

This presentation premiered at WaterSmart Innovations

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ACHIEVING SUSTAINABLE WATER CONSUMPTION TARGETS IN MELBOURNE, AUSTRALIA

08 October 2010

OPENING SUMMARY

ACHIEVING SUSTAINABLE CONSUMPTION TARGETS

- Set scene:
 - Water management structure in Melbourne
 - Who/where is South East Water?
 - Drivers: Drought/climate change/Population growth
- Government
- South East Water
- Customers

SETTING THE SCENE

WHERE IS SOUTH EAST WATER?

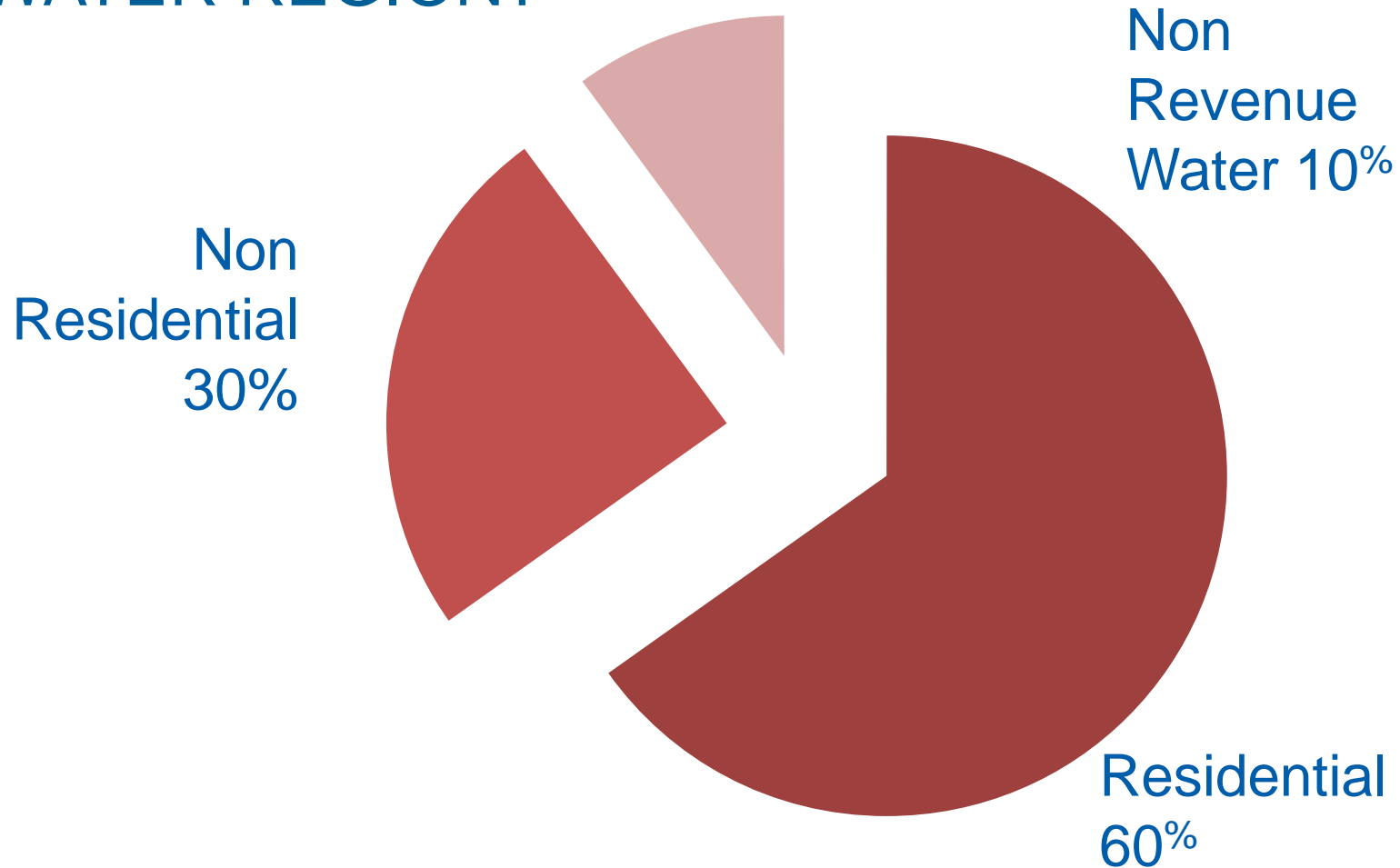


WHO IS SOUTH EAST WATER?

- Providing water, sewerage and recycled water services in the south-east region of Melbourne
- 1.4 million people served in a 3640 square kilometre area (1405 square miles)

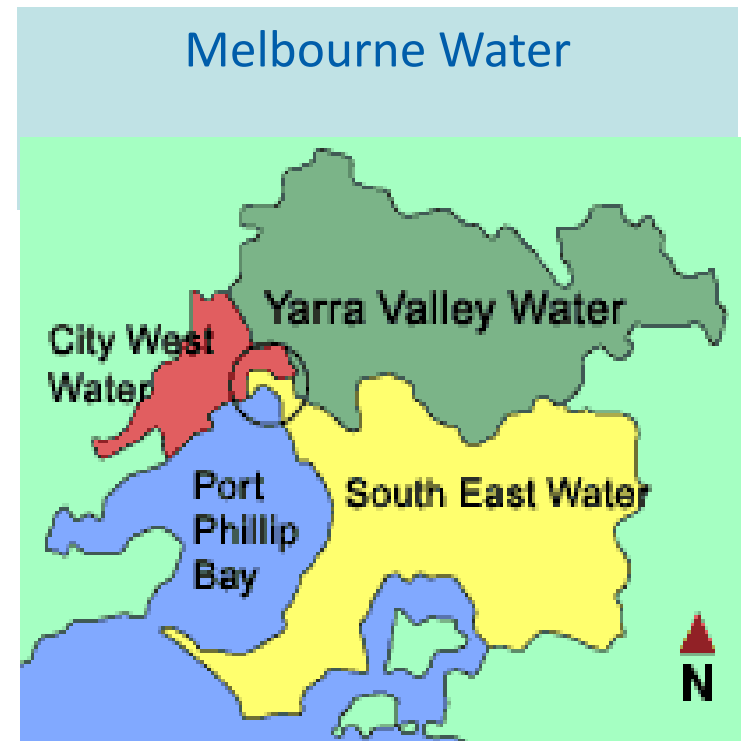


HOW WATER IS USED IN THE SOUTH EAST WATER REGION?



WATER MANAGEMENT STRUCTURE IN MELBOURNE?

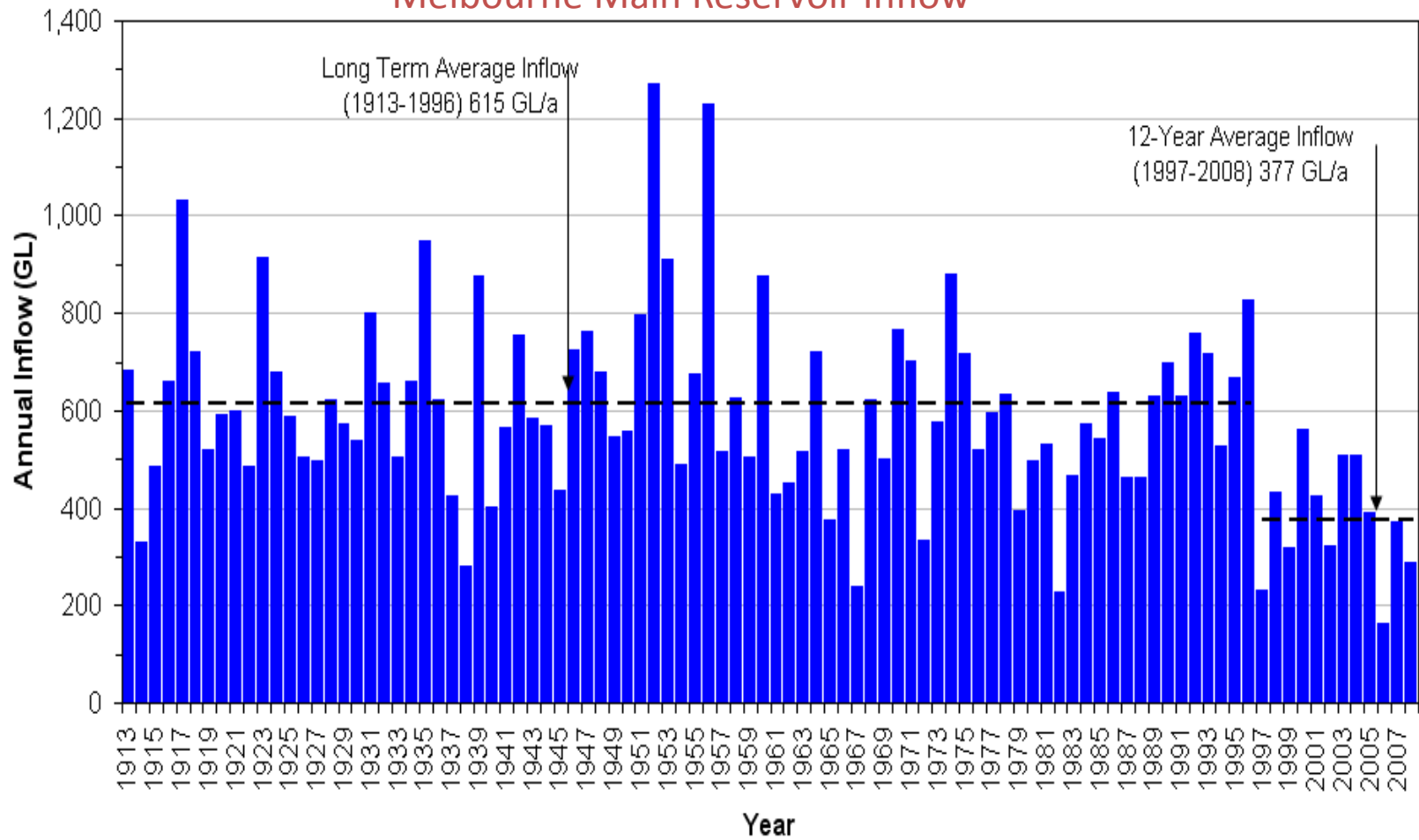
- State Government owned
- One Wholesaler
 - Melbourne Water
- Three Retailers
 - South East Water
 - Yarra Valley Water
 - City West Water



TEN YEAR DROUGHT/CLIMATE CHANGE

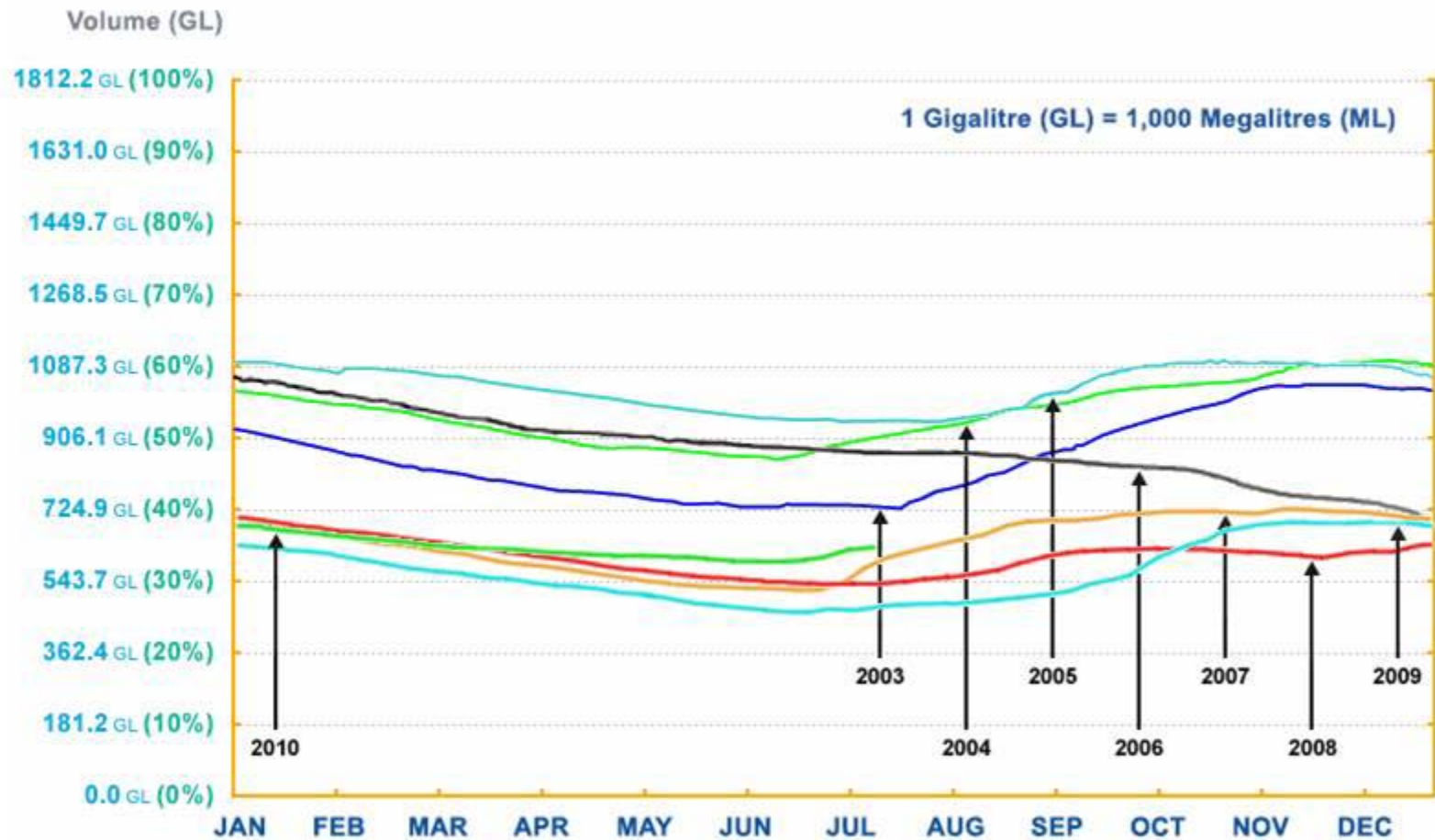
Inflows into water storages

Melbourne Main Reservoir Inflow



TEN YEAR DROUGHT/CLIMATE CHANGE

Water storages



Thomson Dam 1997



Thomson Dam 2008

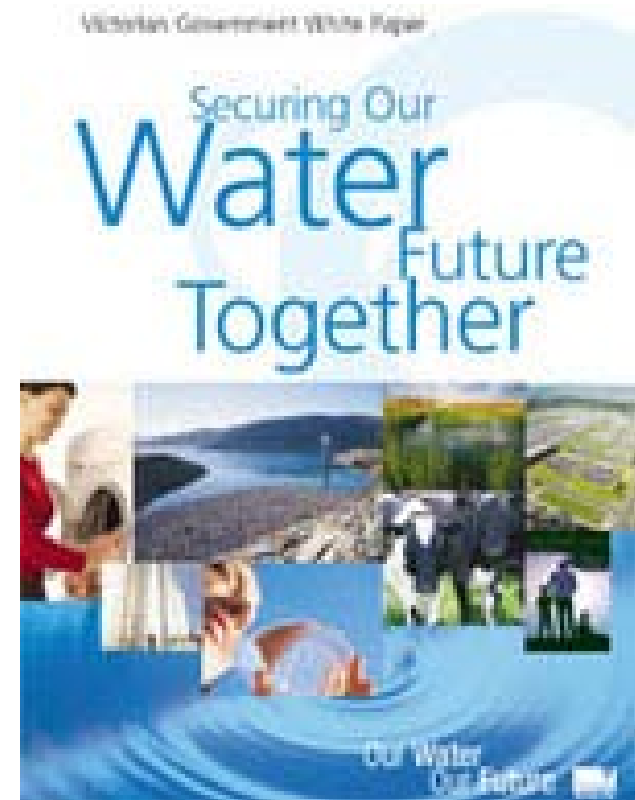


HOW IS GOVERNMENT ACHIEVING SUSTAINABLE WATER CONSUMPTION

GOVERNMENT

Achievement of sustainable consumption?

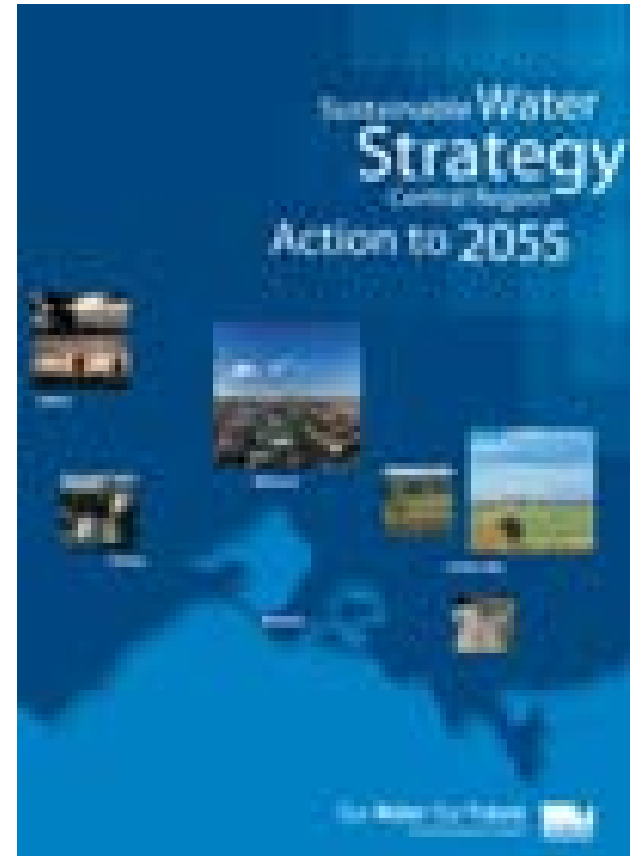
- Strategic planning:
 - Define targets and supply augmentations
- Regulations:
 - Restrictions
 - Mandated water conservation programs
- Education/Incentives
 - Mass marketing
 - Rebates
 - Voluntary targets



GOVERNMENT

Strategic Planning

- Development of a 50 year 'Central Region Sustainable Water Strategy'
- Defined sustainable water targets:
 - 296 litres/person/day or 174 litres/person/day (residential) = 78 gal/p/d or 46 gal/p/d
- Supply augmentations



GOVERNMENT Regulations

- Water Restrictions
- Mandated programs:
 - Showerhead exchange program
 - WaterMAPs
- Support for National Water Efficiency Labelling Scheme (WELS)

STAGE 3a water restrictions are in place across Melbourne



Lawns must not be watered at any time with drinking water

RESIDENTIAL GARDENS*

Watering Days

EVEN and **no-numbered** numbered properties can water plants on **Saturday** and **Tuesday** (within specified times).

ODD numbered properties can water plants on **Sunday** and **Wednesday** (within specified times).

Watering is **NOT** permitted on **Monday, Thursday** and **Friday**.

Watering Times

Manual Watering

Manual dripper systems, a hand-held hose fitted with a trigger nozzle, watering cans and buckets can be used to water plants as required on specified watering days between 6am – 8am.

Households with at least one resident aged 70 years or over may water their plants manually on specified watering days between 6am – 8am or 8am – 10am.

Automatic Watering

Automatic dripper systems can be used to water plants as required on specified watering days between midnight – 2am.

VEHICLE WASHING†

An efficient commercial car wash that uses 70 litres of water or less per vehicle can be used. Cars may not be washed at home with drinking water.

A bucket filled from a tap can be used to clean windows, mirrors and lights, and spot remove corrosive substances.

SPORTS GROUNDS

Generally, 1 in 4 sports grounds as nominated by council can be watered. Exempt playing surfaces may be watered: turf cricket wickets, golf tees and greens (not fairways), tennis courts, bowling greens, hockey pitches, running tracks, croquet greens.

INDUSTRY*

Businesses using 10 megalitres of water or more per year must complete a water conservation action plan (waterMAPs program).

POOLS AND SPAS

A new pool or spa of any size capacity cannot be filled with drinking water. However, a new or existing swimming pool or spa may be filled with an alternative water source such as groundwater.

An existing pool or spa of less than 2,000 litres may be filled by means of a watering can or bucket filled directly from a tap.

An existing pool or spa of greater than 2,000 litres must not be filled except in accordance with a water conservation plan (contact your local water business for more information).

An existing pool or spa must not be topped up except by means of a watering can or bucket, filled directly from a tap. Hoses must not be used.

SOLUTIONS

Greywater, rainwater and recycled water can be used at anytime. For guidelines on safe use, visit www.wpa.vic.gov.au. Restrictions do not apply to rainwater collected in a storage tank, provided it is not supplemented with drinking water supply.

Penalties and enforcement

Stage 3a water restrictions must be followed and water penalties are set in force across Melbourne. If you are issued with a warning notice and still breach the restrictions, you may have your water supply restricted and fined.

To report a breach, call 13WATER (138 2837).

For a full set of Stage 3a water restrictions please visit our website at www.unwater.vic.gov.au or contact your local water business.

City West Water 131 691 www.citywestwater.com.au
 South East Water 131 887 www.southeastwater.com.au
 Yarra Valley Water 131 221 www.yarrawater.com.au

Our Water Our Future

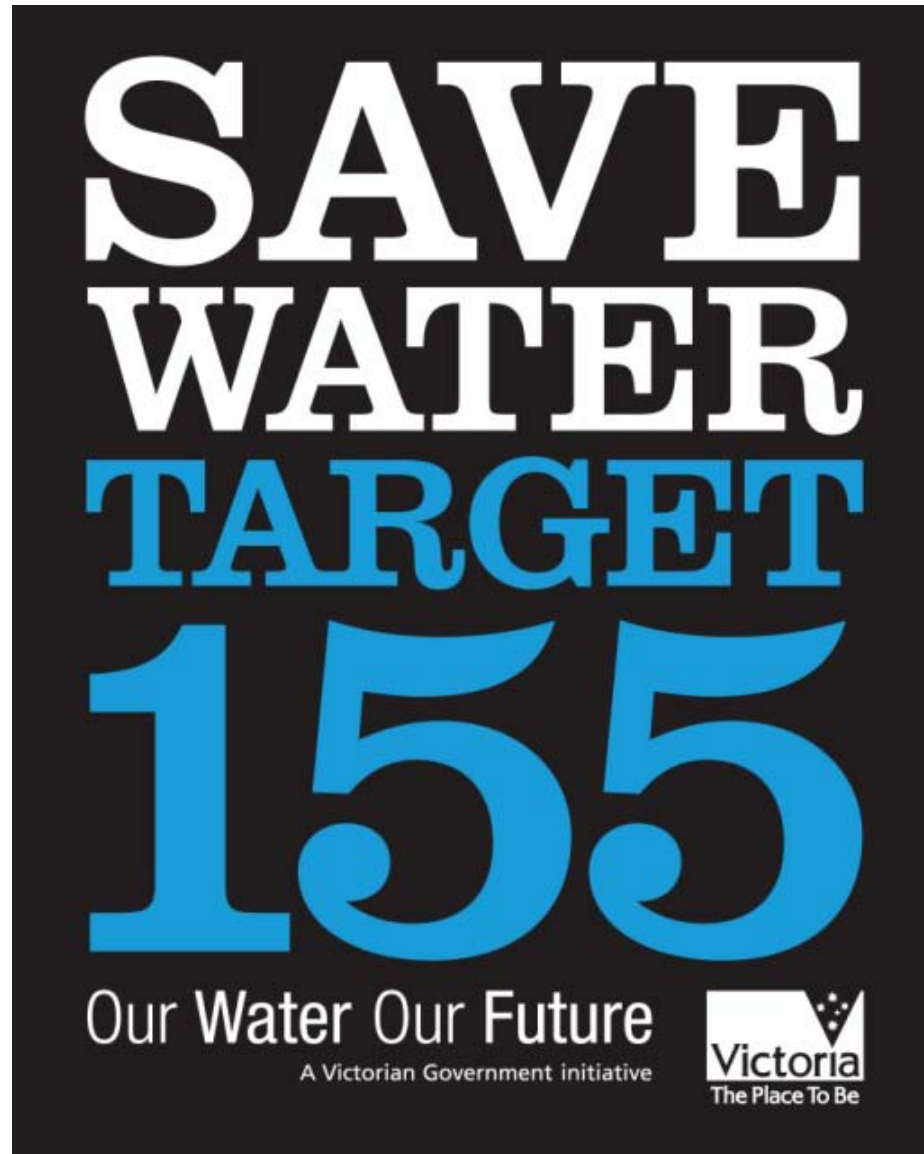
A Victorian Government Initiative



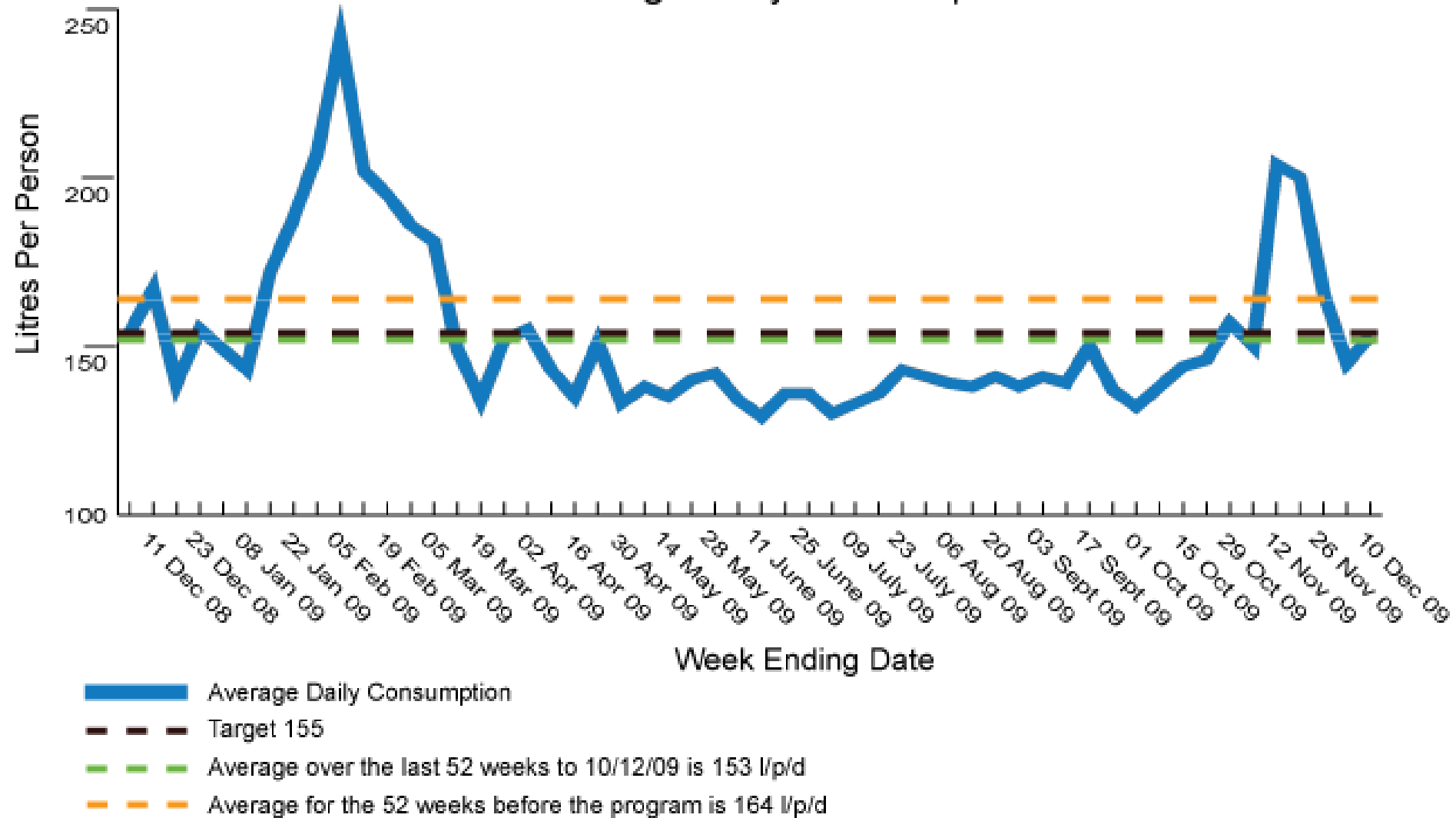
GOVERNMENT

Education/Incentives

- Our Water, Our Future Melbourne wide campaign
- Rebates for residential customers
- Voluntary consumption target



Average Daily Consumption



HOW IS SOUTH EAST WATER ACHIEVING SUSTAINABLE WATER CONSUMPTION

SOUTH EAST WATER

Achievement of sustainable consumption?

- Delivery of mandated programs
- Delivery of non-mandated programs
- Other opportunities
 - Integrated Water Management

SOUTH EAST WATER

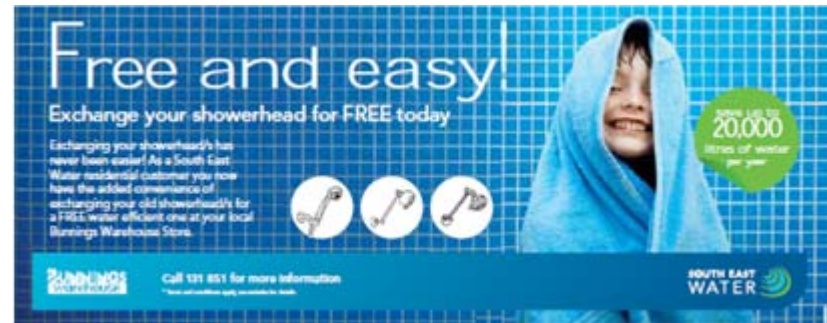
Program Delivery

- Mandated programs:
 - Showerhead exchange program (residential)
 - 170,914 showerheads exchanged since 2006/07
 - Water Management Actions Plans (non-residential) for customers using >10ML/year
 - 478 waterMAPS in 2009/10



SOUTH EAST WATER Program Delivery

- Non-mandated programs
 - Toilet Retrofit Program
 - Audits and retrofits
 - Behaviour change program
 - Rebates for non-residential customers
 - Business water grants
 - Fire services
 - Leakage
 - Schools smart metering



SOUTH EAST WATER

Other opportunities

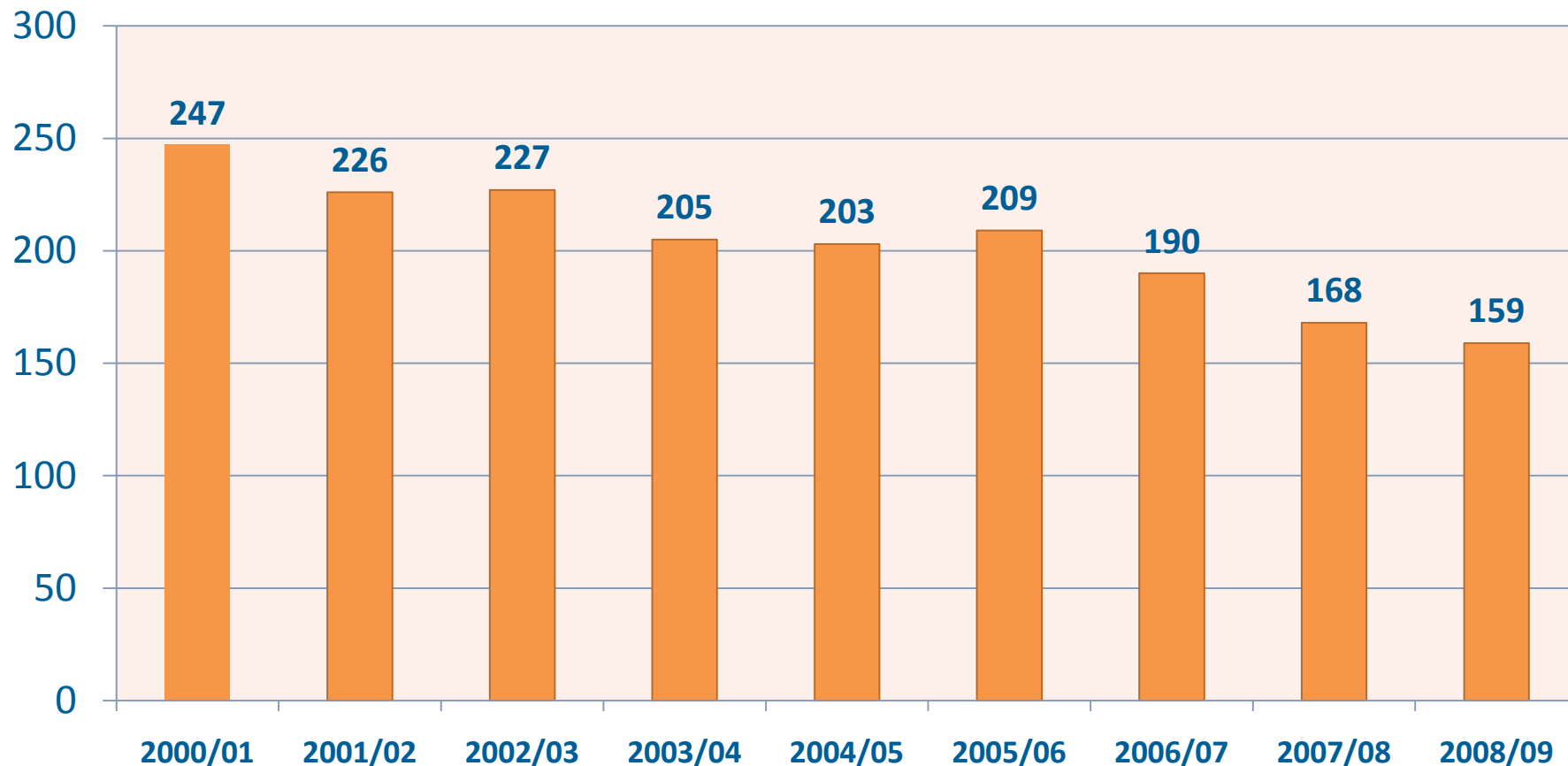
- Selling rainwater tanks
- Development of an Integrated Water Management Strategy for the south east region
 - Groundwater, stormwater, recycled water



HOW ARE CUSTOMERS ACHIEVING SUSTAINABLE WATER CONSUMPTION

CUSTOMERS

Average residential consumption (litres/per/day)



CUSTOMERS

Expectations/Pricing

- Community expectations have changed:
 - Redefining social norms
 - More awareness of issues
 - Want to do the right thing
- Supply augmentations resulting in increased water prices
 - Save money

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