

## Head 194 — WATER SUPPLIES DEPARTMENT

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

**Estimate 2021–22** ..... **\$9,236.6m**

**Establishment ceiling 2021–22** (notional annual mid-point salary value) representing an estimated 4 778 non-directorate posts as at 31 March 2021 reducing by four posts to 4 774 posts as at 31 March 2022..... **\$1,870.2m**

In addition, there will be an estimated 25 directorate posts as at 31 March 2021 reducing by two posts to 23 posts as at 31 March 2022.

**Commitment balance**..... **\$436.0m**

### 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

	2019–20 (Actual)	2020–21 (Original)	2020–21 (Revised)	<b>2021–22 (Estimate)</b>
Financial provision (\$m)	7,895.0	8,205.3	8,219.0 (+0.2%)	<b>8,150.4</b> (–0.8%)
				(or –0.7% on 2020–21 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 2020, 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 commenced the in-situ reprovisioning of Sha Tin water treatment works (South Works) and the construction of the grey water treatment plant at the Anderson Road Quarry Development.

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

### *Targets*

	Target	2019 (Actual)	2020 (Actual)	2021 (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	100
flushing water supply—maintaining normally a minimum residual head of 15 metres in the distribution systems except at their extremities (%) .....	100	100	100	100

### *Indicators*

	2019 (Actual)	2020 (Actual)	2021 (Estimate)
projects under planning .....	29	30	31
value of projects under planning (\$m) .....	6,724.6	8,198.2	8,441.2
projects under design.....	27	28	27
value of projects under design (\$m).....	9,510.7	13,264.1	22,310.3
projects under construction .....	38	38	38
expenditure of works under construction (\$m) .....	3,218.6	3,737.4	4,996.2
fresh water supplied (m <sup>3</sup> ) .....	996 142 000	1 027 124 000	992 000 000
salt water supplied (m <sup>3</sup> ).....	306 777 000	317 744 000	311 000 000
days on full supply .....	365	366	365
total treatment works capacity (m <sup>3</sup> /day).....	4 942 600	4 679 600	4 679 600
total pumping plant capacity (megawatts) .....	357	360	348
leakage rate of water mains (%).....	15.2	14.8	14.8
education programmes / promotion campaigns on water conservation.....	5	5	7
schools joining education programmes on water conservation.....	596	676	750

### *Matters Requiring Special Attention in 2021–22*

6 During 2021–22, 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 design, build, operate 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, 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;
- continue with the construction of the main works for in-situ re-provisioning of Sha Tin water treatment works (South Works);
- commence construction of the main works for the Siu Ho Wan water treatment works extension;
- commence the investigation and detailed design for the Ngau Tam Mei water treatment works extension;
- 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.

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### Programme (2): Water Quality Control

	2019–20 (Actual)	2020–21 (Original)	2020–21 (Revised)	<b>2021–22 (Estimate)</b>
Financial provision (\$m)	297.3	479.7	360.1 (–24.9%)	<b>489.9</b> (+36.0%)
				(or +2.1% on 2020–21 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 the drinking water at treatment works, service reservoirs, connection points and consumers' taps conforms 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 the flushing water at customer ends conforms to the Department's standards.

9 In 2020, 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 launched the Water Safety Plan Subsidy Scheme to encourage implementation of Water Safety Plans in private buildings. The Department also continued with the review of the Waterworks Ordinance (Cap. 102) and Waterworks Regulations (Cap. 102A) and launched a public consultation on the proposed legislative amendments covering amongst others enhancing the regulatory control of plumbing works and materials to safeguard the drinking water quality.

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

#### *Targets*

	Target	2019 (Actual)	2020 (Actual)	<b>2021 (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 (%).....	97.0	98.5	99.6	<b>97.0</b>

#### *Indicators*

	2019 (Actual)	2020 (Actual)	<b>2021 (Estimate)</b>
<i>Treated fresh water</i>			
sampling visits at treatment works, service reservoirs, connection points and consumers' taps .....	28 002	25 943	<b>28 000</b>
chemical quality satisfying standards (%).....	100	100	<b>100</b>
bacteriological quality satisfying standards (%) .....	100	100	<b>100</b>

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### *Matters Requiring Special Attention in 2021–22*

- 11** During 2021–22, the Department will carry out the following work to safeguard the drinking water quality:
- continue to implement the Water Safety Plan Subsidy Scheme to encourage private building owners and property management agents to implement Water Safety Plans in their buildings in order to further safeguard drinking water quality in the community;
  - 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 works and materials.

### **Programme (3): Customer Services**

	2019–20 (Actual)	2020–21 (Original)	2020–21 (Revised)	<b>2021–22 (Estimate)</b>
Financial provision (\$m)	571.3	608.4	579.7 (–4.7%)	<b>596.3</b> (+2.9%)
				(or –2.0% on 2020–21 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 2020, 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 and launched a public consultation on the proposed legislative amendments covering amongst others enhancing regulatory control of inside service leakage.

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

### *Targets*

	Target	2019 (Actual)	2020 (Actual)	<b>2021 (Plan)</b>
processing application for taking up of consumership				
by post within seven working days (%) .....	100	100	99.9	<b>100</b>
in person at Customer Enquiry Centres (all-purpose counter) within 15 minutes (%).....	100	100	100	<b>100</b>
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	99.6	100	<b>100</b>
processing application for autopay service (upon receipt of notification from banks) within three working days (%) .....	100	100	100	<b>100</b>

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	Target	2019 (Actual)	2020 (Actual)	2021 (Plan)
accuracy of water meters (inaccuracy not exceeding +/- 3%) (%) .....	100	98.0	98.8	<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 .....	70	70	70	<b>70</b>
initiating an investigation after receiving a complaint on suspected unauthorised water consumption within one working day (%).....	92	91	92	<b>92</b>

### *Indicators*

	2019 (Actual)	2020 (Actual)	2021 (Estimate)
no. of customer accounts.....	3 071 000	3 110 000	<b>3 150 000</b>
fees, water charges and deposits demanded (\$m) .....	2,914.1	2,260.0	<b>2,950.0</b>
arrears of water charges at year end in terms of no. of days of water charges demanded .....	0.8	1.2	<b>0.9</b>
prosecutions.....	236	152	<b>230</b>
finest imposed (\$).....	472,870	212,800	<b>322,000</b>
house service inspections due to irregular consumption.....	8 630	10 374	<b>9 487</b>
public enquiries and requests for services.....	1 476 443	1 437 787	<b>1 435 615</b>
disputes and complaints handled.....	13 135	20 910	<b>15 751</b>

### *Matters Requiring Special Attention in 2021–22*

**16** During 2021–22, the Department will continue to:

- streamline and enhance the efficiency of the approval process of application of water supplies;
- strengthen regulatory control on inside service leakage to minimise water loss in inside services;
- analyse the public consultation results on the proposed legislative amendments to the Waterworks Ordinance and Waterworks Regulations and proceed with the corresponding law drafting work relating to regulation of plumbing works, control of plumbing materials, safeguarding drinking water safety at consumers' taps, the mandatory water efficiency labelling scheme, the enhancement of regulatory control of inside service leakage and supply of recycled water, as well as the revision of other parts of the legislation;
- 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

Programme	2019–20 (Actual) (\$m)	2020–21 (Original) (\$m)	2020–21 (Revised) (\$m)	2021–22 (Estimate) (\$m)
(1) Water Supply: Planning and Distribution .....	7,895.0	8,205.3	8,219.0	<b>8,150.4</b>
(2) Water Quality Control .....	297.3	479.7	360.1	<b>489.9</b>
(3) Customer Services .....	571.3	608.4	579.7	<b>596.3</b>
	8,763.6	9,293.4	9,158.8 (-1.4%)	<b>9,236.6</b> <b>(+0.8%)</b>
				<b>(or -0.6% on 2020–21 Original)</b>

#### Analysis of Financial and Staffing Provision

##### Programme (1)

Provision for 2021–22 is \$68.6 million (0.8%) lower than the revised estimate for 2020–21. This is mainly due to the reduced provision for hire of services and professional fees, contract maintenance, general departmental expenses, partly offset by increased provision for personal emoluments, personnel related expenses, purchase of water and light and power. There will be a net decrease of four civil service posts primarily for handling water supply planning and distribution matters.

##### Programme (2)

Provision for 2021–22 is \$129.8 million (36.0%) higher than the revised estimate for 2020–21. This is mainly due to the increased provision for implementation of the Water Safety Plan Subsidy Scheme, hire of services and professional fees and other operating expenses relating to water quality control. There will be a net decrease of two civil service posts for enhancing drinking water safety.

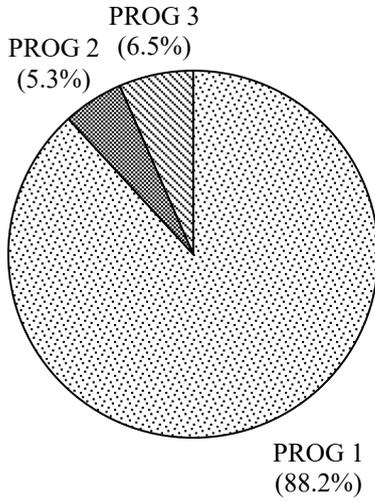
##### Programme (3)

Provision for 2021–22 is \$16.6 million (2.9%) higher than the revised estimate for 2020–21. This is mainly due to the increased provision for personal emoluments, personnel related expenses, acquisition of equipment for the customer telephone enquiry centre and other operating expenses relating to customer services.

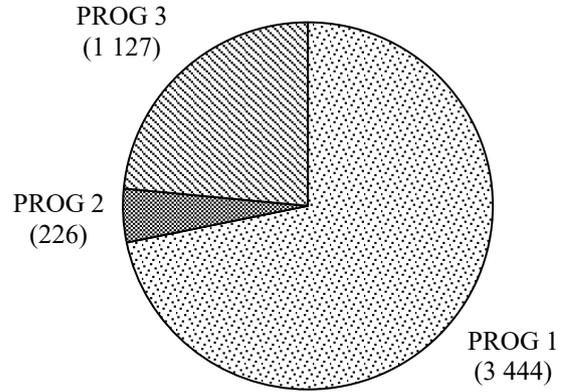
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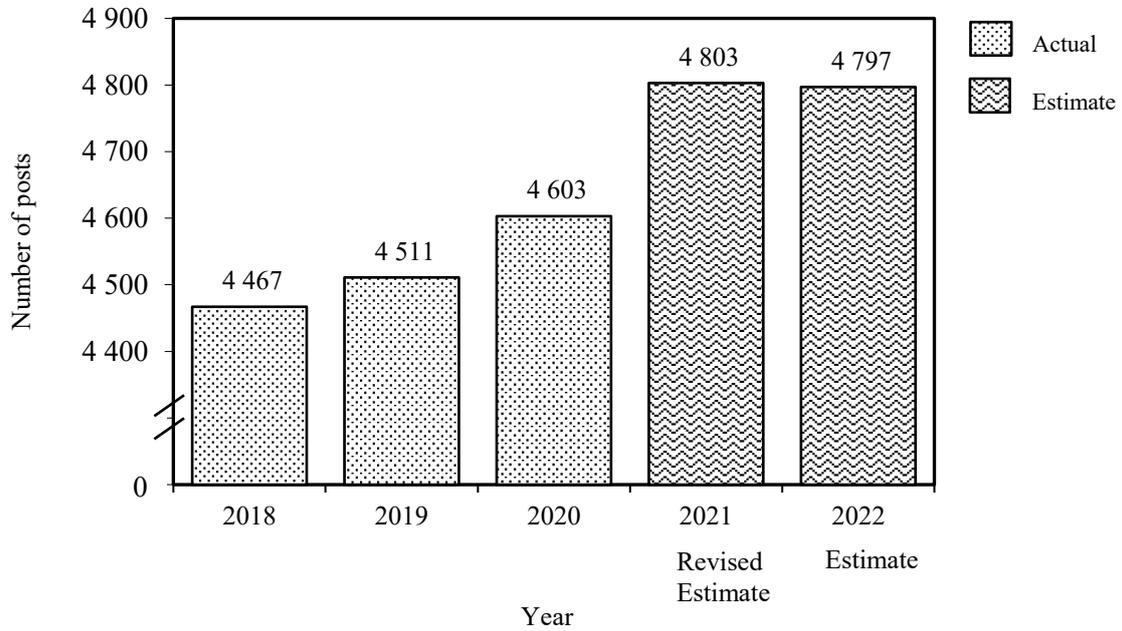
*Allocation of provision  
to programmes  
(2021-22)*



*Staff by programme  
(as at 31 March 2022)*



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



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Sub-head (Code)	Actual expenditure 2019–20	Approved estimate 2020–21	Revised estimate 2020–21	Estimate 2021–22	
	\$'000	\$'000	\$'000	\$'000	
<b>Operating Account</b>					
Recurrent					
000	Operational expenses .....	3,937,913	4,314,610	4,308,472	<b>4,258,252</b>
223	Purchase of water .....	4,809,620	4,844,620	4,833,069	<b>4,844,883</b>
	Total, Recurrent.....	<u>8,747,533</u>	<u>9,159,230</u>	<u>9,141,541</u>	<b><u>9,103,135</u></b>
Non-Recurrent					
700	General non-recurrent .....	—	120,000	4,000	<b>120,000</b>
	Total, Non-Recurrent.....	<u>—</u>	<u>120,000</u>	<u>4,000</u>	<b><u>120,000</u></b>
	Total, Operating Account .....	<u>8,747,533</u>	<u>9,279,230</u>	<u>9,145,541</u>	<b><u>9,223,135</u></b>
<b>Capital Account</b>					
Plant, Equipment and Works					
661	Minor plant, vehicles and equipment (block vote).....	16,020	14,184	13,296	<b>13,465</b>
	Total, Plant, Equipment and Works.....	<u>16,020</u>	<u>14,184</u>	<u>13,296</u>	<b><u>13,465</u></b>
	Total, Capital Account.....	<u>16,020</u>	<u>14,184</u>	<u>13,296</u>	<b><u>13,465</u></b>
	Total Expenditure .....	<u><u>8,763,553</u></u>	<u><u>9,293,414</u></u>	<u><u>9,158,837</u></u>	<b><u><u>9,236,600</u></u></b>

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### Details of Expenditure by Subhead

The estimate of the amount required in 2021–22 for the salaries and expenses of the Water Supplies Department is \$9,236,600,000. This represents an increase of \$77,763,000 over the revised estimate for 2020–21 and \$473,047,000 over the actual expenditure in 2019–20.

#### *Operating Account*

#### Recurrent

**2** Provision of \$4,258,252,000 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 2021 will be 4 803 posts including two supernumerary posts. It is expected that there will be a net decrease of six posts in 2021–22. Subject to certain conditions, the controlling officer may under delegated power create or delete non-directorate posts during 2021–22, but the notional annual mid-point salary value of all such posts must not exceed \$1,870,199,000.

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

	2019–20 (Actual) (\$'000)	2020–21 (Original) (\$'000)	2020–21 (Revised) (\$'000)	<b>2021–22 (Estimate) (\$'000)</b>
Personal Emoluments				
- Salaries .....	1,816,921	1,891,508	1,855,595	<b>1,895,947</b>
- Allowances .....	156,736	135,708	150,000	<b>148,201</b>
- Job-related allowances.....	10,837	12,580	12,581	<b>12,581</b>
Personnel Related Expenses				
- Mandatory Provident Fund contribution .....	13,374	17,798	15,397	<b>17,850</b>
- Civil Service Provident Fund contribution .....	80,348	101,188	93,633	<b>118,486</b>
Departmental Expenses				
- Light and power.....	740,768	776,700	780,390	<b>791,980</b>
- Hire of services and professional fees .....	125,298	290,972	227,312	<b>160,981</b>
- Fuel and lubricating oil.....	137	246	246	<b>246</b>
- Specialist supplies and equipment.....	100,196	145,862	140,734	<b>136,660</b>
- Maintenance materials.....	55,713	58,188	52,931	<b>53,358</b>
- Contract maintenance .....	579,816	595,316	714,488	<b>665,740</b>
- General departmental expenses .....	257,769	288,544	265,165	<b>256,222</b>
	3,937,913	4,314,610	4,308,472	<b>4,258,252</b>

**5** Provision of \$4,844,883,000 under *Subhead 223 Purchase of water* is for the purchase of water from Guangdong.

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### Commitments

Sub-head (Code)	Item (Code)	Ambit	Approved commitment	Accumulated expenditure to 31.3.2020	Revised estimated expenditure for 2020–21	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	—	4,000	436,000
		Total .....	<u>440,000</u>	<u>—</u>	<u>4,000</u>	<u>436,000</u>