

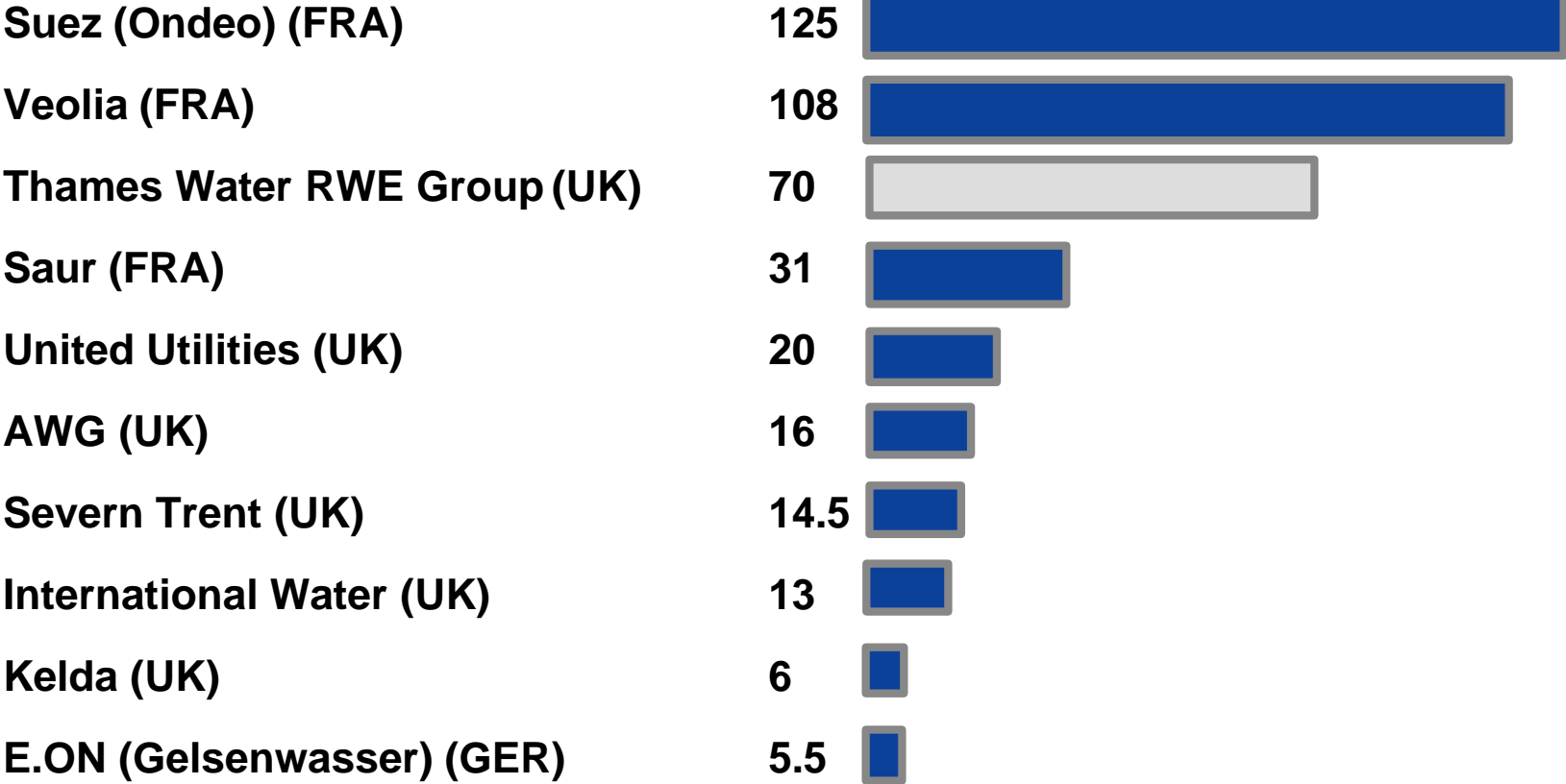


# The World's Largest Water Companies



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 <sup>1</sup>	Ondeo	RWE Water <sup>2</sup>
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 <sup>3</sup> €bn (2002)	1.8	1.7 <sup>4</sup>	2.7
No. of customers 'm	108	125	70
Ownership	Veolia Environnement	Suez	RWE

1) Vivendi data relates to core businesses only

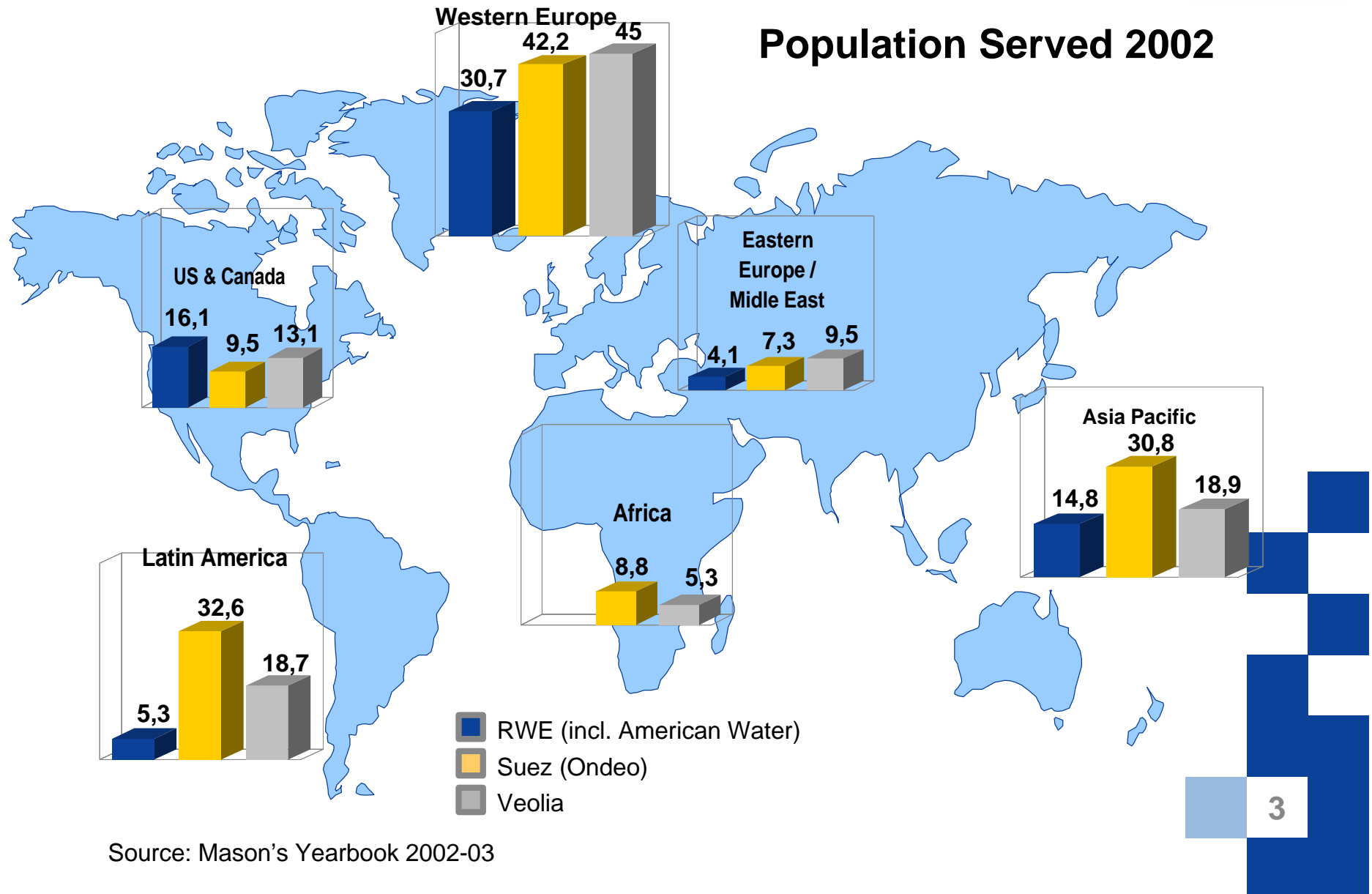
2) RWE includes proforma data for American Water (acquired Jan 2003) in 2002 and 2001 growth comparatives, accounted for under US GAAP [€1 = US\$0.95059 2002 / US\$ 0.89662 2001]

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



Source: Mason's Yearbook 2002-03

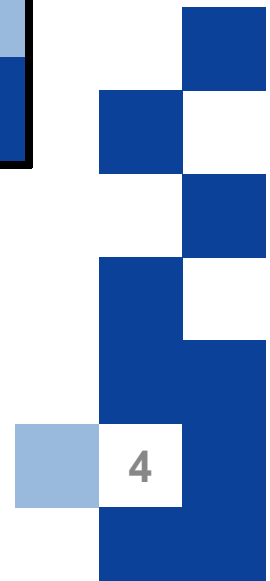
# RWE Water Division: Segmental Sales



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%
<b>TOTAL</b>	<b>4,654</b>	<b>85%</b>	<b>2,850</b>	<b>84%</b>	<b>2,746</b>	<b>84%</b>

- 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

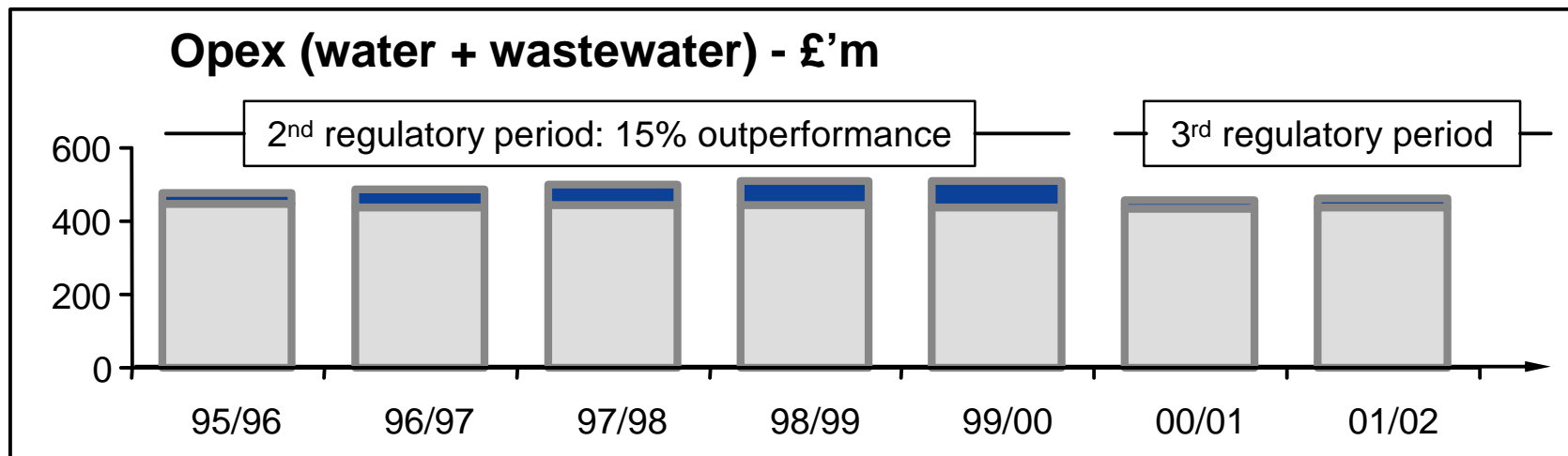
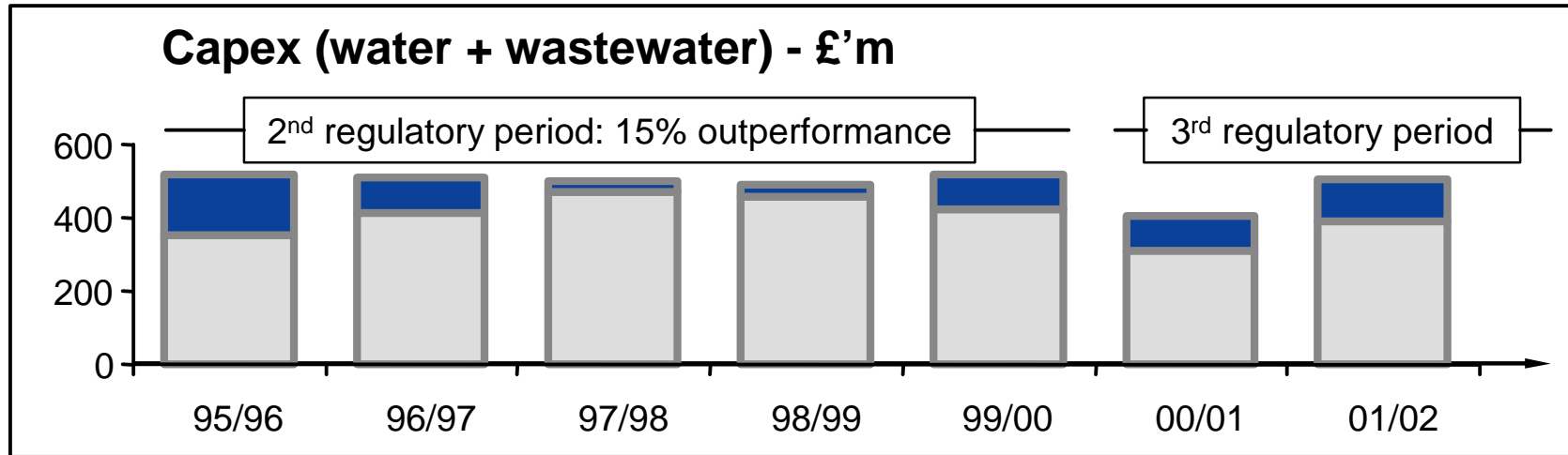
## No. 1 UK water business



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

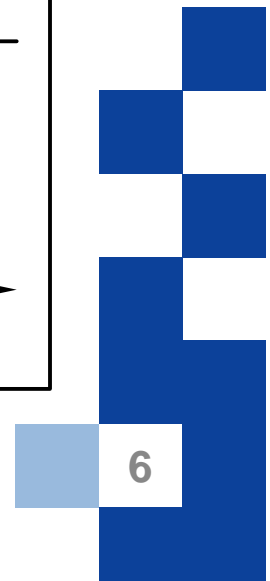
# UK & Ireland: UK Regulated Utility

## Cost performance against regulatory targets



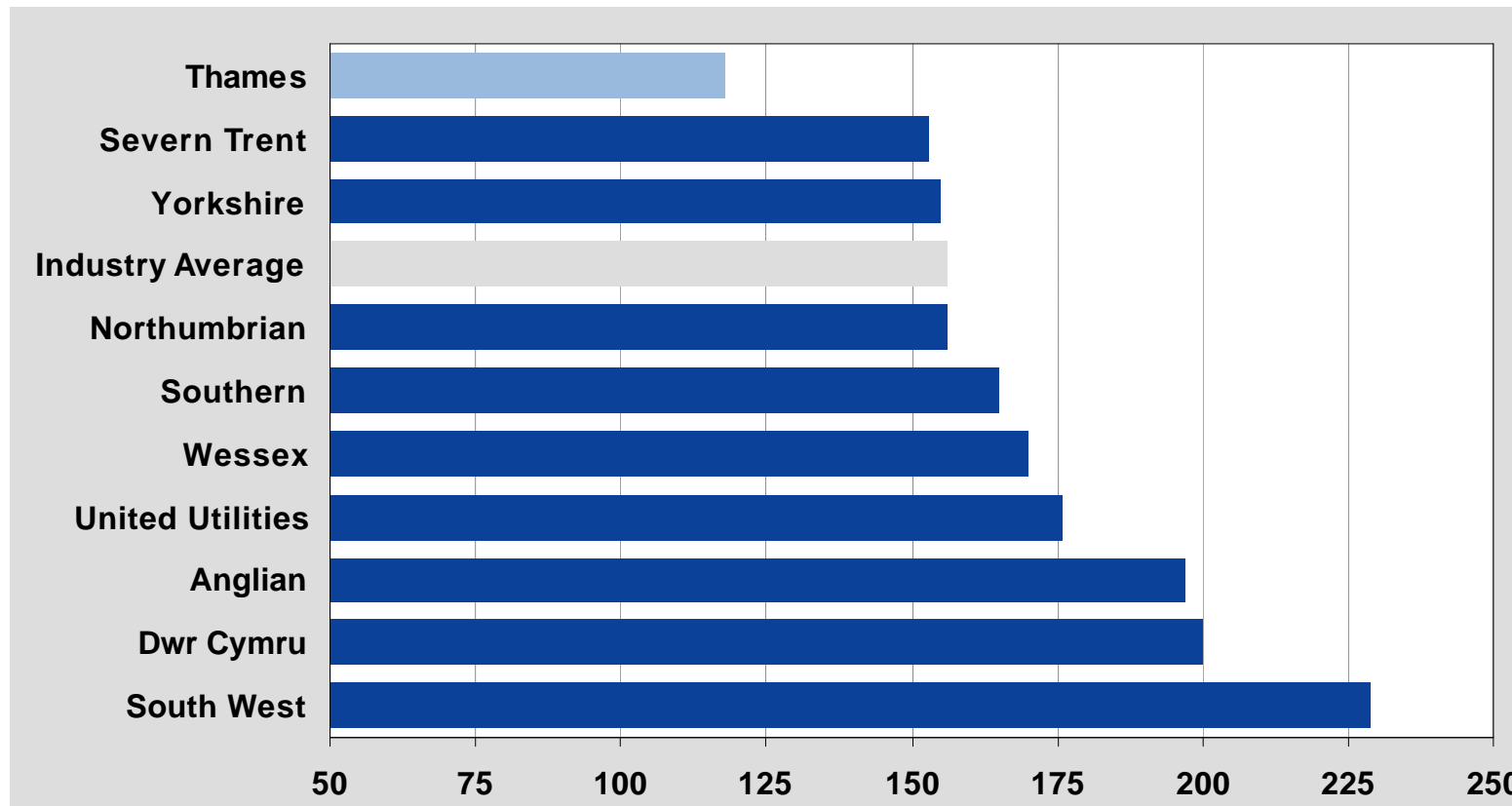
Thames Water actual annual costs
  Savings against Ofwat annual targets

Source: Ofwat



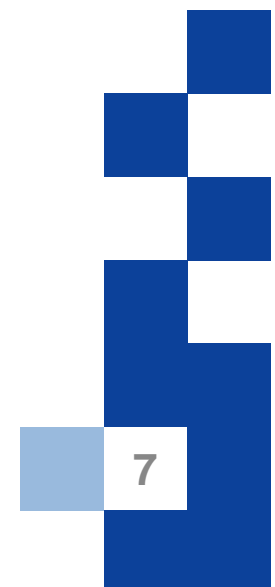
# UK & Ireland: UK Regulated Utility Cost performance relative to peers

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



Pence / m<sup>3</sup> of water delivered + pence / m<sup>3</sup> of sewage collected (2001-02)

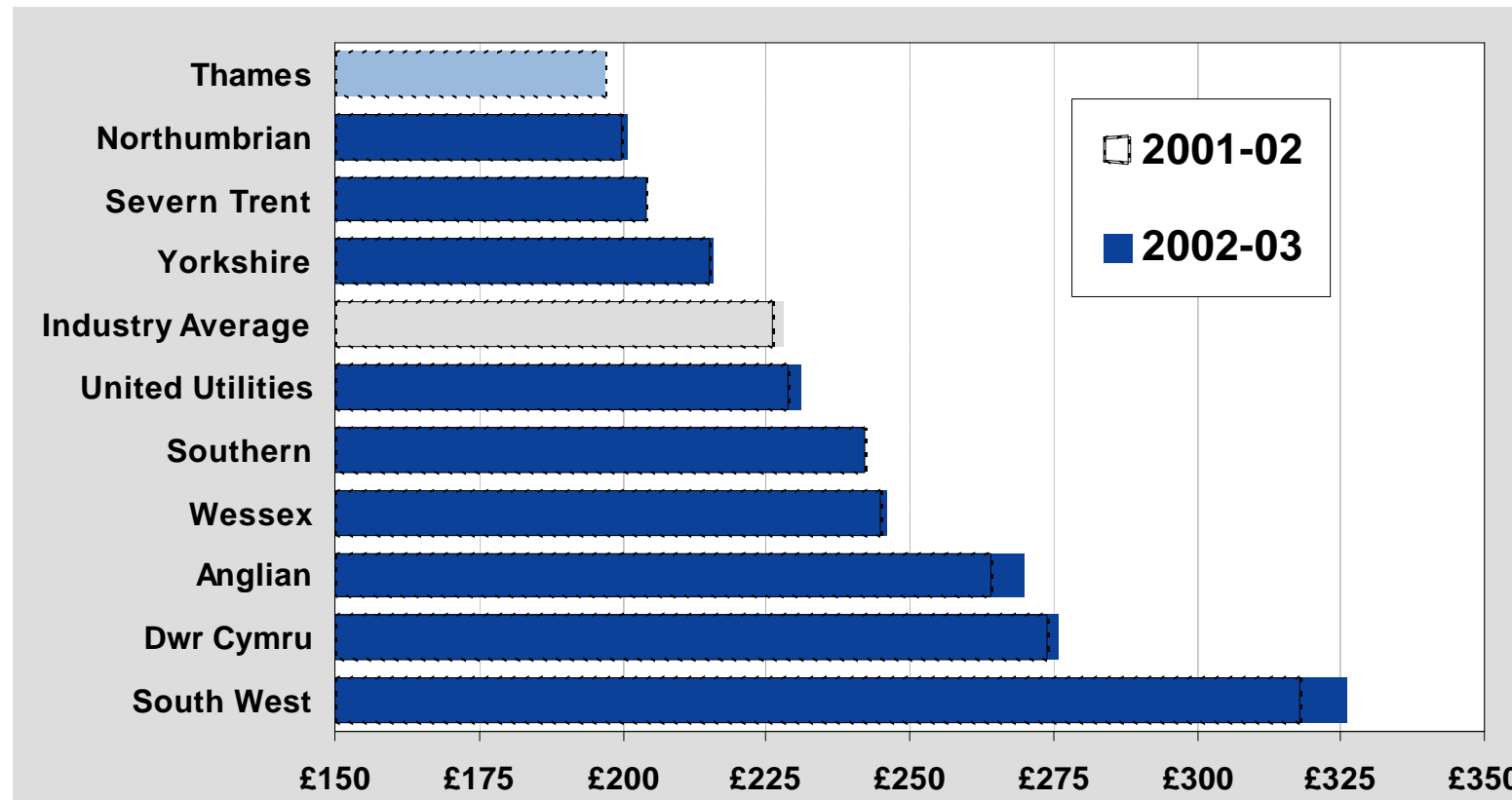
Source: Ofwat





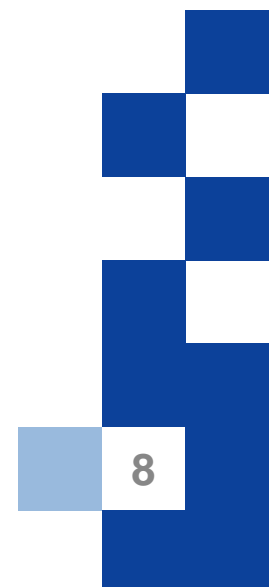
# UK & Ireland: UK Regulated Utility Household bills relative to peers

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



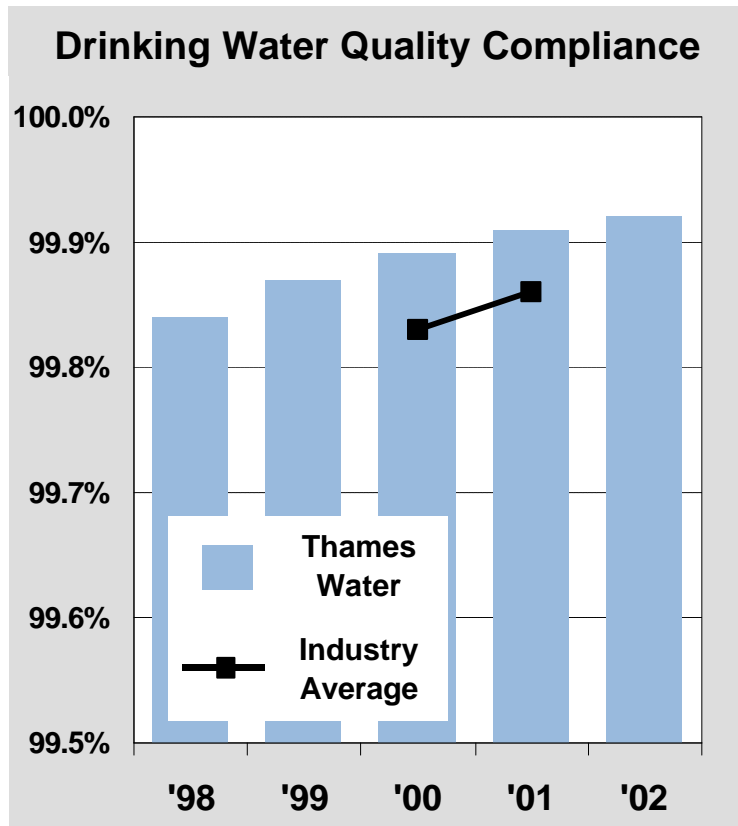
Average annual household bill for water and sewerage services

Source: Ofwat

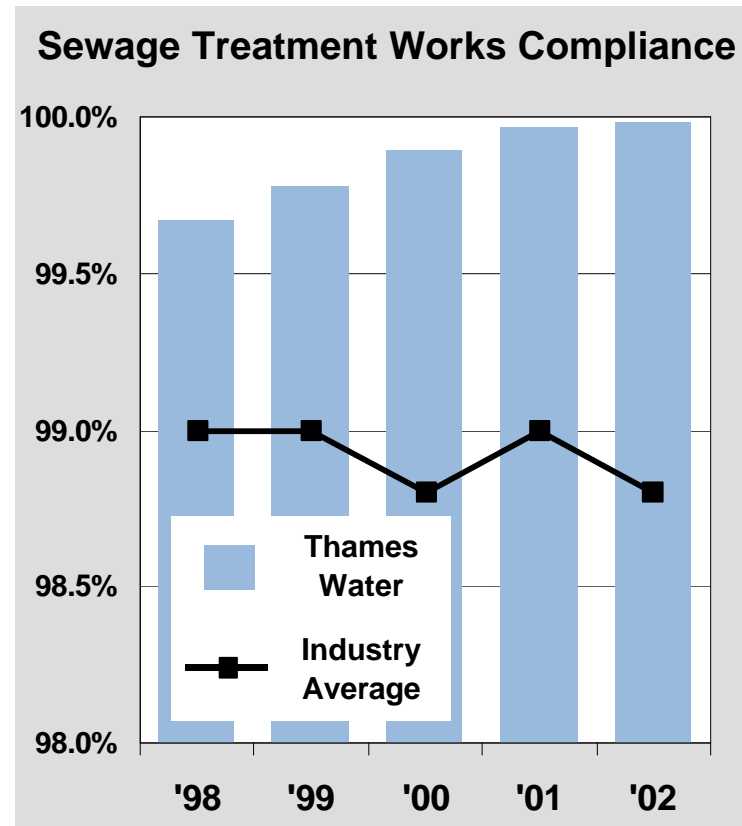


# UK & Ireland: UK Regulated Utility Quality & environmental performance

- Drinking water & sewage treatment:



Source: Water Quality Inspectorate



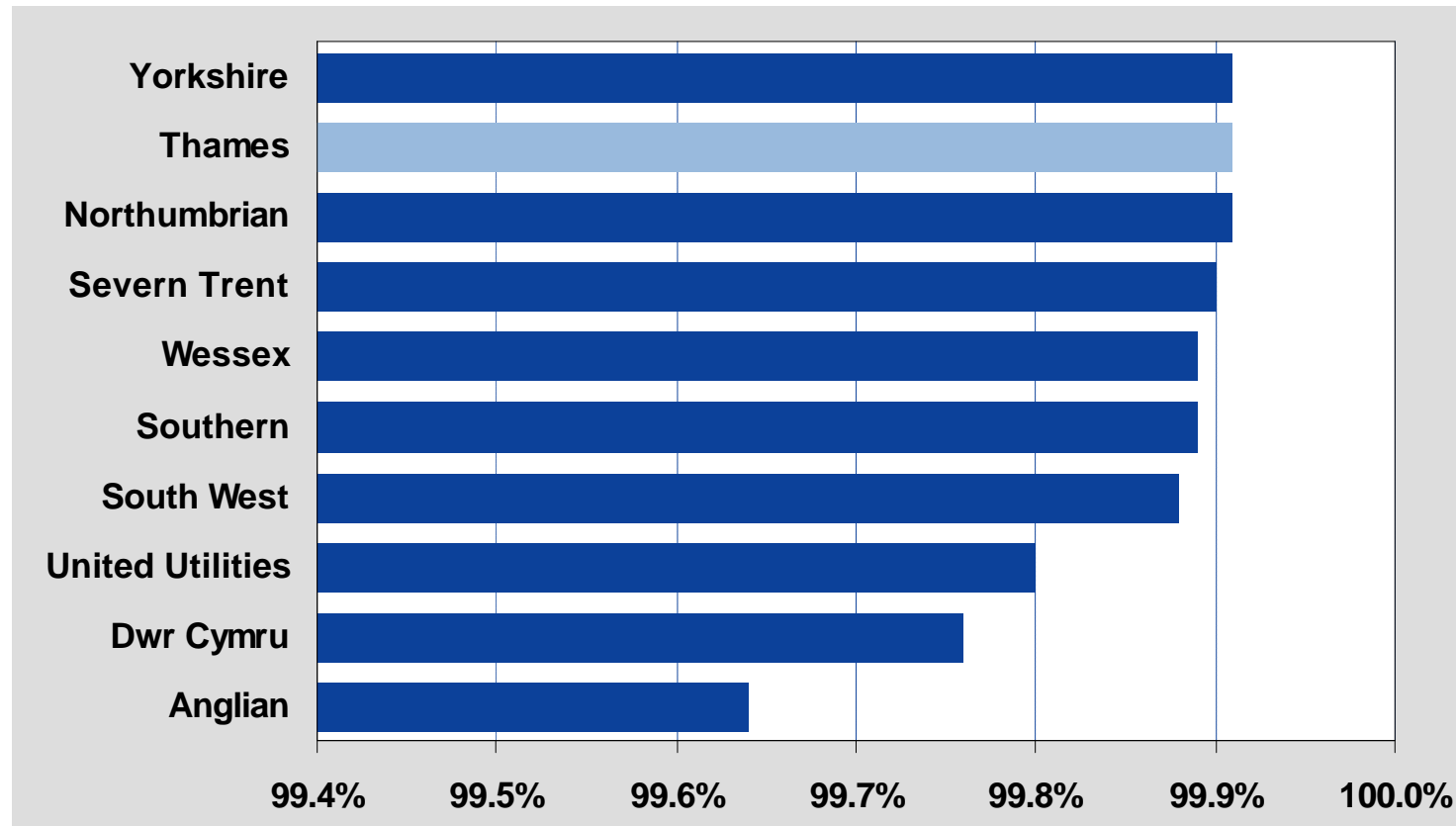
Source: Ofwat

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

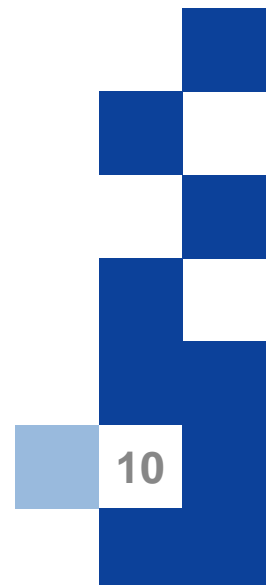


# UK & Ireland: UK Regulated Utility Water quality compliance relative to peers

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

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

UK Notes:

# UK and US Regulatory Regimes for Water



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

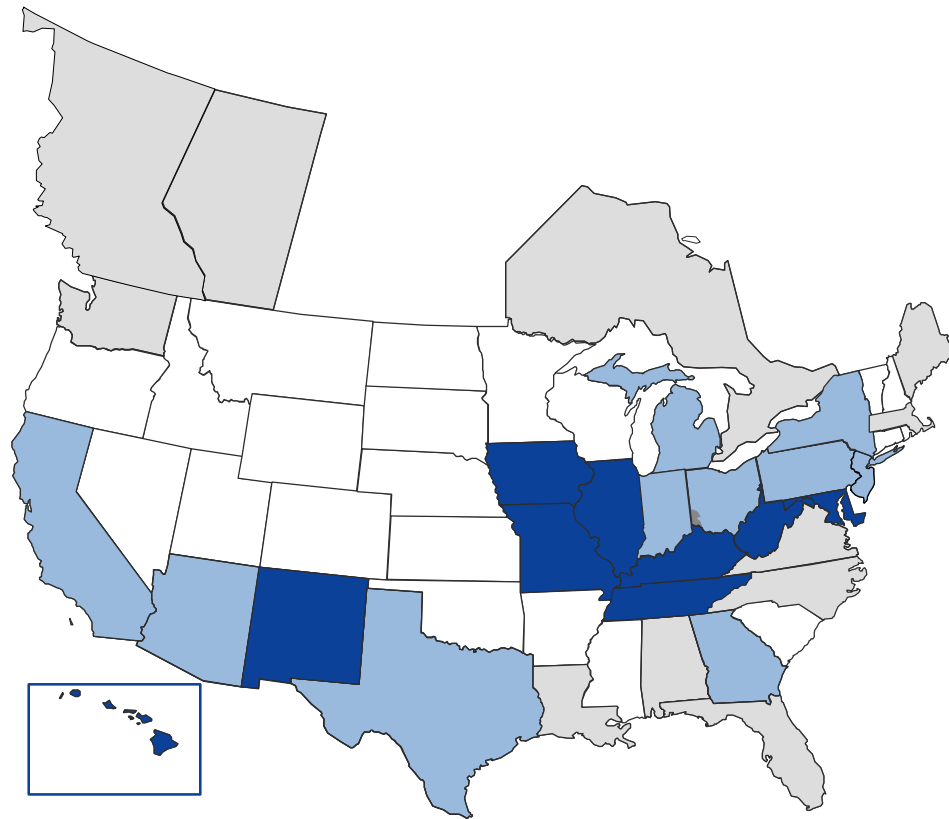
- Well regulated, comparatively low risk, reasonable returns
- RWE is the dominant regulated US player
- Most attractive growth opportunity worldwide



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

- 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

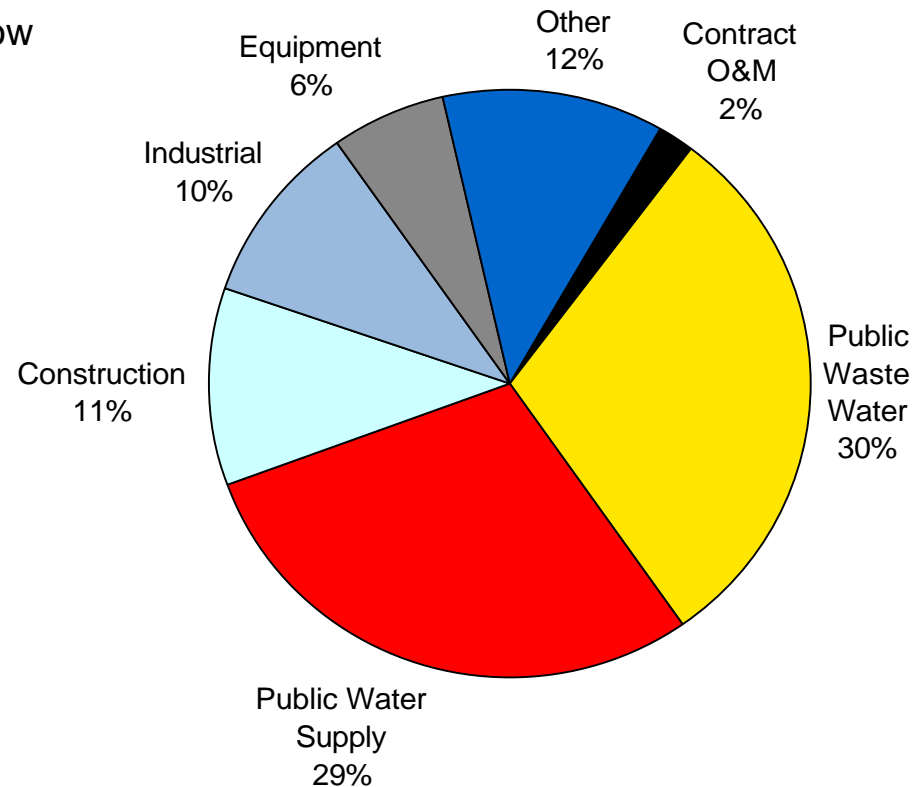
## ■ Residential Market

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

## ■ Industrial Market

- Reduced demand
- Highly Competitive Outsourcing market

## US - a \$82bn market\*

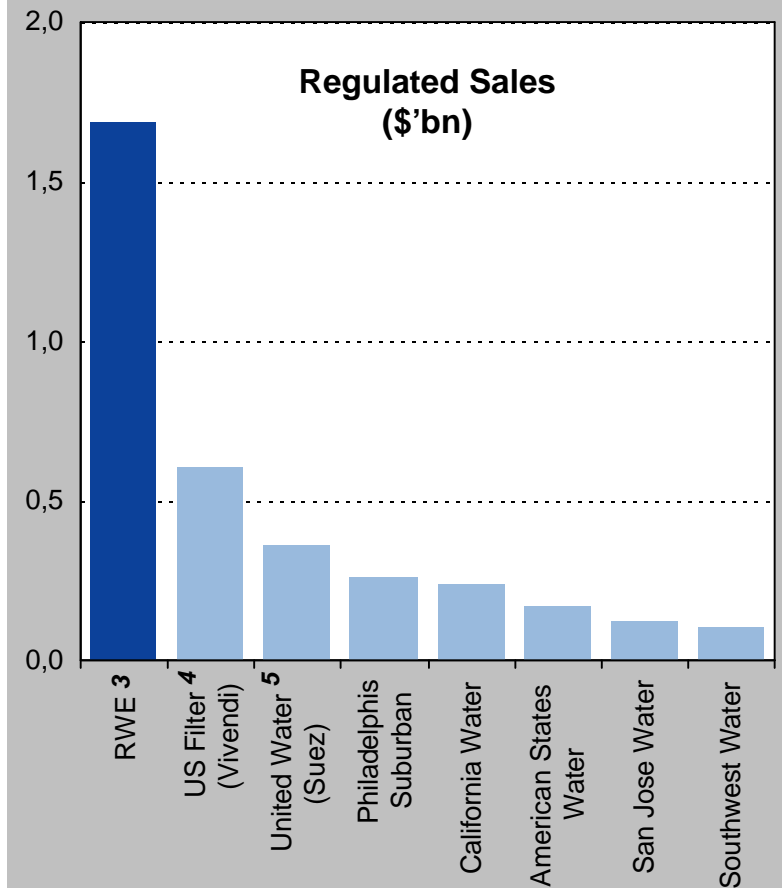


\*) Source: *Privatization and the Future*, AWW Association Journal, Issue 1 (January 2000)

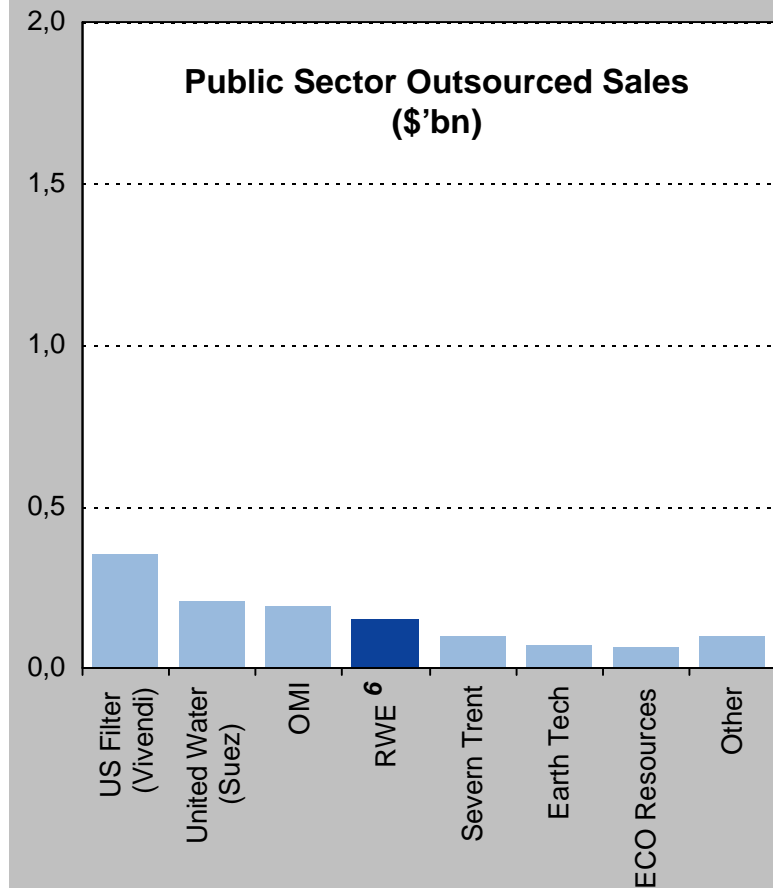
# Americas Region: North America

## Focus on Regulated and Municipal market

### US Regulated Water Market <sup>1</sup>



### US Public Sector Outsourcing <sup>2</sup>



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

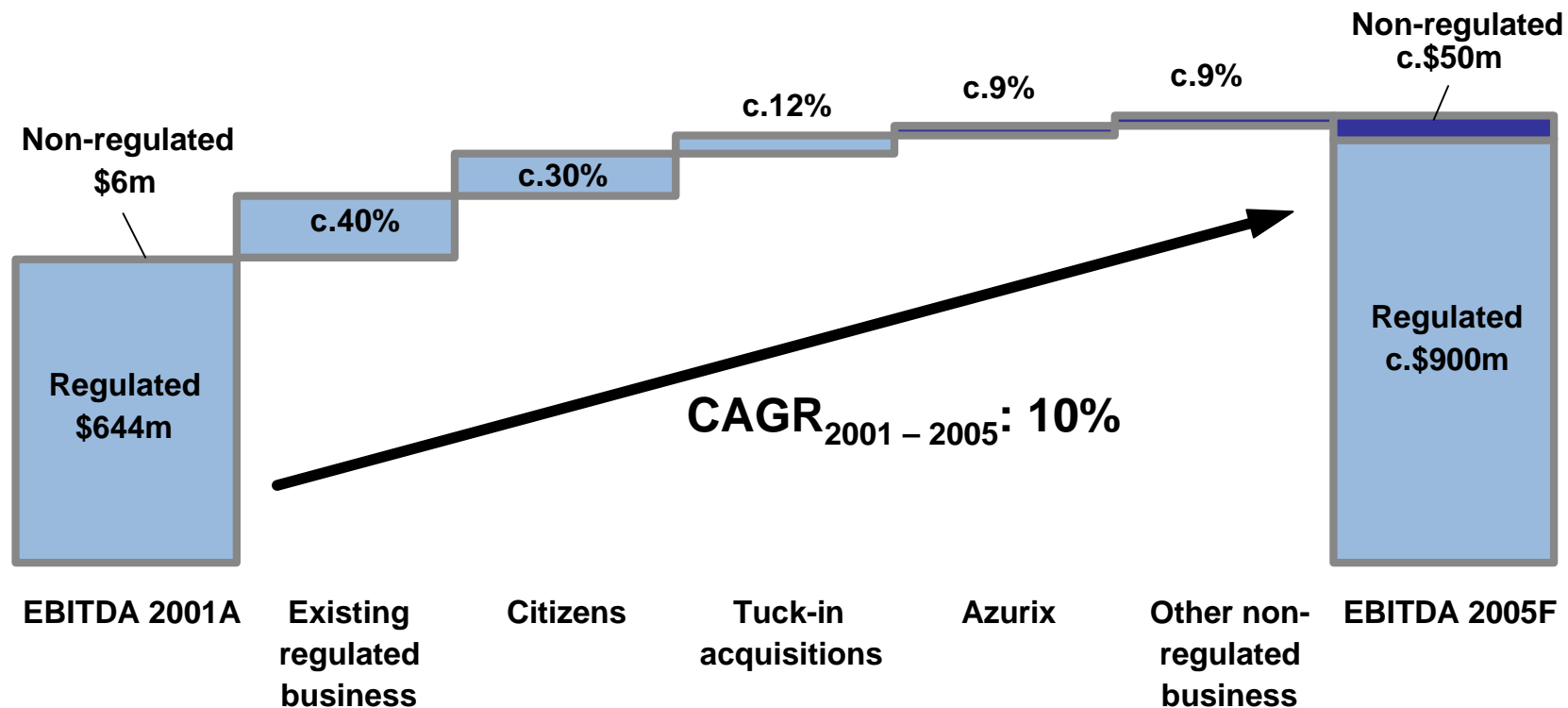
5) United Water 2002 residential & commercial sales estimate - Masons Water Yearbook 2002-2003

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

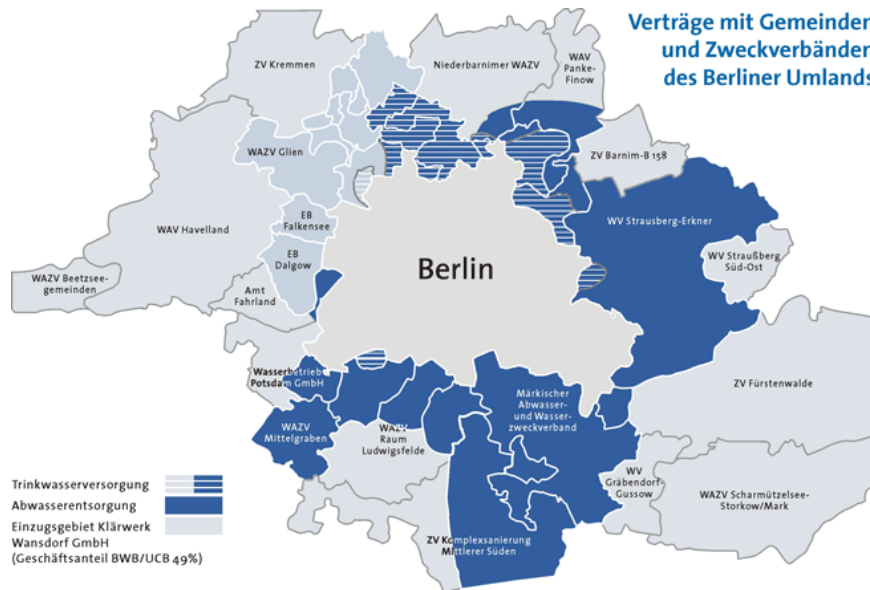
- 15.4m population, 87% in urban areas
- Advanced legislative infrastructure allowing high level of private sector participation
- A– rating (Standard & Poor’s)
- Main industries: mining (copper), fishing, agriculture, forestry, tourism

## ■ Significant growth opportunities

- 6.0% GDP CAGR<sub>1987–2002</sub>, 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 km<sup>2</sup> coverage Berlin area and 3,000 km<sup>2</sup> surrounding Berlin area
- 9 waterworks
- 7,800 km grid
- 6,827 employees (BW-Group)
- 217m m<sup>3</sup> 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

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



# Doing Business: Contract Types Comparative Attributes

## Summary Characteristics of Different Contractual Arrangements

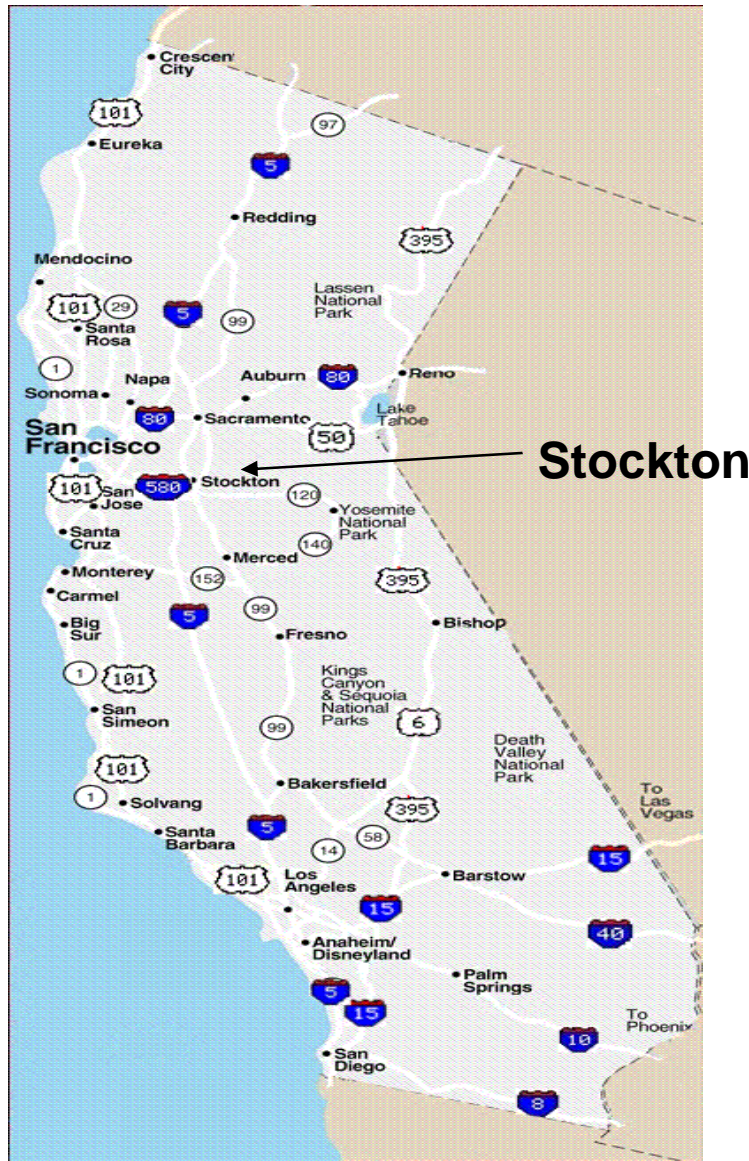
*Increasing capital commitment* →

	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