

## Head 194 — WATER SUPPLIES DEPARTMENT

**Controlling officer:** the Director of Water Supplies will account for expenditure under this Head.

Estimate 2020–21 .....	<b>\$9,293.4m</b>
Establishment ceiling 2020–21 (notional annual mid-point salary value) representing an estimated 4 610 non-directorate posts as at 31 March 2020 rising by 168 posts to 4 778 posts as at 31 March 2021 .....	<b>\$1,870.5m</b>
In addition, there will be an estimated 25 directorate posts as at 31 March 2020 and as at 31 March 2021.	
Commitment balance.....	<b>\$440.0m</b>

### Controlling Officer's Report

#### Programmes

- Programme (1) Water Supply: Planning and Distribution**
- Programme (2) Water Quality Control**
- Programme (3) Customer Services**

These programmes contribute to Policy Area 24: Water Supply, Drainage and Slope Safety (Secretary for Development).

#### Detail

##### Programme (1): Water Supply: Planning and Distribution

	2018–19 (Actual)	2019–20 (Original)	2019–20 (Revised)	<b>2020–21 (Estimate)</b>
Financial provision (\$m)	7,632.5	7,816.1	7,887.4 (+0.9%)	<b>8,205.3</b> (+4.0%)
				(or +5.0% on 2019–20 Original)

#### Aim

2 The aim is to develop water resources and to plan, design, construct, operate and maintain water supply systems in order to provide round-the-clock supplies throughout the year to meet the demands of the territory.

#### Brief Description

3 The Department is responsible for providing adequate supplies of water to the territory. This work involves:

##### *Fresh water*

- assessing fresh water supply requirements on the basis of providing round-the-clock supply of water throughout the year to meet the demand of the territory;
- developing fresh water resources to cope with such requirements;
- planning, designing and constructing reliable and efficient fresh water supply and distribution systems to meet such requirements in good time; and
- operating and maintaining fresh water supply and distribution systems.

##### *Flushing water*

- assessing flushing water (comprising salt water and recycled water) supply requirements;
- developing flushing water resources to cope with such requirements;
- planning, designing and constructing reliable and efficient flushing water supply and distribution systems to meet such requirements in good time; and
- operating and maintaining flushing water supply and distribution systems.

4 In 2019, the Department was able to plan, design and construct new projects for the development of water resources and extension of water supplies to new developments and to operate and maintain water supply and distribution systems to provide adequate and uninterrupted supplies of water throughout the year. Furthermore, the Department completed the review on the Total Water Management Strategy and commenced the design, build, operate (DBO) contract of the first stage of the desalination plant at Tseung Kwan O.

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5 The key performance measures in respect of water supply are:

### *Targets*

	Target	2018 (Actual)	2019 (Actual)	2020 (Plan)
supply pressure				
fresh water supply—maintaining normally a minimum residual head of between 15 and 30 metres in the distribution systems except at their extremities (%).....	100	100	100	<b>100</b>
flushing water supply—maintaining normally a minimum residual head of 15 metres in the distribution systems except at their extremities (%)◇.....	100	100	100	<b>100</b>

◇ Revised description of the previous target “salt water supply—maintaining normally a minimum residual head of 15 metres in the distribution systems except at their extremities” as from 2020 to cover both salt water and recycled water for flushing water supply.

### *Indicators*

	2018 (Actual)	2019 (Actual)	2020 (Estimate)
projects under planning .....	29	29	<b>30</b>
value of projects under planning (\$m) .....	6,582.8	6,724.6	<b>6,904.6</b>
projects under design.....	26	27	<b>28</b>
value of projects under design (\$m).....	9,293.8	9,510.7	<b>13,410.3</b>
projects under construction .....	38	38	<b>39</b>
expenditure of works under construction (\$m) .....	3,146.6	3,218.6	<b>3,398.3</b>
fresh water supplied (m <sup>3</sup> ) .....	1 012 587 000	996 142 000	<b>1 000 000 000</b>
salt water supplied (m <sup>3</sup> ).....	279 213 000	306 777 000	<b>307 000 000</b>
days on full supply .....	365	365	<b>366</b>
total treatment works capacity (m <sup>3</sup> /day).....	5 415 600	4 942 600	<b>4 679 600</b>
total pumping plant capacity (megawatts) .....	357	357	<b>357</b>
leakage rate of water mains (%).....	15.2	15.2	<b>15.0</b>
education programmes / promotion campaigns on water conservation.....	4	5	<b>6</b>
schools joining education programmes on water conservation.....	400	596	<b>700</b>

### *Matters Requiring Special Attention in 2020–21*

6 During 2020–21, the Department will:

- continue with the implementation of the total water management strategy for sustainable use of water resources with focuses on water conservation and water loss management as well as on development of new water resources;
- continue with the establishment of the Water Intelligent Network;
- continue with the DBO contract of the first stage of the desalination plant at Tseung Kwan O and the laying of the associated water mains;
- continue with the construction of infrastructure in stages for supplying reclaimed water for non-potable uses in the north-eastern part of the New Territories including Sheung Shui and Fanling, commence construction of grey water treatment plant for supplying treated grey water for non-potable uses in the Anderson Road Quarry Development and the preparatory work for the legislation for supply of recycled water in Hong Kong;
- commence construction of the main works for in-situ re-provisioning of Sha Tin water treatment works (South Works);
- continue with the investigation and detailed design for the Siu Ho Wan water treatment works extension;
- commence the investigation and detailed design for the Ngau Tam Mei water treatment works extension;

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- continue with the investigation and detailed design for the relocation of Diamond Hill fresh water and salt water service reservoirs into caverns as well as the feasibility studies for the relocation of Yau Tong fresh water and salt water service reservoirs and Tsuen Wan fresh water service reservoir into caverns, and continue with the feasibility study for strategic cavern areas in Lam Tei to accommodate nearby existing and proposed service reservoirs; and
- continue with the planning, design and construction of fresh and flushing water supply systems to meet the demands arising from housing developments.

### Programme (2): Water Quality Control

	2018–19 (Actual)	2019–20 (Original)	2019–20 (Revised)	<b>2020–21 (Estimate)</b>
Financial provision (\$m)	292.7	298.5	306.3 (+2.6%)	<b>479.7</b> (+56.6%)
				(or +60.7% on 2019–20 Original)

### *Aim*

7 The aim is to control the quality of water supplied to customers in accordance with the Hong Kong Drinking Water Standards and the Department's standards for flushing water.

### *Brief Description*

8 The Department is responsible for ensuring the purity, wholesomeness and safety of treated fresh water supplied to customers conforming to the Hong Kong Drinking Water Standards in all respects and at all times. The Department is also responsible for ensuring the quality of flushing water supplied to customers conforming to the Department's standards. This work involves:

#### *Fresh water*

- water treatment—ensuring that treated water conforms chemically and bacteriologically to the Hong Kong Drinking Water Standards; and
- water quality control—ensuring that samples taken from treatment works, service reservoirs, connection points, consumers' taps, etc., conform to the Hong Kong Drinking Water Standards.

#### *Flushing water*

- water treatment — ensuring that the flushing water conforms chemically and bacteriologically to the Department's standards; and
- water quality control—ensuring that samples taken from pumping stations, service reservoirs, customer ends, etc., conform to the Department's standards.

9 In 2019, the Department achieved the water quality standards in water treatment and maintained effective monitoring and control of the quality of water supplied to customers. The Department continued to take forward the Action Plan for Enhancing Drinking Water Safety in Hong Kong. The Department also continued with the review of the Waterworks Ordinance (Cap. 102) and Waterworks Regulations (Cap. 102A) for amongst others enhancing the regulatory control of plumbing materials and construction of inside services to safeguard the drinking water quality.

10 The key performance measures in respect of water quality control are:

### *Targets*

	Target	2018 (Actual)	2019 (Actual)	<b>2020 (Plan)</b>
fresh water quality—water supplied to customers complies with the Hong Kong Drinking Water Standards (%).....	100	100	100	<b>100</b>
flushing water quality—salt water supplied to customers complies with Water Quality Objectives set by Water Supplies Department (%)# .....	97.0Δ	99.3	98.5	<b>97.0</b>

# Revised description of the previous target “salt water quality—water supplied to customers complies with Water Quality Objectives set by Water Supplies Department” as from 2020.

Δ The target was revised from 96 per cent to 97 per cent as from 2019.

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### Indicators

	2018 (Actual)	2019 (Actual)	2020 (Estimate)
<i>Treated fresh water</i>			
sampling visits at treatment works, service reservoirs, connection points and consumers' taps .....	25 904	28 002	<b>28 000</b>
chemical quality satisfying standards (%).....	100	100	<b>100</b>
bacteriological quality satisfying standards (%) .....	100	100	<b>100</b>

### Matters Requiring Special Attention in 2020–21

**11** During 2020–21, the Department will carry out the following work to safeguard the drinking water quality:

- launch the Water Safety Plan Subsidy Scheme to encourage building owners and property management agents to develop and implement Water Safety Plans for their buildings in order to further safeguard drinking water quality in their buildings;
- continue the publicity and public education on drinking water safety; and
- continue with the review of the Waterworks Ordinance and Waterworks Regulations to amongst others safeguard the drinking water quality through enhanced regulatory control of plumbing materials and construction of inside services.

### Programme (3): Customer Services

	2018–19 (Actual)	2019–20 (Original)	2019–20 (Revised)	2020–21 (Estimate)
Financial provision (\$m)	549.9	560.0	571.7 (+2.1%)	<b>608.4</b> (+6.4%)
				(or +8.6% on 2019–20 Original)

### Aim

**12** The aim is to provide customer services and to enforce the Waterworks Ordinance and Waterworks Regulations.

### Brief Description

**13** The Department is responsible for the provision of efficient and effective services to customers and for enforcing the Waterworks Ordinance and Waterworks Regulations. This work involves:

- ensuring efficiency and effectiveness in dealing with customer enquiries and complaints and in processing applications for water supplies;
- enforcing the Waterworks Ordinance and Waterworks Regulations;
- ensuring timeliness of billing and promptness in updating customer accounts;
- monitoring closely the level of arrears of water charges; and
- coping with the growth in the number of customer accounts.

**14** In 2019, the Department continued to provide efficient and effective services to customers and enforce the Waterworks Ordinance and Waterworks Regulations including streamlining the procedures for processing applications for water supplies as well as the control of plumbing materials and commissioning of new plumbing installations. The Department also continued with the review of the Waterworks Ordinance and Waterworks Regulations for amongst others enhancing regulatory control of inside service leakage.

**15** The key performance measures in respect of customer services are:

### Targets

	Target	2018 (Actual)	2019 (Actual)	2020 (Plan)
processing application for taking up of consumership				
by post within seven working days (%) .....	100	100	100	<b>100</b>
in person at Customer Enquiry Centres (all-purpose counter) within 15 minutes (%).....	100	100	100	<b>100</b>

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	Target	2018 (Actual)	2019 (Actual)	2020 (Plan)
issue of final bill upon closure of account				
within three working days (%).....	100	100	100	<b>100</b>
refund of water deposit within				
nine working days (%).....	100	99.9	99.9	<b>100</b>
processing application for meter test				
within eight working days (%).....	100	100	99.6	<b>100</b>
processing application for autopay				
service (upon receipt of notification				
from banks) within three working				
days (%) .....	100	100	100	<b>100</b>
accuracy of water meters (inaccuracy not				
exceeding +/- 3%) (%).....	100	97.7	98.0	<b>98.0</b>
response time for attendance to fault				
complaints				
within half a day for fresh water				
supply fault (%).....	100	100	100	<b>100</b>
within 24 hours for others (%).....	100	100	100	<b>100</b>
notice for planned suspension of				
water supply issued not less than				
four working days in advance (%) .....	100	100	100	<b>100</b>
conducting publicity campaigns and				
seminars for promotion of combating				
unauthorised water consumption .....	70δ	70	70	<b>70</b>
initiating an investigation after				
receiving a complaint on suspected				
unauthorised water consumption				
within one working day (%).....	92Ω	92	91	<b>92</b>

δ The target was revised from 60 campaigns and seminars to 70 campaigns and seminars as from 2019.

Ω The target was revised from 85 per cent to 92 per cent as from 2019.

### Indicators

	2018 (Actual)	2019 (Actual)	2020 (Estimate)
no. of customer accounts.....	3 031 000	3 071 000	<b>3 120 000</b>
fees, water charges and deposits demanded (\$m).....	2,987.1	2,914.1	<b>2,710.0</b>
arrears of water charges at year end in terms of no. of days			
of water charges demanded .....	0.8	0.8	<b>0.8</b>
prosecutions.....	223	236	<b>230</b>
finest imposed (\$).....	440,700	472,870	<b>450,000</b>
house service inspections due to irregular consumption.....	9 049	8 630	<b>9 000</b>
public enquiries and requests for services.....	1 466 231	1 476 443	<b>1 485 000</b>
disputes and complaints handled.....	13 810	13 135	<b>13 000</b>

### Matters Requiring Special Attention in 2020–21

**16** During 2020–21, the Department will continue to:

- strengthen regulatory control on inside service leakage to minimise water loss in inside services;
- review the Waterworks Ordinance and Waterworks Regulations for enhancing regulatory control of inside service leakage;
- provide necessary technical advice and support to building owners and property management agents and render assistance to the market in developing capacity to deal with inside service leakage;
- support and maintain the information technology systems to ensure the continual delivery of customer services in a cost-effective manner; and
- enhance the billing system.

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### ANALYSIS OF FINANCIAL PROVISION

	2018–19 (Actual) (\$m)	2019–20 (Original) (\$m)	2019–20 (Revised) (\$m)	2020–21 (Estimate) (\$m)
<b>Programme</b>				
(1) Water Supply: Planning and Distribution .....	7,632.5	7,816.1	7,887.4	<b>8,205.3</b>
(2) Water Quality Control .....	292.7	298.5	306.3	<b>479.7</b>
(3) Customer Services .....	549.9	560.0	571.7	<b>608.4</b>
	8,475.1	8,674.6	8,765.4 (+1.0%)	<b>9,293.4</b> <b>(+6.0%)</b>
				<b>(or +7.1% on 2019–20 Original)</b>

#### Analysis of Financial and Staffing Provision

##### Programme (1)

Provision for 2020–21 is \$317.9 million (4.0%) higher than the revised estimate for 2019–20. This is mainly due to the increased provision for personal emoluments, security services for waterworks installations, contract maintenance, electricity expenses, purchase of water under the water supply agreement and other operating expenses relating to water supply distribution. There will be a net increase of 98 civil service posts primarily for handling water supply planning and distribution matters.

##### Programme (2)

Provision for 2020–21 is \$173.4 million (56.6%) higher than the revised estimate for 2019–20. This is mainly due to the increased provision for personal emoluments, implementation of the Water Safety Plan Subsidy Scheme, specialist supplies, hire of services and professional fees and other operating expenses relating to water quality control. There will be a net increase of 23 civil service posts for enhancing drinking water safety.

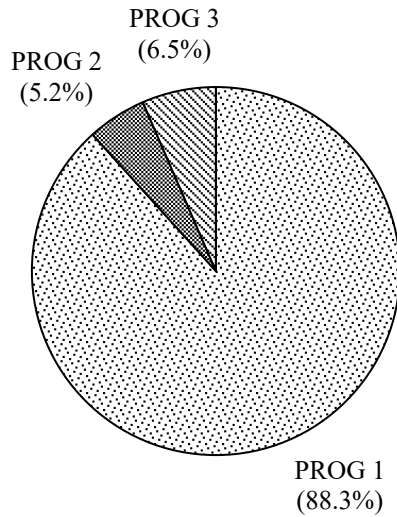
##### Programme (3)

Provision for 2020–21 is \$36.7 million (6.4%) higher than the revised estimate for 2019–20. This is mainly due to the increased provision for personal emoluments, acquisition of equipment for Customer Telephone Enquiry Centre and other operating expenses relating to customer services. There will be a net increase of 47 civil service posts for handling customer service matters.

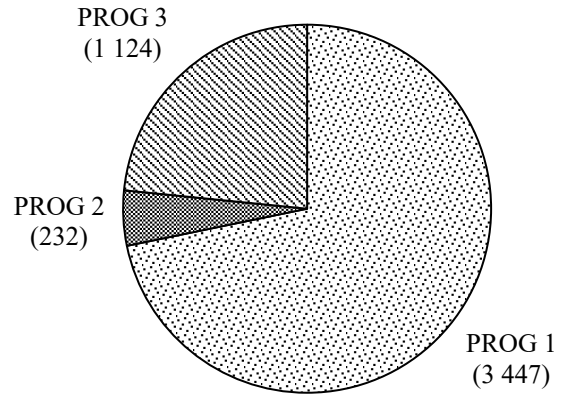
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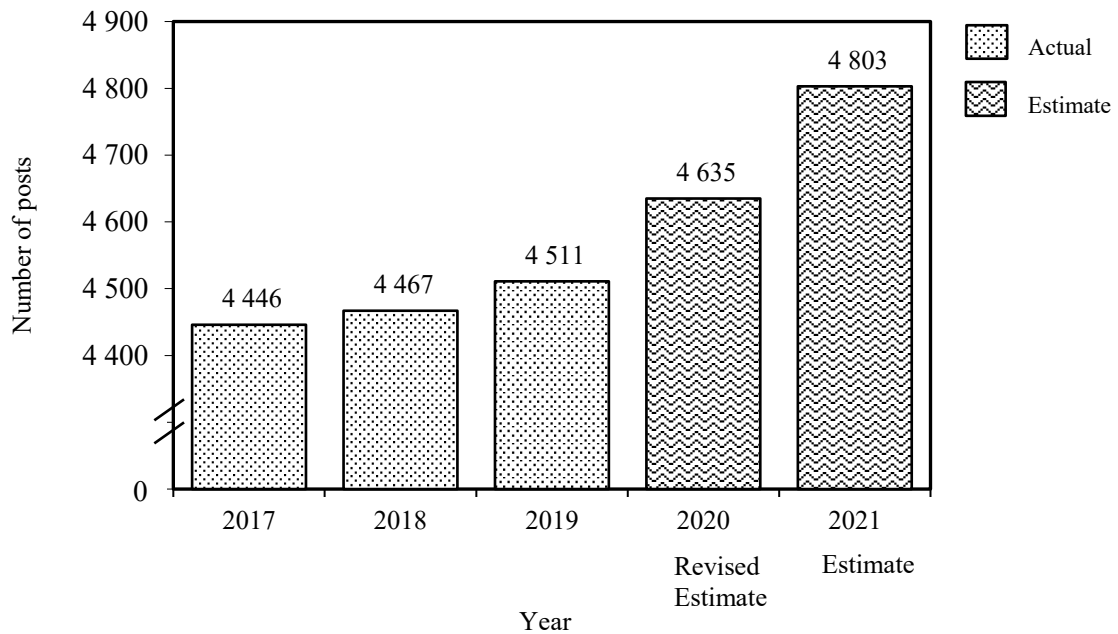
*Allocation of provision  
to programmes  
(2020-21)*



*Staff by programme  
(as at 31 March 2021)*



*Changes in the size of the establishment  
(as at 31 March)*



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Sub-head (Code)	Actual expenditure 2018-19	Approved estimate 2019-20	Revised estimate 2019-20	Estimate 2020-21	
	\$'000	\$'000	\$'000	\$'000	
<b>Operating Account</b>					
Recurrent					
000	Operational expenses .....	3,665,093	3,846,763	3,938,863	<b>4,314,610</b>
223	Purchase of water .....	4,795,210	4,809,620	4,809,620	<b>4,844,620</b>
	Total, Recurrent.....	<u>8,460,303</u>	<u>8,656,383</u>	<u>8,748,483</u>	<u><b>9,159,230</b></u>
Non-Recurrent					
700	General non-recurrent .....	—	—	—	<b>120,000</b>
	Total, Non-Recurrent.....	<u>—</u>	<u>—</u>	<u>—</u>	<u><b>120,000</b></u>
	Total, Operating Account .....	<u>8,460,303</u>	<u>8,656,383</u>	<u>8,748,483</u>	<u><b>9,279,230</b></u>
<b>Capital Account</b>					
Plant, Equipment and Works					
661	Minor plant, vehicles and equipment (block vote).....	14,836	18,168	16,960	<b>14,184</b>
	Total, Plant, Equipment and Works.....	<u>14,836</u>	<u>18,168</u>	<u>16,960</u>	<u><b>14,184</b></u>
	Total, Capital Account.....	<u>14,836</u>	<u>18,168</u>	<u>16,960</u>	<u><b>14,184</b></u>
	Total Expenditure .....	<u><u>8,475,139</u></u>	<u><u>8,674,551</u></u>	<u><u>8,765,443</u></u>	<u><u><b>9,293,414</b></u></u>



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### Details of Expenditure by Subhead

The estimate of the amount required in 2020–21 for the salaries and expenses of the Water Supplies Department is \$9,293,414,000. This represents an increase of \$527,971,000 over the revised estimate for 2019–20 and \$818,275,000 over the actual expenditure in 2018–19.

#### Operating Account

##### Recurrent

**2** Provision of \$4,314,610,000 under *Subhead 000 Operational expenses* is for the salaries, allowances and other operating expenses of the Water Supplies Department.

**3** The establishment as at 31 March 2020 will be 4 635 posts including two supernumerary posts. It is expected that there will be a net increase of 168 posts in 2020–21. Subject to certain conditions, the controlling officer may under delegated power create or delete non-directorate posts during 2020–21, but the notional annual mid-point salary value of all such posts must not exceed \$1,870,529,000.

**4** An analysis of the financial provision under *Subhead 000 Operational expenses* is as follows:

	2018–19 (Actual) (\$'000)	2019–20 (Original) (\$'000)	2019–20 (Revised) (\$'000)	2020–21 (Estimate) (\$'000)
Personal Emoluments				
- Salaries .....	1,710,842	1,768,935	1,807,334	<b>1,891,508</b>
- Allowances .....	137,217	135,336	147,774	<b>135,708</b>
- Job-related allowances.....	10,436	11,032	11,318	<b>12,580</b>
Personnel Related Expenses				
- Mandatory Provident Fund contribution .....	10,235	14,560	14,013	<b>17,798</b>
- Civil Service Provident Fund contribution .....	64,122	79,782	78,521	<b>101,188</b>
Departmental Expenses				
- Light and power.....	727,643	746,700	741,000	<b>776,700</b>
- Hire of services and professional fees.....	114,792	136,824	146,424	<b>290,972</b>
- Fuel and lubricating oil.....	236	246	246	<b>246</b>
- Specialist supplies and equipment.....	111,962	112,495	117,100	<b>145,862</b>
- Maintenance materials.....	57,661	54,602	56,769	<b>58,188</b>
- Contract maintenance .....	482,893	539,478	555,340	<b>595,316</b>
- General departmental expenses .....	237,054	246,773	263,024	<b>288,544</b>
	3,665,093	3,846,763	3,938,863	<b>4,314,610</b>

**5** Provision of \$4,844,620,000 under *Subhead 223 Purchase of water* is for the purchase of water from Guangdong.

#### Capital Account

##### Plant, Equipment and Works

**6** Provision of \$14,184,000 under *Subhead 661 Minor plant, vehicles and equipment (block vote)* represents a decrease of \$2,776,000 (16.4%) against the revised estimate of 2019–20. This is mainly due to the decreased requirements for acquisition and replacement of plant and equipment in 2020–21.

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**Commitments**

Sub-head (Code)	Item (Code)	Ambit	Approved commitment	Accumulated expenditure to 31.3.2019	Revised estimated expenditure for 2019–20	Balance
			\$'000	\$'000	\$'000	\$'000
<b><i>Operating Account</i></b>						
700		<i>General non-recurrent</i>				
	802	Water Safety Plan Subsidy Scheme¶ .....	440,000¶	—	—	440,000
		Total .....	<u>440,000</u>	<u>—</u>	<u>—</u>	<u>440,000</u>

¶ This is a new item, funding for which is sought in the context of the Appropriation Bill 2020.