

Report

**The United Nations World Water Development Report 2017** 

# WASTEWATER THE UNTAPPED RESOURCE







UNECE, UNECLAC, UNESCAP, UNESCWA



United Nations • Educational, Scientific and • Cultural Organization • World Water Assessment Programme





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# WASTEWATER THE UNTAPPED RESOURCE

Published in 2017 by the United Nations Educational, Scientific and Cultural Organization, 7, place de Fontenoy, 75352 Paris 07 SP, France

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ISBN 978-92-3-100201-4



Suggested citation:

WWAP (United Nations World Water Assessment Programme). 2017. The United Nations World Water Development Report 2017. Wastewater: The Untapped Resource. Paris, UNESCO.

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Original cover design by Phoenix Design Aid

Printed by UNESCO CLD

This publication is printed in vegetable inks on FSC Mixed Sources paper, supporting responsible use of forest reserves, 100% recycled, acid-free and chlorine-free.

Printed in France

## TABLE OF CONTENT

FOREWORD	v
<b>by Irina Bokova</b> Director-General of UNESCO	V V
FOREWORD	vii
by Guy Ryder	vii
Chair of UN-Water and Director-General of International Labour Organization	vii
PREFACE	viii
by Stefan Uhlenbrook, WWAP Coordinator	viii
and Richard Connor, Editor-in-Chief	viii
ACKNOWLEDGEMENTS	х
EXECUTIVE SUMMARY	1
PROLOGUE   STATE OF WATER RESOURCES: AVAILABILITY AND QUALITY	9

### PART I BASELINE AND CONTEXT

CHAPTER 1   INTRODUCTION			
1.1	Wastewater flows	20	
1.2	Wastewater as a resource: Seizing the opportunities	21	
CHAPTER 2   WASTEWATER AND THE SUSTAINABLE DEVELOPMENT AGENDA 23			
2.1	2030 Agenda for Sustainable Development	24	
2.2	Potential synergies and conflicts	26	
CHAPTER 3   GOVERNANCE 24			
3.1	Actors and roles	30	
3.2	Policy, law and regulation	31	
3.3	Financing	35	
3.4	Socio-cultural aspects	36	
CHAPTER 4   TECHNICAL ASPECTS OF WASTEWATER 37			
4.1	Wastewater sources and components	38	
4.2	Impacts of releasing untreated or inadequately treated wastewater	40	
4.3	Wastewater collection and treatment	42	
4.4	Data and information needs	46	

i

### PART II THEMATIC FOCUS

CHAP	TER 5   MUNICIPAL AND URBAN WASTEWATER	48
5.1	Urbanization and its impact on wastewater production	49
5.2	Urban forms	50
5.3	Sources of wastewater in municipal and urban systems	51
5.4	Composition of municipal and urban wastewater	52
5.5	Urban form and the potential for municipal and urban wastewater use	55
5.6	Managing urban runoff	57
CHAP	TER 6   INDUSTRY	58
6.1	Extent of industrial wastewater generation	59
6.2	Nature of industrial wastewater	61
6.3	Addressing the resource challenge	62
6.4	Wastewater and sustainable industrial development	68
CHAP	TER 7   AGRICULTURE	69
7.1	Agriculture as a source of water pollution	70
7.2	Agriculture as a user of wastewater	74
CHAP	TER 8   ECOSYSTEMS	78
8.1	The role and limits of ecosystems in wastewater management	79
8.2	Planned use of wastewater for ecosystem services	80
8.3	Operational and policy aspects	82

#### PART III REGIONAL ASPECTS

CHAPTER 9   AFRICA		84
9.1	Water and wastewater in Sub-Saharan Africa	85
9.2	Critical challenges	85
9.3	The way forward	88

CHA	PTER 10   THE ARAB REGION	91
10.1 10.2 10.3	Challenges	92 92 94
CHA	PTER 11   ASIA AND THE PACIFIC	96
11.1 11.2 11.3 11.4	A systems approach to wastewater by-product recovery	97 97 99 99
CH/	PTER 12   EUROPE AND NORTH AMERICA	100
12.1 12.2 12.3	Challenges	101 101 103
CH/	PTER 13   LATIN AMERICA AND THE CARIBBEAN	106
13.1 13.2 13.3 13.4 13.5 13.6	Ongoing concerns and expanding opportunities Benefits of urban wastewater treatment Other sources of wastewater	107 108 109 109 110 110

#### PART IV RESPONSE OPTIONS

#### CHAPTER 14 | PREVENTING AND REDUCING WASTEWATER GENERATION AND POLLUTION LOADS AT THE SOURCE

14.1	Mechanisms for controlling and monitoring pollution	113
14.2	Technical responses	115
14.3	Financial approaches and behavioural change	118

112

<b>CHAPTER 15   ENHANCING WASTEWATER COLLECTION</b>		
AND TREATMENT		
15.1 15.2 15.3 15.4 15.5 15.6 15.7	Sewers and waterborne sanitation Low-cost sewerage Combined sewerage Decentralized treatment (DEWATS) Decentralized stormwater management Evolution of treatment technologies Sewer mining and component separation	120 120 121 121 121 121 122 123
CHAP	TER 16   WATER REUSE AND RESOURCE RECOVERY	124
16.1 16.2 16.3 16.4 16.5 16.6	Beneficial reuse of water Resource recovery from wastewater and biosolids Business models and economic approaches Minimizing risks to human health and the environment Regulations for water reuse Social acceptance of wastewater use	125 129 132 133 135 136
	TER 17   KNOWLEDGE, INNOVATION, RESEARCH CAPACITY DEVELOPMENT	137
17.1 17.2 17.3 17.4	Trends in research and innovation Knowledge, research, technology and capacity-building gaps Future trends in wastewater management Capacity building, public awareness and collaboration among stakeholders	138 138 141 142
CHAPTER 18   CREATING AN ENABLING ENVIRONMENT		143
18.1 18.2 18.3 18.4 18.5 18.6 18.7	Technical options Legal and institutional frameworks Financing opportunities Enhancing knowledge and building capacity Mitigating human and environmental health risks Fostering social acceptance Coda	144 145 146 147 148 149 149
Refere	ences	150
Annex 1 – Lexicon		172
Abbreviations and acronyms		
Boxes, figures and tables		
Photo credits		

## FOREWORD

#### by Irina Bokova

Director-General of UNESCO

In a world where demands for freshwater are ever growing, and where limited water resources are increasingly stressed by over-abstraction, pollution and climate change, neglecting the opportunities arising from improved wastewater management is nothing less than unthinkable.

This is how the 2017 World Water Development Report concludes, highlighting the vital importance of improving the management of wastewater for our common future.

Continuing 'business as usual' means allowing overwhelming neglect to worsen. It is estimated that well over 80 per cent of wastewater worldwide (over 95 per cent in some developing countries) is released into the environment without treatment. The consequences are alarming. Water pollution is worsening in most rivers across Africa, Asia and Latin America. In 2012, over 800,000 deaths worldwide were caused by contaminated drinking water, inadequate handwashing facilities and inappropriate sanitation services. In the seas and ocean, de-oxygenated dead zones caused by the discharge of untreated wastewater are growing rapidly, affecting an estimated 245,000 km<sup>2</sup> of marine ecosystems, impacting on fisheries, livelihoods and food chains.

When not ignored, used water has long been seen as simply a burden for disposal. With rising water scarcity in many regions, this is changing, and we see increasing recognition of the importance of wastewater collection, treatment and reuse. Infrastructure is a central issue in all countries. Data availability remains a persisting challenge, particularly in developing countries. Recent analysis shows that out of 181 countries, only 55 had information on the generation, treatment and use of wastewater, and the remaining ones had no or only partial data. In the majority of countries where data were available, it was outdated. This information bottleneck impedes the research and development necessary to craft innovative technologies and adapt existing ones to local specificities and needs.

The 2017 *World Water Development Report* shows that improved wastewater management is as much about reducing pollution at the source, as removing contaminants from wastewater flows, reusing reclaimed water and recovering useful by-products. Together, these

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