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

Estimate 2015–16: .................................................................................................................. $7,564.8m

Establishment ceiling 2015–16 (notional annual mid-point salary value) representing an estimated 4,457 non-directorate posts as at 31 March 2015 rising by 27 posts to 4,484 posts as at 31 March 2016: .......................................................................................................................... $1,373.4m

In addition, there will be an estimated 23 directorate posts as at 31 March 2015 and as at 31 March 2016.

Commitment balance: ............................................................................................................. $3.7m

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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6,260.7</td>
<td>6,483.8</td>
<td>6,546.0 (+1.0%)</td>
<td>6,924.6 (+5.8%)</td>
</tr>
</tbody>
</table>

(or +6.8% on 2014–15 Original)

Aim

2 The aim is to plan and develop water resources and to design, construct, maintain and operate 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 and satisfactory 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.

Salt water for flushing

- assessing salt water supply requirements;
- planning, designing and constructing reliable and efficient salt water supply and distribution systems to meet such requirements in good time; and
- operating and maintaining salt water supply and distribution systems.

4 In 2014, the Department was able to plan, design and construct new projects in time for extension of fresh and salt water supplies to new developments and to operate and maintain water supply systems to provide adequate and uninterrupted supplies of water throughout the year.
The key performance measures in respect of water supply are:

### Targets

<table>
<thead>
<tr>
<th></th>
<th>2013 (Actual)</th>
<th>2014 (Actual)</th>
<th>2015 (Plan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>supply pressure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fresh water supply</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>— maintaining normally a minimum residual head of between 15 and 30 metres in the distribution systems except at their extremities (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>salt water supply</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>— maintaining normally a minimum residual head of 15 metres in the distribution systems except at their extremities (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

### Indicators

<table>
<thead>
<tr>
<th></th>
<th>2013 (Actual)</th>
<th>2014 (Actual)</th>
<th>2015 (Estimate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>projects under planning</td>
<td>19</td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td>value of projects under planning ($m)</td>
<td>5,366.0</td>
<td>7,475.9</td>
<td>7,140.6</td>
</tr>
<tr>
<td>projects under design</td>
<td>26</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>value of projects under design ($m)</td>
<td>5,253.5</td>
<td>4,811.7</td>
<td>4,605.0</td>
</tr>
<tr>
<td>projects under construction</td>
<td>39</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>expenditure of works under construction ($m)</td>
<td>3,951.1</td>
<td>4,521.1</td>
<td>4,313.5</td>
</tr>
<tr>
<td>fresh water supplied (m³)</td>
<td>932,781,000</td>
<td>959,462,000</td>
<td>952,000,000</td>
</tr>
<tr>
<td>salt water supplied (m³)</td>
<td>278,336,000</td>
<td>271,023,000</td>
<td>280,000,000</td>
</tr>
<tr>
<td>days on full supply</td>
<td>365</td>
<td>365</td>
<td>365</td>
</tr>
<tr>
<td>total treatment works capacity (m³/day)</td>
<td>5,015,600</td>
<td>5,015,600</td>
<td>5,015,600</td>
</tr>
<tr>
<td>total pumping plant capacity (megawatts)</td>
<td>341</td>
<td>346</td>
<td>346</td>
</tr>
<tr>
<td>leakage rate of water mains (%)</td>
<td>17.0</td>
<td>16.0</td>
<td>15.0</td>
</tr>
</tbody>
</table>

### Matters Requiring Special Attention in 2015–16

During 2015–16, the Department will:

- continue with the construction of stages 3 and 4 of the replacement and rehabilitation programme of water mains,
- take forward the implementation of the total water management strategy for sustainable use of water resources with focuses on water conservation and water loss management,
- carry out a review study on the total water management strategy,
- take forward the design for a desalination plant and related infrastructure in stages at Tseung Kwan O,
- continue to carry out investigation and studies on the use of reclaimed water for toilet flushing and other non-potable purposes in the north-eastern part of the New Territories including Sheung Shui and Fanling, and
- carry out the feasibility study for the relocation of service reservoirs at Diamond Hill to cavern.

### Programme (2): Water Quality Control

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial provision ($m)</td>
<td>164.7</td>
<td>165.9</td>
<td>173.0</td>
<td>176.1</td>
</tr>
</tbody>
</table>

(+4.3%) (+1.8%)

(or +6.1% on 2014–15 Original)

### Aim

The aim is to control the quality of water supplied to consumers in accordance with international and the Department’s standards.
Brief Description

The Department is responsible for ensuring that the purity, wholesomeness and safety of treated fresh water conform to international standards, i.e. the World Health Organization’s Guidelines for Drinking-water Quality (WHO Guidelines), in all respects and at all times. The Department is also responsible for ensuring that the quality of salt water for flushing conforms to the Department’s standards. This work involves:

**Fresh water**

- water treatment — ensuring that treated water conforms chemically and bacteriologically to the standards stipulated in the WHO Guidelines; and
- water quality control — ensuring that test samples taken from treatment works, service reservoirs, connection points, consumers’ taps, etc., conform to the standards stipulated in the WHO Guidelines.

**Salt water for flushing**

- water treatment — ensuring that the water supplied conforms chemically and bacteriologically to the Department’s standards; and
- water quality control — ensuring that test samples taken from pumping stations, service reservoirs, connection points, etc., conform to the Department’s standards.

In 2014, the Department achieved the set quality standards in the treatment of water and maintained effective measures in monitoring and controlling the quality of the water supplied to consumers.

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

### Targets

<table>
<thead>
<tr>
<th>Fresh water quality — water supplied to customers at the connection points complies with the standards stipulated in the WHO Guidelines (%)</th>
<th>2013 (Actual)</th>
<th>2014 (Actual)</th>
<th>2015 (Plan)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Salt water quality — water supplied to customers at the connection points complies with Water Quality Objectives set by Water Supplies Department (%)</th>
<th>2013 (Actual)</th>
<th>2014 (Actual)</th>
<th>2015 (Estimate)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>96</td>
<td>96</td>
<td>96</td>
</tr>
</tbody>
</table>

### Indicators

**Treated fresh water**

- samples taken from treatment works, service reservoirs, connection points and consumers’ taps# …………………………
- chemical quality satisfying standards (%)…………………….…
- bacteriological quality satisfying standards (%)………………………

<table>
<thead>
<tr>
<th>2013 (Actual)</th>
<th>2014 (Actual)</th>
<th>2015 (Estimate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 097</td>
<td>26 129</td>
<td>26 000</td>
</tr>
<tr>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

# Revised description of the previous indicator “samples taken from treatment works, service reservoirs and consumers’ taps” as from 2015.

### Matters Requiring Special Attention in 2015–16

During 2015–16, the Department will continue to:

- monitor radiation levels in raw and treated fresh water at radiation screening centres, and
- execute a water safety plan for the Department according to the WHO Guidelines.
Programme (3): Customer Services

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial provision ($m)</td>
<td>448.1</td>
<td>446.2</td>
<td>456.5 (+2.3%)</td>
<td>464.1 (+1.7%)</td>
</tr>
</tbody>
</table>

(or +4.0% on 2014–15 Original)

Aim

The aims are to provide customer services and to enforce the Waterworks Ordinance (Cap. 102) and Waterworks Regulations (Cap. 102A).

Brief Description

The Department is responsible for the provision of efficient and effective services to customers and for taking enforcement action on offences under the Waterworks Ordinance and Waterworks Regulations. This work involves:

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

In 2014, the Department conducted a review of water tariff including its structure and charging rates for both domestic and non-domestic accounts.

The key performance measures in respect of customer services are:

**Targets**

<table>
<thead>
<tr>
<th>Task</th>
<th>Target</th>
<th>2013 (Actual)</th>
<th>2014 (Actual)</th>
<th>2015 (Plan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>processing application for taking up of consumership by post within seven days (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>in person at Customer Enquiry Centres (all-purpose counter) within 15 minutes (%)</td>
<td>100</td>
<td>99</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>issue of final bill upon closure of account within three days (%)</td>
<td>100</td>
<td>99.7</td>
<td>99.7</td>
<td>99.7</td>
</tr>
<tr>
<td>refund of water deposit within nine days (%)</td>
<td>100</td>
<td>99.8</td>
<td>99.8</td>
<td>99.8</td>
</tr>
<tr>
<td>processing application for meter test within eight days (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>processing application for autopay service (upon receipt of notification from banks) within three days (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>accuracy of water meters (inaccuracy not exceeding +/- 3%) (%)</td>
<td>100</td>
<td>96.3</td>
<td>96.7</td>
<td>97.0</td>
</tr>
<tr>
<td>response time for attendance to fault complaints within half a day for fresh water supply fault (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>within 24 hours for others (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>notice for planned suspension of water supply issued not less than four days in advance (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>conducting publicity campaigns and seminars for promotion of combating unauthorised water consumption</td>
<td>60</td>
<td>62</td>
<td>73</td>
<td>70</td>
</tr>
<tr>
<td>initiating an investigation after receiving a complaint on suspected unauthorised water consumption within one day (%)</td>
<td>85</td>
<td>—</td>
<td>91</td>
<td>90</td>
</tr>
</tbody>
</table>
**Indicators**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>no. of consumer accounts</td>
<td>2 852 000</td>
<td>2 880 000</td>
<td>2 909 000</td>
</tr>
<tr>
<td>fees, water charges and deposits demanded ($m)</td>
<td>2,765.0</td>
<td>2,829.0</td>
<td>2,829.0</td>
</tr>
<tr>
<td>arrears of water charges at year end in terms of no. of days of water charges demanded</td>
<td>1.2</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>prosecutions</td>
<td>178</td>
<td>225</td>
<td>230</td>
</tr>
<tr>
<td>fines imposed ($)</td>
<td>613,100</td>
<td>876,400</td>
<td>900,000</td>
</tr>
<tr>
<td>house service inspections due to irregular consumption</td>
<td>7,650</td>
<td>7,830</td>
<td>7,860</td>
</tr>
<tr>
<td>public enquiries and requests for services</td>
<td>1 437 908</td>
<td>1 349 667</td>
<td>1 379 000</td>
</tr>
<tr>
<td>disputes and complaints handled</td>
<td>15 259</td>
<td>16 681</td>
<td>16 500</td>
</tr>
</tbody>
</table>

**Matters Requiring Special Attention in 2015–16**

16 During 2015–16, the Department will:

- review the support and maintenance of information technology systems to ensure the continual operation and delivery of customer services in a cost-effective manner, and
- promote e-billing and enhance the billing system.
### Analysis of Financial and Staffing Provision

#### Programme (1)

Provision for 2015–16 is $378.6 million (5.8%) higher than the revised estimate for 2014–15. This is mainly due to the increased provision to cater for the increase in purchase cost of water under the new Dongjiang water supply agreement and electricity tariff increase. There will be creation of one post in 2015–16 for expediting the mainlaying works in association with the Tseung Kwan O desalination plant.

#### Programme (2)

Provision for 2015–16 is $3.1 million (1.8%) higher than the revised estimate for 2014–15. This is mainly due to the increased provision for purchase of water treatment chemicals.

#### Programme (3)

Provision for 2015–16 is $7.6 million (1.7%) higher than the revised estimate for 2014–15. This is mainly due to the increased provision for creation of 26 new civil servants posts, partly offset by reduced provision for expenses on non-civil service contract staff and replacing ageing plant and equipment. The 26 new posts are for replacement of water meters, processing new applications for salt water supply for flushing and conversion of temporary mains water for flushing to salt water supply for flushing in the North West New Territories, and enhancement of services in the Customer Enquiry Centres.
**Allocation of provision to programmes (2015-16)**

- **PROG 1 (91.5%)**
- **PROG 2 (6.1%)**
- **PROG 3 (2.4%)**

**Staff by programme (as at 31 March 2016)**

- **PROG 1 (3 313)**
- **PROG 2 (159)**
- **PROG 3 (1 035)**

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

- **2012: 4 404**
- **2013: 4 396**
- **2014: 4 396**
- **2015: 4 480**
- **2016: 4 507**

**Graph:**
- Actual
- Estimate

**Year:**
- Revised
- Estimate
### Head 194 — WATER SUPPLIES DEPARTMENT

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
</tr>
</tbody>
</table>

#### Operating Account

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Operational expenses</td>
<td>3,079,757</td>
<td>3,127,712</td>
<td>3,207,284</td>
<td>3,241,569</td>
</tr>
<tr>
<td>223</td>
<td>Purchase of water</td>
<td>3,782,580</td>
<td>3,959,340</td>
<td>3,959,340</td>
<td>4,319,550</td>
</tr>
<tr>
<td></td>
<td>Total, Recurrent</td>
<td>6,862,337</td>
<td>7,087,052</td>
<td>7,166,624</td>
<td>7,561,119</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total, Operating Account</td>
<td>6,862,337</td>
<td>7,087,052</td>
<td>7,166,624</td>
<td>7,561,119</td>
</tr>
</tbody>
</table>

#### Capital Account

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>603</td>
<td>Plant, vehicles and equipment</td>
<td>4,979</td>
<td>3,263</td>
<td>3,263</td>
<td>3,675</td>
</tr>
<tr>
<td></td>
<td>Minor plant, vehicles and equipment (block vote)</td>
<td>6,160</td>
<td>5,605</td>
<td>5,605</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Total, Plant, Equipment and Works</td>
<td>11,139</td>
<td>8,868</td>
<td>8,868</td>
<td>3,675</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total, Capital Account</td>
<td>11,139</td>
<td>8,868</td>
<td>8,868</td>
<td>3,675</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Expenditure</td>
<td>6,873,476</td>
<td>7,095,920</td>
<td>7,175,492</td>
<td>7,564,794</td>
</tr>
</tbody>
</table>
Details of Expenditure by Subhead

The estimate of the amount required in 2015–16 for the salaries and expenses of the Water Supplies Department is $7,564,794,000. This represents an increase of $389,302,000 over the revised estimate for 2014–15 and of $691,318,000 over the actual expenditure in 2013–14.

Operating Account

Recurrent

2 Provision of $3,241,569,000 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 2015 will be 4,480 posts. It is expected that there will be an increase of 27 posts in 2015–16. Subject to certain conditions, the controlling officer may under delegated power create or delete non-directorate posts during 2015–16, but the notional annual mid-point salary value of all such posts must not exceed $1,373,414,000.

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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Emoluments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Salaries</td>
<td>1,410,417</td>
<td>1,429,690</td>
<td>1,491,599</td>
<td>1,519,649</td>
</tr>
<tr>
<td>- Allowances</td>
<td>109,814</td>
<td>108,524</td>
<td>114,924</td>
<td>114,924</td>
</tr>
<tr>
<td>- Job-related allowances</td>
<td>8,984</td>
<td>9,327</td>
<td>8,470</td>
<td>8,970</td>
</tr>
<tr>
<td>Personnel Related Expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Mandatory Provident Fund contribution</td>
<td>4,308</td>
<td>5,399</td>
<td>5,887</td>
<td>8,117</td>
</tr>
<tr>
<td>- Civil Service Provident Fund contribution</td>
<td>16,791</td>
<td>21,121</td>
<td>22,196</td>
<td>29,360</td>
</tr>
<tr>
<td>Departmental Expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Light and power</td>
<td>610,832</td>
<td>633,660</td>
<td>640,800</td>
<td>653,523</td>
</tr>
<tr>
<td>- Hire of services and professional fees</td>
<td>94,540</td>
<td>96,832</td>
<td>96,832</td>
<td>98,832</td>
</tr>
<tr>
<td>- Fuel and lubricating oil</td>
<td>149</td>
<td>170</td>
<td>170</td>
<td>170</td>
</tr>
<tr>
<td>- Specialist supplies and equipment</td>
<td>89,196</td>
<td>89,212</td>
<td>92,051</td>
<td>93,141</td>
</tr>
<tr>
<td>- Maintenance materials</td>
<td>63,661</td>
<td>57,339</td>
<td>57,339</td>
<td>57,276</td>
</tr>
<tr>
<td>- Contract maintenance</td>
<td>539,166</td>
<td>533,389</td>
<td>538,300</td>
<td>519,334</td>
</tr>
<tr>
<td>- General departmental expenses</td>
<td>131,899</td>
<td>143,049</td>
<td>138,716</td>
<td>138,273</td>
</tr>
</tbody>
</table>

5 Provision of $4,319,550,000 under Subhead 223 Purchase of water is for the purchase of water from Guangdong. The increase of $360,210,000 (9.1%) over the revised estimate for 2014–15 is to cater for the increase in purchase cost of water under the new Dongjiang water supply agreement effective from 1 January 2015. It also includes $47,900,000, being the deferred payment of additional water purchase cost for February and March 2015 under the new Dongjiang water supply agreement.
<table>
<thead>
<tr>
<th>Sub-head (Code)</th>
<th>Item (Code)</th>
<th>Ambit</th>
<th>Approved commitment</th>
<th>Accumulated expenditure to 31.3.2014</th>
<th>Revised estimated expenditure for 2014–15</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>$’000</td>
<td>$’000</td>
<td>$’000</td>
<td>$’000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Account</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>603</td>
<td>Plant, vehicles and equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>828</td>
<td>Replacement of one high performance liquid chromatographic system and accessories at Mainland East Laboratory</td>
<td></td>
<td>3,675</td>
<td>—</td>
<td>—</td>
<td>3,675</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>3,675</td>
<td>—</td>
<td>—</td>
<td>3,675</td>
</tr>
</tbody>
</table>