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MINISTRY OF THE ENVIRONMENT AND WATER RESOURCES

OVERVIEW

Mission Statement

To deliver and sustain a clean and healthy environment and water resources for all in Singapore.

FY2008 EXPENDITURE ESTIMATES

Expenditure Estimates by Object Class

Code	Object Class	Actual FY2006	Estimated FY2007	Revised FY2007	Estimated FY2008	Change over FY2007	
	TOTAL EXPENDITURE	\$983,966,783	\$870,219,890	\$854,838,700	\$1,006,681,200	\$151,842,500	17.8%
	Main Estimates						
	OPERATING EXPENDITURE	\$413,512,292	\$469,055,490	\$464,519,500	\$657,961,900	\$193,442,400	41.6%
	<i>RUNNING COSTS</i>	<i>\$409,318,168</i>	<i>\$464,261,490</i>	<i>\$459,725,500</i>	<i>\$653,438,500</i>	<i>\$193,713,000</i>	<i>42.1%</i>
1000	Expenditure on Manpower	\$11,286,407	\$13,243,000	\$16,261,000	\$18,316,100	\$2,055,100	12.6%
1200	Political Appointments	1,253,155	1,600,000	1,600,000	2,605,500	1,005,500	62.8
1500	Permanent Staff	10,029,292	11,642,400	14,660,400	15,710,600	1,050,200	7.2
1600	Temporary, Daily-Rated & Other Manpower	3,960	600	600	0	-600	-100.0
2000	Other Operating Expenditure	\$4,726,480	\$11,068,890	\$8,050,900	\$16,052,200	\$8,001,300	99.4%
2100	Supplies & Services	3,556,878	9,397,090	6,642,500	13,786,300	7,143,800	107.5
2300	Manpower Development	262,239	398,500	343,200	425,600	82,400	24.0
2400	Public Relations & Exercises	765,634	1,196,300	988,200	1,589,300	601,100	60.8
2700	Equipment	141,729	77,000	77,000	251,000	174,000	226.0
3000	Operating Grant	\$393,305,281	\$439,949,600	\$435,413,600	\$619,070,200	\$183,656,600	42.2%
3100	Operating Grant to Statutory Boards	393,305,281	439,949,600	435,413,600	619,070,200	183,656,600	42.2
	<i>TRANSFERS</i>	<i>\$4,194,124</i>	<i>\$4,794,000</i>	<i>\$4,794,000</i>	<i>\$4,523,400</i>	<i>-\$270,600</i>	<i>-5.6%</i>
3500	Social Transfers	428,000	345,000	345,000	0	-345,000	-100.0
3600	Subventions	3,766,124	4,449,000	4,449,000	4,523,400	74,400	1.7

Expenditure Estimates by Object Class - continued

Code	Object Class	Actual FY2006	Estimated FY2007	Revised FY2007	Estimated FY2008	Change over FY2007	
Development Estimates							
DEVELOPMENT EXPENDITURE		\$570,454,492	\$401,164,400	\$390,319,200	\$348,719,300	-\$41,599,900	-10.7%
5100	Direct Development	568,166,182	394,000,400	388,063,100	346,833,900	-41,229,200	-10.6
5200	Capital Grant	2,288,310	3,279,000	2,256,100	1,885,400	-370,700	-16.4
5300	Capital Injections	0	3,885,000	0	0	0	0.0
OTHER DEVELOPMENT FUND OUTLAYS		\$0	\$0	\$0	\$0	\$0	0.0%
5600	Loans	0	0	0	0	0	0.0
9100	Loan Repayments	3,646,667	3,646,700	3,646,700	3,646,700	0	0.0
	Net Lending	-3,646,667	-3,646,700	-3,646,700	-3,646,700	0	0.0

Establishment List

Category/Personnel	Actual FY2006	Estimated FY2007	Revised FY2007	Estimated FY2008
POLITICAL APPOINTMENTS	2	2	2	2
Minister	1	1	1	1
Parliamentary Secretary	1	1	1	1
PERMANENT STAFF	109	115	115	115
Accounting Profession (2008)	0	0	0	1
Administrative	4	6	8	8
Corporate Support	23	25	25	25
Information Service (2008)	0	0	0	2
Management Executive Scheme (2008)	0	0	0	66
Management Support Scheme (2008)	0	0	0	3
Operations Support	4	4	4	4
Shorthand Writers	5	6	6	6
Accounting Profession	1	1	1	0
Information Service (2002)	2	2	2	0
Management Executive (Environment & Water Resources)	67	68	66	0
Management Support	3	3	3	0
OTHERS	3,239	3,596	3,648	3,841
National Environment Agency	2,954	3,311	3,359	3,552
Public Utilities Board	285	285	289	289
TOTAL	3,350	3,713	3,765	3,958

FY2007 BUDGET

The Ministry of the Environment and Water Resources (MEWR)'s revised FY2007 total expenditure is \$854.84 million. This is a decrease of \$129.13 million or 13.1 % from the actual FY2006 expenditure. Of the total expenditure, \$464.52 million or 54.3% is for operating expenditure and \$390.32 million or 45.7% is for development expenditure.

Operating Expenditure

The revised FY2007 operating expenditure of \$464.52 million is \$51 million or 12.3% higher than the actual FY2006 sum of \$413.52 million.

Development Expenditure

The revised FY2007 development expenditure of \$390.32 million is \$180.13 million or 31.6% lower than the actual FY2006 sum of \$570.45 million. This decrease is mainly due to lower expenditure for the Deep Tunnel Sewerage System (DTSS) Phase 1. The tunnel, outfall and influent pumping station components of the project have been completed and major civil works for Changi Water Reclamation Plant (CWRP) are nearing completion.

FY2008 BUDGET

The total expenditure of MEWR in FY2008 is projected to be \$1.01 billion, an increase of \$151.84 million or 17.8% over the revised FY2007 expenditure. Of the total expenditure, \$657.96 million or 65.4% is for operating expenditure and \$348.72 million or 34.6% is for development expenditure.

Operating Expenditure

The provision of \$657.96 million for operating expenditure represents an increase of \$193.44 million or 41.6% over the revised FY2007 expenditure. Of this, \$653.44 million or 99.3% is for running costs and \$4.52 million or 0.7% is for transfers.

The major share of the operating budget, \$425.36 million (64.7%) will go towards the National Environment Agency Programme. This is followed by the Public Utilities Board Programme which will take up \$195.03 million (29.6%) and the Administration Programme with \$37.57 million (5.7%).

National Environment Agency Programme

The National Environment Agency (NEA) aims to promote and maintain a sustainable clean and healthy environment for Singapore. For FY2008, the NEA is allocated an operating grant of \$425.36 million, mainly for the implementation of key programmes to ensure that Singapore continues to have clean air, clean land, clean water and a high standard of public health.

Working in partnership with the people, private and public (3P) sectors, NEA will continue to take the leading role in promoting energy efficiency in the households, transport, building, industry and power generation sectors, and the use of cleaner energy technologies. NEA will also continue to place emphasis on promoting waste minimisation and recycling and ensure the efficient disposal of waste at incineration plants and landfill facility.

NEA will keep public areas free of litter and ensure a high standard of environmental public health. Vector and food-borne diseases will be kept under control through comprehensive ground surveillance and appropriate preventive measures as well as enhanced vector research.

Public Utilities Board Programme

The Public Utilities Board (PUB) aims to secure an adequate supply of water at affordable cost. For FY2008, PUB is allocated an operating grant of \$195.03 million, mainly for drainage operations and upcoming water infrastructure projects such as the Marina, Serangoon and Punggol Reservoir Schemes.

Development Expenditure

The provision of \$348.72 million for development expenditure represents a decrease of \$41.60 million or 10.7% from the revised FY2007 expenditure. The decrease is mainly due to lower expenditure for the Deep Tunnel Sewerage System (DTSS) Phase 1 which is scaling down towards completion.

The major projects to be funded in FY2008 are Sewer Rehabilitation Phase 3 (\$57.80 million), 5 Year Programme to Improve Old Roadside Drains (\$41 million), and Construction of a Barrage Across Marina Channel (\$31 million).

Total Expenditure by Programme

Code	Programme	Running Costs	Transfers	Operating Expenditure	Development Expenditure	Total Expenditure
LA	Administration	34,368,300	3,202,000	37,570,300	4,215,400	41,785,700
LG	Public Utilities Board	195,027,000	0	195,027,000	306,805,200	501,832,200
LH	National Environment Agency	424,043,200	1,321,400	425,364,600	37,698,700	463,063,300
Total		\$653,438,500	\$4,523,400	\$657,961,900	\$348,719,300	\$1,006,681,200

Development Expenditure by Project

Project Title	Total Project Cost	Actual Expenditure up to end of FY2005	Actual FY2006	Estimated FY2007	Revised FY2007	Estimated FY2008
DEVELOPMENT EXPENDITURE	...	...	\$570,454,492	\$401,164,400	\$390,319,200	\$348,719,300
<i>DIRECT DEVELOPMENT</i>	...	...	<i>568,166,182</i>	<i>394,000,400</i>	<i>388,063,100</i>	<i>346,833,900</i>
Administration Programme						
Minor Development Projects	...	...	142,304	5,600,000	2,195,700	2,330,000
Public Utilities Board Programme						
5-Year Sewerage Programme FY1994-FY1998	2,354,339,000	2,182,485,322	5,757,376	3,887,000	4,945,600	4,511,000
5-Year Drainage Programme FY1994-FY1998	903,255,000	687,982,220	4,864,514	5,004,000	3,075,000	5,401,000
Improvement to International Road Outlet Drain	34,923,000	16,028,505	730,606	1,000	0	1,000
Proposed Sewers to Serve New Developments in Changi	13,500,000	5,756,100	649,588	600,000	1,472,000	139,000
Improvement to Old Roadside Drains 5-Year Programme FY2001-FY2005	37,632,000	33,515,352	538,303	1,000	13,000	1,000
Rehabilitation of Sewers Phase 2	110,000,000	73,886,988	101,583	1,000	100,000	5,900,000
Inspection and Rehabilitation of Pumping Mains	49,000,000	29,346,991	890,326	100,000	814,000	1,000,000
Improvement to Alexandra Canal - Phase 2	44,783,200	31,367,375	1,115,664	100,000	800,000	10,000
Improvement to Outlet Drain from Sin Ming Road to Braddell Road	9,559,000	2,310,557	85,822	40,000	261,400	3,500,000

Development Expenditure by Project - continued

Project Title	Total Project Cost	Actual Expenditure up to end of FY2005	Actual FY2006	Estimated FY2007	Revised FY2007	Estimated FY2008
Improvement to Old Roadside Drains in Batch 2 of the Estate Upgrading Programme	70,573,000	59,202,874	500,091	1,000	70,000	1,000
Improvement to Tanglin Halt Outlet Drain	29,000,000	1,715,743	6,478,740	3,100,000	3,100,000	6,500,000
Improvement to Drains Along Stage 2 of Circle Line	27,590,000	11,410,396	4,515,992	3,000,000	3,000,000	3,000,000
Services and Works for Land Alienation	6,983,000	1,218,465	98,988	1,500,000	700,000	400,000
Extension of Sewerage Reticulation System to Serve Tengah Airbase Area	4,800,000	0	0	500,000	100,000	2,000,000
Construction of a Barrage Across Marina Channel	270,000,000	68,780,649	80,531,083	66,500,000	66,500,000	31,000,000
Improvement to Old Roadside Drains in Batch 3 of the Estate Upgrading Programme	26,900,000	8,610,999	2,632,266	370,000	2,500,000	3,800,000
Drainage Improvement to the Opera Estate Catchment	46,200,000	32,784,975	42,300	1,000	0	1,000
Provision of Industrial Water Production and Supply System	133,000,000	109,335,185	4,101,854	200,000	205,300	100,000
Sewerage Works for Additional Reclamation off Tuas Hockey Stick	80,000,000	39,665,689	198,052	45,000	45,000	1,400,000
Collector Drains 2 at Changi East Reclamation - Area "A"	98,000,000	18,944,864	0	500,000	60,000	1,000
Deep Tunnel Sewerage System Phase 1	3,274,000,000	2,553,005,638	406,888,288	224,653,300	214,510,600	29,452,000
Minor Drainage Vote	50,000,000	10,972,643	0	1,000	0	1,000
Relief Sewers for MacPherson Area	4,800,000	0	90,391	1,000,000	1,000,000	880,000
Relief Sewers within Marina Reservoir Catchment	8,000,000	0	88,747	1,500,000	1,500,000	1,120,000
Rehabilitation of Sewers Phase 3	142,886,800	0	3,478,989	15,000,000	24,694,200	57,800,000
Active Beautiful Clean Waters Programme - Initial Phase	23,000,000	0	3,631,858	9,460,000	9,777,000	6,555,000
Rehabilitation of Sanitary Drain-Lines in Marina Reservoir Catchment	68,000,000	0	861,456	4,000,000	6,490,900	8,200,000
Phasing Out of Sewage Treatment Plants in Seletar Air Base	12,500,000	0	163,072	0	1,640,000	1,900,000
Improvement to Old Roadside Drains 5-Year Programme FY2006-FY2010	150,000,000	0	0	6,000,000	6,000,000	41,000,000
Sewers to Divert Used Water from Kranji Water Reclamation Plant to the Deep Tunnel Sewerage System	10,100,000	0	3,302,000	0	2,205,000	1,438,000

Development Expenditure by Project - continued

Project Title	Total Project Cost	Actual Expenditure up to end of FY2005	Actual FY2006	Estimated FY2007	Revised FY2007	Estimated FY2008
Sewer Extension to Service Old Yio Chu Kang Road Areas	1,000,000	0	0	200,000	109,000	1,000,000
Improvement to Neram Road Outlet Drain	6,900,000	0	0	800,000	1,300,000	3,000,000
New Projects	...	...	0	25,402,500	1,000,000	22,591,000
Installation of Landfill Remediation System for Lorong Halus Landfill Site	35,000,000	0	0	0	7,000,000	20,000,000
Improvement to Joan Road Outlet Drain	20,000,000	0	0	0	4,800,000	12,100,000
Active, Beautiful And Clean Waters Programme	106,480,000	0	0	0	3,562,500	22,000,000
Improvement to Sungei Seletar Between Upper Thomson Road and Springleaf Avenue	8,100,000	0	0	0	1,000,000	3,500,000
Demolition of Pumping Stations at Tuas and Loyang Avenue	4,500,000	0	0	0	50,000	1,000,000
Improvement to Geylang River Phase 1 - From Dunman Road to Guillemard Road	29,700,000	0	0	0	0	500,000
Consultancy Services for Marina Reservoir Predictive Water Quality Modeling and Study	5,670,600	0	0	0	1,765,300	1,102,200
Sewer Schemes to serve Marina South & Pasir Ris/Tampines Areas & Phase out Nee Soon Pumping Station	199,000,000	0	0	0	0	3,000,000
National Environment Agency Programme						
Hawker Centres Upgrading Programme - Phase 1	127,153,000	82,164,390	6,891,048	4,302,000	3,654,100	12,698,700
5-Year Programme for the Redevelopment of Choa Chu Kang Cemetery FY2004-FY2008	45,788,000	599,067	12,511,111	6,500,000	4,614,900	25,000,000
Completed Projects	...	...	16,283,773	4,130,600	1,432,600	0
<i>CAPITAL GRANTS</i>	...	...	<i>2,288,310</i>	<i>3,279,000</i>	<i>2,256,100</i>	<i>1,885,400</i>
Administration Programme						
Innovation For Environmental Sustainability (IES) Fund	...	...	924,532	3,279,000	2,256,100	1,885,400
Completed Projects	...	...	1,363,778	0	0	0
<i>CAPITAL INJECTIONS</i>	...	...	<i>0</i>	<i>3,885,000</i>	<i>0</i>	<i>0</i>
Completed Projects	...	...	0	3,885,000	0	0

KEY PERFORMANCE INDICATORS

Desired Outcomes

- A vibrant environment and water industry
- Sustainable and affordable water supply
- Good ambient air quality
- Sustainable solid waste management
- High standards of environmental public health
- Energy efficient Singapore

Key Performance Indicators

Desired Outcome	Performance Indicator	Actual FY2005	Actual FY2006	Revised FY2007	Estimated FY2008
Administration Programme					
A vibrant environment and water industry	Employment in the Water Industry	6,100	NA (i)	6,900	7,300
	Value added of the Water Industry (\$ million)	618	NA (i)	750	830
Public Utilities Board Programme					
Sustainable and affordable water supply	Total domestic consumption of potable water (million m ³)	253.3	257.7	265.5	268.8
	Total non-domestic consumption of potable water (million m ³)	186.9	194.5	184.4	161.3
	Volume of NEWater sale (million m ³)	26.7	30.0	59.9	91.1
	Volume of industrial water sale (million m ³)	40.7	41.4	25.4	25.6
	Volume of used water treated (million m ³)	499.2	520.9	536.8	548.5
	Domestic water consumption per person (litres/day)	160.0	158.0	157.0	156.6
	Quality of sewage effluent (bio-chemical oxygen demand:suspended solids)	13:20	13:20	12:18	20:30
	Size of flood prone area (ha)	135	130	100	80
National Environment Agency Programme					
Good ambient air quality	% days PSI in the 'good' range outside regional haze period	99.0	99.0	99.0	>95.0
	No. of air pollution incidents per million population	14.5	12.3	18.6	<30.0
Sustainable and affordable water supply	No. of water pollution incidents per million population	4.8	2.2	4.2	<10.0
Sustainable solid waste management	Overall rate of recycling (%)	49.0	51.0	53.0	54.0
High standards of environmental public health	No. of local dengue (DF and DHF) cases per 100,000 population	278.0	69.8	213.0	<130.0
High standards of environmental public health	No. of food outlet related food poisoning outbreaks per 1,000 food outlets	4.8	2.5	2.5	<15.0
	% of food establishments graded B or above	73.4	76.4	75.0	80.0
Energy Efficient Economy	% improvement in carbon intensity from the 1990 levels	27.0	30.0	30.0	30.0

(i) 2 year lag in data availability from Department of Statistics and EDB.