

## **OECD Studies on Water**

# **Water Resources Allocation**

**SHARING RISKS AND OPPORTUNITIES** 





# Water Resources Allocation

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#### Foreword

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This report is an output of the OECD Environment Directorate, under the leadership of Director Simon Upton. The project co-ordinator and lead author of the report is Kathleen Dominique. The Head of the Water Unit in the Environment Directorate, Xavier Leflaive, provided substantive inputs and advice. The OECD Secretariat project team, including Kun Wook Kim and Ignacio Deregibus, provided substantive inputs and analysis, in particular in the development of the Survey of Water Resources Allocation and the case studies of reform. The project was undertaken in collaboration with the Stockholm International Water Institute (SIWI) which provided in-kind support and expertise. The author is particularly grateful to John Joyce, Chief Economist at SIWI, for his sustained engagement and valuable insights.

Case studies on the reform of water allocation regimes were prepared by the OECD Secretariat project team, as well as Ian Barker of Water Policy International, Chibesa Pensulo and Johanna Sjödin of SIWI, Barbara Schreiner of Pegasys Strategy and Development, and Gavin Quibell, independent consultant. A background paper prepared Professor Mike Young, Chair in Water and Environmental Policy at the University of Adelaide provided a solid foundation for the work. The financial and in-kind contributions of the government of the Netherlands and the government of Korea helped to make this work possible and are greatly appreciated.

The project benefitted from the discussions at two international workshops supported by the Netherlands. The first, held in November 2012 in Wageningen, helped to frame the project. The second, held in May 2014 in The Hague, focused on the analytical framework and the policy guidance reflected in the "Health Check" for Water Resources Allocation.

The author is also grateful to colleagues and experts who provided valuable comments, including Simon Upton, Anthony Cox, Jane Ellis, Guillaume Gruère, Jesus Anton, Julien Hardelin and Delphine Clavreul (OECD Secretariat) and prominent water experts Ian Barker, of Water Policy International, John Matthews, of the Alliance for Global Water Adaptation, and Professor Mike Young. The contributions of the delegates of the OECD Working Party on Biodiversity, Water, and Ecosystems were instrumental in building a solid evidence basis for the analysis and in shaping the "Health Check". Keen editorial guidance from Janine Treves and impeccable administrative support from Sama Al Taher Cucci are also gratefully acknowledged.

## Table of contents

Preface	9
Acronyms	11
Executive summary	13
Key messages Growing pressures on water allocation regimes Changing patterns of demand Climate change impacts on freshwater. Deteriorating water quality Water use efficiency gains and changes in rates of water consumption Shifting social preferences Conclusion Notes	17 18 20 21 23 25 25 28 30 30
Key messages Policy objectives of allocation regimes Water: A resource with public and private good characteristics Legal status of water and claims to use water Transboundary considerations Policy instruments and mechanisms for water allocation Conclusion Notes	33 34 35 38 41 43 44 53
Key messages  Examining the survey results in context.  Reforming water allocation regimes  General contextual information for allocation.  Understanding the physical features of the water resource and demand profile.  Defining the available ("allocable") water resource pool.  How users access water and how this works in practice.	57 58 61 62 62 65 72 84

Summary of key findings from the Survey of Water		86 87
Notes		89
Chapter 4. Reforming water allocation regimes		91
<b>Key messages</b> Why reform? Building the case for water allocation		93
Policy options appraisal for water allocation reform		
The water allocation reform process		)5
Assessment of water allocation reforms		11
Conclusion		13
Notes		14
References		15
Chapter 5. A "Health Check" for Water Resources Alloca	tion 11	17
Key messages		
System level elements of a water allocation regime		
User level elements of a water allocation regime		
Notes		
References		27
Glossary		29
Annex A. Questionnaire for the OEGD project on water	resources allocation 13	31
Tables		
vv = l de ve		
1.1. Trends affecting water allocation regimes		21
<ul><li>1.1. Trends affecting water allocation regimes</li><li>2.1. General policy objectives of water allocation reg</li></ul>		21 38
<ul><li>2.1. General policy objectives of water allocation reg</li><li>2.2. Water as a public and private good</li></ul>	gimes	38 40
<ul><li>2.1. General policy objectives of water allocation reg</li><li>2.2. Water as a public and private good</li></ul>	gimes	38 40 42
<ul><li>2.1. General policy objectives of water allocation reg</li><li>2.2. Water as a public and private good</li><li>2.3. Types of property ownership systems</li><li>2.4. Description of key system level elements of a w</li></ul>	gimes	38 40 42 47
<ul> <li>2.1. General policy objectives of water allocation reg</li> <li>2.2. Water as a public and private good</li> <li>2.3. Types of property ownership systems</li> <li>2.4. Description of key system level elements of a water statements.</li> <li>2.5. Description of key user level elements of a water statements.</li> </ul>	gimes	38 40 42 47 48
<ul> <li>2.1. General policy objectives of water allocation reg</li> <li>2.2. Water as a public and private good</li> <li>2.3. Types of property ownership systems</li> <li>2.4. Description of key system level elements of a water</li> <li>2.5. Description of key user level elements of a water</li> <li>2.6. Framework for water allocation regimes</li> </ul>	gimes	38 40 42 47 48
<ul> <li>2.1. General policy objectives of water allocation reg</li> <li>2.2. Water as a public and private good</li> <li>2.3. Types of property ownership systems</li> <li>2.4. Description of key system level elements of a w</li> <li>2.5. Description of key user level elements of a water</li> <li>2.6. Framework for water allocation regimes</li> <li>3.1. Examples of water allocation regimes</li> </ul>	gimes	38 40 42 47 48 52
<ul> <li>2.1. General policy objectives of water allocation reg</li> <li>2.2. Water as a public and private good</li> <li>2.3. Types of property ownership systems</li> <li>2.4. Description of key system level elements of a water</li> <li>2.5. Description of key user level elements of a water</li> <li>2.6. Framework for water allocation regimes</li> </ul>	gimes	38 40 42 47 48
<ul> <li>2.1. General policy objectives of water allocation reg</li> <li>2.2. Water as a public and private good</li> <li>2.3. Types of property ownership systems</li> <li>2.4. Description of key system level elements of a water 2.5. Description of key user level elements of a water 2.6. Framework for water allocation regimes</li> <li>3.1. Examples of water allocation regimes</li> <li>3.2. Countries with recent or ongoing water allocation</li> </ul>	gimes	38 40 42 47 48 52 60 62
<ul> <li>2.1. General policy objectives of water allocation regions.</li> <li>2.2. Water as a public and private good</li></ul>	gimes	38 40 42 47 48 52 60 62
<ul> <li>2.1. General policy objectives of water allocation reg</li> <li>2.2. Water as a public and private good</li> <li>2.3. Types of property ownership systems</li> <li>2.4. Description of key system level elements of a water 2.5. Description of key user level elements of a water 2.6. Framework for water allocation regimes</li> <li>3.1. Examples of water allocation regimes</li> <li>3.2. Countries with recent or ongoing water allocation 3.3. Examples of legal basis/doctrine applied to water 3.4. Countries recently assessing water scarcity</li> <li>3.5. Examples of period of time water entitlements 3.6. Summary of various conditions on trade, lease</li> </ul>	gimes	38 40 42 47 48 52 60 62 64
<ul> <li>2.1. General policy objectives of water allocation reg</li> <li>2.2. Water as a public and private good</li></ul>	gimes	38 40 42 47 48 52 60 62 64
<ul> <li>2.1. General policy objectives of water allocation regions.</li> <li>2.2. Water as a public and private good.</li> <li>2.3. Types of property ownership systems.</li> <li>2.4. Description of key system level elements of a water.</li> <li>2.5. Description of key user level elements of a water.</li> <li>2.6. Framework for water allocation regimes.</li> <li>3.1. Examples of water allocation regimes.</li> <li>3.2. Countries with recent or ongoing water allocation.</li> <li>3.3. Examples of legal basis/doctrine applied to water.</li> <li>3.4. Countries recently assessing water scarcity.</li> <li>3.5. Examples of period of time water entitlements.</li> <li>3.6. Summary of various conditions on trade, lease of water entitlements.</li> <li>3.7. Summary of examples where water entitlements.</li> </ul>	gimes	38 40 42 47 48 52 60 62 64 65 78
<ul> <li>2.1. General policy objectives of water allocation regions.</li> <li>2.2. Water as a public and private good.</li> <li>2.3. Types of property ownership systems.</li> <li>2.4. Description of key system level elements of a water.</li> <li>2.5. Description of key user level elements of a water.</li> <li>2.6. Framework for water allocation regimes.</li> <li>3.1. Examples of water allocation regimes.</li> <li>3.2. Countries with recent or ongoing water allocation.</li> <li>3.3. Examples of legal basis/doctrine applied to water.</li> <li>3.4. Countries recently assessing water scarcity.</li> <li>3.5. Examples of period of time water entitlements.</li> <li>3.6. Summary of various conditions on trade, lease of water entitlements.</li> <li>3.7. Summary of examples where water entitlements as a financial instrument.</li> </ul>	gimes	38 40 42 47 48 52 60 62 64 65 78
<ul> <li>2.1. General policy objectives of water allocation regions.</li> <li>2.2. Water as a public and private good.</li> <li>2.3. Types of property ownership systems.</li> <li>2.4. Description of key system level elements of a water system.</li> <li>2.5. Description of key user level elements of a water system.</li> <li>3.1. Examples of water allocation regimes.</li> <li>3.2. Countries with recent or ongoing water allocation.</li> <li>3.3. Examples of legal basis/doctrine applied to water system.</li> <li>3.4. Countries recently assessing water scarcity.</li> <li>3.5. Examples of period of time water entitlements.</li> <li>3.6. Summary of various conditions on trade, lease of water entitlements.</li> <li>3.7. Summary of examples where water entitlements as a financial instrument.</li> <li>3.8. Examples of water abstraction charges in selection.</li> </ul>	gimes	38 40 42 47 48 52 60 62 64 65 78
<ul> <li>2.1. General policy objectives of water allocation regions.</li> <li>2.2. Water as a public and private good.</li> <li>2.3. Types of property ownership systems.</li> <li>2.4. Description of key system level elements of a water.</li> <li>2.5. Description of key user level elements of a water.</li> <li>2.6. Framework for water allocation regimes.</li> <li>3.1. Examples of water allocation regimes.</li> <li>3.2. Countries with recent or ongoing water allocation.</li> <li>3.3. Examples of legal basis/doctrine applied to water.</li> <li>3.4. Countries recently assessing water scarcity.</li> <li>3.5. Examples of period of time water entitlements.</li> <li>3.6. Summary of various conditions on trade, lease of water entitlements.</li> <li>3.7. Summary of examples where water entitlement as a financial instrument.</li> <li>3.8. Examples of water abstraction charges in selection.</li> <li>3.9. Summary of main findings of the Survey of Water.</li> </ul>	gimes	38 40 42 47 48 52 60 62 64 65 78
<ul> <li>2.1. General policy objectives of water allocation regions.</li> <li>2.2. Water as a public and private good.</li> <li>2.3. Types of property ownership systems.</li> <li>2.4. Description of key system level elements of a water.</li> <li>2.5. Description of key user level elements of a water.</li> <li>2.6. Framework for water allocation regimes.</li> <li>3.1. Examples of water allocation regimes.</li> <li>3.2. Countries with recent or ongoing water allocation.</li> <li>3.3. Examples of legal basis/doctrine applied to water.</li> <li>3.4. Countries recently assessing water scarcity.</li> <li>3.5. Examples of period of time water entitlements.</li> <li>3.6. Summary of various conditions on trade, lease of water entitlements.</li> <li>3.7. Summary of examples where water entitlement as a financial instrument.</li> <li>3.8. Examples of water abstraction charges in selection.</li> <li>3.9. Summary of main findings of the Survey of Water.</li> </ul>	gimes	38 40 42 47 48 52 60 62 64 65 78 88
<ul> <li>2.1. General policy objectives of water allocation regions.</li> <li>2.2. Water as a public and private good.</li> <li>2.3. Types of property ownership systems.</li> <li>2.4. Description of key system level elements of a water.</li> <li>2.5. Description of key user level elements of a water.</li> <li>2.6. Framework for water allocation regimes.</li> <li>3.1. Examples of water allocation regimes.</li> <li>3.2. Countries with recent or ongoing water allocation.</li> <li>3.3. Examples of legal basis/doctrine applied to water.</li> <li>3.4. Countries recently assessing water scarcity.</li> <li>3.5. Examples of period of time water entitlements.</li> <li>3.6. Summary of various conditions on trade, lease of water entitlements.</li> <li>3.7. Summary of examples where water entitlement as a financial instrument.</li> <li>3.8. Examples of water abstraction charges in selection.</li> <li>3.9. Summary of main findings of the Survey of Water.</li> </ul>	gimes	38 40 42 47 48 52 60 62 64 65 78

1.4.	Historical trends in streamflow into Stirling Dam	24
1.5.	Effect of reduction of stream inflow on the amount of water available	
	for consumptive use	25
1.6.	Nitrogen effluents from wastewater: 2000 to 2050	26
1.7.	Projected shifts in water-intensity of energy production	28
2.1.	System level elements of a water allocation regime	51
2.2.	User level elements of a water allocation regime	52
3.1.	Drivers of recent and ongoing reforms of water allocation regimes	62
3.2.	Ownership of groundwater resources	63
	Ownership of surface water resources	63
3.4.	Percentage of responses indicating a role for the Ministry of Environment	64
3.5.	Percentage of responses indicating a role for a basin authority	65
	Proportion of water allocation examples by current status of water systems .	66
	Degree of regulation of water system	67
3.8.	Proportion of water allocation examples according to dominant type	
	of water use, per category	68
3.9.	Proportion of water allocation examples indicating significant	
	non-consumptive use, by type	68
3.10.	Proportion of examples according to type of limit on water abstraction	
	(if any)	69
	Proportion of examples that defined environmental flows	70
3.12.	Proportion taking freshwater biodiversity into account in the definition	
	of e-flows	71
	Proportion taking terrestrial biodiversity into account	71
3.14.	Proportion of water allocation examples taking into account various factors	
	in the definition of the available resource pool	71
3.15.	Proportion of water allocation regimes with legally defined private	
	entitlements	72
3.16.	Number of water allocation examples by type of entitlement	
	(individual, collective)	73
	Nature of water users' entitlements	74
	Period of time water entitlement granted for	75
	Proportion of water allocation example specifying return flow obligations	76
	Consequences of non-use of water entitlements	77
3.21.	Proportion of allocation examples that allow some form of trade,	
	lease or transfer of water entitlements	77
	Pre-requisites to grant new water entitlements or expand existing ones	80
	Sequence of priority uses in water allocation	82
	Proportion of water allocation examples with an abstraction charge	85
3.25.	Proportion of water allocation examples reflecting water scarcity	
	in abstraction charge	85
	Proportion of allocation regimes monitoring water withdrawals	87
5.1.	Water scarcity spectrum	120

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# Table of contents

Preface	9
Acronyms	.1
Executive summary	.3
Key messages1Growing pressures on water allocation regimes2Changing patterns of demand2Climate change impacts on freshwater2Deteriorating water quality2Water use efficiency gains and changes in rates of water consumption2Shifting social preferences2Conclusion3	7 18 20 21 23 25 25 28 30
	30
Key messages3Policy objectives of allocation regimes3Water: A resource with public and private good characteristics3Legal status of water and claims to use water4Transboundary considerations4Policy instruments and mechanisms for water allocation4Conclusion5Notes5	33 34 35 38 41 43 34 54
Key messages5Examining the survey results in context.6Reforming water allocation regimes6General contextual information for allocation.6Understanding the physical features of the water resource and demand6profile6Defining the available ("allocable") water resource pool.6How users access water and how this works in practice7	57 58 51 51 52 55 72

	mitoring and enforcement of water withdrawals and allocation rules	86 87
	tes	89 89
Wh Pol The Ass	4. Reforming water allocation regimes.  y messages  ny reform? Building the case for water allocation reform  icy options appraisal for water allocation reform.  e water allocation reform process  sessment of water allocation reforms.  nclusion	91 92 93 100 105 111 113
	tes ferences	114 115
Chapter	5. A "Health Check" for Water Resources Allocation	117
	y messages	118
-	stem level elements of a water allocation regime	121
	er level elements of a water allocation regime	125
	tes ferences	127 127
Glossar	ry	129
Annex A	A. Questionnaire for the OECD project on water resources allocation	131
Tables		
1.1.	Trends affecting water allocation regimes	21
	General policy objectives of water allocation regimes	38
	Water as a public and private good	40
	Types of property ownership systems.	42
	Description of key system level elements of a water allocation regime	47 48
	Framework for water allocation regimes	52
	Examples of water allocation regimes	60
	Countries with recent or ongoing water allocation reforms	62
3.3.	Examples of legal basis/doctrine applied to water resources	64
	Examples of legal basis/doctrine applied to water resources	64 65
3.4.		
3.4. 3.5.	Countries recently assessing water scarcity	65
3.4. 3.5. 3.6.	Countries recently assessing water scarcity	65
3.4. 3.5. 3.6.	Countries recently assessing water scarcity	65 76
3.4. 3.5. 3.6.	Countries recently assessing water scarcity	65 76 78
3.4. 3.5. 3.6. 3.7.	Countries recently assessing water scarcity  Examples of period of time water entitlements are granted for.  Summary of various conditions on trade, lease or transfer of water entitlements  Summary of examples where water entitlements can be used as a financial instrument.	78 78
3.4. 3.5. 3.6. 3.7.	Countries recently assessing water scarcity  Examples of period of time water entitlements are granted for.  Summary of various conditions on trade, lease or transfer of water entitlements  Summary of examples where water entitlements can be used as a financial instrument  Examples of water abstraction charges in select OECD countries  Summary of main findings of the Survey of Water Resources Allocation.	78 78 79 86
3.4. 3.5. 3.6. 3.7. 3.8. 3.9. Figures 1.1.	Countries recently assessing water scarcity  Examples of period of time water entitlements are granted for.  Summary of various conditions on trade, lease or transfer of water entitlements  Summary of examples where water entitlements can be used as a financial instrument  Examples of water abstraction charges in select OECD countries  Summary of main findings of the Survey of Water Resources Allocation.  Global water demand, baseline scenario from 2000-50	78 78 79 86 88
3.4. 3.5. 3.6. 3.7. 3.8. 3.9. Figures 1.1. 1.2.	Countries recently assessing water scarcity  Examples of period of time water entitlements are granted for.  Summary of various conditions on trade, lease or transfer of water entitlements  Summary of examples where water entitlements can be used as a financial instrument  Examples of water abstraction charges in select OECD countries  Summary of main findings of the Survey of Water Resources Allocation.	78 78 79 86 88

1.4.	Historical trends in streamflow into Stirling Dam	24
1.5.	Effect of reduction of stream inflow on the amount of water available	
	for consumptive use	25
1.6.	Nitrogen effluents from wastewater: 2000 to 2050	26
1.7.	Projected shifts in water-intensity of energy production	28
2.1.	System level elements of a water allocation regime	51
2.2.	User level elements of a water allocation regime	52
3.1.	Drivers of recent and ongoing reforms of water allocation regimes	62
3.2.	Ownership of groundwater resources	63
	Ownership of surface water resources	63
	Percentage of responses indicating a role for the Ministry of Environment	64
	Percentage of responses indicating a role for a basin authority	65
	Proportion of water allocation examples by current status of water systems .	66
	Degree of regulation of water system	67
3.8.	Proportion of water allocation examples according to dominant type	
	of water use, per category	68
3.9.	Proportion of water allocation examples indicating significant	
	non-consumptive use, by type	68
3.10.	Proportion of examples according to type of limit on water abstraction	
	(if any)	69
	Proportion of examples that defined environmental flows	70
3.12.	Proportion taking freshwater biodiversity into account in the definition	1000
	of e-flows.	71
	Proportion taking terrestrial biodiversity into account	71
3.14.	Proportion of water allocation examples taking into account various factors	74
0.45	in the definition of the available resource pool.	71
3.15.	Proportion of water allocation regimes with legally defined private	70
015	entitlements	72
3.16.	Number of water allocation examples by type of entitlement	70
0 17	(individual, collective)	73
	Nature of water users' entitlements	74 75
	Proportion of water allocation example specifying return flow obligations	76
	Consequences of non-use of water entitlements	77
	Proportion of allocation examples that allow some form of trade,	1.1
5.21.	lease or transfer of water entitlements	77
3 22	Pre-requisites to grant new water entitlements or expand existing ones	80
	Sequence of priority uses in water allocation	82
	Proportion of water allocation examples with an abstraction charge	85
	Proportion of water allocation examples with an abstraction charge	00
J. 2J.	in abstraction charge	85
3.26	Proportion of allocation regimes monitoring water withdrawals	87
	Water scarcity spectrum	120

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### Preface

Competition to access water resources is increasing as a result of population growth, economic development and climate change. As such competition intensifies, the issue of how governments allocate water between uses and users is rising on the policy agenda. International best practice shows that well-designed water allocation regimes help allocate water to where it creates the most value (economic, ecological, or socio-cultural) for society. They can adjust to changing conditions and preferences at least cost for society and can provide incentives for investment in water use efficiency and innovation.

Yet, in most countries today, rules and priorities for water allocation often do not reflect best practice. In many cases, these rules have developed over decades, or even centuries, and tend to be outdated or not adjusted to take into account new needs and realities. Growing pressures are making existing inefficiencies in water allocation regimes increasingly costly: 19th century allocation arrangements are poorly equipped to serve a 21st century society and economy. Conflicts over water use have an impact on both economic growth and environmental sustainability. However, allocation regimes have proven hard to adjust, even as the economic and social values related to water use have shifted over time. This means that water is often locked-in to uses that are no longer as valuable today as they were decades ago and that the risk of shortage falls disproportionately on certain groups of users. Allocation regimes are often ill-prepared to face more rapid and pronounced change in the future, especially in relation to climate change.

This report, Water Resources Allocation: Sharing Risks and Opportunities, takes a major step forward in providing policy guidance for countries seeking opportunities to unlock the value of water resources and to navigate the challenges of water allocation reform. A survey across 27 OECD and key partner countries for the first time establishes a solid evidence base of the current water allocation landscape. It reveals that most allocation regimes have elements that can encourage a robust system, but operate with significant limitations. For example, many allocation regimes suffer from legal ambiguities and unsustainable abstraction levels. Moreover, many countries still apply very low or no charges at all for water abstraction, even though the value of the resource has grown as competition for the resource has intensified.

While the case for reforming water allocation in many countries is clear, how to navigate the transition is particularly challenging. This report draws lessons from the reform experiences of 10 countries to address questions such as: How can intelligent sequencing help the reform process? How to compensate losers? And how to balance competing interests and objectives? The report also provides a practical tool that can be used to undertake a periodic "health check" of current allocation arrangements and identify opportunities for improving performance.

Although reforming water allocation may appear daunting, an improved regime can greatly increase the value that individuals and society obtain from water resources today and in the future. I am confident that policy makers can find both inspiration and pragmatic support in this report.

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Angel Gurría, OECD Secretary-General