Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)132

Question Serial No.

2550

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

Could the Government advise this Committee the annual expenditure for purchasing Dongjiang water from the Mainland in the past ten years (i.e. 2003-2012)? What are the amount of water purchased and the increase in price within these ten years? Has the Administration made any comparison of the cost-effectiveness between purchasing Dongjiang water and desalination?

Asked by: Hon. CHAN Chi-chuen

Reply:

The quantities of and expenditure on water purchased from Dongjiang (DJ) for the years from 2003 to 2012 are summarized as follow:

	2003	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Amount of water purchased (million cubic metre)	810	820	820	820	820	820	820	820	820	820
Annual Expenditure ($M)	2,498.8	2,529.7	2,529.7	2,494.8	2,494.8	2,494.8	2,959.0	3,146.0	3,344.0	3,538.7

The increase in prices for the purchase of DJ water in the last ten years was 3.9% per annum on average. The increases are based on the operation cost having regard to changes in the exchange rate between Renminbi and Hong Kong dollars as well as the relevant price indices of both sides.

Whilst the ongoing planning and investigation study for setting up a desalination plant at Tseung Kwan O will, amongst others, estimate the production cost of water by desalination,

the unit cost of water produced from desalination has previously been broadly estimated to be around $12 per cubic metre at 2012-13 price level. In comparison, the unit cost of potable water produced from DJ water is $8.4 per cubic metre at 2012-13 price level. Thus, Dongjiang water remains a more economic water resource available to Hong Kong at present when compared with water produced from desalination.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)133

Question Serial No.

2551

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

What is the estimated expenditure for the Government to introduce foreign technologies and exploring desalination technology by itself? How will the Government deploy more resources to reduce the cost of desalination? Apart from the site in Tseung Kwan O, how much land has the Government reserved for the construction of desalination plants?

Asked by: Hon. CHAN Chi-chuen

Reply:

The estimated expenditure of the planning and investigation study for the desalination plant at Tseung Kwan O in 2013-14 is $9 million. As the desalination technology is an energy consuming intensive process, the study will look into various technologies to minimise energy consumption thereby reducing cost of the desalination.

In tandem with the planning of new developments, we will look into need for alternative water resources including desalination water in meeting additional water demand and, as necessary, identify sites for desalination plants.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)134

Question Serial No.

0090

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply, Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

The Financial Secretary stated in the Budget Speech that new water sources have to be explored for Hong Kong and that a site in Tseung Kwan O has been reserved for the construction of a desalination plant. In this regard, would the Administration advise on the following:

a) What is the expenditure involved in the detailed planning and investigation study of the desalination plant this year (i.e. 2013-14)? When will the study be expected to complete?

b) When commissioned, what will be the anticipated capacity of fresh water supplied from the desalination plant? What will be the expected changes in the quantity of Dongjiang water imported into Hong Kong and the relevant expenditure?

c) What will be the anticipated annual operating cost and cost of water supply of the desalination plant? Has there been any assessment of the impact of desalination on water tariff?

d) Apart from desalination, has the Administration made any provision for the study of the feasibility of using reclaimed water as another new water source? What are the current consumption and uses of reclaimed water in Hong Kong?

Asked by: Hon. CHAN Hak-kan

Reply:

a) The estimated expenditure of the planning and investigation study for the desalination plant at Tseung Kwan O (TKO) in 2013-14 is $9 million. The study is expected to be completed by end 2014.

b) The water production capacity of the desalination plant at TKO is around 50 million cubic metre (mcm) per annum, expandable to 90 mcm per annum. With an anticipated earliest plant commissioning date in 2020 and the projected population and economic growth, the quantity of Dongjiang water to be imported should not increase above the current level and no additional expenditure should be incurred in import of extra quantity.

c) The annual operating cost of the desalination plant and cost of water supply of the desalination plant will be studied in detail in the planning and investigation study which will be completed by end 2014. As regards water tariff, it will be reviewed regularly according to the "user-pay" principle taking into account the affordability and acceptability of the public, financial conditions of the government and other policy considerations.

d) We conducted two pilot schemes in 2006 on the recycling of treated effluent in Ngong Ping and Shek Wu Hui and concluded that the use of reclaimed water is technically feasible in Hong Kong. At present, we are using approximately 800 000 cubic metres of reclaimed water for toilet flushing and other non-potable uses. We are also pursuing the planning of the use of reclaimed water in Sheung Shui, Fanling and the New Development Areas in the north-eastern part of the New Territories.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)135

Question Serial No.

0799

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

In connection with operating and maintaining fresh water supply and distribution systems, please advise on:

a. The resources allocated for the maintenance of underground water mains in face of frequent main bursts during recent years. What is the present situation of ageing fresh water mains across the territory? When will the replacement of aged water mains be completed territory-wide?

b. Whether the Administration has allocated any resources for studying or researching on stronger materials for constructing water mains of higher durability. If yes, what are the details? If no, what are the reasons?

c. Measures taken to minimise water main bursts for the past three years (i.e. 2010-11 to 2012-13).

Asked by: Hon. CHAN Han-pan

Reply:

a. The resource allocated for replacement, rehabilitation and maintenance of underground water mains in 2013-14 is $2,555 million while the actual and estimated expenditure in 2011-12 and 2012-13 is $2,207 million and $2,407 million respectively. We have launched a replacement and rehabilitation of water mains programme for 3 000 kilometres (km) of aged water mains for completion by end 2015. Of these water mains, 2 500 km are fresh water mains and 65% of them have been rejuvenated as at February 2013.

b. The new water mains installed in our water supply and distribution network are of more durable materials, including polyethylene pipes, ductile iron pipes with epoxy and cement mortar lining and zinc and bitumen coating, and steel pipes with epoxy lining and coating. They have much better performance in respect of resistance to corrosion,

leakage and breakage than the old water mains of materials like cast iron, galvanised iron and asbestos cement. We will continue to research for stronger and more durable pipe materials with resources absorbed in the relevant project votes and recurrent provisions of our Department.

c. We have been taking a multi-pronged approach to tackle the water main burst problem including leakage detection, pressure management and replacement and rehabilitation of water mains. These works are progressing well in the past three years with the number of water mains burst incidents dropping from 610 in 2010-11 to 243 in 2012-13 (up to February 2013).

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)136

Question Serial No.

0536

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply, Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

According to the Budget Speech, the Administration had started last year a detailed planning and investigation study, including an assessment of the feasibility and cost-effectiveness, for the construction of a desalination plant in Tseung Kwan O with a view to tapping sea water as a water source. What was the expenditure for the study last year (i.e. 2012-13)? What is the provision earmarked for continuing with the study this year?

Asked by: Hon. CHAN Kam-lam

Reply:

The expenditure for planning and investigation study of desalination plant at Tseung Kwan O for 2012-13 is $0.9 million. The provision earmarked for continuing with the study in 2013-14 is $9 million.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)137

Question Serial No.

2845

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (3) Customer Services

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

According to Targets under Programme (3), the Administration has set the accuracy of water meters at 100% (with inaccuracy not exceeding plus or minus 3%). However, the target could not be achieved in 2011-2012 and 2012-2013. Could the Government advise on:

1. The reasons for failing to achieve the target. Will the Administration study the enhancement of the overall accuracy of water meters? If yes, what are the details? If no, what are the reasons?

2. The participation figures of the "regular meter replacement programme" for the recent three years (i.e. 2010-11 to 2012-2013). What are the manpower and expenditure involved?

Asked by: Hon. CHAN Yuen-han

Reply:

1. The "accuracy of water meters" refers to the percentage of water meters of which the accuracy of registered readings is within plus or minus 3% of the actual consumption. Water meters when put into operation for some time will become less accurate due to mechanical wear and tear and tend to under-register the amount of water used. Replacement of aged meters is the most cost effective way to enhance their overall accuracy.

   The target of 100% represents the long-term goal that 100% of our water meters can attain the accuracy level within plus or minus 3% of the actual consumption. With regular replacement of aged water meters over the years, the level of accuracy has improved from 92.7% in 2006 to 95.7% in 2012. The accuracy level is expected to further increase to 96% in 2013. We will strive to sustain the improvement by continuing with the meter replacement programme.

2. In 2010-11, 2011-12 and 2012-13, we have replaced 230 000, 190 000 and around 210 000 aged water meters respectively. The respective expenditure on the cost of meter

and the contractor's work was $42 million, $35 million and around $41 million. About 80% of the meter replacement works was carried out through contractors and the remainder by our in-house staff, deploying about 50 staff each year on the task.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)138

Question Serial No.

2865

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

According to Targets under Programme (1), the leakage rates of water mains for the recent two years are 19% and 18% respectively, and the leakage rate of water mains for the coming year is expected to be 17%. In this regard, could the Government advise on the following:

1. How many water main burst incidents occurred due to aging of water mains this year?

2. What measures has the Administration taken to address the problem of leakage of water mains this year? What are the expenditure and manpower involved?

3. Since the leakage rate reduces by 1% only each year, what measures will the Administration take to effectively reduce the leakage rate for next year? What will be the expenditure and manpower involved?

Asked by: Hon. CHAN Yuen-han

Reply:

1. The number of water main burst incidents in 2012-13 (up to February 2013) was 243. Water main bursting is commonly due to a confluence of various factors, including aged water mains, ground movements and external disturbances.

2. We have been taking a multi-pronged approach to tackle the water main leakage problem including leakage detection, pressure management and implementation of the Replacement and Rehabilitation (R&R) Programme for water mains. These works have reaped positive results, with the number of water main burst incidents dropping from a peak of about 2 500 in 2000-01 to 243 in 2012-13 (up to February 2013). The water main leakage rate has also reduced from 25% in 2001 to 18% in 2012. We will

continue to press ahead with the implementation of the water main R&R programme with a view to completing the programme in end 2015 and the water main leakage rate is expected to be further reduced to 15%. In 2012-13, the expenditure on implementing these measures is estimated to be $2,256 million, of which $333 million is for the employment of consultants including site staff for supervision of implementation of these measures.

3. In implementing the above measures, we have endeavoured to fast-track works programmes while striking a balance between the early improvement to the distribution network to reduce leakage and the need to minimise disruption to road traffic and the local environment. We will however keep on monitoring the conditions of the water mains and reschedule to bring forward the works of those water mains in need of earlier maintenance, replacement or rehabilitation. We consider that the approach adopted has effectively reduced the leakage rate steadily. We therefore will continue with the above-mentioned measures in 2013-14 which will involve an estimated expenditure of $2,480 million.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)139

Question Serial No.

2866

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

According to Programme (1), the Water Supplies Department will continue with the planning and investigation study for a desalination plant at Tseung Kwan O in 2013-14. Could the Government advise on:

1. The details of the study. When will the study be conducted and completed? What will be the expenditure and manpower involved?

2. Whether the Administration has examined any other ways, such as conducting research on reclaimed water, to develop water resources. If yes, what are the expenditure and manpower involved? If no, what measures will the Administration take to develop water resources?

Asked by: Hon. CHAN Yuen-han

Reply:

1. The planning and investigation study for desalination plant at Tseung Kwan O commenced in December 2012 for completion by end 2014. The work plan for 2013-14 includes detailed feasibility study; preliminary design; site investigation; environmental, traffic and drainage impact assessments; cost estimation and cost effectiveness analysis. The estimated expenditure for the study in 2013-14 is $9 million.

2. Apart from seawater desalination, two pilot schemes conducted in 2006 on the recycling of treated effluent in Ngong Ping and Shek Wu Hui concluded that the use of reclaimed water is technically feasible in Hong Kong. We are pursuing the planning of the use of water reclamation and to make more effective use of rainwater and grey water as alternative water resources. The estimated expenditure for these studies in 2013-14 is around $0.66 million.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)140

Question Serial No.

2351

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

In connection with the commencement of the "desalination" programme:

(a) What is the estimated expenditure in 2013-14? When will funds be sought?

(b) Apart from the reserved site in Tseung Kwan O, has the Administration selected any other site locations for the construction of additional desalination plants to optimise water sources in Hong Kong? If yes, when will funds be sought?

Asked by: Hon. FAN Kwok-wai, Gary

Reply:

(a) The estimated expenditure for the planning and investigation study for the desalination plant in Tseung Kwan O in year 2013-14 is $9 million, for which relevant fund has already been secured.

(b) In tandem with the planning of new developments, we will look into need for alternative water resources including desalination water in meeting additional water demand and, as necessary, identify sites for desalination plants.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)141

Question Serial No.

2960

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

How much Dongjiang (DJ) water did the Government import in the past five years (i.e. 2008-09, 2009-10, 2010-11, 2011-12 and 2012-13)? What were the percentages against water consumption in Hong Kong and the average purchase prices for the respective years? What are the estimates this year? Please provide answers in the table below.

Year	Quantity of DJ water imported (million cubic metre, (mcm))	Percentage against water consumption (%)	Average purchase price (HK$ /cubic metre)
2008-09			
2009-10			
2010-11			
2011-12			
2012-13			
2013-14 (Estimated)			

Asked by: Hon. FAN Kwok-wai, Gary

Reply:

The quantities of DJ water imported to Hong Kong, their percentages against consumption and the average purchase prices for the past five years are summarized as follows:

Year	Quantity of DJ water imported (million cubic metre, (mcm))	Percentage against water consumption (%)	Average purchase price (HK$ /cubic metre)
2008-09	621	64.8	3.15
2009-10	717	75.6	3.65
2010-11	717	77.0	3.88
2011-12	822	88.7	4.12
2012-13 (up to Feb 2013)	646	75.5	4.36
2013-14 (Estimate)	70 – 80% of the total quantity of water consumption.		4.61

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)142

Question Serial No.

2961

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

What were the quantities of fresh water discharged due to overflow from reservoirs in the past five years (i.e. 2008-09, 2009-10, 2010-11, 2011-12 and 2012-13)? What were the values of fresh water discharged for the respective years? Please provide answers in the table below.

Year	No. of times reservoir overflow	Quantities of overflow (million cubic metre (mcm))	Total value of fresh water (HK$)
2008-09			
2009-10			
2010-11			
2011-12			
2012-13			

Asked by: Hon. FAN Kwok-wai, Gary

Reply:

The overflow quantities from reservoirs for the years 2008-09 to 2012-13 are as follows:

Year	No. of times reservoir overflow	Quantities of overflow (million cubic metre (mcm))	Total value of fresh water (HK$)
2008-09	Not Applicable[1]	92[3]	Not applicable[2]
2009-10		15	
2010-11		25	
2011-12		0	
2012-13 (Up to Feb 2013)		15	

Notes :

1. We record overflow by quantities only rather than by number of occurrence.

2. The overflow is locally collected rainwater and occurs normally in small reservoirs during heavy rainstorms. Such overflow is rather an operational constraint than a loss.

3. The relatively high amount of overflow in 2008-09 was due to the heavy rainfall of 1 346 mm recorded for the month in June 2008.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)143

Question Serial No.

1528

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title): (223) Purchase of Water

Programme:

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

The purchase of Dongjiang water costs as much as over $3.5 billion each year. However, tens of millions cubic metres of fresh water has been discharged to the sea due to overflow from our reservoirs, resulting in a wastage of water resources and money. Has the Administration discussed with the Government of Guangdong Province how Dongjiang water could be conserved? If yes, what are the measures? If no, what are the reasons?

Asked by: Hon. KWOK, Dennis

Reply:

Since 2006, the Dongjiang water supply agreement has adopted a package deal lump sum approach with provision for adjusting the daily supply rate of Dongjiang water according to our need and enabling us to well control the storage level of our large reservoirs in which Dongjiang water is stored. We have neither overflow nor discharge of Dongjiang water since then.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)144

Question Serial No.

1731

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

The Administration stated that it would commence a planning and investigation study for a desalination plant at Tseung Kwan O. Could the Government advise this Committee:

(a) The progress of the investigation study and advance work for the desalination plant;

(b) The expenditure involved in the construction of the desalination plant so far. What is the estimated expenditure for the relevant project in 2013-14? What are the processes involved in the relevant expenditure or what are the reasons?

Asked by: Hon. KWOK, Dennis

Reply:

(a) The planning and investigation study of desalination plant in Tseung Kwan O commenced in December 2012 for completion by end 2014.

(b) The expenditure for the study in 2012-13 is $0.9 million. The provision for the study in 2013-14 is $9 million. The scope of work under the planning and investigation study for setting up a desalination plant at Tseung Kwan O includes detailed feasibility study; preliminary design; site investigation; environmental, traffic and drainage impact assessments; cost estimation and cost effectiveness analysis.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)145

Question Serial No.

1732

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

The Administration continues to take forward the implementation of the water management programme to explore new water sources and maintain the existing quality of water. The proportion of Dongjiang water supply is about 70 to 80% of Hong Kong's total water demand each year. With the commission of a desalination plant in Tseung Kwan O, will the total annual cost of fresh water supply in Hong Kong be expected to increase or decrease? What will be the amount?

Asked by: Hon. KWOK, Dennis

Reply:

The water production capacity of the proposed desalination plant at Tseung Kwan O is around 50 million cubic metre (mcm) per annum, expandable to 90 mcm per annum amounting to around 9% of the total fresh water supply. With an anticipated earliest plant commissioning date of 2020 and the projected population and economic growth, the quantity of Dongjiang water to be imported should not increase above the current level and no additional expenditure would be incurred on importing extra quantity.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)146

Question Serial No.

1730

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

As mentioned in Matters Requiring Special Attention in 2013-14, the Administration would "continue with the planning and investigation study for a desalination plant at Tseung Kwan O".

(a) What was the work progress in this respect in 2012? What are the work plan for next year, as well as the actual expenditure and estimated expenditure for the respective year?

(b) According to the latest study findings, what are the unit costs of turning each cubic metre of seawater into fresh water, processing local fresh water and processing Dongjiang water?

Asked by: Hon. LEUNG Che-cheung

Reply:

(a) The planning and investigation study for desalination plant at Tseung Kwan O commenced in December 2012 for completion by end 2014. The scope of work carried out under the planning and investigation study for setting up a desalination plant at Tseung Kwan O includes detailed feasibility study; preliminary design; site investigation; environmental, traffic and drainage impact assessments; cost estimation and cost effectiveness analysis. The provision for the study in 2013-14 is $9 million.

(b) The unit cost of potable water produced from water collected from local catchment and Dongjiang water are $4.0 per cubic metre and $8.4 per cubic metre respectively. Whilst the ongoing planning and investigation study for setting up a desalination plant at Tseung Kwan O will, amongst others, estimate the production cost of water by desalination, the unit cost of water produced from desalination has previously been broadly estimated to be around $12 per cubic metre at 2012-13 price level.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)147

Question Serial No.

1784

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

(a) In the past three years (i.e. 2010-11 to 2012-13), what were the quantity of fresh water lost due to leakage of water mains and the cost involved?

(b) In the past three years, how many households used fresh water for flushing and what was the quantity of fresh water involved?

(c) What measures will the Administration carry out in 2013-14 to reduce the quantity of fresh water lost due to leakage of water mains and flushing? What are the details of expenditure in this respect?

Asked by: Hon. LEUNG Che-cheung

Reply:

(a) The water main leakage rates of 2010, 2011 and 2012 are 20%, 19% and 18% respectively.

With service reservoirs located at high altitude for water supply to premises at different levels, water mains at lower altitudes are operating under a relatively high water pressure which renders them more susceptible to leakage. Therefore, water main leakage is considered more an operational constraint rather than a loss. However, with the adoption of a host of measures, including water main replacement and rehabilitation (R&R) works, pressure management and leakage detection, the leakage rate has dropped from 25% in 2001 to 18% in 2012.

(b) The population served with fresh water for flushing and the corresponding quantity over the last 3 years are tabulated as follows:

	Population served with fresh water for flushing	Quantity of fresh water for flushing (million cubic metre)
2010-11	1,500,000	78
2011-12	1,510,000	76
2012-13 (projected estimate)	1,520,000	74

(c) We have been taking a multi-pronged approach to tackle the water main leakage problem including leakage detection, pressure management, replacement and rehabilitation of water mains. The expenditure on these works for 2013-14 is estimated at $2,480 million.

In order to reduce fresh water consumed for flushing, new salt water supply systems are being constructed for the conversion of fresh water flushing to sea water flushing in different areas, including Pok Fu Lam, Tuen Mun East, Yuen Long and Tin Shui Wai, with an estimated expenditure of $129 million in 2013-14.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)148

Question Serial No.

0158

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply, Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

For the desalination plant mentioned in paragraph 97 of the Budget and Programme (1): Water Supply: Planning and Distribution:

a. As mentioned in Matters Requiring Special Attention under Programme (1), the Water Supplies Department will continue with the planning and investigation study for a desalination plant in Tseung Kwan O. Would the Administration advise on the purpose of setting up the desalination plant?

b. What are the expected construction costs of the entire project and the recurrent expenditure in future? What are the expected completion and commissioning dates of the project?

c. What is the expected percentage of the total water consumption in Hong Kong to be supplied from the above project after its commissioning?

Asked by: Hon. MA Fung-kwok

Reply:

a. To better prepare Hong Kong for uncertainties such as acute climate changes and low rainfall, we need to carry out the planning and investigation study of the desalination plant at Tseung Kwan O so that an alternative water source can be readily tapped in good time when needed.

b. The construction cost and recurrent expenditure of the desalination plant will be studied under the planning and investigation study which will be completed by end 2014. Subject to the planning and investigation study, the earliest date for commissioning of the desalination plant is expected to be around 2020.

c. The anticipated output capacity of the desalination plant will be around 5% of Hong Kong's total fresh water consumption, expandable to around 9% as needed.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)149

Question Serial No.

1736

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

Could the Administration advise this Committee the specific work schedule of commissioning a desalination plant in Tseung Kwan O? Has the Administration reserved any sites for setting up more desalination plants in future so as to reduce the reliance on Dongjiang water? If yes, what are the locations? If no, what are the reasons?

Asked by: Hon. MO, Claudia

Reply:

The planning and investigation study of desalination plant in Tseung Kwan O commenced in December 2012 for completion by end 2014. The scope of work of the planning and investigation includes detailed feasibility study; preliminary design; site investigation; environmental, traffic and drainage impact assessments; cost estimation and cost effectiveness analysis.

In tandem with the planning of new developments, we will look into need for alternative water resources including desalination water in meeting additional water demand and, as necessary, identify sites for desalination plants.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)150

Question Serial No.

1737

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

In connection with the "Water Resources Education Centre", please provide information in the table below about the use of the Centre since its coming into operation last year. Please provide a detailed cost breakdown of the 4.77 million dollars used in setting up the Education Centre and the information on other manpower resources (if any). Before setting up the Education Centre, did the Administration know that the office would be moved to Tin Shui Wai in 2017? If yes, why did the Administration still set up the Centre? If no, what are the reasons?

Asked by: Hon. MO, Claudia

Reply:

The Water Resources Education Centre (the Centre) in Mong Kok was officially opened on 4 March 2013. We have however invited primary schools for advance viewing of our centre since December 2012. The utilization of the Centre by the schools up to 6 March 2013 is as follows:

Date	**Name of school**	**Number of visitors**
4 Dec 2012	G.C.C.C.I.T.K.D.Cheung Wong Wai Primary School	25
5 Dec 2012	Pok Oi Hospital Chan Kwok Wai Primary School	24
6 Dec 2012	G.C.C.C.I.T.K.D.Cheung Wong Wai Primary School	25
6 Dec 2012	Pok Oi Hospital Chan Kwok Wai Primary School	24
7 Dec 2012	S.H.K.Chu Yan Primary School	29
10 Dec 2012	S.H.K.Chu Yan Primary School	40
11 Dec 2012	S.H.K.Chu Yan Primary School	29
17 Dec 2012	Chiu Tsang Hok Wan Primary School	20
19 Dec 2012	HKFEW Wong Cho Bau School	24
20 Dec 2012	Kowloon Woman's Welfare Club Li Ping Memorial School	26
9 Jan 2013	Christain Alliance Toi Shan H.C. Chan Primary School	25
10 Jan 2013	Christain Alliance Toi Shan H.C. Chan Primary School	24
14 Jan 2013	Hong Kong Academy	40
18 Jan 2013	Tsung Tsin Primary School	27

Date	Name of school	Number of visitors
22 Jan 2013	S.H.K.Chu Yan Primary School	29
23 Jan 2013	HKFEW Wong Cho Bau School	24
24 Jan 2013	HKFEW Wong Cho Bau School	24
25 Jan 2013	Baptist Lui Ming Choi Primary School	38
25 Jan 2013	Aplichau Kaifong Primary School	25
28 Jan 2013	Tsung Tsin Primary School	27
29 Jan 2013	Beacon Hill school	30
30 Jan 2013	Yan Tak Catholic Primary School	25
31 Jan 2013	Yan Tak Catholic Primary School	28
1 Feb 2013	Beacon Hill school	30
4 Feb 2013	Salesian School	37
5 Feb 2013	Beacon Hill school	30
5 Feb 2013	St Bonaventure Catholic Primary School	38
6 Feb 2013	Tsung Tsin Primary School	26
6 Feb 2013	Shak Chung Shan Memorial Catholic Primary School	24
20 Feb 2013	Baptist Lui Ming Choi Primary School	38
25 Feb 2013	Fanling Government Primary School	38
5 Mar 2013	Po Leung Kuk Lam Man Chan English Primary School	23
6 Mar 2013	Po Leung Kuk Lam Man Chan English Primary School	23
6 Mar 2013	RTC GAIA School	20
	Total	959

There are currently two staff working in the Centre, involving an annual operating cost of $0.73 million. The cost used to set up the Centre amounts to $4.77 million as detailed below:

Consultancy fees	$	0.17	million
Building Services Facilities	$	1.58	million
Exhibits reusable in permanent Education Centre	$	2.23	million
Renovation costs	$	0.79	million
Total:	$	4.77	million

Before setting up the Centre, the Water Supplies Department (WSD) was planning that in the longer term (about four to five years later), a permanent Education Centre would be accommodated within the new office for the department's New Territories West regional office. We note that water resources is part of primary school curriculum for some time, so the early setting up of the Centre (mainly targeted at primary school students) could help deliver knowledge on water resources more effectively and promptly. We estimate that about 6 000 students could be received by the Education Centre each year. Thus, the Centre can benefit 24 000 to 30 000 students prior to opening of the permanent Centre, not to mention the positive impacts projected to their family members in promoting water conservation. The Centre will also play a vital role to support our other water conservation campaign.

Against the above, we have adopted an environmental friendly and frugal approach whilst most of the exhibits and interactive games currently displayed (about 50% of the total cost for setting up the Centre) could be reused in the permanent Education Centre to be set up in Tin Shui Wai.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)151

Question Serial No.

2115

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

What are the details of the planning and investigation study of a desalination plant in Tseung Kwan O? Will there be any assessment of the environmental impacts to the vicinity?

Asked by: Hon. QUAT, Elizabeth

Reply:

The planning and investigation study for the desalination plant in Tseung Kwan O commenced in December 2012 for completion by end 2014. The works of the study include detailed feasibility study; preliminary design; site investigation; environmental, traffic and drainage impact assessments; cost estimation and cost effectiveness analysis.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)152

Question Serial No.

0991

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

In connection with fresh water supply, please advise this Committee on:

a. The progress in continuing the planning and development of water resources and supply systems;

b. The proportion of the sources of fresh water supply in Hong Kong (i.e. locally collected rainwater against Dongjiang water purchased) in the past two years (i.e. 2011-12 to 2012-2013). What is the cost comparison among the latest locally collected rainwater, Dongjiang water purchased from the Mainland and the production of reclaimed water using reverse osmosis technology?

c. The total quantity of the discharge of water to the sea resulting from overflow from reservoirs in the past two years. Please provide a breakdown by reservoir of the proportion of the overflow quantity to fresh water supply in Hong Kong for the respective year.

d. Whether the Administration has conducted other projects, apart from the desalination plant in Tseung Kwan O, to explore local water sources in order to avoid wastage of fresh water resources and provide a steadier supply of water. If yes, what are the details?

Asked by: Hon. WONG Pik-wan, Helena

Reply:

a. The Water Supplies Department undertakes regular reviews of water supply and demand situations in Hong Kong for meeting future development needs. We are carrying out a planning and investigation study for a seawater desalination plant at Tseung Kwan O. We are also pursuing the planning of the supply of reclaimed water to Sheung Shui, Fanling and the Northeast New Territories New Development Areas for toilet flushing and other non-potable uses.

b. The quantities of fresh water supply from water collected locally and Dongjiang in the past two years are as follows:

	2011-12		**2012-13 (up to end Feb 2013)**	
	Quantity (million cubic metre (mcm)	**%**	**Quantity (mcm)**	**%**
Water collected locally	105	11.3	210	24.5
Dongjiang water	822	88.7	646	75.5
Total quantity of fresh water supply	**927**	**100**	**856**	**100**

The production costs per cubic metre of fresh water supply from locally collected and Dongjiang at 2012-13 price level are estimated to be about $4.0 and $8.4 respectively. The cost of reclaimed water using reverse osmosis technology is estimated to be about $10.4 per cubic metre.

c. The overflow quantities in 2011-12 and 2012-13 (up to end February 2013) were 0.3 mcm (about 0.03% of total water supply) and 15.4 mcm (about 1.8% of total water supply) respectively. The overflow is locally collected rainwater and occurred in small reservoirs during heavy rainstorms. Such overflow is an operational constraint rather than a loss.

The overflow quantities in reservoirs are as follows:

	Overflow Quantity (mcm) in 2011-12	**Overflow Quantity (mcm) in 2012-13 (up to end Feb 2013)**
Aberdeen	0.3	1.3
Kowloon	0	1.6
Shek Pik	0	0.9
Tai Tam	0	10.0
Tai Lam Chung	0	1.6
Total	**0.3**	**15.4**

d. Two pilot schemes conducted in 2006 on the recycling of treated effluent in Ngong Ping and Shek Wu Hui concluded that the use of reclaimed water is technically feasible in Hong Kong. We are also pursuing the planning of the supply of reclaimed water to Sheung Shui, Fanling and the Northeast New Territories New Development Areas for toilet flushing and other non-potable uses.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 2 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)219

Question Serial No.

4825

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

Regarding the planning and investigation study for a desalination plant in Tseung Kwan O, please advise on the details including the progress, estimated date of announcement and expenditure.

Asked by: Hon. CHAN Ka-lok, Kenneth

Reply:

The planning and investigation study of desalination plant at Tseung Kwan O commenced in December 2012. The scope of the planning and investigation study includes detailed feasibility study; preliminary design; site investigation; environmental, traffic and drainage impact assessments; cost estimation and cost effectiveness analysis. The study is currently at project inception and data collection stage. The study will be completed by end 2014 for comprehensive announcement of its findings. The provision for the study in 2013-14 is $9 million.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)220

Question Serial No.

4826

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

Please advise on the number of water main burst and leakage cases in the past year (2012-13) by district in accordance with the demarcation of District Councils, the estimated total quantity of fresh water lost due to such incidents, as well as the expenditure for urgent repairs of these water mains.

Asked by: Hon. CHAN Ka-lok, Kenneth

Reply:

The numbers of water main burst and leakage cases in Hong Kong in 2012-13 (up to February 2013) in accordance with the demarcation of District Councils are tabulated below –

District	Number of water main burst cases	Number of water main leakage cases
Central and Western	6	641
Eastern	9	427
Islands	1	314
Kowloon City	24	615
Kwai Tsing	44	332
Kwun Tong	16	601
North	1	1 000
Sai Kung	13	977

District	Number of water main burst cases	Number of water main leakage cases
Sha Tin	25	435
Sham Shui Po	26	305
Southern	3	427
Tai Po	14	427
Tsuen Wan	4	357
Tuen Mun	7	656
Wan Chai	9	584
Wong Tai Sin	3	180
Yau Tsim Mong	18	528
Yuen Long	20	1 892
Total	**243**	**10 698**

The leakage rate of fresh water mains in 2012 was 18% and the water loss due to main bursts was less than 0.01% of the total water supplied. The expenditure on urgent repairs of the above-mentioned water main burst and leakage cases is estimated to be about $120 million.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)221

Question Serial No.

4827

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

How many water wagons of the Water Supplies Department are there at present for providing fresh water and what are their capacities? What were the number of times of the use of water wagons in the past year (2012-13) and the relevant reasons? What is the expenditure for their maintenance? Has the Administration planned to procure new water wagons in the coming year? If yes, what are the expected number of and the estimated expenditure for water wagons to be procured?

Asked by: Hon. CHAN Ka-lok, Kenneth

Reply:

The Water Supplies Department (WSD) has five water wagons each with eight cubic metre storage capacity. The water wagons provide temporary potable water supply to the public when there is emergency water suspension affecting certain area. In 2012-13 (up to end February 2013), WSD has 285 cases of deploying water wagons to serve temporary water supply. The yearly maintenance expenditure of the existing water wagons is around $181,000.

WSD has arranged for supply of five additional water wagons at an estimated total cost of $6.75 million. Three of these new water wagons will be delivered in April 2013 whilst the remaining two before end June 2013.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)222

Question Serial No.

4828

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (3) Customer Services

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

Please provide the details of the cases of arrears of water charges in each of the past three years (i.e. 2010-11, 2011-12 and 2012-13) including:

(1) The number of cases of arrears of water charges for 3 months, 6 months, 12 months or above and the amounts involved; and

(2) The amounts of write-off.

In addition, what are the reasons and criteria for the Administration's decision of not recovering the arrears of water charges?

Asked by: Hon. CHAN Ka-lok, Kenneth

Reply:

The number of cases and amounts of arrears of water charges for the financial years 2010-11 to 2012-13 are as follows-

Arrears of water charges	2010-11 (as at 31.3.2011)		2011-12 (as at 31.3.2012)		2012-13 (as at 31.1.2013)	
	No.	$m	No.	$m	No.	$m
Less than 3 months	3 581	0.9	2 630	0.8	3 639	0.9
Between 3 - 6 months	3 934	0.9	2 969	0.9	3 234	0.7
Between 6 - 12 months	7 308	1.5	6 423	1.2	5 715	0.9
Longer than 12 months	9 496	6.7	2 786	5.8	1 951	5.2
Total	24 319	10.0	14 808	8.7	14 539	7.7

The average amount of write-off for the past three financial years (2010-11 to 2012-13) was $2.6 million per annum, which represented 0.1% of the water charges received. The arrears of water charges will be written off when all exhaustive actions taken to recover the arrears have failed. The main reasons for the write-off are that the debtors were untraceable,

deceased, bankrupt, or wound-up without adequate distributable dividends.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)223

Question Serial No.

4829

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (3) Customer Services

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

How many aged water meters did the Government replace in the past year (2012-13) and what was the expenditure involved? In addition, what is the work plan of the Water Supplies Department in this respect (including the expected number of water meters to be replaced and the estimated expenditure involved) for next year (2013-14)?

Asked by: Hon. CHAN Ka-lok, Kenneth

Reply:

We replaced around 210 000 aged water meters in 2012-13 whilst the expenditure on the cost of meter and the contractor's work was around $41 million. In 2013-14, we plan to replace about 180 000 aged water meters at an estimated cost of $39 million.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)224

Question Serial No.

4912

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (3) Customer Services

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

What are the expected number of persons served by and the estimated operating expenditure for the newly opened Water Resources Education Centre each year? Does the Government intend to relocate it to other district alongside with the Mongkok regional office? If yes, what are the details, estimated expenditure and cost of relocation?

Asked by: Hon. CHAN Ka-lok, Kenneth

Reply:

The newly opened Water Resources Education Centre (the Centre) in Mongkok is targetted to receive around 6 000 students per year. The annual operation expenditure of the Centre is about $0.73 million.

We plan to relocate the Centre alongside with the New Territories West Regional Office at Mongkok to Tin Shui Wai. We have earmarked a site in Tin Shui Wai for construction of a new government building for relocation of the Regional Office with the Centre. We have preliminarily assessed the technical feasibility of this new project and aim to complete the new building construction within four to five years. The expenditure for the new project and cost of relocation are being evaluated.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)225

Question Serial No.

4540

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

Please provide the locations and lengths of existing underground water mains with a service life of over thirty years in Hong Kong in the table below.

Location	Length (m)

Asked by: Hon. CHEUNG Kwok-che

Reply:

The lengths of the existing underground water mains with a service life of over thirty years in 18 districts of Hong Kong as at end February 2013 are set out in the table below.

Location (District)	Length (km)
Central &Western	169
Eastern	111
Islands	59
Kowloon City	160
Kwun Tong	103
Kwai Tsing	120
North	90
Southern	103

Sai Kung	80
Sham Shui Po	100
Sha Tin	80
Tuen Mun	99
Tai Po	56
Tsuen Wan	64
Wan Chai	125
Wong Tai Sin	55
Yuen Long	169
Yau Tsim Mong	124
Total	1 867

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)226

Question Serial No.

4541

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

Please provide in the table below the locations of underground water mains under the construction works of the "replacement and rehabilitation programme of water mains" at present and in the next three years (starting from 2013 to 14), estimated total lengths of pipes to be replaced and rehabilitated, starting dates/expected starting dates of work, expected completion dates of work, lengths of completed pipes and percentages of completion.

Location	Estimated total length of pipe to be replaced and rehabilitated (metres)	Starting date/expected starting date of work	Expected completion date of work	Length of the completed pipe (metres)	Percentage of completion (%)

Asked by: Hon. CHEUNG Kwok-che

Reply:

1. There are currently about 1 000 "replacement and rehabilitation of water mains" sites throughout the territories. These sites have different commencement and completion dates. The total length of water mains replaced or rehabilitated as at end February 2013 is 2 039 km (68% of the total works). The remaining 961 km are to be completed in stages in end 2015.

2. The latest position of the replacement and rehabilitation programme of water mains in 18 districts of Hong Kong as at end February 2013 is as follows: -

Hong Kong

District	Estimated total length to be replaced or rehabilitated (km) (1)	Length of completed water mains (km) (2)	Percentage of completion (%) (2)/[(1)+(2)]
Central & Western	88	146	62
Wan Chai	82	62	43
Eastern	79	73	48
Southern	32	95	75

Kowloon

District	Estimated total length to be replaced or rehabilitated (km) (1)	Length of completed water mains (km) (2)	Percentage of completion (%) (2)/[(1)+(2)]
Kwun Tong	61	92	60
Wong Tai Sin	22	75	77
Kowloon City	80	157	66
Yau Tsim Mong	72	145	67
Sham Shui Po	51	120	70

New Territories

District	Estimated total length to be replaced or rehabilitated (km) (1)	Length of completed water mains (km) (2)	Percentage of completion (%) (2)/[(1)+(2)]
Sai Kung	26	82	76
Sha Tin	34	148	81
Tai Po	22	96	81
North	29	144	83
Yuen Long	51	323	86
Tuen Mun	68	112	62
Tsuen Wan	47	46	49
Kwai Tsing	69	62	47
Islands	48	61	56

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)227

Question Serial No.

3482

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (3) Customer Services

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

Regarding the on-going meter replacement programme, please provide details including the progress of old meters replaced in the past three years (i.e. 2010-2012), the number of meters to be replaced in future and the time schedule of enhancing the accuracy of meters. Please also provide the expenditure and manpower involved in the meter replacement programme in the past three years (i.e. 2010-11 to 2012-13) and the estimated expenditure and manpower in 2013-14. How many complaints relating to the accuracy of water meters were received in the three respective years?

Asked by: Hon. CHEUNG Yu-yan, Tommy

Reply:

In 2010-11, 2011-12 and 2012-13, we have replaced 230 000, 190 000 and around 210 000 aged water meters respectively. The respective expenditure on the cost of meter and the contractor's work was $42 million, $35 million and around $41 million. About 80% of the meter replacement works were carried out by contractors and the remainder by our in-house staff, deploying about 50 staff each year on the task. We will continue to deploy similar manpower resources to replace about 180 000 aged water meters in 2013-14 at an estimated cost of $39 million.

With regular replacement of aged water meters, the overall meter accuracy level has been improving. The percentage of meters with accuracy level within plus or minus 3% of the actual consumption has increased from 94.1% in 2009 to 95.7% in 2012. We will strive to sustain the improvement by continuing with the meter replacement programme and the projected overall meter accuracy level is 96.0% for 2013.

The number of complaints disputing the accuracy of the water meters received in 2010-11, 2011-12 and 2012-13 (up to end January 2013) were 538, 404 and 305 respectively. Amongst them, there were respectively 29, 9 and 6 cases which resulted in downward adjustment of the water bills after the testing and follow-up investigations. The remaining cases did not involve inaccuracy of water meters requiring water bill adjustment.

Name in block letters:	L T MA
Post Title:	Director of Water Supplies
Date:	9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)228

Question Serial No.

3810

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

It is mentioned in the Aim that the Administration 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". Could the Administration advise this Committee on: the proportion of the sources of fresh water supply in Hong Kong in 2011-12 and 2012-13, and the cost comparison among the latest locally collected rainwater, Dongjiang water imported and the production of reclaimed water using reverse osmosis technology.

Asked by: Hon. FUNG Kin-kee, Frederick

Reply:

The proportion of the sources of the fresh water supply in Hong Kong from water collected locally and Dongjiang in the past two years are as follows:

	Water collected locally	Dongjiang water
2011-12	11.3%	88.7%
2012-13 (up to February 2013)	24.5%	75.5%

The production costs per cubic metre of fresh water supply from locally collected, Dongjiang and reclaimed water at 2012-13 price level are estimated to be about $4.0, $8.4 and $10.4 respectively.

Name in block letters:	L T MA
Post Title:	Director of Water Supplies
Date:	9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)229

Question Serial No.

3811

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

It is mentioned in the Brief Description that the Administration will "assess salt water supply requirements; as well as plan, design and construct reliable and efficient salt water supply and distribution systems to meet such requirements in good time". Could the Administration advise this Committee on: the progress of the study for harvesting rainwater via rainwater harvesting systems for purposes of toilet flushing and irrigation; the time when the rainwater harvesting systems will be officially introduced to harvest rainwater for different purposes such as flushing; and whether the Administration will set up regional rainwater recovery systems and secondary water supply systems for non-potable uses, so as to use rainwater resources more effectively.

Asked by: Hon. FUNG Kin-kee, Frederick

Reply:

We have been implementing public projects with rainwater harvesting as an alternative water resource for non-potable uses such as flushing. Setting up of regional rainwater recovery systems and secondary water supply systems for non-potable uses would have to be subject to cost benefit analysis in comparison with other possible options. Meanwhile, supply of seawater for toilet flushing and raw water from our impounding reservoirs for irrigation and augmentation of flushing supply are current practices with proven cost-effectiveness.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)230

Question Serial No.

3812

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

It is mentioned in Matters Requiring Special Attention in 2013-14 that the Administration will "continue to take forward the implementation of the total water management strategy for sustainable use of water resources with a focus on water conservation". Could the Administration advise this Committee on: the details of the aforesaid work; the promotion work of the Administration on water conservation; and whether the Administration will consider mandatory participation and speeding up the implementation of Water Efficiency Labelling Scheme when promoting the use of water saving appliances, so as to facilitate the public to select water efficient appliances.

Asked by: Hon. FUNG Kin-kee, Frederick

Reply:

To take forward the Total Water Management Strategy, in 2013-14, we will continue to enhance public education on water conservation; promote the use of water saving devices; press ahead with the water mains replacement and rehabilitation programme; enhance water leakage control through pressure management and active leakage control; and extend the salt water flushing supply system. On developing new water resources, we will continue to study the option of seawater desalination and water reclamation.

Activities being taken to promote water conservation in 2013-14 include:

1. Operating a temporary Water Resources Education Centre at the WSD Mong Kok Office for enhancing youngsters' knowledge of the importance of protecting water resources and water conservation.
2. Launching a pilot scheme on "Let's Save 10L Water" Campaign with a target of saving 10 litres of fresh water per capita per day. 1 000 primary school students and their family members will be invited to take part in the pilot scheme. After evaluating the results of the pilot scheme, the campaign will then be extended to the community.

3. Reaching out to the community and strengthen public awareness of water conservation through roving exhibitions at shopping malls and housing estates.
4. Producing water saving tips and promotional leaflets in Chinese, English, Indonesian, Tagalog and Thai for distribution to domestic helpers via employment agencies.

For the Water Efficiency Labelling Scheme, a "voluntary" approach is presently adopted. Participation in the scheme is satisfactory. We will review from time to time whether the scheme should be made mandatory.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)231

Question Serial No.

3813

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

Paragraph 97 of the Budget Speech says that "last year, we started a detailed planning and investigation study, including an assessment of the feasibility and cost-effectiveness, for the construction of a desalination plant on a reserved site in Tseung Kwan O, with a view to tapping sea water as a water source. Although the anticipated output capacity of the desalination plant will only account for five to ten per cent of Hong Kong's total water consumption, we hope that as technology advances and costs go down in the future, seawater desalination can serve as another water supply source and help reduce our reliance on other water sources in the long term". Could the Administration advise this Committee on: the latest progress of study for tapping seawater as a water source; the findings on the preliminary feasibility and cost-effectiveness; and the estimated completion date of desalination as a water source of the existing fresh water supply system.

Asked by: Hon. FUNG Kin-kee, Frederick

Reply:

The planning and investigation study of desalination plant in Tseung Kwan O commenced in December 2012 for completion by end of 2014. The scope of the planning and investigation study includes detailed feasibility study; preliminary design; site investigation; environmental, traffic and drainage impact assessments; cost estimation and cost effectiveness analysis. The study is currently at project inception and data collection stage. Subject to the study, the earliest date for commissioning of the desalination plant is expected to be around 2020.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)232

Question Serial No.

3814

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (3) Customer Services

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

It is mentioned in the Brief Description that the Administration will "monitor closely the level of arrears of water charges; and cope with the growth in the number of consumer accounts". Could the Administration advise this Committee on: the level of arrears of water charges including the number of cases, the amount and the irrecoverable water charges in the past three financial years (i.e. 2010-11 to 2012-13); and the estimated growth in the number of consumer accounts in the next three financial years (i.e. starting from 2013-14).

Asked by: Hon. FUNG Kin-kee, Frederick

Reply:

The level of arrears of water charges including the number of accounts and the total amount involved for the financial years 2010-11 to 2012-13 are provided below-

	2010-11 (as at 31.3.2011)	2011-12 (as at 31.3.2012)	2012-13 (as at 31.1.2013)
Number of accounts	24 319	14 808	14 539
Total Amounts ($)	10 million	8.7 million	7.7 million

The average amount of irrecoverable water charges for the past three financial years (2010-11 to 2012-13) was $2.6 million per annum, which represented 0.1% of the water charges received.

It is estimated that there will be an annual increase of 38 000 new water accounts from 2013-14 to 2015-16.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)233

Question Serial No.

3815

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (3) Customer Services

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

Regarding the bursting or apparent leaking of water pipes, could the Administration advise this committee on: the number of cases of bursting or apparent leaking of fresh water pipes and salt water pipes by district in accordance with the demarcation of District Councils in the past two financial years (i.e. 2011-12 and 2012-13); the main cause of bursting or apparent leaking after investigations; the longest and average hours of suspension of water supply affecting the general public as a result; and the longest and average time taken by the Department's staff for attending urgent repairs upon the outbreak of the incidents.

Asked by: Hon. FUNG Kin-kee, Frederick

Reply:

The numbers of fresh and salt water main burst and leakage cases in Hong Kong in 2011-12 and 2012-13 (up to February 2013) in accordance with the demarcation of District Councils are tabulated below –

(i) Numbers of water main burst and leakage cases in 2011-12 –

District	Numbers of water main burst and leakage cases in 2011-12			
	Fresh water main		Salt water main	
	Burst	Leakage	Burst	Leakage
Central and Western	14	511	5	242
Eastern	4	247	2	235
Islands	0	357	0	2
Kowloon City	19	307	7	242
Kwai Tsing	23	221	18	177
Kwun Tong	6	314	20	272

North	9	1 112	0	2
Sai Kung	4	1 140	5	58
Sha Tin	12	431	16	109
Sham Shui Po	15	232	22	140
Southern	3	388	3	80
Tai Po	3	422	5	66
Tsuen Wan	0	317	2	110
Tuen Mun	12	634	2	107
Wan Chai	3	414	2	181
Wong Tai Sin	5	80	14	94
Yau Tsim Mong	18	265	24	242
Yuen Long	20	2 365	0	1
Total	170	9 757	147	2 360

(ii) Numbers of water main burst and leakage cases in 2012-13 (up to February 2013) –

District	Numbers of water main burst and leakage cases in 2012-13 (up to February 2013)			
	Fresh water main		Salt water main	
	Burst	Leakage	Burst	Leakage
Central and Western	4	455	2	186
Eastern	3	253	6	174
Islands	1	313	0	1
Kowloon City	9	355	15	260
Kwai Tsing	31	211	13	121
Kwun Tong	5	358	11	243
North	0	999	1	1
Sai Kung	7	941	6	36
Sha Tin	10	339	15	96
Sham Shui Po	10	172	16	133
Southern	0	343	3	84
Tai Po	1	370	13	57
Tsuen Wan	2	254	2	103
Tuen Mun	3	554	4	102
Wan Chai	6	411	3	173
Wong Tai Sin	0	89	3	91
Yau Tsim Mong	4	281	14	247
Yuen Long	20	1 892	0	0
Total	116	8 590	127	2 108

Burst and leakage of water mains are commonly due to a confluence of various factors. The above-mentioned water main burst and leakage incidents were mainly caused by aged water mains, ground movements or external disturbances.

The average and longest time of fresh water supply suspension affecting the general public were 1.4 and 42.3 hours respectively. Corresponding amounts of time for salt water supply suspension affecting the general public were 6.6 and 70.5 hours respectively. The exceptional cases with much longer time of suspension of water supply were isolated cases due to such reasons as i) congested ground conditions with lots of underground pipes, conduits and cables of the utility companies, ii) repairs requiring breaking of large concrete blocks, iii) fabrication of special pipe fittings to suit site conditions, iv) time for locating leakage spots, and v) work affected by adverse weather conditions such as typhoon.

The average and longest time taken by the Department's staff for attending urgent repairs upon the outbreak of fresh water main bursts were 0.4 and 1.2 hours respectively. Corresponding amounts of time for attending urgent repair in the case of salt water main bursts were 0.4 and 1.6 hours respectively. The cases with longer time for attending urgent repairs were isolated cases due to such reasons as i) the emergency gangs concerned being engaged in dealing with other main burst incidents, and ii) remote location of burst main or busy traffic condition requiring longer travelling time for the emergency gang to reach the site.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)234

Question Serial No.

3816

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (3) Customer Services

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

It is mentioned in the Brief Description that the Administration will "improve efficiency and effectiveness in dealing with customer enquiries and complaints". Could the Administration advise this Committee on: the number of cases the Water Supplies Department received in the past two years (i.e. 2011-2012 and 2012-13) from registered consumers querying the accuracy of water meters and requesting water meter tests; the number of bills requiring adjustments due to inaccuracy of water meters as confirmed in the follow-up investigation and the amount involved.

Asked by: Hon. FUNG Kin-kee, Frederick

Reply:

In 2011-12 and 2012-13 (up to end January 2013), WSD issued 7.6 million and 6.4 million water bills respectively. Out of these bills, there were a total of 709 cases of dispute, 404 in 2011-12 and 305 in 2012-13 (up to end January 2013), over the accuracy of water meters wherein the registered consumers requested for meter testing. After testing and follow-up investigations, nine cases in 2011-12 and six cases in 2012-13 required downward adjustment of the bills due to inaccurate water meters, which amounted to $46,462 and $93,376 respectively.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)235

Question Serial No.

3817

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (3) Customer Services

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

It is mentioned in Matters Requiring Special Attention in 2013-14 that the Administration will "continue to implement the water meter replacement programme to replace aged water meters in order to improve the overall meter accuracy". Could the Administration advise this Committee on: the latest progress of the water meter replacement programme; the progress of and expenditure on aged meter replacement in the past three years (i.e. 2010-2011 to 2012-2013); and the estimated completion date of replacing all aged meters.

Asked by: Hon. FUNG Kin-kee, Frederick

Reply:

In 2010-11, 2011-12 and 2012-13, we replaced 230 000, 190 000 and around 210 000 aged water meters respectively. The respective expenditure on the cost of meter and the contractor's work was $42 million, $35 million and around $41 million. In 2013-14, we will continue to replace about 180 000 aged water meters at an estimated cost of $39 million. The aged meter replacement work is a recurrent exercise aiming for timely replacement of meters meeting replacement criteria.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)236

Question Serial No.

3818

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

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

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

Could the Administration advise this Committee on: the number of full-time non-civil service contract (NCSC) staff employed by the Water Supplies Department in the past three years (i.e. 2010-2011 and 2012-13); the number of NCSC staff with over 3 years and 5 years of service and their percentage share of the total; and whether the Administration will conduct review on the continuous employment of these NCSC staff and consider converting these posts to civil service posts, so as to meet long-term service needs.

Asked by: Hon. FUNG Kin-kee, Frederick

Reply:

The number of full-time NCSC staff employed in the past three years and the number of NCSC staff with over 3 years and 5 years of service are provided below –

(a) Number of full-time **NCSC staff in the past three years**

	2012-13 (as at 31.12.2012)	2011-12 (as at 31.3.2012)	2010-11 (as at 31.3.2011)
Number of NCSC Staff:	118	123	100

(b) Number of NCSC staff with years of service over 3 years or above

Length of services	2012-13 (as at 31.12.2012)	2011-12 (as at 31.3.2012)	2010-11 (as at 31.3.2011)
	Number of NCSC staff (Percentage against total number of NCSC Staff)		
Over 5 years	43 (36.4%)	45 (36.6%)	51 (51%)
Over 3 years to 5 years	11 (9.3%)	6 (4.9%)	7 (7%)

We are conscious of the need to ensure that the engagement of NCSC staff fits the ambit of the NCSC Staff Scheme and will review from time to time whether the service needs should better be met by other means. Should a permanent service need be established, we will seek to replace NCSC positions by civil service posts. Up to 31 December 2012, there have been 14 NCSC staff appointed as civil servants within the Water Supplies Department in 2012-13.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)237

Question Serial No.

3671

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title): (000) Operational expenses

Programme:

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

Regarding the departmental records management work over the past three years (up to 2012-13) :

(a) Please provide information on the number and ranks of officers designated to perform such work. If there is no officer designated for such work, please provide information on the number of officers and the hours of work involved in records management duties, and the other duties they have to undertake in addition to records management;

(b) Please list in the table below information on programme and administrative records which have been closed pending transfer to Government Records Service (GRS) for appraisal :

Category of records	Years covered by the records	Number and linear metres of records	Retention period approved by GRS	Are they confidential documents

(c) Please list in the table below information on programme and administrative records which have been transferred to GRS for retention :

Category of records	Years covered by the records	Number and linear metres of records	Year that the records were transferred to GRS	Retention period approved by GRS	Are they confidential documents

(d) Please list in the table below information on records which have been approved for destruction by GRS :

Category of records	Years covered by the records	Number and linear metres of records	Year that the records were transferred to GRS	Retention period approved by GRS	Are they confidential documents

Asked by: Hon. HO Sau-lan, Cyd

Reply:

Information on the departmental records management work undertaken by the Water Supplies Department over the past three years (up to 2012-13) is provided below –

(a) Number and rank of designated officers:

There is one Confidential Assistant designated to perform records management work. A number of other officers of different grades including executive, clerical and secretarial are also involved in these duties. However, as records management is only part of their overall duties, we are not able to provide a breakdown of the manpower spent solely on the work.

(b) Information on programme and administrative records which have been closed pending transfer to the Government Records Service (GRS) for appraisal :

Category of records	Years covered by the records	Number and linear metres of records	Retention period approved by GRS	Are they confidential documents
Programme Records	1991-2012	No.: 4 713 (153 linear metres)	These records have yet to be appraised by GRS, hence the approved retention period is not yet known	No
Administrative records	2005-2012	No.:1 703 (58 linear metres)	3 - 5 years after action completed	No

(c) Information on programme and administrative records which have been transferred to GRS for retention:

Category of record	Years covered by the record	Number and linear metres of records	Year that records were transferred to GRS	Retention period approved by GRS	Are they confidential documents
Programme records	1992-2012	No.: 969 (42 linear metres)	2012	10 years after records have become inactive	No

(d) Information on records which have been approved for destruction by GRS:

Category of records	Years covered by the records	Number and linear metres of records	Year that records were transferred to GRS	Retention period approved by GRS	Are they confidential documents
Programme records	1997-2012	No.: 1 740 (97 linear metres)	The records were kept by the department until destruction	3 - 20 years after the records have become inactive	No

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)238

CONTROLLING OFFICER'S REPLY TO QUESTION

Question Serial No.

4632

Head: 194 Water Supplies Department Subhead (No. & title): Not specified

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

In the past two years (2011 and 2012), the number of projects under construction remained at 39. What is the progress of the relevant projects? The projects have been implemented for a period of time. The estimated expenditure should have reduced slowly. Why do the estimates of the 39 projects increase but not decrease in the coming year? Please advise on the breakdown of the estimates of these projects.

Asked by: Hon. Dennis KWOK

Reply:

We introduce new projects every year to improve our services. Whilst the number of projects under construction in 2011 and 2012 is the same, there are projects completed and new projects commenced within the years. The estimated expenditure will increase with the water mains rehabilitation and replacement projects getting into full swing.

The cost estimate breakdown of the projects under construction in 2013 is provided as follows:-

Project Category	**Estimates ($ million)**
Construction of new water supply systems	246
Uprating/Improvement of existing water supply systems	176
Replacement and rehabilitation of water mains	2,493
Improvement to water treatment works	422
Minor improvement works	560
Total	**3,897**

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)239

Question Serial No.

4633

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

The Administration said that it would strive to improve the problem of water main leakage to prevent wastage of fresh water. However, the leakage rate of water mains only reduced slightly by 1% in each of the past two years. Please advise on:

(a) The quantity of fresh water lost due to leakage of water mains in the past two years (2011-12, 2012-13).

(b) The measures which the Administration has taken to reduce water main leakage, the manpower and expenditure involved in the implementation of the measures and the effectiveness of such measures.

(c) The reason for the slow progress of reducing water main leakage, the measures which the Administration can take to greatly improve water main leakage and the expenditure involved.

Asked by: Hon. KWOK, Dennis

Reply:

(a) The water main leakage rates of 2011 and 2012 were 19% and 18% respectively.

With service reservoirs located at high altitude for water supply to premises at different levels, water mains at lower altitudes are operating under a relatively high water pressure which renders them more susceptible to leakage. Therefore, water main leakage is considered more an operational constraint rather than a loss.

(b) We have been taking a multi-pronged approach to tackle the water main leakage problem including leakage detection, pressure management and replacement and rehabilitation of water mains. In 2012-13, the expenditure on implementing these measures is estimated to be $2,256 million, of which $333 million is for the employment of consultants including site staff for supervision of the implementation

of these measures. The measures taken have demonstrated to be very effective and the leakage rate has been reduced from 25% in 2001 to 18% in 2012.

(c) In implementing the above measures notably the replacement and rehabilitation of water mains, we have endeavoured to fast-track the works programmes while striking a balance between expedited improvement to the distribution network to reduce leakage and the need to minimise disruption to road traffic and the local environment. We will however keep on monitoring the conditions of the water mains and advance the works of those water mains in need of earlier maintenance, replacement or rehabilitation. We consider that the approach adopted has effectively reduced the leakage rate and we will press ahead with the above-mentioned measures in 2013-14 involving an estimated expenditure of $2,480 million.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)240

Question Serial No.

4634

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

The Administration said that it would continue to implement the Total Water Management Strategy with a focus on water conservation. Please advise on:

(a) The measures on water conservation taken at present apart from rehabilitation of leaking water mains to reduce wastage of fresh water, the expenditure items involved in the implementation of the measures and the relevant amounts.

(b) The estimated quantity of water conserved each year by implementing such measures and the amount of water charges involved.

Asked by: Hon. KWOK, Dennis

Reply:

(a) To take forward the Total Water Management (TWM) Strategy, apart from the water mains replacement and rehabilitation programme, we continue to a) enhance public education on water conservation; b) promote the use of and retrofitting government buildings and schools with water saving devices; c) enhance water leakage control; and d) extend the salt water flushing supply system. The total expenditure of these measures in 2012-13 was $388 million.

(b) With the successful implementation of the long-term TWM Strategy, we expect that 236 million cubic metres of fresh water could be saved annually by 2030, involving an estimated water charges of about $640 million calculated at existing water tariff.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)241

Question Serial No.

4655

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

According to Matters Requiring Special Attention in 2013-14 under Programme (1), the Administration will continue with the construction of stages 3 and 4 of the replacement and rehabilitation programme (R&R programme) of water mains. Could the Administration advise on:

1. The progress of the construction of stages 3 and 4 of the replacement and rehabilitation programme of water mains in 2012-13, the districts of the construction locations in details, the lengths in kilometres of water mains replaced or rehabilitated, and the expenditure and manpower involved in the construction.

2. The target of the construction of stages 3 and 4 of the replacement and rehabilitation programme of water mains in the coming year, the districts of the construction locations in details, the expected lengths in kilometres of water mains replaced or rehabilitated.

Asked by: Hon. KWOK Wai-keung

Reply:

1. In 2012-13 (up to February 2013), the length of water mains replaced or rehabilitated under stage 3 and stage 4 of the R&R programme is 488 km (61% of the stage 3 works) and 219 km (26% of the stage 4 works) respectively. The sites of water mains works are mainly located in Kwun Tong, Kowloon City, Sai Kung, Tuen Mun, Yau Tsim Mong and Yuen Long districts. The expenditure for stage 3 and stage 4 works in 2012-13 is $2,038 million of which $290 million is for the employment of consultants including site staff for supervision of the construction works.

2. There are currently about 1 000 "replacement and rehabilitation of water mains" sites throughout the whole territory. A total of about 340 km of water mains is planned to be replaced or rehabilitated in 2013-14.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)242

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Question Serial No.

5356

Head: 194 Water Supplies Department Subhead (No. & title): 000 Operational Expenses

Programme:

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:
On engagement of "agency workers", please provide the following information:

	2012-13 (the latest position)
Number of contracts with employment agencies	( )
Contract sum paid to each employment agency	( )
Total amount of commission paid to each employment agency	( )
Duration of service for each employment agency	( )
Number of agency workers	( )
Details of the positions held by agency workers	
Monthly salary range of agency workers • $30,001 or above • $16,001 - $30,000 • $8,001 - $16,000 • $6,501 - $8,000 • $6,240 - $6,500 • less than $6,240	 ( ) ( ) ( ) ( ) ( ) ( )
Length of service of agency workers • 15 years or above • 10 - 15 years • 5 - 10 years • 3 - 5 years • 1 - 3 years • less than 1 year	 ( ) ( ) ( ) ( ) ( ) ( )
Percentage of agency workers against the total staff in the department	( )
Percentage of expenditure for employment agencies against the total staff costs in the department	( )
Number of workers with paid meal break Number of workers without paid meal break	( ) ( )
Number of workers working 5 days per week Number of workers working 6 days per week	( ) ( )

Percentages in ( ) denote comparison with 2011-12

Asked by: Hon. WONG Kwok-hing

Reply:

The information in respect of engagement of agency workers is appended below. This information excludes services provided under term contracts centrally administered by the Office of the Government Chief Information Officer.

(a) The number of contracts with employment agencies (EAs)

2012-13 (as at 30.9.12)
8 (-20.0%)

(b) Contract sums and duration of services

Contract sum	**2012-13** (as at 30.9.12) **Number of contracts**
Less than $0.5 million	1 (-)
$0.5 million to $1 million	1 (-66.7%)
Over $1 million	6 (-14.3%)
Total:	**8 (-20.0%)**

Duration of services	**2012-13** (as at 30.9.12**)** **Number of contracts**
6 months or less	0 (-)
Over 6 months to 1 year	8 (-11.1%)
Over 1 year to 2 years	0 (-100%)
Over 2 years	0 (-)
Total:	**8 (-20.0%)**

(c) Commission paid to EAs

In procuring employment agency service, government departments are required to comply with the relevant Stores and Procurement Regulations, Financial Circulars and guidelines issued by the Civil Service Bureau. These regulations and guidelines do not require the departments to specify the amount or the rate of commission payable to EAs. As such, we do not have information on the commission paid to EAs.

(d) Number of workers against their job categories

	2012-13 (as at 30.9.12)
Number of workers	69 (-32.4%)

Job categories of workers Note	**2012-13** (as at 30.9.12) **Number of workers**
Backend office support	2 (-93.5%)
Technical services	67 (-5.6%)
Total:	**69 (-32.4%)**

Note: Agency workers are generally referred to as temporary staff and are not assigned any post titles. However, we have provided information on the workers by two broad job categories, viz. backend office support and technical services.

(e) Monthly salary range of agency workers

With the implementation of the Statutory Minimum Wage (SMW) since 1 May 2011, bidders are required to pay their agency workers salaries not lower than the average monthly wages for "General Worker for all selected industries" in the Quarterly Report for December 2010, unless it is overtaken by the prevailing SMW plus one paid rest day in every period of seven days. For the period from May 2011 to September 2012, the minimum monthly wage specified in the contracts was $8,031.

(f) Length of service of agency workers

The mode of using agency workers is that government departments and an EA enter into a service contract under which the agency will supply manpower as and when required. As long as the requirements of the government departments (in terms of the number of agency workers and the qualifications and/or experience required from agency workers) are satisfied, the EA may arrange any of their employees to work in the departments or arrange replacement agency workers during the contract period for different reasons. Therefore, we do not have information on the years of service of agency workers who are employees of the EAs and are at the disposal of the latter.

(g) Percentage of workers Note against the total number of staff in the Department

2012-13 (as at 30.9.12)
1.3%

Note: For full-time workers only.

(h) Percentage of expenditure for EAs against the total staff costs in the Department

2012-13 (as at 30.9.12)
0.8%

(i) Meal break for workers

The agency workers are employed by the EAs, and whether the meal break is paid or not is governed by the employment contract between the two parties. We do not have information on this matter.

(j) Number of workers against working days **Note**

Working days	**2012-13** (as at 30.9.12) **Number of workers**
5 working days per week	59 (-36.6%)
6 working days per week	0 (-)
Total:	**59 (-36.6%)**

Note: For full-time workers only.

Percentages in ( ) denote comparision with 2011-12, except where the relevant figure in 2011-12 is zero.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)243

Question Serial No.

5357

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title): 000 Operational Expenses

Programme:

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:
On engagement of "outsourced workers", please provide the following information:

	2012-13 (the latest position)
Number of outsourced service contracts	( )
Total expenditure for outsourced service providers	( )
Duration of service for each outsourced service provider	( )
Number of workers engaged through outsourced service providers	( )
Details of the positions held by outsourced workers (e.g. customer service, property management, security, cleansing and information technology)	
Monthly salary range of outsourced workers	
• $30,001 or above	( )
• $16,001 - $30,000	( )
• $8,001 - $16,000	( )
• $6,501 - $8,000	( )
• $6,240 - $6,500	( )
• less than 6,240	( )
Length of service of outsourced workers	
• 15 years or above	( )
• 10 - 15 years	( )
• 5 - 10 years	( )
• 3 - 5 years	( )
• 1 - 3 years	( )
• less than 1 year	( )
Percentage of outsourced workers against the total staff in the department	( )
Percentage of expenditure for outsourced service providers against the total staff costs in the department	( )
Number of workers with paid meal break	( )
Number of workers without paid meal break	( )
Number of workers working 5 days per week	( )
Number of workers working 6 days per week	( )

Percentages in ( ) denote comparison with 2011-12

Asked by: Hon. WONG Kwok-hing

Reply:

The department uses a wide range of outsourced services, such as cleansing and security, information technology support, etc. The requested information is provided below.

(a) Number of outsourced service contracts

2012-13 (as at 31.12.12)
35 (-27.1%)

(b) Total expenditure for outsourced service providers

2012-13 (up to 31.12.12) ($M)
47.8 (+3.0%)

(c) Duration of outsourced service contracts

Duration of service	**2012-13** (as at 31.12.12) **Number of contracts**
6 months or less	0 (-)
Over 6 months to 1 year	18 (+12.5%)
Over 1 year to 2 years	13 (-51.9%)
Over 2 years	4 (-20%)
Total:	**35 (-27.1%)**

(d) Total number of workers engaged through outsourced service providers **Note**

2012-13 (as at 31.12.12)
264 (-1.1%)

Note : Only those contracts with specified number of staff to be provided are counted.

(e) Number of outsourced workers against their work nature

Nature of service contracts	**2012-13** (as at 31.12.12) **Number of workers**
Security	107 (-)
Cleansing	54 (-11.5%)
Information Technology	15 (+7.1%)
Drivers	80 (+3.9%)
Logistics (Store support)	8 (-)
Total:	**264 (-1.1%)**

(f) Salaries of outsourced workers

After the implementation of the Statutory Minimum Wage (SMW) on 1 May 2011, for service contracts on security and cleansing, contractors are required to pay their workers wages not lower than the prevailing SMW.

For other service contracts, we specify and require only the service to be provided. We do not have information about the salaries of the workers employed by the contractors.

(g) Length of service of outsourced workers

The mode of using outsourced workers is that government departments and the contractor enter into a service contract under which the contractor will supply manpower as and when required. As long as the requirements of the government departments (in terms of the number of outsourced workers and the qualifications and/or experience required from outsourced workers) are satisfied, the contractor may arrange any of their employees to work in the departments or arrange replacement outsourced workers during the contract period for different reasons. Therefore, we do not have information on the years of service of outsourced workers who are employees of the contractors and are at the disposal of the latter.

(h) Percentage of outsourced workers against the total staff in the Department

2012-13 (as at 31.12.12)
5.8%

(i) Percentage of expenditure for outsourced service providers against the total staff costs in the Department

2012-13 (up to 31.12.12)
4.3%

(j) Meal break for outsourced workers

The outsourced workers are employed by the outsourced contractors, and whether the meal break is paid or not is governed by the employment contract between the two parties. We do not have information on this matter.

(k) Number of outsourced workers against working days

	2012-13 (as at 31.12.12)
Working days	**Number of workers**
5 working days per week	143 (+15.3%)
6 working days per week	121 (-15.4%)
Total:	**264 (-1.1%)**

Percentages in ( ) denote comparison with 2011-12, except where the relevant figure in 2011-12 is zero.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)244

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Question Serial No.

5358

Head: 194 Water Supplies Department Subhead (No. & title): (000) Operational expenses

Programme:

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

Regarding the employment of "non-civil service contract (NCSC) staff", please provide the following information:

	2012-13 (the latest position)
Number of NCSC staff	( )
Details of the positions held by NCSC staff	
Total expenditure on salaries for NCSC staff	( )
Monthly salary range of NCSC staff • $30,001 or above • $16,001 - $30,000 • $8,001 - $16,000 • $6,501 - $8,000 • $6,240 - $6,500 • less than 6,240	 ( ) ( ) ( ) ( ) ( ) ( )
Length of service of NCSC staff • 15 years or above • 10 - 15 years • 5 - 10 years • 3 - 5 years • 1 - 3 years • less than 1 year	 ( ) ( ) ( ) ( ) ( ) ( )
Number of NCSC staff successfully appointed as civil servants	( )
Number of NCSC staff failed to be appointed as civil servants	( )
Percentage of NCSC staff against the total staff in the department	( )
Percentage of staff costs for NCSC staff against the total staff costs in the department	( )
Number of NCSC staff with paid meal break Number of NCSC staff without paid meal break	( ) ( )
Number of NCSC staff working 5 days per week Number of NCSC staff working 6 days per week	( ) ( )
Number of NCSC staff with application for paternity leave Number of NCSC staff with approval granted for paternity leave	( ) ( )

Percentages in ( ) denote comparison with 2011-12

Asked by: Hon. WONG Kwok-hing

Reply:

Information on the employment of full-time non-civil service contract (NCSC) staff is provided below.

(a) Number of NCSC staff against their job nature

Job nature	**2012 – 13** (as at 31.12.12)
	Number of NCSC staff
Professional	6 (-40.0%)
Technical & inspectorate	20 (-23.1%)
General administration	92 (-6.1%)
Total:	**118 (-11.9%)**

(b) Total expenditure on salary of NCSC staff

2012-13 (up to 31.12.12) ($M)
21.1 (-)

(c) Number of NCSC staff against their salaries and length of service

Monthly salary	**2012-13** (as at 31.12.12)
	Number of NCSC staff
$30,001 or above	16 (-11.1%)
$16,001 to $30,000	30 (-)
$8,001 to $16,000	72 (-16.3%)
$6,501 to $8,000	0 (-)
$6,240 to $6,500	0 (-)
Less than $6,240	0 (-)
Total:	**118 (-11.9%)**

Length of services	**2012-13** (as at 31.12.12)
	Number of NCSC staff
15 years or above	0 (-)
10 years to less than 15 years	27 (-10.0%)
5 years to less than 10 years	16 (-15.8%)
3 years to less than 5 years	11 (+83.3%)
1 year to less than 3 years	50 (+117.4%)
Less than 1 year	14 (-75.0%)
Total:	**118 (-11.9%)**

(d) Number of NCSC staff appointed as civil servant [(Note1)]

2012-13 (up to 31.12.12)
14 (-12.5%)

Note 1: Including information on appointment of NCSC staff as civil servant within WSD only. The said NCSC staff have joined the civil servant through an open fair and competitive process.

(e) Number of NCSC staff failed to be appointed as civil servant

2012-13 (up to 31.12.12)
No record

(f) Percentage of NCSC staff against the total number of staff in the Department

2012-13 (as at 31.12.12)
2.6%

(g) Percentage of staff costs for NCSC staff against the total staff costs in the Department

2012-13 (up to 31.12.12)
1.9%

(h) Number of NCSC staff against meal break

Meal break	**2012-13** (as at 31.12.12)
	Number of NCSC staff
Paid meal break	102 (-5.6%)
Unpaid meal break	16 (-38.5%)
Total:	**118 (-11.9%)**

(i) Number of NCSC staff against working days per week [(Note 2)]

Working days	**2012-13** (as at 31.12.12)
	Number of NCSC staff
5 working days per week[(Note)]	118 (-11.9%)
6 working days per week	0 (-)
Total:	**118 (-11.9%)**

Note 2: Including staff who are rostered to work shift for 5 days or less in a week.

(j) Number of NCSC staff relating to paternity leave (Note 3)

	2012-13 (up to 31.12.12)
	Number of NCSC staff
Application for paternity leave	0
Approval for paternity leave application	0

Note 3: NCSC staff are eligible for paternity leave with effect from 1 April 2012.

Percentages in ( ) denote comparison with 2011-12, except where the relevant figure in 2011-12 is zero.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

DEVB(W)245

Question Serial No.

4603

CONTROLLING OFFICER'S REPLY TO INITIAL WRITTEN QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

Regarding the maintenance of water mains and the replacement and rehabilitation programme of water mains, please advise this Committee on:

1. The number of water main burst incidents in the past three years (2010-11, 2011-12, 2012-13) with a breakdown by 18 districts over the territory.

2. The number of aforesaid incidents involving water mains which has completed the programme and the number of such water mains involved in one or more than one incident with a breakdown by the relevant information including dates of the incidents and locations.

3. The completion date of the entire programme; and the manpower and expenditure involved in the programme in the past three years (2010-11, 2011-12, 2012-13) and coming year (2013-14).

Asked by: Hon. WU Chi-wai

Reply:

1. The numbers of water main burst cases in Hong Kong in 2010-11, 2011-12 and 2012-13 (up to February 2013) with a breakdown by 18 districts are tabulated below -

District	Number of water main burst cases		
	2010-11	2011-12	2012-13 (up to February 2013)
Central and Western	19	19	6

Eastern	16	6	9
Islands	0	0	1
Kowloon City	53	26	24
Kwai Tsing	33	41	44
Kwun Tong	100	26	16
North	11	9	1
Sai Kung	16	9	13
Sha Tin	62	28	25
Sham Shui Po	68	37	26
Southern	46	6	3
Tai Po	22	8	14
Tsuen Wan	7	2	4
Tuen Mun	26	14	7
Wan Chai	18	5	9
Wong Tai Sin	14	19	3
Yau Tsim Mong	78	42	18
Yuen Long	21	20	20
Total	610	317	243

2. Of the above water main burst incidents, 12 (about 1%) involved water mains which were replaced or rehabilitated under the water mains replacement and rehabilitation (R&R) programme. All 12 incidents were isolated cases with water mains bursting caused by ground movement or latent defects. There was no recurrence of water burst in these sites. The dates and locations of the occurrence of the 12 water main burst incidents are as follows:

Date	Location
26 June 2010	Shek Kip Mei Street, Sham Shui Po
10 August 2010	Nga Tsin Long Road, Kowloon City

28 August 2010	Yip Kan Street, Southern
27 September 2010	Nam Kok Road, Kowloon City
16 January 2011	Norfolk Road, Kowloon City
20 January 2011	Tung Choi Street, Yau Tsim Mong
29 April 2011	Cheung Wing Road, Kwai Tsing
26 December 2011	Maple Street, Sham Shui Po
29 February 2012	Ki Lung Street, Sham Shui Po
5 June 2012	Changsha Street, Yau Tsim Mong
11 October 2012	Beacon Hill Road, Kowloon City
22 October 2012	Tai Pak Tin Street, Kwai Tsing

3. The current R&R programme for replacement and rehabilitations of 3 000 km water mains is planned to be completed in end 2015. In 2010-11 and 2011-12, the expenditure on the R&R programme were $2,204 million and $1,977 million respectively while the expenditure in 2012-13 is estimated to be $2,187 million. Out of the above expenditures, $284 million, $267 million and $317million were for the employment of consultants including site staff for supervision of the construction works in 2010-11, 2011-12 and 2012-13 respectively.

   In 2013-14, we target to spend $2,335million on the R&R programme of which $339 million is for the employment of consultants including site staff for supervision of the construction works.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 9 April 2013

Examination of Estimates of Expenditure 2013-14

Reply Serial No.

S-DEVB(W)12

Question Serial No.

S065

CONTROLLING OFFICER'S REPLY TO SUPPLEMENTARY QUESTION

Head: 194 Water Supplies Department Subhead (No. & title):

Programme: (1) Water Supply: Planning and Distribution

Controlling Officer: Director of Water Supplies

Director of Bureau: Secretary for Development

Question:

To follow up the questions which I raised during the Special Finance Committee Meeting, would the Director, MA Lee-tak, provide further information on:

(1) the respective percentages of the quantity of fresh water lost due to water main bursts against the annual quantity of fresh water supply in the past three years;

(2) the respective percentages of the quantity of fresh water used for flushing against the annual quantity of fresh water supply in the past three years; and

(3) the respective percentages of the quantity of fresh water lost due to overflow from our reservoirs against the annual quantity of fresh water supply in the past three years?

Asked by: Hon. WONG Kwok-hing

Reply:

The concerned percentages are given in the following table -

		2010-11	2011-12	2012-13
(1)	Percentage of the quantity of fresh water lost due to water main bursts against the annual quantity of fresh water supply	0.01%	Less than 0.01%	Less than 0.01%
(2)	Percentage of the quantity of fresh water used for flushing against the annual quantity of fresh water supply	8.4%	8.2%	7.9% (Projected figure)
(3)	Percentage of the quantity of fresh water lost due to overflow from our reservoirs against the annual quantity of fresh water supply	2.7%[1]	0.03%	1.7%[1]

Note:

1) The overflow is locally collected rainwater and occurs normally in small reservoirs during heavy rainstorms that fluctuate from year to year. Such overflow is an operational constraint rather than a loss.

Name in block letters: L T MA

Post Title: Director of Water Supplies

Date: 16 April 2013