upon a residential customer for their sewerage per kL sewage production ('usage'). Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most sewerage connections.

*Notes:*

 - if there are no usage charges then 'NR' should be entered

**SWIM category:** Sewerage Pricing

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P4.2

**Required by:** Large SPs with >10,000 connections

## SWIM Code: PR33

**Indicator short title:** Special levies: sewerage value

**Units:** $

**Title:** Special levies - sewerage: value

**Definition:** The actual dollar value ($) of any special levies that may apply to residential customers of the sewerage services portion of the business. Special levies are any charges that are directly levied upon properties, and are neither a fixed or pay for use charge for sewerage services (e.g. environmental improvement levy). Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most sewerage connections.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Sewerage Pricing

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P4.3

**Required by:** Large SPs with >10,000 connections

## SWIM Code: PR34

**Indicator short title:** Revenue from sewerage special levies retained by utility

**Units:** yes/no

**Title:** Income from special sewerage levies retained by the utility?

**Definition:** Is the income from any sewerage services special levies retained by the utility? Provide a 'yes' or 'no' response. If only some of the levy is retained, please answer 'yes' and note how much is retained in a comments against the data.

**SWIM category:** Sewerage Pricing

**Scheme type(s):** Sewerage scheme

**Data type:** TEXT

**Source of data:** USER

**NPR code:** P4.4

**Required by:** Large SPs with >10,000 connections

## SWIM Code: PR40

**Indicator short title:** Fixed charge: sewerage description

**Units:** Text

**Title:** Description of the basis of fixed sewerage charge.

**Definition:** Please provide a text description of the basis of the fixed sewerage charge. Where the basis of fixed sewerage charges differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most sewerage connections.

*Example:*

Per cent of property value, number of pedestals, etc.

**SWIM category:** Sewerage Pricing

**Scheme type(s):** Sewerage scheme

**Data type:** TEXT

**Source of data:** USER

**QG KPI code:** QG4.2(text)

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR43

**Indicator short title:** Annual bill based on 200kL/a: water

**Units:** $

**Title:** Average annual residential bill based on the supply of 200kL of water.

**Definition:** The typical residential customer's bill based on an annual consumption of 200kL of water. Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

*Includes:*

 - relevant fixed and/or usage charges for water

 - any relevant special levy charges for water

*Calculation:*

Average annual residential bill based on the supply of 200kL of water = Annual residential water fixed charge + Residential water usage charge for 200kL consumption + Special water levies.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P2

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR44

**Indicator short title:** Typical residential bill: water

**Units:** $

**Title:** Typical residential water bill per annum.

**Definition:** The dollar ($) amount of the typical residential water bill for the reporting year. This information is premised on the average annual residential consumption for a full-paying customer. Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

*Includes:*

 - relevant fixed and/or usage charges for water

 - any relevant special levy charges for water

*Calculation:*

Typical residential water bill per annum = Annual residential water fixed charge + Residential water usage charge for the average residential consumption + Special water levies.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P3

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR45

**Indicator short title:** Annual bill based on 200kL/a: sewerage

**Units:** $

**Title:** Average annual residential bill based on the production of 200kL of sewage.

**Definition:** The typical residential customer's bill based on an annual production of 200kL of sewage. Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most sewerage connections.

*Includes:*

 - relevant fixed and/or usage charges for sewerage

 - any relevant special levy charges for sewerage

*Calculation:*

Average annual residential bill based on the production of 200kL of sewage = Annual residential sewerage fixed charge + Residential sewerage usage charge for 200kL production + Special sewerage levies.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Sewerage Pricing

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P5

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR46

**Indicator short title:** Typical residential bill: sewerage

**Units:** $

**Title:** Typical residential sewerage bill per annum.

**Definition:** The dollar ($) amount of the typical residential sewerage bill for the reporting year. This information is premised on the average annual residential production for a full-paying customer. Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most sewerage connections.

*Includes:*

 - relevant fixed and/or usage charges for sewerage

 - any relevant special levy charges for sewerage

*Calculation:*

Typical residential sewerage bill per annum = Annual residential sewerage fixed charge + Residential sewerage usage charge for the average residential sewage production + Special sewerage levies.

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Sewerage Pricing

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P6

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR47

**Indicator short title:** Annual bill based on 200kL/a: water+sewerage

**Units:** $

**Title:** Average annual water and sewerage bill based on 200kL water consumption and 200kL sewage production.

**Definition:** This is the typical residential customer's bill based on an annual consumption of 200kL of water and production of 200kL of sewage. It is equal to the sum of the average annual water bill based on 200kL consumption plus the average annual sewerage bill based on 200kL production.

*Includes:*

 - relevant fixed and/or usage charges for water and sewerage

 - any relevant special levy charges for water and sewerage

*Example:*

Annual average residential bill water and sewerage based on 200 kL consumption, where: Sewerage fixed charge = $100/year (no usage charge); Water fixed charge = $50/year; Special levy = $30/year; Water pay-for-use charge = $1/kL = $1 x 200 kL = $200. Therefore, the annual residential bill for 200 kL water and sewerage = $100 + $50 + $200 + $30 = $380.

*Notes:*

 - where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Pricing

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** PR47:wsp=PR43+PR45

**QG KPI code:** QG4.3

**NPR code:** P7

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR48

**Indicator short title:** Typical residential bill: water+sewerage

**Units:** $

**Title:** Typical residential water and sewerage bill per annum.

**Definition:** The dollar ($) amount of the typical residential water and sewerage bill for the reporting year. It is equal to the sum of the typical residential water bill per annum plus the typical residential sewerage bill per annum. This information is premised on the average annual residential consumption for a full-paying customer.

*Includes:*

 - relevant fixed and/or usage charges for water and sewerage

 - any relevant special levy charges for water and sewerage

*Example:*

Typical residential bill water and sewerage, where: Sewerage fixed charge = $100/year (no usage charge); Water fixed charge = $50/year; Special levy = $30/year; Average residential water consumption per property = 300 kL (calculated from 'Average annual residential water supplied per property'); Water pay-for-use charge = $1/kL = $1 x 300 kL = $300. Therefore, the typical residential bill water and sewerage = $100 + $50 + $300 + $30 = $480.

*Notes:*

 - where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Pricing

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** PR48:wsp=PR44+PR46

**QG KPI code:** QG4.4

**NPR code:** P8

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR49

**Indicator short title:** Usage upper bound of 1st Step: kL

**Units:** kL

**Title:** Water upper bound of 1st step: kL.

**Definition:** The upper bound of water usage (volume in kL) range that defines this step. Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

*Notes:*

 - enter the value for the end volume (upper bound) of the usage step in kL

 - if this is the first and last step then the kL value should be entered as greater than the starting volume of this step in the format >A, e.g. '>0'

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P1.3a

**ABS code:** 126

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR50

**Indicator short title:** Usage upper bound of 2nd Step: kL

**Units:** kL

**Title:** Water upper bound of 2nd step: kL.

**Definition:** The upper bound of water usage (volume in kL) range that defines this step. Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

*Notes:*

 - enter the value for the end volume (upper bound) of the usage step in kL

 - if this is the last step then the kL value should be entered as greater than the starting volume of this step in the format >A, e.g. '>150'

 - if there are no usage charges at this step then 'NR' should be entered

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P1.4a

**ABS code:** 128

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR51

**Indicator short title:** Usage upper bound of 3rd Step: kL

**Units:** kL

**Title:** Water upper bound of 3rd step: kL.

**Definition:** The upper bound of water usage (volume in kL) range that defines this step. Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

*Notes:*

 - enter the value for the end volume (upper bound) of the usage step in kL

 - if this is the last step then the kL value should be entered as greater than the starting volume of this step in the format >A, e.g. '>300'

 - if there are no usage charges at this step then 'NR' should be entered

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P1.5a

**ABS code:** 130

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR52

**Indicator short title:** Usage upper bound of 4th Step: kL

**Units:** kL

**Title:** Water upper bound of 4th step: kL.

**Definition:** The upper bound of water usage (volume in kL) range that defines this step. Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

*Notes:*

 - enter the value for the end volume (upper bound) of the usage step in kL

 - if this is the last step then the kL value should be entered as greater than the starting volume of this step in the format >A, e.g. '>450'

 - if there are no usage charges at this step then 'NR' should be entered

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P1.6a

**ABS code:** 132

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR53

**Indicator short title:** Usage upper bound of 5th Step: kL

**Units:** kL

**Title:** Water upper bound of 5th step: kL.

**Definition:** The upper bound of water usage (volume in kL) range that defines this step. Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

*Notes:*

 - enter the value for the end volume (upper bound) of the usage step in kL

 - if this is the last step then the kL value should be entered as greater than the starting volume of this step in the format >A, e.g. '>600'

 - if there are no usage charges at this step then 'NR' should be entered

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P1.7a

**ABS code:** 134

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: PR54

**Indicator short title:** Usage upper bound of 6th Step: kL

**Units:** kL

**Title:** Water upper bound of 6th step: kL.

**Definition:** The upper bound of water usage (volume in kL) range that defines this step. Where values differ between schemes/areas then the WSP-wide value reported is to be that of the scheme/area with the most water connections.

*Notes:*

 - enter the value for the end volume (upper bound) of the usage step in kL

 - if this is the last step then the kL value should be entered as greater than the starting volume of this step in the format >A, e.g. '>750'

 - if there are no usage charges at this step then 'NR' should be entered

**SWIM category:** Water Pricing

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** P1.8a

**ABS code:** 136

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA1

**Indicator short title:** Volume water sourced: surface water

**Units:** ML

**Title:** Volume of water taken from surface water source (including via desalination).

**Definition:** The total metered and estimated unmetered volume of water abstracted by the utility from surface water sources such as dams, weirs, rivers or irrigation channels during the reporting period.

*Includes:*

 - surface water desalination

 - dams, weirs, rivers or irrigation channels

 - for any potable and non-potable use

 - any water returned to surface water

 - water taken by other service providers operating on behalf of the utility

*Excludes:*

 - any sourced from marine desalination

 - any urban stormwater

 - any purchased/imported surface water from another service provider such as a bulk water supplier (reported separately)

*Example:*

 - 'Imported' versus 'sourced' water when a third party is involved. Water Service Provider A (WSP A) has multiple potable water schemes from which they source/import raw water (an allocation) and then treat it themselves and supply to their customers. The question is whether they report the amount of water they ‘get’ into a ‘sourced’ or ‘imported’ indicator as per the examples below.

 1. Potable Water Scheme X. They have an allocation from Sunwater. Sunwater releases water from an upstream dam into a river/weir further downstream from which WSP A itself extracts the water and treats. In this case, WSP A would class this as ‘Volume water taken: surface water’ and add the volume to WA1.

 2. Potable Water Scheme Y. Again, the raw water is from an allocation from Sunwater. In this case Sunwater provide the water to WSP A directly via a pipeline which WSP A pays both an access fee and pumping charge to Sunwater (in addition to the normal volume charge for the allocation). The raw water originates in a dam but is piped by Sunwater directly to the Water Treatment Plant of Potable Water Scheme Y. In this case WSP A report this raw water as ‘Volume raw-PT water imported’ and add the volume to WA65. With regard to this example, the organisations requesting the data would classify this as 'imported water' (i.e. bulk raw water supplied by another supplier), because Sunwater provides the infrastructure for the service (and additionally WSP A pays the access fee and pumping charges).

*Notes:*

 - there may be a requirement in some cases for utilities to aggregate volumes from various surface water sources

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

 - the reported volume should be based on the metered inflow of raw water to WTPs or metered extraction of raw water where it is supplied directly into the urban system without treatment

 - if a WTP inflow measurement is not available an outflow measurement can be used. In such cases this should be documented in the associated footnote/quantification method/comment

 - where possible, avoid reporting volumes based on meters that are a long way upstream of a WTP. Distribution system losses and gains can influence the measured volume significantly

**SWIM category:** Sources of Water

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.8

**NPR code:** W1

**ABS code:** 34

**BoM Cat 7 code:** U1.1+U1.2

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA2

**Indicator short title:** Volume water sourced: groundwater

**Units:** ML

**Title:** Volume of water taken from a groundwater source (including via desalination).

**Definition:** The total metered and estimated unmetered volume of water abstracted from groundwater during the reporting period.

*Includes:*

 - groundwater desalination

 - aquifers, including those subject to aquifer replenishment

 - for any potable and non-potable use

 - water taken by other service providers operating on behalf of the utility

*Excludes:*

 - any purchased/imported groundwater from another service provider such as a bulk water supplier (reported separately)

*Notes:*

 - there may be a requirement in some cases for utilities to aggregate volumes from various groundwater sources

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

 - the reported volume should be based on the metered inflow of raw water to WTPs or metered extraction of raw water where it is supplied directly into the urban system without treatment

 - if a WTP inflow measurement is not available an outflow measurement can be used. In such cases this should be documented in the associated footnote/quantification method/comment

 - where possible, avoid reporting volumes based on meters that are a long way upstream of a WTP. Distribution system losses and gains can influence the measured volume significantly

**SWIM category:** Sources of Water

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.9a

**NPR code:** W2

**ABS code:** 35

**BoM Cat 7 code:** U2.1+U2.2

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA4

**Indicator short title:** Volume recycled sewage produced (NPR)

**Units:** ML

**Title:** Volume of recycled sewage water produced, excluding water that was used on-site or by agriculture where it did not replace raw-PT or potable water (and excluding stormwater reuse).

**Definition:** The total metered and estimated unmetered volume of recycled water sourced by the water utility during the reporting period including recycled sewage water from direct or indirect reuse. This should be the sum of residential, industrial/commercial, municipal irrigation and on-site substitution (where it replaces potable water). Water for agribusiness should also be included where potable water (or untreated water in storage) would normally be used.

*Includes:*

 - water discharged to a waterway for environmental purposes as prescribed by the environmental regulator

*Excludes:*

 - managed aquifer recharge

 - urban stormwater reuse

*Notes:*

 - this differs from indicator WA26 (Total recycled water supplied) where any agricultural and on-site uses are counted, whereas only agricultural and on-site uses which meet the above qualifications are included here

 - unmetered volumes - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Sources of Water

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: WA7

**Indicator short title:** Volume water sourced

**Units:** ML

**Title:** The total volume of water sourced (potable, raw-PT, recycled sewage and stormwater).

**Definition:** The total metered and estimated unmetered volume of water sources reported elsewhere as supplied from surface waters, groundwater, desalination, recycling (sewage and stormwater) and imported (from bulk supplier).

*Includes:*

 - surface water

 - groundwater

 - marine desalination

 - recycled stormwater and recycled sewage water

 - bulk supplier (imported)

 - any other sources

 - for any potable and non-potable (raw-PT) use

*Excludes:*

 - aquifer recharge

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Sources of Water

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA7:potable+raw=WA1+WA2+WA61+WA158-WA197; WA7:recycled=WA20+WA21+WA85+WA86; WA7:wsp=WA1+WA2+WA61+WA158-WA197+WA20+WA21+WA85+WA86

**QG KPI code:** QG1.12

**NPR code:** W7

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA8

**Indicator short title:** Volume all water supplied: residential

**Units:** ML

**Title:** Total volume of potable and non-potable (raw-PT) residential water supplied (includes recycled water).

**Definition:** The total metered and estimated unmetered volume of potable and non-potable (raw-Partially Treated) water supplied to residential properties. Includes recycled water sourced from sewage and stormwater.

*Includes:*

 - recycled sewage water

 - recycled stormwater

 - water supplied to a residential property connected to a scheme before any water treatment process

 - water supplied to a residential property connected to a scheme after any water treatment process

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA8:potable+raw=WA206; WA8:recycled=WA20+WA85; WA8:wsp=WA206+WA20+WA85

**NPR code:** W8

**ABS code:** 40

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA9

**Indicator short title:** Volume all water supplied: non-residential

**Units:** ML

**Title:** Total volume of potable and non-potable (raw-PT) non-residential water supplied (includes recycled water).

**Definition:** The total metered and estimated unmetered volume of potable and non-potable (raw-Partially Treated) water supplied to non-residential properties. Includes recycled sewage and stormwater.

*Includes:*

 - recycled sewage water

 - recycled stormwater

 - water supplied to a commercial, municipal and industrial property connected to a scheme before any water treatment process

 - water supplied to a commercial, municipal and industrial property connected to a scheme after any water treatment process

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA9:potable+raw=WA207; WA9:recycled=WA21+WA86; WA9:wsp=WA207+WA21+WA86

**NPR code:** W9

**ABS code:** 40.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA10

**Indicator short title:** Volume potable+raw-PT water supplied: other (NPR)

**Units:** ML

**Title:** Total volume of non-revenue potable and non-potable (raw-PT) water supplied to other uses (excluding non-urban agriculture and aquifer recharge; including losses).

**Definition:** The total metered and estimated unmetered volume of non-revenue potable and non-potable (raw-PT) water supplied to other uses. Other components of non-revenue water supplied, consisting of, but not limited to, unbilled authorised consumption (fire-fighting, water treatment process water, flushing and other consumption due to operations), unauthorised consumption (from hydrants, fire services, etc.), customer metering errors (including under-registration) and real losses (leaks and overflows from service reservoirs, leaks and bursts from mains and services up to customer meters). Excludes non-urban agricultural irrigation and environmental water. Also excludes managed aquifer recharge.

*Includes:*

 - losses

 - recycled sewage water

 - recycled stormwater

*Excludes:*

 - water supplied to non-urban agriculture

 - water supplied to aquifer recharge

 - water supplied to environment

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA10:potable=WA36; WA10:raw=WA93; WA10:recycled=WA187+WA192-WA73; WA10:wsp=WA36+WA93+WA187+WA192-WA73

**ABS code:** 40.2

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA11

**Indicator short title:** Volume water supplied: all (NPR)

**Units:** ML

**Title:** Total volume of potable and non-potable urban water supplied (excluding agricultural irrigation and aquifer recharge).

**Definition:** The total metered and estimated unmetered volume of water (potable and non-potable, including recycled water) supplied to customers over the reporting period. This comprises the sum of residential and non-residential (includes losses).

*Includes:*

 - losses

 - recycled sewage water

 - recycled stormwater

*Excludes:*

 - water supplied to non-urban agriculture

 - water supplied to aquifer recharge

 - water supplied to environment

 - water exported

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA11:wsp+potable+raw+recycled=WA8+WA9

**NPR code:** W11

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: WA12

**Indicator short title:** Annual residential water supplied per connection

**Units:** kL/connection/year

**Title:** Average annual residential water supplied per property.

**Definition:** Average annual residential water supplied is the total residential water supplied divided by the number of residential water connected properties.

*Includes:*

 - potable, raw-PT and recycled water supplies

**SWIM category:** Consumption

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA12:wsp+potable+raw+recycled=WA8/CS2

**NPR code:** W12

**ABS code:** 117

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA13

**Indicator short title:** Volume raw (untreated) water supplied: environmental flows

**Units:** ML

**Title:** Volume of raw (untreated) water supplied for environmental flows from outside the urban water supply system (excludes recycled water and aquifer recharge).

**Definition:** The total metered and estimated unmetered volume of raw (untreated) water supplied by the utility to the environment during the reporting year. Environmental flows are wholesale flow allocations to the environment, generally upstream of the master meter, as specified in the environmental flow management regime generally required by the relevant natural resource management agency. Accidental or unintentional releases should not be included unless they can be incorporated into the environmental flow management regime - clarification should be sought from the State or Territory regulator on any component of unintended releases to be included in environmental flows.

*Includes:*

 - environmental releases made from outside of the urban water supply system, i.e. before treatment

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

 - any volumes of potable water

 - water that has been subjected to treatment for use and subsequently returned to surface water. Water returned to surface water from the urban water system are reported under another indicator

 - water supplied for aquifer recharge

 - accidental or unintentional releases (see definition above)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments

**SWIM category:** Env Flows

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** W13

**ABS code:** 65

**BoM Cat 7 code:** U14.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA15

**Indicator short title:** Volume recycled sewage exported

**Units:** ML

**Title:** Total volume of recycled sewage water exported (supplied to other infrastructure operators/utilities).

**Definition:** The total metered and estimated unmetered volume of potable and non-potable recycled sewage water, exported or sold to another utility, entity or infrastructure operator outside this utility's geographic area of responsibility.

*Includes:*

 - volumes of water originating from another source. For example, water imported by this utility and then exported

 - bulk recycled sewage water sales

 - transfers not associated with a financial transaction

*Excludes:*

 - volume of water exported/provided to water carriers or tankers that supply water

 - any recycled stormwater

 - any recycled sewage water exported 'internally' (from within your organisation) from one recycled scheme to another

 - volumes from service providers operating infrastructure on behalf of the utility

*Notes:*

 - provide only the total volume of water actually received by the other utility and not the amount of water that this utility or entity might have been entitled to receive

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Recycled Water (sewage) uses

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** W15

**ABS code:** 106

**BoM Cat 7 code:** U42.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA16

**Indicator short title:** Volume sewage collected: residential+non-trade

**Units:** ML

**Title:** Volume of residential and non-trade waste sewage collected.

**Definition:** The total metered and estimated unmetered volume of sewage received from residential, non-residential and non-trade waste sources. This also includes any volumes collected in the sewage system due to stormwater, illegal connection inflow and infiltration to the sewerage system. Residential (domestic) sewage is the water borne waste derived from human origin comprising of faecal matter, urine and liquid household waste from water closet pans, sinks, baths, basins and similar fixtures designed for use in private dwellings.

*Includes:*

 - wastewater collected by the utility or service providers operating infrastructure on behalf of the utility

 - domestic sewage

 - infiltration of groundwater in the sewage system

 - inflow of stormwater in the sewage system

 - illegal connections inflows

*Excludes:*

 - any trade waste

 - transfers from other utilities or third party infrastructure operators (imports - reported elsewhere)

 - transfers from other operational areas (imports - reported elsewhere)

 - transfers from the wastewater treatment system (reported elsewhere)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** W16

**ABS code:** 96

**BoM Cat 7 code:** U22.3

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA17

**Indicator short title:** Volume sewage collected: trade waste

**Units:** ML

**Title:** Volume trade waste collected.

**Definition:** The total metered and estimated unmetered volume of trade waste collected and treated by the utility, or on behalf of the utility. This includes any volumes of stormwater collected in the trade waste system. Trade waste (industrial waste) is the liquid waste generated from any industry, business, trade, or manufacturing process.

*Excludes:*

 - any domestic (residential/non-trade) sewage

 - trade waste transfers from other utilities or third party infrastructure operators (imports - reported elsewhere)

 - trade waste transfers from other operational areas (imports - reported elsewhere)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** W17

**ABS code:** 97

**BoM Cat 7 code:** U22.2

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA18

**Indicator short title:** Volume sewage collected: residential+trade

**Units:** ML

**Title:** Total volume of residential sewage and trade waste collected.

**Definition:** The total metered and estimated unmetered volume of sewage collected by the utility, measured as treatment plant inflow, plus sewage treated by another business on behalf of the water utility e.g. wholesaler. Where only treatment plant outflow is measured, record this value and comment appropriately. This measure should equal the sum of volumes reported for residential, non-residential and non-trade waste collected and trade waste collected.

*Notes:*

 - residential and non-residential sewage and trade waste are defined as per either The National Water Management Strategy Guidelines for Sewerage Systems 1994 or State-based legislation

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA18:wsp+sewage=WA16+WA17

**NPR code:** W18

**Required by:** Large SPs with >10,000 connections

## SWIM Code: WA19

**Indicator short title:** Volume sewage collected per connection

**Units:** kL/connection/year

**Title:** Average volume sewage collected per property.

**Definition:** This indicator provides the average volume (kL) of sewage collected per residential and trade waste property (connection) over the reporting year.

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA19:wsp+sewage=WA18/CS8

**NPR code:** W19

**Required by:** Large SPs with >10,000 connections

## SWIM Code: WA20

**Indicator short title:** Volume recycled sewage supplied: residential

**Units:** ML

**Title:** Volume of recycled sewage water supplied to residential customers.

**Definition:** The total metered and estimated unmetered volume of recycled sewage water supplied to residential customers. This would generally occur via a third pipe system.

*Includes:*

 - potable and non-potable water used to top-up the recycled sewage water system

 - volumes taken from sewer mining

 - potable and non-potable water

*Excludes:*

 - any recycled stormwater

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Recycled Water (sewage) uses

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** W20

**ABS code:** 102

**BoM Cat 7 code:** U44.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA21

**Indicator short title:** Volume recycled sewage supplied: non-residential

**Units:** ML

**Title:** Volume of recycled sewage water supplied to non-residential customers.

**Definition:** The total metered and estimated unmetered volume of recycled sewage water supplied to non-residential customers. For example, recycled water supplied to golf courses, heavy industry and commercial areas. This would generally occur via a third pipe system.

*Includes:*

 - potable and non-potable water used to top-up the recycled sewage water system

 - volumes taken from sewer mining

 - potable and non-potable water

 - commercial, industrial, municipal and agricultural customers, own use.

*Excludes:*

 - any recycled stormwater

 - any recycled sewage water supplied as environmental flows (reported elsewhere)

 - any recycled sewage water supplied as aquifer recharge (reported elsewhere)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Recycled Water (sewage) uses

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA21:recycled+wsp=WA218+WA22+WA219+WA187

**NPR code:** W21

**ABS code:** 102.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA22

**Indicator short title:** Volume recycled sewage supplied: agricultural (all)

**Units:** ML

**Title:** Volume of recycled sewage water supplied for agricultural purposes.

**Definition:** The total metered and estimated unmetered volume of recycled sewage water supplied for agricultural purposes. Includes potable and non-potable water. For example, irrigation of crops recycled sewage water supplied to forestry, agricultural products including livestock.

*Includes:*

 - volumes taken from sewer mining

 - volumes supplied to individual agricultural irrigators and Irrigation Water Systems/Schemes

*Excludes:*

 - recycled stormwater

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Recycled Water (sewage) uses

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 102.2

**BoM Cat 7 code:** U44.3+U44.4

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA23

**Indicator short title:** Volume recycled sewage supplied: environmental flows

**Units:** ML

**Title:** Volume of recycled sewage water supplied for environmental flows/purposes (excluding groundwater/aquifer recharge).

**Definition:** The total metered and estimated unmetered volume of recycled sewage water discharged to a waterway for environmental purposes as prescribed by the environmental regulator. There must be a quality characteristic that is a net benefit to the environment as determined by the relevant regulator. For example, water discharged to rivers, the sea, natural wetlands for environmental purposes as prescribed by the environmental regulator. This will exclude non-harvestable forests and bushland if the regulator determines there is disposal rather than beneficial use.

*Includes:*

 - potable and non-potable water used to top-up the recycled sewage water system

 - volumes taken from sewer mining

 - potable and non-potable water

*Excludes:*

 - any recycled stormwater

 - any volumes supplied to agriculture/individual irrigation

 - any recycled sewage water supplied for groundwater/aquifer recharge (reported elsewhere)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Recycled Water (sewage) uses

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** W23

**ABS code:** 66

**BoM Cat 7 code:** U44.6

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA26

**Indicator short title:** Volume recycled sewage supplied: all

**Units:** ML

**Title:** Total volume of recycled sewage water supplied (within your geographic area of responsibility).

**Definition:** The total metered and estimated unmetered volume of recycled sewage water supplied (within your geographic area of responsibility). This indicator is the sum of recycled sewage water supplied to all customers, i.e. residential, commercial, municipal and industrial, agriculture, environmental purposes, on-site use, supplied through a third-pipe system for urban reuse, and other users (including aquifer recharge).

*Includes:*

 - volumes supplied through a third-pipe system for urban reuse

 - all recycled sewage water supplied/used

 - volumes taken from sewer mining

 - potable and non-potable water

*Excludes:*

 - recycled stormwater

 - evaporation

*Notes:*

 - recycled water can be provided for on-site reuse, agriculture, irrigation, industry, potable or other use external to the treatment process

 - there may be a requirement in some cases for water service providers to aggregate volumes from various sources

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Recycled Water (sewage) uses

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA26:recycled=WA20+WA21+WA23+WA73; WA26:wsp=WA20+WA21+WA23+WA73

**QG KPI code:** QG1.11

**NPR code:** W26

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA27

**Indicator short title:** Per cent sewage recycled

**Units:** %

**Title:** Per cent of sewage collected that was recycled.

**Definition:** The per cent of all treated effluent that is used by either the water utility itself, a business supplied by the water utility, or supplied through a third pipe system for urban re-use. The total volume of treated effluent should exclude the volume of bulk recycled water purchased from another utility or business and treatment plant evaporation. The parameters are the total sewage collected and the volume of effluent recycled. Recycled sewage water can be provided for onsite reuse, agriculture, irrigation, industry, potable or other use external to the treatment process.

*Notes:*

 - recycled water supplied to clubs, sporting fields, or other businesses is included

 - environmental flows are included if they are approved by the regulator and substitute raw water abstraction or are recognised as an environmental flow by the regulator/authority

 - sewer mining extracted from the utility's mains is an accepted form of recycling

 - this indicator represents the percentage of the Utility's effluent that is recycled by the Utility. This calculation must take into account any recycled sewage water that is purchased from outside the Utility's-area (this must be excluded from the calculation) and any recycled water that is produced by the Utility but exported to outside the Utility's-area

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Recycled Water (sewage) uses

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA27:wsp=((WA26+WA15-WA101)/WA31)\*100

**NPR code:** W27

**Required by:** Large SPs with >10,000 connections

## SWIM Code: WA30

**Indicator short title:** Annual potable water supplied per connection

**Units:** kL/connection/year

**Title:** Average annual potable water supplied per connection.

**Definition:** Average annual potable water supplied per connection is the total potable urban water supplied divided by the total number of properties connected to potable water supplies.

*Excludes:*

 - any raw-PT water

 - any recycled water

**SWIM category:** Consumption

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA30:wsp+potable=(WA32+WA34+WA36)/CS67

**ABS code:** 118

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA31

**Indicator short title:** Volume sewage treated

**Units:** ML

**Title:** Volume of sewage effluent treated by the utility.

**Definition:** The total metered and estimated unmetered volume of effluent produced by the Sewage Treatment Plant (STPs) within each sewerage scheme, regardless of whether any of the effluent is reused.

*Includes:*

 - treated effluent that is subsequently disposed of

 - treated effluent returned to the sewerage system

 - treated effluent that is recycled, either directly or with further treatment

 - losses during treatment process

*Excludes:*

 - onsite usage (reported elsewhere)

*Notes:*

 - the reported volume should be based on the metered outflows at the outlet of the STP

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

 - where measurement of the volume of effluent leaving the treatment plant is not made but the volume of influent is measured, then the volume of sewage effluent can be calculated as follows: volume sewage measured at inlet to treatment works minus net evaporation. Net evaporation can be calculated either by using outlet meters (where present) or through meteorological data. Meteorological data should be taken from the Bureau of Meteorology weather station closest to the location of the pond or alternatively by weather stations on site operated by the water utility. Where a utility's weather stations are used, these need to be subjected to appropriate quality control processes

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** W18.5

**ABS code:** 72

**BoM Cat 7 code:** U24.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA32

**Indicator short title:** Volume potable water supplied: residential

**Units:** ML

**Title:** Volume of potable residential water supplied (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of potable water supplied to residential properties. Potable water is intended for use as drinking water and should materially meet the Australian Drinking Water Guidelines 2004, or equivalent.

*Excludes:*

 - any volumes of potable recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - the reported volume should be based on customer metering data

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Potable water uses

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.17a

**ABS code:** 112

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA34

**Indicator short title:** Volume potable water supplied: non-residential

**Units:** ML

**Title:** Volume of potable non-residential water supplied (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of potable water supplied to non-residential properties/customers. Potable water is intended for use as drinking water and should materially meet the Australian Drinking Water Guidelines 2004, or equivalent.

*Includes:*

 - environmental releases made from the urban water supply system, i.e. after treatment

*Excludes:*

 - any volumes of potable recycled water (i.e. sourced from sewage or stormwater)

 - environmental releases made outside of the water supply system

*Notes:*

 - the reported volume should be based on customer metering data

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Potable water uses

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.18a

**ABS code:** 112.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA36

**Indicator short title:** Volume potable water supplied: non-revenue

**Units:** ML

**Title:** Volume of potable water produced that is not paid for (excluding recycled water; including losses).

**Definition:** The total metered and estimated unmetered volume of potable water produced that is not paid for. Often referred to as 'non-revenue' water. This would include, but may not be limited to, an estimate of water used for fire fighting, mains flushing, burst mains, unauthorised use, losses due to customer meter errors, leakage or contractors and any other consumption due to operations. Potable water is intended for use as drinking water and should materially meet the Australian Drinking Water Guidelines 2004, or equivalent.

*Includes:*

 - losses

 - unbilled authorised potable water supplied

 - unauthorised potable water consumption

 - customer metering errors

 - leakage and overflow of potable water from mains, service reservoirs and service connections prior to customer meters

 - non-revenue water (i.e. water not sold to/paid for by customers)

*Excludes:*

 - potable water volumes supplied to non-urban agriculture

 - potable water volumes supplied to aquifer recharge

 - any volumes of potable recycled water (i.e. sourced from sewage or stormwater)

 - volume of residential potable water supplied and billed

 - volume of commercial, municipal and industrial potable water supplied and billed

*Calculation:*

In general this can be calculated as the total volume of potable water produced/supplied to the water supply system minus the total volume of potable water billed (i.e. paid for) to customers (e.g. residential and non-residential).

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Potable water uses

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.19

**NPR code:** W10.1

**ABS code:** 112.2

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA40

**Indicator short title:** Volume potable water exported

**Units:** ML

**Title:** Total volume of potable water exported (supplied to other infrastructure operators/utilities) (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of potable water, exported or sold to another utility, entity or infrastructure operator outside this utility's geographic area of responsibility.

*Includes:*

 - volumes of water originating from another source. For example, water imported by this utility and then exported

 - bulk water sales

 - transfers not associated with a financial transaction

*Excludes:*

 - volume of water exported/provided to water carriers or tankers that supply water

 - any potable recycled sewage water or stormwater

 - any potable water exported 'internally' (from within your organisation) from one potable scheme to another

 - volumes from service providers operating infrastructure on behalf of the utility

*Notes:*

 - provide only the total volume of water actually received by the other utility and not the amount of water that this utility or entity might have been entitled to receive

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Potable water uses

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 113

**BoM Cat 7 code:** IU8.1pot

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA41

**Indicator short title:** Volume raw-PT water exported

**Units:** ML

**Title:** Total volume of non-potable (raw-PT) water exported (supplied to other infrastructure operators/utilities) (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of non-potable (raw-Partially Treated) water, exported or sold to another utility, entity or infrastructure operator outside this utility's geographic area of responsibility.

*Includes:*

 - volumes of water originating from another source. For example, water imported by this utility and then exported

 - raw water

 - bulk water sales

 - transfers not associated with a financial transaction

*Excludes:*

 - volume of water exported/provided to water carriers or tankers that supply water

 - any non-potable recycled sewage water or stormwater

 - any non-potable water exported 'internally' (from within your organisation) from raw-PT scheme to another

 - volumes from service providers operating infrastructure on behalf of the utility

*Notes:*

 - provide only the total volume of water actually received by the other utility and not the amount of water that this utility or entity might have been entitled to receive

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Raw-Partially Treated water uses

**Scheme type(s):** Raw-Partially treated water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 116

**BoM Cat 7 code:** IU8.1raw

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA45

**Indicator short title:** Volume water sourced: imported

**Units:** ML

**Title:** The total volume of water imported (received from bulk supplier/infrastructure operators or other utilities), including recycled sewage and stormwater.

**Definition:** The total metered and estimated unmetered volume of water (potable and non-potable) imported (purchased or provided from another utility, bulk supplier or entity outside this utility's service area). This includes recycled stormwater and recycled sewage water. The volume of water may include water which is subsequently exported to another utility.

*Includes:*

 - recycled stormwater and recycled sewage water

 - water that is subsequently exported to another service provider

*Excludes:*

 - any water imported 'internally' (from within your organisation) from one potable, raw-PT or recycled scheme to another

*Example:*

 - 'Imported' versus 'sourced' water when a third party is involved. Water Service Provider A (WSP A) has multiple potable water schemes from which they source/import raw water (an allocation) and then treat it themselves and supply to their customers. The question is whether they report the amount of water they ‘get’ into a ‘sourced’ or ‘imported’ indicator as per the examples below.

 1. Potable Water Scheme X. They have an allocation from Sunwater. Sunwater releases water from an upstream dam into a river/weir further downstream from which WSP A itself extracts the water and treats. In this case, WSP A would class this as ‘Volume water taken: surface water’ and add the volume to WA1.

 2. Potable Water Scheme Y. Again, the raw water is from an allocation from Sunwater. In this case Sunwater provide the water to WSP A directly via a pipeline which WSP A pays both an access fee and pumping charge to Sunwater (in addition to the normal volume charge for the allocation). The raw water originates in a dam but is piped by Sunwater directly to the Water Treatment Plant of Potable Water Scheme Y. In this case WSP A report this raw water as ‘Volume raw-PT water imported’ and add the volume to WA65. With regard to this example, the organisations requesting the data would classify this as 'imported water' (i.e. bulk raw water supplied by another supplier), because Sunwater provides the infrastructure for the service (and additionally WSP A pays the access fee and pumping charges).

*Notes:*

 - include the scheme's purchases only if the water was provided by another organisation

 - there may be a requirement in some cases for water service providers to aggregate volumes from various bulk suppliers

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Sources of Water

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA45:potable=WA64+WA65; WA45:raw=WA65; WA45:recycled=WA101+WA83; WA45:wsp=WA64+WA65+WA101+WA83

**QG KPI code:** QG1.9b

**NPR code:** W5

**ABS code:** 143

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA46

**Indicator short title:** Volume potable+raw-PT+recycled water exported

**Units:** ML

**Title:** Total volume of potable and non-potable (raw-PT) water exported or supplied to other infrastructure operators or utilities (including recycled water).

**Definition:** The total metered and estimated unmetered volume of potable and non-potable (raw-Partially Treated) water (including recycled waters) exported (sold/provided to another scheme or another utility or entity outside this utility's geographic area of responsibility). The volume of water may include water originating from another source, e.g. imported.

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Exports

**Scheme type(s):** Potable/Raw/Recycled

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA46:potable=WA40; WA46:raw=WA41; WA46:recycled=WA15+WA82; WA46:wsp=WA40+WA41+WA15+WA82

**NPR code:** W14

**ABS code:** 119

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA61

**Indicator short title:** Volume water sourced: desalination marine water

**Units:** ML

**Title:** Volume of water taken from desalination of marine water.

**Definition:** The volume of water produced by the utility from the desalination of marine or estuarine water during the reporting year.

*Includes:*

 - marine and estuarine water sources

 - for any potable and non-potable use

 - water taken by other service providers operating on behalf of the utility

*Excludes:*

 - groundwater sources

 - surface water sources which are not estuarine or marine

 - any purchased/imported marine desalination water from another service provider such as a bulk water supplier (reported separately)

*Notes:*

 - there may be a requirement in some cases for utilities to aggregate volumes from various marine desalination sources

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

 - the reported volume should be based on the metered outflow of treated water from marine desalination plant

**SWIM category:** Sources of Water

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.10

**NPR code:** W3.1

**ABS code:** 36

**BoM Cat 7 code:** U3.1

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA64

**Indicator short title:** Volume potable water imported

**Units:** ML

**Title:** Total volume of potable water imported (received from other bulk supplier/infrastructure operators or utilities) (excluding any recycled water).

**Definition:** The total metered and estimated unmetered volume of potable water received/imported from other third party infrastructure operators/utilities or bulk suppliers.

*Includes:*

 - raw water

 - bulk water purchases

 - any water that is subsequently exported to another utility

 - transfers not associated with a financial transaction

*Excludes:*

 - any potable recycled sewage water or stormwater

 - any potable water imported 'internally' (from within your organisation) from one potable scheme to another

 - volumes from service providers operating infrastructure on behalf of the utility

*Notes:*

 - provide only the total volume of water actually received from other water suppliers and not the amount of water that this utility or entity might have been entitled to receive

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Sources of Water

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 94

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA65

**Indicator short title:** Volume non-potable water imported

**Units:** ML

**Title:** Total volume of non-potable (raw-PT) water imported (received from other bulk supplier/infrastructure operators or utilities) (excluding any recycled water).

**Definition:** The total metered and estimated unmetered volume of non-potable (raw-Partially Treated) water received/imported from other third party infrastructure operators/utilities or bulk suppliers.

*Includes:*

 - raw water

 - bulk water purchases

 - any water that is subsequently exported to another utility

 - transfers not associated with a financial transaction

*Excludes:*

 - any non-potable recycled sewage water or stormwater

 - any non-potable (raw-PT) water imported 'internally' (from within your organisation) from one raw-PT scheme to another

 - volumes from service providers operating infrastructure on behalf of the utility

*Notes:*

 - provide only the total volume of water actually received from other water suppliers and not the amount of water that this utility or entity might have been entitled to receive

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Sources of Water

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 95

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA66

**Indicator short title:** Volume sewage exported

**Units:** ML

**Title:** Volume of sewage exported to other infrastructure operators or operational areas.

**Definition:** The total metered and estimated unmetered volume of sewage exported by the utility to other infrastructure operators or operational areas within the urban wastewater system during the reporting year.

*Includes:*

 - residential and trade waste

 - transfers not associated with a financial transaction

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

 - any sewage exported 'internally' (within your organisation) from one sewage scheme to another

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** W18.1

**BoM Cat 7 code:** U21.1

**Required by:** Large SPs with >10,000 connections

## SWIM Code: WA67

**Indicator short title:** Volume sewage imported

**Units:** ML

**Title:** Volume of sewage received (imported) from other infrastructure operators, utilities or operational areas.

**Definition:** The total metered and estimated unmetered volume of sewage received (imported) from other infrastructure operators or utilities from outside your jurisdiction.

*Includes:*

 - residential and trade waste

 - transfers not associated with a financial transaction

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

 - any sewage imported 'internally' (within your organisation) from one sewage scheme to another

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** W18.2

**ABS code:** 98

**BoM Cat 7 code:** U20.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA68

**Indicator short title:** Volume sewage collected: sewer mining

**Units:** ML

**Title:** Volume of sewage taken from sewer mining.

**Definition:** The total metered and estimated unmetered volume of wastewater extracted through sewer mining by any service provider, from the utility’s sewer system during the reporting year.

*Includes:*

 - extractions by the utility or a service provider operating infrastructure on behalf of the utility

 - extractions by independent operators

 - extractions not associated with a financial transaction

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** W18.3

**ABS code:** 99

**BoM Cat 7 code:** U83.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA69

**Indicator short title:** Volume sewage inflow measured at STP inlet

**Units:** ML

**Title:** Volume of sewage measured at inlet to treatment works (includes imported sewerage, excludes export sewerage and that taken from sewer mining).

**Definition:** The total metered and estimated unmetered volume of sewage measured at inlet to treatment works. Includes sewage taken (imported) from other infrastructure operators. Excludes sewage supplied (exported) to other infrastructure operators and that taken from sewer mining).

*Includes:*

 - any imported sewage

*Excludes:*

 - any exported sewage

 - any volumes taken from sewer mining

*Notes:*

 - the reported volume should be based on the metered inflow to STP

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** W18.4

**BoM Cat 7 code:** U23.1

**Required by:** Large SPs with >10,000 connections

## SWIM Code: WA73

**Indicator short title:** Volume recycled sewage supplied: aquifer recharge

**Units:** ML

**Title:** Volume of recycled sewage water supplied to managed groundwater/aquifer recharge.

**Definition:** The total metered and estimated unmetered volume of recycled sewage water supplied for managed groundwater/aquifer recharge, excluding other environmental water. For example, aquifer replenishment schemes.

*Includes:*

 - potable and non-potable water used to top-up the recycled sewage water system

 - volumes taken from sewer mining

 - potable and non-potable water

*Excludes:*

 - any recycled stormwater

 - any recycled sewage water supplied as environmental flows (reported elsewhere)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Recycled Water (sewage) uses

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** W25.1

**ABS code:** 104

**BoM Cat 7 code:** U44.5

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA74

**Indicator short title:** Volume potable water produced/supplied into water supply system

**Units:** ML

**Title:** Volume of potable water produced and supplied into the water supply system (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of potable water produced by the utility (by all water treatment plants/that extracted for supply as potable water) or otherwise supplied by other organisations that was put into the utilities water supply system. Potable water is intended for use as drinking water and should materially meet the Australian Drinking Water Guidelines 2004, or equivalent.

*Includes:*

 - the volume of water produced at the water treatment plant or extracted directly from the source (with no/minimal treatment) as potable water

 - residential potable water supplied

 - commercial, municipal and industrial potable water supplied

 - unbilled authorised water supplied

 - unauthorised consumption

 - customer metering errors

 - leakage and overflow from mains, service reservoirs and service connections prior to customer meters

*Excludes:*

 - any volumes of potable recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - this indicator measures the volume of water produced at the treatment plant or extracted from the source NOT the volume of water supplied, meter errors or other consumption. Refer to the latest version of the DEWS 'Key Performance Indicators - Definitions Guide' section on 'Estimating Data' for further information on estimating volumes

 - this indicator is used to determine non-revenue water WA36 (Volume potable water supplied: non-revenue - QG1.19)

 - the reported volume is measured at the outflow of treatment plants (e.g. water treatment plants, desalination plants, disinfection plants) or at the beginning of the urban water supply system. Distribution system losses and gains can influence the measured volume significantly and should be excluded

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Potable water uses

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.6

**NPR code:** W11.3

**BoM Cat 7 code:** U9

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA82

**Indicator short title:** Volume recycled stormwater exported

**Units:** ML

**Title:** Volume of recycled stormwater exported (supplied to other infrastructure operators/utilities).

**Definition:** The total metered and estimated unmetered volume of recycled urban stormwater exported (supplied to other infrastructure operators/utilities). Includes water for potable and for non-potable urban stormwater reuse supplied to other infrastructure operators.

*Excludes:*

 - recycled sewage water

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Stormwater Reuse

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 107

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA83

**Indicator short title:** Volume stormwater imported

**Units:** ML

**Title:** Volume of recycled stormwater imported (received from other infrastructure operators/utilities) (excluding recycled sewage water reuse).

**Definition:** The total metered and estimated unmetered volume of potable or non-potable recycled urban stormwater received from other infrastructure operators or utilities.

*Excludes:*

 - recycled sewage water

 - any recycled stormwater imported 'internally' (from within your organisation) from one recycled scheme to another

*Notes:*

 - unmetered volumes - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Sources of Water

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 92

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA84

**Indicator short title:** Volume recycled stormwater supplied: aquifer recharge

**Units:** ML

**Title:** Volume of recycled stormwater supplied to managed groundwater/aquifer recharge.

**Definition:** The total metered and estimated unmetered volume of recycled stormwater supplied for managed groundwater/aquifer recharge, excluding other environmental water. For example, aquifer replenishment schemes.

*Includes:*

 - potable and non-potable water used to top-up the recycled stormwater system

 - potable and non-potable water

*Excludes:*

 - any recycled sewage water

 - any recycled stormwater supplied as environmental flows (reported elsewhere)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Stormwater Reuse

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 108

**BoM Cat 7 code:** U62.5

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA85

**Indicator short title:** Volume recycled stormwater supplied: residential

**Units:** ML

**Title:** Volume of recycled stormwater supplied to residential customers.

**Definition:** The total metered and estimated unmetered volume of recycled stormwater supplied to residential customers.

*Includes:*

 - potable and non-potable water used to top-up the recycled stormwater system

 - potable and non-potable water

*Excludes:*

 - any recycled sewage water

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Stormwater Reuse

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** W28.4

**ABS code:** 109

**BoM Cat 7 code:** U62.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA86

**Indicator short title:** Volume recycled stormwater supplied: non-residential

**Units:** ML

**Title:** Volume of recycled stormwater supplied to non-residential customers.

**Definition:** The total metered and estimated unmetered volume of recycled stormwater supplied to non-residential customers.

*Includes:*

 - potable and non-potable water used to top-up the recycled stormwater system

 - potable and non-potable water

 - urban stormwater discharged to waterways (rivers, seas, natural wetlands) for environmental flows/purposes as prescribed by the environmental regulator

*Excludes:*

 - any recycled sewage water

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Stormwater Reuse

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA86:wsp+recycled=WA220+WA189+WA190+WA191+WA84+WA192

**NPR code:** W28.5

**ABS code:** 109.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA88

**Indicator short title:** Volume recycled stormwater supplied: all

**Units:** ML

**Title:** Total volume of recycled stormwater supplied (excluding aquifer recharge).

**Definition:** The total metered and estimated unmetered volume of recycled urban stormwater supplied to customers (excluding aquifer recharge).

*Excludes:*

 - recycled sewage water

 - volumes supplied to aquifer recharge

 - losses

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Stormwater Reuse

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA88:wsp+recycled=WA85+WA86

**ABS code:** 111.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA91

**Indicator short title:** Volume raw-PT water supplied: residential

**Units:** ML

**Title:** Volume of non-potable (raw-PT) residential water supplied (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of non-potable (raw-Partially Treated) water supplied to residential properties. Non-potable water is not intended for use as drinking water.

*Excludes:*

 - any volumes of non-potable recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - the reported volume should be based on customer metering data

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Raw-Partially Treated water uses

**Scheme type(s):** Raw-Partially treated water scheme

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.17b

**ABS code:** 114

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA92

**Indicator short title:** Volume raw-PT water supplied: non-residential

**Units:** ML

**Title:** Volume of non-potable (raw-PT) non-residential water supplied (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of non-potable (raw-Partially Treated) water supplied to non-residential properties/customers. Non-potable water is not intended for use as drinking water.

*Includes:*

 - environmental releases made from the urban water supply system

*Excludes:*

 - any volumes of non-potable recycled water (i.e. sourced from sewage or stormwater)

 - environmental releases made outside of the water supply system

*Notes:*

 - the reported volume should be based on customer metering data

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Raw-Partially Treated water uses

**Scheme type(s):** Raw-Partially treated water scheme

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.18b

**ABS code:** 114.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA93

**Indicator short title:** Volume raw-PT water supplied: any other

**Units:** ML

**Title:** Total volume of non-potable (raw-PT) water supplied to other uses not reported elsewhere (excluding recycled water, water supplied for non-urban agricultural irrigation or managed aquifer recharge; including losses).

**Definition:** The total metered and estimated unmetered volume of non-potable water supplied for other uses. This would include, but may not be limited to, water supplied for urban agricultural irrigation, an estimate of water used for fire fighting, mains flushing, losses due to customer meter errors, leakage or contractors and any other consumption due to operations. Non-potable water is not intended for use as drinking water. Excluding the following: (a) any non-potable recycled water; (b) residential, commercial, municipal and industrial water; (d) water supplied for non-urban agricultural irrigation or managed aquifer recharge. Including losses from the water supply system.

*Includes:*

 - losses

*Excludes:*

 - any volumes of non-potable recycled water (i.e. sourced from sewage or stormwater)

 - non-potable water supplied to non-urban agriculture

 - non-potable water supplied to aquifer recharge

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Raw-Partially Treated water uses

**Scheme type(s):** Raw-Partially treated water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 114.2

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA95

**Indicator short title:** Volume raw-PT water supplied: aquifer recharge

**Units:** ML

**Title:** Volume of non-potable (raw-PT) water supplied for managed aquifer recharge (excluding any recycled water).

**Definition:** The total metered and estimated unmetered volume of non-potable (raw-Partially Treated) water supplied to managed aquifer recharge. Excluding any non-potable recycled water. Non-potable water is not intended for use as drinking water.

*Excludes:*

 - any volumes of non-potable recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Raw-Partially Treated water uses

**Scheme type(s):** Raw-Partially treated water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 115

**BoM Cat 7 code:** U11.5

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA96

**Indicator short title:** Volume raw-PT water supplied: agricultural irrigation

**Units:** ML

**Title:** Volume of non-potable (raw-PT) water supplied for agricultural irrigation (excluding any recycled water).

**Definition:** The total metered and estimated unmetered volume of non-potable (raw-Partially Treated) water supplied to non-urban agricultural irrigation. Excluding any non-potable recycled water. Non-potable water is not intended for use as drinking water.

*Excludes:*

 - any volumes of non-potable recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Raw-Partially Treated water uses

**Scheme type(s):** Raw-Partially treated water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 44

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA98

**Indicator short title:** Volume recycled stormwater produced

**Units:** ML

**Title:** Total volume of urban stormwater captured/produced by the utility (excludes any imports).

**Definition:** The total volume of water captured from urban stormwater for reuse purposes.

*Includes:*

 - any volumes that may be subsequently exported

*Excludes:*

 - any recycled stormwater imports

*Notes:*

 - unmetered volumes - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Sources of Water

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 69

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA101

**Indicator short title:** Volume recycled sewage imported

**Units:** ML

**Title:** Total volume of recycled sewage water imported (received from other bulk supplier/infrastructure operators or utilities).

**Definition:** The total metered and estimated unmetered volume of water recycled sewage water received/imported from other third party infrastructure operators/utilities or bulk suppliers.

*Includes:*

 - bulk recycled sewage water purchases

 - any water that is subsequently exported to another utility

 - recycled sewage water received from independent operators

 - transfers not associated with a financial transaction

*Excludes:*

 - any recycled stormwater

 - any recycled sewage water imported 'internally' (from within your organisation) from one recycled scheme to another

 - volumes from service providers operating infrastructure on behalf of the utility

*Notes:*

 - provide only the total volume of water actually received from other water suppliers and not the amount of water that this utility or entity might have been entitled to receive

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Sources of Water

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** W6

**ABS code:** 93

**BoM Cat 7 code:** U41.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA108

**Indicator short title:** Volume water taken: any other sources

**Units:** ML

**Title:** Water extracted from any other sources.

**Definition:** The total metered and estimated unmetered volume of water sourced from other sources not specified or reported elsewhere.

*Includes:*

 - for any potable and non-potable (raw-PT) use

*Example:*

 - rainfall harvesting

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Sources of Water

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 37

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA109

**Indicator short title:** Volume water taken: all sources

**Units:** ML

**Title:** Total volume of water extracted.

**Definition:** The total metered and estimated unmetered volume of potable and non-potable (raw-Partially Treated) water reported as extracted from surface water, groundwater, marine desalination and other sources.

*Includes:*

 - for any potable and non-potable (raw-PT) use

*Excludes:*

 - any water imported

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Sources of Water

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA109:wsp+potable+raw=WA1+WA2+WA61+WA108

**ABS code:** 38

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA110

**Indicator short title:** Volume potable+raw-PT water exported

**Units:** ML

**Title:** Total volume of potable and non-potable (raw-PT) water exported (supplied to other infrastructure operators/utilities) (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of potable and non-potable (raw-Partially Treated) water exported or sold to another utility, entity or infrastructure operator outside this utility's geographic area of responsibility.

*Includes:*

 - volumes of water originating from another source. For example, water imported by this utility and then exported

 - raw water

 - bulk water sales

 - transfers not associated with a financial transaction

*Excludes:*

 - volume of water exported/provided to water carriers or tankers that supply water

 - any non-potable or potable recycled sewage water or stormwater

 - any potable and non-potable water exported 'internally' (from within your organisation) from one potable or raw-PT scheme to another

 - volumes from service providers operating infrastructure on behalf of the utility

*Notes:*

 - provide only the total volume of water actually received by the other utility and not the amount of water that this utility or entity might have been entitled to receive

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Exports

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA110:potable=WA40; WA110:raw=WA41; WA110:wsp=WA40+WA41

**NPR code:** W14.3

**ABS code:** 39

**BoM Cat 7 code:** U8.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA110.1

**Indicator short title:** Names/volumes of who you exported potable+raw-PT water to

**Units:** Text

**Title:** Names/volumes of who you exported potable and non-potable (raw-PT) water to (excluding recycled water).

**Definition:** Please provide a text description of the name(s) of the water utility, entity or infrastructure operator and volume(s) (ML) supplied in indicator WA110 'Total volume of potable and non-potable (raw-PT) water exported (excluding recycled water)'. List all utilities supplied.

**SWIM category:** Exports

**Scheme type(s):** WSP

**Data type:** TEXT

**Source of data:** USER

**ABS code:** 39.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA111

**Indicator short title:** Volume potable+raw-PT water supplied: parks and gardens

**Units:** ML

**Title:** Volume of water supplied to parks and gardens (including sports fields, golf courses and race courses) (excluding those managed by you, recycled water).

**Definition:** The total metered and estimated unmetered volume of billed potable and non-potable (raw-Partially Treated) water supplied to non-residential properties or businesses mainly engaged in operating parks and gardens, sports fields, golf courses and race courses etc.

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

 - supply of water to parks, gardens and sporting grounds operated and maintained by this utility or entity

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 43

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA112

**Indicator short title:** Volume potable water supplied: agriculture

**Units:** ML

**Title:** Volume of potable water supplied to agriculture (excluding those managed by you, recycled water).

**Definition:** The total metered and estimated unmetered volume of billed potable water supplied to non-residential properties or businesses mainly engaged in agriculture including plant nurseries, turf farms, floriculture.

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

 - supply of water to agricultural activities operated and maintained by this utility or entity

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 45

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA113

**Indicator short title:** Volume potable+raw-PT water supplied: forestry

**Units:** ML

**Title:** Volume of water supplied to forestry (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of billed potable or non-potable (raw-Partially Treated) water supplied to non-residential properties or businesses mainly engaged in growing and logging of standing timber in native or plantation forests or timber tracts for commercial benefits.

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 46

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA114

**Indicator short title:** Volume potable+raw-PT water supplied: aquaculture or fishing

**Units:** ML

**Title:** Volume of water supplied to aquaculture or fishing (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of billed potable or non-potable (raw-Partially Treated) water supplied to non-residential properties or businesses mainly engaged in off-shore or on-shore farming of finfish, crustaceans or molluscs. Also includes fishing such a prawn and line fishing.

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 47

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA115

**Indicator short title:** Volume potable+raw-PT water supplied: mining

**Units:** ML

**Title:** Volume of water supplied to mining (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of billed potable or non-potable (raw-Partially Treated) water supplied to non-residential properties or businesses mainly engaged in mining operations and mining support activities.

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 48

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA116

**Indicator short title:** Volume potable+raw-PT water supplied: electricity generation

**Units:** ML

**Title:** Volume of water supplied to electricity generation (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of billed potable or non-potable (raw-Partially Treated) water supplied to non-residential properties or businesses mainly engaged in the generation, transmission and distribution of electricity.

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 49

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA117

**Indicator short title:** Volume potable+raw-PT water supplied: commercial

**Units:** ML

**Title:** Volume of water supplied to commercial (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of billed potable or non-potable (raw-Partially Treated) water supplied to non-residential properties or businesses mainly in goods/products wholesaling or retailing activities and in the provision of accommodation (e.g. hotel, motel, resort, youth hostel operation) and food services (e.g. cafes, restaurants and takeaway food services).

*Includes:*

 - offices, shops and accommodation

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 50

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA118

**Indicator short title:** Volume potable+raw-PT water supplied: industrial

**Units:** ML

**Title:** Volume of water supplied to industrial (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of billed potable or non-potable (raw-Partially Treated) water supplied to non-residential properties or businesses often described as plants, factories or mills. These are businesses or units mainly engaged in the physical or chemical transformation of materials, substances or components into new products.

*Includes:*

 - food product manufacturing

 - beverage and tobacco product manufacturing

 - textile, leather, clothing and footwear manufacturing

 - wood product manufacturing

 - pulp, paper and converted paper product manufacturing

 - petroleum and coal product manufacturing

 - metallic and non-metallic product manufacturing

 - machinery and equipment manufacturing

 - other manufacturing

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 51

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA119

**Indicator short title:** Volume potable+raw-PT water supplied: institutional

**Units:** ML

**Title:** Volume of water supplied to institutional (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of billed potable or non-potable (raw-Partially Treated) water supplied to non-residential properties or businesses mainly engaged in the provision and support of education and training (i.e. schools), health care and social assistance (i.e. hospitals, medical and dental services, diagnostic imaging services, etc.) and public order and safety services (i.e. correctional and detentions centres).

*Includes:*

 - hospitals, jails and schools

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 52

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA120

**Indicator short title:** Volume potable+raw-PT water supplied: any other

**Units:** ML

**Title:** Volume of water supplied to others not reported elsewhere (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of billed potable or non-potable (raw-Partially Treated) water supplied to non-residential properties or businesses not specified elsewhere. This will include, but not limited to the following businesses:

 - construction (i.e. building, civil engineering)

 - transport, postal and warehousing (i.e. road, rail, water and other transport)

 - information media and telecommunications (i.e. publishing, broadcasting, telecommunications)

 - financial and insurance services (i.e. banking, financing, insurance)

 - rental, hiring and real estate services (i.e. motor vehicle, equipment farm animal and bloodstock leasing)

 - professional, scientific and technical services (i.e. scientific research, engineering services, advertising, legal and accounting services)

 - administrative and support services (i.e. employment, travel agencies, cleaning, pest control)

 - other services

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 53

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA120.1

**Indicator short title:** Nature/volumes of who you supplied non-residential 'other' water to

**Units:** Text

**Title:** Nature/volumes of who you supplied non-residential 'other' water to.

**Definition:** Please provide a text description of the nature and amounts (ML) of the two largest items included in the indicator WA120 'Volume of water supplied to others not reported elsewhere'.

**SWIM category:** Total water supply

**Scheme type(s):** WSP

**Data type:** TEXT

**Source of data:** USER

**ABS code:** 53.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA121

**Indicator short title:** Volume potable+raw-PT water supplied: non-residential (ABS)

**Units:** ML

**Title:** Total volume of non-residential water supplied (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of billed potable and non-potable (raw-Partially Treated) water supplied to non-residential properties or businesses. These properties will include, but may not be limited, to those engaged in parks and gardens, agriculture, forestry, aquaculture and fishing, mining, electricity generation, commercial, industrial and institutional industries.

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA121:potable=WA111+WA112+WA113+WA114+WA115+WA116+WA117+WA118+WA119+WA120; WA121:raw=WA96+WA111+WA113+WA114+WA115+WA116+WA117+WA118+WA119+WA120; WA121:wsp=WA96+WA111+WA112+WA113+WA114+WA115+WA116+WA117+WA118+WA119+WA120

**ABS code:** 41

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA122

**Indicator short title:** Volume potable+raw-PT water supplied: all (ABS)

**Units:** ML

**Title:** Total volume of potable and non-potable (raw-PT) residential and non-residential water supplied (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of potable and non-potable (raw-Partially Treated) water supplied to residential and non-residential customers.

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA122:potable=WA32+WA36+WA121; WA122:raw=WA91+WA95+WA13+WA121; WA122:wsp=WA32+WA36+WA121+WA91+WA95+WA13

**ABS code:** 42

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA123

**Indicator short title:** Volume water used by your organisation: any other uses

**Units:** ML

**Title:** Volume of potable and raw-PT water used by your organisation for all other uses (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of unbilled but authorised water use by this utility/entity for purposes other than watering own parks, gardens and sports grounds or fields. This will include but not limited to office use, drinking water facilities, mains flushing or back washing, fire-fighting or any other unbilled but authorised supply/use.

*Excludes:*

 - unauthorised water consumption (from hydrants, fire services, etc.), metering errors and water loss

 - volume of recycled (reuse) water used

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Consumption

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 59

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA124

**Indicator short title:** Volume water used by your organisation: all

**Units:** ML

**Title:** Total volume of potable and raw-PT water used by your organisation (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of authorised but unbilled potable and non-potable (raw-Partially Treated) water used by this utility/entity. This would include but is not limited to watering local parks, gardens and sports fields, local nurseries, pasture and forestry, managed aquifer recharge and an estimate of water used for fire fighting and mains flushing.

*Excludes:*

 - water supplied by this entity to customers

 - volume of recycled (reuse) water used

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Consumption

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA124:wsp+potable+raw=WA166+WA123

**ABS code:** 60

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA135

**Indicator short title:** Volume recycled sewage+stormwater imported

**Units:** ML

**Title:** Volume of recycled sewage and stormwater reuse imported (received from bulk supplier/other infrastructure operators or utilities).

**Definition:** The total metered and estimated unmetered volume of recycled (reuse) water (potable or non-potable), stormwater and sewage water received from other water suppliers or utilities outside your utility's geographical area of responsibility. Recycled (reuse) water is wastewater (including sewage) and stormwater that could be readily used again without first being discharged to the environment.

*Includes:*

 - any potable or non-potable recycled water sourced from stormwater or sewage water

*Excludes:*

 - any recycled water imported 'internally' (from within your organisation) from one recycled scheme to another

*Notes:*

 - include the scheme's purchases only if the water was provided by another organisation

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Sources of Water

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA135:wsp+recycled=WA83+WA101

**ABS code:** 67

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA137

**Indicator short title:** Volume wastewater collected: sewage+stormwater

**Units:** ML

**Title:** Total volume of wastewater (including sewage) and stormwater collected (excluding any imports).

**Definition:** The total metered and estimated unmetered volume of all wastewater (including sewage and stormwater) collected/captured by this water utility for use, export or discharge back to the environment.

*Excludes:*

 - any wastewater (sewage and stormwater) imports

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewage/Recycled

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA137:recycled=WA98; WA137:sewage=WA18; WA137:wsp=WA18+WA98

**ABS code:** 71

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA139

**Indicator short title:** Volume recycled water exported

**Units:** ML

**Title:** Volume of recycled (reuse) water exported (supplied to other infrastructure operators/utilities).

**Definition:** The total metered and estimated unmetered volume of billed recycled (reuse) water (potable or non-potable) supplied to other water suppliers, infrastructure operators or utilities outside this utility's geographical area of responsibility. Recycled (reuse) water will include wastewater (including sewage) that could be readily used again without first being discharged to the environment. Also includes potable or non-potable recycled stormwater reuse.

*Excludes:*

 - volumes supplied to water carriers or tankers

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Exports

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA139:wsp+recycled=WA15+WA82

**ABS code:** 73

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA140

**Indicator short title:** Volume recycled water supplied: residential

**Units:** ML

**Title:** Volume of recycled (reuse) water supplied to domestic or residential (including stock and domestic).

**Definition:** The total metered and estimated unmetered volume of recycled (reuse) water supplied to residential properties.

*Excludes:*

 - water for any other intensive or commercial use

*Notes:*

 - in metropolitan or major urban areas, recycled water would generally occur by a third-pipe system

 - 'stock and domestic' water supply is water supplied to households without access to reticulated water. It includes potable, non-potable water used for household purposes, watering of cattle or other stock or irrigation of kitchen garden/s

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA140:wsp+recycled=WA20+WA85

**ABS code:** 74

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA141

**Indicator short title:** Volume recycled water supplied: parks and gardens

**Units:** ML

**Title:** Volume of recycled (reuse) water supplied to parks and gardens (including sports fields, golf courses and race courses) (excluding those managed/owned by you).

**Definition:** The total metered and estimated unmetered volume of billed recycled (reuse) water supplied to non-residential properties or businesses mainly engaged in operating parks and gardens, sports fields, golf courses and race courses etc.

*Excludes:*

 - supply of unbilled recycled (reuse) water to parks and gardens and sporting grounds operated and maintained by this utility or entity (considered as own use by this utility or entity)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 77

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA142

**Indicator short title:** Volume recycled water supplied: agriculture

**Units:** ML

**Title:** Volume of recycled (reuse) water supplied to agriculture (excluding forestry).

**Definition:** The total metered and estimated unmetered volume of billed recycled (reuse) water supplied for agricultural purposes. Includes irrigation of crops, agricultural products including livestock.

*Excludes:*

 - recycled (reuse) water supplied to forestry

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 78

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA143

**Indicator short title:** Volume recycled water supplied: forestry

**Units:** ML

**Title:** Volume of recycled (reuse) water supplied to forestry.

**Definition:** The total metered and estimated unmetered volume of billed recycled (reuse) water supplied to non-residential properties or businesses mainly engaged in growing and logging of standing timber in native or plantation forests or timber tracts for commercial benefits.

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 79

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA144

**Indicator short title:** Volume recycled water supplied: aquaculture or fishing

**Units:** ML

**Title:** Volume of recycled (reuse) water supplied to aquaculture or fishing.

**Definition:** The total metered and estimated unmetered volume of billed recycled (reuse) water supplied to non-residential properties or businesses mainly engaged in off-shore or on-shore farming finfish, crustaceans or molluscs. Also includes fishing such a prawn and line fishing.

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 80

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA145

**Indicator short title:** Volume recycled water supplied: mining

**Units:** ML

**Title:** Volume of recycled (reuse) water supplied to mining.

**Definition:** The total metered and estimated unmetered volume of billed recycled (reuse) water supplied to non-residential properties or businesses mainly engaged in mining operations and mining support activities.

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 81

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA146

**Indicator short title:** Volume recycled water supplied: electricity generation

**Units:** ML

**Title:** Volume of recycled (reuse) water supplied to electricity generation.

**Definition:** The total metered and estimated unmetered volume of billed recycled (reuse) water supplied to non-residential properties or businesses mainly engaged in the generation, transmission and distribution of electricity.

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 82

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA147

**Indicator short title:** Volume recycled water supplied: commercial

**Units:** ML

**Title:** Volume of recycled (reuse) water supplied to commercial.

**Definition:** The total metered and estimated unmetered volume of billed recycled (reuse) water supplied to non-residential properties or businesses mainly in goods/products wholesaling or retailing activities and in the provision of accommodation (e.g. hotel, motel, resort, youth hostel operation) and food services (e.g. cafes, restaurants and takeaway food services).

*Includes:*

 - offices, shops, food services and accommodation

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 83

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA148

**Indicator short title:** Volume recycled water supplied: industrial

**Units:** ML

**Title:** Volume of recycled (reuse) water supplied to industrial.

**Definition:** The total metered and estimated unmetered volume of billed recycled (reuse) water supplied to non-residential properties or businesses often described as plants, factories or mills. These are businesses or units mainly engaged in the physical or chemical transformation of materials, substances or components into new products.

*Includes:*

 - food product manufacturing

 - beverage and tobacco product manufacturing

 - textile, leather, clothing and footwear manufacturing

 - wood product manufacturing

 - pulp, paper and converted paper product manufacturing

 - petroleum and coal product manufacturing

 - metallic and non-metallic product manufacturing

 - machinery and equipment manufacturing

 - other manufacturing

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 84

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA149

**Indicator short title:** Volume recycled water supplied: institutional

**Units:** ML

**Title:** Volume of recycled (reuse) water supplied to institutional.

**Definition:** The total metered and estimated unmetered volume of billed recycled (reuse) water supplied to non-residential properties or businesses mainly engaged in the provision and support of education and training (i.e. schools), health care and social assistance (i.e. hospitals, medical and dental services, diagnostic imaging services, etc.) and public order and safety services (i.e. correctional and detentions centres).

*Includes:*

 - hospitals, jails and schools

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 85

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA150

**Indicator short title:** Volume recycled water supplied: any other

**Units:** ML

**Title:** Volume of recycled (reuse) water supplied to other uses not reported elsewhere.

**Definition:** The total metered and estimated unmetered volume of billed recycled (reuse) water supplied to non-residential properties or businesses not specified elsewhere. This will include, but not limited to the following businesses:

 - construction (i.e. building, civil engineering)

 - transport, postal and warehousing (e. road, rail, water and other transport)

 - information media and telecommunications (i.e. publishing, broadcasting, telecommunications)

 - financial and insurance services (i.e. banking, financing, insurance)

 - rental, hiring and real estate services (i.e. motor vehicle, equipment farm animal and bloodstock leasing)

 - professional, scientific and technical services (i.e. scientific research, engineering services, advertising, legal and accounting services)

 - administrative and support services (e.g. employment, travel agencies, cleaning, pest control)

 - other services

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 86

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA150.1

**Indicator short title:** Nature/volumes of who you supplied recycled 'other' water to

**Units:** Text

**Title:** Nature/volumes of who you supplied recycled 'other' water to.

**Definition:** Please provide a text description of the nature and amounts (ML) of the two largest items included in indicator WA150 'Volume of recycled (reuse) water supplied to other uses not reported elsewhere'.

**SWIM category:** Total water supply

**Scheme type(s):** WSP

**Data type:** TEXT

**Source of data:** USER

**ABS code:** 86.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA151

**Indicator short title:** Volume recycled water supplied: all non-residential

**Units:** ML

**Title:** Total volume of recycled (reuse) water supplied to non-residential.

**Definition:** The total metered and estimated unmetered volume of billed recycled (reuse) water supplied to non-residential properties or businesses. These properties will include, but may not be limited, to those engaged in parks and gardens, agriculture, forestry, aquaculture or fishing, mining, electricity generation, commercial, industrial and institutional industries.

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA151:wsp+recycled=WA141+WA142+WA143+WA144+WA145+WA146+WA147+WA148+WA149+WA150

**ABS code:** 75

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA152

**Indicator short title:** Volume recycled water exported and supplied: all

**Units:** ML

**Title:** Total volume of recycled (reuse) water supplied to other water suppliers, residential and non-residential.

**Definition:** The total metered and estimated unmetered volume of billed recycled (reuse) water supplied to other water suppliers, residential and non-residential businesses or properties.

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA152:wsp+recycled=WA139+WA140+WA151

**ABS code:** 76

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA158

**Indicator short title:** Volume potable+non-potable water imported

**Units:** ML

**Title:** Total volume of potable and non-potable (raw-PT) water imported (received from other bulk supplier/infrastructure operators or utilities) (excluding any recycled water).

**Definition:** The total metered and estimated unmetered volume of potable and non-potable (raw-Partially Treated) water received/imported from other third party infrastructure operators/utilities or bulk suppliers.

*Includes:*

 - raw water

 - bulk water purchases

 - any water that is subsequently exported to another utility

 - transfers not associated with a financial transaction

*Excludes:*

 - any non-potable or potable recycled sewage water or stormwater

 - any potable and non-potable (raw-PT) water imported 'internally' (from within your organisation) from one potable or raw-PT scheme to another

 - volumes from service providers operating infrastructure on behalf of the utility

*Notes:*

 - provide only the total volume of water actually received from other water suppliers and not the amount of water that this utility or entity might have been entitled to receive

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Sources of Water

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA158:raw=WA65; WA158:potable=WA64+WA65; WA158:wsp=WA64+WA65

**NPR code:** W5.3

**ABS code:** 33

**BoM Cat 7 code:** U4.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA158.1

**Indicator short title:** Names/volumes imported water suppliers

**Units:** Text

**Title:** Names (including volumes) of bulk supplier/other infrastructure operators or utilities that supplied you with potable and/or non-potable (raw-PT) water (excluding recycled water).

**Definition:** Provide a text description of the name(s) of the bulk water supplier(s)/other infrastructure operators or utilities and the volume(s) (ML) that supplied you with potable and/or raw-PT water (excluding recycled water). List all suppliers.

*Includes:*

 - all suppliers and their matching total volumes

*Excludes:*

 - any raw-PT (non-potable) or potable recycled water

*Notes:*

 - provide only the total volume of water actually received from other water suppliers and not the amount of water that this utility or entity might have been entitled to receive

**SWIM category:** Sources of Water

**Scheme type(s):** WSP

**Data type:** TEXT

**Source of data:** USER

**ABS code:** 33.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA163

**Indicator short title:** Volume sewage released by utility: treated+untreated

**Units:** ML

**Title:** Total volume of sewage (treated and untreated) effluent released from a treatment works.

**Definition:** The total metered and estimated unmetered volume of sewage (treated and untreated) effluent released from a treatment works.

*Includes:*

 - untreated sewage wastewater discharged because of breakage, malfunction or flow volumes exceeding system capacity

 - any/all treated sewage wastewater disposal to groundwater, inland surface waters, sea/estuary or land

*Notes:*

 - sewage is waste from residential and non-residential/trade properties collected and/or treated via sewerage infrastructure. It includes any volumes collected in the sewerage system due to stormwater, illegal connection overflow and infiltration to the system

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 100

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA166

**Indicator short title:** Volume water used by your organisation: your own parks and gardens

**Units:** ML

**Title:** Volume of potable and raw-PT water used by your organisation for your own parks and gardens (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of unbilled but authorised water used by this utility/entity specifically for watering local parks, gardens and sports grounds or fields. For example, council/shire maintained parks and gardens, public sporting grounds.

*Excludes:*

 - Volume of recycled (reuse) water used

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Consumption

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 58

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA167

**Indicator short title:** Volume sewage collected: all

**Units:** ML

**Title:** Total volume sewage collected including via sewer mining.

**Definition:** The total metered and estimated unmetered volume of sewage collected by the utility, measured as treatment plant inflow, plus sewage treated by another business on behalf of the water utility e.g. wholesaler. Where only treatment plant outflow is measured, record this value and comment appropriately. This measure should equal the sum of volumes reported for residential, non-residential and non-trade waste collected, trade waste collected, sewerage imported from other utilities, and any sewer mining.

*Includes:*

 - volume of sewage taken from sewer mining

 - volume of sewerage imported (i.e. taken from other infrastructure operators or utilities)

*Notes:*

 - residential and non-residential sewage and trade waste are defined as per either The National Water Management Strategy Guidelines for Sewerage Systems 1994 or State-based legislation

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA167:wsp+sewage=WA18+WA68+WA67

**ABS code:** 68

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA168

**Indicator short title:** Volume recycled water supplied: your organisation for own use

**Units:** ML

**Title:** Total volume of recycled (reuse) water used by your organisation.

**Definition:** The total metered and estimated unmetered volume of authorised but unbilled recycled (reuse) water (potable and non-potable) used by this utility/entity. This would include, but is not limited to, watering local parks, gardens and sports fields, local nurseries, pasture and forestry, managed aquifer recharge and an estimate of water used for fire fighting and mains flushing.

*Excludes:*

 - all authorised and billed recycled (reuse) water consumption

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 87

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA171

**Indicator short title:** Volume water sourced: surface water (regulated supply)

**Units:** ML

**Title:** Volume of water taken from a regulated surface water source (including via desalination).

**Definition:** The total metered and estimated unmetered volume of water abstracted by the utility from a regulated surface water sources such as dams, weirs, rivers or irrigation channels during the reporting period. Regulated surface water sources are those subject to the controlled management of water releases and are typically subject to entitlements and annual allocation announcements.

*Includes:*

 - surface water desalination

 - dams, weirs, rivers or irrigation channels

 - for any potable and non-potable use

 - any water returned to surface water

 - water taken by other service providers operating on behalf of the utility

*Excludes:*

 - any sourced from marine desalination

 - any urban stormwater

 - any purchased/imported surface water from another service provider such as a bulk water supplier (reported separately)

*Notes:*

 - there may be a requirement in some cases for utilities to aggregate volumes from various surface water sources

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

 - the reported volume should be based on the metered inflow of raw water to WTPs or metered extraction of raw water where it is supplied directly into the urban system without treatment

 - if a WTP inflow measurement is not available an outflow measurement can be used. In such cases this should be documented in the associated footnote/quantification method/comment

 - where possible, avoid reporting volumes based on meters that are a long way upstream of a WTP. Distribution system losses and gains can influence the measured volume significantly

**SWIM category:** Sources of Water

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U1.1

**Required by:** Redland, Gold Coast and Logan Councils; QUU and Unitywater

## SWIM Code: WA172

**Indicator short title:** Volume water sourced: surface water (unregulated supply)

**Units:** ML

**Title:** Volume of water taken from an unregulated surface water source (including via desalination).

**Definition:** The total metered and estimated unmetered volume of water abstracted by the utility from an unregulated surface water sources such as dams, weirs, rivers or irrigation channels during the reporting period. Unregulated surface water sources are not subject to entitlements and allocations.

*Includes:*

 - surface water desalination

 - dams, weirs, rivers or irrigation channels

 - for any potable and non-potable use

 - any water returned to surface water

 - water taken by other service providers operating on behalf of the utility

*Excludes:*

 - any sourced from marine desalination

 - any urban stormwater

 - any purchased/imported surface water from another service provider such as a bulk water supplier (reported separately)

*Notes:*

 - there may be a requirement in some cases for utilities to aggregate volumes from various surface water sources

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

 - the reported volume should be based on the metered inflow of raw water to WTPs or metered extraction of raw water where it is supplied directly into the urban system without treatment

 - if a WTP inflow measurement is not available an outflow measurement can be used. In such cases this should be documented in the associated footnote/quantification method/comment

 - where possible, avoid reporting volumes based on meters that are a long way upstream of a WTP. Distribution system losses and gains can influence the measured volume significantly

**SWIM category:** Sources of Water

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U1.2

**Required by:** Redland, Gold Coast and Logan Councils; QUU and Unitywater

## SWIM Code: WA173

**Indicator short title:** Volume water sourced: groundwater (regulated supply)

**Units:** ML

**Title:** Volume of water taken from a regulated groundwater source (including via desalination).

**Definition:** The total metered and estimated unmetered volume of water abstracted from a regulated groundwater source during the reporting period. Regulated groundwater sources are subject to controlled management of water releases and are typically subject to entitlements and annual allocation announcements.

*Includes:*

 - groundwater desalination

 - aquifers, including those subject to aquifer replenishment

 - for any potable and non-potable use

 - water taken by other service providers operating on behalf of the utility

*Excludes:*

 - any purchased/imported groundwater from another service provider such as a bulk water supplier (reported separately)

*Notes:*

 - there may be a requirement in some cases for utilities to aggregate volumes from various groundwater sources

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

 - the reported volume should be based on the metered inflow of raw water to WTPs or metered extraction of raw water where it is supplied directly into the urban system without treatment

 - if a WTP inflow measurement is not available an outflow measurement can be used. In such cases this should be documented in the associated footnote/quantification method/comment

 - where possible, avoid reporting volumes based on meters that are a long way upstream of a WTP. Distribution system losses and gains can influence the measured volume significantly

**SWIM category:** Sources of Water

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U2.1

**Required by:** Redland, Gold Coast and Logan Councils; QUU and Unitywater

## SWIM Code: WA174

**Indicator short title:** Volume water sourced: groundwater (unregulated supply)

**Units:** ML

**Title:** Volume of water taken from an unregulated groundwater source (including via desalination).

**Definition:** The total metered and estimated unmetered volume of water abstracted from an unregulated groundwater source during the reporting period. Unregulated groundwater sources are not subject to entitlements and allocations.

*Includes:*

 - groundwater desalination

 - aquifers, including those subject to aquifer replenishment

 - for any potable and non-potable use

 - water taken by other service providers operating on behalf of the utility

*Excludes:*

 - any purchased/imported groundwater from another service provider such as a bulk water supplier (reported separately)

*Notes:*

 - there may be a requirement in some cases for utilities to aggregate volumes from various groundwater sources

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

 - the reported volume should be based on the metered inflow of raw water to WTPs or metered extraction of raw water where it is supplied directly into the urban system without treatment

 - if a WTP inflow measurement is not available an outflow measurement can be used. In such cases this should be documented in the associated footnote/quantification method/comment

 - where possible, avoid reporting volumes based on meters that are a long way upstream of a WTP. Distribution system losses and gains can influence the measured volume significantly

**SWIM category:** Sources of Water

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U2.2

**Required by:** Redland, Gold Coast and Logan Councils; QUU and Unitywater

## SWIM Code: WA175

**Indicator short title:** Volume treated sewage disposal: inland surface waters

**Units:** ML

**Title:** Total volume of treated sewage wastewater disposal to inland surface waters.

**Definition:** The total metered and estimated unmetered volume of treated sewage wastewater disposal by the utility to inland surface waters. For example, dams, rivers, creeks or lakes.

*Includes:*

 - rivers, creeks and streams

 - surface water storages

 - irrigation channels

*Excludes:*

 - any wastewater disposal to groundwater, land or sea/estuary

*Notes:*

 - sewage is waste from residential and non-residential/trade properties collected and/or treated via sewerage infrastructure. It includes any volumes collected in the sewerage system due to stormwater, illegal connection overflow and infiltration to the system

 - the reported volume should be based on the metering at the disposal site

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 88

**BoM Cat 7 code:** U25.1

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA176

**Indicator short title:** Volume treated sewage disposal: land

**Units:** ML

**Title:** Total volume of treated sewage wastewater disposal to land.

**Definition:** The total metered and estimated unmetered volume of treated sewage wastewater disposal by the utility to land. For example, disposal as irrigation activities.

*Excludes:*

 - any wastewater disposal to groundwater, inland surface waters or sea/estuary

*Notes:*

 - sewage is waste from residential and non-residential/trade properties collected and/or treated via sewerage infrastructure. It includes any volumes collected in the sewerage system due to stormwater, illegal connection overflow and infiltration to the system

 - the reported volume should be based on the metering at the disposal site

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 89.1

**BoM Cat 7 code:** U25.2

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA177

**Indicator short title:** Volume treated sewage disposal: groundwater

**Units:** ML

**Title:** Total volume of treated sewage wastewater disposal to groundwater.

**Definition:** The total metered and estimated unmetered volume of treated sewage wastewater disposal by the utility to groundwater. For example, basins or aquifers.

*Excludes:*

 - any wastewater disposal to inland surface waters, land or sea/estuary

*Notes:*

 - sewage is waste from residential and non-residential/trade properties collected and/or treated via sewerage infrastructure. It includes any volumes collected in the sewerage system due to stormwater, illegal connection overflow and infiltration to the system

 - the reported volume should be based on the metering at the disposal site

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 89

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA178

**Indicator short title:** Volume treated sewage disposal: sea/estuary

**Units:** ML

**Title:** Total volume of treated sewage wastewater disposal to the sea/estuary.

**Definition:** The total metered and estimated unmetered volume of treated sewage wastewater disposal by the utility to the sea (estuary or ocean).

*Includes:*

 - marine water bodies (e.g. seas, oceans, straits)

 - coastal water bodies discharging to the ocean, either naturally or through flow control structures or systems

*Excludes:*

 - any wastewater disposal to groundwater, inland surface waters or land

*Notes:*

 - sewage is waste from residential and non-residential/trade properties collected and/or treated via sewerage infrastructure. It includes any volumes collected in the sewerage system due to stormwater, illegal connection overflow and infiltration to the system

 - the reported volume should be based on the metering at the disposal site

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 90

**BoM Cat 7 code:** U25.3

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA179

**Indicator short title:** Wastewater losses: during collection process

**Units:** ML

**Title:** Losses during sewage collection process.

**Definition:** The total metered and estimated unmetered volume of sewage lost during the collection process from evaporative, overflow, spills, egress (e.g. from emergency relief structures) or any other losses.

*Includes:*

 - any spills/overflows from collection systems (including detention/storages and storages structures) that occur before primary treatment (i.e. screening)

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U28.4

**Required by:** Redland, Gold Coast and Logan Councils; QUU and Unitywater

## SWIM Code: WA180

**Indicator short title:** Wastewater losses: during treatment process

**Units:** ML

**Title:** Losses during sewage treatment process.

**Definition:** The total metered and estimated unmetered volume of sewage lost during the treatment process from evaporative, overflow, spills or any other losses.

*Includes:*

 - wet weather bypass that have received treatment

 - evaporation, from treatment ponds

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U28.9

**Required by:** Redland, Gold Coast and Logan Councils; QUU and Unitywater

## SWIM Code: WA181

**Indicator short title:** Wastewater losses: after treatment process

**Units:** ML

**Title:** Losses after sewage treatment process.

**Definition:** The total metered and estimated unmetered volume of sewage lost after the treatment process from evaporative, overflow, spills or any other losses before being discharged to the environment.

*Includes:*

 - pipe bursts and leaks in the disposal system

 - meter inaccuracy

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U28.13

**Required by:** Redland, Gold Coast and Logan Councils; QUU and Unitywater

## SWIM Code: WA182

**Indicator short title:** Volume treated sewage returned to sewer for further treatment

**Units:** ML

**Title:** Volume of treated sewage disposal back to sewer for further treatment.

**Definition:** The total metered and estimated unmetered volume of treated wastewater returned from the utility’s WWTP to sewer for transportation and further treatment during the reporting year.

*Notes:*

 - the volumes of wastewater captured here provides additional information about the movement of wastewater described by other indicators

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U29.1

**Required by:** Redland, Gold Coast and Logan Councils; QUU and Unitywater

## SWIM Code: WA183

**Indicator short title:** Volume sewage imported to bulk wastewater treatment system

**Units:** ML

**Title:** Volume of sewage imported (i.e. taken from other infrastructure operators or utilities) to a bulk wastewater treatment system.

**Definition:** The total metered and estimated unmetered volume of sewage imported from other infrastructure operators or utilities from outside your jurisdiction to a bulk wastewater treatment system.

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U20.3

**Required by:** Redland, Gold Coast and Logan Councils; QUU and Unitywater

## SWIM Code: WA184

**Indicator short title:** Volume sewage measured at bulk wastewater treatment plant inlet

**Units:** ML

**Title:** Volume of sewage measured at inlet to bulk wastewater treatment plant.

**Definition:** The total metered and estimated unmetered volume of sewage measured at inlet to bulk wastewater treatment plant. Includes sewage taken (imported) from other infrastructure operators. Excludes sewage supplied (exported) to other infrastructure operators and that taken from sewer mining).

*Includes:*

 - any imported sewage to bulk wastewater treatment plant

*Excludes:*

 - any exported sewage

 - any volumes taken from sewer mining

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U23.2

**Required by:** Redland, Gold Coast and Logan Councils; QUU and Unitywater

## SWIM Code: WA185

**Indicator short title:** Volume recycled sewage supplied: agricultural/individual irrigation

**Units:** ML

**Title:** Volume of recycled sewage water supplied for agricultural/individual irrigation purposes (excluding supply to Irrigation Water Systems/Schemes).

**Definition:** The total metered and estimated unmetered volume of recycled sewage water supplied for agricultural/individual irrigation purposes. Excluding any supply to Irrigation Water Systems/Schemes. Includes potable and non-potable water. For example, irrigation of crops, recycled sewage water supplied to forestry, agricultural products including livestock. This would generally occur via a third pipe system.

*Includes:*

 - potable and non-potable water used to top-up the recycled sewage water system

 - volumes taken from sewer mining

 - potable and non-potable water

*Excludes:*

 - any recycled stormwater

 - any volumes supplied to Irrigation Water Systems/Schemes

 - any recycled sewage water supplied as environmental flows (reported elsewhere)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Recycled Water (sewage) uses

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U44.3

**Required by:** Redland, Gold Coast and Logan Councils; QUU and Unitywater

## SWIM Code: WA186

**Indicator short title:** Volume recycled sewage supplied: irrigation water system/scheme

**Units:** ML

**Title:** Volume of recycled sewage water supplied to Irrigation Water Systems/Schemes (excluding supply to agriculture/individual irrigation).

**Definition:** The total metered and estimated unmetered volume of recycled sewage water supplied to any Irrigation Water Systems/Schemes. Excluding any supply to agriculture/individual irrigation. For example, large scale agricultural use via infrastructure managed by an irrigation entity. Includes potable and non-potable water. This would generally occur via a third pipe system.

*Includes:*

 - potable and non-potable water used to top-up the recycled sewage water system

 - volumes taken from sewer mining

 - potable and non-potable water

*Excludes:*

 - any recycled stormwater

 - any volumes supplied to agriculture/individual irrigation

 - any recycled sewage water supplied as environmental flows (reported elsewhere)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Recycled Water (sewage) uses

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U44.4

**Required by:** Redland, Gold Coast and Logan Councils; QUU and Unitywater

## SWIM Code: WA187

**Indicator short title:** Volume recycled sewage supplied: any other

**Units:** ML

**Title:** Volume of recycled sewage water supplied for other uses not reported elsewhere.

**Definition:** The total metered and estimated unmetered volume of recycled sewage water supplied to other uses not reported elsewhere.

*Includes:*

 - potable and non-potable water used to top-up the recycled sewage water system

 - volumes taken from sewer mining

 - potable and non-potable water

*Excludes:*

 - any recycled stormwater

 - any imported/exported

 - any used on-site or for own use

 - any supplied to: residential, commercial, industrial and municipal, agricultural/individual irrigation, Irrigation Water Systems/schemes, managed groundwater/aquifer recharge, environment flows/purposes

 - any losses

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Recycled Water (sewage) uses

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 105

**BoM Cat 7 code:** U44.10

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA189

**Indicator short title:** Volume recycled stormwater supplied: agricultural/individual irrigation

**Units:** ML

**Title:** Volume of recycled stormwater supplied for agricultural/individual irrigation purposes (excluding supply to Irrigation Water Systems/Schemes).

**Definition:** The total metered and estimated unmetered volume of recycled stormwater supplied for agricultural/individual irrigation purposes. Excluding any supply to Irrigation Water Systems/Schemes. Includes potable and non-potable water. For example, irrigation of crops, recycled sewage water supplied to forestry, agricultural products including livestock. This would generally occur via a third pipe system.

*Includes:*

 - potable and non-potable water used to top-up the recycled stormwater system

 - potable and non-potable water

*Excludes:*

 - any recycled sewage water

 - any volumes supplied to Irrigation Water Systems/Schemes

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Stormwater Reuse

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 110.1

**BoM Cat 7 code:** U62.3

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA190

**Indicator short title:** Volume recycled stormwater supplied: irrigation water system/scheme

**Units:** ML

**Title:** Volume of recycled stormwater supplied to Irrigation Water Systems/Schemes (excluding supply to agriculture/individual irrigation).

**Definition:** The total metered and estimated unmetered volume of recycled stormwater supplied to any Irrigation Water Systems/Schemes. Excluding any supply to agriculture/individual irrigation. For example, large scale agricultural use via infrastructure managed by an irrigation entity. Includes potable and non-potable water. This would generally occur via a third pipe system.

*Includes:*

 - potable and non-potable water used to top-up the recycled stormwater system

 - potable and non-potable water

*Excludes:*

 - any recycled sewage water

 - any volumes supplied to agriculture/individual irrigation

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Stormwater Reuse

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 110.2

**BoM Cat 7 code:** U62.4

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA191

**Indicator short title:** Volume recycled stormwater supplied: environmental flows

**Units:** ML

**Title:** Volume of recycled stormwater supplied for environmental flows/purposes (excluding groundwater/aquifer recharge).

**Definition:** The total metered and estimated unmetered volume of recycled stormwater discharged to a waterway for environmental purposes as prescribed by the environmental regulator. There must be a quality characteristic that is a net benefit to the environment as determined by the relevant regulator. For example, water discharged to rivers, the sea, natural wetlands for environmental purposes as prescribed by the environmental regulator. This will exclude non-harvestable forests and bushland if the regulator determines there is disposal rather than beneficial use.

*Includes:*

 - potable and non-potable water used to top-up the recycled stormwater system

 - potable and non-potable water

*Excludes:*

 - any recycled sewage water

 - any recycled stormwater supplied for groundwater/aquifer recharge (reported elsewhere)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Stormwater Reuse

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 110.3

**BoM Cat 7 code:** U62.6

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA192

**Indicator short title:** Volume recycled stormwater supplied: any other

**Units:** ML

**Title:** Volume of recycled stormwater supplied for other uses and other customers not reported elsewhere.

**Definition:** The total metered and estimated unmetered volume of recycled stormwater supplied to other uses and other customers not reported elsewhere.

*Includes:*

 - potable and non-potable water used to top-up the recycled stormwater system

 - potable and non-potable water

*Excludes:*

 - any recycled sewage water

 - any imported/exported

 - any supplied to: residential, commercial, industrial and municipal, agricultural/individual irrigation, Irrigation Water Systems/schemes, managed groundwater/aquifer recharge, environment flows/purposes

 - any losses

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Stormwater Reuse

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 111

**BoM Cat 7 code:** U62.10

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA197

**Indicator short title:** Volume water returned to surface water or groundwater from water supply system

**Units:** ML

**Title:** Volume of potable and non-potable water returned to surface water or groundwater from urban water supply system.

**Definition:** The total metered and estimated unmetered volume of potable and non-potable water returned by the utility to surface water or groundwater from the urban supply system during the reporting year.

*Includes:*

 - water that has been subjected to treatment for use and subsequently returned to surface water or groundwater

 - raw water

 - water supplied to managed aquifer recharge

 - water received from other service providers

 - environmental releases made from the potable supply system, i.e. after treatment - releases from the potable supply system should be noted in the associated footnote

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

 - any untreated environmental flow releases (outside the urban water supply system)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments

**SWIM category:** Potable water uses

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**NPR code:** W31

**BoM Cat 7 code:** U6.1

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: WA201

**Indicator short title:** Maximum daily demand

**Units:** ML/day

**Title:** Maximum daily water supply demand.

**Definition:** The greatest daily demand for potable and non-potable water supply recorded in the reporting year.

*Notes:*

 - maximum daily demand is to represent the maximum volume provided to the network

 - small service providers should consider excluding days on which main bursts, fire fighting or flushing occurred. Service providers may consider using the 90th percentile maximum daily demand

 - may be estimated by using a single average daily demand multiplied by the peaking factor as determined by the service provider or using mean day maximum month values, noting that this is likely to be less than the peaking factor

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Consumption

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.5

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WA202

**Indicator short title:** Volume all potable water supplied: residential

**Units:** ML

**Title:** Volume of potable residential water supplied.

**Definition:** The total metered and estimated unmetered volume of potable water supplied to residential properties. Potable water is intended for use as drinking water and should materially meet the Australian Drinking Water Guidelines 2004, or equivalent.

*Includes:*

 - any volumes of potable recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.17a

**Required by:** Small SPs with <10,000 connections

## SWIM Code: WA203

**Indicator short title:** Volume all potable water supplied: commercial+industrial+municipal

**Units:** ML

**Title:** Volume of potable commercial, municipal and industrial water supplied.

**Definition:** The total metered and estimated unmetered volume of potable water supplied to commercial, municipal and industrial properties. Potable water is intended for use as drinking water and should materially meet the Australian Drinking Water Guidelines 2004, or equivalent.

*Includes:*

 - any volumes of potable recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.18a

**Required by:** Small SPs with <10,000 connections

## SWIM Code: WA204

**Indicator short title:** Volume all non-potable water supplied: residential

**Units:** ML

**Title:** Volume of non-potable (raw-PT) residential water supplied.

**Definition:** The total metered and estimated unmetered volume of non-potable (raw-Partially Treated) water supplied to residential properties. Non-potable water is not intended for use as drinking water.

*Includes:*

 - any volumes of non-potable recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.17b

**Required by:** Small SPs with <10,000 connections

## SWIM Code: WA205

**Indicator short title:** Volume all non-potable water supplied: commercial+industrial+municipal

**Units:** ML

**Title:** Volume of non-potable (raw-PT) commercial, municipal and industrial water supplied.

**Definition:** The total metered and estimated unmetered volume of non-potable (raw-Partially Treated) water supplied to commercial, municipal and industrial properties. Non-potable water is not intended for use as drinking water.

*Includes:*

 - any volumes of non-potable recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Raw/Recycled

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.18b

**Required by:** Small SPs with <10,000 connections

## SWIM Code: WA206

**Indicator short title:** Volume potable+raw-PT water supplied: residential

**Units:** ML

**Title:** Volume of potable and non-potable (raw-PT) residential water supplied (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of potable and non-potable (raw-Partially Treated) water supplied to residential properties.

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

*Notes:*

 - the reported volume should be based on customer metering data

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA206:potable=WA32; WA206:raw=WA91; WA206:wsp=WA32+WA91

**NPR code:** W8.3

**BoM Cat 7 code:** U10.1

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: WA207

**Indicator short title:** Volume potable+raw-PT water supplied: non-residential (NPR)

**Units:** ML

**Title:** Volume of potable and non-potable (raw-PT) non-residential water supplied (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of potable and non-potable (raw-Partially Treated) water supplied to non-residential properties/customers.

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

 - environmental releases made outside of the water supply system

*Notes:*

 - the reported volume should be based on customer metering data

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA207:potable=WA34; WA207:raw=WA92; WA207:wsp=WA34+WA92

**NPR code:** W9.3

**Required by:** Large SPs with >10,000 connections; GAWB

## SWIM Code: WA208

**Indicator short title:** Volume potable+raw-PT water supplied: commercial+industrial+municipal

**Units:** ML

**Title:** Volume of potable and non-potable (raw-PT) non-residential water supplied to commercial, industrial and municipal customers (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of potable and non-potable (raw-Partially Treated) water supplied to commercial, industrial and municipal customers.

*Excludes:*

 - any volumes supplied for your own use

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

 - environmental releases made outside of the water supply system

*Notes:*

 - the reported volume should be based on customer metering data

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U10.2

**Required by:** Redland, Gold Coast and Logan Councils; QUU and Unitywater

## SWIM Code: WA209

**Indicator short title:** Volume potable+raw-PT water supplied: agricultural/individual irrigation

**Units:** ML

**Title:** Volume potable and non-potable (raw-PT) non-residential water supplied to agricultural and individual irrigation customers (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of potable and non-potable (raw-Partially Treated) water supplied to agricultural and individual irrigation customers.

*Includes:*

 - the irrigation of crops, market gardens, forestry operations and pasture

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

 - environmental releases made outside of the water supply system

*Notes:*

 - the reported volume should be based on customer metering data

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U10.3

**Required by:** Redland, Gold Coast and Logan Councils; QUU and Unitywater

## SWIM Code: WA210

**Indicator short title:** Volume potable+raw-PT water supplied: irrigation water systems/schemes

**Units:** ML

**Title:** Volume of potable and non-potable (raw-PT) non-residential water supplied to irrigation water schemes (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of potable and non-potable (raw-Partially Treated) water supplied to irrigation water schemes. Irrigation water schemes are a large scale agricultural use supplied via infrastructure managed by an irrigation entity

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

 - environmental releases made outside of the water supply system

*Notes:*

 - the reported volume should be based on customer metering data

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U10.4

**Required by:** Redland, Gold Coast and Logan Councils; QUU and Unitywater

## SWIM Code: WA211

**Indicator short title:** Volume potable+raw-PT water supplied: environmental flows

**Units:** ML

**Title:** Volume of potable and non-potable (raw-PT) non-residential water supplied as environmental flows from the urban water system (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of potable and non-potable (raw-Partially Treated) water supplied as environmental flows from the urban water system. Environmental flows are released under a specific environmental management plan prepared in conjunction with and/or approved by the appropriate environmental resource regulator.

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

 - environmental releases made outside of the water supply system

*Notes:*

 - the reported volume should be based on customer metering data

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U10.6

**Required by:** Redland, Gold Coast and Logan Councils; QUU and Unitywater

## SWIM Code: WA212

**Indicator short title:** Volume potable+raw-PT water supplied: own or other use

**Units:** ML

**Title:** Volume of potable and non-potable (raw-PT) non-residential water supplied for own or other use (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of potable and non-potable (raw-Partially Treated) water supplied for own or other use.

*Includes:*

 - all your own water use, e.g. onsite use at a WTP (including the irrigation of grounds, process water at treatment plant, hydrants for mains flushing, etc.)

 - water supplied for any other non-residential uses that are not reported elsewhere and not necessarily directly attributable to the utility (for example, for the use of fire-fighting, provided to non-residential institutions/customers free of charge)

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

 - environmental releases made outside of the water supply system

*Notes:*

 - the reported volume should be based on customer metering data

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U10.7

**Required by:** Redland, Gold Coast and Logan Councils; QUU and Unitywater

## SWIM Code: WA213

**Indicator short title:** Volume potable+raw-PT water supplied: any other

**Units:** ML

**Title:** Volume of potable and non-potable (raw-PT) non-residential water supplied to any other customer (excluding recycled water).

**Definition:** The total metered and estimated unmetered volume of potable and non-potable (raw-Partially Treated) water supplied to any other customer.

*Includes:*

 - any other uses/customers not captured by the other 'non-residential' water supplied U-code indicators. Not previously reported in WA216 (U10.2) 'commercial+industrial+municipal', WA217 (U10.3) 'agricultural/individual irrigation', WA218 (U10.4) 'irrigation water systems/schemes', WA220 (U10.6) 'environmental flows', or WA221 (U10.7) 'own use'

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

 - environmental releases made outside of the water supply system

*Notes:*

 - the reported volume should be based on customer metering data

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Total water supply

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U10.5

**Required by:** Redland, Gold Coast and Logan Councils; QUU and Unitywater

## SWIM Code: WA214

**Indicator short title:** Volume sewage moved between your own STPs

**Units:** ML

**Title:** Volume of sewage received (imported) from own organisation.

**Definition:** The total metered and estimated unmetered volume of sewage received (imported) from other sewerage treatment plants owned/run/managed by, or on behalf of, the utility.

*Includes:*

 - residential and trade waste

 - transfers not associated with a financial transaction

*Excludes:*

 - any volumes of recycled water (i.e. sourced from sewage or stormwater)

 - any sewage imported 'externally' from other infrastructure operators, utilities or operational areas

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U20.4

**Required by:** Large SPs with >10,000 connections

## SWIM Code: WA215

**Indicator short title:** Volume treated sewage disposal: all (NPR/BOM)

**Units:** ML

**Title:** Volume of treated wastewater disposals (excluding to groundwater/aquifers).

**Definition:** The total metered and estimated unmetered volume of treated wastewater disposed of by the utility to surface waters and land during the reporting year.

*Includes:*

 - treated wastewater disposals

*Excludes:*

 - aquifer replenishment/groundwater

 - recycling

 - onsite use

 - environmental releases

 - losses that occur between leaving the WWTP and the disposal site

*Notes:*

 - the reported volume should be based on the metering at the disposal site

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA215:wsp+sewage=WA175+WA176+WA178

**NPR code:** W29

**Required by:** Large SPs with >10,000 connections

## SWIM Code: WA216

**Indicator short title:** Volume treated sewage disposal: all (ABS)

**Units:** ML

**Title:** Volume of treated wastewater disposals.

**Definition:** The total metered and estimated unmetered volume of treated wastewater disposed of by the utility during the reporting year.

*Includes:*

 - treated wastewater disposals

*Excludes:*

 - recycling

 - onsite use

 - environmental releases

 - losses that occur between leaving the WWTP and the disposal site

*Notes:*

 - the reported volume should be based on the metering at the disposal site

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA216:wsp+sewage=WA175+WA176+WA177+WA178

**ABS code:** 101

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA217

**Indicator short title:** Wastewater losses: all

**Units:** ML

**Title:** Volume of wastewater losses.

**Definition:** The total metered and estimated unmetered volume of wastewater losses during the treatment process from collection to disposal and including evaporative, overflow, spills or any other losses.

*Includes:*

 - system overflows up stream of WWTP

 - WWTP plant bypasses (e.g. wet weather flows)

 - evaporation and infiltration losses

 - sludge removal

*Notes:*

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Wastewater

**Scheme type(s):** Sewerage scheme

**Data type:** NUMERIC

**Source of data:** DERIVED

**Calculated as:** WA217:wsp+sewage=WA179+WA180+WA181

**NPR code:** W30

**Required by:** Large SPs with >10,000 connections

## SWIM Code: WA218

**Indicator short title:** Volume recycled sewage supplied: commercial+industrial+municipal

**Units:** ML

**Title:** Volume of recycled sewage water supplied to commercial, industrial and municipal customers.

**Definition:** The total metered and estimated unmetered volume of recycled sewage water supplied to commercial, industrial and municipal customers. For example, recycled water supplied to golf courses, heavy industry and commercial areas. This would generally occur via a third pipe system.

*Includes:*

 - potable and non-potable water used to top-up the recycled sewage water system

 - volumes taken from sewer mining

 - potable and non-potable water

*Excludes:*

 - any recycled stormwater

 - any recycled sewage water supplied as environmental flows (reported elsewhere)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Recycled Water (sewage) uses

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**BoM Cat 7 code:** U44.2

**Required by:** Large SPs with >10,000 connections

## SWIM Code: WA219

**Indicator short title:** Volume recycled sewage supplied: own use

**Units:** ML

**Title:** Volume of recycled sewage water supplied for your own use.

**Definition:** The total metered and estimated unmetered volume of recycled sewage water used by your own organisation external to the treatment process.

*Includes:*

 - potable and non-potable water used to top-up the recycled sewage water system

 - volumes taken from sewer mining

 - potable and non-potable water

*Excludes:*

 - any recycled stormwater

 - any recycled water used on-site in the treatment process

 - any recycled sewage water supplied as environmental flows (reported elsewhere)

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Recycled Water (sewage) uses

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 103

**BoM Cat 7 code:** U43.5

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WA220

**Indicator short title:** Volume recycled stormwater supplied: commercial+industrial+municipal

**Units:** ML

**Title:** Volume of recycled stormwater supplied to commercial, industrial and municipal customers.

**Definition:** The total metered and estimated unmetered volume of recycled stormwater supplied to commercial, industrial and municipal customers. For example, recycled water supplied to golf courses, heavy industry and commercial areas.

*Includes:*

 - potable and non-potable water used to top-up the recycled stormwater system

 - potable and non-potable water

*Excludes:*

 - any recycled sewage water

*Notes:*

 - unmetered volumes – information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Stormwater Reuse

**Scheme type(s):** Recycled water scheme

**Data type:** NUMERIC

**Source of data:** USER

**ABS code:** 110

**BoM Cat 7 code:** U62.2

**Required by:** Small non-indigenous SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WF1

**Indicator short title:** Total full-time equivalent water+sewerage employees

**Units:** FTEs

**Title:** Total full-time equivalent water and sewerage service employees.

**Definition:** The total number of personnel involved in delivering water and sewerage services at the end of the reporting period, including administrative and maintenance services, whether direct employees or indirect employees e.g. contractor staff.

*Includes:*

 - operational employees

 - administrative employees

 - maintenance employees

 - laboratory employees

 - contractors employed in these areas

*Excludes:*

 - contractors employed in constructing or upgrading a plant or network as a once-off

*Example:*

A small service provider has 4 FTEs employed in operations and maintenance for its water and sewerage systems and 2 administrative FTEs employed across the local government who spend about a quarter of their time dealing with water and sewerage business. The total number of FTE water and sewerage services employees is 4 + (0.25 x 2) = 4.5.

*Notes:*

 - if a service provider has a discrete business unit which provides commercial water and/or sewerage services to other providers and customers. Then proportion of staff undertaking work for the provider should be included, but not those working for other customers. This would be calculated on the proportion of external and internal effort

 - local government finance and other staff who partially support water and/or sewerage service activities should also be included based on an estimate of the proportion of their time spent supporting the water and sewerage businesses

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Workforce

**Scheme type(s):** WSP

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG1.20

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WS1

**Indicator short title:** Months water supply remaining: 30 June

**Units:** months

**Title:** Months of water supply remaining at end of the reporting period.

**Definition:** The number of months of potable and non-potable water supply remaining based on total anticipated water demand and excluding contingency supplies.

*Example:*

 - WSP A holds a water allocation of 5,000 ML/a of 'High Priority' (HP) water in a dam, and services a current demand of around 4,000 ML/a. Based on the current announced allocation, the current level in the dam, the historical performance of the dam, average assumed inflows, assumption regarding water use by other users and understanding the projected town water demand, WSP A undertakes an indicative water balance and considers that 30 to 32 months of supply remain. WSP A reports '30'.

 - WSP B relies on bores that have met town water supply requirements under most conditions. However, some periods of falling bore levels due to poor recharge events have led to the need to augment supply and/or apply restrictions. When graphed and examined, the historical information on bore level and demand exhibit a trend in the rate of declining bore levels across the various events. Through extrapolation and historical experience in previous events, this declining trend can be used to estimate the time to supply shortfall. In accordance with their trend extrapolation and without any further significant recharge events, WSP B estimates 10 months to supply shortfall. WSP B reports '10' and a response to WS2 (QG2.2) is triggered.

 - WSP C has access to 8,600 kL of water stored in an in-stream storage/pumping pool. The river has in the past had periods of low flow and there have been negligible inflows to the pumping pool over the past six months. Anticipated demand is 1,750 kL per month. At forecast rates of demand and storage loss, and without access to new run of river flows, the WSP expects that around 18 weeks' supply remain. WSP C reports '4', submits quarterly information reports to the regulator, and responses to both WS2 (QG2.2) and WS3 (QG2.3) are triggered.

*Notes:*

 - if response is less than 12 months, then you must supply text for indicator WS2 'Anticipated water availability to meet demand for next year'

 - if response is less than 6 months, then you must also supply text for indicator WS3 'Available contingency supplies' and you will be required to submit quarterly information on 'supply to meet demand' on quarterly basis to the Queensland Water Supply Regulator

 - providers using run-of-river or groundwater based supply systems including the Great Artesian Basin should report based on best estimates considering recent performance of these systems

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Water Security

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG2.1

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WS2

**Indicator short title:** Anticipated water availability to meet demand for next year

**Units:** ok/not ok

**Title:** Anticipated water supply availability to meet demand for next reporting year (ONLY required if WS1 'Months water supply remaining: 30 June' is reported as less than 12 months).

**Definition:** Please provide a 'ok' or 'not ok' statement on water supply availability to meet demand for next reporting year. You MUST provide a comment against the data cell to outline the anticipated threat (not ok) in your own terms.

*Example:*

 - WSP B reported 10 months available supply at WS1 (QG 2.1), triggering a response to WS2 (QG2.2). The WSP relies on bores that have met town water supply requirements under most conditions. However, some periods of falling bore levels due to poor recharge events have led to the need to augment supply and/or apply restrictions. With the historical information on bore level and demand graphed and examined, the WSP estimated the time to supply shortfall without any further significant recharge events. WSP B reports ‘not ok’ and inserts a text response explaining the situation.

 - WSP C reported 4 months available supply at WS1 (QG2.1), triggering a response to WS2 (QG2.2). WSP C can access 8,600 kL of water stored in an in-stream storage/pumping pool. There have been negligible inflows to the pumping pool over the past six months. Anticipated monthly demand is 1,750 kL. At forecast levels of demand and storage loss, and without access to new run of river flows, WSP C expects that around 18 weeks supply remain. WSP C reports 'not ok', inserts a comment explaining the situation.

 - WSP D relies on run-of-river flows and, due to very limited in-stream storage, reported 2 months available supply at WS1 (QG2.1). Because of its supply arrangements, WSP D usually has only a few months stored supply. However, the river is continually replenished by run of river flows. WSP D determines (based on best estimates and past experience) that continuity of supply is unlikely to be threatened in most years. WSP D reports 'ok' and inserts a comment explaining the reasons that the supply is considered secure.

*Notes:*

 - only report this indicator if response to WS1 (QG2.1) is less than 12 months

 - a comment MUST be added when you report 'not ok' for this indicator or may be appropriate if the service provider reports 'ok' using experience/judgement as with the WSP D example below

 - if WS1 (QG2.1) is 12 months or greater enter 'NR' for this indicator

**SWIM category:** Water Security

**Scheme type(s):** Potable/Raw

**Data type:** TEXT

**Source of data:** USER

**QG KPI code:** QG2.2

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WS3

**Indicator short title:** Available contingency supplies

**Units:** yes/no

**Title:** Available contingency supplies (ONLY required if WS1 'Months water supply remaining: 30 June' is reported as less than 6 months).

**Definition:** Please provide a 'yes' or 'no' statement on the availability of contingency supplies. You MUST add a comment to the data cell describing the contingency supplies that are available ('yes' response) or why you have no contingency supplies ('no' response).

Comment to include:

 - the nature of the contingency supply source/s

 - the absolute capacity (ML/a) of the contingency supply source/s

 - the expected time taken to implement the contingency supply

 - any other information that you think relevant

*Example:*

 - WSP C reported 4 months supply remaining at WS1 (QG2.1), triggering a response at WS3 (QG2.3). The service provider's supply occasionally drops below 6 months prior to the wet season and this has already prompted the Council to commence construction of an emergency supply pipeline to a nearby town with a more secure supply source. WSP C reports 'yes' and adds a comment explaining the pipeline project will be completed before local supplies are exhausted and that the pipeline is able to provide sufficient contingency supply on a seasonal basis.

 - WSP E reported less than 6 months' supply remaining at WS1 (QG2.1), triggering a response at WS3 (QG2.3). There are no viable identified local alternative supply sources, so WSP E has an arrangement to cart water from a neighbouring provider in the event of a water supply threat. Short term and long term supply solutions should be included where appropriate. WSP E reports 'yes' and adds the comment: “Carting from neighbouring provider to provide for drinking water requirements. This should provide sufficient volume for a restricted contingency supply and, by agreement, is able to commence at 7 days' notice. A total outdoor water usage ban will apply on commencement of carting.”

 - WSP F reported less than 6 months supply remaining at WS1 (QG2.1), triggering a response at WS3 (QG2.3). However, it does not have a current drought management strategy and has not identified suitable emergency supplies. WSP F reports 'no' and adds a comment explaining the current situation and the actions that the SP intends to remedy the situation.

*Notes:*

 - a comment MUST be added whether you report 'yes' or 'no' for this indicator

 - the expected time taken to implement the contingency supply should be reported in the comments

 - only report this indicator if response to WS1 (QG2.1) is less than 6 months OR WS2 (QG2.2) is 'not ok'

 - if WS1 (QG2.1) is 6 months or greater then enter 'NR' for this indicator

 - examples provided in WS7 (QG2.7) may also be helpful to developing a response here

**SWIM category:** Water Security

**Scheme type(s):** Potable/Raw

**Data type:** TEXT

**Source of data:** USER

**QG KPI code:** QG2.3

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WS4

**Indicator short title:** Total anticipated water demand for next reporting year

**Units:** ML

**Title:** Total anticipated water demand for next reporting year.

**Definition:** The total anticipated potable and non-potable water demand for the next reporting year. The value reported should be based on last year's usage, your 'per connection' analysis and the anticipated increase in population over the coming year.

*Example:*

 - based on the total volume of raw water that WSP G sourced in the previous water year of 15,250 ML, plus a small anticipated increase in the serviced population over the coming year that was identified in Council's population forecasts, trends in development applications received by Council and new connections and confirmed by the Queensland Government Statistician's Office (QGSO) population forecasts. WSP G reports '16,800 ML'.

 - WSP H sourced an average of 130,000 ML of raw water in the past few water years and has recently introduced tariff reform that it believes will reduce overall demand. Additionally, it anticipates a decrease in water demand due to the closure of significant industry or mines over the coming year which is confirmed by various sources. WSP H reports '120,000 ML'.

*Notes:*

 - anticipated annual water demand to be guided by available information including:

 a. water demand trends (including effects of water restrictions and tariff charges)

 b. development approvals and applications

 c. town planning documents

 d. local and regional growth reports and documents

 e. growth projections

 f. inclusion of treatment losses, distribution losses and other non-revenue water in the demand assessment (i.e. Service Provider response represents the total volume of raw water sourced for the scheme)

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Water Security

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG2.4

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WS5

**Indicator short title:** Total anticipated annual water demand in five years time

**Units:** ML

**Title:** Total anticipated annual water demand in five years' time.

**Definition:** The total anticipated annual potable and non-potable demand for water in the year five years after the reporting year. The value reported should be based on last year's usage, your 'per connection' analysis and the anticipated increase in population over the next 5 years.

*Example:*

 - The Queensland Government Statistician's Office (QGSO) in Queensland Treasury projects a town's population to increase by 15% over the next five years. WSP I examines its historical growth in connections and considers that this estimated rate of future growth is consistent with historical growth in new connections. WSP I forecasts changes to residential demand by calculating this proportional increase when projecting the annual demand in 5 years' time. From the current annual demand of 20,000 ML, WSP I assumes that per capita demand remains constant, anticipated annual demand in five years is calculated as 20,000 ML x 115% = 23,000 ML. WSP I reports '23,000 ML'. The WSP uses the comment field to outline the methodology.

 - The QGSO projects a town's population to increase by 15% over the next five years due to the opening of a new processing facility in the area. WSP J also considers the planned water efficiency program could cut 10% from the anticipated future demand increase and 5% from existing demand. WSP J forecasts changes to residential demand by considering these proportional changes from water demand in the current year. Anticipated annual demand in five years is calculated as (20,000 ML x 95%) + (20,000 ML x 15% x 90%) = 21,700 ML/a. WSP J reports '21,700 ML'. The WSP uses the comment field to outline the methodology.

 - WSP K has a detailed lot-based demand forecasting model that is linked to Council's population forecasting and identifies upcoming growth in various sectors in the serviced area. Taking into account the significant growth forecast in the residential and industrial sectors associated with recent increase in mining activity in the region the WSP uses the model to estimate the anticipated demand for the next reporting year. WSP K reports '14,500 ML'. The WSP uses the comment field to outline the methodology.

*Notes:*

 - anticipated annual water demand to be guided by available information including:

 a. water demand trends (including effects of water restrictions and tariff charges)

 b. development approvals and applications

 c. town planning documents

 d. local and regional growth reports and documents

 e. growth projections

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Water Security

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG2.5

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WS6

**Indicator short title:** Anticipated capacity to meet demand in 5 years time

**Units:** ok/not ok

**Title:** Anticipated capacity to meet demand in 5 years' time.

**Definition:** Please provide a 'ok' or 'not ok' statement on your anticipated capacity to meet annual demand in the year five years after this reporting year. If you report 'not ok' then you MUST add a comment to the data cell to outline the anticipated threat in your own terms.

Comments to include:

 - describing the anticipated supply shortfall

 - when a shortfall may arise

 - plans on how to remedy this situation

*Example:*

 - WSP L is anticipating a significant increase in demand for a particular scheme. The service provider's forecasting suggests that while current town water demand can be met from existing sources, a recent hydrological assessment of the existing supply sources suggests there may be insufficient yield from existing supply sources to meet water demand in 5 years' time. The WSP is currently investigating alternative supply sources. WSP L reports 'not ok' and provides a comment describing the anticipated supply shortfall, including forecasting when a shortfall may arise. A response to WS7 (QG2.7) is triggered.

 - WSP M anticipates growth in a major population centre to occur in line with the QGSO population forecast. While current water demand can be met from existing sources, it is nearing the capacity of the service provider's existing water allocations. High and medium priority allocations are available for sale in existing supply sources. The WSP is assessing options for securing additional water allocations. WSP M reports 'not ok' and provides a comment describing the anticipated supply shortfall, including forecasting when a shortfall may arise, and outline that the WSP is investigating the purchase of additional allocations to remedy this situation. A response to WS7 (QG2.7) is triggered.

*Notes:*

 - if response is 'not ok', then you MUST also supply text for indicator WS7 (QG2.7) 'Planned supply system response'

**SWIM category:** Water Security

**Scheme type(s):** Potable/Raw

**Data type:** TEXT

**Source of data:** USER

**QG KPI code:** QG2.6

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WS7

**Indicator short title:** Planned supply system response

**Units:** yes/no

**Title:** Planned supply system response (ONLY required if WS6 'Anticipated capacity to meet demand in 5 years' time' is reported as 'not ok').

**Definition:** Please provide a 'yes' or 'no' statement on the availability of planned system supply response actions. You MUST add a comment to the data cell describing the contingency supplies that are available ('yes' response) or why you have no contingency supplies ('no' response).

Includes (but not limited to):

 - demand management

 - leakage management

 - source substitution

 - efficiency programmes

 - supply system augmentation

 - savings/contribution of the actions in absolute volume (ML/a)

 - changes to tariff structure

 - any other information you think relevant

*Example:*

 - WSP N reported 'not ok' at WS6 (QG2.6), which triggered the requirement for a response at WS7 (QG2.7). WSP N is anticipating a significant increase in demand for a particular scheme. The WSP's forecasting suggests there may be insufficient water allocation to meet water demand in 5 years' time. The WSP is currently investigating alternative supply sources and has developed an interim supply system response to the shortfall. WSP N reports 'yes' and in the required text response (i.e. adds a comment), provides details of its short-term response including the capacity of its demand management, leakage management and efficiency programs to reduce demand. WSP N also provides its long-term response to the anticipated shortfall, including details of a planned pipeline to an existing storage, timing for construction and the potential timing of when the impoundment could reach minimum operating level.

 - WSP O reported 'not ok' at WS6 (QG2.6), which triggered the requirement for a response at WS7 (QG2.7). The service provider services a town that has experienced higher than expected growth in the past few years and the WSP is currently meeting the increased demand with water sourced under a contract with a bulk supplier. The contract is due to expire in 2 years. WSP O considers the new population to have stabilised and has decided to seek a permanent water allocation. The WSP is currently investigating options to secure a permanent water allocation to meet their needs. WSP O reports 'yes' and in the required text response (i.e. adds a comment), provides details of its plan to proceed with the permanent water trade, effect a permitted change of use under the ROP and register Council as the owner of the new allocation.

 - WSP P reported 'not ok' at WS6 (QG2.6), which triggered the requirement for a response at WS7 (QG2.7). The service provider has identified several areas with unusually high leakage/losses. Before commencing an expensive investigation into new supply sources, the WSP proposes a local infrastructure renewal program to minimise existing losses because preliminary assessment indicates that the possible savings have the potential to meaningfully address the potential shortfall identified under WS6 (QG2.6). WSP P reports 'yes' and in the required text response (i.e. adds a comment), provides details of its local infrastructure renewal program to minimise existing losses.

*Notes:*

 - only required if response to WS6 (QG2.6) 'Anticipated capacity to meet demand in 5 years time' is reported as 'not ok'

 - if WS6 is reported as 'ok' then enter 'NR' for this indicator

**SWIM category:** Water Security

**Scheme type(s):** Potable/Raw

**Data type:** TEXT

**Source of data:** USER

**QG KPI code:** QG2.7

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections; GAWB

## SWIM Code: WS9

**Indicator short title:** Water restrictions (severity)

**Units:** %

**Title:** Water restrictions - severity (ONLY required if WS10 (QG2.8) 'Water restrictions - duration' is reported as > 0).

**Definition:** Demand reductions achieved for the most severe restriction implemented in the current reporting year.

*Includes:*

 - restrictions for maintenance/conservation purposes

*Excludes:*

 - permanent water conservation measures/restrictions

 - restrictions on recycled water

*Calculation:*

Water restrictions (severity) = (1-(R/U))\*100 where:

R = average monthly volume of water supplied during the most severely restricted period

U = average monthly volume of water supplied during the most recent comparable unrestricted period

*Example:*

In WS10 (QG2.8) WSP R reported 94 days of water restrictions, triggering a required response for WS9 (QG2.9). WSP R applied two levels of water restrictions over the 94 days, with Level 2 (the more restrictive) running all November. With restrictions in place, November's demand was 1,360 ML. Demand in November in the previous year was also restricted (so it isn't a comparable period of unrestricted use), but October and November usually record about the same demand. Therefore, WSP R decided 'the most recent comparable period of unrestricted use' was October in the previous year (October's demand was 1,570 ML). To calculate the demand reduction attributable to Level 2 water restrictions, use the formula: (1-(R/U))\*100. R = 1360 ML, U = 1570 ML. Demand reduction = (1 - (1360/1570)) x 100 = 13.38%. WSP R reports '13'.

 - WSP T reported 310 days of water restrictions in WS10 (QG2.8). WSP T applied four levels of water restrictions, with Level 4 (the most restrictive) running from June to November. With the Level 4 water restriction in place, total demand from June to November was 6,000 ML. With restrictions used so frequently in recent years, WSP T decided 'the most recent comparable period of unrestricted use' was the June to November period back in 2009 (7,500 ML). To adjust for population growth since 2009, WSP T considers its own 'number of connections' data and historical population data available from the Queensland Government Statistician's Office. WSP T decides to apply a 15% coefficient to 2009 demand data to reflect population growth since 'the most recent comparable period of unrestricted use'. To calculate the demand reduction attributable to Level 4 water restrictions, use the formula: (1-(R/U))\*100. R = 6,000 ML, U = 7,500 ML x 115%. Demand reduction = (1 - (6,000/8,625)) x 100 = 30.43%. WSP T reports '30'.

*Notes:*

 - only required if response to WS10 (QG2.8) is reported as > 0

 - if WS10 is reported as 0 then enter 'NR' for this indicator

 - water supplied is to represent the volume of water provided into the distribution network for use

 - for the purpose of this calculation permanent water conservation measures are not to be considered as water restrictions. See example.

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Water Security

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG2.9

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

## SWIM Code: WS10

**Indicator short title:** Water restrictions (duration)

**Units:** days

**Title:** Water restrictions - duration.

**Definition:** The number of days in the reporting year where water restrictions (of any level) were applied.

*Excludes:*

 - permanent water conservation measures/restrictions

*Example:*

 - WSP R implements water restrictions for about 13 weeks in the reporting year, and can check the start and end dates by reference to Council notices. WSP R has a Permanent Water Conservation Measures which are in place year-round and these are not considered nor reported as water restrictions. WSP R reports '94' and a response to WS9 (QG 2.9) is triggered.

 - WSP S has not implemented any water restrictions. WSP S has Permanent Water Conservation Measures which are in place year-round and these are not considered nor reported as water restrictions. WSP S reports '0'.

*Notes:*

 - a response of greater than 0 here triggers a response to WS9 (QG2.9) 'Water restrictions (severity)'

 - information on estimates should be included in the (appropriate) associated NPR footnote (W indicators), quantification method (U codes) or comments (KPI/ABS codes)

**SWIM category:** Water Security

**Scheme type(s):** Potable/Raw

**Data type:** NUMERIC

**Source of data:** USER

**QG KPI code:** QG2.8

**Required by:** Small SPs with <10,000 connections; Large SPs with >10,000 connections

# BoM ‘daily’ reported indicators

## SWIM Code: GW1

**Indicator short title:** Ground water level

**Units:** m

**Title:** Ground water level, expressed in metres.

**Definition:** Groundwater level of a bore, expressed in metres relative to specified datum, and the time of the observation.

**Sampling/collection frequency:** as available

**SWIM category:** Groundwater

**Site Type(s):** Groundwater bore

**Data Source:** USER

**Data type:** NUMERIC

**BoM Regulation:** Reg200806.s3.2a

## SWIM Code: GW2

**Indicator short title:** Ground water pressure

**Units:** kPa

**Title:** Ground water pressure, expressed in kilopascal.

**Definition:** Groundwater pressure of a bore, expressed in kilopascals, the aquifer layer and depth at which the pressure is measured, and the time of the observation.

**Sampling/collection frequency:** as available

**SWIM category:** Groundwater

**Site Type(s):** Groundwater bore

**Data Source:** USER

**Data type:** NUMERIC

**BoM Regulation:** Reg200806.s3.2b

## SWIM Code: GW3

**Indicator short title:** Volume water supplied for aquifer recharge

**Units:** ML

**Title:** Volume of water supplied for aquifer recharge, expressed in megalitres.

**Definition:** Volume of water supplied for aquifer recharge, expressed in megalitres, and the time of the observation.

**Sampling/collection frequency:** as available

**SWIM category:** Groundwater

**Site Type(s):** Groundwater bore

**Data Source:** USER

**Data type:** NUMERIC

**BoM Regulation:** Reg200806.s3.2c

## SWIM Code: MT1

**Indicator short title:** Accumulated precipitation depth, including the water-equivalent precipitation depth

**Units:** mm

**Title:** Accumulated precipitation depth, including the water-equivalent precipitation depth, expressed in millimetres.

**Definition:** Accumulated precipitation depth for a specified time interval, expressed in millimetres, and the time of the observation.

**Sampling/collection frequency:** daily

**SWIM category:** Meteorology

**Site Type(s):** Meteorology

**Data Source:** USER

**Data type:** NUMERIC

**BoM Regulation:** Reg200806.s3.4a

## SWIM Code: MT2

**Indicator short title:** Evaporation

**Units:** mm/day

**Title:** Evaporation, expressed in mm per day.

**Definition:** Total daily evaporation from a Class A evaporation pan, expressed in mm per day, the start and finish times of the observation, and date of the observation.

**Sampling/collection frequency:** daily

**SWIM category:** Meteorology

**Site Type(s):** Meteorology

**Data Source:** USER

**Data type:** NUMERIC

**BoM Regulation:** Reg200806.s3.4c

## SWIM Code: ST1

**Indicator short title:** Level of water in a major storage

**Units:** m

**Title:** Level of water in a major storage, expressed in metres.

**Definition:** Level of water held in a major storage (>100 ML), expressed in metres relative to specified datum, and the time of the observation.

**Sampling/collection frequency:** daily

**SWIM category:** Storages

**Site Type(s):** Major storage

**Data Source:** USER

**Data type:** NUMERIC

**BoM Regulation:** Reg201205.s3.3a

## SWIM Code: ST2

**Indicator short title:** Volume water in each major storage

**Units:** ML

**Title:** Volume of water in each major storage, expressed in megalitres.

**Definition:** Volume of water held in each major storage (>100 ML), expressed in megalitres, and the time of the observation.

**Sampling/collection frequency:** daily

**SWIM category:** Storages

**Site Type(s):** Major storage

**Data Source:** USER

**Data type:** NUMERIC

**BoM Regulation:** Reg201205.s3.3b

## SWIM Code: ST3

**Indicator short title:** Volume water released from a major storage

**Units:** ML

**Title:** Volume of water released from a major storage, expressed in megalitres.

**Definition:** Total daily volume of water released from a major storage (>100 ML) to a watercourse, expressed in ML per day, start and finish times and date of the observation.

**Sampling/collection frequency:** daily

**SWIM category:** Storages

**Site Type(s):** Major storage

**Data Source:** USER

**Data type:** NUMERIC

**BoM Regulation:** Reg201205.s3.3c

## SWIM Code: ST4

**Indicator short title:** Total Volume water delivered to a major storage

**Units:** ML

**Title:** Total volume of water delivered to a major storages, expressed in megalitres.

**Definition:** Total daily volume of water transferred between major storages (>100ML), expressed in megalitres per day, the start and finish and finish times of the observation, and the date of the observation.

**Sampling/collection frequency:** daily

**SWIM category:** Storages

**Site Type(s):** Major storage

**Data Source:** USER

**Data type:** NUMERIC

**BoM Regulation:** Reg201205.s3.3d

## SWIM Code: ST4.1

**Indicator short title:** Volume water delivered to a major storage from each water source

**Units:** ML

**Title:** Volume of water delivered to a major storages from each water source, expressed in megalitres.

**Definition:** Total daily volume of water delivered to a major storages (>100ML), expressed in megalitres per day, the start and finish and finish times of the observation, and the date of the observation.

**Sampling/collection frequency:** daily

**SWIM category:** Storages

**Site Type(s):** Major storage

**Data Source:** USER

**Data type:** NUMERIC

**BoM Regulation:** Reg201205.s3.3da

## SWIM Code: ST5

**Indicator short title:** Volume water in a minor storage

**Units:** ML

**Title:** Volume of water in a minor storage, expressed in megalitres.

**Definition:** Volume of water held in a minor storage (<100 ML), expressed in megalitres, and the time of the observation.

**Sampling/collection frequency:** daily

**SWIM category:** Storages

**Site Type(s):** Minor storage

**Data Source:** USER

**Data type:** NUMERIC

**BoM Regulation:** Reg201205.s3.3e

## SWIM Code: SW1

**Indicator short title:** Level of a watercourse (other than a water storage)

**Units:** m

**Title:** Level of a watercourse (other than a water storage), expressed in metres.

**Definition:** Instantaneous watercourse level, expressed in metres relative to specified datum, and the time of the observation.

**Sampling/collection frequency:** as available

**SWIM category:** Surfacewater

**Site Type(s):** Stream gauge

**Data Source:** USER

**Data type:** NUMERIC

**BoM Regulation:** Reg200806.s3.1a

## SWIM Code: SW2

**Indicator short title:** Discharge of a watercourse (other than a water storage)

**Units:** m3/s

**Title:** Discharge of a watercourse (other than a water storage), expressed in cumecs.

**Definition:** Instantaneous watercourse discharge, expressed in cumecs, and the time of the observation.

**Sampling/collection frequency:** as available

**SWIM category:** Surfacewater

**Site Type(s):** Stream gauge

**Data Source:** USER

**Data type:** NUMERIC

**BoM Regulation:** Reg200806.s3.1b

## SWIM Code: WQ1

**Indicator short title:** Electrical conductivity of surface water above the tidal limit of the watercourse

**Units:** uS/cm

**Title:** Electrical conductivity of surface water above the tidal limit of the watercourse, expressed in microsiemens per centimetre at 25 degrees Celsius.

**Definition:** The instantaneous electrical conductivity of a surface water sample collected above the tidal limit of the watercourse, expressed in microsiemens per centimetre at 25 degrees Celsius, and the time of the observation.

**Sampling/collection frequency:** daily

**SWIM category:** Water quality

**Scheme/site type(s):** Water quality

**Data type:** NUMERIC

**Source of data:** USER

**Temporal type:** INSTANT

**BoM Regulation:** Reg201205.s3.9a

## SWIM Code: WQ2

**Indicator short title:** Electrical conductivity of ground water

**Units:** uS/cm

**Title:** Electrical conductivity of ground water, expressed in microsiemens per centimetre at 25 degrees Celsius.

**Definition:** The instantaneous electrical conductivity of a ground water sample, expressed in microsiemens per centimetre at 25 degrees Celsius, and the time of the observation.

**Sampling/collection frequency:** as available

**SWIM category:** Water quality

**Scheme/site type(s):** Water quality

**Data type:** NUMERIC

**Source of data:** USER

**Temporal type:** INSTANT

**BoM Regulation:** Reg201205.s3.9b

## SWIM Code: WQ3

**Indicator short title:** Total suspended solids concentration of surface water collected above the tidal limit of a watercourse

**Units:** mg/L

**Title:** Total suspended solids concentration of surface water collected above the tidal limit of a watercourse, expressed in milligrams per litre.

**Definition:** The instantaneous total suspended solids concentration of a surface water sample collected above the tidal limit of a watercourse, expressed in milligrams per litre, and the time of the observation.

**Sampling/collection frequency:** as available

**SWIM category:** Water quality

**Scheme/site type(s):** Water quality

**Data type:** NUMERIC

**Source of data:** USER

**Temporal type:** INSTANT

**BoM Regulation:** Reg201205.s3.9c

## SWIM Code: WQ4

**Indicator short title:** Turbidity of surface water above the tidal limit of a watercourse

**Units:** NTU

**Title:** Turbidity of surface water above the tidal limit of a watercourse, expressed in nephelometric turbidity units.

**Definition:** Instantaneous turbidity of a surface water sample collected above the tidal limit of a watercourse, in nephelometric turbidity units, and time of observation.

**Sampling/collection frequency:** as available

**SWIM category:** Water quality

**Scheme/site type(s):** Water quality

**Data type:** NUMERIC

**Source of data:** USER

**Temporal type:** INSTANT

**BoM Regulation:** Reg201205.s3.9d

## SWIM Code: WQ5

**Indicator short title:** Total phosphorus concentration of a surface water sample collected above the tidal limit of a watercourse

**Units:** mg/L

**Title:** Total phosphorus concentration of a surface water sample collected above the tidal limit of a watercourse, expressed in mg/L.

**Definition:** The instantaneous total Phosphorus concentration of a surface water sample collected above the tidal limit of a watercourse, expressed in mg/L, and the time of observation.

**Sampling/collection frequency:** as available

**SWIM category:** Water quality

**Scheme/site type(s):** Water quality

**Data type:** NUMERIC

**Source of data:** USER

**Temporal type:** INSTANT

**BoM Regulation:** Reg201205.s3.9e

## SWIM Code: WQ6

**Indicator short title:** Total nitrogen concentration of a surface water sample collected above the tidal limit of a watercourse

**Units:** mg/L

**Title:** Total nitrogen concentration of a surface water sample collected above the tidal limit of a watercourse, expressed in mg/L.

**Definition:** The instantaneous total Nitrogen concentration of a surface water sample collected above the tidal limit of a watercourse, expressed in mg/L, and the time of observation.

**Sampling/collection frequency:** as available

**SWIM category:** Water quality

**Scheme/site type(s):** Water quality

**Data type:** NUMERIC

**Source of data:** USER

**Temporal type:** INSTANT

**BoM Regulation:** Reg201205.s3.9f

## SWIM Code: WQ7

**Indicator short title:** pH of surface water collected above the tidal limit of a watercourse

**Units:** [pH]

**Title:** pH of surface water collected above the tidal limit of a watercourse.

**Definition:** The instantaneous pH of a surface water sample collected above the tidal limit of a watercourse, and the time of the observation.

**Sampling/collection frequency:** as available

**SWIM category:** Water quality

**Scheme/site type(s):** Water quality

**Data type:** NUMERIC

**Source of data:** USER

**Temporal type:** INSTANT

**BoM Regulation:** Reg201205.s3.9g

## SWIM Code: WQ8

**Indicator short title:** Temperature of surface water collected above the tidal limit of a watercourse

**Units:** degrees Celsius

**Title:** Temperature of surface water collected above the tidal limit of a watercourse, expressed in degrees Celsius.

**Definition:** Instantaneous temperature of a surface water sample collected above the tidal limit of a watercourse, expressed in degrees Celsius, and the time of observation.

**Sampling/collection frequency:** as available

**SWIM category:** Water quality

**Scheme/site type(s):** Water quality

**Data type:** NUMERIC

**Source of data:** USER

**Temporal type:** INSTANT

**BoM Regulation:** Reg201205.s3.9h

## SWIM Code: WQ9

**Indicator short title:** pH of ground water

**Units:** [pH]

**Title:** pH of ground water.

**Definition:** The instantaneous pH of a ground water sample, and the time of the observation.

**Sampling/collection frequency:** as available

**SWIM category:** Water quality

**Scheme/site type(s):** Water quality

**Data type:** NUMERIC

**Source of data:** USER

**Temporal type:** INSTANT

**BoM Regulation:** Reg201205.s3.9ga