

Water for All

Global Solutions for a Changing Climate

DAVID SEDLAK

Yale UNIVERSITY PRESS/NEW HAVEN & LONDON

CONTENTS

Preface ix

THE SIX WATER CRISES

1	Water for Household Use	3
2	Safe Drinking Water	16
3	Water to Grow Food	28
4	Water for Nature	40

ANTICIPATING AN UNCERTAIN FUTURE

5	The Great Acceleration	55
6	Powering the Acceleration	68
7	Impacts of Climate Change on Water Resources	79

USING WATER MORE EFFICIENTLY

8	Reducing Water Use in Wealthy Communities	95
9	Reducing Water Use in Low- and Middle-Income Communities	109
10	Reducing Agricultural Water Demand	124
11	Navigating the Jevons Paradox	138

EXPANDING CONVENTIONAL WATER SUPPLIES

12	A Dam Legacy	155
13	A Second Chance for Dams	167
14	Storing Water Underground	175

TAPPING UNCONVENTIONAL WATER SOURCES

15	A New Source of Water Falling from the Sky	191
16	Replenishing Groundwater with Treated Sewage	204
17	Refilling Reservoirs with Treated Sewage	214
18	Irrigating Crops with Treated Sewage	225
19	Coastal Cities Turn toward the Sea	234
20	The Coming Wave of Inland Desalination	242

PLANNING FOR A CHANGE

21	Stillsuit for a City	263
22	Net Zero Water Buildings	272
23	A Better Salt Machine	286
24	Running the Rivers	296
25	The Right Things to Do	308
	Epilogue	325

Notes 331

Acknowledgments 391

Illustration Credits 395

Index 397