



Smart Service Organization to Sustainability



Annual Report **2023**

Metropolitan Waterworks Authority



Smart Service Organization to Sustainability



Annual Report 2023

Metropolitan Waterworks Authority



Smart Service

Enhance..Quality ..of Services

**MWA enhances service
innovation in form of Smart
Service**

**Fulfill Convenient lifestyle by
MWA onMobile APPLICATION**



Including listening to every problem,
giving advices, prompt problem solving,
and responding to all needs



Environmental



Raise Value Awareness on the environment and water resources

**Promote a variety of
environmental activities
that affect the conservation
of lively water resources to
restore the abundance of
watershed forest**

MWA Watershed Forest Conservation Project



Mutually making a livable world by
recognizing wise energy consumption
and diminishing carbon emissions for
the benefits of society and environment



Social



Create..
Benefits
for society

through various projects
continuously, such as MWA
Plumbing System for School
Project

As a Giver... give back to the
society



Value-creating organization
for Thai society



Corporate Governance



Integrity

**Drive the transparency
across entire organization**

**Adhere to the good corporate
governance by realizing all impacts
towards all sectors of stakeholders**

**Integrity, Transparency and
Sustainable Good Governance**



Anti-Corruption Organization,
Free from corruption

Vision:

Quality Water for Quality Living

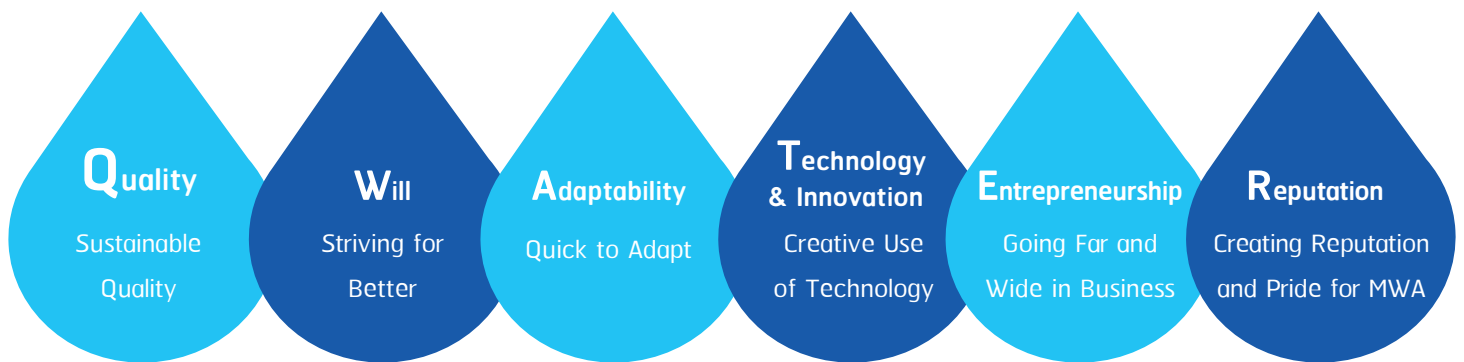
Missions:

1. To operate the complete main water business through providing water services that meet quality standards for extensive good quality of life of people.
2. To be a capable organization to effectively deal with crises.
3. To operate related businesses for creating value to stakeholders while creating sustainable organizational growth.

The Metropolitan Waterworks Authority (MWA) is a state enterprise under the supervision of the Ministry of Interior that has been operating since 16 August 1967 pursuant to the Metropolitan Waterworks Authority Act, B.E. 2510 (1967). The main mission is to procure raw water resources for waterworks, produce, deliver and distribute water in Bangkok, Nonthaburi and Samut Prakan, and operate other business related or beneficial to waterworks.

Values:

(QWATER)



There are 3 policy levels of public sector shareholders towards state enterprises:

- 1. Policies for Overall State Enterprises**
Serving as state mechanisms to drive the country economy and society for security, prosperity and sustainability.
- 2. Policies for State Enterprises in Public Utilities**
Developing basic infrastructure and real estate to raise the people quality of life while sustainably supporting urbanization and economic areas.
- 3. Policies for the Metropolitan Waterworks Authority**
improving and expanding water networks for quality and sufficiency to meet emerging urbanization while developing related businesses for creating added value to the organization.

Pride Awards



SOE Award 2023 are as follows:

- Outstanding Corporate Development Award
- Outstanding Corporate Social and Environment Responsibility Award from the project “Water Hammer Operation in Chao Praya River”
- Honorable Mention Outstanding Creativity and Innovation Award from “Active Leakage Control Assistant System (ALCAS)”



Certification of Integrity and Transparency Assessment (ITA) for the fiscal year 2023 with an assessment score of 98.18



Public Sector Excellence Award 2023 (Thailand Public Service Award: TPSA) for the Outstanding Innovation from “Charm Samorn” or Unmanned Underwater Vehicles (UUV)”



Sustainability Disclosure Award 2023 in **Category 1 (Honorary Award)** for 4 consecutive years



Outstanding Official Information Center Award for 5 consecutive years (2019-2023)

by adhering to information service provision according to good corporate governance principles



Good Organization Award 2023

by continuing promotion a culture of sustainable good deeds.



Excellent Award for White Zone

(Anti-Corruption) by PACC Connect for the fiscal year 2022



Silver Medal from the International Trade Fair - Ideas, Inventions and New Products (iENA 2022) from “Waree kunchorn” or “Raw Water Canal Survey Robot”



King Abdulaziz University's Distinguished Innovation Award

for “Charn Samorn” or “Unmanned Underwater Vehicle (UUV)”



The Second Runner-up of Ombudsman Award 2022

in category of Self Initiative Award for “Enhancing Services with MWA onMobile”



Contents

About MWA	10
Pride Awards	12
Message from the Chairman of the Metropolitan Waterworks Authority	16
Message from the Governor of the Metropolitan Waterworks Authority	18
Organization Structure	
• Workforce Structure	21
• Organization Chart	22
• MWA Board of Directors	24
• MWA Executives	39
The Metropolitan Waterworks Authority Today and the Future	
• State of the Industry and Future Trends	53
• Important Work Plans and Projects	54
• Roadmap of the Sixth Metropolitan Waterworks Authority Strategic Management Plan (Revision Edition B.E. 2566 (2023)	55
• Strategic Objectives and Tactics to Drive the Organization	56
• Future Policies and Plans	57
Performance	
• Business Performance under the Action Plan for Fiscal Year 2023 according to the Sixth Metropolitan Waterworks Authority Strategic Management Plan	59
- Water Stability	59
- Adaptive Organization	60
- Sustainable Partnership	60
- High Financial Performance	61
- Business Plus	61



• Corporate Management	
- Risk Management	62
- Internal Control	64
- Internal Audit	65
• Corporate Social and Environmental Responsibility Policy of Metropolitan Waterworks Authority	66
• Corporate Social and Environmental Responsibility Performance	67
• Stakeholders of the Metropolitan Waterworks Authority and Stakeholder Engagement	70
• Water Production Process Chart	72
• Length of Pipes and Equipment	74
• Services of MWA Branch Office	76
• Activities in the Fiscal Year 2023	77

Performance in Compliance with Corporate Governance Policy


• Corporate Governance Policy	81
- Review in Compliance with Corporate Governance Guidelines and Principles	81
- Corporate Governance Principles of the Metropolitan Waterworks Authority	82
- Corporate Governance Performance of the Metropolitan Waterworks Authority	83
- Remuneration of the Governor and Senior Executives	84
- Prevention of Conflict of Interest, Use of Internal Information and Connected Transactions	85
• Information on Important Securities held by Directors related to the Metropolitan Waterworks Authority and Connected Transactions with the interest of Metropolitan Waterworks Authority	87
• Structure of the Board of Directors of the Metropolitan Waterworks Authority	88
• Oversight of Compliance to Laws, Regulations, and Requirements (Compliance Unit)	92
• The Metropolitan Waterworks Authority Corporate Governance Structure	93
• The Metropolitan Waterworks Authority Board of Directors Structure	94
• Appointment of Committees and Subcommittees	95
• Meetings and Remunerations of the Board of Directors, Committees, and Subcommittees	108
• Compliance to Official Information Act, B.E. 2540 (1997)	110

Information and Statistics

• General Information	113
• Financial Information	114
• Rate of Water Tariffs and New Installation Fees	115
• Locations of MWA Offices	116
• Channels to Contact The Metropolitan Waterworks Authority	118
• Payment Channels	120

Financial Information

• Factors Influencing Financial Status and Performance	123
• Key Financial Information	124
• Report of Financial Analysis	126
• Audit Committee's Report	130
• Report of Board of Directors' Responsibility For the Financial Report	132
• Auditor's Report	133
• Financial Statements and Notes to the Financial Statements	137



“ we promise to perform a professional water business in regards to transparency and the best interests of stakeholders in compliance with guidelines of Corporate Governance and Corporate Social responsibility ”

Message from the Chairman of the Metropolitan Waterworks Authority

During the previous year, the Metropolitan Waterworks Authority continuously improved Stakeholder Management and committed stakeholder engagement to achieve maximum satisfaction through providing clean and quality water for consumption in accordance with the World Health Organization (WHO) standards. Under the framework of the Stakeholder Master Plan (2022 - 2027) and the revision of the Sixth Metropolitan Waterworks Authority Strategic Management Plan (2023-2027), service improvement and related businesses responding to stakeholder needs and expectations, including performance review with the current changing situation. Those actions also led to organizational effectiveness and development and take organizational knowledges and expertises to harness the potential of employees for generating business growth, and delivering more sustainable value to consumers and stakeholders.

Due to the Ministry of Interior's determination "Healing Suffering, Nourishing happiness for the people", the Metropolitan Waterworks Authority Board of Director has always concerned on the fundamental of people's quality of life through establishing corporate governance policies, directions and measures to lessen the people's burden and leading to concrete actions. The value of every water drop is a great power of happiness showing our belief that "Quality Water for Quality Living" through obvious national awards; for instance, SOE

Award 2023 in which won 3 categories, Public Sector Excellence Award 2023 (Thailand Public Service Award: TPSA) for the Outstanding Innovation, Sustainability Disclosure Award 2023 in Category 1: Honorary Award for 4 consecutive years, Certificate of Integrity and Transparency Assessment (ITA) for the fiscal year 2023 with a score of 98.18 points etc.

In addition, the Metropolitan Waterworks Authority received international awards; for instance, Silver Medal from International Invention and Innovation Competition "The International Trade Fair for Ideas, Inventions, and New Products" (iENA 2022) from "Waree kunchorn" or "Raw Water Canal Survey Robot", King Abdulaziz University's Distinguished Innovation Award for "Charn Samorn" or "Unmanned Underwater Vehicles (UUV)", the second Runner-up Ombudsman Awards 2022 for Outstanding Corporate (Self-Initiative Award) for "Service Enhancement with MWA onMobile" etc.

On behalf of the Board of Directors, executives, employees, and contract workers of the Metropolitan Waterworks Authority, all of us, we promise to perform a professional water business in regards to transparency and the best interests of stakeholders in compliance with guidelines of Corporate Governance and Corporate Social Responsibility, along with driving the country's prosperity to grow and move forward steadily and sustainably.



(Mr. Nisit Jansomwong)

Chairman of the Metropolitan Waterworks Authority



“ Smart Service Organization to Sustainability” is considered a vision that the Board of Directors and executives focusing on concrete actions such as service enhancement for a fast and convenient lifestyle via an application and various online channels ”

Message from the Governor of the Metropolitan Waterworks Authority

The past fiscal year of 2023 could be considered as a year of transition for public administration and policy advocacy by the Ministry of Interior encouraging government agencies under supervision for integrative cooperation to generate concrete outcome and serve the best interest to the people. Particularly the policies that widely provide access to free drinking water, clean water for consumption are the organizational objectives to immediately coordinate with relevant agencies and sectors.

The development context of "Smart Service Organization to Sustainability" is considered a vision that the Board of Directors and executives focusing on concrete actions under the Sixth Metropolitan Waterworks Authority Strategic Management Plan (2023-2027) and integrating all functional lines with policy planning into practice from upstream to downstream water systems consistent with technology that plays an important role in making dialy lives more convenient and easy to access services, such as service enchancement for fast and convenient lifestyle via an application and various online channels, building good relationships and creating added value for stakeholders through various CSR and CSV tasks, etc.

However, the Metropolitan Waterworks Authority considers the opportunities of organization development to create stability and sustainability in the long term. The development in organizational structure shall support related business opportunities (Business Unit) to develop strengths and strengthen each employee potential to show a wider range of potentials, such as water system design with the installation of large-scale projects, after sale and home services, water tank cleaning services, and related businesses. In addition, the proactive development also results in new products and innovation that encourages employees for concrete further development.

The agenda to strengthen the organization as a "Giver" is at the heart of performing various missions through Coporate Governance as a direction compass. There are many dimensions of management challenges, including economy, society, environment, and social trends. All of those are proven that various performance going through with the interests of the poeple and the aim of developing stable and sustainable water utility.



(Mr. Manit Panaim)

Governor of the Metropolitan Waterworks Authority

Organization Structure



Workforce Structure

(As of September 2023)

As of 30 September 2023, the Metropolitan Waterworks Authority has 5,175 personnel categorizing as 4,154 employees and 1,021 contract workers while total workforce expenses are 3,485.31 million baht categorizing as employee expenses 3,258.02 million baht and contract workers expenses 227.29 million baht.

Functional Line	Workforce (persons)		
	Employees	Contract Workers	Total
1. Governor	160	31	191
2. Deputy Governor (Administration)	298	68	366
3. Deputy Governor (Finance)	159	13	172
4. Deputy Governor (Eastern Services)	1,176	315	1,491
5. Deputy Governor (Western Services)	1,071	312	1,383
6. Deputy Governor (Engineering)	351	54	405
7. Deputy Governor (Water Production)	679	184	863
8. Deputy Governor (Planning and Development)	142	35	177
9. Deputy Governor (Digital Technology)	118	9	127
Total	4,154	1,021	5,175

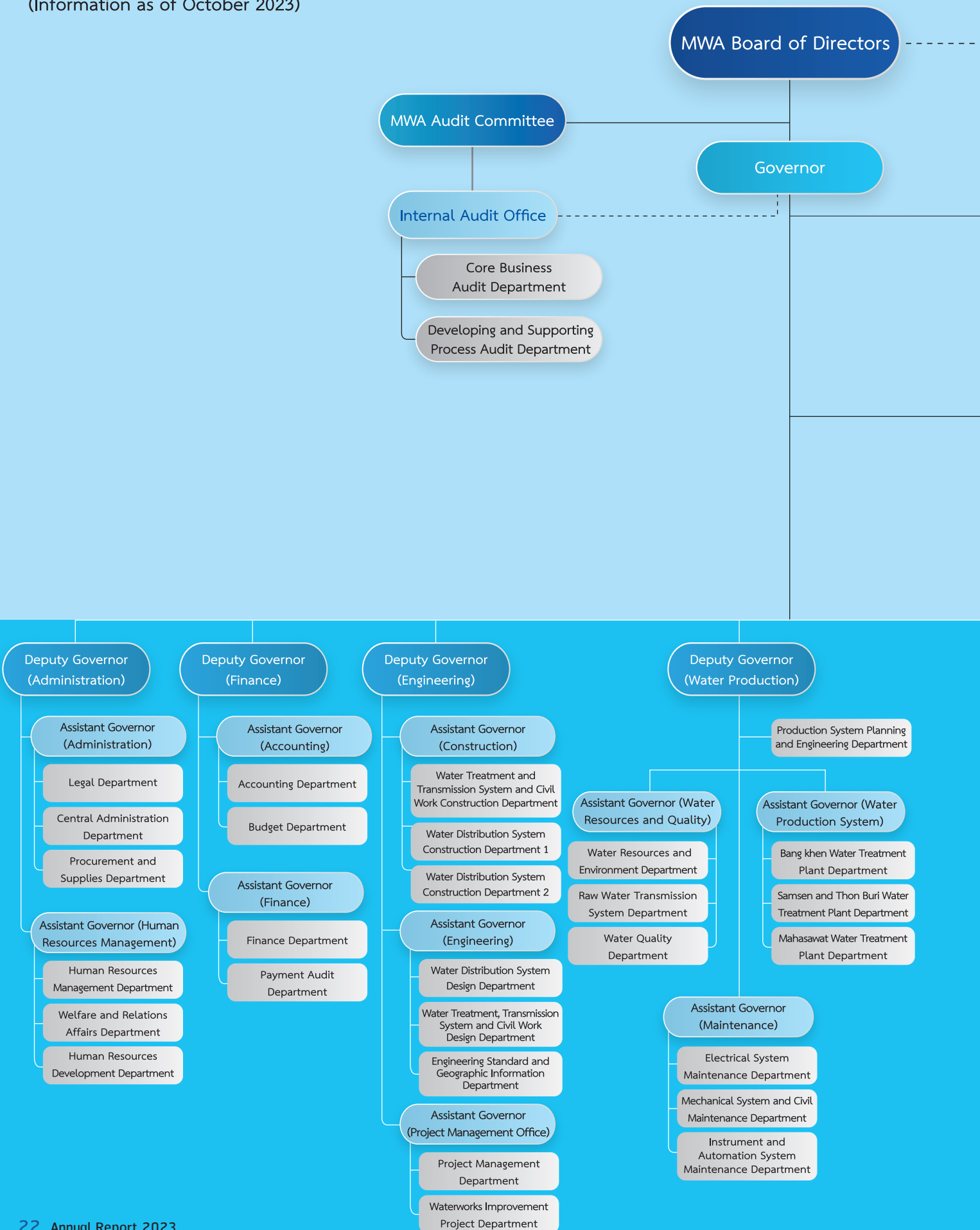
Workforce expenses in the past 3 years

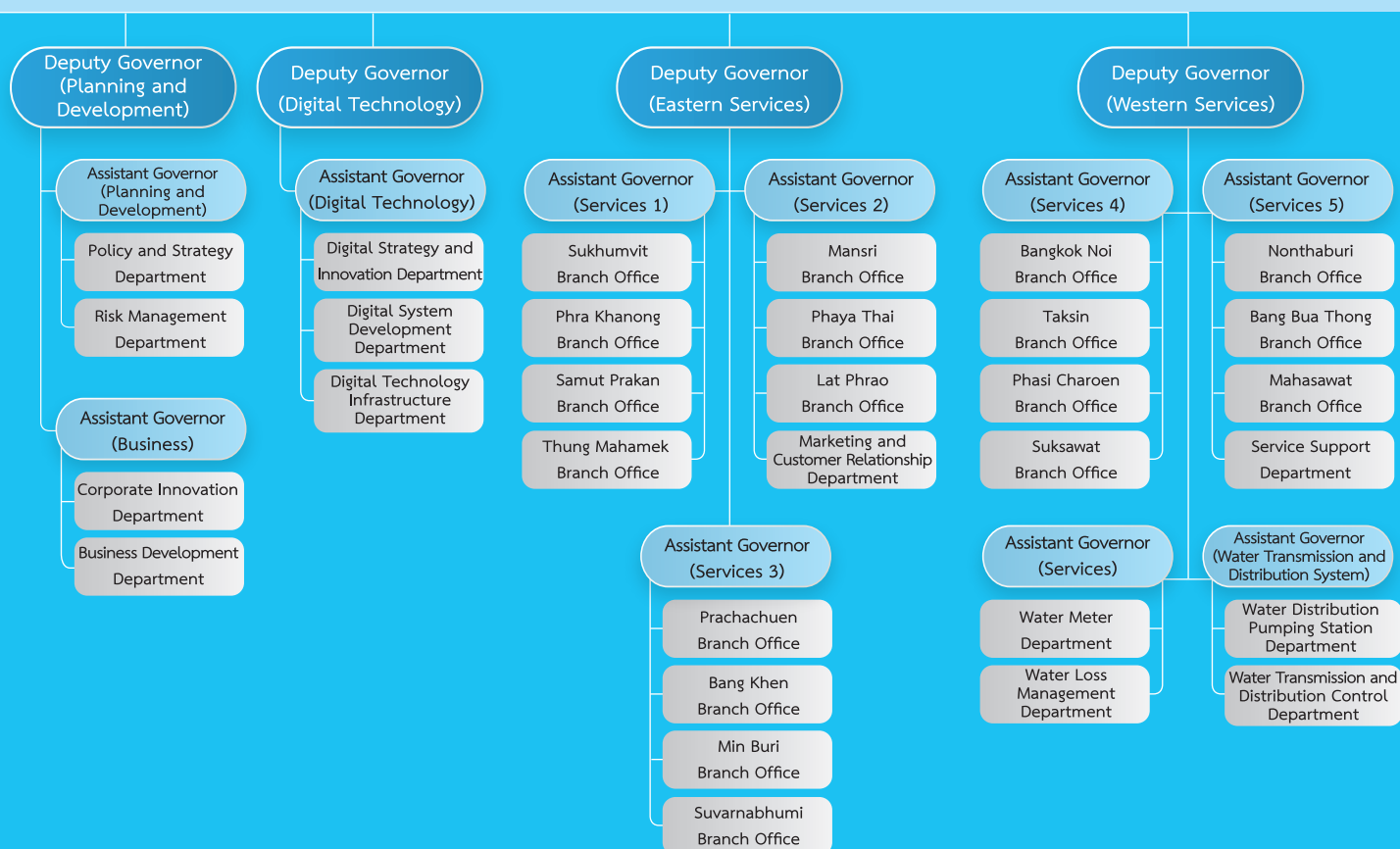
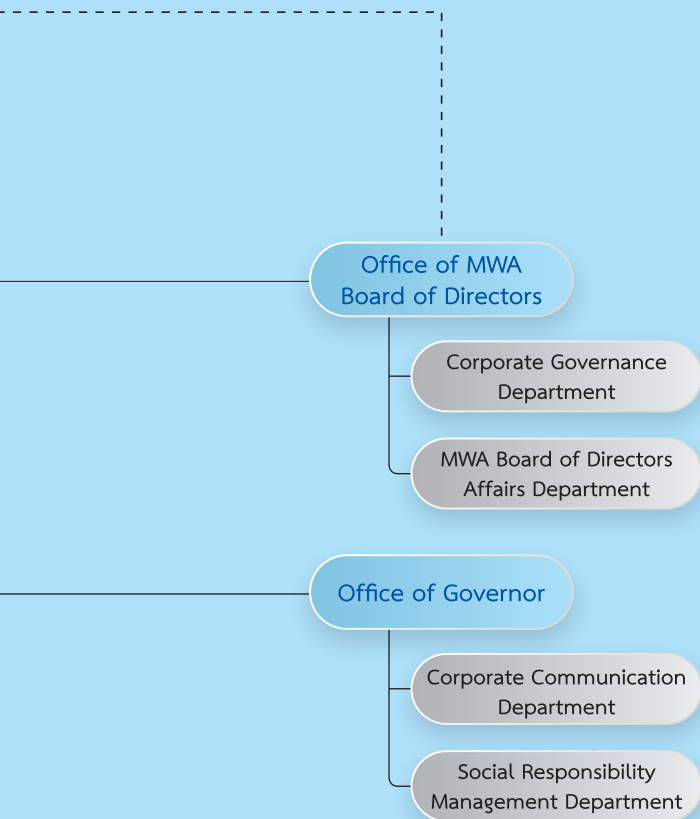
(As of September 2023)

Functional Line	Expenses (Million baht)								
	Employees			Contract Workers			Total		
	2023	2022	2021	2023	2022	2021	2023	2022	2021
1. Governor	174.16	158.75	239.69	4.25	3.69	14.31	178.41	162.44	254.00
2. Deputy Governor (Administration)	235.85	235.70	190.94	11.67	11.04	10.68	247.52	246.74	201.62
3. Deputy Governor (Finance)	144.89	139.76	129.54	2.02	2.13	2.19	146.91	141.89	131.73
4. Deputy Governor (Eastern Services)	874.83	848.89	783.32	73.14	73.20	62.86	947.97	922.09	846.18
5. Deputy Governor (Western Services)	839.63	809.81	641.77	89.53	90.89	64.44	929.16	900.70	706.21
6. Deputy Governor (Engineering)	210.07	230.29	211.82	9.58	8.82	8.82	219.65	239.11	220.64
7. Deputy Governor (Water Production)	547.25	529.73	620.63	29.90	32.32	55.26	577.15	562.05	675.89
8. Deputy Governor (Planning and Development)	124.19	127.59	81.29	5.69	5.38	0.59	129.88	132.97	81.88
9. Deputy Governor (Digital Technology)	107.15	102.28	97.49	1.51	1.59	1.69	108.66	103.87	99.18
Total	3,258.02	3,182.80	2,996.49	227.29	229.06	220.84	3,485.31	3,411.86	3,217.33

Organization Chart

(Information as of October 2023)





MWA Board of Directors



General Singthong Meethong, Ph.D.
Director and Independent Director

Mr. Nisit Jansomwong
Chairman and Independent Director

Mr. Anuchit Trakulmututa
Director and Independent Director



Mr. Krisada Kaweeyarn
Director and Independent Director

Mr. Chaitat Saetang, D.B.A.
Director and Independent Director

Mr. Varayuth Yenbamroong
Director and Independent Director

Mr. Nattakit Tangpoonsinthana, Ph.D.
Director and Independent Director

MWA Board of Directors



Mr. Roya Juntaratana
Director and Independent Director

Mr. Sanya Saengpumpong
Director and Independent Director

Mr. Nitat Maneesilasan
Director and Independent Director



Mr. Werawat Yomchinda
Director and Independent Director

Mr. Chodnarin Koedsom
Director

Mr. Boonchai Charassangsomboon
Director

Mr. Manit Panaim
Director and MWA Governor

MWA Board of Directors List

(As of 30 September 2023)

Mr. Nisit Jansomwong

Position: Chairman and Independent Director

(Held the position until 7 September 2023)

Age: 61

Education/Training:

- Bachelor of Arts (Political Science) (First-Class Honors, Gold Medal), Chulalongkorn University
- Master of Arts (Political Science) (Excellent Honors), Chulalongkorn University
- Certificate of District Chief Program (Class 41) Institute of Administration Development
- Certificate of New Public Management (Class 2) Office of the Civil Service Commission
- Advanced Certificate Course in Politics and Governance in Democratic Systems for Executive, (Class 11), King Prajadhipok's Institute
- Certificate of the Joint State-Private Course (Class 23), National Defence College
- Advanced Certificate Course in Justice Administration (Class 3), Office of Justice Affairs
- Advanced Certificate Course in Politics and Elections Development (Class 4), Office of the Election Commission of Thailand
- Certificate of Senior Budget Administrator (Class 2), Budget Bureau
- Director Certification Program (DCP) (Class 253/2018), Thai Institute of Directors (IOD)
- Advanced Certificate Course of Capital Market Academy Programs (Class 28)
- Certificate of College of the Constitutional Court (Class 6)

Work Experience:

- Head of Plan and Develop the Staffing System Group, Personal Division, Office of the Permanent Secretary for Interior
- Director of Administrative System Development Group, the Secretariat of the Cabinet
- Specialists in Strategic Development and Management Systems, Management System Development Group, the Secretariat of the Cabinet
- Director, Bureau of Strategic Development and Special Policy Monitoring, the Secretariat of the Cabinet
- Director General, Office of Policy and Planning, Office of the Permanent Secretary for Interior
- Vice Governor of Samut Prakan Province
- Deputy Director General, Community Development Department
- Director, Center for Recovery Management System, Office of the Prime Minister
- Advisor to Provincial Administration Integrity
- Deputy Director, Office of Thai Women Empowerment Funds Commission, Office of the Prime Minister
- Chairman of Audit Committee of Thailand Post Distribution Company Limited

- Chief of Inspector for Interior
- Governor of Prachuap Khiri Khan Province
- Governor of Ratchaburi Province
- Governor of Phuket Province
- Governor of Nonthaburi Province
- Deputy Permanent Secretary, Ministry of Interior
- Director General of Community Development Department
- Director General of Department of Lands

Present Positions:

- Chairman of MWA Board of Directors (Held the position until 7 September 2023)
- Vice Chairman of Thailand Post Distribution Company Limited
- Public Sector Audit and Evaluation Subcommittee (Provincial Cluster)
- The Law Reform in Urgent Stage Commission
- Subcommittee of Improvement or Abrogation of Unnecessarily Burdensome Laws
- Information Technology Subcommittee, Islamic Bank of Thailand
- Advisor, Office of the Public Sector Development Commission (OPDC)
- Office of the Public Sector Development Commission Subcommittee (OPDCSC), involved in promoting and improving convenience in government and business application processes
- Subcommittee of Managing Director's Remuneration Determination/Performance Appraisal, Thailand Post Distribution Company Limited
- Legal Subcommittee, Thailand Post Distribution Company Limited
- Strategy Driving Subcommittee, Thailand Post Distribution Company Limited
- Marketing and Communication Subcommittee, Thailand Post Distribution Company Limited
- Senior Director, Songkhla Rajabhat University
- President of the Valuers Association of Thailand
- Director of Property Management, Thammasat University

Holding Director in Other Agencies:

- Vice Chairman of Thailand Post Distribution Company Limited
- The Urgent Reforms Committee
- Provincial Government Audit and Performance Evaluation Sub-Committee (PGAPES)
- Senior Director, Songkhla Rajabhat University

Holding Juristic Person Shares Related to MWA Core Business over 10 percent of All Voting Shares:

- None

The MWA Related Juristic Person:

- None

General Singthong Meethong, Ph.D.

Position: Director and Independent Director

(Held the position until 29 September 2023)

Age: 63

Education/Training:

- Bachelor of Science, Chulachomklao Royal Military Academy
- Master of Arts (Political Science), Ramkhamhaeng University
- Ph.D. (Public Affairs), Burapha University
- Thailand National Defence College (Class 57), National Defence College
- Infantry Officer Basic Course, Infantry School Infantry Center
- Infantry Officer Advance Course, Infantry School Infantry Center
- Command and General Staff Officer Course (CGSOC) (Class 70)
- Director Certificate Program (DCP) 305/2021, Thai Institute of Directors (IOD)

Work Experience:

- Commander of Infantry Battalion 4, Infantry Regiment 1, King's Guard
- Infantry Regiment 1 Deputy Commander, King's Guard
- Commander General, Infantry Battalion 19
- Infantry Regiment 9 Deputy Commissioner
- Commander General, Kanchanaburi Military District
- Commanding General, Military Circle 11
- Commanding General, Military Circle 14
- Special Expert, Royal Thai Army (Lieutenant General)
- Deputy Chief of Staff, Royal Thai Army
- Army Special Qualified General, Royal Thai Army

Present Positions:

- Director of Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Chairman of the Risk Management and Internal Control Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Vice Chairman of the Policy Implementation Monitoring Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)

Holding Director in Other Agencies:

- None

Holding Juristic Person Shares Related to MWA Core Business over 10 percent of All Voting Shares:

- None

The MWA Related Juristic Person:

- None

Mr. Anuchit Trakulmututa

Position: Director and Independent Director

(Held the position until 29 September 2023)

Age: 64

Education/Training:

- Bachelor of Engineering, Technology and Vocational Education College (Rajamangala University of Technology)
- Bachelor of Arts (Political Science), Ramkhamhaeng University
- Bachelor of Law, Thammasat University
- Master of Development Administration (Public Administration), NIDA
- High level Senior Administration Program (Class 55), Damrong Rajanubhab Institute
- Modern Executive Program, Department of Public Works and Town & Country Planning (DTCP)
- High level Senior Administration of City Planning Program (Class 1), Department of Public Works and Town & Country Planning (DTCP)
- Department Inspector, Office of the Prime Minister
- Advance Diploma in Public Administration and Law (Class 16), King Prajadhipok's Institute
- Director Accreditation Program (DAP) Class 201/2023, Thai Institute of Directors (IOD)

Work Experience:

- Department of Public Works and Town & Country Planning Inspector, Ministry of Interior
- Vice Governor of Songkhla Province, Ministry of Interior
- Governor of Yala Province, Ministry of Interior

Present Positions:

- Director of Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Chairman of the Legal and Appeal Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Vice Chairman of the Human Resources Management and Development Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Member of the Audit Committee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)

Holding Director in Other Agencies:

- None

Holding Juristic Person Shares Related to MWA Core Business over 10 percent of All Voting Shares:

- None

The MWA Related Juristic Person:

- None

Mr. Krisada Kaweeyarn

Position: Director and Independent Director

(Held the position until 29 September 2023)

Age: 52

Education/Training:

- Master of Business Administration (MBA) Kenan-Flagler Business School, the University of North Carolina at Chapel Hill, USA
- Bachelor degree in Accounting and Finance (Second Class Honor – Upper Division) Faculty of Commerce and Accountancy, Thammasat University
- Islamic Finance Diploma in Islamic Finance, the United Kingdom Chartered Institute for Securities and Investment
- Business Government and International Economy, Harvard Business School
- Diploma Program in Medical Governance for Senior Executives (Class 10), King Prajadhipok's Institute and the Medical Council of Thailand
- National Defence College (Class 64) Thailand National Defence College
- Director Certification Program (DCP), Thai Institute of Directors (IOD)
- Advanced Master of Management Program (AMM), Graduate School of Public Administration, National Institute of Development Administration
- Top Executive Program in Metropolitan Development (Mahanakorn 4), Navamindradhiraj University
- Thammasat Leadership Program, Class 3, Thammasat University
- Capital Market Academy (Class 10)
- Homeland Security Program, Internal Security Operations Command
- Public Economic Management for Executives, Class 3, King Prajadhipok's Institute
- Cyber Forensics: A Decade of Necessity and Challenges, Federation of Accounting Professions under the Royal Patronage of His Majesty the King.

Work Experience:

- Strategic Advisor, International Finance Corporation (IFC), World Bank Group
- Director and Chairman of the Audit Committee, Metropolitan Waterworks Authority
- Director of the Board of Director, Chairman of the Risk Management Committee and the Executive Board, the Krungthep Thanakom Company Limited
- Director and Chairman of the Board of Director, CAT Telecom Public Company Limited
- Director and Chairman of the Board of Director, Islamic Bank of Thailand
- Executive Director, Dhanarak Asset Development Company Limited

- Director and Member of the Internal Audit Committee, Playing Card Factory, the Excise Department
- Chief Executive Officer (CEO), Ploenchit Asset Management Company Limited
- Chief Executive Officer (CEO), Altus Capital Partners (Thailand) Limited
- Advisor to the Board of Directors, Software Industry Promotion Agency (Public Organization)
- Head of Principal Transaction Group, Lehman Brothers (Thailand) Company Limited
- Vice President, GE Capital, Danbury Connecticut (USA)
- Vice President, Broadcaster's Association of Thailand under the Royal Patronage of His Majesty the King
- Vice President, Digital Media for Consumer Association (Thailand)
- Vice President of Telecommunications Affairs, Broadcaster's Association of Thailand under the Royal Patronage of His Majesty the King

Present Positions:

- Director of Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Chairman of the Water Loss Monitoring and Water Pressure Management Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Member of the Audit Committee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Managing Director, Precious Wood Industry Company Limited
- Managing Director, I Am Chinatown Company Limited
- Managing Director of Nemo Property Company Limited

Holding Director in Other Agencies:

- Managing Director, Precious Wood Industry Company Limited
- Managing Director, I Am Chinatown Company Limited
- Managing Director of Nemo Property Company Limited

Holding Juristic Person Shares Related to MWA Core Business over 10 percent of All Voting Shares:

- None

The MWA Related Juristic Person:

- None

Mr. Chaitat Saetang, D.B.A.

Position: Director and Independent Director

Age: 44

Education/Training:

- Bachelor of Arts (B.A.) in Mass Communication, Ramkhamhaeng University
- Master of Business Administration (MBA) (Marketing), Ramkhamhaeng University
- Doctor of Business Administration (DBA) (Business Management), Phranakhon Rajabhat University
- Director Certification Program (DCP 222), Thai Institute of Directors (IOD)
- Family Business Governance (FBG 13), Thai Institute of Directors (IOD)
- Senior Management Program in Urban Development (Metropolitan Development), Class 5, Navamindradhiraj University
- Digital Chief Executive Officer (CEO) Program, Class 1, Digital Economy Promotion Agency
- Senior Executive Management for Industrial Business Development and Investment, Class 5, Institute of Business and Industrial Development
- Top Executive Program in Commerce and Trade (TEPCoT), Class 12, Commerce Academy, University of Thai Chamber of Commerce
- Advanced Retail Management (ARM) Program, Class 28, Office of Business Networking Management, CP All Public Company Limited
- Project Management Essential Program, Career for the Future Academy
- Top Executives for Nation Building Program, Class 1, Nation-Building Institute
- Advanced Certificate Course of Capital Market Academy Programs (Class 31)
- Certificate of Corporate Governance for Directors and Senior Executives of Regulators, State Enterprises and Public Organizations, King Prajadhipok's Institute

Work Experience:

- Advisor for Digital Content Marketing & IMC
- Advisor for IT Human Transformation
- Advisor for Digital Signage Design
- Advisor for Adaptation of Sufficiency Economy Philosophy for Sustainability
- Advisor for Presentation Skills for Small Businesses

Present Positions:

- Director of Metropolitan Waterworks Authority
- Chairman of the MWA Digital Technology Development Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)

- Member of the Procurement Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Chief Executive Officer (CEO), Chaityagarn Consulting Company Limited

Holding Director in Other Agencies:

- Chief Executive Officer (CEO), Chaityagarn Consulting Company Limited

Holding Juristic Person Shares Related to MWA Core Business over 10 percent of All Voting Shares:

- None

The MWA Related Juristic Person:

- None

Note: Holding the director position of Metropolitan Waterworks Authority until 29 September 2023 and reappointing according to the Cabinet Resolution on 9 January 2024.

Mr. Varayuth Yenbamroong

Position: Director and Independent Director

(Held the position until 29 September 2023)

Age: 39

Education/Training:

- Bachelor of Science (Aerospace Engineering), University of California at Los Angeles, USA
- Master of Science (Mechanical Engineering), University of California at Los Angeles, USA

Work Experience:

- Civil Engineering (Drainage Design), Los Angeles County Department of Public Works, USA
- Systems Engineer, Northrop Grumman Corporation, USA
- Senior Integration Project Engineer Lead, Northrop Grumman Corporation, USA
- Director of Strategy and Business Development, Northern Gulf Petroleum Pte Ltd.
- Director and Chief Technology Officer (CTO), Mobile LTE Company Limited
- Director and Chief Executive Officer (CEO), Mobile LTE Company Limited

Present Positions:

- Director of Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Vice Chairman of the Risk Management and Internal Control Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Director & Chief Executive Officer (CEO), Mu Space and Advanced Technology Company Limited
- Chief Technology Officer (CTO), Mu Space and Advanced Technology Company Limited

Holding Director in Other Agencies:

- Director and Chief Executive Officer (CEO), Mu Space and Advanced Technology Company Limited

Holding Juristic Person Shares Related to MWA Core Business over 10 percent of All Voting Shares:

- None

The MWA Related Juristic Person:

- None

Mr. Nattakit Tangpoonsinthana, Ph.D.

Position: Director and Independent Director

(Held the position until 29 September 2023)

Age: 59

Education/Training:

- Bachelor of Communication Arts (Mass Communication), Chulalongkorn University
- Master of Business Administration, University of North Texas, USA
- Ph.D. in Mass Communication Arts, Chulalongkorn University
- Certificate of Director Certification Program (DCP 209), Thai Institute of Directors (IOD)
- Certificate of Good Governance for State Enterprise/Public Organization Directors & Executives Program (Class 14), Public Director Institute, King Prajadhipok's Institute
- Industrial Business Development and Investment Program for Top Executives, Institute of Business and Industrial Development (Class 2)
- TME Tourist Management Program for Executive, (Class 3)
- Top Executive Program in Commerce and Trade (TEPCoT) (Class 11), Commerce Academy, University of Thai Chamber of Commerce
- Capital Market Leader Program, Capital Market Academy (CMA-24)
- Diploma, National Defense Course 62
- The Executive Program in Energy Literacy for a Sustainable Future, Thailand Energy Academy (TEA), Class 17

Work Experience:

- Account Director, Lintas Worldwide Advertising Company Limited (Thailand)
- Associate Director in Marketing and Sales Division, Samart Corporation Public Company Limited
- Lecturer in Department of Mass Communication, Faculty of Communication Arts, Chulalongkorn University
- Chief Marketing Officer, Thai Samsung Electronics Company Limited
- Advisor in Public Relations to Ministry of Commerce and Ministry of Labour
- Advisor to Minister of Science and Technology
- Advisor to Deputy Minister of Agriculture and Cooperatives

Present Positions:

- Director of Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Chairman of the MWA Improvement Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Chairman of the MWA Governor's Performance Appraisal Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)

- Member of the MWA Digital Technology Development Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Senior Executive Vice President of Central Group
- Executive Vice President in Marketing Line, Central Pattana Public Company Limited
- Director, Siamrajathanee Public Company Limited
- Director, Premier Quality Starch Public Company Limited
- Council, Thailand Management Association (TMA)
- Subcommittee on Information Management, Communications, and Public Relations under the National Competitiveness Development Committee

Holding Director in Other Agencies:

- Director, Siamrajathanee Public Company Limited
- Director, Premier Quality Starch Public Company Limited
- Executive Vice President, Central Group Company Limited
- Executive Vice President - Marketing, Central Pattana Public Company Limited

Holding Juristic Person Shares Related to MWA Core Business over 10 percent of All Voting Shares:

- None

The MWA Related Juristic Person:

- None

Mr. Roya Juntaratana

Position: Director and Independent Director

(Held the position until 29 September 2023)

Age: 62

Education/Training:

- Bachelor of Engineering (Civil Engineering), Rajamangala Institute of Technology
- Bachelor of Business Administration (Construction Management), Sukhothai Thammathirat Open University
- Director Certification Program (DCP), Thai Institute of Directors (IOD)
- Diploma National Defence College, the National Defence Course, (NDC) (Class 60)
- The Executive Program in Energy Literacy for a Sustainable Future, Thailand Energy Academy (TEA), Class 15

Work Experience:

- Chief Office of the Minister, Ministry of Energy
- Deputy Director General, Department of Alternative Energy Development and Efficiency
- Inspector General, Ministry of Energy, Office of the Permanent Secretary, Ministry of Energy
- Director, EGAT International Company Limited

Present Positions:

- Director of Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Chairman of the Human Resources Management & Development Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Vice Chairman of the MWA Governor's Performance Appraisal Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Member of the Risk Management and Internal Control Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)

Holding Director in Other Agencies:

- None

Holding Juristic Person Shares Related to MWA Core Business over 10 percent of All Voting Shares:

- None

The MWA Related Juristic Person:

- None

Mr. Sanya Saengpumpong

Position: Director and Independent Director

(Held the position until 29 September 2023)

Age: 61

Education/Training:

- Bachelor of Engineering (Civil Engineering), Rajamangala University of Technology
- Master of Engineering (Irrigation Engineering), Kasetsart University
- Master of Public and Private Management, National Institute of Development Administration
- Top Executive Development Program in Agriculture and Cooperatives, Class 51, Kasetrathikarn Institute, Office of the Permanent Secretary for Ministry of Agriculture and Cooperatives
- Administration and Leadership Competency Development Program, GRIPS Institute, Japan
- Security Psychology Program for Executives, Institute of Security Psychology, National Defence Studies Institute
- The Civil Service Executive Development Program: Visionary and Moral Leadership (Nor Bor Sor 1), Class 87, Office of the Civil Service Commission
- Director Accreditation Program (DAP) 184/2021, Thai Institute of Directors (IOD)
- Advance Audit Committee Program (AACP), Thai Institute of Directors (IOD)

Work Experience:

- Director of Bureau of Water Management and Hydrology, Royal Irrigation Department
- Expert in Irrigation Engineering, Royal Irrigation Department
- Expert in Irrigation Engineering (Maintenance), Royal Irrigation Department
- Inspector General, Ministry of Agriculture and Cooperatives, Office of the Permanent Secretary for Ministry of Agriculture and Cooperatives

Present Positions:

- Director of Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Chairman of the Corporate Governance (CG) and Corporate Social Responsibility (CSR) Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Vice Chairman of the Procurement Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)

Holding Director in Other Agencies:

- None

Holding Juristic Person Shares Related to MWA Core Business over 10 percent of All Voting Shares:

- None

The MWA Related Juristic Person:

- None

Mr. Nitat Maneesilasan

Position: Director and Independent Director

Age: 57

Education/Training:

- Bachelor of Science (Computer Science), University of the Thai Chamber of Commerce
- Bachelor of Law, Ramkhamhaeng University
- Diploma Attorney, Batch No. 48, Lawyers Council of Thailand under the Royal Patronage
- Master of Management (General Management), College of Management, Mahidol University
- Director Accreditation Program (DAP), Thai Institute of Directors (IOD)
- Mini MBA of Retail Management
- Real Estate Entrepreneurs Program, Kasetsart University
- Advance Diploma in Public Administration and Law (Class 21), King Prajadhipok's Institute
- Certificate of Corporate Governance for Directors and Senior Executive of Regulators, State Enterprises and Public Organizations, Class 26, Public Director Institute, King Prajadhipok's Institute

Work Experience:

- Chairman of the Executive Committee and Managing Director, Solution Corner (1998) Public Limited Company
- Director, Media Executive Group Company Limited
- Vice President of IT, University of the Thai Chamber of Commerce Alumni Association
- Vice President, the Association of Thai Software Industry
- Advisor and Secretary of the Police Commission, the House of Representatives
- Advisor and Specialist Committee on Land, Natural Resources and Environment, the House of Representatives
- Specialist of the Representative, the House of Representatives
- Working group study on state security for Nuclear energy case, Energy Commission, the House of Representatives
- Working group on considering further study on Service Places Act, B.E. 2509, the House of Representatives
- Board of Directors on considering the application for BOI promotion, Software Industry Promotion Agency (Public Organization)
- Honorary Advisor, Software Industry Promotion Agency (Public Organization)
- Subcommittee of Software Industry Promotion Agency (Public Organization)
- Subcommittee, Organization Management, Office of Trade Competition Commission
- Subcommittee, Investment Management, Social Security Fund, Social Security Office

- Chairman, Corporate Governance (CG) and Corporate Social Responsibility (CSR) Subcommittee, Metropolitan Waterworks Authority
- Risk Management and Internal Control Subcommittee, Metropolitan Waterworks Authority
- Advisory Board of Deputy Minister of Public Health Office of the Minister, Ministry of Public Health
- Advisory Committee to the Deputy Minister of Interior, Minister's Office, Ministry of Interior
- Audit Committee, Office of Trade Competition Commission
- Subcommittee on Legal and Appeals, Rubber Authority of Thailand

Present Positions:

- Director of Metropolitan Waterworks Authority
- Chairman of the Procurement Subcommittee, Metropolitan Waterworks Authority
(Held the position until 29 September 2023)
- Vice Chairman of the MWA Digital Technology Development Subcommittee, Metropolitan Waterworks Authority
(Held the position until 29 September 2023)
- Member of MWA Improvement Subcommittee, Metropolitan Waterworks Authority
(Held the position until 29 September 2023)
- Member of Risk Management Subcommittee, Social Security Fund, Social Security Office
- Independent Director, Audit Committee and Nomination Committee, Capital Link Credit Foncier Company Limited
- Independent Director, Audit Director and Nomination Director, Capital Link Financial Group Public Company Limited
- Director, Third Dragon Company Limited
- Director, Happy Serve Company Limited
- Director, Little Hill Place Company Limited
- Lawyer/Legal Advisor, JKL Law Firm
- Chief Executive Officer (CEO), Openserve Company Limited

Holding Director in Other Agencies:

- Independent Director, Audit Director and Nomination Director, Capital Link Credit Foncier Company Limited
- Independent Director, Audit Director, Nomination Director, and Risk Oversight Director, Capital Link Financial Group Public Company Limited
- Director, Happy Serve Company Limited
- Director, Third Dragon Company Limited
- Director, Little Hill Place Company Limited
- Chief Executive Officer (CEO), Openserve Company Limited

Holding Juristic Person Shares Related to MWA Core Business over 10 percent of All Voting Shares:

- None

The MWA Related Juristic Person:

- None

Note: Holding the director position of the Metropolitan Waterworks Authority until 29 September 2023 and reappointing according to the Cabinet Resolution on 9 January 2024.

Mr. Werawat Yomchinda

Position: Director and Independent Director

(Held the position until 29 September 2023)

Age: 61

Education/Training:

- Bachelor of Political Science, Ramkhamhaeng University
- Mini MBA, Class 32, Thammasat Business School, Thammasat University
- Diploma of Advance Energy Project, Thailand Energy Academy (TEA), Class 15
- Certificate of “Kasettrapipat” Training (Honorable), Class 76, Ministry of Agriculture and Cooperatives
- Director Certificate Program (DCP) 307/2021, Thai Institute of Directors (IOD)

Work Experience:

- Director, Wastewater Management Authority
- President of Subcommittee on Public Relations, Wastewater Management Authority
- Director, the Zoological Park Organization of Thailand under the Royal Patronage of His Majesty the King
- President of Subcommittee on Business Development, the Zoological Park Organization of Thailand under the Royal Patronage of His Majesty the King
- President of Subcommittee on Information Technology, the Zoological Park Organization of Thailand under the Royal Patronage of His Majesty the King

Present Positions:

- Director of Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Chairman of the MWA Relations Affairs Committee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Vice Chairman of the Water Loss Monitoring and Water Pressure Management Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Member of MWA Governor’s Performance Appraisal Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Chief Executive Officer (CEO), Maxima Studio Company Limited

Holding Director in Other Agencies:

- Chief Executive Officer (CEO), Maxima Studio Company Limited

Holding Juristic Person Shares Related to MWA Core Business over 10 percent of All Voting Shares:

- None

The MWA Related Juristic Person:

- None

Mr. Chodnarin Koedsom

Position: Director

Age: 55

Education/Training:

- Bachelor of Law, Ramkhamhaeng University
- Bachelor of Agricultural Technology (Cooperative Economics), Maejo University
- Master of Public Administration, Prince of Songkla University
- Advanced Certificate Course in Public Administration and Law for Executives (Class 10), King Prajadhipok’s Institute
- Governing Executive, Higher Level (Class 59), Ministry of Interior
- Senior Executives in Industrial Business Development and Investment Program (Class 5), Institute of Business and Industrial Development (IBID)
- Digital Leadership for Executive Level (Class 1), Thailand Digital Government Academy (TDGA)
- Workshop on “Creating leaders of change according to the framework of the National Reform, Strategy and Cohesion” (RSC 2), Class 5
- CEO Learning through experience (Class 1), Digital Economy Promotion Agency (DEPA)
- Senior Executive Development Program, Royal Thai Police

Work Experience:

- Deputy Governor of Prachuap Khiri Khan Province
- Deputy Governor of Ranong Province
- Deputy Governor of Phang Nga Province
- Governor of Chumphon Province

Present Positions:

- Director of Metropolitan Waterworks Authority
- Chairman of the Policy Implementation Monitoring Subcommittee, Metropolitan Waterworks Authority (Held the position until 29 September 2023)
- Vice Chairman of the MWA Improvement Subcommittee (Held the position until 29 September 2023)
- Deputy Permanent Secretary for Interior

Holding Director in Other Agencies:

- Deputy Permanent Secretary, Ministry of Interior

Holding Juristic Person Shares Related to MWA Core Business over 10 percent of All Voting Shares:

- None

The MWA Related Juristic Person:

- None

Note: Holding the director position of Metropolitan Waterworks Authority until 29 September 2023 and reappointing according to the Cabinet’s resolution on 9 January 2024.

Mr. Boonchai Charassangsomboon

Position: Director

(Held the position until 30 September 2023)

Age: 60

Education/Training:

- Bachelor of Arts (Political Science), Chulalongkorn University
- Master of Science (Development Economics), National Institute of Development Administration (NIDA)
- Master of Economics, Macquarie University, Sydney, Australia
- Advanced Management Program (AMP 183), Harvard Business School
- Thailand National Defence College, Class 60, National Defence College
- Senior Anti-Corruption Strategic Executive Program, Class 13
- The Executive Program in Energy Literacy for a Sustainable Future, Class 16
- Directors Certification Program (DCP), Thai Institute of Directors (IOD)
- Corporate Governance for Capital Market Intermediaries (CGI), Thai Institute of Directors (IOD)
- Advanced Audit Committee Program (AACP), Thai Institute of Directors (IOD)
- Risk Management Program for Corporate Leaders (RCL), Thai Institute of Directors (IOD)
- IT Governance and Cyber Resilience Program (ITG), Thai Institute of Directors (IOD)

Work Experience:

- Director of Financial Policy and Financial Institutions Bureau, Fiscal Policy Office
- Minister (Economic and Financial) for United Kingdom and Europe, the Office of Economic and Financial Affairs, the Royal Thai Embassy in London, United Kingdom
- Director of Macroeconomic Policy Bureau, Fiscal Policy Office
- Alternate Executive Director of World Bank Group (WBG)
- Director of International Economic Policy Bureau, Fiscal Policy Office
- International Economic Advisor, Fiscal Policy Office
- Inspector General, Ministry of Finance
- Chief Inspector General, Ministry of Finance
- Deputy Permanent Secretary, Ministry of Finance
- Director of Sukhumvit Asset Management Company Limited
- Director of Government Savings Bank
- Director of the Government Pharmaceutical Organization
- Director, Government Housing Bank

- Director, Expressway Authority of Thailand
- Director, Neighbouring Countries Economic Development Cooperation Agency (Public Organization)
- Director, Government Pension Fund

Present Positions:

- Director of Metropolitan Waterworks Authority (Held the position until 30 September 2023)
- Chairman of the Audit Committee, Metropolitan Waterworks Authority (Held the position until 30 September 2023)
- Vice Chairman of the Corporate Governance (CG) and Corporate Social Responsibility (CSR) Subcommittee, Metropolitan Waterworks Authority (Held the position until 30 September 2023)
- Vice Chairman of the Legal and Appeal Subcommittee, Metropolitan Waterworks Authority (Held the position until 30 September 2023)

Holding Director in Other Agencies:

- None

Holding Juristic Person Shares Related to MWA Core Business over 10 percent of All Voting Shares:

- None

The MWA Related Juristic Person:

- None

Mr. Manit Panaim

Position: Director and MWA Governor

Age: 59

Education/Training:

- Bachelor of Engineering (Civil Engineering), Khon Kaen University
- Bachelor of Law, Sukhothai Thammathirat Open University
- Master of Engineering (Civil Engineering), Thammasat University
- Master of Engineering (Infrastructure Engineering and Management), Kasetsart University
- Military Logistics Management and Defence Industrial Relationship Development Program, the RTA Logistics School
- The Civil Service Executive Development Program: Visionary and Moral Leadership, Civil Service Training Institute
- Security Management and Leadership for Executives Program (Class 3), National Defence College

Work Experience:

- Engineering Standard and Geographic Information Department Director
- Water Distribution System Construction Department 1 Director
- MWA Expert Level 9
- Assistant Governor (Project Management Office)
- Deputy Governor (Engineering)

Present Positions:

- Director of Metropolitan Waterworks Authority
- Governor of Metropolitan Waterworks Authority

Holding Director in Other Agencies:

- None

Holding Juristic Person Shares Related to MWA Core Business over 10 percent of All Voting Shares:

- None

The MWA Related Juristic Person:

- None

Definitions

- (1) Holding Director in Other Agencies refers to the MWA director holding a director or senior executive in other state enterprises or juristic persons
- (2) Holding Juristic Person Shares Related to MWA Core Business over 10 percent of All Voting Shares refers to holding of securities (shares) by the MWA director in juristic person related to the MWA core business over 10 percent of all voting shares
- (3) The MWA Related Juristic Person refers to a juristic person that is expected to have transactions related to the Metropolitan Waterworks Authority in which the spouse, underage child/adopted child of the MWA directors having control authority, such as holding voting shares more than 50 percent of all voting rights or having control authority over the majority of votes in the shareholder meeting or having control authority to appoint or remove directors at least one half of all directors.

Note: The Metropolitan Waterworks Authority has no subsidiaries/ affiliated companies.

MWA Executives

(As of 2 October 2023)



Mr. Manit Panaim
MWA Governor

Education/Training:

- Bachelor of Engineering (Civil Engineering),
Khon Kaen University
- Bachelor of Law, Sukhothai Thammathirat Open University
- Master of Engineering (Civil Engineering),
Thammasat University
- Master of Engineering (Infrastructure Engineering and
Management), Kasetsart University
- Military Logistics Management and Defence Industrial
Relationship Development Program, The RTA Logistics School
- The Civil Service Executive Development Program:
Visionary and Moral Leadership, Civil Service Training Institute
- Security Management and Leadership for Executives
Program (Class 3), National Defence College

Work Experiences

- Assistant Governor (Project Management Office)
- Deputy Governor (Engineering)



Miss Chawewan Uthaipibool
Deputy Governor (Planning and Development)

Education/Training:

- Bachelor of Political Science (Public Administration), Thammasat University
- Master of Arts (Public Administration), National Institute of Development Administration (NIDA)
- The Civil Service Executive Development Program: Visionary and Moral Leadership, Office of the Civil Service Commission (OCSC)
- Senior Executives on Justice Administration (Class 26), National Justice Academy, Judicial Training Institute

Work Experiences

- Assistant Governor (Administration)
- Deputy Governor (Administration)



Mr. Raksak Suriyaharn
Deputy Governor (Water Production)

Education/Training:

- Bachelor of Engineering (Civil Engineering), Khon Kaen University
- National Defence College of Thailand (Class 63)
- Director Certification Program (DCP) Class 321, Thai Institute of Directors (IOD)
- Air War College Program, Air War College
- Advanced Metropolitan Administrator Program, Bangkok Metropolitan Administration
- Corporate Governance for Directors and Executives, King Prajadhipok's Institute
- Public Administration and Public Law, King Prajadhipok's Institute

Work Experiences

- Assistant Governor (Services 4)
- Deputy Governor (Western Services)



Miss Busagon Procks-anocha

Deputy Governor (Finance) and Acting Deputy Governor (Digital Technology)

Education/Training:

- Bachelor of Science (Accounting), Kasetsart University
- Master of Accountancy (Financial Accounting), Chulalongkorn University
- Master of Science (Information Technology), Eastern Asia University
- Corporate Governance for Directors and Senior Executives of Regulators, State Enterprises and Public Organizations, Public Director Institute (PDI)
- Financial & Fiscal Management Program for Senior Executives (FME), The Comptroller General's Department

Work Experiences

- Assistant Governor (Internal Audit Office)
- MWA Inspector Level 10



Mr. Suthep Euapakorn

Deputy Governor (Eastern Services) and Acting Deputy Governor (Western Services)

Education/Training:

- Bachelor of Engineering (Civil Engineering), Khon Kaen University
- Master of Public and Private Management Program (Public and Private Management), National Institute of Development Administration (NIDA)
- Naval War College, Class 49
- Top Executive in Metropolitan Development Program (Class 7), Navamindradhiraj University

Work Experiences

- Suksawat Branch Office Manager
- Assistant Governor (Services)



Miss Suwara Thawitchasri
Deputy Governor (Administration)

Education/Training:

- Bachelor of Political Science (International Relations), Chulalongkorn University
- Master of Labour and Welfare Development, Thammasat University
- Joint Staff College (Class 57), Joint War College, National Defence Studies Institute
- Good Governance for Sustainability Development (Class 8), Office of the Public Sector Development Commission (OPDC)

Work Experiences

- Director of MWA Waterworks Institute of Thailand
- Assistant Governor (Office of MWA Board of Directors)



Mrs. Rachirach Uthayo

MWA Expert Level 10

Education/Training:

- Bachelor of Communication Arts (Public Relations), Bangkok University
- National Defense College of Thailand (Class 63)
- The Senior Executive Development Program, Royal Thai Police
- The Executive Program for Crime Prevention and Criminal Justice, Batch 27

Work Experiences

- Director of Corporate Communication Department
- Assistant Governor (Office of Governor)



Miss Widchuda Liamsanguan

MWA Expert Level 10 and Acting Deputy Governor (Engineering)

Education/Training:

- Bachelor of Engineering (Irrigation Engineering), Kasetsart University
- Master of Engineering (Water Resources Engineering), Chulalongkorn University
- Master of Business Administration (Management), Thammasat University
- Global Mini MBA: Entrepreneurial Manager Series (Class 83), Thammasat University
- Public Private Partnership for Executives Program: PEP (Class 7), Institute of Research and Development for Public Enterprises (IRDPE)

Work Experiences

- Project Management Department Director
- Assistant Governor (Planning and Development)

Executives (Assistant Governor and Equivalent)

(As of 2 October 2023)

Line of Governor



Mrs. Maytawee Suchartlumpong

Assistant Governor
(Office of Governor)

Mrs. Rachirach Uthayo

Acting Assistant Governor
(internal Audit Office)

Miss Kornvilai Yeawyasat

Assistant Governor
(Office of MWA Board of Directors)

Line of Deputy Governor (Administration)



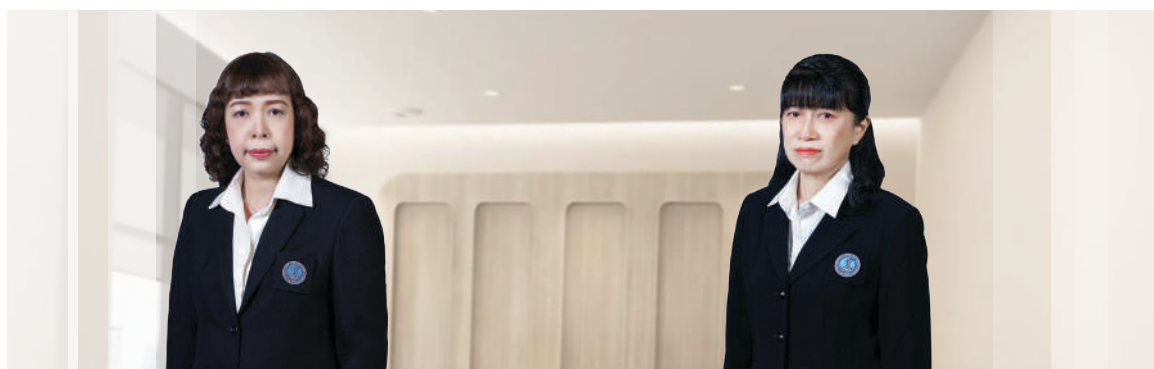
Mrs. Suwanna Parkros

Acting Assistant Governor
(Administration)

Mr. Suntorn Thonggumnerd

Acting Assistant Governor
(Human Resource Management)

Line of Deputy Governor (Finance)



Mrs. Sukontip Ngarmwacha

Assistant Governor (Finance)

Mrs. Pattharaporn Pattharasikarin

Assistant Governor (Accounting)

Line of Deputy Governor (Eastern Services)



Mr. Archawan Im-erbtham

Assistant Governor
(Services 1)

Mr. Kittipat Uthikamporn

Acting Assistant Governor (Services 2)

Mr. Wison Midtrapanon

Assistant Governor (Services 3)

Line of Deputy Governor (Western Services)



Mr. Sarawut Boonwong

Assistant Governor
(Services 4)

Mr. Washirawit Powichit

Assistant Governor
(Services 5)

Mr. Supichete Tavorntaveevong

Assistant Governor
(Services)

Mr. Sermsak Jansam

Assistant Governor
(Water Transmission and
Distribution System)

Line of Deputy Governor (Engineering)



Mr. Arnuparp Supapant

Assistant Governor (Construction)
Acting Assistant Governor (Engineering)

Mr. Sutthisak Lapprasert

Assistant Governor
(Project Management Office)

Line of Deputy Governor (Water Production)



Mr. Montri Longtee

Assistant Governor
(Water Resources and Quality)

Mr. Pornsak Samornkraisorakit

Assistant Governor
(Water Production System)

Mr. Amnat Pakros

Assistant Governor
(Plant Maintenance)

Line of Deputy Governor (Planning and Development)



Mr. Thanapong Kausangunsilp

Assistant Governor
(Planning and Development)

Mrs. Nisapas Wongpat

Assistant Governor
(Business)

Line of Deputy Governor (Digital Technology)



Mr. Paripan Pinsurong

Assistant Governor
(Digital Technology)

MWA Expert Level 9



Mr. Suntorn Thonggumnerd

Mr. Somsak Passananon



Mrs. Suwanna Parkros

Mrs. Pitsawart Phapsuwan



Mrs. Pawnthip Dinakara Na Ayudhya

Mr. Kittipat Uthikamporn

MWA Inspector (Level 9)



Mr. Sinut Sinittarnon

Executives (Department Director and Equivalent)

(As of 2 October 2023)

Line of Governor

Mrs. Chavina	Wiratyosin	Corporate Communication Department Director
Miss Nattaya	Bunkerd	Social Responsibility Management Department Director
Mrs. Araya	Sukyuang	Department Director (Internal Audit Office)
Mr. Siam	Jittharm	Developing and Supporting Process Audit Department Director
Mrs. Suchada	Nakyoy	Core Business Audit Department Director
Mrs. Sirijan	Santirojanakul	Corporate Governance Department Director
Mrs. Nittaya	Pibul	MWA Board of Directors Affairs Department Director

Line of Deputy Governor (Administration)

Mrs. Tatrapa	Kanjanasint	Legal Department Director
Mr. Phanrat	Payak	Central Administration Department Director
Miss Pattana	Witchajutakul	Procurement and Supplies Department Director
Mr. Narintorn	Mahanaka	Human Resources Management Department Director
Mrs. Phongpan	Wattanasermkit	Welfare and Relations Affairs Department Director
Mr. Chumpon	Kongkasem	Human Resources Development Department Director

Line of Deputy Governor (Finance)

Miss Pornwilai	Sinwirote	Finance Department Director
Miss Patcharin	Punyapornsup	Payment Audit Department Director
Miss Anoottaree	Prasertchai	Accounting Department Director
Mrs. Saikwan	Chaowanagit	Budget Department Director

Line of Deputy Governor (Eastern Services)

Mr. Chiranuwat	Narong	Sukhumvit Branch Office Manager
Mr. Teerasak	Jangwiboon	Phra Khanong Branch Office Manager
Mr. Kamol	Wisansawat	Samut Prakan Branch Office Manager
Mr. Achawan	Im-Eabtham	Acting Thung Mahamek Branch Office Manager
Miss Amphai	Phanayuwattana	Mansri Branch Office Manager
Mr. Chaiyaporn	Rattanatanangpong	Phaya Thai Branch Office Manager
Miss Jitree	Mungkun	Lat Phrao Branch Office Manager
Miss Achara	Poramathikul	Marketing and Customer Relationship Department Director
Miss Panicha	Wetchosodsakda	Prachachuen Branch Office Manager
Mr. Sanchai	Pongputtchart	Bang Khen Branch Office Manager
Mr. Pratan	Leardcharoenroek	Min Buri Branch Office Manager
Miss Duangkamol	Rienpuech	Suvarnabhumi Branch Office Manager

Line of Deputy Governor (Western Services)

Mr. Sukit	Musikphan	Bangkok Noi Branch Office Manager
Mr. Wimarn	Marsjaroon	Taksin Branch Office Manager
Mr. Luanchai	Kanjanasint	Phasi Charoen Branch Office Manager
Mr. Nurach	Noisopa	Suksawat Branch Office Manager
Mr. Phichet	Wongphitak	Nonthaburi Branch Office Manager
Mrs. Sasithorn	Meekuniam	Bang Bua Thong Branch Office Manager
Mr. Pornchai	Mongkolkrut	Mahasawat Branch Office Manager
Mrs. Duangjit	Suvanphatep	Service Support Department Director
Mr. Piyapong	Srisomboon	Water Meter Department Director
Mr. Natthapong	Suwannarat	Water Loss Management Department Director
Mr. Komgrit	Pochai	Water Distribution Pumping Station Department Director
Mr. Pummate	Chaitragul	Water Transmission and Distribution Control Department Director

Line of Deputy Governor (Engineering)

Miss Madira	Suparp	Water Treatment and Transmission System and Civil Work Construction Department Director
Mr. Chana	Pongpothakul	Water Distribution System Construction Department 1 Director
Mr. Pravej	Ampornrat	Water Distribution System Construction Department 2 Director
Mr. Winyu	Roongadulpisan	Water Distribution System Design Department Director
Mrs. Thimaporn	Wimonanupong	Engineering Standard and Geographic Information Department Director
Miss Warangkana	Sudto	Water Treatment, Transmission System and Civil Work Design Department Director
Mr. Dollachet	Klahan	Project Management Department Director
Mr. Noppatat	Malerak	Waterworks Improvement Project Department Director

Line of Deputy Governor (Water Production)

Mr. Supukkaj	Bunnahirun	Production System Planning and Engineering Department Director
Miss Chatsinee	Surasen	Water Resources and Environment Department Director
Mr. Thaveesak	Ngarmwacha	Raw Water Transmission System Department Director
Miss Nongnara	Atanavanich	Water Quality Department Director
Mr. Manawat	Preechachon	Bang Khen Water Treatment Plant Department Director
Mr. Thanitpong	Settachaisri	Samsen and Thon Buri Water Treatment Plant Department Director
Mr. Chaiwat	Chotkongkatitham	Mahasawat Water Treatment Plant Department Director
Mr. Yongyut	Srimode	Electrical System Maintenance Department Director
Mr. Vittaya	Kongkeatvanit	Mechanical System and Civil Maintenance Department Director
Mr. Pisarn	Thudee	Instrument and Automation System Maintenance Department Director

Line of Deputy Governor (Planning and Development)

Mr. Jirawat	Kanpayan	Policy and Strategy Department Director
Miss Orawan	Suraiman	Risk Management Department Director
Mrs. Sunisa	Piyasuwan	Corporate Innovation Department Director
Mrs. Petiporn	Chantawong	Business Development Department Director

Line of Deputy Governor (Digital Technology)

Mrs. Pajongjit	Saovajantr	Digital Strategy and Innovation Department Director
Mrs. Phisawat	Phapsuwan	Acting Digital System Development Department Director
Mr. Phakphoom	Pirachai	Digital Technology Infrastructure Department Director

MWA Expert Level 8

Mrs. Suntaree	Akepanidtaworn	Mr. Boonchok	Panyaprasitkit
Mrs. Wantanee	Chumpoo	Miss Thiranut	Thamlethong
Mr. Khajhonwatch	Suwanla-iad	Mrs. Dalina	Klayklung
Miss Roskon	Dankul	Mr. Thanomsak	Duangdee
Miss Nuchnapa	Wongmongkhon	Miss Wanicha	Yotkham
Mrs. Aimchit	Chumchalem	Mr. Sarawut	Apiluk
Mr. Anuruk	Promchai	Mr. Pongtape	Nootbootsaba
Mr. Arttachai	Ketrattanabovorn	Mr. Chodanun	Surapeepong
Miss Jaronrat	Thanaolan	Mr. Naruchit	Kanittakul
Mrs. Wisakhar	Montian-art		

Auditor Level 8

Mr. Bundit	Seanglew
------------	----------

Retired Senior Executives in the fiscal year 2023

Mr. Thamrong	Buranatrakul	Deputy Governor (Digital Technology)
Mr. Prasopsuk	Somprasonk	Deputy Governor (Western Services)
Mr. Suthirug	Buchagul	Deputy Governor (Engineering)
Mrs. Kanitta	Pholcharoen	MWA Expert Level 10
Mr. Veerachai	Wisepunthurungsi	MWA Expert Level 10

Metropolitan Waterworks Authority

Today and the Future



State of the Industry and Future Trends

In 2023, the International Monetary Fund (IMF) forecasted global economic growth at 3.0 percent as the global economy recovered from the COVID-19 pandemic, as well as inflation declined from 8.7 percent to 7.0 percent in 2023 due to lower energy prices. For 2024, global economic growth is expected to decline to 2.9 percent due to risks associated with China's real estate crisis and, the Israeli-Palestinian conflict. The European Union (EU) economic growth is projected to expand by 0.7 percent in 2023 and will expand by 1.8 percent in 2024. Meanwhile, China's economic growth is expected to be 5.0 percent in 2023 and will slow down to 4.2 percent in 2024 due to the real estate crisis and a downturn in external demand. If the Chinese government can solve the real estate crisis, economic growth may improve more than expected. Developing countries in Asia are expected to grow 5.3 percent in 2023 and 5.0 percent in 2024 and the economy of developing countries are growing faster than the economy of developed countries.

For Thailand, The World Bank forecasts that the economy will grow from 2.6 percent in 2022 to 3.4 percent in 2023 mainly due to the recovery of tourism and a strong labor market, as well as lower inflation rate driving private consumption set to rebound. However, the exports are expected to slow down as demand declines in the economy of developed countries. According to tourism and private consumption, the economic growth is expected to be 3.5 percent and 3.3 percent in 2024 and 2025 respectively and the number of tourists is expected to reach pre-pandemic

level in 2024. The risk factors and challenges include a slowdown in global trade and exports affecting manufacturing activity and private investment, climate change, the El Niño phenomenon, geopolitical tensions, and volatile energy prices

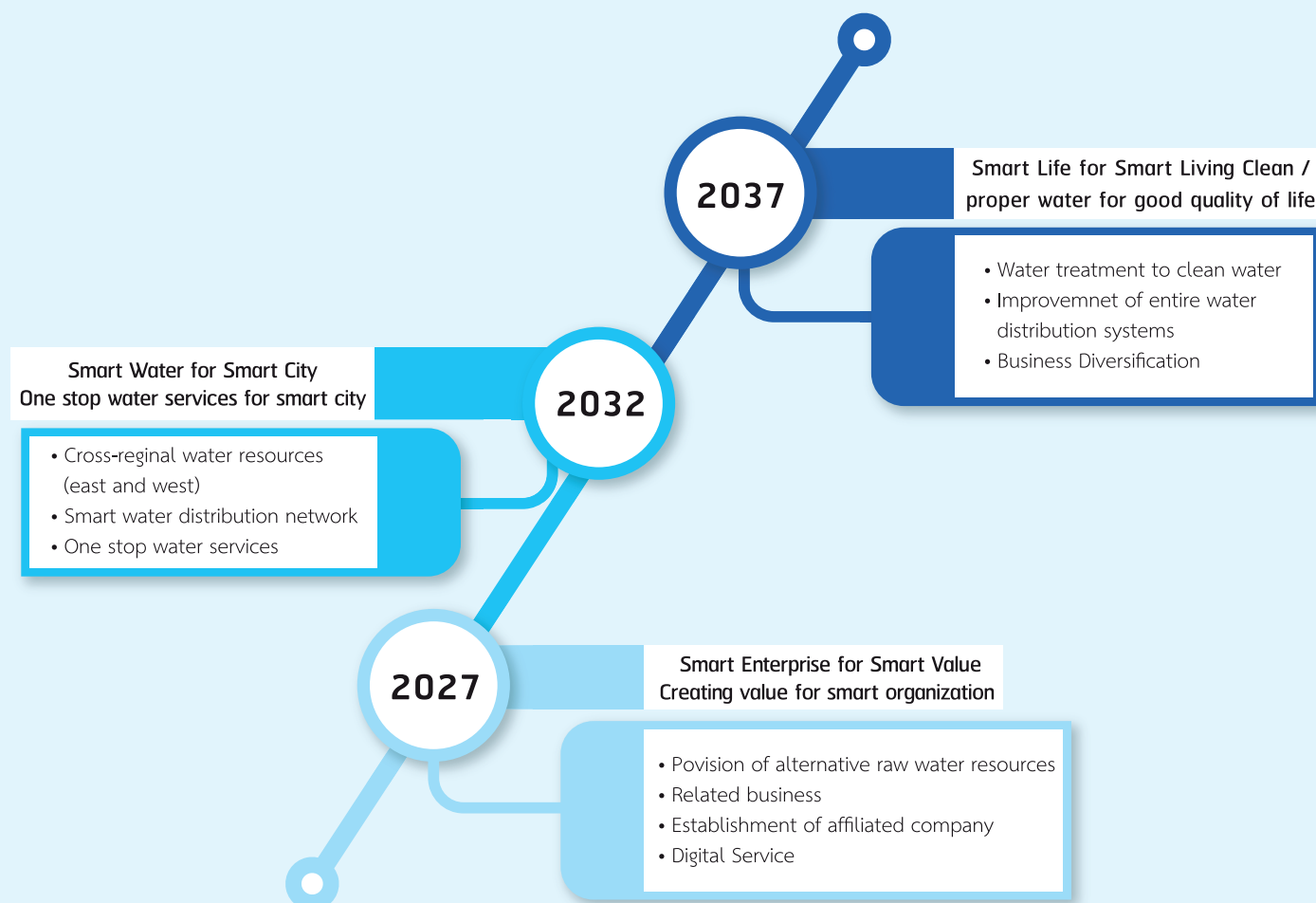
For the growth rate of Gross Domestic Product by production, the Office of the National Economic and Social Development Council predicts that agricultural production will expand by 0.5 percent in the second quarter of 2023. Non-agricultural sector will expand by 1.9 percent such as accommodations and food services, wholesale and retail owing to the expansion of private consumption, the continued recovery of tourism sector, and the continued expansion of both private and public investment. In 2023, the consumption and total investment are expected to expand by 5.0 percent and 1.6 percent, respectively while the average inflation rate is in the range of 1.7-2.2 percent.

The Metropolitan Waterworks Authority forecasts that water sales in fiscal 2023 are likely to increase from fiscal 2022 as water sales are likely to continue rising because of the recovery of foreign tourists. The Tourism Authority of Thailand forecasts 30-35 million of foreign tourists entering Thailand in 2024, which are up from the forecast of 25 million tourists in 2023. In addition, the El Niño phenomenon will result an increase in water demand, including various economic driving measures by the government and incentives to attract long stay and foreign investors also encouraging the expansion of the real estate sector.

Important Work Plans and Projects

Projects	Project Duration (Years)	Project Expenses (Million Baht)	Performance up to Fiscal Year 2023 (%)
1. The Eighth Bangkok Water Supply Improvement Project The production capacity of the water treatment plants in Bang Khen and Mahasawat has increased each place by 400,000 cubic meters per day, and clear water reservoirs were constructed at the Rat Burana and Phet Kasem water distribution pumping stations. Raw water pumps, water supply pumps and water distribution pumps were also purchased and installed along with the construction and installation of piping systems and other related work.	2008-2024	7,494.0	85.02
2. The Ninth Bangkok Water Supply Improvement Project The production capacity of the water treatment plant in Mahasawat was increased by 800,000 cubic meters per day, and the effectiveness of the water distribution system has increased through the construction of water supply tunnels and a water distribution pumping station at Bang Mod and the expansion of clear water reservoirs along with the construction and installation of piping systems and other related work.	2017-2027	42,750.0	20.02
3. Work to Enhance Water Pumping Potential in the Main Pipe System New pipes are installed and old pipes were renovated in all 18 branches under the responsibility of the Metropolitan Waterworks Authority.	2016-2027	3,798.05	39.32
4. Project to Improve Water Pipe Systems to Increase Water Supply System Stability Project has carried out to improve the water pipe systems to reduce water loss and enhance the overall effectiveness of the piping networks of the Metropolitan Waterworks Authority.	2012-2027	1,520.42	58.43
5. Project to Improve the Raw Water Transportation System to Enhance Stability and Permanently Prevent Flooding The raw water transmission system on the eastern side where raw water has supplied to the Bang Khen water treatment plants, Sam Sen water treatment plants and Thon Buri water treatment plants has improved from the Bang Khen water treatment plants to the Sam Lae raw water distribution pumping station to increase water transmission potential and permanently prevent flooding along water supply canals.	2013-2026	3,573.64	23.97

Roadmap of the Sixth Metropolitan Waterworks Authority Strategic Management Plan (Revision Edition B.E. 2566 (2023))



The Metropolitan Waterworks Authority has divided the strategic goals into 3 phases as follows:

1. **Short-term goal (2027)** is to focus on driving the organization toward a Smart Enterprise for Smart Value, including main activities; for instance, the provision of alternative raw water resources, service enhancement and performance efficiency for digital service and digital utility, a technology-driven organization, an easy access to related businesses, proactive communication, product/service development for reaching consumer needs and expectations, and an establishment of affiliated company, etc.

2. **Medium-term goal (2032)** is to focus on providing one stop water services for Smart City, including main activities; for instance, linkage between east and west water resources, smart water distribution network, and one stop water businesses, etc.

3. **Long-term goal (2037)** is to focus on clean /proper water for good quality of life (Smart Life for Smart Living), an improvement of entire water distribution systems, and creating business diversification beyond the core business, etc.

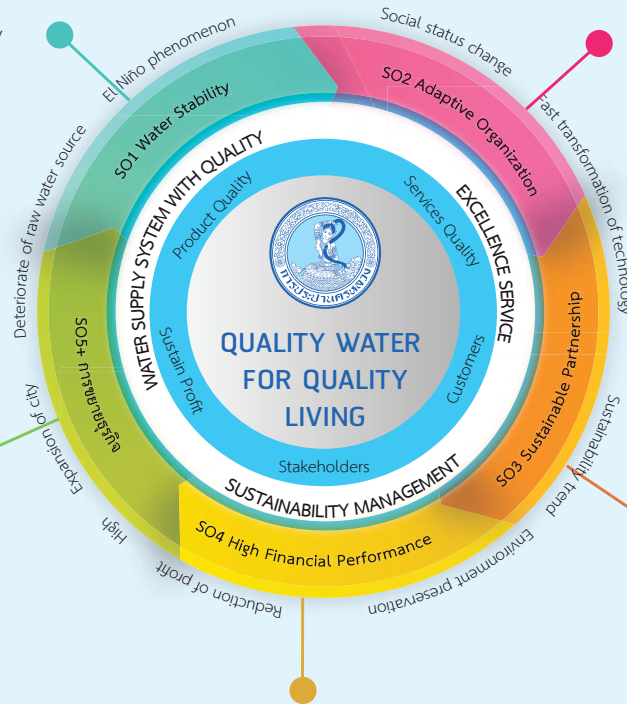
Strategic Objectives and Tactics to Drive the Organization

Improve Water Supply System & Processes

- Stability of raw water resources
- Sufficient water treatment capacity
- Standard water quality
- Low rate of water loss
- Water pressure

Growth Strategy

- Increasing more income from related business
- Opportunity development for related business and market share for new business
- BU/Affiliated company



Productivity Strategy

- Increasing more income from water business
- Expansion of responsible service
- Adjustment of significant cost and expenses

Digital Technology & Innovation Processes

- Applying technology
- Personnel skill development
- Organization Structure Development
- Innovative Process Creation

Improve Customer Management Processes

- MWA onMobile
- Digital Service
- One Stop Service
- Customer Journey/Persona

CSR & Stakeholders Management

- Good relationship with communities along upstream-downstream watersheds
- Watershed forest reserve
- Building a strong brand image and reliability
- ITA Score

Based on the short-term goals (2027), the strategic positions are defined into 3 sub-phases: 1) short-term (2023), 2) medium-term (2024-2026), and 3) long-term (2027) by considering 3 dimensions as follows: 1) quality water supply system, 2) service excellence, 3) sustainable management. The indicator

of strategic position is to be Organizational Excellence in 2023, Organizational Growth in Related Businesses in 2024-2026, and Smart Enterprise for Smart Value in 2027 together with driving Strategic Objective (SO) to achieve those indicated strategic positions.

Future Policies and Plans

The Tenth Bangkok Water Supply Improvement Project

- Expand the production capacity of the Maha Sawat Water Treatment Plant with a capacity of 800,000 cubic meters per day, equivalent to a total capacity of 3,200,000 cubic meters per day
- Construct water transmission tunnel with cross-regional water resources from the west side to the east side up to 600,000 cubic meters per day
- Increase water reserve capacity by enlarging the clear water reservoir of the Bangkhen Water Treatment Plant, raising the storage volume by 190,000 cubic meters.
- Construct a new pumping station on the upper west side with a clear water reservoir of 40,000 cubic meters.

Provision of Alternative Raw Water Resources Project

To study the feasibility to provide an area in the upper part of the Chao Phraya River Basin which increases raw water reserves by 0.6 million cubic meters in fiscal year 2025 and by 0.5 million cubic meters in fiscal year 2027.

Greenhouse Gas (CO₂) Reduction Project

To sustain the organization continuously reduces greenhouse gas (CO₂) emissions.

Establishment/Partnership of affiliated company

To expand related businesses, capability, and generate income for sustainable growth.

Six types of Related Business plans

For instance, sales and pipeline Installation businesses (pipe installation, design work inspection)/ After sale and home services (surveying internal leaking pipes and repairing pipes in consumer homes, water tank cleaning services)/Testing services (water meter testing, water quality testing, water equipment testing)/ Water Supply Technology Training/CIS System Service and Water System Design, Consulting and Improvement Services.

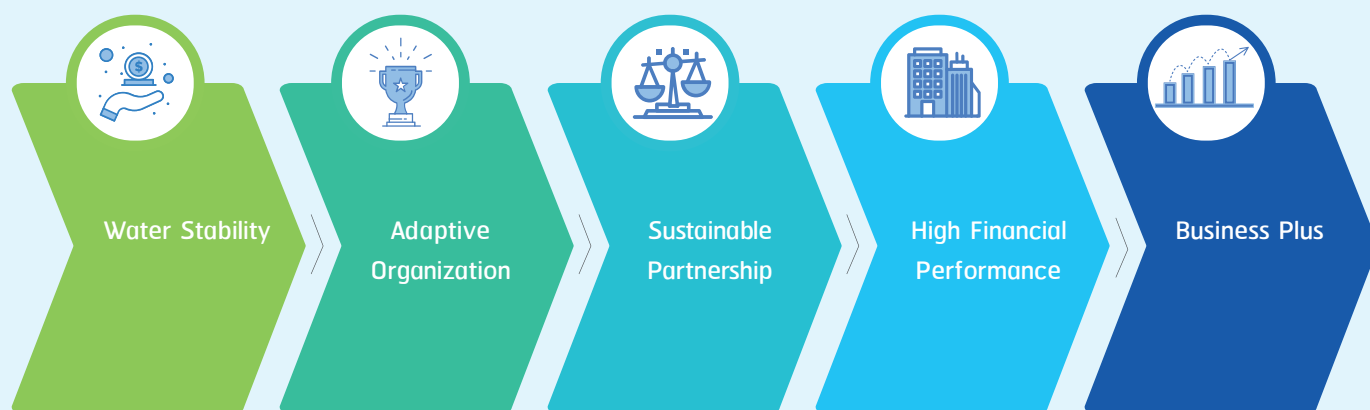
Customer/Consumer Journey and Customer/Consumer Persona Project

To enhance services reaching overall needs and expectations, develop products/services that meet the needs of niche markets to generate continuous income for the Metropolitan Waterworks Authority.

Performance



Business Performance under the Action Plan for Fiscal Year 2023 according to the Sixth Metropolitan Waterworks Authority Strategic Management Plan



In fiscal year 2023, the Metropolitan Waterworks Authority operates under “the Sixth Metropolitan Waterworks Authority Strategic Management Plan (2023-2027)” for the first year, focusing on driving the organization to become a Smart Enterprise for Smart Value by applying technology throughout the supply chain in raw water resource management, water treatment, water distribution, sales and pipeline Installation businesses and after sales and home services, as well as applying technology in organizational management as a high-performance organization delivering value to meet stakeholders needs as per the Vision. “ Quality Water for Quality Living”. The details of implementing Strategic Objectives across the organization as follows :

1. Water Stability

The Metropolitan Waterworks Authority stabilizes/improves the east and west side of raw water transmission systems, a construction to prevent permanent flooding, water loss management, and water pressure. The rate of water loss accumulates at 27.12 percent in 2023 carrying out the replacement of aging pipes for 1,200 kilometers per year. In the past 10 years, the Metropolitan Waterworks Authority has completed pipe replacement more than 5,700

kilometers reducing water loss rate only 23 percent that will be a challenging goal by 2027 implementing pipe replacement plan, proactive water loss management, water pressure control and management, and the use of technology to accurately detect pipe leaks and providing rapid and efficient maintenance. In addition, in order to ensure every drop of tap water clean and safe for consumption, the Metropolitan Waterworks Authority enhances water treatment system more efficient in compliance with Water Safety Plan of the World Health Organization (WHO). The best practices in water treatment and risk management principles have been applied to manage water quality, including the water supply chain from raw water resources to consumers, including reinforcing water supply network for urban expansion, strengthening Thailand’s economy and society. The Ninth Bangkok Water Supply Improvement Project has invested more than 42,750 million baht consisting of 1) the expansion of production capacity of Maha Sawat Water Treatment Plant, 2) the construction of transmission tunnels connecting the east and west water supply networks, and 3) the construction of new pumping stations and additional clear water reservoirs, various sizes of pipe installation for expanding water distribution system, which will be completed gradually in 2024 and completed entire



system by 2029. Those will create stability in water system proceeding continuous diversion between the west and east side of Bangkok, improving water pressure, and continuous distribution system that support the expansion of the joint area between Bangkok and its vicinity.

2. Adaptive Organization

The Metropolitan Waterworks Authority commits to service enhancement for more convenient, fast, and easy access. The quality of service on all aspects of connecting every step are driven by innovation and technology in the form of online services, such as the MWA e-Service (<https://eservicesapp.mwa.co.th>) website providing Virtual Branch 24 hours a day, MWA Line Connect, and MWA onMobile Application. Consumers are allowed to enjoy convenience in all water services on their smartphones, which can be downloaded on both App Store and Play Store, as well as enhancing the organization capacity by applying knowledge in development contributed to innovation for the Project of 1 Department 1 Innovation / 1 Process Development, and Project of Organizational Innovation Contest, and use of technology to improve and support service processes through the Command Center, which aims to monitor, verify, solve and supervise people troubles immediately, as well as analyze complains and incidents

from the people for decision making, plan and policy formulation in order to execute systematic management and facilitate the people effectively.

3. Sustainable Partnership

The Metropolitan Waterworks Authority focuses on doing business in accordance with Corporate Governance principles, transparency, building good relationships with stakeholders according to a target level based on set characteristics, and co-creating added value with stakeholders as follows:

• Sustainable Stakeholder Engagement and Involvement Project

The communication of various business performance and engagement with all groups of stakeholders through various communication channels and activities; for instance, visiting a relation network, participating in community development, Identifying community needs and expectations, and doing CSR activities such as MWA Plumber for People Project, MWA Plumbing System for School to strengthen the community or discuss with relevant agencies as policy makers and shareholders, and agencies involved in missions such as the National Water Resources Office and Royal Irrigation Department to find out stakeholder need, etc.

- **Project of Installation and maintenance of energy-saving equipment in renewable or alternative energy power generation systems between the Metropolitan Electricity Authority and the Metropolitan Waterworks Authority**

All departments promote energy efficiency and independence on imports of foreign fuels used to generate electricity, global warming reduction, which affects people lives around the world. The project provides the installation of rooftop solar power generation equipment for energy conservation with the purpose of supporting the government to reduce electricity costs. The project is expected to save approximately 1,675.53 million baht in electricity costs and reduce carbon dioxide emissions by approximately 636,621.26 tons of carbon dioxide (Tco₂) or 31,831.06 tons of carbon dioxide/year (Tco₂/year).

- **Corporate Governance Enhancement Project for Executives and Employees**

The standard of Corporate Governance has enhanced through the international principles of Corporate Governance and sustainability to be a state-owned enterprise in compliance with a corporate culture based on corporate governance and transparency in doing business. The Metropolitan Waterworks Authority implemented according to the Action Plan and revises to meet the Core Business Enablers criteria and Integrity and Transparency Assessment (ITA) by communicating information on ethics, corporate governance, and code of conduct to employees and integrating information technology systems with Corporate Governance to report conflicts of interest for easy access to employee information. Furthermore, the Metropolitan Waterworks Authority earns Certificate of Integrity and Transparency Assessment (ITA) with a score of 98.18 points in the fiscal year 2023, which was ranked the second among state enterprises under the Ministry of Interior and the fourth among all 51 state enterprises.

4. High Financial Performance

To focus on creating sustainability on business growth to generate full potential revenues and returns,

the Metropolitan Waterworks Authority undertakes pipe installation 72.571 kilometers under Adequate, Stable, and Extensive Water Service Expansion Project. Moreover, Pipe Installation for Water Service Expansion Project completes for 73 routes with a total distance of 40.725 kilometers, which operates by the Metropolitan Waterworks Authority and grants financial support from local government agencies and signed a Memorandum of Understanding (MOU) between the Metropolitan Waterworks Authority and local government agencies. In addition, the Metropolitan Waterworks Authority also completed the research and innovation for use in the organization and for commercial use in the future, such as Detection Stray Current in Trunk Main System Project with Stray Current Mapper technique for design and monitoring of Cathodic Protection (CP) for trunk main system in the line of construction of electric trains, which also optimizes asset management and controls operating expenses.

5. Business Plus

The Metropolitan Waterworks Authority is allowed doing related businesses to optimize revenues. The direction to boost other revenues apart from the core business is set to strengthen financial stability such as providing water system development business to the Local Administrative Organizations (LOAs), service enhancement for water technology training business, promotion and public relations for sales and pipeline Installation businesses, and service enhancement for related businesses under One Stop Water Services by MWA to facilitate more inconvenient to consumers who require home services providing full ranges of quality water services such as consulting service, design of water system and water distribution, providing water check-up service, providing pipe survey and repair services, and small to large water tank cleaning services, including water quality testing services certified by expert scientists and accredited laboratories according to ISO/IEC 17025. As a result, the Metropolitan Waterworks Authority earned the revenue from related business 1,123.91 million baht in 2023.

Corporate Management

Risk Management

The Metropolitan Waterworks Authority realizes the importance of risk management used as a tool to manage corporate risk for operational efficiency and effectiveness and reach the achievement of Vision, Mission, and organizational goals. Risk management and internal control are implemented by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework and Core Business Enablers of State-Owned Enterprises in consistency with Corporate Governance principles and corporate strategies. The various aspects of organizational operation are summarized as follows:

Raw Water Quantity and Quality

In 2023, the Meteorological Department predicts that Thailand has volume of rainfall relatively less than in the year 2022. At the end of the year, the El Niño conditions are likely to intensify and expected to last until 2024. The Metropolitan Waterworks Authority therefore takes the approach to efficient and up to date water management for mitigating the less impact on consumers in service areas. The organization regularly attends the meeting of Subcommittee on Monitoring and Analysis Water Situation every Monday except public holidays to monitor water situation and to coordinate with the Department of Royal Irrigation, as well as to closely collaborate with relevant agencies both public and private sectors together with planning and water management until the crisis passing by. For the long term, the Metropolitan Waterworks Authority has prepared a project to expand production capacity and maintenance of Water Treatment Plants, and to increase clear water reservoirs. The water supply canals have also improved to store more raw water for reducing the impact of various situations that may occur and manage an increase in water demand in the future. The Metropolitan Waterworks Authority has configured Key Risk Indicators (KRIs) both quality and quantity of raw water for relevant agencies to use as

the surveillance information and incident response in time. In addition, executives have exploited information as resource management for maximum benefit and reducing occurring impacts while thoroughly delivering quality water in accordance with the World Health Organization's guidelines to consumers in accordance with the mission.

Stability in Water Treatment, transmission, and Distribution Systems

In order to reduce the opportunities and impacts on the stability of water treatment, transmission, and distribution systems both in the east and west sides, the Metropolitan Waterworks Authority has prepared a maintenance plan for machine availability in water systems. There are some projects to expand water capacity of water treatment plants, as well as to improve water infrastructure reaching water demand for future urbanization. In addition, the Metropolitan Waterworks Authority has prepared a management plan for water treatment, transmission, and distribution Systems to ensure a continuous water supply. In the fiscal year 2023, the Metropolitan Waterworks Authority enables to manage water treatment, transmission, and delivery service due to the Service Plan..

Responsibility to Stakeholders

The Metropolitan Waterworks Authority concerns on resilience management, a state of readiness to immediately respond to any possible future disaster, crisis, or any other type of emergency situation. In fiscal year 2023, the Metropolitan Waterworks Authority enables to maintain the Business Continuity Management System (BCMS) according to ISO 22301: 2019 which defines the scope ranges from raw water management process, water treatment process, transmission and distribution processes, service process, and related supporting activities for employees to prepare for a state of readiness to immediately respond to a disaster and

to deal with the situation efficiency and effectiveness, and in time. Furthermore, the stakeholders can ensure that the Metropolitan Waterworks Authority enable to constantly provide quality water to consumers even the organization facing any possible future crisis.

Finance

Financial Management is an important matter to the organization when the expenses particularly tend to increase continuously, meanwhile total revenues tend to remain constant. In addition, the impact of COVID-19 pandemic has also affected on changing consumer behavior, especially in industries showing a significant decline in water consumption. The Metropolitan Waterworks Authority is facing the challenges in planning financial management appropriate to the economic situation and financial status. Therefore, “Statement of Cash Receipts and Payments” is a form of financial tool for decision making in liquidity management and financial risk management as well.

The Metropolitan Waterworks Authority also improves the process of preparing daily and monthly statement of cash receipts and payments and provided varieties of approach presenting information in addition to table and text formats used for appropriate data processing, financial analysis and planning by implementing SAP Analytic Cloud (SAC), a function developed by SAP HANA platform. The highlights of SAC features has shown complete Business Intelligence (BI) through a modern dashboard for the executives to be informed the actual movement of cash receipts and payments report and the forecast at a particular time such as 1 month or 1 year ahead. The analysis of present and future financial statement is used for fund and excess liquidity management, and others to maximize benefits under the context of sufficient liquidity for continuing sustainable operation.

Information Technology

To ensure efficient services to the public, the Metropolitan Waterworks Authority implements “Security Operations Center” Project and Communication Network Optimization and Water Distribution System Stability Project, for enhancing the efficiency and security of technology infrastructure, and analyzing cybersecurity issues. There are also measures to prevent network intrusions and malicious attacks, which emphasizes on Data Governance allowing information provision and services in accordance with a framework of Data Governance for Government. In addition, the Metropolitan Waterworks Authority complies with Cyber Security Act B.E. 2562 (2019) by revising and updating Business Continuity Plan (BCP) in information technology, as well as regularly carrying out the rehearsal based on the standards on annual basis to deal with undesirable situations.

Improving Efficiency in Water Loss Reduction

The Metropolitan Waterworks Authority hires a Performance Based Contract (PBC) and the study of the survey to identify routes and signs of pipe installation for achieving a targeted water loss reduction, as well as an amendment of the regulations relating to call for damages in tortious actions. Risk management plans include Target Control Plan on Water loss under PBC Project and Opportunity and Impact Reduction Plan on Water Transmission and Distribution Systems in Case of Damage from Adjacent Construction. The performance of risk management plans are completed activities and plans on schedule, particularly Performance Based Contract (PBC) that requires control of leaking pipe repairs and pipe installation useful for monitoring the performance in accordance with the guidelines and achieving appropriate organization’s goals.

Internal Control

The Metropolitan Waterworks Authority complies internal control with the Ministry of Finance regarding Internal Control Standard and Practical Guideline for Government Agency B.E. 2561 (2018) and COSO 2013 framework, as well as in accordance with the criteria of Core Business Enablers for state-owned enterprises. The various aspects of internal control are summarized as follows:

Control Environment

It is determined that an internal control policy, practical internal control, and an integrated Governance, Risk, and Compliance (GRC) for practical guideline, appropriate administrative authority and various levels of performance due to the organizational structure. In order to achieve checks and balances mechanism, the executives strives to create an atmosphere and culture that supports risk management, internal control, and a role model for transparent, fair, and responsible performance, as well as to promote employees an awareness for productivity improvement and internal control.

Risk Assessment

Internal control system are established in accordance with the organizational structure and mission covering important work processes, all stages of appropriate and adequate performance and focusing on internal control on knowledge-based processes, defining impact assessment criteria based on knowledge under department risk assessment criteria to ensure that the organization retaining business knowledge and to support relevant departments identifying all dimensions of risk assessment.

Control Activities

Control activities are performed at all levels of work processes in order to minimize risks on the achievement of objectives, assess adequacy and effectiveness of existing control activities, and consider additional control activities as necessary to ensure that the organization achieves the specified goals. Moreover, new innovations are promoted useful development and further extension for the best interest to the organization.

Information and Communication

An integrated system of internal control, risk management, and internal audit called Governance, Risk, and Compliance (GRC) for risk analysis is to define control activities and measures for risk management and historical risk universe data collection, including to analyze data relationships and prepare various formats of a report, communication, knowledge transfer and exchange relating to control points through KM Portal system to all levels of employees.

Monitoring Activities

For regular monitoring and assessment, all departments assess the adequacy of internal control system on an annual basis, report to top executives, relevant committees and subcommittees, and submit complete internal control assessment report in accordance with the criteria of the Ministry of Finance regarding Internal Control Standard and Practical Guideline for Government Agency B.E. 2561 (2018) within the specified timeframe.

In fiscal year 2024, the Metropolitan Waterworks Authority focuses on creating added value to the organization through connecting between risk management and internal control processes in line with the strategic plan to reasonably ensure that the organization will enable to achieve strategic goals.

Internal Audit

The Internal Audit Office plays a primary role in providing assurance and consulting services in a fair and independent manner by assessing and improving the effectiveness processes of risk management, internal control, and supervision, including performance auditing, financial report, and policy, legal and regulatory compliance. The roles and responsibilities are obviously defined in the Charter of Internal Audit Office with a review/improvement at least once a year, and a communication of roles and responsibilities for acknowledgment to the executives/employees of Audit Unit. The policy formulation focuses on audit performance that provides confidence and consulting in accordance with International Standards for Professional Practice for Internal Auditing and enhances performance processes according to 7 criterias of Core Business Enablers.

Audit Performance and Report

A five-year long-term plan (2022-2026) and Risk-Based Annual Audit Plan for 2023 have been focused on organizational key risks corresponding to vision, goals, and the sixth Metropolitan Waterworks Authority Strategic Management Plan. Digital technology and data analytics techniques are used to support operations, which are fully implemented accordance to an Annual Audit Plan in 2023. Proactively advising to executives and Audit Unit to complete in accordance with annual audit plan, has inspired the improvement of efficiency, effectiveness, and value creation to the organization. The results of audit performance are reported to executives of Audit Unit, the governor of the Metropolitan Waterworks Authority, Audit Committee, Board of Directors of the Metropolitan Waterworks Authority, and regulatory agencies, including summarized audit issues into explicit knowledges according to knowledge management process, exchanged knowledges within Internal Audit Office and in the organization. Audit performance of Internal Audit Office is independent, no restrictions on the expression of opinions, and no conflicts that unresolved between Audit Unit and Internal Audit Office.



Maintaining Work Quality of Internal Auditor

The internal auditor has followed the guidelines set forth in the Internal Audit Operation Manual. After audit performing from Audit Unit, Self-Assessment Report (SAR) is implemented on a quarterly basis and assessed by the Audit Committee and top executives once a year. The assessment results and recommendations are the feedback for improvement, enhancement of audit performance, and consulting through implementing Internal Audit Talent Retention Plan and supporting internal auditors improve personal development skills to become a Certified Internal Auditor (CIA) or other relevant professional certificates. As a result, 43 percent of internal auditors have professional certifications and spend internal and external training at least 40 hours per person per year.

Auditor's remuneration: State Audit Office of the Kingdom of Thailand is the MWA auditor for fiscal year 2023 setting auditor's remuneration in amount of 6.90 million baht.

Corporate Social and Environmental Responsibility Policy of Metropolitan Waterworks Authority



The Metropolitan Waterworks Authority realizes the importance of all sectors of stakeholders and has adopted the ISO 26000 International Standard Social and Environmental Responsibility Practice, which consists of seven behavioral principles: Accountability, Transparency, Ethical Behavior, Respect for Stakeholder Interests, Respect for the Rule of Law, Respect for International Norms, and Respect for Human Rights as an operating framework throughout the entire of value chain. Therefore, Corporate Social and Environmental Responsibility Policy has been established practical guidelines for the Board of Directors, Governor, executives and employees of the Metropolitan Waterworks Authority as follows:

1. Commit to improve water services owing to an organizational main mission along with social and environmental responsibility in process (CSR in Process) and carry out social activities (CSR after process) complying with 7 core issues of the ISO 26000 international standard as follows: Governance, Human Rights, Labour Practices, Environment, Fair Operating Practices, Consumer Issues, Community Involvement and Development with emphasis on stakeholder Involvement in regard to prevent impact that may arise from the organization's operations along with the obvious goals.

2. Promote employee awareness at all functional levels for performing in a manner of social responsibility, ethics, and morals until becoming a part of corporate culture.

3. Build systematic stakeholder engagement according to the AA1000 Stakeholder Engagement Standard (AA1000SES), which result in effectiveness and achievement of stakeholder management in significant issues focusing on using the organization's expertise to advocate and meet stakeholder needs and expectations.

4. Promote sustainable development and corporate performance reporting relying on a sustainability reporting framework based on the guidelines of the Global Reporting Initiative (GRI) to enhance the organization's operational potentials and the international recognition of reliable performance reports.

Furthermore, employees of the Metropolitan Waterworks Authority commit to the Corporate Social and Environmental Responsibility Policy as part of their performances. The Metropolitan Waterworks Authority is committed to conducting social and environmental responsibility, which is the fundamental of organization's development toward a Sustainable Organization.

In addition, the Metropolitan Waterworks Authority realizes the importance of responsive to balance stakeholder needs under corporate governance and concerning social and environmental responsibility leading to the development and strengthening of the corporate fundamental towards a high-performance and sustainable growing organization. Announcement of Metropolitan Waterworks Authority Board of Directors on Stakeholder Management Policy and the international principles of AA1000 Stakeholder Engagement Standard (AA1000SES) have been applied with stakeholder management in accordance with core work process throughout the entire value chain.

Corporate Social and Environmental Responsibility Performance

The Metropolitan Waterworks Authority deals with the communities in various related areas through many projects to improve people's quality of life and promote community progress in varied dimensions, including water and natural resource conservation, Improvement of water systems in community areas, organizing training for knowledge transfer about water systems as an organization's core competencies and expertise, as well as organizing activities to intimate communities in a sustainable and unified way.



MWA Plumbing System for School Project

Plumbing System for School Project offers to support communities/societies that lack access to clean water for consumption, good hygiene, and a better quality of life by providing and improving plumbing system for school, groundwater systems, water filter system, distribution system, plumbing system, high tanks for rain and groundwater storage, rain gutters or other activities that are beneficial to schools. For fiscal year 2023, the project was implemented to assist a school in the east of water supply canal near Bangkhen Water Treatment Plant. The project has carried out to improve water system in schools, water filter system, and cold water dispenser for Pracha Uppatham School, Thasai Subdistrict, Mueang Nonthaburi District, Nonthaburi Province, including held a handover

ceremony and organized learning base activities “Water for Life” to raise awareness of water resource conservation among youths. The project results clean and hygienic drinking water for teachers and students, reduction of purchasing bottled water, and water leakage reduction in school.

In addition to the implementation of projects in the service area, groundwater system improvement plumbing system in school, a water filter system, and replaced faucets for Wat Khunthai Tararam School located in the community area along the west water supply canal, The Muang District, Kanchanaburi Province, including organized activities to educate students on water resource conservation and waste separation. The project has resulted the school saving about 4,000 baht per month for purchasing drinking water, including Agricultural Garden Project, and Drinking Water Distribution Project to the communities as another source of school income.



MWA Plumber for People Project (Communities surrounding Water Treatment Plants)

MWA Plumber for People Project aims for knowledge transfer about plumbing system as an organization's core competencies and expertise to the general public. Project participants have taken professional plumber training, basic maintenance of



plumbing system and knowledge exchange among plumbers through a collaboration network. The project allows the trainees to apply their knowledge to repair pipe system in their homes and various communities, and to pursue their careers as professional plumbers to generate another income. In fiscal year 2023, the Metropolitan Waterworks Authority has offered 2 training courses called “Plumber for Occupation”; for instance, Basic Plumber 1/2566 with a total of 28 participants who passed the training, and Basic Plumber 2/2566 with a total of 29 participants who passed the training. The participants who passed the training has repaired plumbing systems for temples/schools in CSR Water for People activities to 2 schools: Wat Noi Noppakhun School, Dusit District, Bangkok and Khlong Kluea School. Khlong Kluea Subdistrict, Pak Kret District, Nonthaburi Province.



In addition to educating skills for the general public, the Metropolitan Waterworks Authority has offered a training course for employees who are going

to retire in the fiscal year 2022-2024 to learn about professional plumbers, plumbing systems, sanitary wares, and repairing home plumbing equipments for themselves and their families. The training course is called “Basic Plumber for Employees and Retiring Employees” with a total of 29 participants.

To pursue more opportunities to improve skills and careers for societies in the fiscal year 2023, the Metropolitan Waterworks Authority has offered the project in collaboration with Correctional Institutions, Juvenile Observation and Protection Center providing professional plumber training to good class of inmates. The training supports them to prepare before going out into society, self-supporting, not to be a burden to their families and problems for societies. The most important thing is not to recommit crimes by starting a new life and being a good person in societies. Therefore, “Creating Career Opportunities” Project on the occasion of the Ministry of Interior’s 130th Anniversary Ceremony in 2022 was organized at Minburi Remand Prison, Minburi Subdistrict, Minburi District, Bangkok for 2 groups; 30 male inmates and 30 female inmates and “MWA Plumber for People Project: Basic Plumber for Inmates” at Nonthaburi Provincial Prison, Mueang Nonthaburi District, Nonthaburi Province.



Ruamjai Rak Nam Project (Education on Water Awareness and Saving, Grease Trap)

For many years, the area around Samlae Raw Water Pumping Station located beside Wat Samlae, Ban Krachaeng Subdistrict, Mueang Pathum Thani District,



Pathum Thani Province, has been raw water intake from the Chao Phraya River basin and an important water source of the Metropolitan Waterworks Authority. At Khlong Ban Phrao, Khlong Om and Khlong Bang Luang Chiang Rak has occurred a rapid expansion of residence, agriculture, and industrial plants, which causes trespassing on canal banks, shallow water channels, dense water hyacinths, no water circulation in the canals, and community and agricultural wastewater discharges into the canal resulting canal water deterioration. It is essential for the Metropolitan Waterworks Authority to sustain the appropriate water quality through raising public awareness of river and canal preservation, including rehabilitation of water deterioration to good quality water. “Ruamjai Rak Nam Project” has established to focus on communities, students, and youths to encourage environmental awareness with their family members, and the benefits of sustainable environment conservation for surrounding circumstances, especially on both sides of the canals. The project also creates a strong network among various agencies and collaboration between public and private sectors; for instance the Royal Irrigation Department, the Wastewater Management Organization, Pathum Thani



Province, 8 sub-district administration organizations such as Ban Klang, Chiang Rak, Bang Poon, Bang Phut, Suan Pepper, Ban Mai, Ban Krachaeng and Bang Kadi, which allows the public involving in water quality restoration to good water quality, including, improving people’s quality of life.

For fiscal year 2023, the project is implemented for two schools in Pathum Thani province located on east side of water supply canal; Wat Prem Prachakorn School, Bang Poon Sub-district, Mueang Pathum Thani District, Pathum Thani Province through an improvement of drainage system and the installation of grease traps, learning based activities on waste separation and water resource conservation. Meanwhile Wat Bangkadi Community School is implemented through the construction of sinks and the installation of grease traps, and learning based activities on waste separation and water resource conservation. Those schools initially treat wastewater before discharging into public canals, which help the society save the environment, solve the problem of clogged water pipes caused by accumulated fat, as well as an efficient drainage system to sustainably prevent flooding in schools.

Stakeholders of the Metropolitan Waterworks Authority and Stakeholder Engagement

Stakeholders of the Metropolitan Waterworks Authority

The Metropolitan Waterworks Authority considers the importance of corporate stakeholders aligned with the objectives and prescribed participation scope. The revision of stakeholders is carried out in accordance with AA1000SES standard. In 2023, the stakeholders of the Metropolitan Waterworks Authority remain dividing in 9 groups without any modification to the definition of each group as follows:

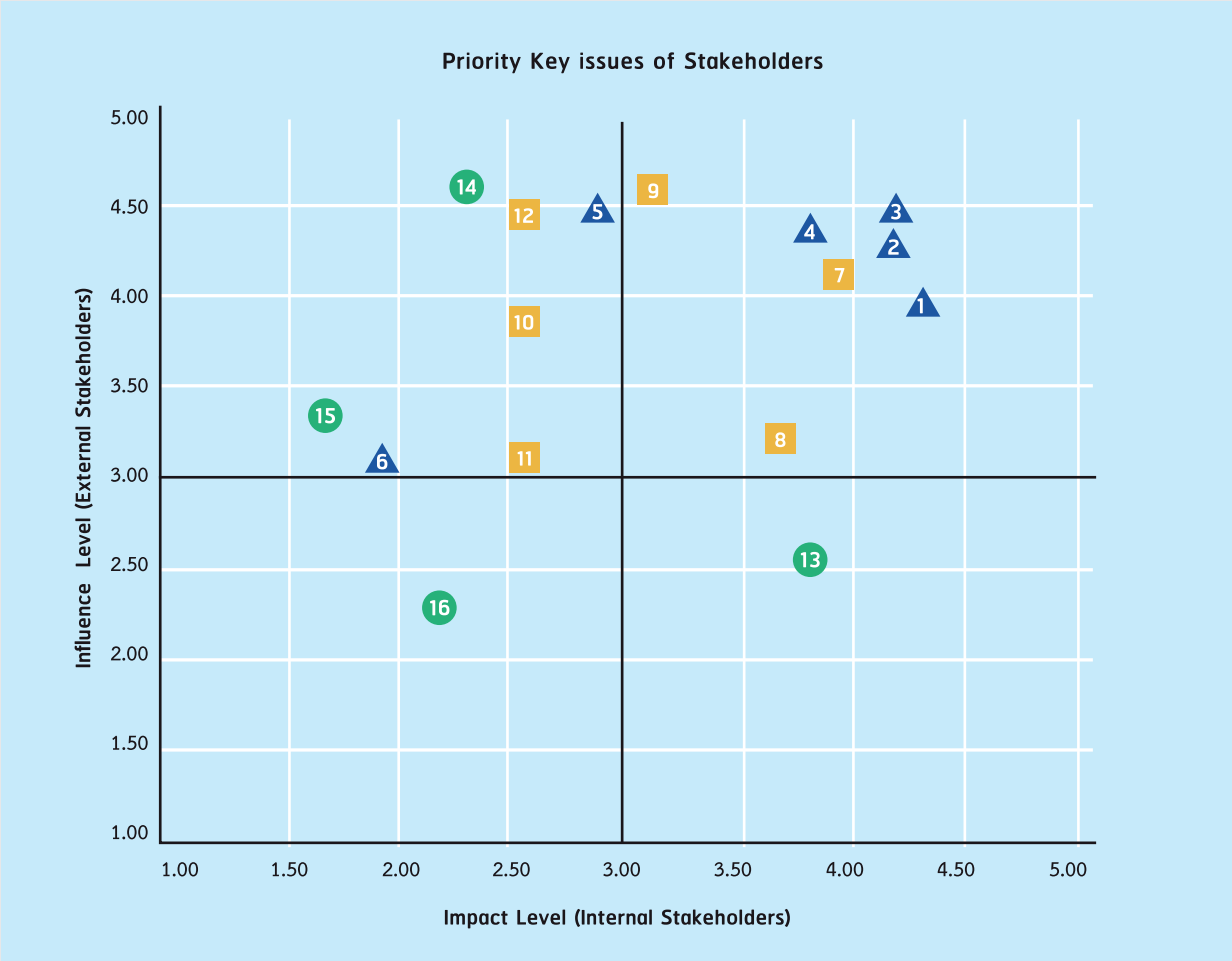
- 1. Policy-makers and government shareholders
- 2. Mission-based related agencies
- 3. Trade partners
- 4. Alliances
- 5. Customers
- 6. Employees and contract workers
- 7. Communities and societies
- 8. Media
- 9. Activists / independent organizations / civil societies / academics

Stakeholder Engagement Plan

The Metropolitan Waterworks Authority has formulated stakeholder engagement plan covering all functional lines / departments to ensure effective stakeholder management and meet the needs and expectations of all groups of stakeholders under the Metropolitan Waterworks Authority’s Stakeholder Master Plan (2023-2027). In fiscal year 2023, The Metropolitan Waterworks Authority is implemented in accordance with the Action Plan under five concepts as follows:

- 1. Proactive communication to create a sustainable corporate image
- 2. Enhancement of stakeholder involvement
- 3. Knowledge transfer toward efficient performance
- 4. Knowledge exchange on management, innovation, and digital technology
- 5. Building strong relationships to promote services

Implementing such above plans lead to build strong relationships and enhance stakeholder satisfaction. The Metropolitan Waterworks Authority has also constantly disseminated and communicated the performance and guidelines of stakeholder engagement, sustainability management, and economic, social, and environmental performance in Sustainability Report in accordance with international reporting standards of Global Reporting Initiatives (GRI) in terms of defining and selecting sustainability issues and prioritizing issues from internal and external perspectives, as shown in the Metropolitan Waterworks Authority’s Sustainability Issues and Priority Map (Materiality Matrix).

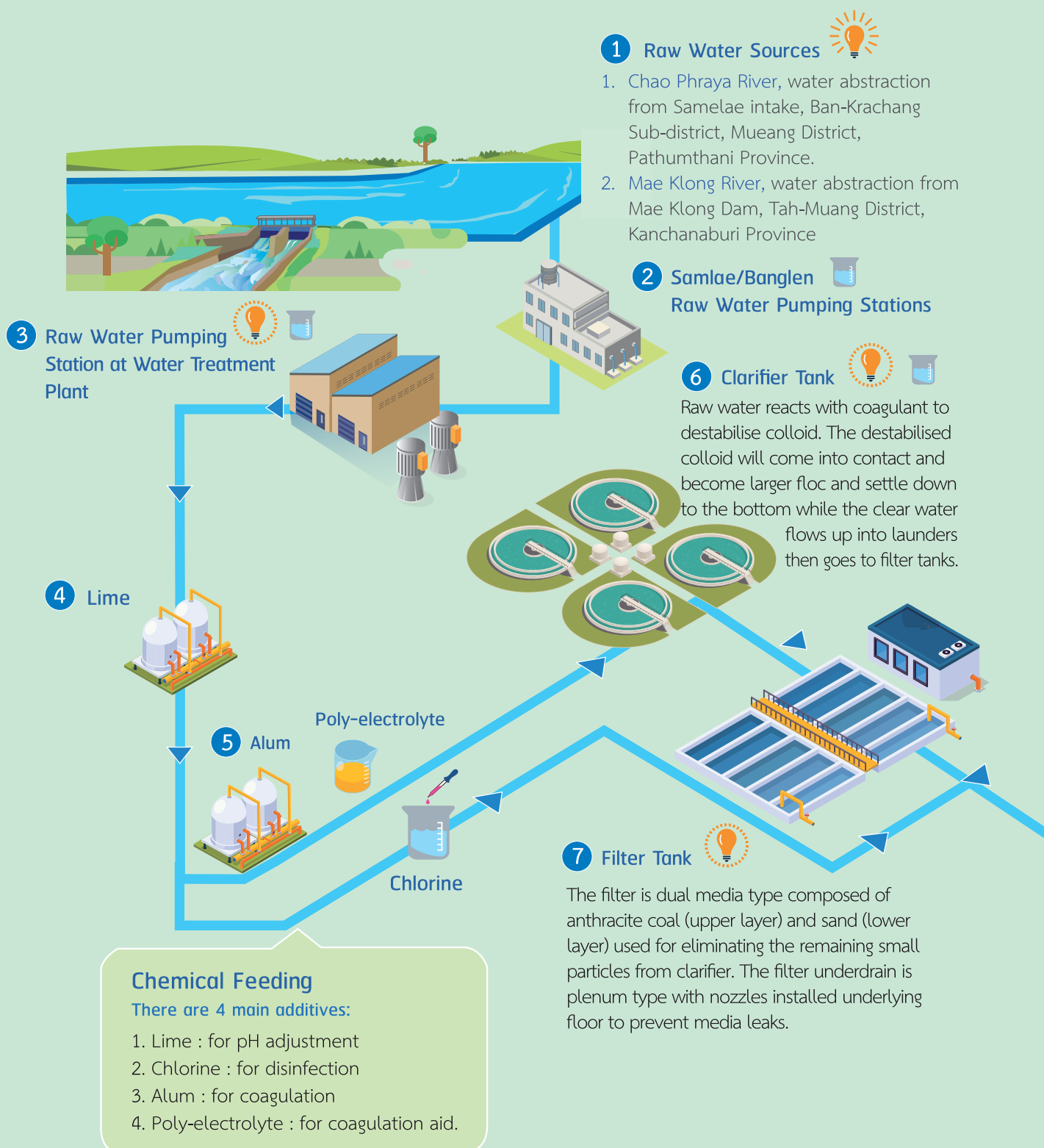


<div>▲ Economy</div> <div>■ Society</div> <div>● Environment</div>	1. Supply chain and Procurement Management	7. Occupational Health and Safety	13. Water Resources and Water Loss
	2. Economic Capability	8. Training and Education	14. Energy
	3. Innovation and Digital	9. Water Quality	15. Air Pollution
	4. Transparency and Integrity	10. Local Communities	16. Waste Management in an Organization
	5. Involvement in Policy-Making	11. Customer Relationship Management	
	6. Indirect Economic Impacts	12. Business Collaboration and Coordination	



Stakeholder Engagement Performance 2023

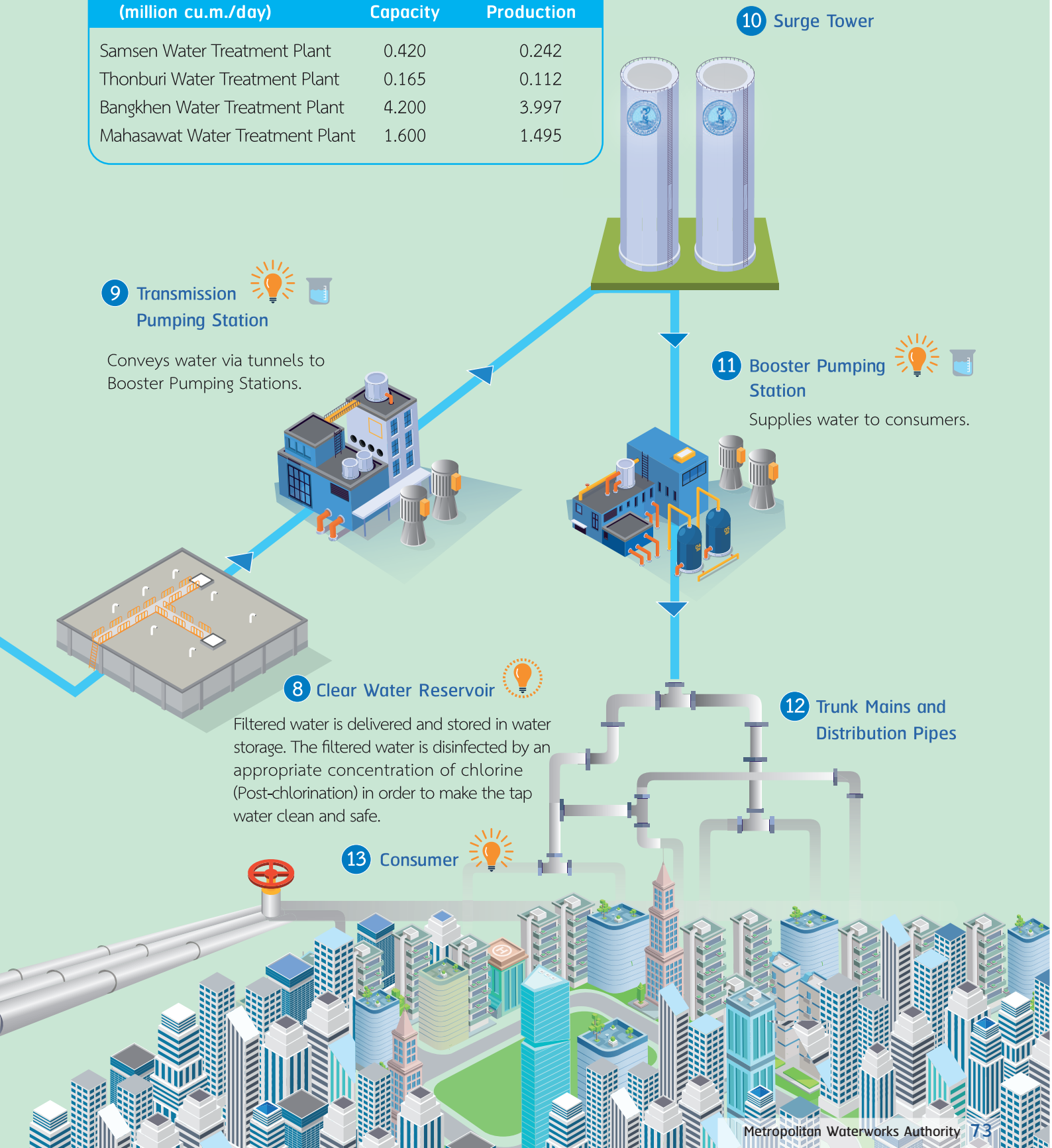
Water Production Process Chart



Notes

- Water monitoring and analysis are done by Water Treatment Plant Laboratory. Bangkhen Water Treatment Plant ISO Certified to ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 22301:2019, GHP and HACCP.
- Water quality monitoring comply with WHO's guidelines 2022. Water quality analysis is conducted by Water Quality Department Laboratory certified to ISO/IEC 17025:2017 and ESPReL

Unit (million cu.m./day)	Production Capacity	Water Production
Samsen Water Treatment Plant	0.420	0.242
Thonburi Water Treatment Plant	0.165	0.112
Bangkhen Water Treatment Plant	4.200	3.997
Mahasawat Water Treatment Plant	1.600	1.495



Length of Pipes and Equipment (As of 30 September 2023)

Diameter Size					
	ST	ST		CI	PC-ST
		SCP	RCP (ST)		
Tunnel and Conduit					
3,400	10.367				6.582
3,200	40.846				
3,000	16.286				
2,800	0.070				25.124
2,500	11.980				6.172
2,300	19.497				1.755
2,000	36.801				8.153
1,500	7.289				
Total in Transmission System (km.)	143.135	0.000	0.000	0.000	47.786
Trunk Main					
1,800	12.583	0.676			
1,500	103.660	11.806	10.672		
1,200	154.719	14.930	2.744		
1,000	573.277	16.653	47.622	12.881	
900	26.895			16.929	
800	477.641	0.330	0.172	8.885	
700	39.305			8.419	
600	135.059			15.746	
500	37.435			19.109	
400	20.139			17.991	
Total in Trunk Main (km.)	1,580.712	44.395	61.210	99.960	0.000
Distribution Pipe					
400	36.156			6.357	
300	300.980			2.244	
250	1.721			0.351	
200	145.748			1.540	
150	175.220			0.112	
100	21.114			0.571	
50	0.048			0.057	
Total in Distribution Pipe (km.)	680.987	0.000	0.000	11.232	0.000
Total in Distribution System (km.)	2,404.834	44.395	61.210	111.192	47.786

*Length of pipes and equipment excluding the length of service pipes (Size 1/2 - 3 inches)

Number of fire hydrant size 150 mm.	32,859	Number of gate valve (Distribution Pipe)	153,311
Above-ground fire hydrant	32,833	Number of gate valve (Trunk Main)	4,299
Underground fire hydrant	26	Number of DMA gate valve	2,953
		Total	160,563
		Butterfly Valve	2,746

Pipe Length (km.)							
AC	AC	DI	PVC	GI	HDPE	PB	Total
							16.949
							40.846
							16.286
							25.193
							18.152
							21.252
							44.954
							7.289
0.000	0.000	0.000	0.000	0.000	0.000	0.000	190.921
							13.258
							126.138
0.354		0.013					172.759
4.533							654.966
2.322					1.254		47.400
4.835		0.423			3.041		495.328
6.831					1.338		55.893
5.009	3.786	2.704			0.582		162.886
12.217	2.702				0.127		71.589
0.222	0.142				0.172		38.667
36.323	6.629	3.140	0.000	0.000	6.515	0.000	1,838.885
	97.439		111.519		1.255	0.106	252.833
	1,034.226	1.096	4,983.103	0.049	83.131	0.145	6,404.973
	15.706		1.272				19.049
	364.143		4,811.796	0.012	146.904	0.131	5,470.275
	814.404		9,824.856	21.986	10.802	1.280	10,848.659
	299.474		13,431.028	164.670	122.778	2.665	14,042.299
	0.410		32.238	28.054	3.082	1,746.128	1,810.018
0.000	2,625.802	1.100	33,195.812	214.771	367.952	1,750.456	38,848.107
36.323	2,632.431	4.235	33,195.812	214.771	374.467	1,750.456	40,877.912

Services of MWA Branch Office

(As of 30 September 2023)

Branch Office	Service Area	Consumers	New Connection	Water Production	Water Distribution		
	Km ²	Connection	Connection	Million cubic meter	Water Sales Million cubic meter	Other Water Million cubic meter	Total Million cubic meter
Service 1	531.73	590,230	14,109	567.47	389.95	29.21	419.16
Sukhumvit	95.16	130,890	2,744	148.32	99.05	9.10	108.15
Phra Khanong	121.31	162,630	3,595	140.28	96.71	11.58	108.29
Samut Prakan	283.40	225,821	7,292	195.28	139.06	6.19	145.25
Thung Mahamek	31.86	70,889	478	83.59	55.13	2.34	57.47
Service 2	194.78	326,390	4,044	339.75	245.48	7.98	253.46
Phaya Thai	60.89	88,643	879	122.08	86.97	5.31	92.28
Mansri	35.81	67,070	649	113.06	77.87	1.46	79.33
Lat Phrao	98.08	170,677	2,516	104.62	80.64	1.21	81.85
Service 3	776.25	579,084	19,868	370.64	295.30	10.94	306.24
Prachachuen	77.87	119,990	2,294	85.61	61.44	3.62	65.06
Bang Khen	82.98	136,969	3,781	71.46	55.33	3.18	58.51
Min Buri	292.88	179,468	5,674	95.41	79.36	1.67	81.03
Suvarnabhumi	322.52	142,657	8,119	118.15	99.17	2.47	101.64
Service 4	528.67	631,968	12,941	491.70	289.13	27.69	316.82
Bangkok Noi	112.26	138,528	2,527	123.31	65.58	9.74	75.32
Taksin	114.53	161,071	2,261	122.73	80.41	1.65	82.06
Phasi Charoen	129.47	178,853	3,392	112.88	74.27	3.98	78.25
Suksawat	172.41	153,516	4,761	132.78	68.87	12.32	81.19
Service 5	482.46	478,495	15,446	272.84	175.28	17.60	192.88
Nonthaburi	91.96	132,978	1,890	94.39	64.75	3.58	68.33
Bang Bua Thong	219.63	160,987	6,546	85.07	51.93	8.46	60.39
Mahasawat	170.87	184,530	7,010	93.39	58.60	5.56	64.16
Total	2,513.89	2,606,167	66,408	2,042.41	1,395.14	93.42	1,488.56

Activities in the Fiscal Year 2023



The MWA 56th Foundation Anniversary



Memorandum of Understanding (MOU) on “Exchange of academic knowledge and water innovations”



Pineapple Eye Family Season 3



One Stop Water Services by MWA



The Memorandum of Agreement (MOA) on “Installation of Fire Hydrant”



MOU and collaboration with Metropolitan Electricity Authority

MOU on “Enhancing Public Services for Society, Communities and Environment”



Water transmission tunnel under the Ninth Bangkok Water Supply Improvement Project



MWA Meets People Activity



Yod Nam and Friend Activity

Performance

in Compliance with Corporate Governance Policy



Corporate Governance Policy

The Metropolitan Waterworks Authority commits to comply with the framework of good corporate governance in accordance with the international standards of the Organization for Economic Co-operation and Development (OECD) and the State Enterprise Policy Office (SEPO). The Board of Directors of the Metropolitan Waterworks Authority pays attention to Organizational management based on cooperate governance promoting transparency, verifiability, free from corruption, efficiency, and aiming to be the high performance organization. To ensure sustainable confidence. of all stakeholder groups, the Corporate Governance Policy is formulated covering important issues as follows:

1. The role of public sector
2. The role of fair marketing
3. The equal rights of shareholders
4. The role of stakeholders
5. Information disclosure
6. The Board of Directors
7. Risk management and internal control
8. The code of ethics
9. Sustainability and innovation
10. Performance monitoring

In addition, the Metropolitan Waterworks Authority carries out corporate governance policy through performing in line with Corporate Governance Master Plan under the supervision of the Board of Directors and the Corporate Governance (CG) and Corporate Social Responsibility (CSR) Subcommittee in form of a performance report on a monthly basis in order to acknowledge suggestions and observations, including guideline solutions in case of problems or obstacles that may arise from operational issues.

Review in Compliance with Corporate Governance Guidelines and Principles

The Metropolitan Waterworks Authority regularly reviews Corporate Governance Policy Manual and other relevant policies on a yearly basis. Prior to starting the fiscal year, The review ensures the consistency with changes in policies and contexts under the supervision of the Board of Directors of the Metropolitan Waterworks Authority and the subcommittee assigned by the Board of Directors. The Steering Committee is comprised of each functional line of deputy governors to scrutinize appropriateness and completeness ensuring that the contents of Corporate Governance Policy consistent with international standards.

Corporate Governance Principles of the Metropolitan Waterworks Authority

The Metropolitan Waterworks Authority aims at efficiency and effectiveness of organizational management. The guidelines are formulated to operate justly and to promote equality while recognizing importance to balance all stakeholder groups, respecting to organization rules, regulations, and requirements, promoting transparency and verifiable operation in every work process. The Metropolitan Waterworks Authority adheres to 6 principles of the Corporate Governance consistent with the country's good corporate governance as follows:



1. The Rule of Law

refers to fair rules and regulations applied to every party, developing equitable enforcement without double standard, supervision of compliance with rules, regulations, and timeframe without seeking illegitimate gains, operating within the bounds of respect for human right and freedom, and updating rules and regulations consistent with the current situation.



2. Virtue

refers to adherence to good and right performing duties serving as a good role model for society, encouraging the people for self-improvement together, transforming Thailand into a society of integrity, sincerity, endurance, and discipline, and doing honest professions without supporting or engaging in any corruption, as well as preventing corruption in the organization.



3. Transparency

refers to transparency in management and verifiable operation in every aspect such as clear and disclosable work systems, clear processes for verifying correctness, and accurate and transparent information disclosure directed to the public benefit in line with the times and situation.



4. Participation

refers to an opportunity for employee participation in management relating to giving recommendations and decision-making in various matters, including allocation of corporate resources that affect business operations, employees, and owners through giving information, listening and expressing opinions, giving advice, consultation, collaborative planning, collaborative action, and controlled by stakeholders.



5. Accountability

refers to an awareness on rights, duties, conscious responsibility, attentiveness, enthusiasm for problem-solving, offering a chance and readiness for verification and assessment that reflect the responsibility to stakeholders, as well as accepting the results arising from performing duties and business operations.



6. Efficiency & Effectiveness

refers to efficient and effective management, use of worthwhile resources for the best interest as a whole, providing quality products and services that gain competitiveness and retain society and environment for lasting abundance as specified by key performance indicators and independent entity or individual recognized by society to act as an assessor.

Corporate Governance Performance of the Metropolitan Waterworks Authority

The Metropolitan Waterworks Authority is committed to managing in the framework of Corporate Governance Policy and dealing with constantly changing situation in accordance with the government's policy on promoting good corporate governance in public administration and preventing and suppressing corruption and misconduct in the public sectors, and the Sixth Metropolitan Waterworks Authority Strategic Management Plan (2023 – 2027). Those ensure that Metropolitan Waterworks Authority is a state-owned enterprise carrying out activities according to an organizational mission while driving the organization to achieve a vision stated "Quality Water for Quality Living" regarding the performance in corporate social responsibility as a key factor for organization development toward sustainability.

The corporate governance activities of the Metropolitan Waterworks Authority prioritize promoting ethics and morals at all levels of employees through different learning processes, such as trainings, study visits, an awareness campaign on public relations medias such as circular letters, posters, video clips. Moreover, employee engagement activities through the establishment of the Metropolitan Waterworks Authority Corporate Governance Council aim to promote employees who are selected as a member

of the council involving in communication and serving as spokespersons in promoting knowledge and understanding of corporate governance in their own departments, as well as creative participation in monitoring, surveilling, and reporting suspicions of corruption occurring in the organization.

In addition, the Metropolitan Waterworks Authority is committed to recognize the significance of prevention and anti-corruption through doing important activities. For example, the Board of Directors of the Metropolitan Waterworks Authority, subcommittees, all executives and employees mutually make Declaration of Intention "MWA – Transparency, Accountability, Anti-corruption on and Efficiency" to express their intention on honesty and integrity in management. Moreover, the Metropolitan Waterworks Authority issues an announcement on the policies and practice guidelines for preventing conflict of interest, use of internal information, and connected transactions to prevent any conflict of interest occurring between an employee's personal interests and collective interests of the Metropolitan Waterworks Authority. The Metropolitan Waterworks Authority also establishes the Metropolitan Waterworks Authority Anti-Corruption Center to promote ethics, morals, and anti-corruption and announces the policy regarding reporting on corruption and protecting whistleblowers to ensure that activities follow set procedures while protecting the confidentiality of personal data.

Remuneration of the Governor and Senior Executives

- The Governor of the Metropolitan Waterworks Authority is recruited under the employment contract for a term not over four years. The remuneration is based on the consideration of the Board of Directors of the Metropolitan Waterworks Authority in terms of knowledge, competence, duties and responsibilities, and organization ability to pay under specified remuneration framework
- The remuneration of senior executives (Deputy Governors and equivalent) is based on the wage structure of the state enterprise contract workers (53 tiers). In addition, The remuneration includes monetary and non-monetary compensation, including other benefits pursuant to rules and regulations of the Metropolitan Waterworks Authority.

Unit: Million Baht

Remuneration	2023	2022	2021	Difference in 2023 – 2022 Increased (Decreased)	
				Million Baht	Percent
Remuneration of the Governor	4.85	4.71	4.51	0.14	2.97
Remuneration of Deputy Governors and Equivalent	23.10	21.02	21.04	2.08	9.90
Total	27.95	25.73	25.55	2.22	8.63

Prevention of Conflict of Interest, Use of Internal Information and Connected Transactions

The Board of Directors of the Metropolitan Waterworks Authority recognizes the importance of preventing any conflict of interest occurring between an employee's personal interests and collective interests of the Metropolitan Waterworks Authority. As a result, policies and practice guidelines are formulated to prevent the conflict of interest, use of internal information, and connected transactions, including relevant rules and regulations. Both policies and practice guidelines are reviewed regularly on a yearly basis to ensure that shareholders' rights are managed transparently and efficiently according to good corporate governance principles and practice guidelines. The Metropolitan Waterworks Authority has disseminated those policies and practice guidelines in Corporate Governance Manual of the Metropolitan Waterworks Authority for employee's acknowledgment and compliance.

1. Conflict of Interest Prevention Policy and Practice Guidelines

The following actions or situations are considered as a conflict of interest:

(1) Use of the Metropolitan Waterworks Authority's information to seek benefits for self or other parties.

(2) Being a party to a contract or holding a stake in the contract made with the Metropolitan Waterworks Authority or operating business with a competitive nature to the Metropolitan Waterworks Authority occurring an employee's personal interests conflicts with or contradicts the interests of the Metropolitan waterworks Authority or impacts discretionary decision-making in the duty of employee as employees of the Metropolitan Waterworks Authority.

(3) Holding the position as managing director, manager, major shareholder, consultant, representative, employee or contract worker of a private business supervised, controlled or inspected by the Metropolitan

Waterworks Authority occurring an employee's personal interests conflicts with or contradicts the interests of the Metropolitan teamworks Authority or impacts discretionary decision-making in the duty of employee as an employee of the Metropolitan Waterworks Authority unless assigned to do so in writing by the Metropolitan Waterworks Authority.

The actions in (1), (2), and (3) performed by the employee's spouse are considered as if performed by the employees themselves.

(4) Accepting assets or any other benefits from people apart from assets or benefits that shall be gained under the law, rules or regulations as issued by virtue of the provisions of the law, except in case acceptance from a parent, descendant or relative according to tradition or ethics and status, by which acceptance according to ethics has a price or value of acceptance from each individual and each occasion shall not exceed that prescribed by the National Anti-Corruption Commission or an act of giving to ordinary people.

(5) Consenting for or conspiring with a member of one's own family to accept assets or any other benefits that have a price or value of acceptance from each person and each occasion, which exceed that prescribed by the National Anti-Corruption Commission from a subordinate or a connected person in performing one's duties.

(6) Giving assets or any other benefits or consenting for or conspiring with a member of one's own family for giving the assets or any other benefits with price or value of giving to each individual and each occasion which exceed that prescribed by the National Anti-Corruption Commission for acceptance of assets or any other benefits to a superior or family member of a supervisor or a connected person in performing one's duties.

In this regard, the superior must not appoint or assign persons who may have conflict of interest in any matter as a director, a judge, or a person who involved in providing information, giving opinions, or having authority to give orders on that matter.

2. Use of Internal Information Policy and Practice Guidelines

The employees are obliged to retain internal information of the Metropolitan Waterworks Authority that are informed from performing duties and are prohibited from using internal information to seek illegitimate gains or benefits for themselves or other people, whether directly or indirectly, unless the use of information in making complaints or inspecting complaints to ensure transparent and fairness according to corporate governance principles, and use in education or research and development for the organization interests and the public. In any case, use of internal information must take place within the scope of assigned duties and responsibilities and in compliance with the law, regulations, rules, orders or practice guidelines relating to internal information.

3. Connected Transactions Policy and Practice Guidelines

Connected transactions mean transactions made by between the Metropolitan Waterworks Authority and the connected persons with transaction values according to the criteria set by the Metropolitan Waterworks Authority. Such transactions include making contracts or agreements for acquisition or disposal of assets, renting or giving rent of assets, giving or receiving services, giving or receiving financial assistance, including creating or disclaiming rights in the aforementioned actions, unless transactions are proved to be fair and do not lead to any benefit transfers. To enter into connected transactions, cautiousness, honesty, and integrity are required along the correct procedures without the involvement of stakeholders in decision-making, and done in the best interest of the Metropolitan Waterworks Authority as if the transactions are made with external parties, and avoiding the connected transactions that may cause conflict of interest.

4. Reporting in Compliance with the Policies and Practice Guidelines for Preventing Conflicts of Interest, Use of Internal Information, and Connected Transactions

The Board of Directors, executives, employees, and contract workers are defined to disclose information in order to prevent conflicts between individual interests and collective interests, whether directly or indirectly through reporting the conflicts of interest, use of internal information, and connected transactions according to specified forms to the superiors following the chain of command every fiscal year. During the fiscal year, any action is considered as a conflict of interest or a connected transaction that must be reported to the superior every time. The Internal Audit Office shall be a responsible unit to summarize the report with regard to conflicts of interest, use of internal information, and connected transactions of the entire organization occurring during the fiscal year and reporting to the Governor and the Board of Directors of the Metropolitan Waterworks Authority respectively by 30 September of each year.

In the fiscal year 2023, the personnels of the Metropolitan Waterworks Authority comprising the Board of Directors of the Metropolitan Waterworks Authority (including the Governor), employees, and other contract workers for a total of 4,232 persons reports the conflict of interests, which 4,232 persons have no conflict of interest.

For the procurement process, the Metropolitan Waterworks Authorities makes an inspection of direct and indirect interests of those submitting bids either ordinary person or juristic persons by considering their relationships in terms of administration and capital or cross-relationships between administration and capital. The Metropolitan Waterworks Authority strictly performs in pursuant to the Government Procurement and Supplies Management Act, B.E.2560 (2017) and the Regulation of the Ministry of Finance on Public Procurement and Supplies Administration, B.E. 2560 (2017) as well as other related laws and regulations.

Information on Important Securities held by Directors related to the Metropolitan Waterworks Authority and Connected Transactions with the interest of Metropolitan Waterworks Authority

The Metropolitan Waterworks Authority prepares the disclosure report on securities (shares) and connected transactions for the MWA Board of Directors reporting to the public as the following details:

List of Directors	Holding Juristic Person Securities (Shares) Related MWA Core Business	The MWA Related Juristic Person	Director/Senior Executive in State Enterprises/Other Juristic Persons		
			Chairman	Director	Executive
Chairman					
1. Mr. Nisit Jansomwong	-	-	-	A	-
Director and Independent Director					
2. General Singthong Meethong, Ph.D.	-	-	-	-	-
3. Mr. Anuchit Trakulmututa	-	-	-	-	-
4. Mr. Krisada Kaweeyarn	-	-	-	-	B
5. Mr. Chaitat Saetang, D.B.A.	-	-	-	-	C
6. Mr. Varayuth Yenbamroong	-	-	-	D	E
7. Mr. Nattakit Tangpoonsinthana, Ph.D.	-	-	-	F	G
8. Mr. Roya Juntaratana	-	-	-	-	-
9. Mr. Sanya Saengpumpong	-	-	-	-	-
10. Mr. Nitat Maneesilasan	-	-	-	H	I
11. Mr. Werawat Yomchinda	-	-	-	-	J
12. Mr. Chodnarin Koedsom	-	-	-	-	K
Director Representing the Ministry of Finance					
13. Mr. Boonchai Charassangsomboon	-	-	-	-	-
Director and Governor					
14. Mr. Manit Panaim	-	-	-	-	-

- A : Vice President, Thailand Post Distribution Company Limited
The Urgent Reforms Committee
Provincial Government Audit and Performance Evaluation Sub-Committee (PGAPES)
Senior Director, Songkhla Rajabhat University
- B : Managing Director, Precious Wood Industry Company Limited
Managing Director, I am Chinatown Company Limited
Managing Director, Nemo Property Company Limited
- C : Chief Executive Officer (CEO), Chaiyakan Consulting Company Limited
- D : Director, Mu Space and Advanced Technology Company Limited
- E : Chief Executive Officer (CEO), Mu Space and Advanced Technology Company Limited
- F : Director, Siamrajathanee Public Company Limited
Director, Premier Quality Starch Public Company Limited
- G : Executive Vice President, Central Group Company Limited
Executive Vice President in Marketing, Central Pattana Public Company Limited
- H : Independent Director, Audit Director, and Nomination Director, Capital Link Credit Foncier Company Limited
Independent Director, Audit Director, Nomination Director, and Risk Oversight Director, Capital Link Financial Group Public Company Limited
Director, Happy Serve Company Limited
Director, Third Dragon Company Limited
Director, Little Hill Place Company Limited

- I : Chief Executive Officer (CEO), Open Serve Company Limited
- J : Chief Executive Officer (CEO), Maxima Studio Company Limited
- K : Deputy Permanent Secretary, Ministry of Interior
- Note: The Metropolitan Waterworks Authority has no subsidiaries/affiliated companies.

Definitions

(1) Holding Juristic Person Securities (Shares) Related to MWA Core Business refers to holding of securities (shares) by the MWA director in juristic person related to the MWA core business in the proportion more than 10 percent of all voting shares.

(2) The MWA Related Juristic Person refers to a juristic person that is expected to have transactions related to the Metropolitan Waterworks Authority in which the spouse, underage child/adopted child of the MWA directors having control authority, such as holding voting shares more than 50 percent of all voting rights or having control authority over the majority of votes in the shareholder meeting or having control authority to appoint or remove directors at least one half of all directors.

(3) Director/Senior Executive in State Enterprises/Other Juristic Persons refers to the MWA director holding a director or senior executive in other state enterprises or juristic persons (See the list of other state enterprises/juristic persons in which each director holding a position on page 28-38 of an Annual Report).

Structure of the Board of Directors of the Metropolitan Waterworks Authority

Pursuant to the Standard Qualifications of Directors and State Enterprise Employees Act B.E. 2518 (1975), the Board of Director of the state enterprise consists of a chairman and at least 9 other directors but no more than 13 directors and the Governor as a director by virtue of the office. The Board of Directors appointed by the Cabinet holds an office for a three-year term (If any director is removed from the office, a director in replacement should be appointed for the remaining term of the replaced director).

In the fiscal year 2023, the Board of Directors of the Metropolitan Waterworks Authority includes 15 members* (including the Chairman and the Governor) as follows:

- There are 12 members from the list of State Enterprise Director's Pool (excluding the Chairman and the Governor)

- There are 12 independent directors.

(* The Chairman of the Metropolitan Waterworks Authority is removed from the office by resignation effective from 8 September 2023. Other directors on the Board of Directors of the Metropolitan Waterworks Authority are removed from the office by resignation including M.R. Sasiprin Chandratat by resignation effective from 24 March 2023, other 11 directors by resignation effective from 30 September 2023 and Mr. Boonchai Charassangsomboon by retirement effective from 1 October 2023. In the fiscal year 2023, the Governor of the Metropolitan Waterworks Authority remains in office according to his term of office until now).

All directors should possess knowledge while their experiences are useful to the Metropolitan Waterworks Authority in different professional fields; for instance, engineering, law, business administration, public administration, information technology, etc. The members of the Board of Directors' of the Metropolitan Waterworks Authority are recruited pursuant to the qualifications as stipulated in the Metropolitan Waterworks Authority Act, B.E.2510 (1967) and corporate governance principles. The State Enterprise

Policy Office and the Metropolitan Waterworks Authority represented by the top executives have specified Competencies and Skill Matrix for the Board of Directors of the Metropolitan Waterworks Authority in compliance with corporate missions and strategies regarding 4 areas such as finance, accounting, law and information technology, in addition to the expertise required by the organization, which are revised on annually basis. The Skill Matrix is used to consider an appointment of the directors of the Metropolitan Waterworks Authority. However, the numbers of Skill Matrix must not exceed the entire members of the Board of Directors.

Governance of the Board of Directors and Executives

Pursuant to the Metropolitan Waterworks Authority Act, B.E. 2510 (1967) and the good corporate governance principles, the duties and responsibilities between the Board of Directors and the Executives are clearly separated. The Board of Directors has duties to set policies, control, supervise organizational business, monitor operational outcomes, and assess the Governor's performance. While the Governor has duties to manage and control organizational business in compliance with laws, regulations, and policies set by the Board of Directors and report to the Board of Directors.

Meetings

The MW Board of Directors plans the meeting schedule in advance throughout the entire calendar year on monthly basis and the special agenda may be held as appropriate. The Office of the MWA Board of Directors serves as a secretary to send the meeting invitation letter along with the meeting agenda and related documents. In the fiscal year 2023, a regular meeting is held every month (The meeting attendance details of each director are shown in page 108-109 of the Annual Report).

The Board of Directors receives the meeting agenda and related documents prior to the meeting day by at least 7 days in advance on average. The Board of Directors has sufficient time to study information before each meeting. The executives of Deputy Governor level are also invited by the Board of Directors to attend the meeting for providing relevant information useful to the consideration, and to acknowledge policies for accurate and prompt implementation. Unless only the Board of Directors shall be present in a particular agenda for the purpose of independency.

The Board of Directors widely express their opinions with an independent viewpoint in every meeting. In case any member who has a stake in a particular agenda shall not be present at the meeting until the consideration of that agenda is completed. In addition, the minutes of meeting containing opinions/ observations are made in writing and certified minutes of meeting are kept for verification of directors and involved people.

Moreover, the Board of Directors of the Metropolitan Waterworks Authority also participated in operational meetings and seminars in associated with executives to set the direction of strategic operations and future work plans of the Metropolitan Waterworks Authority.

Appointment of the Committees/Subcommittees

In the fiscal year 2023, the Board of Directors of the Metropolitan Waterworks Authority appointed 14 committees/subcommittees to screen important work processes before making proposals to the Board of Directors. The details on composition and scope of duties and responsibilities of each committee are shown on pages 95-107 of the Annual Report. In addition, the subcommittees have provided the Charters for using as practice guidelines according to their duties and responsibilities pursuant to the organization's Corporate Governance Policy.

Remunerations of the Board of Directors of the Metropolitan Waterworks Authority and Committees/ Subcommittees Appointed by the MWA Board of Directors

Remuneration and meeting attendance fee are provided pursuant to the Cabinet Resolution on 24 April 2019, except for the Audit Committee in compliance with the Regulations of the Ministry of Finance on the Audit Committee and Internal Audit Unit of State Enterprises B.E. 2555 (2012).

1. Remuneration/Meeting Attendance Fee

1.1 For the Board of Directors of the Metropolitan Waterworks Authority, the directors shall receive monthly remuneration and meeting attendance fee. The burden of the tax will be borne by the directors as the following details:

- The directors shall receive monthly remuneration no more than 10,000 baht per month. when directors do not hold the office for a full month, remuneration shall be paid based on Pro-Rata basis.
- The Chairman shall receive monthly remuneration at 2 times monthly remunerations of directors (20,000 baht per month).
- Only directors who attend the meeting shall receive meeting attendance fee once per month but no more than 20,000 Baht per person per month and no more than once per month. The Chairman shall receive an additional 25 percent of the director rate. If deemed appropriate, meeting attendance fee will be paid more than once per month but no more than 15 times per year.

1.2 The Board of Directors of the Metropolitan Waterworks Authority and other directors who are not state enterprise employees and appointed to serve as directors in committees/ subcommittees/ working groups shall receive meeting attendance fee per attendance at an equal amount at a rate of no more than 0.5 percent of state enterprise director rate, which serve no more than 2 committees and no more than once per month per committee. The chairman shall be paid an additional 25 percent of the director rate unless the law, regulations or Cabinet Resolutions stipulate other remuneration rate or criteria. If those other directors who are state enterprise employees can be defined as the performance of their duties due to the state enterprise practices, those employees shall receive no meeting attendance fee due to performing their duties.

1.3 As the Audit Committee of the Metropolitan Waterworks Authority shall receive monthly lump sum remuneration equal to meeting attendance fees of the Board of Directors. The Chairman of the Audit Committee shall receive an additional 25 percent of the remuneration even on months in which no meetings held. When directors who hold the office less than a full month, a remuneration shall be paid based on Pro-Rata basis.

1.4 The Relations Affairs Committee of the Metropolitan Waterworks Authority is a committee under state enterprise labor relations law. The scope of duties is to support works of the Board of directors of state enterprise, which shall receive meeting attendance fee once per month at a rate of 0.5 percent of the Board of directors of state enterprise only those who are in a meeting. If a director appointed by a position absent from a meeting assigns a representative to attend the meeting when the letter or evidence is clearly made, that representative shall receive meeting attendance fee.

1.5 Each director is required to attend at least 75 percent of total meetings held in each fiscal year.

2. Bonus

The Chairman and directors are entitled to receive the bonus according to the regulations set by the Cabinet.

Bonus allocation shall be made when State Audit Office of the Kingdom of Thailand has audited and certified the financial statements as well as an approval for bonus allocation is granted by State Enterprise Policy Office (SEPO). Thus the Metropolitan Waterworks Authority shall request for net profit allocation as bonus for the Board of Directors, subject to the following conditions:

2.1 Rate of bonus payment to the Board of Directors of state enterprises is considered based on profits for bonus allocation as follows:

Profit for Bonus Allocation (Million Baht)	Bonus (Baht/Person)
No more than 100	3 percent of profit for bonus allocation but no more than 60,000 Baht per person
From 100 to 300	65,000
More than 300 to 500	70,000
More than 500 to 700	75,000
More than 700 to 1,000	80,000
More than 1,000 to 2,000	90,000
More than 2,000 to 5,000	100,000
More than 5,000 to 8,000	110,000
More than 8,000 to 11,000	120,000
More than 11,000 to 13,000	130,000
Additional profit at intervals of every 2,000	Additional 10,000

The Chairman and Vice Chairman shall receive more bonus than directors by 25 percent and 12.50 percent respectively.

2.2 State enterprise that make bonus allocation for employees when earning profit for bonus allocation shall pay bonus to directors based on performance appraisal as follows:

Performance Appraisal (Score)	Directors' Bonus Amount (Baht/Person/Year)
5.00 (Excellent)	Base + 100 percent of the base
4.50	Base + 75 percent of the base
4.00 (Very Good)	Base + 50 percent of the base
3.50	Base + 25 percent of the base
3.00 (Good)	Base
2.50	Base - 25 percent of the base
2.00 (Fair)	Base - 50 percent of the base
1.50	No bonus
1.00 (Improvement required)	No bonus

Criteria

1. Bonus payment to directors shall be made when the Metropolitan Waterworks Authority shall remit net profit allocation as government revenue to Ministry of Finance or an approval is granted by the State Enterprise Policy Office to remit installments within a specified time.

2. The Method of net profit calculation for directors' bonus allocation shall be made as specified by the State Enterprise Policy Office, Ministry of Finance.

3. The burden of the tax shall be borne by the directors who receive bonus.

During an accounting period, if a director is absent from the meeting more than 3 months, bonus shall be paid according to the following criteria:

- If a directors is absent from a meeting more than 3 months but less than 6 months, bonus payment is reduced by 25 percent.

- If a directors is absent from a meeting more than 6 months but less than 9 months, bonus payment is reduced by 50 percent.

- If a directors is absent from a meeting more than 9 months, bonus payment is reduced by 75 percent.

Oversight of Compliance to Laws, Regulations, and Requirements (Compliance Unit)

The Metropolitan Waterworks Authority provides oversight to ensure compliance to laws, regulations, and requirements in the form of “Compliance Unit” including Deputy Governor (Administration) serves as Chairman, Assistant Governor (Internal Audit Office) serves as an advisor to the Board of Directors, Assistant Governors of all functional lines and Risk Management Department Director of serve as directors, and Legal Department Director serves as a director and secretary. The Compliance Unit has duty and power to supervise and monitor the operations of the Metropolitan Waterworks Authority in compliance with laws and related regulations in a systematic manner, including to monitor, study, and gather both internal and external laws and regulations relating to the Metropolitan Waterworks Authority as practice guidelines and to report compliance results to the Governor for acknowledgement within the specified time.

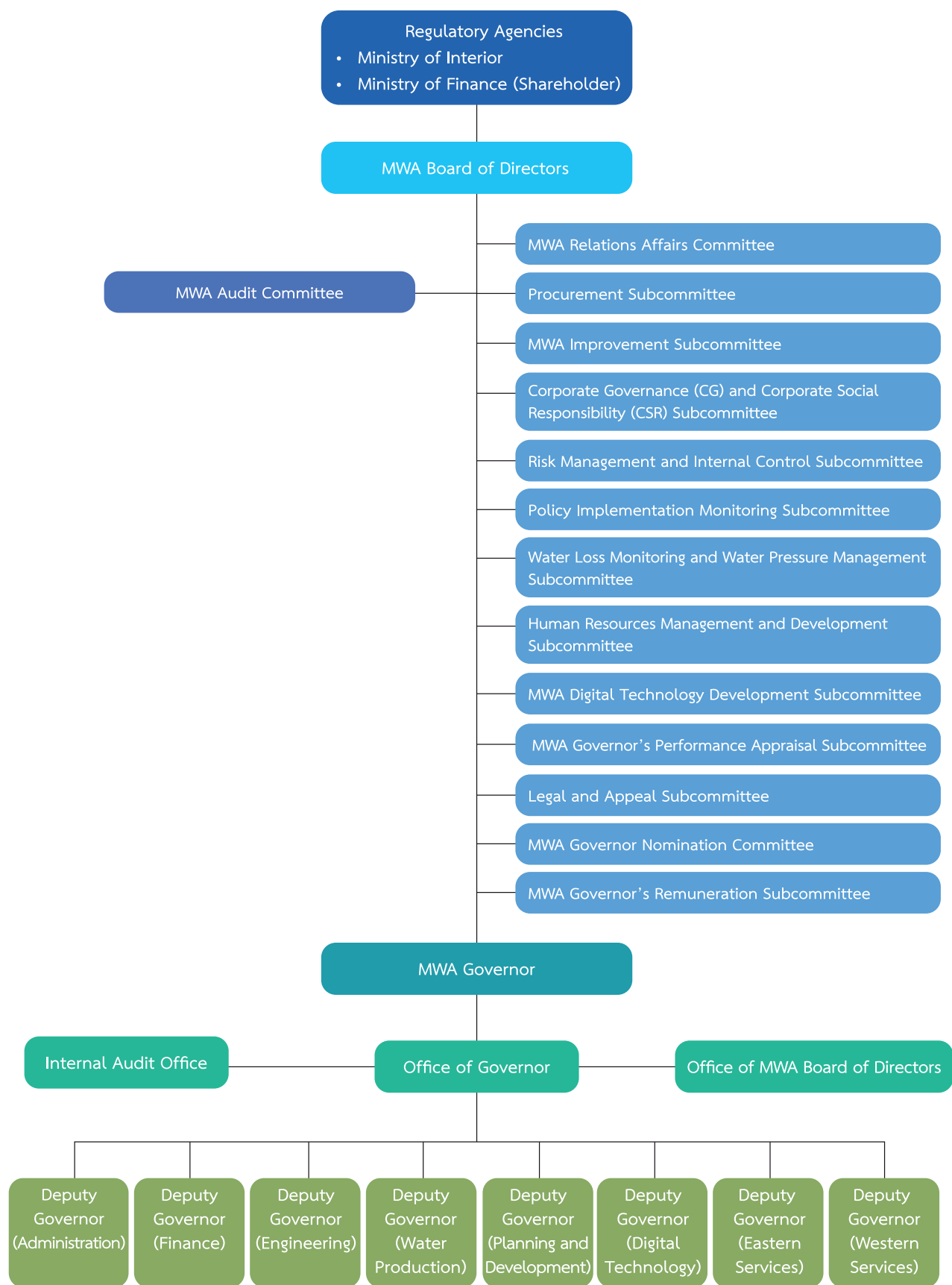
In the fiscal year 2023, the Compliance Unit plays a supervising role in compliance with significant laws, regulations, and requirements of the Metropolitan Waterworks Authority as follows:

1. Compile and disseminate the new laws/regulations relating to the operations of Metropolitan Waterworks Authority. Performance results demonstrates an examination and collection of laws as well as dissemination and notification of new laws/regulations of 29 issues to several departments and the Governor for acknowledgement and compliance. In addition, the contents of new laws/regulations are disclosed through Compliance Unit website in the Intranet as well.

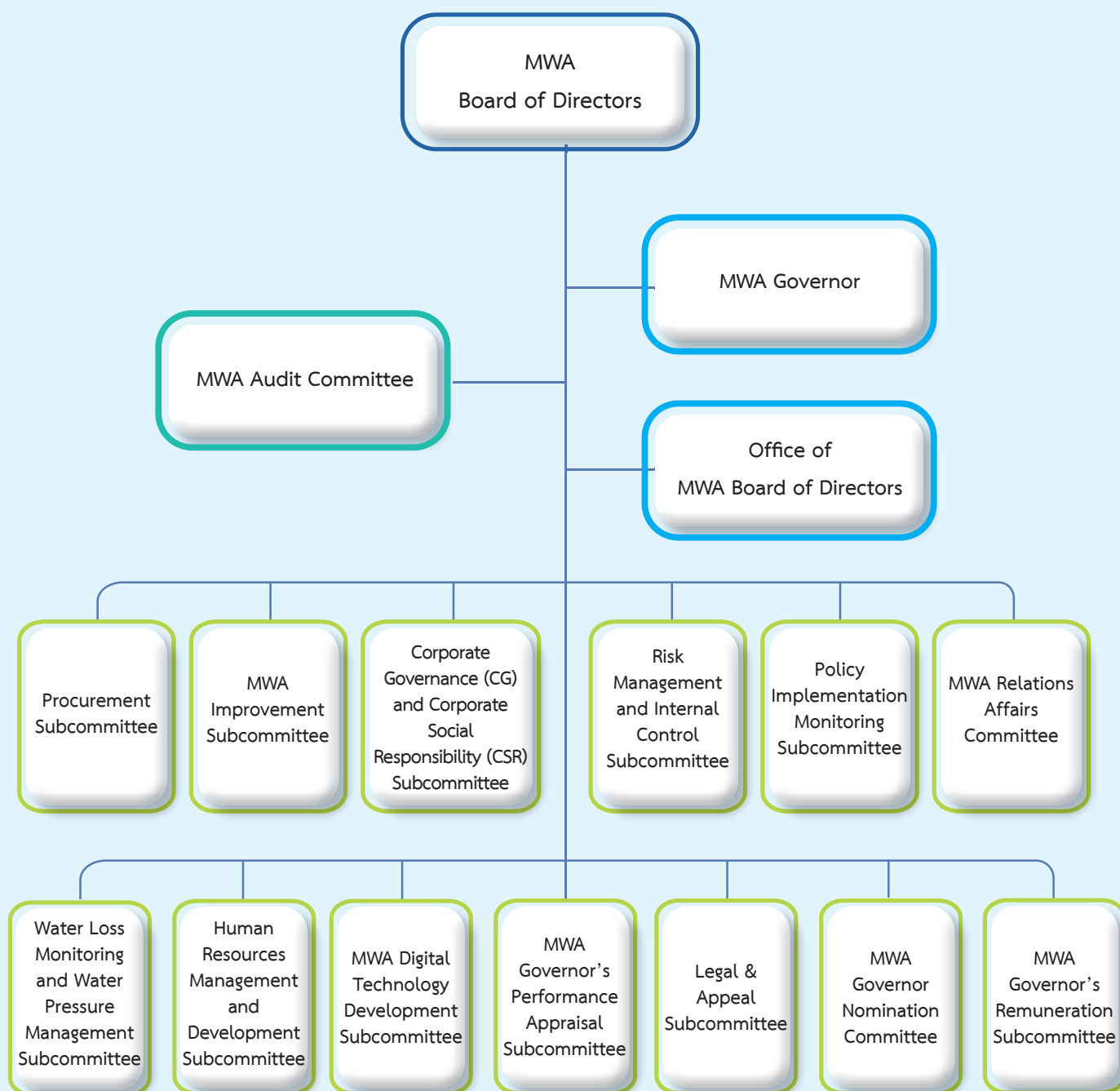
2. Supervise and monitor the operations of the Metropolitan Waterworks Authority in compliance with laws and regulations relating to significant work processes. The essential suggestions are proposed to the Governor in case non-compliance with laws and regulations found.

3. Consider and approve the registration lists of legal requirements and business continuity regulations, registration details of legal requirements and business continuity regulations, risk assessment results and opportunities, and compliance assessment to legal requirements and business continuity regulations to support business continuity system certification according to ISO 22301-2019 standard.

The Metropolitan Waterworks Authority Corporate Governance Structure



The Metropolitan Waterworks Authority Board of Directors Structure



Appointment of Committees and Subcommittees

(As of 30 September 2023)

1. Procurement Subcommittee

1. Mr. Nitat Maneesilasan	Chairman
2. Mr. Sanya Saengpumpong	Vice Chairman
3. Mr. Chaitat Saetang	Member
4. MWA Governor	Member
5. Mr. Prasit Suebchana	Member
6. Mr. Napong Sirikantayakul	Member
7. Mr. Krid Thammasiri	Member
8. Mr. Pasuk Choeychom	Member
9. Mr. Asawin Chotipanang	Member
10. Miss Waranya Sarapan	Member
11. Deputy Governor (Administration)	Member
12. Deputy Governor (Engineering)	Member
13. Assistant Governor (Project Management Office)	Secretary
14. Project Management Department Director	Assistant Secretary
15. Procurement and Supplies Department Director	Assistant Secretary

Powers and Duties

- 1) Prepare the Procurement Subcommittee Charter present to the MWA Board of Directors for consent.
- 2) Scrutinize the subjects for approval of supplies procurement and hiring, hiring of consultants, engineering design and construction supervision under the jurisdiction of the MWA Board of Directors prior to presenting to the MWA Board of Directors.
- 3) Scrutinize the changes of procurement contract or agreement, suspension or reduction fines for contract parties, and work schedule extension according to contract or agreement under the jurisdiction of the MWA Board of Directors prior to presenting to the MWA Board of Directors.
- 4) Monitor and expedite procurement undertaking and management of various contracts as deemed appropriate.
- 5) Scrutinize and revise drafts of laws, regulations, and rules relating to procurement of the Metropolitan Waterworks Authority suitable to current operations prior to presenting to the MWA Board of Directors for further presentation to the Ministry of Finance.
- 6) Provide consultation and/or recommendation on problem-solving solutions and obstacles of procurement undertaking/contract management under the jurisdiction of the MWA Board of Directors.
- 7) Perform other duties as assigned by the MWA Board of Directors.

2. MWA Improvement Subcommittee

1. Mr. Nattakit Tangpoonsinthana	Chairman
2. Mr. Chodnarin Koedsom	Vice Chairman
3. Mr. Nitat Maneesilasan	Member
4. MWA Governor	Member
5. Mr. Wanchai Lawattanatrakul	Member
6. Lieutenant General Kittipan Chupiputt	Member
7. Mr. Chira Wongburana	Member
8. The Representative from Office of the National Economic and Social Development Council (Mrs. Varinporn Noradechanont)	Member
9. Mr. Khanat Kruthkul	Member
10. Mr. Somkiat Tankittiwat	Member
11. Mr. Ratchathep Deepralard	Member
12. Deputy Governor (Planning and Development)	Member
13. Chairman of Labour Union of MWA	Member
14. Assistant Governor (Planning and Development)	Secretary
15. Policy and Strategy Department Director	Assistant Secretary

Powers and Duties

- 1) Prepare the MWA Improvement Subcommittee Charter present to the MWA Board of Directors for consent.
- 2) Scrutinize Strategic Management Plan and Annual Action Plan as well as budgeting consistent with said Action Plan prior to the MWA Board of Directors before starting each fiscal year, and present performance monitoring to the MWA Board of Directors at least once every quarter.
- 3) Scrutinize policies, practice guidelines, and manuals on knowledge management, consumers and marketing prior to presenting to the MWA Board of Directors for acknowledgement before starting each fiscal year.
- 4) Scrutinize the policies, practice guidelines, and manuals on innovation management and strategic sustainability prior to presenting to the MWA Board of Directors for approval before starting each fiscal year.
- 5) Consider approval for strategies/master plan/long-term and short-term plans on knowledge management, innovation, consumers and marketing present to the MWA Board of Directors before starting each fiscal year, and present performance monitoring to the MWA Board of Directors at least once every quarter.
- 6) Consider waterworks business, provide consultation and/or recommendations starting from raw water procurement, water treatment, water transmission, water distribution and service provision, including financial management, investment and business operations, and present performance monitoring to the MWA Board of Directors at least once quarterly.
- 7) Scrutinize the method and criteria for MWA performance appraisal prior to presenting to the MWA Board of Directors for approval, and performance monitoring at least once every quarter.
- 8) Perform other duties as assigned by the MWA Board of Directors.

3. Corporate Governance (CG) and Corporate Social Responsibility (CSR) Subcommittee

1. Mr. Sanya Saengpumpong	Chairman
2. Mr. Boonchai Charassangsomboon	Vice Chairman
3. Miss Piyawan Lamkitcha	Member
4. Mr. Sukich Udindu	Member
5. Mr. Pradit Ruangdit	Member
6. Mrs. Rachadaporn Kaewsanit	Member
7. Mr. Visut Bootsriboom	Member
8. Mr. Apirat Chatupanyachotikul	Member
9. Mr. Songtham Dechsingsopa	Member
10. Mr. Komol Buathong	Member
11. Mrs. Intira Narksakul	Member
12. Mr. Suriya Boonchote	Member
13. Assistant Governor (Office of MWA Board of Directors)	Member
14. Chairman of Labour Union of MWA	Member
15. Assistant Governor (Office of Governor)	Secretary
16. Corporate Governance Department Director	Assistant Secretary

Powers and Duties

- 1) Prepare the Corporate Governance and Corporate Social Responsibility Subcommittee Charter present to the MWA Board of Directors for consent.
- 2) Scrutinize corporate governance policies and manual, policies and practice guidelines on reporting the compliance results according to corporate governance policies and guidelines to government shareholder, policies and practice guidelines on shareholder rights management according to laws and requirements relating to policies and practice guidelines on stakeholder management, objectives and scope of stakeholder engagement, stakeholder identification, and issues/demands of key stakeholders towards the organization prior to presenting to the MWA Board of Directors for consent before starting each fiscal year.
- 3) Consider approval for long-term and annual corporate governance plans prior to presenting to the MWA Board of Directors for acknowledgement before starting each fiscal year, and present performance monitoring to the MWA Board of Directors at least once every quarter.
- 4) Consider approval for the manual of ethics and code of conduct, the MWA Code of Conduct requirements on business operation and work ethics, including practice guidelines of the MWA directors, executives, employees, and contract workers prior to presenting to the MWA Board of Directors for acknowledgement before starting each fiscal year.
- 5) Consider for consent in strategic plans focusing on long-term stakeholders and action plan prior to presenting to the MWA Board of Directors for acknowledgement before starting each fiscal year, and present performance monitoring to the MWA Board of Directors at least once every quarter.
- 6) Supervise, oversee, monitor, and provide suggestions on operations in line with corporate governance principles and report to the MWA Board of Directors at least once every quarter.
- 7) Consider for consent in strategic policies and proactive public relations plans with all stakeholder groups prior to presenting to the MWA Board of Directors for acknowledgement, and present performance monitoring to the MWA Board of Directors at least once every quarter.
- 8) Consider guidelines for managing the museum work showing the business history from the past to the present as well as future possibilities, and budget allocation to support work achievement.
- 9) Perform other duties as assigned by the MWA Board of Directors.

4. Risk Management and Internal Control Subcommittee

1. General Singthong Meethong	Chairman
2. Mr. Varayuth Yenbamroong	Vice Chairman
3. Mr. Roya Juntaratana	Member
4. General Kanok Poomuang	Member
5. General Suvit Mahasaksoonthorn	Member
6. Lieutenant General Kuntapon Aukkaranuluk	Member
7. Lieutenant General Kittipan Chupiputt	Member
8. Major General Banlang Vajrakuptha	Member
9. Mr. Surapol Arunmas	Member
10. Mr. Kreecha Kirdsriphan	Member
11. Miss Kanatwatda Supap	Member
12. Deputy Governor (Planning and Development)	Member
13. Deputy Governor (Water Production)	Member
14. Assistant Governor (Planning and Development)	Secretary
15. Risk Management Department Director	Assistant Secretary

Powers and Duties

- 1) Prepare the Risk Management and Internal Control Subcommittee Charter present to the MWA Board of Directors for consent.
- 2) Consider for consent in policies, manuals, practice guidelines, risk management and internal control plans prior to presenting to the MWA Board of Directors for acknowledgement before starting each fiscal year, and present performance monitoring on risk management and internal control to the Audit Committee and the MWA Board of Directors at least once every quarter.
- 3) Scrutinize the policies on Governance, Risk Management, and Compliance (GRC), including specify corporate risk appetite and risk tolerance prior to presenting to the MWA Board of Directors for consent before starting each fiscal year, and present performance monitoring to the MWA Board of Directors at least once every quarter.
- 4) Scrutinize Business Continuity Plan (BCP) and emergency plans prior to making a proposal to the MWA Board of Directors for consent before starting each fiscal year, and present performance monitoring to the MWA Board of Directors at least once every quarter.
- 5) Provide suggestions on risk management processes to ensure sufficient and appropriate management in all aspects of corporate significant risks.
- 6) Scrutinize a report on organizational internal control assessment prior to presenting to the MWA Board of Directors for approval and report to the Ministry of Interior and the MWA Audit Committee at least once a year within 90 days from the end of each fiscal year.
- 7) Perform other duties as assigned by the MWA Board of Directors.

5. MWA Relations Affairs Committee

Mr. Werawat Yomchinda Chairman

Employer's Representatives:

1. Deputy Governor (Eastern Services)	Member
2. Deputy Governor (Digital Technology)	Member
3. Deputy Governor (Administration)	Member
4. Deputy Governor (Water Production)	Member
5. Deputy Governor (Engineering)	Member
6. Deputy Governor (Western Services)	Member
7. Deputy Governor (Finance)	Member
8. Deputy Governor (Planning and Development)	Member
9. Assistant Governor (Human Resource Management)	Member

Employee's Representatives:

1. Acting Sub Lieutenant Chaityuth Homvong	Member
2. Mr. Marut Puekpong	Member
3. Mr. Prawech Chamchaloem	Member
4. Mr. Siwapong Wanna	Member
5. Mr. Jaktree Mesombut	Member
6. Mr. Wanna Sreesod	Member
7. Mr. Prayad Jitreechow	Member
8. Mr. Kittisak Chumwaengwapee	Member
9. Mr. Patompong Ruenloang	Member
10. Welfare and Labor Relations Division Director	Secretary
11. Labor Relations Section Chief	Assistant Secretary

Powers and Duties

- 1) Provide suggestions on improvement of MWA operational efficiency, promote and develop labor relations.
- 2) Seek reconciliation and conflict resolution within the Metropolitan Waterworks Authority.
- 3) Consider and improve operating rules and regulations useful to MWA employers and employees.
- 4) Provide advice or discussion for problem-solving according to complaints of employees or labour union of MWA, including the complaint on disciplinary punishment.
- 5) Provide advice or discussion for an improvement of employment conditions.

6. The MWA Audit Committee

1. Mr. Boonchai Charassangsomboon	Chairman
2. Mr. Anuchit Trakulmututa	Member
3. Mr. Krisada Kaweeyarn	Member
4. Assistant Governor (Internal Audit Office)	Secretary

Powers and Duties

- 1) Prepare and review the suitability of the Audit Committee Charter in compliance with the scope of responsibility in MWA operations approved by the MWA Board of Directors at least once a year and communicate to all people involved.
- 2) Arrange the assessments of composition, qualification, competency, and skills matrix of the MWA Audit Committee at least once a year or when changing in committee members, and present to the MWA Board of Directors for acknowledgement.
- 3) Report internal audit performance of the Audit Committee to the MWA Board of Directors and submit copies to the Ministry of Interior and the Ministry of Finance as follows:
 - 3.1) Report on Internal audit performance on quarterly basis within 60 days from the end of each quarter and on annual basis within 90 days from the end of each fiscal year as well as disclose an annual report of the MWA Audit Committee in the MWA Annual Report.
 - 3.2) Report on compliance with recommendations of the MWA Audit Committee at least once a year.
 - 3.3) In case of without the MWA Audit Committee and/or the MWA Board of Directors, Assistant Governor (Internal Audit Office) shall hold a written discussion with the State Enterprise Policy Office (SEPO) regarding the guidelines on submission of reports to regulatory agencies.
- 4) Prepare and review operating manual of the MWA Audit Committee used as practice guidelines consistent with the Audit Committee Charter and actual practices at least once a year.
- 5) Prepare and review an annual action plan covering duties and responsibilities.
- 6) Disclose conflict of interest according to the criteria and practice guidelines on conflict of interest.
- 7) Audit the efficiency and effectiveness of internal control, risk management and corporate governance processes.
- 8) Audit to ensure that the Metropolitan Waterworks Authority presents accurate and reliable financial reporting as follows:
 - 8.1) General audits; for instance, review of significant accounting issues, impacts towards the financial report, critical risks, legal issues, etc.
 - 8.2) Annual financial report, information disclosure, and interim financial report.
- 9) Audit and approve long-term and annual audit plans of the Internal Audit Office.
- 10) Audit and approve the Charter of Internal Audit Office prior to submitting to the MWA Board of Directors for acknowledgement at least once a year.
- 11) Audit and approve the internal audit manual of the Internal Audit Office.
- 12) Audit and approve an audit report in varied organizational performance, including provide further opinions/ suggestions regarding the policy on value-added creation to the organization prior to presenting to the MWA Board of Directors for acknowledgement to ensure that the Metropolitan Waterworks Authority provides effective processes and responsible departments execute efficient performance according to 7 Core Business Enablers as follows:

- 12.1) Corporate Governance and Leadership
- 12.1) Strategic Planning
- 12.3) Risk Management and Internal Control
- 12.4) Stakeholder and Customer Management
- 12.5) Digital Technology
- 12.6) Human Capital Management
- 12.7) Knowledge and Innovation Management
- 13) Audit the Metropolitan Waterworks Authority to provide good internal audit system, and consider independence of the Internal Audit Office.
- 14) Consider an appointment, transfer, removal, promotion hierarchy, promotion position, and performance evaluation of Internal Auditors of Internal Auditor Office of as follows:
 - 14.1) For Assistant Governor (Internal Audit Office) and Internal Auditor Level 8 of Internal Auditor Office, the MWA Audit Committee shall hold a discussion with the Governor before presenting to the MWA Board of Directors for consideration.
 - 14.2) For Internal Auditors Level 6-7 of Internal Audit Office, Assistant Governor (Internal Audit Office) shall hold a discussion with the Governor and present to the Audit Committee for consideration.
 - 14.3) For Internal Auditors Level 3-5 of the Internal Audit Office, the Assistant Governor (Internal Audit Office) shall hold a discussion with the Governor and present to the MWA Audit Committee for acknowledgement.
- 15) Consider the sufficiency and appropriateness of human resources by considering internal auditor recruitment plan of the Internal Audit Office, internal auditor retention plan, and promotion plan to support internal auditors to obtain professional certificate, including other resources of the Internal Audit Office whether or not the Governor determines; for instance, budgeting, resource sufficiency to perform audit plans, sufficient trainings for internal auditors, and succession plan for Assistant Governor (Internal Audit Office), etc.
- 16) Hold a discussion with auditors regarding scope and guidelines of audit, audit results, findings in financial audit, and suggest to review or audit any necessary transaction, in addition to hold special discussion with auditors in varied necessary issues without attendance of executives or unrelated parties at least once a year.
- 17) Discuss in a formal meeting with executives to support the Audit Committee understand MWA business, risk management, and internal control at least once a year in varied topics relating to each meeting agenda while regular discussion with some executives; for instance, Deputy Governor (Finance), Legal Department Director, Assistant Governor (Internal Audit Office), etc.
- 18) Audit the MWA performance to ensure compliance with laws, regulations, requirements, orders, announcements, work procedures and criteria relating to the MWA operations.
- 19) Audit to ensure that the written code of conduct for executives, employees, and contract workers acknowledged by all executives and employees, and communicate an importance of ethics, code of conduct, and guidelines of desirable behaviors.
- 20) Consider connected transactions or transactions that may cause conflict of interest or corruption affecting the MWA performance, including an audit report occurring conflict of interest transactions and relevant reports.
- 21) Other responsibilities:
 - 21.1) Supervise and oversee as requested by the MWA Board of Directors.
 - 21.1) Arrange for special audit as necessary and hire a consultant or an expert as appropriate.

- 21.3) Oversee and monitor management of damage prevention process, improvement, and recommendation of the Internal Audit Office on information system security.
- 21.4) Support the oversight of complaint handling.
- 21.5) Monitor performance in compliance with observations or suggestions as given by Ministry of Interior, Ministry of Finance, State Audit Office of the Kingdom of Thailand, and the MWA Audit Committee.

7. Policy Implementation Monitoring Subcommittee

- | | |
|---|---------------------|
| 1. Mr. Chodnarin Koedsom | Chairman |
| 2. General Singthong Meethong | Vice Chairman |
| 3. Associate Professor Thira Jearsiripongkul | Member |
| 4. Mr. Vimol Malila | Member |
| 5. Mr. Wichien Anukul | Member |
| 6. Mr. Supich Jurukul | Member |
| 7. Mr. Noon Saiong | Member |
| 8. Deputy Governor (Administration) | Member |
| 9. Deputy Governor (Eastern Services) | Member |
| 10. Deputy Governor (Western Services) | Member |
| 11. Deputy Governor (Water Production) | Member |
| 12. Deputy Governor (Engineering) | Member |
| 13. Deputy Governor (Digital Technology) | Member |
| 14. Miss Kornvilai Yeawyasat
(Assistant Governor (Office of MWA Board of Directors)) | Secretary |
| 15. Waterworks Improvement Project Department Director | Assistant Secretary |
| 16. MWA Board of Directors Affairs Department Director | Assistant Secretary |

Powers and Duties

- 1) Prepare the Policy Implementation Monitoring Subcommittee Charter presenting to the MWA Board of Directors for consent.
- 2) Monitor performance in compliance with policies of the government, regulatory ministry, and the MWA Board of Directors.
- 3) Monitor the performance of Bangkok Water Supply Improvement Projects.
- 4) Monitor disbursement of MWA investment budget to ensure the effectiveness and efficiency of investment budget spending.
- 5) Monitor the performance according to the resolutions assigned by the MWA Board of Directors.
- 6) Report performance monitoring in compliance with the policy of MWA Board of Directors for acknowledgement at least once a quarter.
- 7) Perform other duties as assigned by the MWA Board of Directors.

8. Water Loss Monitoring and Water Pressure Management Subcommittee

1. Mr. Krisada Kaweeyarn	Chairman
2. Mr. Werawat Yomchinda	Vice Chairman
3. The Representative from Public Works Department, Bangkok Metropolitan Administration (Mr. Suphakit Nuansiri)	Member
4. Mr. Utarn Pichayaporn	Member
5. Mr. Yongyuth Arpaichiraratana	Member
6. Mr. Kittipong Apichaichankit	Member
7. Mr. Thaweesak Lertpraphan	Member
8. Mr. Atipat Jarurochanaanan	Member
9. Mr. Tirapot Chandarasupsang	Member
10. Deputy Governor (Eastern Services)	Member
11. Deputy Governor (Western Services)	Member
12. Deputy Governor (Engineering)	Member
13. Assistant Governor (Services)	Secretary
14. Water Loss Management Department Director	Assistant Secretary

Powers and Duties

- 1) Scrutinize strategies and work plans for the MWA water loss and water pressure management.
- 2) Consider water pressure management in line with water loss management plans.
- 3) Scrutinize the implementation of water loss and water pressure management activities.
- 4) Consider and provide suggestions on using advanced technologies for water loss and water pressure management.
- 5) Invite agencies or people involved in water loss and water pressure management to provide necessary information.
- 6) Summarize all activities that require undertakings presenting to the MWA Board of Directors for consent.
- 7) Oversee, expedite and monitor undertakings of water loss and water pressure management according to the plans, and intermittently report the progress to the MWA Board of Directors.
- 8) Carry out the policies as assigned by the MWA Board of Directors.
- 9) Attend the meeting to Scrutinize strategic implementation and organizational management direction in varied aspects prior to presenting to the MWA Board of Directors.
- 10) Provide comments, suggestions, and consultants to executives to optimize effectiveness and efficiency in an organization.
- 11) Monitor, control, and oversee the MWA performance to achieve organizational goals and objectives.
- 12) Perform other duties as assigned by the MWA Board of Directors.

9. Human Resources Management and Development Subcommittee

1. Mr. Roy Juntaratana	Chairman
2. Mr. Anuchit Trakulmututa	Vice Chairman
3. Mr. Krisada Kaweeyarn	Member
4. Mr. Chalerm Sak Panasri	Member
5. Mr. Asawin Chotipanang	Member
6. Mr. Chumroen Varaporn	Member
7. Mr. Phat Tangbenjapon	Member
8. Mr. Piboon Meenil	Member
9. Mr. Chaiwat Panghom	Member
10. Deputy Governor (Administration)	Member
11. Chairman of Labour Union of MWA	Member
12. Assistant Governor (Human Resources Management)	Secretary
13. Human Resources Management Department Director	Assistant Secretary
14. Human Resources Development Department Director	Assistant Secretary

Powers and Duties

- 1) Consider for consent in policies, strategies, goals, Master Plan, and annual Action Plan on Human Resource Management (HRM) and Human Resource Development (HRD) consistent with the same direction and systematic manner and benefits of driving overall organizational management prior to submitting to the MWA Board of Directors for acknowledgement before starting each fiscal year, and present performance monitoring to the MWA Board of Directors at least once a quarter.
- 2) Scrutinize the management structure, manpower framework, and MWA employee's salary structure prior to presenting to the MWA Board of Directors for consent.
- 3) Provide suggestions to drive operating results according to Master Plan and annual Action Plan to achieve goals and guidelines for efficient Human Resource Management and Development.
- 4) Perform other related tasks in Human Resource Management/Development.
- 5) Perform other duties as assigned by the MWA Board of Directors.

10. MWA Digital Technology Development Subcommittee

1. Mr. Chaitat Saetang	Chairman
2. Mr. Nitat Maneesilasan	Vice Chairman
3. Mr. Nattakit Tangpoonsinthana	Member
4. Associate Professor Pisit Boonsrimuang	Member
5. Mr. Arnon Tubtiang	Member
6. Mr. Yongyuth Areerat	Member
7. Mr. Prechaporn Suwatnodom	Member
8. Mr. Adisorn Anananusit	Member
9. Mr. Udomsakdi Apichatthanapath	Member
10. Mr. Kritsada Kaewwadpring	Member
11. Deputy Governor (Western Services)	Member
12. Deputy Governor (Water Production)	Member
13. Deputy Governor (Digital Technology)	Member
14. Deputy Governor (Engineering)	Member
15. Assistant Governor (Digital Technology)	Secretary
16. Digital Strategy and Innovation Department Director	Assistant Secretary

Powers and Duties

- 1) Prepare the MWA Digital Technology Development Subcommittee Charter presenting to the MWA Board of Directors for approval and conduct an annual review.
- 2) Consider and set the direction, policies, and strategies on digital technology development responding to stakeholder needs and expectations consistent with the MWA strategic management plan to achieve the set vision and missions.
- 3) Consider for consent in Digital Governance framework and present to the MWA Board of Directors for acknowledgement before starting each fiscal year.
- 4) Consider for consent in policies or information security management plans, and present to the MWA Board of Directors for acknowledgement before starting each fiscal year.
- 5) Consider for consent in established policies of information technology emergency plans and present to the MWA Board of Directors for acknowledgement before starting each fiscal year.
- 6) Consider for consent in the MWA short-term and long-term digital plans, including an annual digital action plan presenting to the MWA Board of Directors for acknowledgement before starting each fiscal year.
- 7) Oversee and monitor performance in compliance with work plans of key organization management system such as the digital and information management system/digital action plan at least every quarter.
- 8) Assess the quality and/or efficiency of participatory processes and monitor the operational results of digital and information management system/digital action plan, and use an assessment as basic data for concrete improvement.
- 9) Report performance and consider for approval digital and information management system/digital action plan presenting to the MWA Board of Directors.
- 10) Perform other duties as assigned by the MWA Board of Directors.

11. MWA Governor's Performance Appraisal Subcommittee

- | | |
|--|---------------------|
| 1. Mr. Nattakit Tangpoonsinthana | Chairman |
| 2. Mr. Roya Juntaratana | Vice Chairman |
| 3. Mr. Werawat Yomchinda | Member |
| 4. Assistant Governor (Office of MWA Board of Directors) | Secretary |
| 5. Miss Nuchnapa Wongmongkhon | Assistant Secretary |
| MWA Expert Level 8 | |

Powers and Duties

- 1) Prepare the MWA Governor's Performance Appraisal Subcommittee Charter presenting to the MWA Board of Directors for consent.
- 2) Scrutinize the action plan of the MWA Governor according to objectives, goals, and missions to ensure that the Governor achieve efficiency and effectiveness in pursuing organizational strategies and management direction in varied aspects and present to MWA Board of Directors for consent.
- 3) Determine the MWA Governor's Key Performance Indicators (KPIs) and performance appraisal methods in line with missions prior to presenting to the MWA Board of Directors for consent.
- 4) Monitor and appraise the MWA Governor's performance according to specified time frame, appraisal methods, and KPIs prior to presenting to the MWA Board of Directors for consent.
- 5) Perform other duties as assigned by the MWA Board of Directors.

12. Legal and Appeal Subcommittee

- | | |
|---|---------------------|
| 1. Mr. Anuchit Trakulmututa | Chairman |
| 2. Mr. Boonchai Charassangsomboon | Vice Chairman |
| 3. Mr. Chartpong Chirabandhu | Member |
| 4. Mr. Prasit Suebchana | Member |
| 5. Mrs. Saowarot Rimsakorn | Member |
| 6. Mr. Seree Nonhasoot | Member |
| 7. Mr. Krid Thammasiri | Member |
| 8. Mrs. Patraporn Milindasuta | Member |
| 9. Mr. Nopporn Prapa-aporn | Member |
| 10. Mrs. Kannika Phonyiam | Member |
| 11. Legal Department Director | Secretary |
| 12. Legal Development Division Director | Assistant Secretary |

Powers and Duties

- 1) Scrutinize and revise drafts of the MWA laws, regulations, agreements and contracts proper to current operations.
- 2) Consider and provide opinions on various issues regarding the MWA laws, contracts, regulations, requirements, and orders in case where issues or doubts shall be considered or given commands.
- 3) Consider and provide opinions relating to the appeals of administrative orders or complaints according to

the MWA regulations on Human Resource Management B.E.2543 (2000) and the Administrative Procedure Act, B.E. 2539 (1996) as assigned by the Chairman of the MWA Board of Directors or the MWA Board of Directors.

- 4) Perform other duties as assigned by the Chairman of the MWA Board of Directors or the MWA Board of Directors.

13. MWA Governor Nomination Committee

- | | |
|--|---------------------|
| 1. Mr. Nattakit Tangpoonsinthana | Chairman |
| 2. Mr. Anuchit Trakulmututa | Vice Chairman |
| 3. Mr. Chaitat Saetang | Member |
| 4. Mr. Sanya Saengpumpong | Member |
| 5. Mr. Nitat Maneesilasan | Member |
| 6. Assistant Governor (Office of MWA Board of Directors) | Secretary |
| 7. MWA Board of Directors Affairs Department Director | Assistant Secretary |

Powers and Duties

- 1) Prepare/review the proper MWA Governor Nomination Committee Charter in compliance with the recruitment guidelines and current related rules and regulations presenting to the MWA Board of Directors for consent.
- 2) Determine the criteria, method, and recruitment for knowledgeable, competent, experienced, and suitably qualified persons pursuant to section 8 of Standard Qualifications of Directors and State Enterprise Employees Act B.E. 2518 (1975), and an Amendment Edition for the position of the MWA Governor, and present the select nominee who is deserved appointment to the MWA Board of Directors.

14. MWA Governor Remuneration Subcommittee

- | | |
|---|---------------------|
| 1. Mr. Roya Juntaratana | Chairman |
| 2. General Singthong Meethong | Vice Chairman |
| 3. Mr. Varayuth Yenbamroog | Member |
| 4. The Representative from the State Enterprise Policy Office | Member |
| 5. Assistant Governor (Office of MWA Board of Directors) | Secretary |
| 6. MWA Board of Directors Affairs Department Director | Assistant Secretary |

Powers and Duties

- 1) Prepare/review the proper MWA Governor Remuneration Subcommittee Charter in compliance with the recruitment guidelines and current related rules and regulations presenting to the MWA Board of Directors for consent.
- 2) Prepare a draft of employment contract for the position of the MWA Governor.
- 3) Determine the proper remuneration and negotiate remuneration with the nominee as the MWA Governor.
- 4) Present considering results and a draft of employment contract to the MWA Board of Directors and the Ministry of Finance for consent.

Meetings and Remunerations of the Board of Directors, Committees, and Subcommittees (As of September 2023)

Details of meeting attendance and meeting attendance fee/remunerations of the Board of Directors, Committees, and Subcommittees in the Fiscal Year 2023 (1 October 2022 – 30 September 2023)

No.	Name	Position	MWA Board of Directors	Procurement Sub-committee	MWA Improvement Sub-committee	Corporate Governance (CG) and Corporate Social Responsibility (CSR) Sub-committee	Risk Management and Internal Control Sub-committee	Policy Implementation Monitoring Sub-committee	MWA Relations Affairs Committee
			15 times	13 times	12 times	12 times	12 times	12 times	12 times
1	Mr. Nisit Jansomwong	Chairman Director	15/15						
2	General Singthong Meethong, Ph.D.	Director	15/15				12/12	12/12	
3	Mr. Anuchit Trakulmututa	Director	15/15						
4	Mr. Krisada Kaweeyarn	Director	12/15						
5	Mr. Chaitat Saetang, D.B.A.	Director	15/15	13/13					
6	Mr. Varayuth Yenbamroong	Director	13/15				0/12		
7	Mr. Nattakit Tangpoonsinthana, Ph.D.	Director	15/15		12/12				
8	M.R. Sasiprin Chandratat	Director	7/7		6/6			6/6	
9	Mr. Roya Juntaratana	Director	15/15				12/12		
10	Mr. Sanya Saengpumpong	Director	14/15	13/13		12/12			
11	Mr. Nitat Maneesilasan	Director	15/15	13/13	11/12				
12	Mr. Werawat Yomchinda	Director	14/15						12/12
13	Mr. Boonchai Charassangsomboon	Director	15/15			12/12			
14	Mr. Chodnarin Koedsom	Director	8/8		6/6			5/6	
15	Mr. Manit Panaim	Director/ Governor	15/15	12/13	11/12				

Water Loss Monitoring and Water Pressure Management Sub-committee	Human Resources Management and Development Sub-committee	MWA Digital Technology Development Sub-committee	MWA Audit Committee	Legal and Appeal Sub-committee	MWA Governor's Performance Appraisal Sub-committee	Meeting Attendance fee for All Committees	Fixed Remunerations	Bonus	Total
14 times	12 times	12 times	8 times	12 times	6 times				
						375,000.00	224,666.69	204,774.30	804,440.99
						572,500.00	119,666.57	174,513.89	866,680.46
	12/12		8/8	12/12		689,333.43	119,666.57	174,513.89	983,513.89
14/14	5/6		8/8			629,333.43	119,666.57	174,513.89	923,513.89
		12/12				570,000.00	119,666.57	174,513.89	864,180.46
						260,000.00	119,666.57	174,513.89	554,180.46
		11/12			6/6	575,000.00	119,666.57	174,513.89	869,180.46
						275,000.00	67,419.34	83,736.55	426,155.89
	12/12				6/6	570,000.00	119,666.57	174,513.89	864,180.46
						550,000.00	119,666.57	174,513.89	844,180.46
		12/12				570,000.00	119,666.57	174,513.89	864,180.46
14/14					6/6	550,000.00	119,666.57	174,513.89	844,180.46
			8/8	12/12		720,000.00	120,000.00	175,000.00	1,015,000.00
						282,500.00	70,023.71	102,118.05	454,641.76
						500,000.00	120,000.00	175,000.00	795,000.00
						7,688,666.86	1,798,775.44	2,485,767.80	11,973,210.10

- Notes:**
- The Cabinet Resolution on 28 February 2023 appoints **Mr. Chodnarin Koedsom** as a Director of MWA Board of Directors in replacement of the former director leaving a position effective from 28 February 2023 onwards.
 - **M.R. Sasiprin Chandratat**, a Director of MWA Board of Directors, resigned from a director of MWA Board of Directors effective from 24 March 2023.
 - **Mr. Nisit Jansomwong**, the Chairman of MWA Board of Directors, resigned from the chairman of MWA Board of Directors effective from 8 September 2023 onwards.
 - **The MWA Directors No. 2 – 12 and 14** resigned from directors of MWA Board of Directors effective from 30 September 2023 onwards.
 - **Mr. Boonchai Charassangsomboon**, a director of MWA Board of Directors (Representative from Ministry of Finance), resigned from a director of MWA Board of Directors due to retirement effective from 1 October 2023 onwards .
 - **The MWA Directors No. 3, 4, 13** are directors of MWA Audit Committee.

Compliance to Official Information Act, B.E. 2540 (1997)

The Metropolitan Waterworks Authority Information Center has established under Official Information Act, B.E. 2540 (1997) to gather and display official information that offers search convenience to public with the commitment in providing fast, accurate, and easy to access information provision according to corporate governance principles under the concept of “Disclosure is the Principle Concealment is an Exception”.

To Enhance standards for information provision, the MWA Information Center regularly improves information provision aiming at accurate and up-to-date information as well as a renovation of physical service locations. Apart from the exiting information center on the first floor of Suthi Tharakorn Building (6-storey building), an another information center is located on the first floor of Suthi Utthakakorn Building (12-storey building), the MWA Headquarters. In addition to the important concern about the interests of the people, the MWA provides the electronic information center for public convenience to access official information from everywhere and inspect government operations every time. As a result, the MWA Information Center

has received the Outstanding Official Information Center Award for the fifth consecutive year (from 2019 to 2023) from Office of the Official Information Commission, Office of the Permanent Secretary that specifies the state agency shall disclose the official information to the public.

The varied information channels of the MWA Information Center include the website: www.oic.go.th/INFOCENTER2/237 or the MWA Information Center on the first floor of Suthi Tharakorn Building (6-storey building) and on the first Floor of the Suthi Utthakakorn Building (12-storey building), the MWA Headquarters.

Performance in 2023

The MWA Information Center performs in accordance with an action plan of information center for the fiscal year 2023, the Official Information Act, B.E.2540 ((1997), and the MWA Regulation on the Information B.E.2561 (2018) as follows:

- Committee Meetings

The meetings are held to discuss and acknowledge performance in various aspects such as considerations of an appointment of the MWA Information Committee, the Outstanding Official Information Center Award 2023, performance report under the action plan, and statistical information service in fiscal 2023.

- Visiting the Center

Many agencies make a visit at the MWA Information Center as follows:

- Office of the National Broadcasting and Telecommunications Commission on 21 October 2022.
- Airports of Thailand Public Company Limited on 3 March 2023.
- Port Authority of Thailand on 29 March 2023.
- Thailand Post Company Limited on 25 April 2023.



MWA Information Center



Many agencies make a visit at the MWA Information Center.
(Thailand Post Company Limited on 25 April 2023)

- Study Visit

The MWA Information Center Committee makes a study visit at the Information Center of the Government Housing Bank (GHB) Headquarters, to exchange performance of the Information Center and information provision on 7 February 2023.

- Knowledge Training Participation

There are two employees pass E-Learning program “Knowledge on the Official Information Act, B.E. 2540” provided by Office of the Civil Service Commission.



The MWA Information Center Committee makes a study visit at the Information Center of the Government Housing Bank (GHB) Headquarters on February 7, 2023

- Knowledge Test Participation

There are two employees participate in knowledge training and pass the test on the Official Information Act, B.E. 2540 provided by Office of the Official Information Commission (O.I.C.).

- Employee Knowledge Training

The Metropolitan Waterworks Authority arranges online learning “Knowledge on the Official Information Act, B.E. 2540” via Zoom program for 391 employees of Level 2-7 on 30 November 2022.

- Dissemination of Knowledge on the Official Information Act, B.E. 2540 (1997)

The Metropolitan Waterworks Authority prepares news and articles for publication through various public relations media, including disseminating knowledge on the Official Information Act, B.E. 2540 in Red Cross Fair 2022 at Lumpini Park during 9-10 December 2022 and organized public relations activities of the MWA Information Center called “MWA Meets People” at Sarawanville Village, Soi Chaengwattana -Pak Kret 28, Bang Talat Subdistrict, Pak Kret District, Nontaburi Province on 22 March 2023.

- Statistical information service in Fiscal 2023

- Provide electronic information at the MWA Information Center to 13,518 people.
- Provide information service for particular requester (pursuant to Section 11) to 1 person.



The MWA Information Center

Information and Statistics



General Information

General Information	Unit	2019	2020	2021	2022	2023
Total amount of water production	Million m ³	2,075.2	2,121.1	2,116.5	2,080.3	2,042.4
Bang Khen Water Treatment Plant	Million m ³	1,402.3	1,410.0	1,427.6	1,394.0	1,386.4
Sam Sen Water Treatment Plant	Million m ³	113.0	102.4	92.2	86.4	87.3
Thon Buri Water Treatment Plant	Million m ³	41.1	36.4	40.1	39.9	40.4
Mahasawat Water Treatment Plant	Million m ³	518.8	572.3	556.6	560.0	528.3
Total amount of water distribution	Million m ³	1,467.4	1,458.3	1,416.2	1,422.2	1,488.6
Residences	Million m ³	675.7	694.3	705.8	695.6	715.6
Business, state enterprises, government agencies, and others	Million m ³	753.2	717.8	643.2	640.5	679.6
Public water and others	Million m ³	38.5	46.2	67.2	86.1	93.4
Percentage of water distribution	Percent	70.71	68.75	66.91	68.36	72.88
Number of consumers at the end of the year	Connections	2,423,540	2,479,547	2,517,486	2,558,418	2,606,167
Residence	Connections	1,957,391	2,010,824	2,062,299	2,109,493	2,155,257
Business, state enterprises, government agencies, and others	Connections	466,149	468,723	455,187	448,925	450,910
Small consumers	Connections	2,386,832	2,443,405	2,482,886	2,523,957	2,571,637
Water meter size 1/2 inch	Connections	1,510,537	1,571,405	1,613,975	1,658,198	1,707,664
Water meter size 3/4 inch	Connections	807,907	803,240	798,621	795,051	792,845
Water meter size 1 inch	Connections	68,388	68,760	70,290	70,708	71,128
Key consumers	Connections	36,708	36,142	34,600	34,461	34,530
Water meter size 1 1/2 inches	Connections	16,078	16,169	15,366	15,596	15,951
Water meter size 2 inches	Connections	13,243	12,814	12,405	12,235	12,200
Water meter size over 2 inches	Connections	7,387	7,159	6,829	6,630	6,379
Number of new connections	Connections	67,745	67,916	60,241	62,379	66,408
Average amount of water consumption per month	m ³	49.58	47.98	44.99	43.86	44.99
Residences	m ³	29.02	29.16	28.86	27.78	27.94
Business, state enterprises, government agencies, and others	m ³	136.14	127.67	116.38	118.05	125.95
Average water tariff per m ³	Baht	11.99	10.93	11.31	11.69	11.81
Residences	Baht	10.00	8.96	9.40	9.85	9.94
Business, state enterprises, government agencies, and others	Baht	13.79	12.85	13.42	13.69	13.78
Total number of personnel	Persons	5,378	5,384	5,314	5,272	5,175
Number of employees at the end of the year	Persons	4,303	4,339	4,250	4,252	4,154
Number of contract workers	Persons	1,075	1,045	1,064	1,020	1,021
Ratio of consumers per personnel	Connections	451	461	474	485	504
Population in responsible area at the end of the year	Persons	8,276,526	8,216,446	8,173,080	8,151,075	8,152,650
Number of households in responsible are at the end of the year	Houses	4,436,973	4,354,086	4,609,369	4,688,136	4,776,463

Financial Information

Financial Information	Unit	2019	2020	2021	2022	2023
Total assets	Million baht	79,365.8	81,337.9	84,158.8	87,211.4	90,224.1
Current assets	Million baht	20,751.8	13,653.8	10,356.4	11,431.1	13,315.7
Non-current assets	Million baht	58,614.0	67,684.1	73,802.4	75,780.3	76,908.4
Total liabilities	Million baht	15,742.2	15,055.4	16,761.1	17,683.0	18,982.9
Current liabilities	Million baht	4,059.6	3,105.6	4,369.1	5,303.4	5,876.3
Non-current liabilities	Million baht	11,682.6	11,949.8	12,392.0	12,379.6	13,106.6
Total equity	Million baht	63,623.6	66,282.5	67,397.7	69,528.4	71,241.2
Total Revenues	Million baht	20,051.4	18,045.0	18,435.6	18,490.4	19,459.1
Operating Revenue	Million baht	19,548.9	17,559.8	18,061.1	18,067.4	19,043.2
Revenue from water sales and water equipment fees	Million baht	18,334.2	16,548.9	16,895.4	16,837.8	17,706.7
Revenue from new connection fees	Million baht	385.9	247.9	278.5	308.9	324.2
Other operating income	Million baht	828.8	763.0	887.2	920.7	1,012.3
Non-operating Revenues	Million baht	502.5	485.2	374.5	423.0	415.9
Total expenses	Million baht	13,047.6	12,422.0	13,600.3	14,380.0	15,598.6
Operating expenses	Million baht	13,012.8	12,390.6	13,574.7	14,375.3	15,569.9
Direct operating expenses	Million baht	8,173.6	7,536.1	8,339.3	8,840.2	9,914.9
Depreciation and amortization	Million baht	4,808.4	4,829.0	5,210.6	5,515.3	5,639.9
Interest expense and loan fee	Million baht	30.8	25.5	24.8	19.8	15.1
Non-operating expenses	Million baht	34.8	31.4	25.6	4.7	28.7
Other expenses	Million baht	36.7	33.6	25.6	4.7	28.7
(Profit) Loss from foreign exchange rate	Million baht	(1.9)	(2.2)	-	-	-
Net profit	Million baht	7,003.8	5,623.0	4,835.3	4,110.4	3,860.5
Return on Assets	Percent	8.82	6.91	5.75	4.71	4.28
Return on Equity	Percent	11.01	8.48	7.17	5.91	5.42
Net Profit Margin	Percent	35.83	32.02	26.77	22.75	20.27
Asset Turnover	Times	0.25	0.22	0.21	0.21	0.21
Current Ratio	Times	5.11	4.40	2.37	2.16	2.27
Debt to Total Assets Ratio	Times	0.20	0.19	0.20	0.20	0.21
Debt to Equity Ratio	Times	0.25	0.23	0.25	0.25	0.27
Cost of water sales per m ³	Baht	8.67	8.33	9.48	10.07	10.56

Rate of Water Tariffs and New Installation Fees

Rate of Water Tariff

Type 1 Residences		Type 2 Business, Government Agencies, State Enterprises, Industries, and Others	
Amount of Water Consumption (m ³)	Water Tariffs (Baht/m ³)	Amount of Water Consumption (m ³)	Water Tariffs (Baht/m ³)
0-30	8.50	0-10	9.50 But not less than 90.00 baht
31-40	10.03	11-20	10.70
41-50	10.35	21-30	10.95
51-60	10.68	31-40	13.21
61-70	11.00	41-50	13.54
71-80	11.33	51-60	13.86
81-90	12.50	61-80	14.19
91-100	12.82	81-100	14.51
101-120	13.15	101-120	14.84
121-160	13.47	121-160	15.16
161-200	13.80	161-200	15.49
More than 200	14.45	More than 200	15.81

Notes:

- Water tariffs exclude VAT.
 - For bulk water sales, the average water tariffs are as follows:
 - * Residential type: 10.50 baht/m³
 - * Other types: 13.00 baht/m³
- Effective from 1 June 2004, MWA shall charge raw water fee at the rate of 15 Satang/m³ for contribution to Royal Irrigation Department.

Rate of New Installation in Lump Sum and Monthly Service Fee

Unit: baht

Meter Sizes (inches)	1/2	3/4	1	1 1/2	2	3	4	6	8	12
New Connection Fees	5,000	6,000	8,000	12,500	38,500	76,000	93,500	156,500	210,000	431,500
Monthly Service Fees	25	40	50	80	300	400	500	900	1,100	3,500

Notes:


- For the expenses over 20 meters calculating from MWA trunk main, water supply requesters shall pay the tariffs of pipe installation and equipment as follows:


Size of pipe (mm.)	20	25	40	50	100	150	200	300
Price per meter (baht)	355	386	452	997	1,981	2,160	2,364	3,017


- The expenses in the above table exclude VAT.


Locations of MWA Offices

Headquarters

 400 Prachachuen Road, Thung Song Hong Sub-district,
Lak Si District, Bangkok 10210


 Tel. 0 2504-0123


 Fax. 0 2500-2582-3

 E-mail mwa1125@mwa.co.th

Sukhumvit Branch Office

1564/1 Sukhumvit Road, Phra Khanong Sub-district,
Khleng Toei District, Bangkok 10260


 Tel. 0 2331 0028-30


 Fax. 0 2331 7533


 E-mail br07s00@mwa.co.th

Phra Khanong Branch Office

1564/1 Sukhumvit Road, Phra Khanong Sub-district,
Khleng Toei District, Bangkok 10260


 Tel. 0 2331 0031-32


 Fax. 0 2331 1061


 E-mail br13s00@mwa.co.th

Samut Prakan Branch Office

27 Bunsiri 4 Alley, Sukhumvit Road, Pak Nam Sub-district,
Mueang Samut Prakan District, Samut Prakan 1027


 Tel. 0 2384 1411-2


 Fax. 0 2384 3065


 E-mail br17s00@mwa.co.th

Phaya Thai Branch Office

1057 Vibhavadi-Rangsit Road, Chatuchak Sub-district,
Chatuchak District, Bangkok 10900


 Tel. 0 2537 8225


 Fax. 0 2537 8227


 E-mail br03s00@mwa.co.th

Thung Mahamek Branch Office

9/2 Nang Linchi Road, Thung Mahamek Sub-district,
Sathon District, Bangkok 10120


 Tel. 0 2286 0172, 0 2286 0174-5,
0 2286 0177, 0 2286 0179


 Fax. 0-2286-0153


 E-mail br05s00@mwa.co.th

Prachachuen Branch Office

2 Soem Suk Alley, Prachachuen Road, Chatuchak
Sub-district, Chatuchak District, Bangkok 10900

 Tel. 0 2585 7444, 0 2585 0319, 0 2585 3889,
0 2585 0490


 Fax. 0 2586 0922


 E-mail br15s00@mwa.co.th

Bang Khen Branch Office

3 Chaeng Watthana Road, Anusawari Sub-district,
Bang Khen District, Bangkok 10220


 Tel. 0 2552 1550-4


 Fax. 0 2521 1176


 E-mail br16s00@mwa.co.th

Phasi Charoen Branch Office

454 Kanchanaphisek Road, Bang Khae Nuea Sub-district,
Bang Khae District, Bangkok 10160


 Tel. 0 2455 0055


 Fax. 0 2454 5500

 E-mail br11s00@mwa.co.th

Bangkok Noi Branch Office


170 Moo 2, Kanchanaphisek Road, Plai Bang Sub-district,
Bang Kruai District, Nonthaburi 11130


 Tel. 0 2449 0011, 0 2448 0461


 Fax. 0 2449 0065

Service Unit

258/4 Charan Sanit Wong 30/1 Alley, Ban Chang Lo
Sub-district, Bangkok Noi District, Bangkok 10700


 Tel. 0 2411 3117, 0 2411 2240


 Fax. 0 2411 3117

 E-mail br01s00@mwa.co.th

Taksin Branch Office

71 Rama 2 Road, 31 Alley, Bang Mot Sub-district,
Chom Thong District, Bangkok 10150


 Tel. 0 2427 6000


 Fax. 0 2427 7772


 E-mail br02s00@mwa.co.th

Mansri Branch Office

1203 Nakhon Chaisi Road, Samsen Nai Sub-district, Phaya
Thai District, Bangkok 10400

 Tel. 0 2298 6700-24


 Fax. 0 2298 6735


 E-mail br06s00@mwa.co.th

Lat Phrao Branch Office

591 Soi Chamnian Serm, Pracha Uthit Road, Wang Thonglang
Sub-district, Wang Thonglang District, Bangkok 10310


 Tel. 0 2934 4432-6


 Fax. 0 2934 4815


 E-mail br12s00@mwa.co.th

Min Buri Branch Office

133 Ramkhamhaeng Road, Saen Saep Sub-district,
Min Buri District, Bangkok 10510


 Tel. 0 2543 6500


 Fax. 0 2543 6630


 E-mail br53s00@mwa.co.th

Suvarnabhumi Branch Office

623/1 Luang Phaeng Road, Thap Yao Sub-district, Lat
Krabang District, Bangkok 10520


 Tel. 0 2171 5455-64


 Fax. 0 2171 5475


 E-mail br55s00@mwa.co.th

Suk Sawat Branch Office

71 Rama 2 Road, 31 Alley, Bang Mot Sub-district, Chom
Thong District, Bangkok 10150


 Tel. 0 2427 7000


 Fax. 0 2427 7772


 E-mail br14s00@mwa.co.th

Bang Bua Thong Branch Office

59 Moo 2, Bang Kruai-Sai Noi Road, Sano Loi Sub-district,
Bang Bua Thong District, Nonthaburi 11110


 Tel. 0 2571 3982-7


 Fax. 0 2571 1743


 E-mail br54s00@mwa.co.th

Mahasawat Branch Office

170 Moo 2, Kanchanaphisek Road, Plai Bang Sub-district,
Bang Kruai District, Nonthaburi 11130


 Tel. 0 2449 0129


 Fax. 0 2449 0088


 E-mail br56s00@mwa.co.th

Nonthaburi Branch Office

282 Nonthaburi Road, Tha Sai Sub-district, Mueang
Nonthaburi District, Nonthaburi 11000

 Tel. 0 2589 0035-8

 Fax. 0 2580 5964

 E-mail br04s00@mwa.co.th

Channels to Contact The Metropolitan Waterworks Authority

1. MWA Office

- Headquarters and 18 Branch Offices
 - 1) Customer service counters and payment service counters
 - 2) Justice Provision Center
 - 3) Drive Thru Payment
- Department store service centers
 - 1) The Government Center in Nonthaburi Province
 - Central Plaza Westgate
 - Central Plaza Chaeng Wattana
 - The Mall Lifestore Ngamwongwan
 - 2) Bangkok Express Service, Bangkok
 - The Mall Lifestore Bang Khae
- Suksawat Smart Consumer Service Centers, Samut Prakan Province
 - 1) Phra Pradaeng District Office
 - 2) Phra Samut Chedi District Office

2. Online channels

- Website: www.mwa.co.th
 - 1) e-Service
 - 2) Web Chat
 - 3) Service complaint
 - 4) Registration for refund of water usage guarantee
 - 5) Registration for use of entitlement on state welfare cards
- E-mail: mwa1125@mwa.co.th, saraban@mwa.co.th
- Facebook: www.facebook.com/MWATHailand
- X (Twitter): [@mwa1125](https://twitter.com/mwa1125)
- Line Official: [@MWATHailand](https://line.me/tv/@MWATHailand)
- Instagram: [@MWATHailand](https://www.instagram.com/MWATHailand)
- Application: MWA onMobile


3. Telephone

- MWA Call Center: 1125
- Head Headquarters: 0 2504 0123
- Sukhumvit Branch Office: 0 2331 0028-30
- Phra Khanong Branch Office: 0 2331 0031-32
- Samut Prakan Branch Office: 0 2384 1411-12
- Thung Mahamek Branch Office: 0 2286 0172, 0 2286 0174-75, 0 2286 0177, 0 2286 0179
- Mansri Branch Office: 0 2298 6700-24
- Phaya Thai Branch Office: 0 2537 8225
- Lat Phrao Branch Office: 0 2934 4432-36
- Prachachuen Branch Office: 0 2585 7444, 0 2585 0490, 0 2585 0319, 0 2585 3889
- Bang Khen Branch Office: 0 2552 1550-54
- Min Buri Branch Office: 0 2543 6500
- Suvarnabhumi Branch Office: 0 2171 5455-64
- Taksin Branch Office: 0 2427 6000
- Suk Sawat Branch Office: 0 2427 7000
- Bangkok Noi Branch Office: 0 2449 0011, 0 2448 0239, 0 2448 0461, 0 2448 0670, 0 2448 0263, 0 2448 0513, 0 2448 0860, Charan Sanitwong Road Office: 0 2412 7176
- Phasi Charoen Branch Office: 0 2455 0044
- Nonthaburi Branch Office: 0 2589 0035-38, 0 2580 0079, 0 2580 0081, 0 2580 0094, 0 2580 0097
- Bang Bua Thong Branch Office: 0 2571 3982-87
- Mahasawat Branch Office: 0 2448 0734, 0 2449 0129, 02449 0296, 0 2449 0310







Payment Channels



Channels for paying the Metropolitan Waterworks Authority water bills



MWA onMobile

MWA e-Service



<https://eservicesapp.mwa.co.th/>





PAYMENT GATEWAY

Credit Card / Debit Card


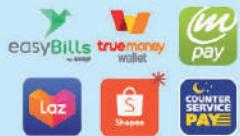


Internet Banking


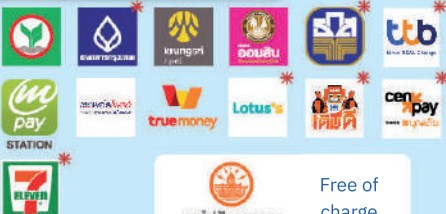
Mobile Application

Free service charge


Service fees are as specified by the agent

Counter Service

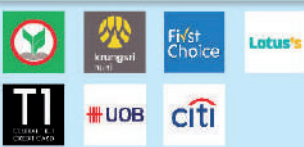
Free of charge

Direct Debit



Free of charge


Credit Card



Free of charge


ATM

Service fees are as specified by the agent



KIOSK

Service fees are as specified by the agent



* Able to pay overdue fees

As of 28 August 2023

Channels for paying the Metropolitan Waterworks Authority water bills in case of overdue payment

Application



Free of Charge
when paying with
KTB Internet Banking



(Only for All Free Accounts)

Free of Charge

Service fees are as
specified by the agent

MWA Representative Counter Services



Water Bill Payments

- In case of overdue payment, the fee is 15 baht through an agent.
- In case of overdue payment and temporary water suspension, the fee is 107 baht.

MWA & MEA One-Stop Payment Service at 38 service counters

Covering various
services:



- Water and electricity bills
- Overdue payment fee (15 Baht)
- Temporary water suspension fee (107 Baht)
- Water suspension fee (10% and 20%)
- Cost of power shutoff (40 Baht)

Including a real-time services of water bill, electricity bill,
fees, and information on paid bills

MWA service locations at MWA
Headquarters and MWA's 18 Branch
Offices during 07.30 – 15.30 hrs.
on business day

*Accept payment of MEA's electricity
bill by cash only



MEA service locations at all
MEA's 19 service areas during
07.30 – 15.00 hrs. on business day

*Accept payment of MWA's water bill
by cash only

1125



mwa.co.th



@MWATHailand



Financial Information



Factors Influencing Financial Status and Performance

The past year in 2023, the overall Thai economy started recovering after the country had to cope with many obstacles arising within the country and from overseas, including problems of geopolitical conflicts in many areas that affected the world energy price and put pressure on the inflation direction within the country.

At present, however, the COVID-19 pandemic has a tendency to unwind, but the risk for possibly arising from the new epidemic had to monitor closely. Thailand's economy gained significant support from tourism sector and private consumption. An increase in foreign tourists was the support factor for tourism-related businesses and the consistent growth of employment rate in service sector. The economic stimulus measures by the government further supported water revenue in 2023 which was the MWA main revenue to recover close to that of the pre-COVID-19 pandemic. The volume of water sold has continually improved from the previous year since the beginning of the fiscal year and still got significantly higher in the latter half of the year which reflected a sign of much better recovery after long period of slowdown during pandemic crisis. The volume of water sold to Commercial (C) group such as companies, stores, hotels, shopping centers, and airports remarkably increased according to Thai economic recovery. This also included the Residential (R) group, especially high-rise residence types of condominiums, flats, and dormitories, where the residence of the labor sector who returned to the main economic areas in Bangkok and vicinity. For the industrial (I) group, although the volume of water sold slightly improved in some parts of manufacturing sector, but showed overall downward trend according to economic slowdown in main trading partner countries such as China and the United States.

For the expenses, the Metropolitan Waterworks Authority possessed costs for water treatment and distribution much higher than that of the previous year mainly arising from the external uncontrollable factors; for

example, the higher electricity costs due to the adjustment of higher variable electricity tariff (Ft) by the Energy Regulatory Commission according to global energy tariff. In addition, raw water cost on the east side has further collected by the Royal Irrigation Department since 4 January 2022, and expenses for accelerating water loss reduction. Although water revenue recovered in a better direction, the sharp increase in expenses affected a decrease in operating profits in fiscal 2023 lower than the previous year. At present, the Metropolitan Waterworks Authority is under implementation of the Ninth Bangkok Water Supply Improvement Project which requires high capital investment and affects an organizational financial status in the future when bearing an inevitable increase of expenses. However, the Metropolitan Waterworks Authority has committed to treat, transmit, and distribute clean and safe water proper for consumption under international standards for widely providing people a good quality of life.

From the above factors, the Metropolitan Waterworks Authority prepares readiness to deal with impacts that may encounter by an enhancement of work efficiency with the management structure and manpower framework to solve the current structural problems align with the future directions. The knowledge and digital technologies are applied to improve work processes while establishing Business Unit (BU) to drive related businesses in providing one stop water service that focuses on value delivery to consumers exceeding their expectations and timely demand. In addition, the Metropolitan Waterworks Authority has performed cost management plan along with using existing asset management for the best interest, including liquidity management for financial stability to ensure that the organization persists in amid changing situation while creating sustainable growth.

Key Financial Information

Descriptions	2023	2022	2021
Financial Position (Million Baht)			
Current Assets	13,315.67	11,431.11	10,356.39
Total Assets	90,224.13	87,211.40	84,158.81
Current Liabilities	5,876.29	5,303.45	4,369.14
Total Liabilities	18,982.95	17,683.05	16,761.08
Total Equity	71,241.18	69,528.35	67,397.73
Operating Results (Million Baht)			
Total Revenues	19,459.11	18,490.38	18,435.62
Total Expenses	15,598.62	14,379.98	13,600.33
Net Profit	3,860.49	4,110.40	4,835.29
Financial Ratio			
Net Profit Margin (percent)	20.27	22.75	26.77
Return on Asset (percent)	4.28	4.71	5.75
Return on Equity (percent)	5.42	5.91	7.17
Debt to Equity Ratio (times)	0.27	0.25	0.25
Current Ratio (times)	2.27	2.16	2.37
Average Collection Period (days)	27	28	30

Capital and Shareholder Structure

The Ministry of Finance is a 100 percent MWA shareholder as follows:

Unit: Million Baht

Description	2023	2022	2021
Initial capital	1,192.71	1,192.71	1,192.71
Government budget	7,194.14	7,194.14	7,194.14
Total	8,386.85	8,386.85	8,386.85

Approved Budgets

Unit: Million Baht

Approved Budgets	2023	2022	2021
Operating budget	9,940.1	9,059.8	7,790.0
Investment budget	13,225.0	12,261.8	9,461.9
Total	23,165.1	21,321.6	17,251.9

Loan Debt

Unit: Million Baht

Loan Debts	2023	2022	2021
Domestic loans	-	-	-
Foreign loans	69.651	148.907	258.012
Total	69.651	148.907	258.012

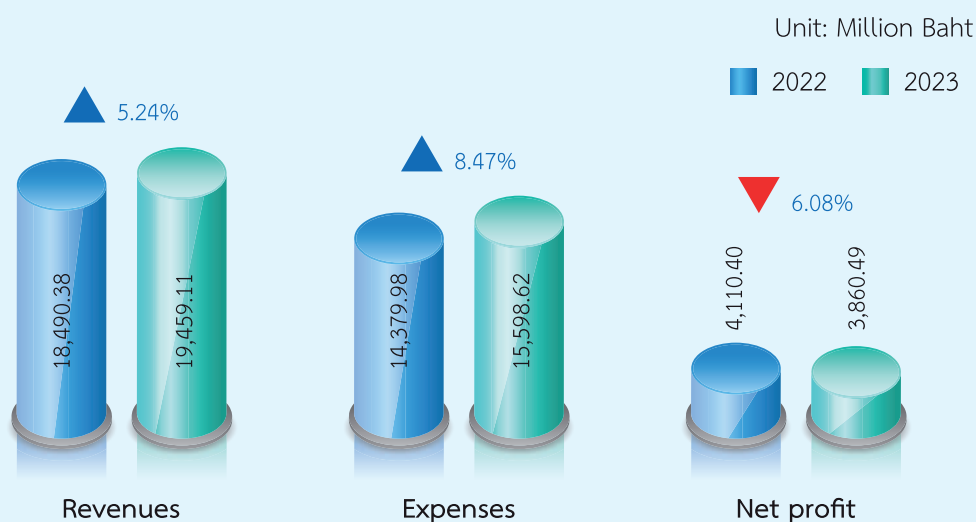
Remittance to Ministry Finance

Unit: Million Baht

Remittance to Ministry of Finance	2023	2022	2021
Remittance to Ministry of Finance	2,256.60	2,172.75	3,522.55

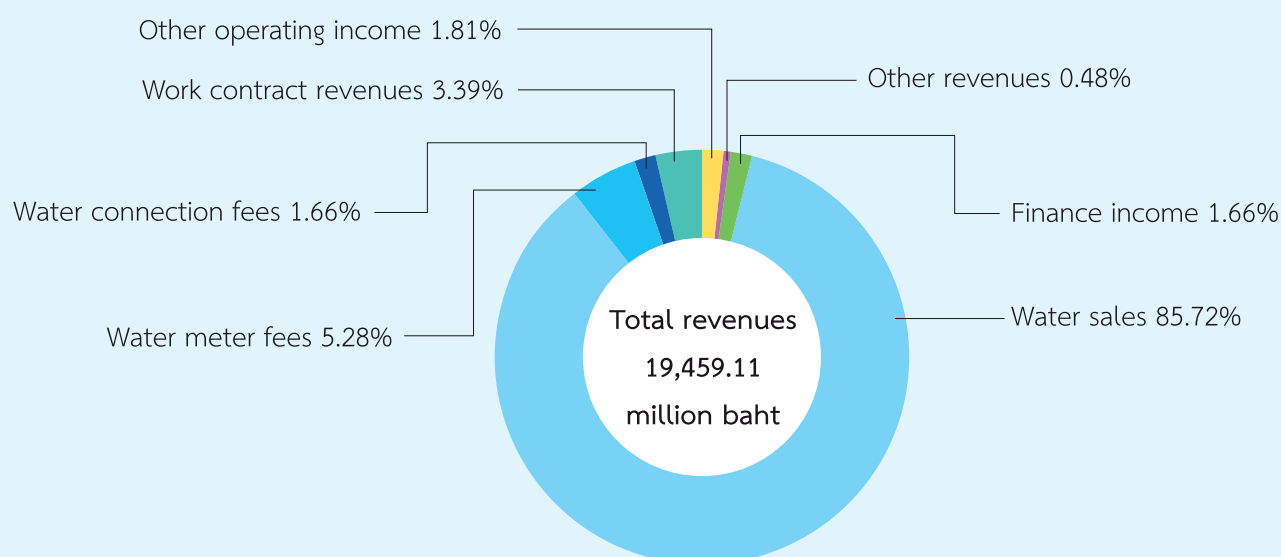
Report of Financial Analysis

For the overall performance in fiscal year 2023, the revenue from water sales tends to recover close to pre-COVID-19 pandemic due to tourism sector playing an important supporting factor. Meanwhile, expenses soars up more than an increased revenues mostly due to various government agencies legislating laws to collect fees from the Metropolitan Waterworks Authority. That affects the net profit of 3,860.49 million baht for 2023 lower than the previous year 249.91 million baht or 6.08 percent.



Performance

Revenues

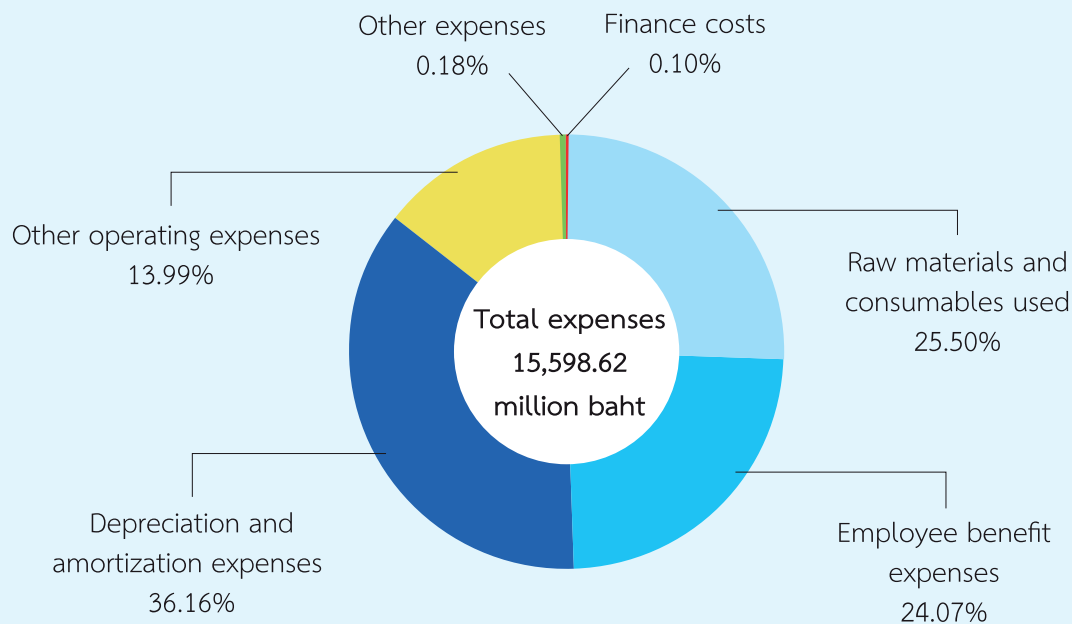


Unit: Million Baht

Items	2022	2023	Increased (Decreased)
Revenues	18,244.63	19,136.96	892.33
Water sales	15,821.54	16,679.69	858.15
Water meter fees	1,016.25	1,027.03	10.78
Water Connection fees	308.91	324.21	15.30
Work contract revenues	595.39	659.53	64.14
Other operating income	325.33	352.79	27.46
Other revenues	177.21	93.71	(83.50)
Finance income	245.75	322.15	76.40
Total	18,490.38	19,459.11	968.73

The Metropolitan Waterworks Authority generates total revenues of 19,459.11 million baht higher than the previous year 968.73 million baht or 5.24 percent mainly due to higher **water sales and water meter fees** than the last year. This is due to an increase in the amount of water sales since the beginning of the fiscal year and significant higher in the latter half of the year. It is a good sign of recovery after long period of slowdown during the COVID-19 pandemic. The main supporting factors from well recover business sector and high expansion in tourism sector resulting an increase in amount of water sales in business sector and tourism-related services, including shopping centers, hotels, various stores and airports. In addition, the growth of **work contract revenues** mostly arising from pipe installation in private sector, and design, inspection, and control tasks. Despite a decline in investment, **finance income** rises from liquidity management in spite of higher average interest rate from the previous year surging the interest income.

Expenses

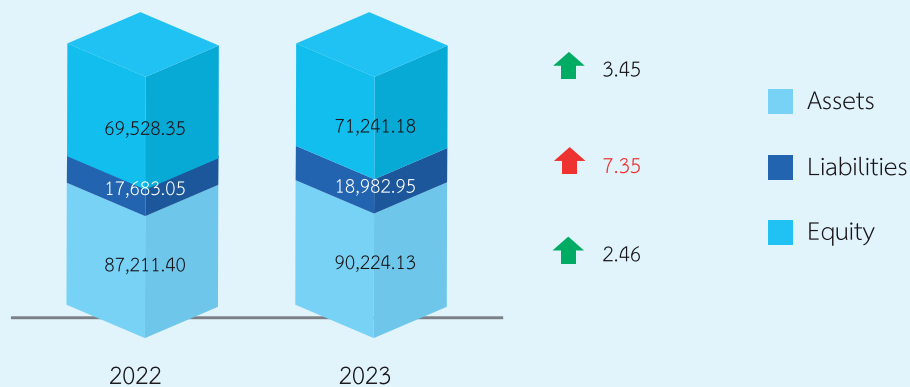


Unit: Million Baht

Items	2022	2023	Increased (Decreased)
Expenses	14,360.15	15,583.54	1,223.39
Raw materials and consumables used	3,400.95	3,977.41	576.46
Employee benefit expenses	3,643.95	3,755.11	111.16
Depreciation and amortization expenses	5,515.26	5,639.97	124.71
Other operating expenses	1,795.29	2,182.38	387.09
Other expenses	4.70	28.67	23.97
Finance costs	19.83	15.08	(4.75)
Total	14,379.98	15,598.62	1,218.64

The Metropolitan Waterworks Authority incurs total expenses of 15,598.62 million baht higher than the last year 1,218.64 million baht or 8.47 percent mostly arising from **raw materials and consumables used** such as 1) Much higher electricity costs than last year due to an adjustment of average variable electricity tariff (Ft) throughout the year to 0.9442 Baht per unit, and 2) Additional raw water cost charged by the Royal Irrigation Department since January 2022. Moreover, an increment in **employee benefit expenses** from salary and medical expenses while rising in **depreciation and amortization expenses** from pipe depreciation according to government policy regarding urgent water loss reduction through pipe replacement, including **other operating expenses** soaring up from that activity.

Financial Position



- Total assets amount to 90,224.13 million baht higher than the previous year 3,012.73 million baht, mostly from higher assets under construction (the Ninth Bangkok Water Supply Improvement Project) while declining investment in financial assets.
- Total liabilities amount to 18,982.95 million baht higher than the previous year 1,299.90 million baht, mostly from higher trade accounts payable and work security guarantees.
- Equity amount to 71,241.18 million baht higher than the previous year 1,712.83 million baht as a consequence of higher retained earnings

Liquidity

As of 30 September 2023, The Metropolitan Waterworks Authority incurs balance of cash and cash-equivalent transactions of 4,301.31 million baht higher than the previous year 2,608.28 million baht in order to reserve for investment plans of water infrastructure improvement currently operated by the Metropolitan Waterworks Authority as the following details:

Unit: Million baht

Items	2022	2023	Cashflow Increased (Decreased)
Net cash received from operating activities	8,468.99	7,176.14	(1,292.85)
Net cash spent in investment activities	(4,763.70)	(2,074.17)	(2,689.53)
Net cash spent in financing Activities	(2,409.16)	(2,493.69)	84.53
Net cash and cash-equivalent transactions increased (decreased)	1,296.13	2,608.28	1,312.15
Cash and cash-equivalent transactions at the beginning of the Period	396.90	1,693.03	1,296.13
Cash and cash-equivalent transactions at the end of the Period	1,693.03	4,301.31	2,608.28

- Net cash received from operating activities amount to 7,176.14 million baht lower than the previous year 1,292.85 million baht, mostly due to higher operating expenses.
- Net cash spent in investment activities amount to 2,074.17 million Baht lower than the previous year 2,689.53 million baht, mostly due to lower investment deposits to reserve for disbursement of higher investment budgets.
- Net cash spent in financing activities amount to 2,493.69 million baht higher than the previous year 84.53 million baht, mostly due to higher revenue remittance to the treasury.

Audit Committee's Report

The MWA Audit Committee was appointed by the MWA Board of Directors according to the MWA Board of Directors Order No. 4/2565 issued on 26 July 2022 consisting of three knowledgeable, competent, and experienced directors based on necessary competencies and knowledge (Skills Matrix) as follows:

- | | |
|-----------------------------------|----------|
| 1) Mr. Boonchai Charassangsomboon | Chairman |
| 2) Mr. Anuchit Trakulmututa | Member |
| 3) Mr. Krisada Kaweeyarn | Member |

Assistant Governor (Internal Audit Office) serves as the secretary of the MWA Audit Committee.

During fiscal year 2023, the Audit Committee held entirely 8 meetings in accordance with an action plan of the MWA Audit Committee when all members attended all meetings. The senior executives, the internal auditors, and representatives of the State Audit Office of the Kingdom of Thailand also attend the meetings in compliance with related agendas to discuss and exchange opinions. Every meeting report was submitted to the MWA Board of Directors containing essential contents summarized as follows:

Financial Report

The MWA financial report of the fiscal year 2022 and the financial statements of the first to the third quarters of the fiscal year 2023 were audited by the MWA Audit Committee as well as discussing with financial executives to inquire and provide opinions on material issues that possibly affected the financial report. It is to ensure accuracy, properness, and materiality of financial report as in line with Thai Financial Reporting Standards (TFRS) in addition to disclose sufficient significant information and present transactions useful to users of the financial report.

The MWA Audit Committee held one particular meeting associated with the representatives of the State Audit Office of the Kingdom of Thailand without the presence of executives in order to discuss the performance, findings derived from auditing the financial report, and other relevant matters. While the entire audit fee was 6.90 million baht.

Risk Management, Internal Control, and Good Corporate Governance

The operation of risk management process was audited to ensure that risk management could manage risks that might affect the achievement of corporate objectives by regularly auditing on the efficiency and appropriateness of risk management processes.

The efficiency, effectiveness, and sufficiency of the internal control was audited by considering the audit performance of the Audit Office and representatives of the State Audit Office of the Kingdom of Thailand. The performance report of the committee regarding the internal control was complied with the criteria of the Ministry of Finance, including reports on significant findings and concrete solutions for submitting to the MWA Board of Directors.

Performance audit shall comply with related laws, regulations and specifications to ensure consistent with good corporate governance principles, while suggestions were given to the responsible departments for better improvement.

Organizational Performing According to the State Enterprise Assessment: SE-AM (Core Business Enablers) and Monitoring on Observations/Suggestions of Regulatory Agency

The varied performance auditing could ensure organization management in accordance with 7 Core Business Enablers of state enterprises, and further opinions/suggestions were given to add values and systematically upgrade the MWA operational processes as well as performance monitoring due to observations/suggestions of regulatory agency.

Oversight and Internal Audit Improvement

It was to consider reviewing and improving along with approval for the internal audit charter and operating manual, 5-year long-term audit plan, an annual audit plan, internal audit improvement plan, and to audit performance reports align with providing further suggestions and opinions given apart from the Internal Audit Office. The solutions of material issues were monitored while considering the independence of the Internal Audit Office, training plans, sufficiency and appropriateness of the Internal Audit Office's human resources and other resources along with the guidelines for developing and retaining talented personnel or those who received a professional certificate in order to promote self-improvement of the internal auditors to obtain professional certificate in internal auditing or other related professions, including use of digital technology to support internal audit tasks and enhance the working efficiency.

Quality Maintaining of the Audit Committee

The Audit Committee Charter and operating manual were considered, reviewed and improved while reviewing the necessary competencies and knowledges (Skills Matrix) of the Audit Committee along with an assessment of the Audit Committee's composition, attributes, and audit performances both on collective and individual basis according to best practice guidelines. The Audit Committee's action plan and improvement plan were specified while reporting audit results to the MWA Board of Directors for acknowledgment on quarterly and annually basis. Self-development promoted the Audit Committee according to the improvement plan via participating in various training programs such as Risk Management and Enterprise Risk Management Framework (COSO-ERM 2017) and Director Accreditation Program: DAP 201/2023 of Thai Institute of Directors (IOD), and Cyber Forensics of the Federation of Accounting Professions under the Royal Patronage of His Majesty the King, including the internal and external study visits and discussion associated with senior executives.

In Conclusion, the Audit Committee performs the duties with professional competence, due care, and adequate independence according to duties and responsibilities stipulated in the Audit Committee's Charter and operating manual. The Audit Committee's opinions express that the financial report showing material information and reliability pursuant to financial reporting standards, risk management to an acceptable level, and adequate internal control under good corporate governance principles in compliance with related laws, regulations and specifications in addition to provide opinions and useful suggestion as well as systematic add value to the Metropolitan Waterworks Authority.



(Mr. Boonchai Charassangsomboon)
Chairman of the MWA Audit Committee

Note: The MWA Audit Committee (according to the MWA Board of Directors Order No. 1/2567 as of 29 January 2024) considered and approved the MWA financial statement for the year ended 30 September 2023 (approved by the State Audit Office of the Kingdom of Thailand) in the Meeting No. 3/2567 on 10 April 2024.

Report of Board of Directors' Responsibility For the Financial Report

The Board of Directors of the Metropolitan Waterworks Authority (MWA) is responsible for financial statement by directing the preparation of financial statement in accordance with the generally accepted accounting standards. There is an adequate disclosure of significant information in the Notes to the Financial Statement as well as certified by the Office of the Auditor General.

The Board of Directors has appointed the MWA Audit Committee which comprises of Independent Directors to supervise the auditing, the review of the financial statement and the internal control, to ensure the accounting records are correct, fully adequate, and punctual, and to prevent fraud and irregular conduct.

The MWA Board of Directors has considered that the financial statement of the Metropolitan Waterworks Authority reports the financial status, performance results, and changes in equity and cash flow accurately in the subject matters under generally accepted accounting standards.



(Mr. Chaiwat Chuenkosum)
Chairman, MWA Board of Directors



(TRANSLATION)

AUDITOR'S REPORT

To The Board of Directors of Metropolitan Waterworks Authority

Opinion

The State Audit Office of the Kingdom of Thailand has audited the financial statements of Metropolitan Waterworks Authority (MWA) which comprise the statements of financial position as at September 30, 2023, the statements of income, the statements of comprehensive income, the statements of changes in equity and the statements of cash flows for the year then ended, and the notes to the financial statements, including a summary of significant accounting policies.

In the State Audit Office of the Kingdom of Thailand's opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Metropolitan Waterworks Authority as at September 30, 2023, and its financial performance and its cash flows for the year then ended in accordance with Thai Financial Reporting Standards.

Basis for opinion

The State Audit Office of the Kingdom of Thailand conducted the audit in accordance with State Audit Standards and Thai Standards on Auditing. The State Audit Office of the Kingdom of Thailand's responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of the State Audit Office of the Kingdom of Thailand's report. The State Audit Office of the Kingdom of Thailand is independent of MWA in accordance with the ethical requirements set out in the State Audit Standards issued by the State Audit Commission and the Code of Ethics for Professional Accountants including Independence Standards issued by the Federation of Accounting Professions (Code of Ethics for Professional Accountants) that are relevant to the State Audit Office of the Kingdom of Thailand's audit of the financial statements, and has fulfilled other ethical responsibilities in accordance with State Audit Standards and the Code of Ethics for Professional Accountants. The State Audit Office of the Kingdom of Thailand believes that the audit evidence the State Audit Office of the Kingdom of Thailand has obtained is sufficient and appropriate to provide a basis for the State Audit Office of the Kingdom of Thailand's opinion.

Other information

The management is responsible for the other information. The other information comprises the information included in the annual report, but does not include the financial statements and auditor's report thereon. The State Audit Office of the Kingdom of Thailand expects to receive the annual report after the date of this auditor's report.

The State Audit Office of the Kingdom of Thailand's opinion on the financial statements does not cover the other information and the State Audit Office of the Kingdom of Thailand will not express any form of assurance conclusion thereon.

In connection with the audit of the financial statements, the State Audit Office of the Kingdom of Thailand's responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the financial statements or the State Audit Office of the Kingdom of Thailand's knowledge obtained in the audit, or otherwise appears to be materially misstated.

When the State Audit Office of the Kingdom of Thailand reads the annual report, if the State Audit Office of the Kingdom of Thailand concludes that there is a material misstatement therein, the State Audit Office of the Kingdom of Thailand is required to communicate the matter to those charged with governance.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Thai Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the management is responsible for assessing the MWA's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate MWA or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the MWA's financial reporting process.

Auditor's Responsibilities for the audit of the the Financial Statements

The State Audit Office of the Kingdom of Thailand's objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes the State Audit Office of the Kingdom of Thailand's opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with State Audit Standards and Thai Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with State Audit Standards and Thai Standards on Auditing, the State Audit Office of the Kingdom of Thailand exercises professional judgment and maintain professional skepticism throughout the audit. the State Audit Office of the Kingdom of Thailand also :

- Identifies and assesses the risks of material misstatement of the financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence that is sufficient and appropriate to provide a basis for the State Audit Office of the Kingdom of Thailand's opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the MWA's internal control.
- Evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Concludes on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the MWA's ability to continue as a going concern. If the State Audit Office of the Kingdom of Thailand concludes that a material uncertainty exists, the State Audit Office of the Kingdom of Thailand is required to draw attention in the auditor's report of the State Audit Office of the Kingdom of Thailand to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify the State Audit Office of the Kingdom of Thailand's opinion. The State Audit Office of the Kingdom of Thailand's conclusions are based on the audit evidence obtained up to the date of the auditor's report of the State Audit Office of the Kingdom of Thailand. However, future events or conditions may cause MWA to cease to continue as a going concern.

- Evaluates the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

The State Audit Office of the Kingdom of Thailand communicates with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that the State Audit Office of the Kingdom of Thailand identifies during the State Audit Office of the Kingdom of Thailand's audit.

(Signed) *Chittina Siriwatcharakul*

(Mrs. Chittina Siriwatcharakul)

Director of Financial and Procurement Audit Office No.17

(Signed) *Piyarat Tangkanjanapas*

(Ms. Piyarat Tangkanjanapas)

State Auditor, Senior Professional Level

State Audit Office of the Kingdom of Thailand
March 19, 2024

English translation of the Auditor's Report has not been reviewed by The State Audit Office of the Kingdom of Thailand.

METROPOLITAN WATERWORKS AUTHORITY

STATEMENTS OF FINANCIAL POSITION

AS OF SEPTEMBER 30, 2023

Unit : Baht

	<u>Note</u>	<u>2023</u>	<u>2022</u>
ASSETS			
Current assets			
Cash and cash equivalents	5.1, 7.1	4,301,305,667	1,693,027,444
Trade accounts receivable and other current receivables	5.2, 7.2	1,364,640,490	1,259,917,540
Inventories and supplies	5.3, 7.3	213,182,389	162,095,163
Investment in current financial assets	7.4	5,749,878,044	6,874,898,049
Current special-purpose deposits at financial institutions	7.5	1,480,640,069	1,344,397,370
Other current assets	7.6	206,023,331	96,777,943
Total current assets		13,315,669,990	11,431,113,509
Non-current assets			
Investment in non-current financial assets	7.7	8,629,631,930	15,439,522,069
Non-current special-purpose deposits at financial institutions	7.8	-	164,991,524
Advance payment	7.9	3,917,591,060	2,878,640,534
Assets under construction	5.4, 7.10	16,597,187,286	9,804,801,630
Property, plant and equipment	5.5, 7.11	47,322,733,607	46,996,372,489
Right-of-use assets	5.12, 7.12	209,982,291	334,560,483
Intangible assets	5.6, 7.13	179,078,346	138,931,466
Other non-current assets	7.14	52,259,978	22,463,881
Total non-current assets		76,908,464,498	75,780,284,076
Total assets		90,224,134,488	87,211,397,585

The accompanying notes are an integral part of these financial statements.

METROPOLITAN WATERWORKS AUTHORITY
STATEMENTS OF FINANCIAL POSITION
AS OF SEPTEMBER 30, 2023

Unit : Baht

	<u>Note</u>	<u>2023</u>	<u>2022</u>
LIABILITIES AND EQUITY			
Current liabilities			
Trade accounts payable		2,555,228,829	1,736,261,565
Current portion of long-term loans	7.15	69,651,332	74,453,703
Current portion of lease liabilities	5.12, 7.16	215,539,168	174,188,022
Accrual remittance to the Ministry of Finance	7.17	1,069,850,000	1,182,600,000
Other current liabilities	7.18	1,966,026,485	2,135,948,867
Total current liabilities		5,876,295,814	5,303,452,157
Non-current liabilities			
Long-term loans	7.15	-	74,453,703
Lease liabilities	5.12, 7.16	90,947,012	242,366,856
Employee benefit obligations	5.11, 7.19	2,665,226,006	2,575,034,820
Provision on litigation	7.20	73,411,181	38,900,356
Water usage guarantee		1,349,956,953	1,381,014,818
Deferred revenues	5.7, 7.21	7,754,302,693	7,371,707,517
Unearned income		198,857,314	129,423,667
Other non-current liabilities	7.22	973,955,780	566,697,504
Total non-current liabilities		13,106,656,939	12,379,599,241
Total liabilities		18,982,952,753	17,683,051,398

The accompanying notes are an integral part of these financial statements.

METROPOLITAN WATERWORKS AUTHORITY
STATEMENTS OF FINANCIAL POSITION
AS OF SEPTEMBER 30, 2023

Unit : Baht

	<u>Note</u>	<u>2023</u>	<u>2022</u>
Equity			
Capital	7.23	8,386,847,139	8,386,847,139
Unappropriated retained earnings		63,065,972,822	61,349,332,391
Other components of equity		(211,638,226)	(207,833,343)
Total equity		<u>71,241,181,735</u>	<u>69,528,346,187</u>
Total liabilities and equity		<u>90,224,134,488</u>	<u>87,211,397,585</u>

The accompanying notes are an integral part of these financial statements.

(Signed) *Manit Panaim*

(Mr. Manit Panaim)

Governor

(Signed) *Anoottaree Prasertchai*

(Miss Anoottaree Prasertchai)

Director of Accounting Department

METROPOLITAN WATERWORKS AUTHORITY
STATEMENTS OF INCOME
FOR THE YEARS ENDED SEPTEMBER 30, 2023

Unit : Baht

	<u>Note</u>	<u>2023</u>	<u>2022</u>
Revenues			
Water sales		16,679,689,359	15,821,539,088
Water meter fees		1,027,028,149	1,016,249,199
Tab water connection fees		324,214,507	308,908,834
Work contract revenues		659,525,613	595,394,124
Other operating income		352,784,401	325,325,286
Other revenues		93,712,872	177,211,220
Total Revenues		19,136,954,901	18,244,627,751
Expenses			
Finished goods and work in process increase (decrease)		-	197,742
Work performed by the entity and capitalized		(72,479,750)	(46,292,448)
Raw materials and consumables used	7.24	3,977,412,487	3,400,953,065
Directors remuneration	7.25	31,623,898	32,959,795
Employee benefit expenses		3,755,104,350	3,643,945,639
Depreciation and amortization expenses		5,639,962,579	5,515,261,471
Other operating expenses	7.26	2,223,239,028	1,808,418,876
Other expenses		28,671,470	4,705,890
Total Expenses		15,583,534,062	14,360,150,030
Profit from operating		3,553,420,839	3,884,477,721
Finance income		322,151,255	245,757,259
Finance costs	7.27	(15,081,663)	(19,831,618)
Profit for the year		3,860,490,431	4,110,403,362

The accompanying notes are an integral part of these financial statements.

METROPOLITAN WATERWORKS AUTHORITY
STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED SEPTEMBER 30, 2023

		Unit : Baht	
	<u>Note</u>	<u>2023</u>	<u>2022</u>
Profit for the year		3,860,490,431	4,110,403,362
Other comprehensive income			
Items that will not be reclassified to profit or loss			
in subsequent periods			
Actuarial Gains (Losses)	7.19	(9,361,031)	395,133,908
Items that will be reclassified to profit or loss			
in subsequent periods			
Gains (Losses) on cash flow hedge		5,556,148	12,078,801
Other comprehensive income for the year		(3,804,883)	407,212,709
Total comprehensive income for the year		<u>3,856,685,548</u>	<u>4,517,616,071</u>

The accompanying notes are an integral part of these financial statements.

STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED SEPTEMBER 30, 2023

Unit : Baht

	Contributions		Total Capital	Unappropriated retained earnings	Other components of equity		Total equity
	Initial Capital	Government			Actuarial Gains (Losses)	Cash flow hedge reserve	
Balance as of October 1, 2021	1,192,708,301	7,194,138,838	8,386,847,139	59,625,929,029	(555,473,053)	(59,572,999)	67,397,730,116
Remittance to Ministry of Finance	-	-	-	(2,387,000,000)	-	-	(2,387,000,000)
Profit for the year	-	-	-	4,110,403,362	-	-	4,110,403,362
Total comprehensive income for the year	-	-	-	-	395,133,908	12,078,801	407,212,709
Balance as of September 30, 2022	1,192,708,301	7,194,138,838	8,386,847,139	61,349,332,391	(160,339,145)	(47,494,198)	69,528,346,187
Balance as of October 1, 2022	1,192,708,301	7,194,138,838	8,386,847,139	61,349,332,391	(160,339,145)	(47,494,198)	69,528,346,187
Remittance to Ministry of Finance	-	-	-	(2,143,850,000)	-	-	(2,143,850,000)
Profit for the year	-	-	-	3,860,490,431	-	-	3,860,490,431
Total comprehensive income for the year	-	-	-	-	(9,361,031)	5,556,148	(3,804,883)
Balance as of September 30, 2023	1,192,708,301	7,194,138,838	8,386,847,139	63,065,972,822	(169,700,176)	(41,938,050)	71,241,181,735

The accompanying notes are an integral part of these financial statements.

METROPOLITAN WATERWORKS AUTHORITY
STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED SEPTEMBER 30, 2023

Unit : Baht

	2023	2022
Cash flows from operating activities		
Profit for the year	3,860,490,431	4,110,403,362
Adjustment of net income to cash received (paid)		
From operating activities		
Depreciation	5,546,359,193	5,465,584,196
Amortization - intangible assests	93,603,386	49,677,275
Impairment loss	1,533,092	(41,471,719)
(Gains) losses from disposal of assets	20,891,935	(6,480,327)
Gains from disposal of obsolete materials and supplies	(25,467,775)	(21,315,664)
Gains from terminated leases	(86,437)	(62,408)
Finance costs	15,081,663	19,831,618
Finance income	(322,151,255)	(245,757,259)
Deferred revenues from donated assets	(1,320,855)	(2,997,860)
Deferred revenues from tab water connection fees	(304,133,815)	(289,166,474)
Deferred revenues from work contract revenues	(597,345,047)	(557,746,670)
Deferred revenues from pipelines-MOU	(48,664,541)	(46,755,499)
Deferred revenues from government grants	(268,404)	-
Provision for employee benefit obligations	224,031,234	225,258,362
Prosecution losses	42,687,747	27,511,175
Operating income before changes in operating assets and liabilities	8,505,240,552	8,686,512,108
Operating assets (increase) decrease		
Trade accounts receivable and other current receivables	(106,446,420)	201,205,444
Inventories	213,056,532	217,906,415
Other current assets	(47,833,942)	75,160,621
Other non-current assets	(29,887,902)	164,994
Operating liabilities increase (decrease)		
Trade accounts payable	(2,813,216,821)	(2,257,440,231)
Accrued bonus expense	(5,899,174)	(62,749,446)
Other current liabilities	(187,044,331)	497,608,788
Provision for employee benefits	(143,201,079)	(115,258,029)
Provisions for litigation	(8,176,922)	(4,968,686)
Water usage guarantee	(31,057,865)	(44,465,475)
Deferred revenues	1,311,617,805	1,101,336,490
Unearned income-MOU	91,757,013	68,997,908
Other non-current liabilities	427,212,771	104,906,992
Net cash from operating activities	7,176,120,217	8,468,917,893

The accompanying notes are an integral part of these financial statements.

METROPOLITAN WATERWORKS AUTHORITY
STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED SEPTEMBER 30, 2023

Unit : Baht

	2023	2022
Cash flows from investing activities		
Cash inflow (outflow) from investments in current financial assets	1,125,000,000	(250,000,000)
Cash inflow (outflow) from Current special-purpose deposits at financial institutions	(136,288,883)	160,600,000
Cash inflow (outflow) from investment in non-current financial assets	6,810,000,000	(140,000,000)
Cash inflow (outflow) from non-current special-purpose deposits at financial institutions	165,000,000	(165,000,000)
Interest received	260,731,921	285,560,741
Proceeds from disposals of assets	49,396,809	62,785,888
Proceeds from disposal of obsolete materials and supplies	25,564,826	22,532,665
Payments of fixed assets acquisition	(10,372,702,450)	(4,740,177,518)
Advance payment for lease agreement	(875,000)	-
Net cash used in investing activities	(2,074,172,777)	(4,763,698,224)
Cash flows from financing activities		
Repayment on borrowing	(70,471,563)	(77,588,729)
Installment payment on lease	(157,207,154)	(144,021,253)
Finance costs	(9,415,090)	(14,802,238)
Remittance to Ministry of Finance	(2,256,600,000)	(2,172,750,000)
Net cash used in financing activities	(2,493,693,807)	(2,409,162,220)
Net increase in cash and cash equivalents	2,608,253,633	1,296,057,449
Allowance for expected credit losses (increase) decrease	24,590	72,095
Cash and cash equivalents at the beginning of the period	1,693,027,444	396,897,900
Cash and cash equivalents at the ending of the period	4,301,305,667	1,693,027,444
Supplementary cash flow information		
Invested in fixed assets on payables	1,404,327,373	645,138,277

The accompanying notes are an integral part of these financial

METROPOLITAN WATERWORKS AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
FOR THE YEARS ENDED SEPTEMBER 30, 2023

1. GENERAL INFORMATION

Metropolitan Waterworks Authority (MWA) is the state enterprise under the Metropolitan Waterworks Authority Act, B.E. 2510 (1967) and its amendment with objectives as follows,

1.1 To survey and provide raw water sources and acquire raw water for use in the waterworks.

1.2 To produce, supply and distribute treated water in the Bangkok Metropolis, Nonthaburi and Samut Prakan provinces and control the standard of the private waterworks system in such areas.

1.3 To engage in other related business or beneficial to MWA.

The head office is located at 400 Prachachuen Road, Laksi, Bangkok, 10210.

2. BASIS OF PREPARATION AND PRESENTATION OF THE FINANCIAL STATEMENTS

The financial statements have been prepared in accordance with Thai Generally Accepted Accounting Principles under the Accounting Act, B.E.2543 being these Thai Financial Reporting Standards issued under the Accounting Profession Act, B.E.2547 including accounting interpretations and guidelines promulgated by the Federation of Accounting Professions and announcements Department of Business Development “Definition of the abbreviated components required in the financial statements (No. 3) B.E. 2562” dated December 26, 2019.

Preparation of financial statements in accordance with Thai Financial Reporting Standards, Management is required to use estimates and assumptions that affect income, expenditure, assets and liabilities for the purpose of determining the value of assets, liabilities as well as contingent liabilities. For that reason the result of the transactions when actually happened therefore may differ from the estimates.

3. NEW FINANCIAL REPORTING STANDARDS

3.1 Financial Reporting Standards that became effective in the current year

MWA has adopted the revised and new accounting standards, financial reporting standards and interpretation issued by the Federation of Accounting Professions which effective for fiscal years beginning on or after January 1, 2022 . These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards, with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards. The adoption of these financial reporting standards does not have any significant impact on MWA’s financial statements.

3.2 Financial reporting standards that are not yet effective

During the period, the Federation of Accounting Professions issued a number of revised financial reporting standards (Revised 2022), which are effective for fiscal years beginning on or after January 1, 2023. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards. The management of MWA is currently evaluating the impact of these standards to the financial statements in the year when they are adopted.

4. CHANGES IN ACCOUNTING ESTIMATES

For fiscal year 2023, MWA has reviewed and changed the estimated useful lives of air conditioning assets from 5 years to 10 years and water tunnel assets from 35 years to 50 years in order to be appropriate more reflective of the current situation, patterns and facts.

These changes that effect to the depreciation of air conditioning assets for fiscal year 2023 decreased by 7.94 million baht. And water tunnel assets, for period from July 1 to September 30, 2023, decreased by 47.97 million baht.

5. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

5.1 CASH AND CASH EQUIVALENTS

Cash and cash equivalents comprise cash on hand, deposits held at call with banks but do not include deposits with banks which are held to maturity, and other short-term highly liquid investments with maturities of three months or less from the date of acquisition and without restriction of use and that are subject to an insignificant risk of change in value.

5.2 TRADE ACCOUNTS RECEIVABLE AND OTHER CURRENT RECEIVABLES

Trade accounts receivable and other current receivables measure initially at fair value and measure later with the amortized cost price.

Trade accounts receivable and accrued revenue of water sales, meter fees and raw waters, MWA uses a simple method for calculating allowance for expected credit losses over the life of trade accounts receivable. The expected loss rate is calculated at the end of each reporting period.

Other current receivables, MWA calculates the allowance for expected credit losses by considering the accounts receivable that expected to be unable to collect by estimated from the amount of outstanding debt at the end of the period according to payment history and the current financial status of the accounts receivable, including considering the percentage according to the accounts receivable aging of the outstanding balance at the end of the period.

Increases and decreases in allowance for expected credit losses are expensed in the period that occurred.

5.3 INVENTORIES

Inventories are valued at the lower of cost price or net realizable value, Consist of:

5.3.1 Materials and supplies use in MWA's operation such as pipes, water meter and chemical are valued at cost moving average method.

For disposal obsolete materials will have an allowance for loss in the whole amount.

Obsolete materials by dismantling of assets valued at book values.

5.3.2 Finished Goods comprises of drinkable bottle are valued cost moving average method.

5.4 ASSETS UNDER CONSTRUCTION

All costs related directly to qualifying assets and those assets under construction are recorded at cost. When the construction is completed and in the condition necessary for it to be capable of operating in the manner of its intended use, its cost will be transferred to property, plant and equipment.

5.5 PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are stated at cost at the date of purchase or acquisition. or the completion of constructions, the expenses incurred to keep the asset in a ready-to-use condition less accumulated depreciation.

Depreciation of plant and equipment is calculated by reference to their costs on a straight-line basis over the estimated useful lives as follows:

	Useful lives (Years)
Land improvement	30
Building and factory	30
Machinery and equipment	5, 7, 10, 20, 25
Pipe and tunnel	10, 15, 25, 35, 50
Meter	7, 10
Office equipments	5, 10
Vehicles	5, 8

Donated assets are recorded with deferred revenue and recognized to revenue throughout the useful lives.

5.6 INTANGIBLE ASSETS

Intangible assets include the right to use the digital data map and the computer software, presented at cost deducted by accumulated amortization expense. Amortization is charged to the income statement on a straight-line basis according to the 5-20 years estimated useful life of assets.

5.7 DEFERRED REVENUES

5.7.1 The asset from donation account is recorded together with the Deferred revenue from donation. They are recognized as income at a rate consistent with depreciation over the useful life of that asset for donation assets in operations.

5.7.2 Deferred revenue is the money that the MWA charges from the applicant to use the water supply for the installation of new water supply and the laying of pipes. The ownership of assets, maintenance and repair belong to the MWA. Such items are presented as deferred income. They are recognized as income at a rate consistent with depreciation over the useful life of that asset.

5.8 REVENUES

MWA recognizes revenue when it fulfills its obligations to customers by delivery goods or services promised to customers in an amount that reflects the expected consideration to be entitled to the exchange of goods or services the amount of revenue recognized is the amount allocated to the performance obligation. For a contract of delivery of goods, it is an obligation that must be fulfilled at a certain point in time. Service delivery are obligations that must be completed over a period of time at the end of the reporting period. MWA recognizes revenue by measuring the progression of the performance obligation.

5.9 BORROWING COSTS

Borrowing costs consist of interest expense, fee, all of the finance charges and exchange differences arising from foreign currency. Adjustment of the cost of interest expense recognized as an expense in the whole amount. Except for borrowing costs related to qualifying fixed assets and assets under construction are capitalized as part of the constructions cost. When constructions are completed, such borrowing costs will be recorded as the expenses.

Interest expense from financial liabilities at amortised cost is calculated using the effective interest method and recognized on an accrual basis.

5.10 FOREIGN CURRENCY TRANSACTIONS

Foreign currency transactions in foreign currencies are converted into Thai Baht by using the exchange rates prevailing at the transaction date. Monetary assets and liabilities denominated in foreign currencies at the fiscal year-end date are converted into Thai Baht at the average buying or selling rate announced by the Bank of Thailand at such date. Gains or losses on exchange rate arising on settlements and conversion are recognized as revenue or expense.

5.11 EMPLOYEE BENEFITS

Recognition and measurement

5.11.1 Short-term employee benefits are recognized in profit and loss as expenses when incurred.

5.11.2 Post-employment benefits

Defined contribution plans

MWA and its employees have established MWA provident fund in accordance with the Provident Fund Act B.E. 2530 (1987) and registered on June 2, 1997.

The fund is separated from assets of MWA and managed by asset management company and will be paid to employees upon termination of employment in accordance with the rules of the fund.

The MWA contributes to the fund on a monthly basis at a rate of 9% of salaries for members having 1-10 years of service, 10% for members having 11-20 years of service and 11 % for members having more than 20 years of service. Contributions are recognized as expenses when incurred.

Defined benefit plans comprised of 4 projects as follows:

1. The pension fund MWA established MWA employee pension fund on October 28, 1976 with the objective of helping the employees in the case of vacating office without fault equal to the product of working age calculated annually by the last month's salary. MWA contribution to the fund on a monthly basis at the rate of 10% of salary of MWA pension fund members.

2. The remuneration on retirement preferences is employee benefits are notification of State Enterprise Labor Relations Commission's minimum standards of employment conditions in state-owned enterprises, 2010. Employee retired which work more than 15 years. Benefits are equal to the wage rate of the last 300 days.

On September 25, 2019, the State Enterprise Labor Relations Committee announced The Government Gazette, the minimum standard of employment conditions in state enterprises (Issue 4), issued with the approval of the Cabinet on September 10, 2019 which stipulates that employees who have worked continuously for 20 years or more to receive benefits not less than the last 400 days' wage rate.

3. The annual leave project that has not been exercised is employee benefits retirement and the annual leave is not exercised. Benefits are equal to the number of days that have not been exercised. Up to 45 days of the final wage rate.

4. The project of the awards age 60 years or retirement is a project of the awards when employees age 60 years or retirement.

The obligation under the defined benefit plan is determined based on actuarial techniques, using the Projected Unit Credit Method, in order to determine present value of the obligation, current service cost and past service cost. These are recognized as a liability in statements of financial position and expenses in statements of income. Actuarial gains and losses arising from post-employment benefits are recognized in statements of comprehensive income when incurred.

5.11.3 Other long-term employee benefits plan is a project of the awards when employees have worked for 25 years.

MWA uses actuarial estimation techniques in the same method as for termination of employment benefit plans. It is recognized as a liability in statements of financial position. Actuarial expenses and gains (losses) are recognized in statements of income in the period in which they are incurred.

5.12 Leases

At inception of contract, MWA assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

MWA as a lessee

MWA applied a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. At the commencement date of the lease (i.e. the date the underlying asset is available for use), MWA recognizes right-of-use assets representing the right to use underlying assets and lease liabilities based on lease payments.

Right-of-use assets

Right-of-use assets are measured at cost, less accumulated depreciation, any accumulated impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities initially recognized, initial direct costs incurred, and lease payments made at or before the commencement date of the lease less any lease incentives received.

Depreciation of right-of-use assets are calculated by reference to their costs, on the straight-line basis over the shorter of their estimated useful lives and the lease term.

Land	3 - 30	years
Building and improvements	36	months
Machinery and equipment	3 - 32	months
Office –equipments	36	months
Vehicles	60	months

If ownership of the leased asset is transferred to MWA at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

Lease liabilities

Lease liabilities are measured at the present value of the lease payments to be made over the lease term. The lease payments include fixed payments less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be payable under residual value guarantees. Moreover, the lease payments include the exercise price of a purchase option reasonably certain to be exercised by MWA and payments of penalties for terminating the lease, if the lease term reflects MWA exercising an option to terminate. Variable lease payments that do not depend on an index or a rate are recognized as expenses in the period in which the event or condition that triggers the payment occurs.

MWA discounted the present value of the lease payments by the interest rate implicit in the lease or MWA's incremental borrowing rate. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is

remeasured if there is a change in the lease term, a change in the lease payments or a change in the assessment of an option to purchase the underlying asset.

Short-term leases and leases of low-value assets

A lease that has a lease term less than or equal to 12 months from commencement date or a lease of low-value assets is recognized as expenses on a straight-line basis over the lease term.

5.13 Financial instruments

MWA initially measures financial assets at its fair value plus transaction costs, in the case of financial assets that are not measured at fair value through profit or loss. However, trade receivables, that do not contain a significant financing component, are measured at the transaction price.

Classification and measurement of financial assets

Financial assets are classified, at initial recognition, as to be subsequently measured at amortised cost, fair value through other comprehensive income (“FVOCI”), or fair value through profit or loss (“FVTPL”). The classification of financial assets at initial recognition is driven by MWA’s business model for managing the financial assets and the contractual cash flows characteristics of the financial assets.

Financial assets at amortised cost

MWA measures financial assets at amortised cost if the financial asset is held in order to collect contractual cash flows and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest rate (“EIR”) method and are subject to impairment. Gains and losses are recognized in profit or loss when the asset is derecognized, modified or impaired.

Classification and measurement of financial liabilities

Except for derivative liabilities, at initial recognition MWA’s financial liabilities are recognized at fair value net of transaction costs and classified as liabilities to be subsequently measured at amortised cost using the EIR method. Gains and losses are recognized in profit or loss when the liabilities are derecognized as well as through the EIR amortization process. In determining amortised cost, MWA takes into account any fees or costs that are an integral part of the EIR. The EIR amortization is included in finance costs in profit or loss.

Derecognition of financial instruments

A financial asset is primarily derecognized when the rights to receive cash flows from the asset have expired or have been transferred and either MWA has transferred substantially all the risks and rewards of the asset, or MWA has neither transferred nor retained substantially all the risks and rewards of the asset but has transferred control of the asset.

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different

terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in profit or loss.

Impairment of financial assets

MWA recognizes an allowance for expected credit losses (“ECLs”) for all debt instruments not held at FVTPL. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that MWA expects to receive, discounted at an approximation of the original effective interest rate.

For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure (a lifetime ECL).

MWA considers a significant increase in credit risk to have occurred when contractual payments are more than 30 days past due and considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, MWA may also consider a financial asset to have a significant increase in credit risk and to be in default using other internal or external information, such as credit rating of issuers.

For trade receivables and Accrued revenue of water sales, meter fees and raw waters, MWA applies a simplified approach in calculating ECLs. Therefore, MWA does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. It is based on its historical credit loss experience and adjusted for forward-looking factors specific to the debtors and the economic environment.

A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Offsetting of financial instruments

Financial assets and financial liabilities are offset, and the net amount is reported in the statement of financial position if there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, to realize the assets and settle the liabilities simultaneously.

5.14 Derivatives and hedge accounting

MWA uses derivatives, cross currency swaps, to hedge its foreign currency risks.

Derivatives are initially recognized at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. The subsequent changes are recognized in profit or loss unless the derivative is designated and effective as a hedging instrument under cash flow hedge. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Derivatives are presented as non-current assets or non-current liabilities if the remaining maturity of the instrument is more than 12 months and it is not due to be realized or settled within 12 months. Other derivatives are presented as current assets or current liabilities.

Hedge accounting

For the purpose of hedge accounting, hedge is classified as cash flow hedges when hedging the exposure to a variability in cash flows that is either attributable to a particular risk associated with a recognized asset or liability or a highly probable forecast transaction.

At the inception of a hedging relationship, MWA formally designates and documents the hedging relationship to which it wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge.

The documentation, at the inception of the hedge and on an ongoing basis, includes identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how MWA will assess whether the hedging relationship meets the hedge effectiveness requirements, including analysis of the sources of hedge ineffectiveness and how the hedge ratio is determined.

A hedging relationship qualifies for hedge accounting if it meets all the following hedge effectiveness requirements:

- There is 'an economic relationship' between the hedged item and the hedging instrument.
- The effect of credit risk is not the dominant factor in the value changes that result from that economic relationship.
- The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that MWA actually hedges and the quantity of the hedging instrument that MWA actually uses to hedge that quantity of hedged item.

Hedges that meet all the qualifying criteria for hedge accounting are accounted for, as described below:

Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognized in other comprehensive income in the cash flow hedge reserve, while any ineffective portion is recognized immediately in profit or loss. The cash flow hedge reserve is adjusted to the lower (in absolute amounts) of the cumulative gain or loss on the hedging instrument and the cumulative change in fair value of the hedged item.

The way cash flow hedge reserve accumulated in other comprehensive income are subsequently accounted for, depends on the nature of the underlying hedged transaction. If the hedged transaction subsequently results in the recognition of a non-financial item, the reserve accumulated in equity is removed from the separate component of equity and included in the initial cost or other carrying amount of the hedged asset or liability. This is not a reclassification adjustment and is not recognized in other comprehensive income for the period. For any other cash flow hedges, the reserve accumulated in other comprehensive income is subsequently reclassified to profit or loss as a reclassification adjustment in the same period which the hedged cash flows affect profit or loss.

If cash flow hedge accounting is discontinued, the cash flow hedge reserve accumulated in other comprehensive income must remain in equity if the hedged future cash flows are still expected to occur. Otherwise, the reserve will be immediately reclassified to profit or loss as a reclassification adjustment. After discontinuation, once the hedged cash flow occurs, the way the reserve remaining in equity is accounted for depends on the nature of the underlying transaction as described above.

5.15 Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between buyer and seller (market participants) at the measurement date. MWA applies a quoted market price in an active market to measure their assets and liabilities that are required to be measured at fair value by relevant financial reporting standards. Except in case of no active market of an identical asset or liability or when a quoted market price is not available, MWA measures fair value using valuation technique that are appropriate in the circumstances and maximizes the use of relevant observable inputs related to assets and liabilities that are required to be measured at fair value.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorized within the fair value hierarchy into three levels based on categorize of input to be used in fair value measurement as follows:

- Level 1 Use of quoted market prices in an active market for such assets or liabilities.
- Level 2 Use of other observable inputs for such assets or liabilities, whether directly or indirectly.
- Level 3 Use of unobservable inputs such as estimates of future cash flows.

At the end of each reporting period, MWA determines whether transfers have occurred between levels within the fair value hierarchy for assets and liabilities held at the end of the reporting period that are measured at fair value on a recurring basis.

6. SIGNIFICANT ACCOUNTING JUDGEMENTS AND ESTIMATES

The preparation of financial statement in conformity with generally accepted accounting principles requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income, and expenses. Actual results may differ from these estimates. The significant judgements and estimate is as follow:

6.1 PROPERTY, PLANT AND EQUIPMENT AND DEPRECIATION

In determining depreciation of plant and equipment, the management is required to make estimates of the useful lives and residual value of the plant and equipment and to review estimate useful lives when there are any changes.

6.2 ACCRUED REVENUE OF WATER SALES, METER FEES

Unbilled revenue was calculated from water consumption from the last reading date to reporting date by estimated from water consumption average per day of the latest month to the following month backwards 3 years.

6.3 LITIGATION

The MWA has recorded provisions on litigation for cases which have considered the status of the cases and are expected to bear liability. As for the liabilities that may arise from being prosecuted for damages. In which the management has discretion in an evaluation of a lawsuit that has been prosecuted and is confident that no damages will occur, such provisions will not be recorded at the date of the financial statements.

6.4 ALLOWANCE FOR EXPECTED CREDIT LOSSES OF TRADE RECEIVABLES AND ACCRUED REVENUE OF WATER SALES, METER FEES

In determining an allowance for expected credit losses of trade receivables and accrued revenue of water sales, the management needs to make judgement and estimates based upon, among other things, past collection history, aging profile of outstanding debts and the forecast economic condition for groupings of various customer segments with similar credit risks. MWA's historical credit loss experience and forecast economic conditions may also not be representative of whether a customer will actually default in the future.

6.5 LEASES

Determining the lease term with extension and termination options - MWA as a lessee.

In determining the lease term, the management is required to exercise judgement in assessing whether MWA is reasonably certain to exercise the option to extend or terminate the lease considering all relevant facts and circumstances that create an economic incentive for MWA to exercise either the extension or termination option.

Estimating the incremental borrowing rate - MWA as a lessee.

MWA cannot readily determine the interest rate implicit in the lease, therefore, the management is required to exercise judgement in estimating its incremental borrowing rate to discount lease liabilities. The incremental borrowing rate is the rate of interest that MWA would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment.

7. ADDITIONAL DATA

7.1 CASH AND CASH EQUIVALENTS comprised of:

Unit : Million Baht

	<u>2023</u>	<u>2022</u>
Cash on hand	1.20	5.89
Savings and current account	701.40	917.74
Cash in transit	23.22	(30.52)
Current account up to 3 months	-	800.00
Investments in debt instruments not exceeding 3 months	3,575.54	-
Total Cash and cash Equivalents	4,301.36	1,693.11
<u>Less</u> Allowance for Expected Credit Losses	(0.05)	(0.08)
Total Cash and cash equivalents - net	4,301.31	1,693.03

7.2 TRADE ACCOUNTS RECEIVABLE AND OTHER CUREENT RECEIVABLES comprised of:

Unit : Million Baht

	<u>2023</u>	<u>2022</u>
Accounts receivable	556.70	472.56
Other Current Receivables	807.94	787.36
Total	1,364.64	1,259.92

7.2.1 TRADE ACCOUNTS RECEIVABLE comprised of:

Unit : Million Baht

	<u>2023</u>	<u>2022</u>
Water utilities bills receivable	608.95	520.64
<u>Less</u> Undue output taxes water utilities	(39.51)	(33.47)
Total Water utilities bills receivable	569.44	487.17
<u>Less</u> Allowance for Expected Credit Losses	(12.74)	(14.61)
Total Water utilities bills receivable - net	556.70	472.56

As of September 30, 2023 and 2022, the water utility bills receivable were classified by customer type and aging period as follows:

Unit : Million Baht

	<u>2023</u>			<u>2022</u>		
<u>Aging period</u>	<u>Private sector</u>	<u>Public sector</u>	<u>Total</u>	<u>Private sector</u>	<u>Public sector</u>	<u>Total</u>
Not yet due	179.40	199.78	379.18	179.92	177.68	357.60
Up to 3 months	22.47	100.26	122.73	29.43	60.71	90.14
Over 3 months - 6 months	1.52	40.03	41.55	1.65	10.14	11.79
Over 6 months - 1 year	2.67	12.98	15.65	3.12	1.32	4.44
Over 1 year	9.92	0.41	10.33	10.92	12.28	23.20
	<u>215.98</u>	<u>353.46</u>	<u>569.44</u>	<u>225.04</u>	<u>262.13</u>	<u>487.17</u>
<u>Less</u> Allowance for Expected Credit Losses	<u>(12.74)</u>	<u>-</u>	<u>(12.74)</u>	<u>(14.61)</u>	<u>-</u>	<u>(14.61)</u>
Total	<u>203.24</u>	<u>353.46</u>	<u>556.70</u>	<u>210.43</u>	<u>262.13</u>	<u>472.56</u>

For government and state enterprise accounts receivable as of September 30, 2023 and 2022, MWA does not set an allowance for expected credit losses as there is quite a possibility to receive payments from government and state enterprise.

The movement in the allowance for expected credit losses of trade accounts receivables are as follows.

Unit : Million Baht

	<u>2023</u>	<u>2022</u>
Balance brought forward at beginning of period	14.61	19.32
<u>Less</u> Provision for expected credit losses	2.32	0.93
Amount written off	(4.18)	(5.47)
Adjusting the list of cancellation of the previous year's bill	<u>(0.01)</u>	<u>(0.17)</u>
Balance carry forward at ending of period	<u>12.74</u>	<u>14.61</u>

7.2.2 OTHER CURRENT RECEIVABLES comprised of:

	Unit : Million Baht	
	2023	2022
Water installation receivable and others	6.08	6.57
<u>Less</u> Allowance for Expected Credit Losses	(0.03)	(0.04)
Water installation receivable and others - net	6.05	6.53
Accrued revenue of water sales, meter fees and raw waters	799.11	782.47
<u>Less</u> Allowance for Expected Credit Losses	(0.83)	(1.64)
Accrued revenue of water sales, meter fees and raw waters - net	798.28	780.83
Government debtors	3.61	-
Total other current receivables - net	807.94	787.36

Government debtors are water utilities bills receivable which the government bears on behalf of the debtor from the implementation of measures to alleviate the burden of water bills (measures). According to the Cabinet Resolution of February 28, 2023, the Cabinet approved the allocation of new Pracharath Welfare for eligible persons under the State Welfare Registration Program. (eligible persons). The measures of 2022 differ from those of 2017 and 2018 for government welfare card holders (card holders) : the Comptroller General's Department changed the method of disbursement of subsidies by paying directly to MWA. Previously, support payments are paid directly to card holders. Card holders must pay their own money first.

With such measures, The government bears the burden of subsidizing water bills for eligible persons in the amount of 100 baht per household per month. In the case of eligible persons under the project use tap water more than 100 baht per household per month but not more than 315 baht per household per month. Eligible persons will still be entitled to a subsidy in the amount of 100 baht per household per month. The excess of 100 baht must be paid by the eligible person himself. However, if the eligible person uses water in excess of 315 baht per household per month, must bear the entire amount of water bill.

7.3 INVENTORIES AND SUPPLIES comprised of:

	Unit : Million Baht	
	2023	2022
Materials and Supplies	201.41	151.49
Material in transit	11.77	10.61
Total	213.18	162.10

7.4 INVESTMENT IN CURRENT FINANCIAL ASSETS

Unit : Million Baht

	<u>2023</u>	<u>2022</u>
Investment in current financial assets	5,750.00	6,875.00
<u>Less</u> Allowance for Expected credit losses	(0.12)	(0.10)
Total investment in current financial assets - net	<u>5,749.88</u>	<u>6,874.90</u>

7.5 CURRENT SPECIAL-PURPOSE DEPOSITS AT FINANCIAL INSTITUTIONS

Unit : Million Baht

	<u>2023</u>	<u>2022</u>
Current special-purpose deposits at financial institutions	1,480.69	1,344.40
<u>Less</u> Allowance for Expected Credit losses	(0.05)	-
Total Current special-purpose deposits at financial institutions - net	<u>1,480.64</u>	<u>1,344.40</u>

As of September 30, 2023 and 2022, Current special-purpose deposits at financial institutions consist of water usage guarantee and its interests. As of September 30, 2023, water usage guarantee reserved for repayment and interest income earned from water usage guarantee amounting to 22.04 million baht is included in cash and cash equivalents item in the financial statements.

7.6 OTHER CURRENT ASSETS comprised of:

Unit : Million Baht

	<u>2023</u>	<u>2022</u>
Accrued interest receivable	152.39	90.97
<u>Less</u> Allowance for Expected Credit Losses	(0.02)	(0.01)
Accrued interest receivable - net	152.37	90.96
Other assets	53.65	5.82
Total other current assets	<u>206.02</u>	<u>96.78</u>

7.7 INVESTMENTS IN NON-CURRENT FINANCIAL ASSETS

Unit : Million Baht

	<u>2023</u>	<u>2022</u>
Investments in non-current financial assets	8,630.00	15,440.00
<u>Less</u> Allowance for Expected Credit Losses	(0.37)	(0.48)
Total investments in non-current financial assets - net	<u>8,629.63</u>	<u>15,439.52</u>

7.8 NON-CURRENT SPECIAL-PURPOSE DEPOSITS AT FINANCIAL INSTITUTIONS

Unit : Million Baht

	<u>2023</u>	<u>2022</u>
Non-current special-purpose deposits at financial institutions	-	165.00
<u>Less</u> Allowance for Expected Credit Losses	-	(0.01)
Total Non-current special-purpose deposits at financial institutions - net	<u>-</u>	<u>164.99</u>

As of September 30, 2022 , Non-current special-purpose deposits at financial institutions consist of water usage guarantee and its interests.

7.9 ADVANCE PAYMENT

As of September 30, 2023 and 2022, Advance payment amounting to 3,917.59 million baht and 2,878.64 million baht, respectively have paid according to the conditions in the agreement. The contractor has to submit Thai Government's bond or a guarantee issued by a local bank in accordance with Rules of Metropolitan Waterworks Authority (Volume 100) on Procurement B.E.2537 (1994) and Government Procurement and Supplies Management Act B.E. 2560 (2017).

7.10 ASSETS UNDER CONSTRUCTION details as follows:

Unit : Million baht

	2023			
	<u>Oct 1, 2022</u>	<u>Additions</u>	<u>Transferred</u>	<u>Sep 30, 2023</u>
			<u>to assets</u>	
The Eighth Bangkok water Supply Improvement Project	393.15	0.32	-	393.47
The Ninth Bangkok water Supply Improvement Project	1,643.65	5,177.59	(247.16)	6,574.08
Normal Capital Expenditure	7,768.00	7,438.17	(5,576.53)	9,629.64
Total	<u>9,804.80</u>	<u>12,616.08</u>	<u>(5,823.69)</u>	<u>16,597.19</u>

Unit : Million baht

	2022			
	<u>Oct 1, 2021</u>	<u>Additions</u>	<u>Transferred</u>	<u>Sep 30, 2022</u>
			<u>to assets</u>	
The Seventh Bangkok water Supply Improvement Project	272.62	2.35	(274.97)	-
The Eighth Bangkok water Supply Improvement Project	383.24	10.06	(0.15)	393.15
The Ninth Bangkok water Supply Improvement Project	668.43	1,044.32	(69.10)	1,643.65
Normal Capital Expenditure	7,413.94	5,631.38	(5,277.32)	7,768.00
Total	<u>8,738.23</u>	<u>6,688.11</u>	<u>(5,621.54)</u>	<u>9,804.80</u>

7.11 PROPERTY, PLANT AND EQUIPMENT details as follows:

Unit : Million baht

2023									
	Cost				Accumulated Depreciation				Property, Plant and Equipment Sep 30, 2023
	Oct 1, 2022	Additions	Write off	Sep 30, 2023	Oct 1, 2022	Depreciation	Write off	Sep 30, 2023	
Land	4,287.78	-	-	4,287.78	-	-	-	-	4,287.78
Building and improvements	19,700.13	88.80	(7.04)	19,781.89	14,091.85	444.43	(5.55)	14,530.73	5,251.16
Machineries and equipments	12,458.20	278.76	(159.30)	12,577.66	9,902.07	392.19	(159.01)	10,135.25	2,442.41
Pipes	100,506.80	4,702.61	(358.98)	104,850.43	68,630.19	3,890.23	(339.54)	72,180.88	32,669.55
Meters	6,205.95	519.49	(352.56)	6,372.88	4,022.45	457.60	(302.12)	4,177.93	2,194.95
Office - equipments	2,131.41	183.59	(90.19)	2,224.81	1,740.57	182.23	(89.96)	1,832.84	391.97
Vehicles and transport	299.06	4.34	-	303.40	205.83	12.66	-	218.49	84.91
Total	145,589.33	5,777.59	(968.07)	150,398.85	98,592.96	5,379.34	(896.18)	103,076.12	47,322.73

Property, plant and equipment, amounting to 150,398.85 million baht , as of September 30, 2023 included fully depreciation assets 43,801.39 million baht, which have the carrying amount 65.79 million baht.

Unit : Million baht

2022									
	Cost				Accumulated Depreciation				Property, Plant and Equipment Sep 30, 2022
	Oct 1, 2021	Additions	Write off	Sep 30, 2022	Oct 1, 2021	Depreciation	Write off	Sep 30, 2022	
Land	4,287.78	-	-	4,287.78	-	-	-	-	4,287.78
Building and improvements	19,709.92	112.94	(122.73)	19,700.13	13,745.92	466.27	(120.34)	14,091.85	5,608.28
Machineries and equipments	12,524.89	282.93	(349.62)	12,458.20	9,827.47	413.90	(339.30)	9,902.07	2,556.13
Pipes	97,593.72	4,595.56	(1,682.48)	100,506.80	66,542.20	3,762.60	(1,674.61)	68,630.19	31,876.61
Meters	6,036.92	532.13	(363.10)	6,205.95	3,892.03	450.81	(320.39)	4,022.45	2,183.50
Office - equipments	2,255.71	125.43	(249.73)	2,131.41	1,791.09	199.20	(249.72)	1,740.57	390.84
Vehicles and transport	318.48	12.15	(31.57)	299.06	220.69	14.05	(28.91)	205.83	93.23
Total	142,727.42	5,661.14	(2,799.23)	145,589.33	96,019.40	5,306.83	(2,733.27)	98,592.96	46,996.37

Property, plant and equipment, amounting to 145,589.33 million baht, as of September 30, 2022 included fully depreciation assets 42,133.16 million baht, which have the carrying amount 61.10 million baht.

7.12 RIGHT-OF- USE ASSETS

Unit : Million baht

2023									
	Cost				Accumulated Depreciation			Right of use	
	Oct 1, 2022	Additions	Write off	Sep 30, 2023	Oct 1, 2022	Depreciation	Write off	Sep 30, 2023	Asset
									Sep 30, 2023
Land	88.04	4.40	(2.98)	89.46	47.71	23.83	(2.98)	68.56	20.90
Building and improvements	14.28	-	-	14.28	2.38	4.76	-	7.14	7.14
Machineries and equipments	112.48	31.90	(63.01)	81.37	32.22	45.08	(27.00)	50.30	31.07
Office - equipments	16.57	-	-	16.57	2.77	5.51	-	8.28	8.29
Vehicles	350.62	42.15	(24.63)	368.14	162.35	87.84	(24.63)	225.56	142.58
Total	581.99	78.45	(90.62)	569.82	247.43	167.02	(54.61)	359.84	209.98

Unit : Million baht

2022									
	Cost				Accumulated Depreciation			Right of use	
	Oct 1, 2021	Additions	Write off	Sep 30, 2022	Oct 1, 2021	Depreciation	Write off	Sep 30, 2022	Asset
									Sep 30, 2022
Land	88.04	-	-	88.04	23.85	23.86	-	47.71	40.33
Building and improvements	-	14.28	-	14.28	-	2.38	-	2.38	11.90
Machineries and equipments	36.10	88.03	(11.65)	112.48	4.12	38.31	(10.21)	32.22	80.26
Office - equipments	-	16.57	-	16.57	-	2.77	-	2.77	13.80
Vehicles	302.50	63.66	(15.54)	350.62	85.93	91.95	(15.53)	162.35	188.27
Total	426.64	182.54	(27.19)	581.99	113.90	159.27	(25.74)	247.43	334.56

7.13 INTANGIBLE ASSETS

Intangible assets presented at cost deduct by accumulated amortization expense. Amortization is calculated by straight-line method basis according to estimated useful life of assets, details as follows:

Unit : Million bal

2023									
	Cost			Sep 30, 2023	Accumulated Depreciation			Sep 30, 2023	Intangible assets Sep 30, 2023
	Oct 1, 2022	Additions	Write off		Oct 1, 2022	Amortization	Write off		
Rights to use the data map	215.73	-	-	215.73	195.09	4.10	-	199.19	16.54
Software	1,261.51	133.75	-	1,395.26	1,143.22	89.50	-	1,232.72	162.54
Total	<u>1,477.24</u>	<u>133.75</u>	<u>-</u>	<u>1,610.99</u>	<u>1,338.31</u>	<u>93.60</u>	<u>-</u>	<u>1,431.91</u>	<u>179.08</u>

Unit : Million bal

2022									
	Cost			Sep 30, 2022	Accumulated Depreciation			Sep 30, 2022	Intangible assets Sep 30, 2022
	Oct 1, 2021	Additions	Write off		Oct 1, 2021	Amortization	Write off		
Rights to use the data map	215.73	-	-	215.73	187.88	7.21	-	195.09	20.64
Software	1,235.46	48.44	(22.39)	1,261.51	1,123.66	41.95	(22.39)	1,143.22	118.29
Total	<u>1,451.19</u>	<u>48.44</u>	<u>(22.39)</u>	<u>1,477.24</u>	<u>1,311.54</u>	<u>49.16</u>	<u>(22.39)</u>	<u>1,338.31</u>	<u>138.93</u>

7.14 OTHER NON-CURRENT ASSETS comprised of:

Unit : Million Baht

	<u>2023</u>	<u>2022</u>
Restricted bank deposits	29.80	-
<u>Less</u> Allowance for Expected Credit Losses	-	-
Restricted bank deposits - net	29.80	-
Other miscellaneous accounts receivable	27.45	27.33
<u>Less</u> Allowance for Expected Credit Losses	(11.80)	(11.72)
Other miscellaneous accounts receivable-net	15.65	15.61
Right-of-use in Ratchaphatsadu Land	5.96	5.96
Other non-current assets	0.85	0.89
Total other non-current assets - net	52.26	22.46

Restricted bank deposits are bank deposits used as collateral for relief of execution in the Supreme Court.

7.15 LONG – TERM LOANS details as follows:

Unit : Million baht

Loan facility	2023		2022		Repayment Condition			
	Foreign currency	Thai Baht equivalent	Foreign currency	Thai Baht equivalent	Annual Interest rate (percent per annum)	Number of installment	The First repayment date	The Last repayment date
Japanese Yen currency (Unit : million Yen)								
Yen 11,706.00 million loan	280.04	69.65	560.07	148.90	1.70	37	Sep 20, 2006	Sep 20
Total long-term loans	280.04	69.65	560.07	148.90				
Less Total current portion	(280.04)	(69.65)	(280.04)	(74.45)				
Long-term loans - net	-	-	280.03	74.45				

BOT average selling Foreign Exchange Rate

As of Sep 29, 2023 1 JPY = 0.248721 THE

As of Sep 30, 2022 1 JPY = 0.265870 THE

Movements in the long-term loans account are summarized below;

	Unit : Million baht	
	<u>Foreign currency</u>	<u>Thai Baht equivalent</u>
<u>Japanese Yen currency</u>		
Balance as of October 1, 2022	560.07	148.90
Gains on foreign exchange rate	-	(8.78)
Repayment	(280.03)	(70.47)
Balance as of September 30, 2023	280.04	69.65

7.16 LEASE LIABILITIES

	Unit : Million baht	
	<u>2023</u>	<u>2022</u>
Lease liabilities	312.80	425.31
<u>Less</u> Deferred interest expense	(6.31)	(8.75)
Lease liabilities- net	306.49	416.56
Portion due within one year	215.54	174.19
Portion due over one year	90.95	242.37
Total	306.49	416.56

Expenses relating to leases that are recognized in profit or loss

	Unit : Million baht	
	<u>2023</u>	<u>2022</u>
Depreciation expense of right-of-use assets	167.02	159.27
Interest expense on lease liabilities	5.83	5.19
Expense relating to short-term leases	29.99	206.08
Expense relating to leases of low-value assets	3.65	4.72
Expense relating to variable lease payments	19.22	1.12

MWA had total cash outflows for leases for the year ended September 30, 2023 and 2022 amounting to 185.38 million baht and 161.47 million baht respectively, including the cash outflow related to short-term lease, leases of low-value assets and variable lease payments that do not depend on an index or a rate.

At of September 30, 2023 and 2022, MWA had an increase in non-cash items for right-of-use assets and lease liabilities of 78.45 and 182.54 million baht respectively.

7.17 ACCRUED REMITTANCE TO THE MINISTRY OF FINANCE

The Ministry of Finance has prescribed MWA to remit the state revenue to the Ministry of Finance at the rate of 50 percent of the net profit before deducting of bonus expense. If it appears that the remittance amount of the state revenue is lower than remittance amount prescribed in the Annual Budget Expenditure Act, MWA remits the state revenue in the amount prescribed in the Act. which delivering twice a year.

Movements in the accrual remittance to the Ministry of Finance account are summarized below;

	Unit : Million Baht	
	2023	2022
Balance at beginning of period	1,182.60	968.35
Increase during the period		
- The first half of the year 2022	-	1,204.90
- The second half of the year 2022	-	1,182.10
- The first half of the year 2023	1,074.00	-
- The second half of the year 2023	1,069.85	-
Decrease during the period		
Remittance to the Ministry of Finance		
- The second half of the year 2021	-	(968.35)
- The first half of the year 2022	-	(1,204.40)
- The second half of the year 2022	(1,182.60)	-
- The first half of the year 2023	(1,074.00)	-
Balance at end of period	1,069.85	1,182.60

The outstanding amount of 1,069.85 million baht is the remittance to the Ministry of Finance for the second half of the year 2023.

7.18 OTHER CURRENT LIABILITIES comprised of:

	Unit : Million baht	
	2023	2022
Accrued interest payables	0.04	0.08
Accrued public utilities	145.69	161.74
Accrued expenses	688.60	673.06
Accrued expense on value added taxes	-	25.53
Accrued withholding taxes	21.13	18.82
Accrued bonus expense	422.38	428.28
Accrued raw water	423.24	587.55
Unearned income	31.81	14.33
Outstanding cheques	0.04	0.08
Other liabilities	233.10	226.48
Total	<u>1,966.03</u>	<u>2,135.95</u>

7.19 EMPLOYEE BENEFIT OBLIGATIONS

Provisions for employee benefits in statement of financial position as of September 30, 2023 and 2022

	Unit : Million baht	
	2023	2022
Post-employment benefits		
The pension fund	902.16	945.00
The remuneration on retirement preferences	1,882.11	1,819.59
The annual leave project that has not been exercised	213.44	206.27
The project of the awards age 60 years or retirement	149.67	145.18
Total	<u>3,147.38</u>	<u>3,116.04</u>
<u>Less</u> Plan assets	<u>(542.91)</u>	<u>(598.38)</u>
Total Post-employment benefits	<u>2,604.47</u>	<u>2,517.66</u>
Other long-term employee benefits plan		
The awards when employees work 25 years	60.76	57.38
Total Other long-term employee benefits plan	<u>60.76</u>	<u>57.38</u>
Employee benefit obligations - net	<u>2,665.23</u>	<u>2,575.04</u>

Unit : Million baht

2023							
	Post-Employment Benefits					Other Long-term	
						Employee Benefits	
	Staff	Legal	Unused	Retire	Total	25 years	Total
	Pension	severance	vacation	ment		long-	
	fund	plan	plan	award		service	award
As of October 1, 2022	945.00	1,819.59	206.27	145.18	3,116.04	57.38	3,173.42
Service cost	29.56	105.80	12.09	9.61	157.06	4.46	161.52
Interest Cost from Defined Benefit	17.37	48.14	5.45	3.93	74.89	1.47	76.36
Obligation							
Benefits paid	(89.77)	(91.42)	(10.37)	(9.05)	(200.61)	(2.55)	(203.16)
As of September 30, 2023	902.16	1,882.11	213.44	149.67	3,147.38	60.76	3,208.14
<u>Less</u> Fair value of plan assets	(542.91)	-	-	-	(542.91)	-	(542.91)
Amount recognized in statement of financial position.	359.25	1,882.11	213.44	149.67	2,604.47	60.76	2,665.23

Unit : Million baht

2022							
	Post-Employment Benefits					Other Long-term	
						Employee Benefits	
	Staff	Legal	Unused	Retire	Total	25 years	Total
	Pension	severance	vacation	ment		long-	
	fund	plan	plan	award		service	award
As of October 1, 2021	1,081.70	2,015.51	228.28	159.04	3,484.53	61.56	3,546.09
Service cost	33.40	128.08	14.59	11.15	187.22	5.00	192.22
Interest Cost from Defined Benefit	9.90	30.44	3.44	2.40	46.18	0.81	46.99
Obligation							
Benefits paid	(120.87)	(64.58)	(7.34)	(7.96)	(200.75)	(4.09)	(204.84)
Actuarial (Gains) Losses	(59.13)	(289.86)	(32.70)	(19.45)	(401.14)	(5.90)	(407.04)
As of September 30, 2022	945.00	1,819.59	206.27	145.18	3,116.04	57.38	3,173.42
<u>Less</u> Fair value of plan assets	(598.38)	-	-	-	(598.38)	-	(598.38)
Amount recognized in statement of financial position.	346.62	1,819.59	206.27	145.18	2,517.66	57.38	2,575.04

Expenses are recognised in statements of income and statements of comprehensive income, as follows:

Unit : Million baht

2023							
	Post-Employment Benefits					Other Long-term	
	Staff	Legal	Unused	Retirement	Total	25years	Total
	Pension	severance	vacation	award		long-	
	fund	plan	plan			service	
						award	
<u>Statements of income</u>							
service cost	29.56	105.80	12.09	9.61	157.06	4.46	161.52
Interest Cost from Defined Benefit	17.37	48.14	5.45	3.93	74.89	1.47	76.36
Obligation							
Return on plan assets	(13.85)	-	-	-	(13.85)	-	(13.85)
Total	33.08	153.94	17.54	13.54	218.10	(5.93)	224.03
<u>Other comprehensive income</u>							
Actuarial Gains (Losses)	(9.36)	-	-	-	(9.36)	-	(9.36)
Total	(9.36)	-	-	-	(9.36)	-	(9.36)

Unit : Million baht

2022							
	Post-Employment Benefits					Other Long-term	
	Staff	Legal	Unused	Retirement	Total	25years	Total
	Pension	severance	vacation	award		long-	
	fund	plan	plan			service	
						award	
<u>Statements of income</u>							
service cost	33.40	128.08	14.59	11.15	187.22	5.00	192.22
Interest Cost from Defined Benefit	9.90	30.44	3.44	2.40	46.18	0.81	46.99
Obligation							
Return on plan assets	(8.05)	-	-	-	(8.05)	-	(8.05)
Actuarial (Gains) Losses	-	-	-	-	-	(5.90)	(5.90)
Total	35.25	158.52	18.03	13.55	225.35	(0.09)	225.26
<u>Other comprehensive income</u>							
Actuarial Gains (Losses)	53.12	289.86	32.70	19.45	395.13	-	395.13
Total	53.12	289.86	32.70	19.45	395.13	-	395.13

Movements in the present value of the plan assets – Staff Pension fund, as follows:

Unit : Million baht

	<u>2023</u>	<u>2022</u>
Balance at beginning of period	598.38	685.92
<u>Add</u> Return on plan assets	13.85	8.05
Obligation payable from MWA.	29.81	31.29
<u>Less</u> Benefits paid	(89.77)	(120.87)
Plan assets Gains (Losses)	(9.36)	(6.01)
Balance at end of period	<u>542.91</u>	<u>598.38</u>

Principal actuarial assumptions to determine the present value of Post-Employment Benefits provision,
as follows:

	<u>Annual percentage (%)</u>
Discount rate	1.11 - 5.76
Salary increase rate	5.0 - 8.0
Employee turnover rate	0.0 - 2.0
Mortality rate	According to the announcement by the Office of Insurance Commission (OIC) Thai Death Table 2017
Improvement the mortality	3.0

A sensitivity analysis of the Principal actuarial assumptions to determine the present value of post-employment benefit provisions and other long-term employee benefits is as follows:

Change in present value of provision increase (decrease)		
Unit : Million baht		
	2023	2022
Discount rate -1.0%	292.55	295.09
Discount rate + 1.0%	(250.88)	(252.93)
Salary increase rate -1.0%	(261.95)	(238.31)
Salary increase rate +1.0%	299.02	271.16
Gold price -20% of assumptions	(42.31)	(40.51)
Gold price +20% of assumptions	42.31	40.51
Employee turnover rate -20.0% of assumptions	17.50	15.26
Employee turnover rate +20.0% of assumptions	(17.27)	(15.06)
Improvement the mortality -1.0%	(11.53)	(10.19)
Improvement the mortality +1.0%	10.09	8.92

7.20 PROVISION ON LITIGATION

Unit : Million baht		
	2023	2022
At the beginning of the period	38.90	16.36
Increase during the period	42.69	27.51
Decrease during the period	(8.18)	(4.97)
At the ending of the period	73.41	38.90

As of September 30, 2023 and 2022, MWA are defendant sued for damages. From consideration the status of lawsuits, there are 16 lawsuits and 7 lawsuits which it's probably to accept obligation and record accounts at the expected payment amounting to 73.41 million baht and 38.90 million baht as mentioned in Note 9 to the financial statements.

7.21 DEFERRED REVENUES comprised of:

Unit : Million baht

2023				
	<u>As of Oct</u>		<u>Recognized</u>	<u>As of Sep</u>
	<u>1, 2022</u>	<u>Added</u>	<u>as income</u>	<u>30, 2023</u>
Other assets	9.19	0.60	(1.32)	8.47
Water meter	1,517.50	317.50	(304.14)	1,530.86
Government plumbing works	230.86	9.30	(39.93)	200.23
Private plumbing works	5,170.78	984.82	(557.42)	5,598.18
MOU	439.93	22.11	(48.66)	413.38
Government Grants	3.45	-	(0.27)	3.18
Total	<u>7,371.71</u>	<u>1,334.33</u>	<u>(951.74)</u>	<u>7,754.30</u>

Unit : Million baht

2022				
	<u>As of Oct</u>		<u>Recognized</u>	<u>As of Sep</u>
	<u>1, 2021</u>	<u>Added</u>	<u>as income</u>	<u>30, 2022</u>
Other assets	10.80	1.39	(3.00)	9.19
Water meter	1,514.69	291.97	(289.16)	1,517.50
Government plumbing works	249.49	20.32	(38.95)	230.86
Private plumbing works	4,895.88	793.69	(518.79)	5,170.78
MOU	449.94	36.75	(46.76)	439.93
Government Grants	3.45	-	-	3.45
Total	<u>7,124.25</u>	<u>1,144.12</u>	<u>(896.66)</u>	<u>7,371.71</u>

7.22 OTHER NON-CURRENT LIABILITIES comprised of:

Unit : Million baht

	<u>2023</u>	<u>2022</u>
Collective and metering representative deposits	22.16	22.70
Work guarantee (retention) and Contractor deposits	925.58	497.83
Derivative liabilities	<u>26.22</u>	<u>46.17</u>
Total	<u>973.96</u>	<u>566.70</u>

7.23 CAPITAL

As of September 30, 2023, capital 8,386.85 million Baht, included initial capital 1,192.71 million Baht and government budget 7,194.14 million Baht.

7.24 RAW MATERIALS AND CONSUMABLES USED comprised of:

Unit : Million baht

	2023	2022
Raw water	1,060.00	885.84
Chemical	565.03	526.48
Electricity utility	1,956.83	1,604.06
Pipe and equipment for repair and maintenance	272.88	247.84
Other raw material and consumables used	122.67	136.73
Total	<u>3,977.41</u>	<u>3,400.95</u>

7.25 DIRECTORS REMUNERATION

The remuneration for directors for the year ended September 30, 2023 and 2022 amounting to 31.62 million Baht and 32.96 million Baht are expense of Director and MWA's Board of directors.

7.26 OTHER OPERATING EXPENSES comprised of:

Unit : Million baht

	2023	2022
Contract out - inspection and improvement of distribution valve	87.37	60.40
Contract out - leakage pipes survey and repair	675.53	675.90
Contract out - other services	425.56	284.10
Outsourcing expenditure	227.28	229.06
Collective and metering representative expenses	138.17	136.87
Repair and maintenance expenses	208.50	204.70
Work contracts expenses	13.85	12.60
Other expenses	446.98	204.79
Total	<u>2,223.24</u>	<u>1,808.42</u>

7.27 FINANCE COSTS comprised of:

Unit : Million baht

	2023	2022
Interest expense on borrowings	2.09	3.63
Interest expense on lease liabilities	5.83	5.19
Interest paid from cross currency swaps and other interest rates	7.16	11.01
Total	<u>15.08</u>	<u>19.83</u>

8. DISCLOSURES OF FINANCIAL INSTRUMENT

8.1 Derivative designated as hedging instruments

MWA had entered into Plain vanilla cross currency swap agreement on March 17, 2006, designated as hedging instrument in cash flow hedge on fixed-rate loan in foreign currency to reduce the risk from exchange rate. Contract principle amounting to 11,706.00 million Yen, utilized amounting to 5,180.74 million Yen, to the MWA's Lender through 18.5 years contract which details as follows.

Swap contract notional receipt	5,180.74 million Yen
Swap contract interest receipt rate (per annum)	1.70
Swap contract exchange rate	1 JPY = 0.334 THB
Swap contract notional payment	1,730.37 million Baht
Swap contract interest payment rate (percent per annum)	5.759

As of September 30, 2023

Outstanding Loan	280.04 million Yen
Remaining Tenor	1 Years
BOT Average Buying Rates as of September 29, 2023	1 JPY = 0.241854 THB

As of September 30, 2023, The CCS has a carrying amount of derivative liabilities (Level 3 fair value) at 26.22 million baht, presented as a part of other non-current liabilities in statement of financial position.

8.2 Financial risk management objectives and policies

MWA's financial instruments principally comprise cash and cash equivalents, trade accounts receivable and other current receivables, and long-term loans. The financial risks associated with these financial instruments and how they are managed is described below.

8.2.1 Credit risk

MWA is exposed to credit risk primarily with respect to trade accounts receivable and accrued revenue of water sales, meter fees and raw waters, deposits with banks and financial institutions and other financial instruments. Except for derivatives, the maximum exposure to credit risk is limited to the carrying amounts as stated in the statement of financial position. MWA's maximum exposure relating to derivatives is noted in the liquidity risk topic.

Trade accounts receivable and accrued revenue of water sales, meter fees and raw waters

MWA manages the risk by adopting appropriate credit control policies and procedures and therefore does not expect to incur material financial losses. Outstanding trade receivables are regularly monitored. An impairment analysis is performed at each reporting date to measure expected credit losses. The provision rates are based on days past due for groupings of various customer segments with similar credit risks. MWA classifies customer segments by customer type. The calculation reflects the probability-weighted outcome, the time value of money and reasonable and

supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions.

Cash deposits

MWA manages the credit risk from balances with banks and financial institutions. When making a deposit, MWA will consider the amount and time of deposit to be appropriate with the remaining liquidity of the MWA by depositing or investing in short-term financial instruments with financial institutions in accordance with the regulations. Set out in the regulations of the Ministry of Finance regarding accounting and finance of state owned enterprise B.E. 2548, including the distribution of deposits or investments. with many financial institutions in order to reduce the risk of concentration and alleviate financial losses that may arise from the default of financial institutions.

The credit risk on debt instruments and derivatives is limited because the counterparties are banks with high credit-ratings assigned by international credit-rating agencies.

8.2.2 Market risk

There are two types of market risk comprising currency risk and interest rate risk. MWA enters into a cross currency swaps to mitigate the risk of foreign currency rates:

Foreign currency risk

MWA's exposure to the foreign currency risk relates primarily to its borrowing that is denominated in foreign currency. MWA seeks to reduce this risk by entering into a cross currency swap contract as described in Note 8.1 to the financial statements.

Interest rate risk

As of September 30, 2023, significant financial assets and liabilities classified by type of interest rate are summarized in the table below, with those financial assets and liabilities that carry fixed interest rates further classified based on the maturity date, or the repricing date if this occurs before the maturity date.

Unit : Million baht

	2023						
	Fixed interest rates			Floating interest rate	Non-interest bearing	Total	Effective interest rate (% per annum)
	Within 1 year	1-5 years	Over 5 years				
Financial assets							
Cash and cash equivalents	3,575.54	-	-	724.57	1.20	4,301.31	0 - 2.27
Trade accounts receivable and other current receivables	-	-	-	-	1,364.64	1,364.64	-
Investment in current financial assets	5,749.88	-	-	-	-	5,749.88	1.60 - 1.90

Unit : Million baht

2023

	Fixed interest rates					Total	Effective interest rate (% per annum)
	Within 1 year	1-5 years	Over 5 years	Floating interest rate	Non-interest bearing		
Current special-purpose deposits at financial institutions	1,480.64	-	-	-	-	1,480.64	1.90
Investment in non-current financial assets	8,629.63	-	-	-	-	8,629.63	1.80 - 2.15
Restricted bank deposits	-	29.80	-	-	-	29.80	1.40
	19,435.69	29.80	-	724.57	1,365.84	21,555.90	

Unit : Million baht

2023

	Fixed interest rates					Total	Effective interest rate (% per annum)
	Within 1 year	1-5 years	Over 5 years	Floating interest rate	Non-interest bearing		
<u>Financial liabilities</u>							
Trade accounts payable	-	-	-	-	2,555.23	2,555.23	-
Long-term loans	69.65	-	-	-	-	69.65	5.759
Lease liabilities	215.54	90.77	0.18	-	-	306.49	0.68 - 2.96
	285.19	90.77	0.18	-	2,555.23	2,931.37	

8.2.3 Liquidity risk

MWA monitors the risk of a shortage of liquidity using long-term loan and lease contracts. Approximately 22.10% of MWA's debt will mature in less than one year as of September 30, 2023 based on the carrying value of borrowings reflected in the financial statements. The table below summaries the maturity profile of MWA's non-derivative financial liabilities and derivative financial instruments as of September 30, 2023 based on contractual undiscounted cash flows:

Unit : Million baht

	On demand	Less than 1 year	1 to 5 years	Over 5 years	Total
Non-derivatives					
Trade accounts payable	2,555.23	-	-	-	2,555.23
Water usage guarantee	1,349.96	-	-	-	1,349.96
Long-term loans	-	70.54	-	-	70.54
Lease liabilities	-	219.31	93.26	0.23	312.80
Total non-derivatives	3,905.19	289.85	93.26	0.23	4,288.53

Unit : Million baht

	On demand	Less than 1 year	1 to 5 years	Over 5 years	Total
Derivatives					
Derivative liabilities: pay separately					
Cash inflow	-	68.59	-	-	68.59
Cash outflow	-	(97.57)	-	-	(97.57)
Total derivatives	-	(28.98)	-	-	(28.98)

8.3 Fair values of financial instruments

Since the majority of MWA's financial instruments are short-term in nature or carrying interest at rates close to the market interest rates, their fair value is not expected to be materially different from the amounts presented in the statement of financial position.

MWA estimate fair value of financial Instruments by using following assumptions:

Cash and cash equivalents, trade accounts receivable and other current receivables, investment in current financial assets, other current assets, investment in non-current financial assets, other non-current assets, trade accounts payable, accrual remittance to the Ministry of Finance, other current liabilities, water usage guarantee and other non-current liabilities have the carrying amounts based on a reasonable estimate of fair value, except for the items shown in the table as follows.

Unit : Million baht

	Fair Value				Book Value
	Level 1	Level 2	Level 3	Total	
2023					
Financial liabilities					
disclosed at fair value					
Long-term loans	-	-	69.69	69.69	69.65
2022					
Financial liabilities					
disclosed at fair value					
Long-term loans	-	-	148.99	148.99	148.90

Valuation techniques and data input for Level 3 fair value measurements

The fair value of the long-term loan is estimated by using technique on calculating present value of future cash flow and by using valuation models, which is discount rate adjusted by the risk on the cash receiving date. The rate is used because the reference risk in the market at the end of the fiscal period is not available. The related observable data in the market includes spot rate, interest rate and the yield curve of debt instruments.

9. OBLIGATION AND CONTINGENT LIABILITIES

Material changes in the obligations and contingent liabilities with detail as follows:

9.1 OBLIGATIONS UNDER BANK GUARANTEES

As of September 30, 2023 and 2022, MWA has letters of guarantee issued by a bank on behalf of MWA amounting to 78.42 million baht, which all bank guarantees are guarantees for pipeline construction.

9.2 OBLIGATIONS OF CAPITAL EXPENDITURE comprised of:

Unit : Million baht

	2023	2022
The Seventh Bangkok water Supply Improvement Project	-	0.95
The Eighth Bangkok water Supply Improvement Project	388.61	372.32
The Ninth Bangkok water Supply Improvement Project	20,510.16	17,518.59
Normal Capital Expenditure	12,518.17	9,513.07
รวม	33,416.94	27,404.93

9.3 OBLIGATIONS UNDER LEASE AGREEMENT

MWA has legal obligations arising from a lessee under a financial lease with the minimum amount of money to be paid in the future according to the contract that cannot be terminated as follows:

Unit : Million baht		
	2023	2022
- Not more than 1 year	6.14	0.42
- Over 1 year but not over 5 years	-	-
Total	6.14	0.42

9.4 LAND RENTAL OBLIGATIONS OF THE TREASURY DEPARTMENT

The Ratchaphatsadu Land Act, B.E.2562 (2019), which came into force on July 7, 2019, stipulates that government agencies covering state enterprises when Ratchaphatsadu Land is used, compensation must be paid to the Treasury Department.

In 2023, MWA has discussed the utilization of Ratchaphatsadu land of MWA with the Ministry of Interior. The draft law consideration committee of the Ministry of Interior has given its opinion that all assets transferred by MWA under Section 10 of the Metropolitan Waterworks Authority Act B.E. 2510 (1967) are the property of MWA and are not Ratchaphatsadu land. Therefore, there is no need to enter into a rental contract and pay compensation to the Treasury Department in any way.

MWA has sent a discussion letter to the Office of the Council of State. The Office of the Council of State cannot accept MWA's discussions for consideration and give opinions. Therefore, MWA and the Treasury Department will jointly submit the matter to the Ratchaphatsadu Land Committee for consideration in order to be in accordance with the administrative procedures and the procedures specified in the Ministerial Regulations.

MWA has sent a letter to the Treasury Department confirming the status of assets owned by MWA and assets used by MWA. Later, the Treasury Department sent a letter informing MWA that the Treasury Department was in the process of gathering relevant facts to present to the Ratchaphatsadu Land Committee for consideration.

At present, the Ratchaphatsadu Land Committee has not yet considered giving an opinion on the issues that MWA has disputes with the Treasury Department.

MWA has recognized estimated rental expenses for Ratchaphatsadu Land from July 7, 2019 to September 30, 2022 in the amount of 628.88 million baht. This item is shown in the financial statements as part of accrued expenses.

9.5 OBLIGATIONS FOR UTILIZATION OF THE HIGHWAY AREA

The Ministry of Transport has issued ministerial regulations prescribing fees for utilization area of special highways, national highways, rural highways and concession highways B.E. 2564 (2021), effective from January 1, 2022, prescribing the person so permitted for utilization the highway area to erect the pole, line up, lay pipes or perform

any action in the highway area shall pay fee for utilization of the highway area at the rates prescribed in Ministerial Regulations.

MWA received a notice from the Department of Highways (DOH) and the Department of Rural Roads (DRR) to collect fee for utilization of the highway area at the rates prescribed in Ministerial Regulations. However, the MWA Board of Directors resolved to allow the MWA to exercise its power under section 38 of Metropolitan Waterworks Authority Act B.E. 2510 (1967) to pay fee in the form of land utilization compensation, not fee for utilization of the highway area. MWA has ordered the appointment of a committee to consider and determine the amount of compensation for damage from utilization or taking possession immovable property and compensation for utilization land and cutting down trees (The committee) has the duty and authority to set criteria and guidelines for the payment of damages and compensation for utilization land, including determining the amount of compensation for damage and compensation for utilization land.

The committee has considered and determined the amount of compensation for utilization land that is appropriate for the construction of the water delivery system and water distribution system. MWA proceeded to send a letter notifying the amount of compensation for utilization land to DOH/DRR, but DOH/DRR does not accept the amount of compensation for utilization land.

Currently, MWA is in the process of gathering facts to submit the dispute to the Attorney General's Office, according to regulations of the Office of the Prime Minister on the arbitration and settlement of disputes between government agencies and litigation B.E.2561 (2018).

MWA has not yet recorded this transaction in its financial statements for the year ending September 30, 2023, because it has not yet reached a resolution with the DOH/DRR regarding the amount paid and the nature of the payment. This makes it impossible to reliably estimate expenses that will or may be incurred.

9.6 OBLIGATIONS FOR COMPENSATION FOR UTILIZATION LAND OF THE STATE RAILWAY OF THAILAND

The State Railway of Thailand (SRT) has notified to collect of compensation for utilization land for the construction of water delivery systems and water distribution systems for 3 projects. MWA has ordered the appointment of a committee to consider and determine the amount of compensation for damage from utilization or possession of real estate and compensation for utilization land and cutting down trees (The committee), has the duty and authority to set criteria and guidelines for the payment of damages and compensation for utilization land, including determining the amount of compensation for damage and compensation for utilization land.

The committee has considered determining the amount of compensation for utilization land that is appropriate for the construction of the water delivery system and water distribution system in lieu of the original amount that SRT had collected. MWA proceeded to sent a letter notifying the amount of compensation for utilization land to SRT for acknowledgement, but MWA did not receive a response letter from SRT.

Currently, MWA is in the process of gathering facts to submit the dispute to the Attorney General's Office, according to regulations of the Office of the Prime Minister on the arbitration and settlement of disputes between government agencies and litigation B.E.2561 (2018).

MWA has not yet recorded this transaction in its financial statements for the year ending September 30, 2023, because it has not yet reached a resolution with SRT, making it unable to estimate expenses that will or may occur reliably.

9.7 CASE IN WHICH THE MWA FILED PETITIONS AGAINST THE ARBITRAL AWARDS AS OF SEPTEMBER 30, 2023, AMOUNTING TO 2 CASES, AS FOLLOWS:

9.7.1 The case in which the MWA filed a petition against the award of the Thai Arbitration Institute that ordered MWA to return the contractual fines to 2 MWA's contractors amounting to 18.34 million baht with interest at the rate of 7.5 % per year, from the day following the date of submitting the dispute until the settlement is complete. At present, the case is under the consideration of Central Administrative Court.

MWA has set aside provisions for any losses that may occur as a result of the said case in the financial statements according to note 7.20 to the financial statements, the amount was 18.34 million baht.

9.7.2 The case in which the MWA filed a petition against the award of the Thai Arbitration Institute that ordered the MWA to pay for the work according to contract to one of MWA's contractors (the claimant) amounting to 27.40 million baht and 40.76 million yen, totaling 43.50 million baht, with the claimant paying a fine of 69.00 million baht after offsetting. the claimants must pay the MWA the amount of 25.50 million baht. The Claimants also file a request for revocation of the award. At present, the case is under the consideration of the Central Administrative Court.

During the accounting period, there was a case where the Supreme Administrative Court had completed its judgment. It was a case in which MWA filed a petition to challenge the award of the Arbitration Office of the Thai Chamber of Commerce which ordered MWA must pay for additional work according to the contract to one of MWA's contractors (the claimant) in the amount of 8.00 million baht to the claimant within 60 days from the date following the date of acknowledgment of the award. If the period has elapsed, MWA has not yet paid the entire amount or part of it to the claimant, MWA must pay interest at the rate of 7.5% per year on the said unpaid principal from the day after the due date onwards until payment is completed. The Supreme Administrative Court has ruled to revoke the award of the Arbitration Office, MWA does not have to pay the said amount.

9.8 THE CASES ARE UNDER CONSIDERATION OF DEPARTMENT OF CIVIL DISPUTE SETTLEMENT AND ARBITRATION AS OF SEPTEMBER 30, 2023, AMOUNTING TO 2 CASES, AS FOLLOWS:

9.8.1 A lawsuit that one government agency demanded that the MWA and another government agency jointly, responsible for compensation for damages caused by the bank protection wall moving and collapsing into Khlong Lat Pho amounting to 32.50 million baht. Currently, the case is pending with the prosecutor who owns the case.

MWA has set aside provisions for any losses that may occur as a result of the said case in the financial statements according to note 7.20 to the financial statements, the amount was 1.62 million baht.

9.8.2 A case in which one government agency demanded that MWA pay the deficit of land rent and fines, according to the lease of land in Lumpini Park area amounting to 51.81 million baht, Currently, the case is pending with the prosecutor who owns the case.

MWA recognized the deficit of land rent amounting to 49.26 million baht in the financial statements as part of the lease liabilities according to note 7.16 to the financial statements.

9.9 MWA WAS CHARGED 20 CASES OF LAWSUIT AS OF SEPTEMBER 30, 2023, ESTIMATED TOTAL CLAIMS FOR COMPENSATION AND DAMAGES AMOUNTING TO BAHT 322.97 MILLION BAHT, AS FOLLOW:

9.9.1 There are 2 cases about breach of employment contract amounting to 81.81 million baht. In the present, 1 case is under consideration by the Supreme Court and 1 case is under consideration by the Supreme Administrative Court.

9.9.2 There are 18 cases about infringement claiming damages amounting to 241.16 million baht. In the present, 2 cases are under consideration by the Civil Court, 7 cases are under consideration by the Central Administrative Court and 9 cases are under consideration by the Supreme Administrative Court.

MWA has set aside provisions for any losses that may occur as a result of the said case in the financial statements according to note 7.20 to the financial statements amounting to 53.45 million baht.

10. Approval of Financial Statements

These financial statements were approved for issuance by MWA's Governor on March 19, 2024.



**Survey on Satisfaction
towards MWA
Annual Report 2023**



Metropolitan Waterworks Authority (Headquarters)

400 Prachacheun Road, Thung Song Hong Sub-district,
Lak Si District, Bangkok 10210
Tel. 0 2504 0123
MWA Call Center: 1125



Annual Report 2023