

Water Factbook UK & US Operations

August 2003

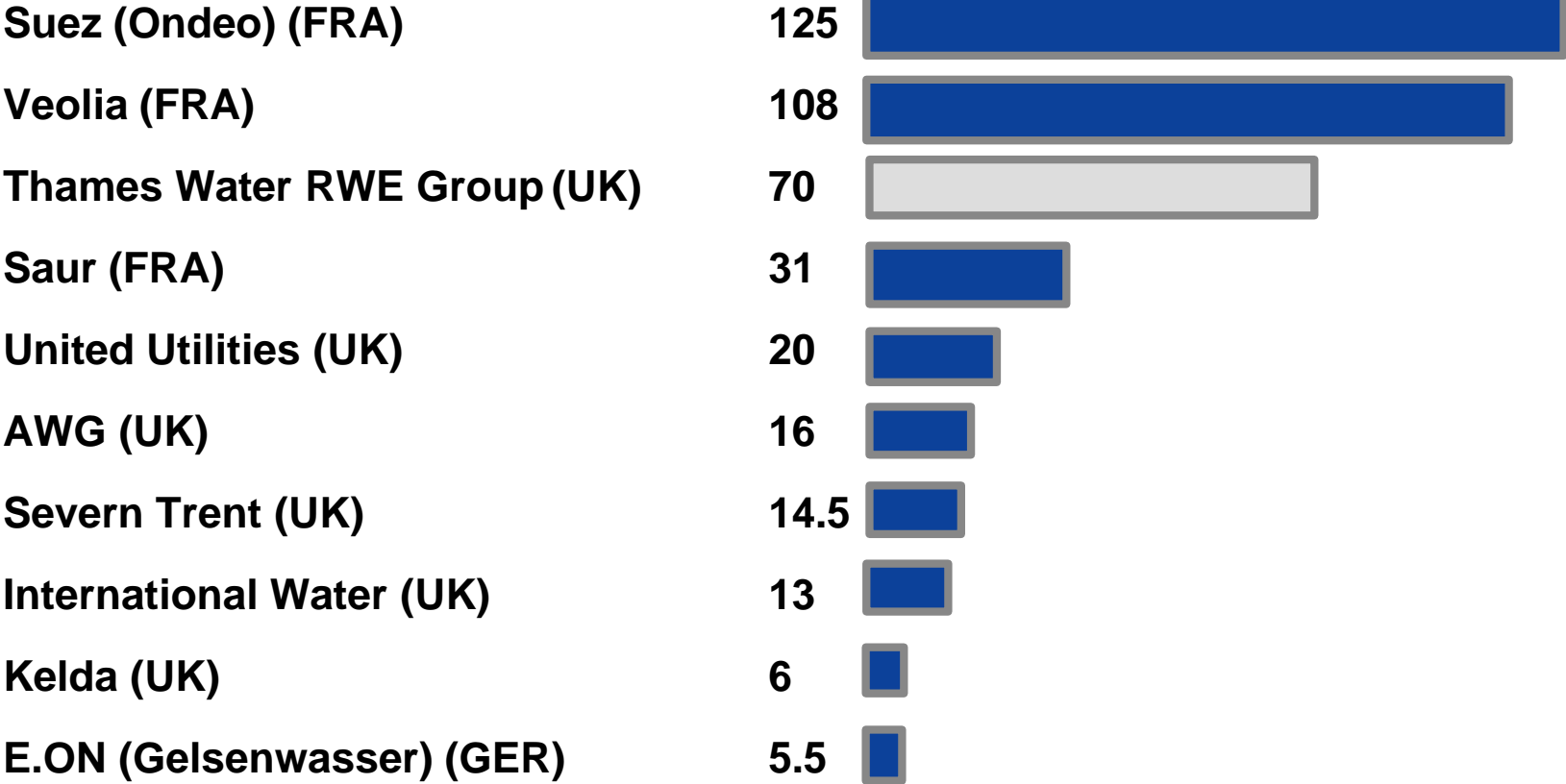


The World's Largest Water Companies



Population served worldwide in millions

As of April 2003



Source: Own market analyses made from annual reports



Global Water Market: Competition (I)



Veolia, Ondeo (owned by Suez) and RWE are the three largest international water businesses

	Veolia ¹	Ondeo	RWE Water ²
Sales €bn (2002)	11.3	10.1	4.7
Sales annual growth %	2.4	0.4	7.0
EBITDA €bn (2002)	1.6	2.0	2.2
EBITDA annual growth %	6.8	-11.8	8.2
EBITDA margin %	14	20	48
% of total Group EBITDA (2002)	43	28	20
Capital investment ³ €bn (2002)	1.8	1.7 ⁴	2.7
No. of customers 'm	108	125	70
Ownership	Veolia Environnement	Suez	RWE

1) Vivendi data relates to core businesses only

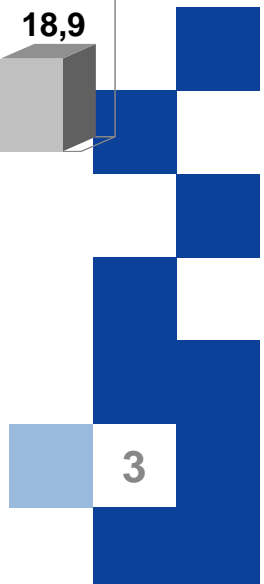
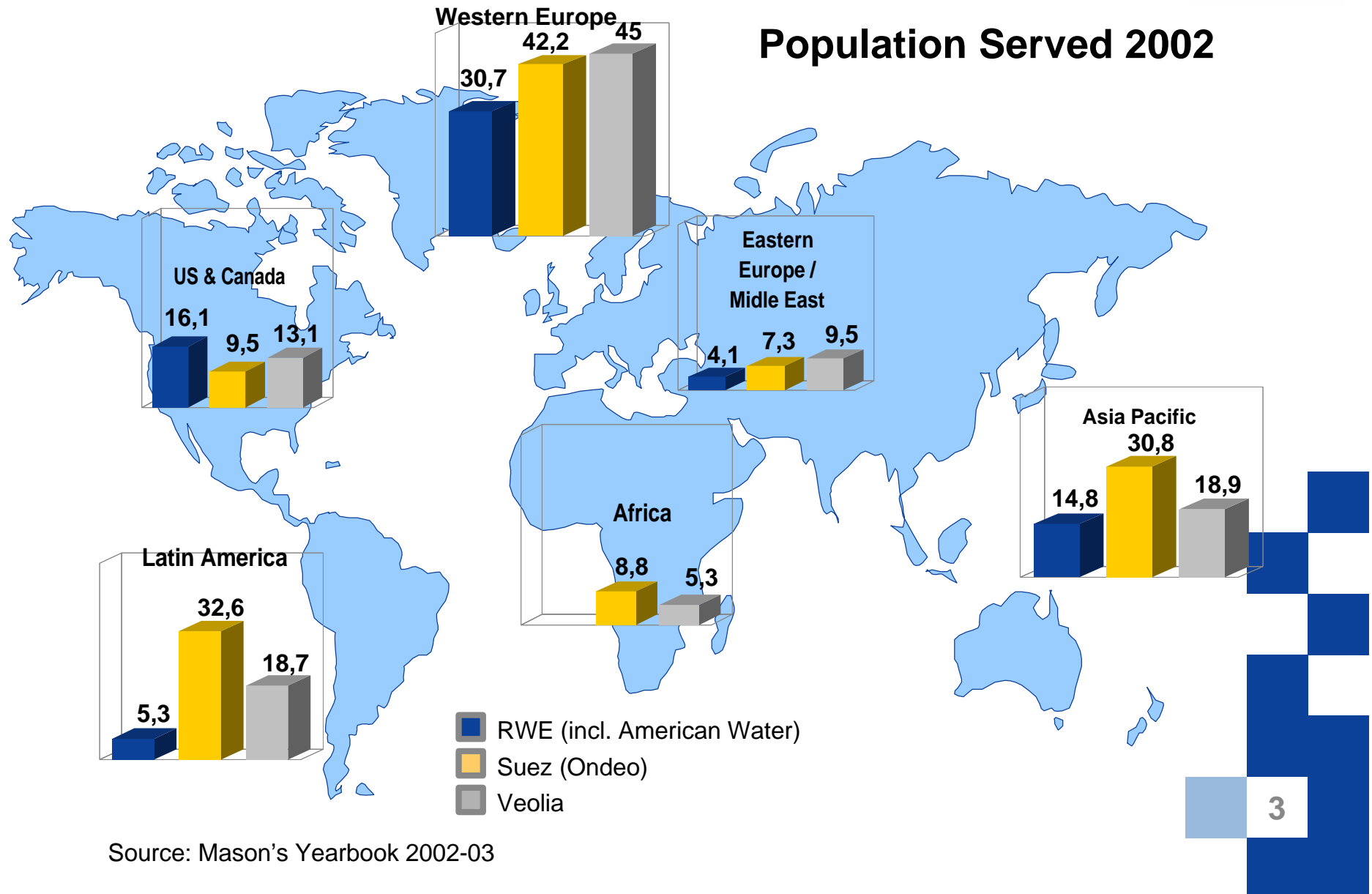
2) RWE includes proforma data for American Water (acquired Jan 2003) in 2002 and 2001 growth comparatives, accounted for under US GAAP [€1 = US\$0.95059 2002 / US\$ 0.89662 2001]

3) Investment in fixed assets plus acquisition of financial assets

4) Ondeo capital investment is 2001 (2002 not currently available)

Global Water Market: Competition (II)

Population spread of the key players



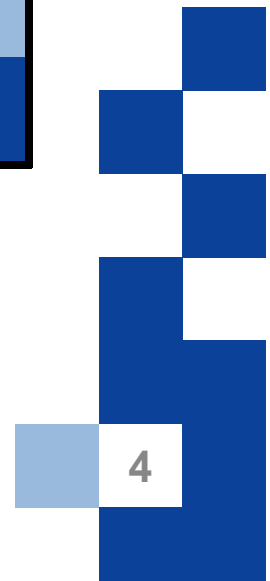
RWE Water Division: Segmental Sales



Region	2002 incl. AW *		2002		2001	
	TOTAL €m	Regulated %	TOTAL €m	Regulated %	TOTAL €m	Regulated %
UK & Ireland	1,982	87%	1,982	87%	2,046	84%
Americas	2,215	85%	411	78%	358	72%
Europe, Middle East, Africa	338	86%	338	86%	263	99%
Asia Pacific	119	55%	119	55%	79	70%
TOTAL	4,654	85%	2,850	84%	2,746	84%

- The acquisition of American Water in January 2003 re-balances RWE's geographical spread across the major regulated water markets

*) Turnover for 2002 including pro-forma results for American Water (acquired Jan 2003) within the Americas figures, accounted for under US GAAP [€1 = US\$0.95059]

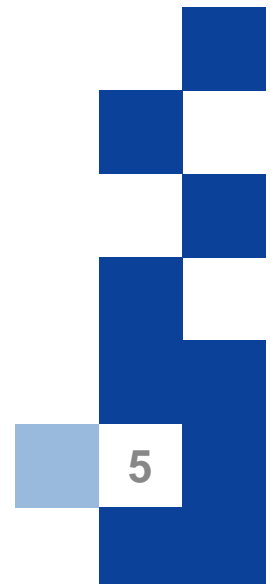


UK & Ireland: Overview

No. 1 UK water business

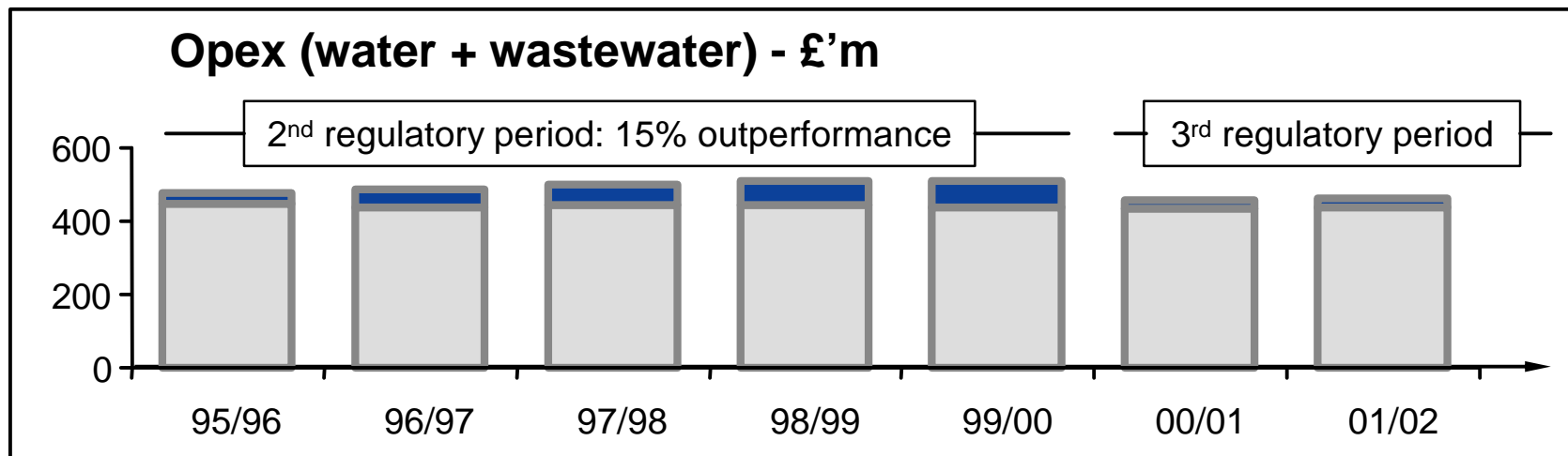
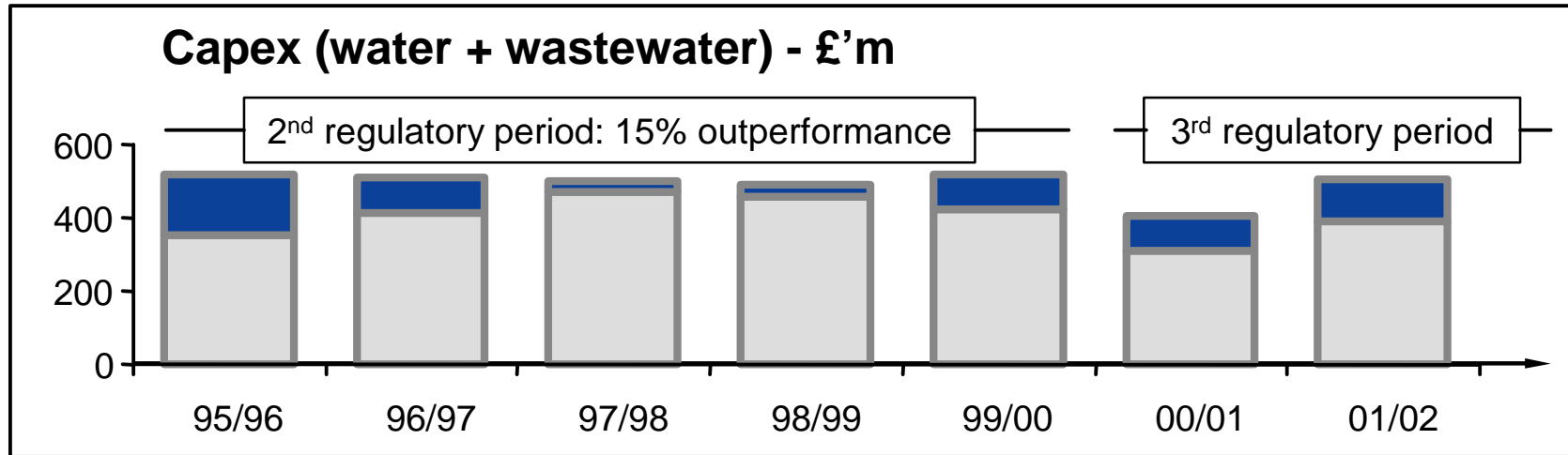


- Serves 15m customers, mainly in London and the Thames Valley
- Thames Water - leading UK water brand name
- 'Regulated' business
- 'Unregulated' businesses



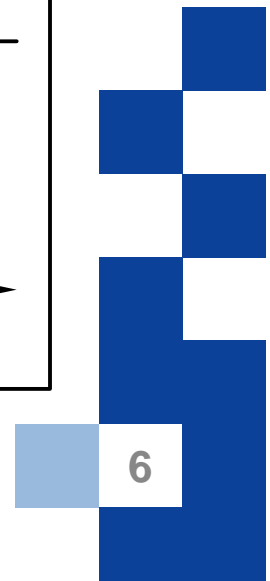
UK & Ireland: UK Regulated Utility

Cost performance against regulatory targets



Thames Water actual annual costs
 Savings against Ofwat annual targets

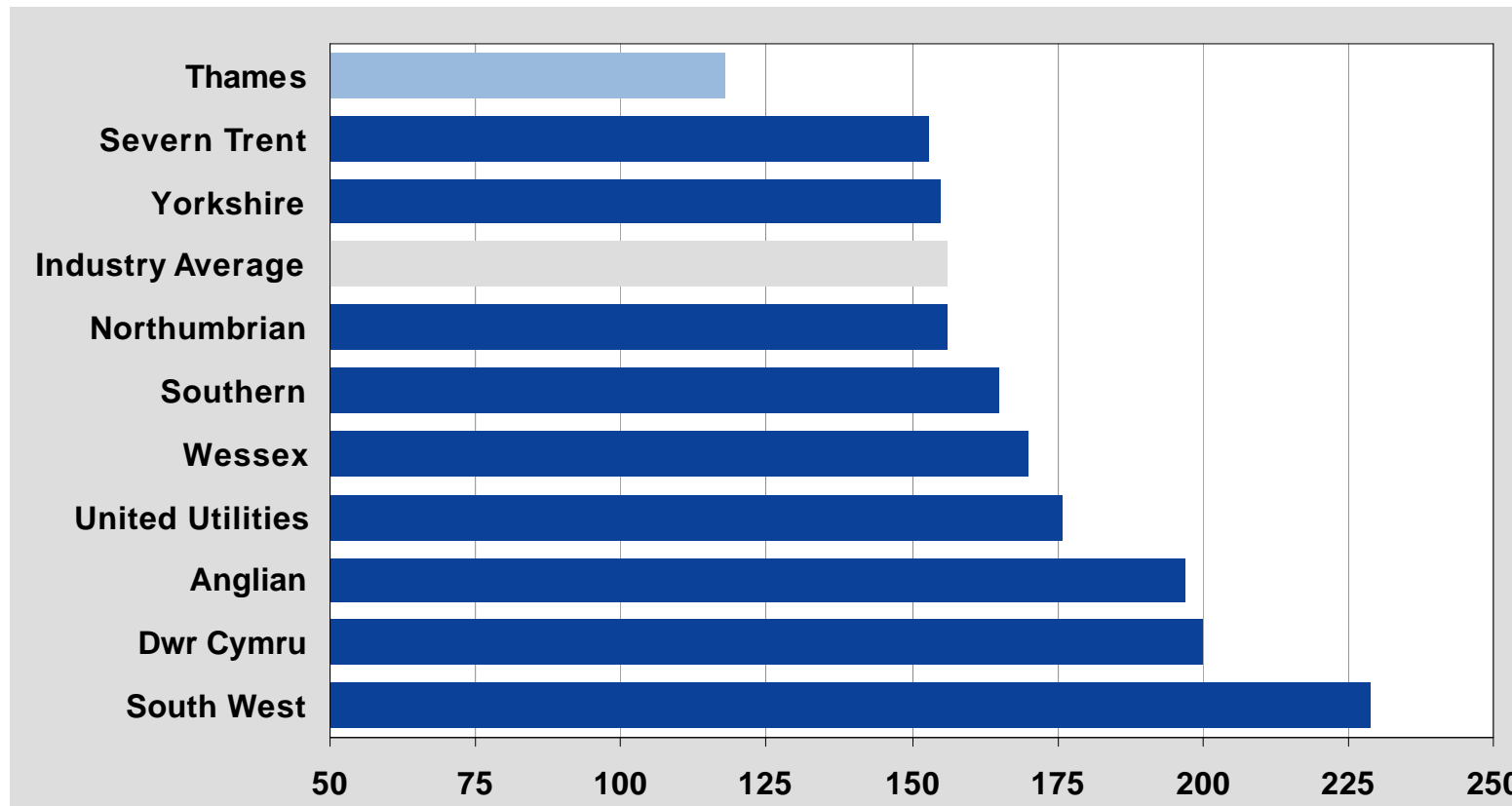
Source: Ofwat



UK & Ireland: UK Regulated Utility Cost performance relative to peers

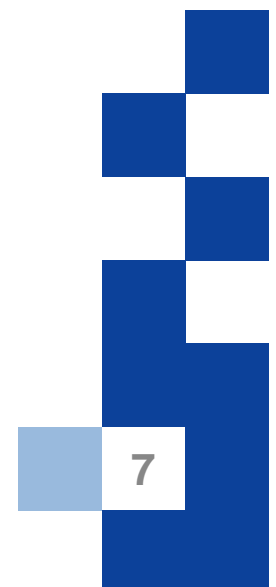


- Thames Water achieves the lowest combined unit costs of all UK water + wastewater companies



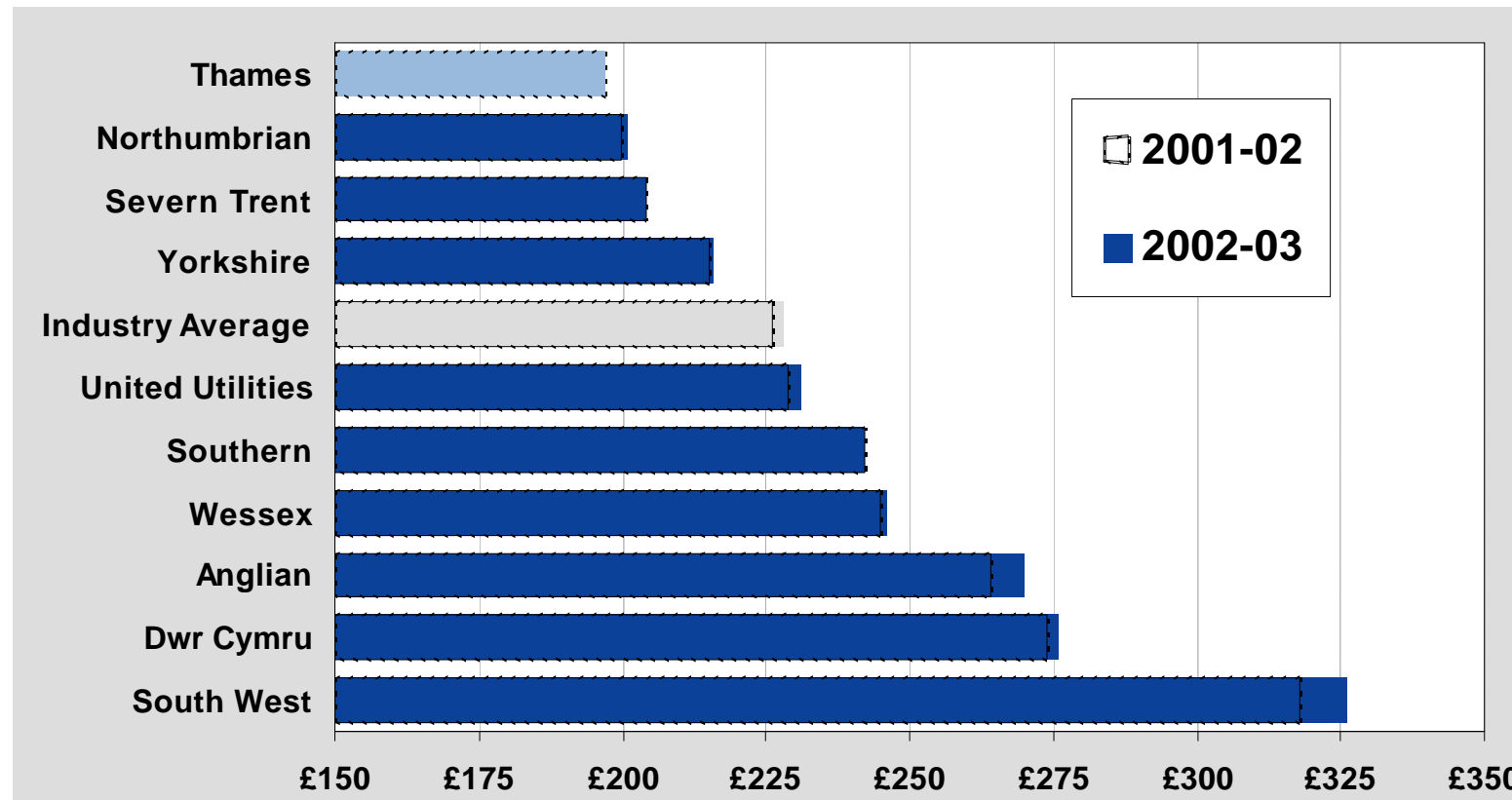
Pence / m³ of water delivered + pence / m³ of sewage collected (2001-02)

Source: Ofwat



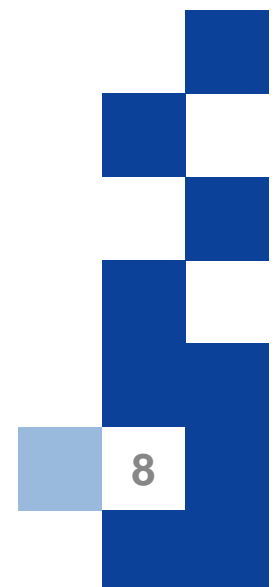
UK & Ireland: UK Regulated Utility Household bills relative to peers

- Thames Water achieves the lowest combined household bills of all UK water + wastewater companies



Average annual household bill for water and sewerage services

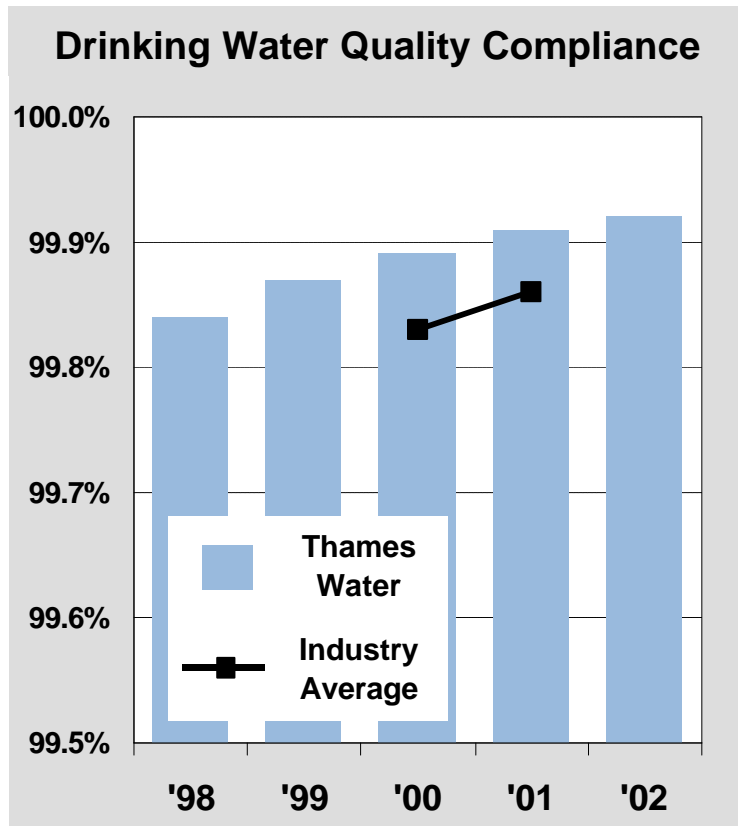
Source: Ofwat



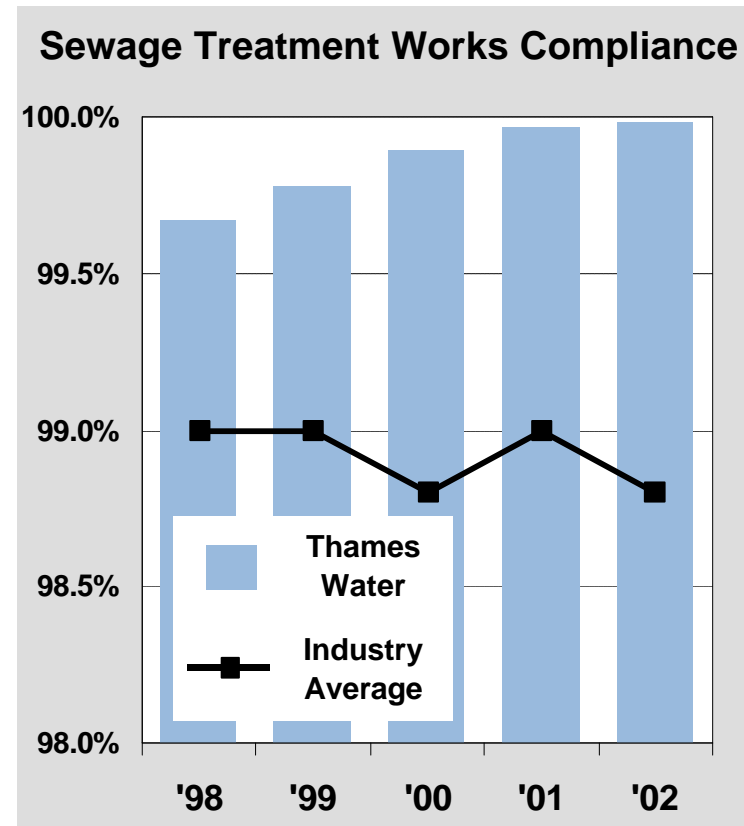
UK & Ireland: UK Regulated Utility Quality & environmental performance



- Drinking water & sewage treatment:



Source: Water Quality Inspectorate



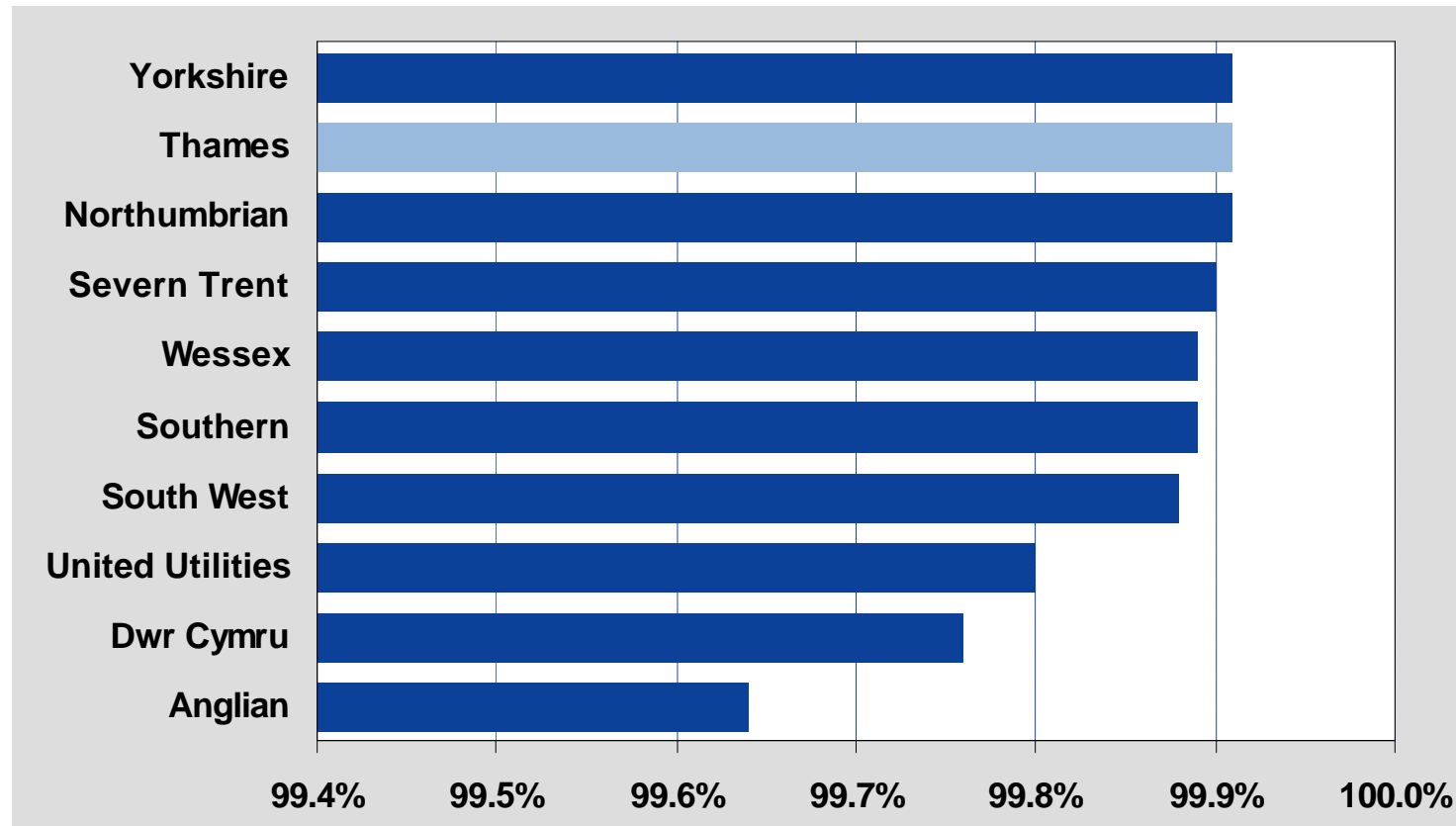
Source: Ofwat

- Biosolids disposal: **100% compliance since 1995**

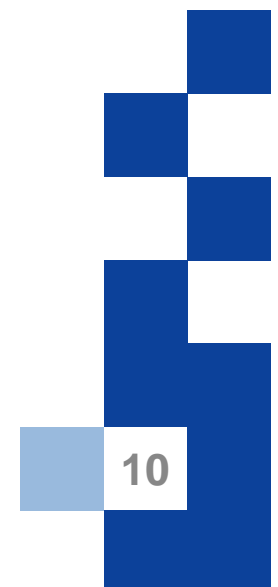


UK & Ireland: UK Regulated Utility Water quality compliance relative to peers

- Thames Water's drinking water quality compliance is amongst the highest for UK water + wastewater companies



Source: Water Quality Inspectorate for 2001 (latest published data)



Americas

Economic Regulation in US & UK

Pre tax Allowed Returns	USA	UK
Allowed Return on Equity post tax	10,5%	6,5%
Tax rate	39,0%	24,0%
Grossed up RoE	17,2%	8,6%
Gearing	60,0%	50,0%
Equity portion of Return on Investment	6,9%	4,3%
Cost of Debt pre tax	6,0%	4,2%
Debt portion of Return on Investment	3,6%	2,1%
OFWAT Current Cost vs IAS Depreciation		1,1%
Other adjustments		0,3%
Allowed Return on Investment pre tax	10,5%	7,8%
RAB/Rate Base growth CAGR _{1990 - 2002}	9,6%	7,6%

Post tax Allowed Returns	USA	UK
Allowed Return on Equity post tax	10,5%	6,5%
Gearing	60,0%	50,0%
Equity portion of Return on Investment	4,2%	3,3%
Cost of Debt pre tax	6,0%	4,2%
Tax rate	39,0%	24,0%
Debt portion of Return on Investment	2,2%	1,6%
OFWAT Current Cost vs IAS Depreciation		1,1%
Other adjustments		0,3%
Allowed Return on Investment post tax	6,4%	6,2%

UK Notes:

UK and US Regulatory Regimes for Water



	UK	US
Regulatory Structure	England and Wales, OFWAT, Office of Water Regulation	State specific, Public Utility Commission
Method	Price Cap incentivisation, prospective	Rate of return, retrospective
Financial Features	4.75% real post-tax return on current cost assets	11 - 12% nominal post-tax return on equity
Operating Costs	Pass through once targets are met, extra efficiency kept for 5 years	Pass through (subject to periodic prudence test)
Capital Costs	Rolling 5 year programme agreed with regulator, extra efficiency kept for 5 years	Rate filings at the operator's discretion
Debt - assumption	Debt / Rate Base approximately 50%	Debt / Rate Base – 50-60%
Debt - actual	TWUL Debt / Rate Base – 59%	AWW Debt / Rate Base – 57%
Regulated Assets	Thames Water Utility Ltd Regulatory Asset Base March 2003 £4.7 bn	N America Regulated Asset Base at December 2003 \$5.4 bn

Americas Overview



- Leading water service provider in North America & Number two in Chile
- Managed by American Water
- 'Regulated' business
 - American Water (USA)
 - E'town (USA)
 - ESSEL/ESSBIO, ANSM (Chile)
 - Puerto Rico
- 'Unregulated' business
 - American Water Products & Services (USA/Canada)

Americas Region: Market Characteristics



North America

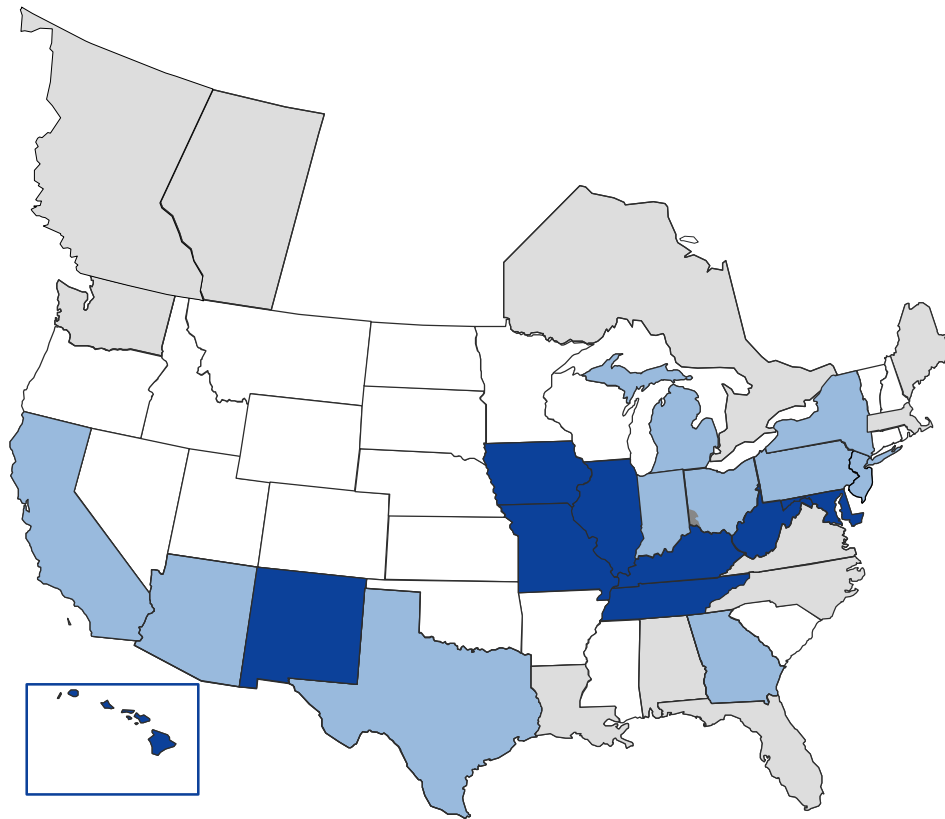
- Well regulated, comparatively low risk, reasonable returns
- RWE is the dominant regulated US player
- Most attractive growth opportunity worldwide




Chile

- Well regulated, economically stable, good returns
- RWE is No.2 player with control of a prime local market

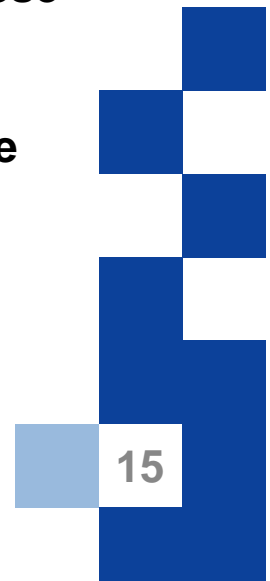
Americas Region: North America

Largest US Water Utility



-  Regulated only
-  Regulated and Non-regulated
-  Non-regulated only

- Well regulated activities in a transparent environment
- Serves 20 million people
- Covers 27 US States and four Canadian Provinces
- 70% of all public water systems and 80% of US population located in these areas
- Prime consolidator in the fragmented US market
- Enviable reputation and relationships



Market Characteristics: North America

■ General Characteristics

- Increasing Environmental Legislation
- Infrastructure asset condition below standard
- 85% Municipal Ownership
- Fragmented Market

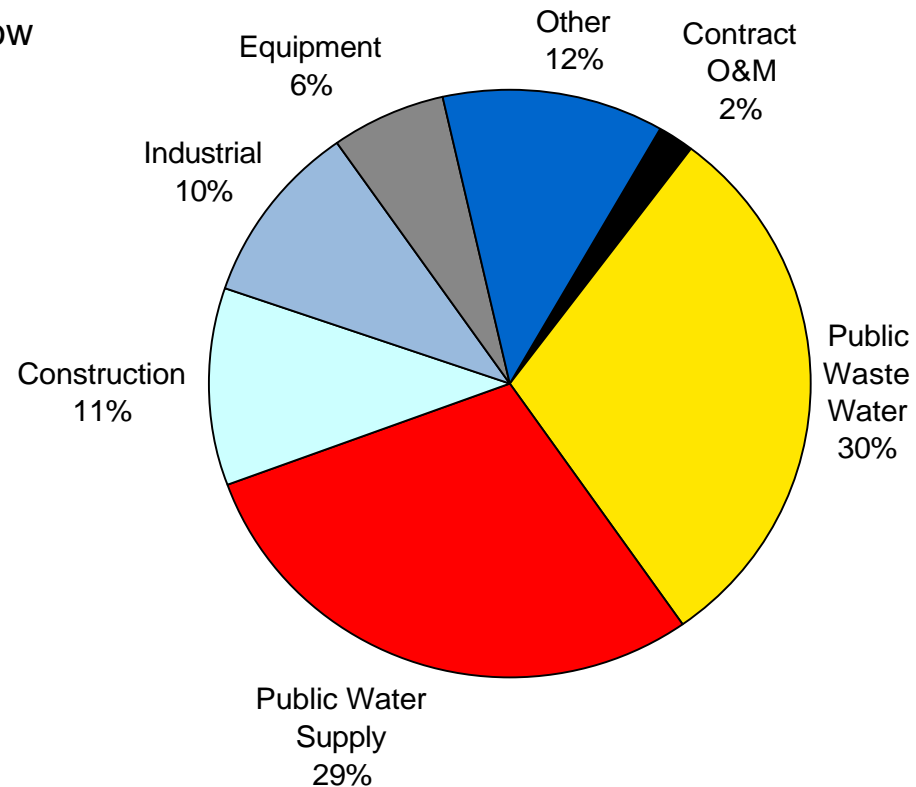
■ Residential Market

- \$500bn+ needed above current spending levels in coming two decades
- Privatisation
- Outsourcing

■ Industrial Market

- Reduced demand
- Highly Competitive Outsourcing market

US - a \$82bn market*

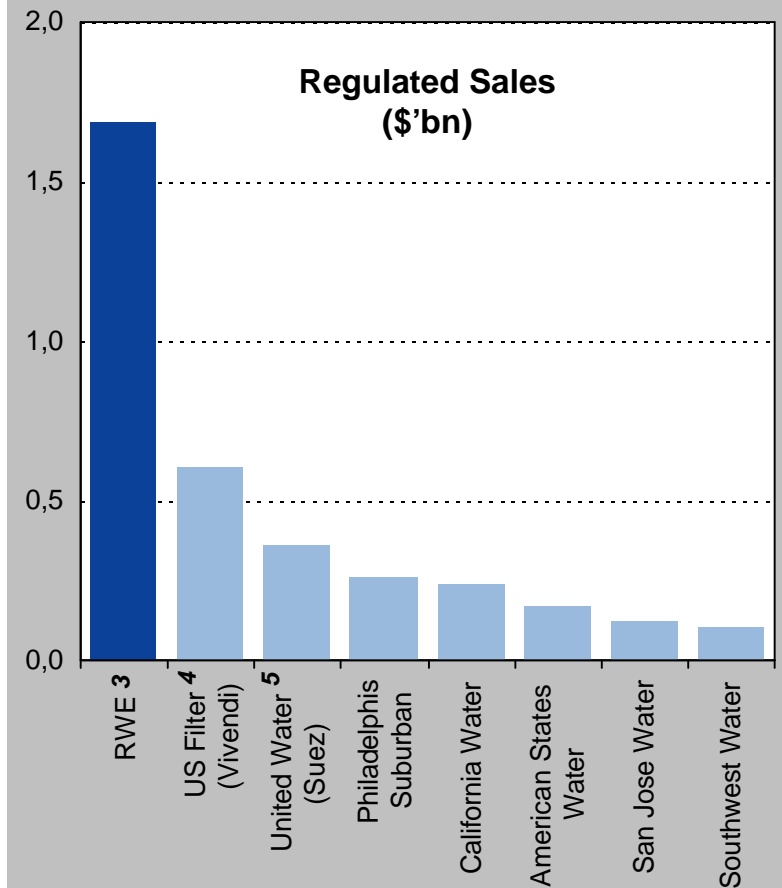


*) Source: *Privatization and the Future*, AWW Association Journal, Issue 1 (January 2000)

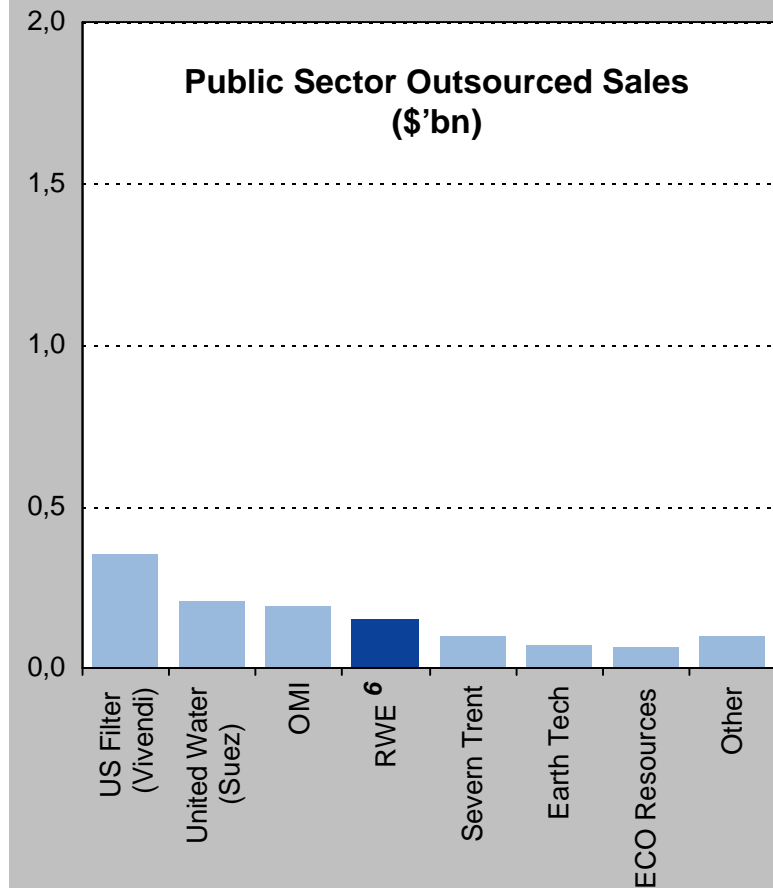
Americas Region: North America

Focus on Regulated and Municipal market

US Regulated Water Market ¹



US Public Sector Outsourcing ²



1) **Source:** Company earnings announcements for 2002

2) **Source:** Public Works Financing in 2002 (March 2003 publication)

3) Incl. American Water acquired in Jan 2003

4) US Filter 2000 regulated sales estimate - Masons Water Yearbook 2002-2003

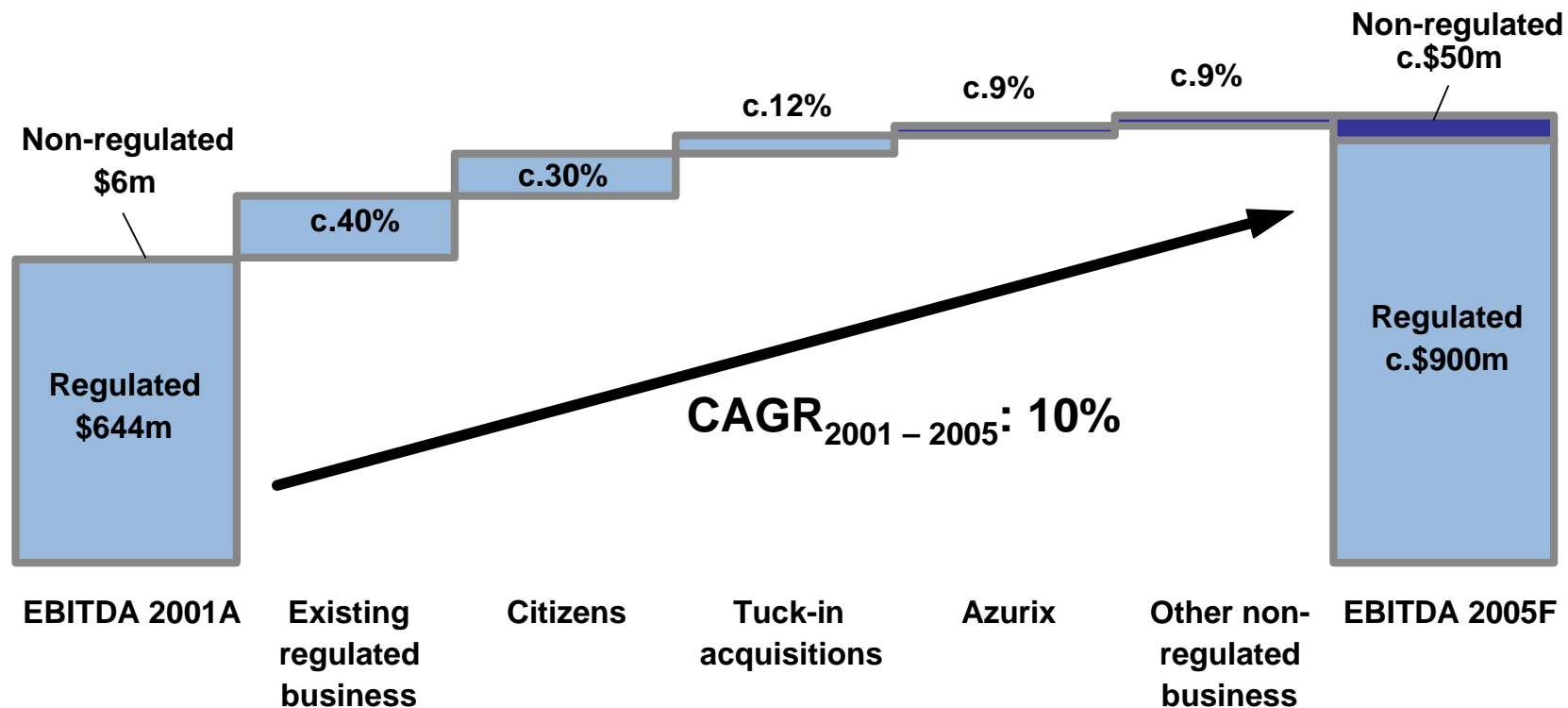
5) United Water 2002 residential & commercial sales estimate - Masons Water Yearbook 2002-2003

6) Incl. American Water acquired in Jan 2003

Americas Region: American Water Growth forecasts to 2005



- 10% compound annual growth in EBITDA from 2001-2005



Americas Region: Chile



- No 2 player with 20% market share and 2.7m population served
- Three contiguous operations
 - **ESSEL**: acquired 51% shareholding in 2000
 - **ANSM**: signed 30-year concession contract in 2001
 - **ESSBIO**: acquired 51% shareholding in 2001
 - Merged ESSEL and ESSBIO in 2002

Chile – The Most Stable Water Market in Latin America

■ Stable economy

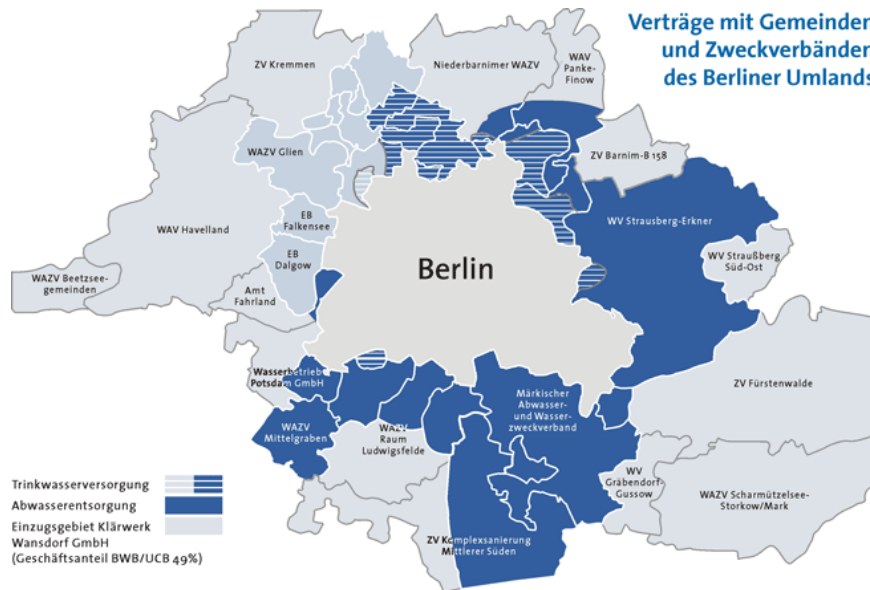
- 15.4m population, 87% in urban areas
- Advanced legislative infrastructure allowing high level of private sector participation
- A– rating (Standard & Poor’s)
- Main industries: mining (copper), fishing, agriculture, forestry, tourism

■ Significant growth opportunities

- 6.0% GDP CAGR_{1987–2002}, growth even during “Latin America crisis”
- Population growth at 1.6%
- Sewage treatment coverage below US/European standards

Berlinwasser

Largest Water Services Business in Germany



- 49.9% of Berlinwasser privatized in 1999 to a 50-50 Joint Venture of Veolia and RWE

■ Key figures

- 3.7m customers
- 890 km² coverage Berlin area and 3,000 km² surrounding Berlin area
- 9 waterworks
- 7,800 km grid
- 6,827 employees (BW-Group)
- 217m m³ water supply
- €1.2bn revenues

Doing Business: Contract Types Regulated

License

- UK/US model
- Operator asset ownership and customer billing
- 25+ years in UK, perpetuity in US
- Subject to meeting regulatory criteria

Concession

- Mid-way between O&M and UK license
- Operator asset ownership and customer billing
- Reverts to municipality after 20-30+ yrs
- Can also be unregulated

Doing Business: Contract Types Unregulated

Lease/'Affermage'	<ul style="list-style-type: none">● Municipal ownership, leased to operator for 10-20 yrs● Operator looks after customer billing
O&M	<ul style="list-style-type: none">● Municipal ownership, no operator:customer contact● Management fee to operator for 3-20 yrs
Build, Own, Operate & Transfer (BOOT)	<ul style="list-style-type: none">● Privately funded capital project followed by concession● With no obligation to return asset, called BOO
Design, Build & Operate (DBO)	<ul style="list-style-type: none">● Publicly funded capital project followed by O&M contract
Industrial contracts	<ul style="list-style-type: none">● Hybrids of DBO and O&M style contracts● Depending on scale and customer need
Consultancy	<ul style="list-style-type: none">● Services to other public or private sector operators

Doing Business: Contract Types Comparative Attributes

Summary Characteristics of Different Contractual Arrangements

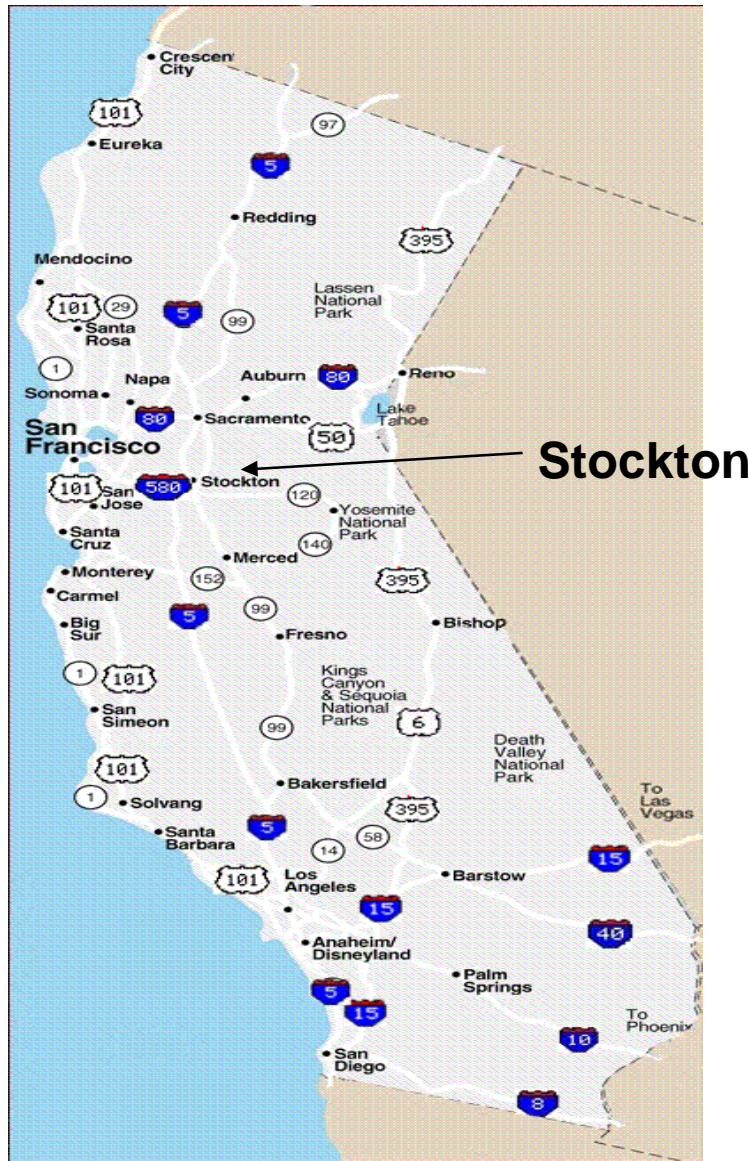
Increasing capital commitment →

	O&M	Leasing ("Affermage")	BOO/BOOT contract	License/Concession
Ownership	M	M	C	C
Responsibility of major investment	M	M/(C)	C	C
Responsibility for minor investment	M	C	C	C
Responsibility for billing and collection	M	C	C/M	C
Responsibility for operation	C	C	C	C
Accountability to public	M/C	M/C	C/M	C
Form of contract remuneration	Fee	Tariff (share)	Fee	Tariff/Fee
Typical length of contract	3-20 yrs	10-20 yrs	10-30+ yrs	20-30+ yrs

C - contractor (operator)
M - municipality

Doing Business: Stockton, California

20 Year O&M Contract



- Awarded 2003 – largest ever in California
- O&M of water and wastewater utilities
- 20 yr contract + renewal options
 - \$58m capex over 20 yrs
 - \$29m annual revenues
- Joint venture with OMI Inc.
- Stockton key figures
 - 0.3m population
 - 592 mile water network
 - 1,151 mile sewer system
 - 109 employees

Doing Business: Coatesville, Pennsylvania

'Tuck in' case study



- Municipally owned water/wastewater system in Philadelphia suburb
- Purchased by American Water through competitive bidding
 - Revenues \$9m p.a.
 - ROCE 13% (pre tax)
- Benefits for municipality through divestment proceeds
- Benefits to water customers
- Benefits to American Water