

Overview of the WaterReuse Association

Idaho Water Reuse Conference
May 15, 2013



Wastewater anyone?

Beattie ready to embrace 'Armageddon solution'

Des Houghton
Tuck Thompson

RESIDENTS of Goulburn may be drinking water recycled from sewage treatment plants within two years.

A water emergency recycling strategy says up to 500 million litres of treated wastewater from Laggan Falls, Oakey and Bundamba treatment plants would be available to be pumped to the town.

"If we did run into a crisis we would have to consider all options," Mr Beattie said.

Townsville Mayor Donna Thackay said it was "scandalous" that Bundamba and Laggan Falls Oakey and Bundamba treatment plants would be available to be pumped to the town.

Waterways and which treated effluent has been discharged upstream.

Mr Newman said adding recycled water to dams was "an essential element of the drought strategy".

Minister for Environment and Heritage, Environment Minister Dorey Burke said he would consider the proposal.

Mr Water said matters were being considered.

A taste for waste

STANDING on the crusty bottom of Goulburn's lower dry Pajar Dam on the Southern Tablelands, it is obvious that the work of such large water storages is their susceptibility to drought.

It is no surprise, therefore, that Goulburn's Water Council is launching itself down the controversial path toward waste water recycling in a bid to secure the town's long-term water supply.

Federal Parliamentary Secretary for Water, Malcolm Turnbull, said the idea which has been a hit through Queensland's Darling Downs City, Toowoomba.

Residents there will vote in a referendum on the idea later this year, but Mr Turnbull said it was necessary in Goulburn due to strong community support for any idea to stave off the effects of drought.

Mr Turnbull said the reality of severe water restrictions for a prolonged period had softened Goulburn residents to the idea.

Last week the tablelands city was

forced to close its sporting fields because they were bare of grass cover and too hard for side water sport activity.

Goulburn's water crisis is much worse than Toowoomba's... I'd be very surprised if this project does not continue to have strong community support," Mr Turnbull said.

It is also about the proposed recycling system would be the first of its kind in Australia.

Waste water would be transferred via a pipeline to a wetland system upstream of Goulburn's main water supply dam for natural filtering.

It would then be blended with water in the dam and treated again before being added to drinking water supplies.

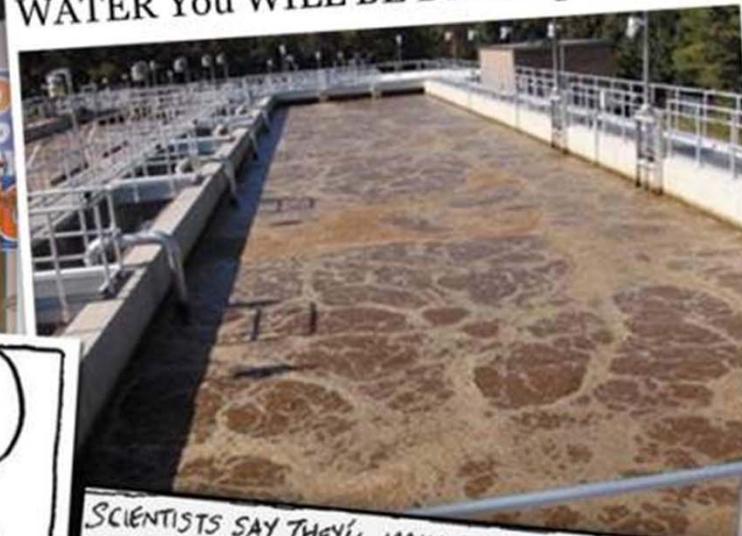
At the end of the process the recycled water would be purer than that currently being drunk in households across Australia - so pure, in fact, it may be too hygienic for the tastes of some people, Mr Turnbull said.

"In those situations it is essential

CADS gathers to voice defiance



If You Vote YES Look At The PURIFIED WATER You WILL BE Drinking from



Water the w starts

San Diego should flush "toilet to tap" plan

July 24, 2006

Your golden retriever may drink out of the toilet with no ill effects. But that doesn't mean humans should do the same.

San Diego's infamous "toilet to tap" plan is back once again, courtesy of Water Department bureaucrats who are prodding the City Council to adopt this very costly boondoggle. The project was rightly shelved seven years ago amid a public health hazards and the



A Water Source with Many Names...

Reuse Water

Recycled Water

Reclaimed Water

Water

Water Recycling

Tertiary Wastewater

Gray Water?

...And Many Uses!

- * Agricultural irrigation
- * Industrial and commercial uses
- * Landscape irrigation
- * Environmental enhancement
- * Seawater intrusion barriers
- * Drinking water

Australia

- * 10+ years of serious drought (2000-2010):
 - * Invested ~\$10 billion in reuse and desalination
- * Toowoomba – failed reservoir augmentation project in 2006
 - * Public voted “no,” even with water storage at 20% capacity
- * National Goal: 30% Reuse by 2015

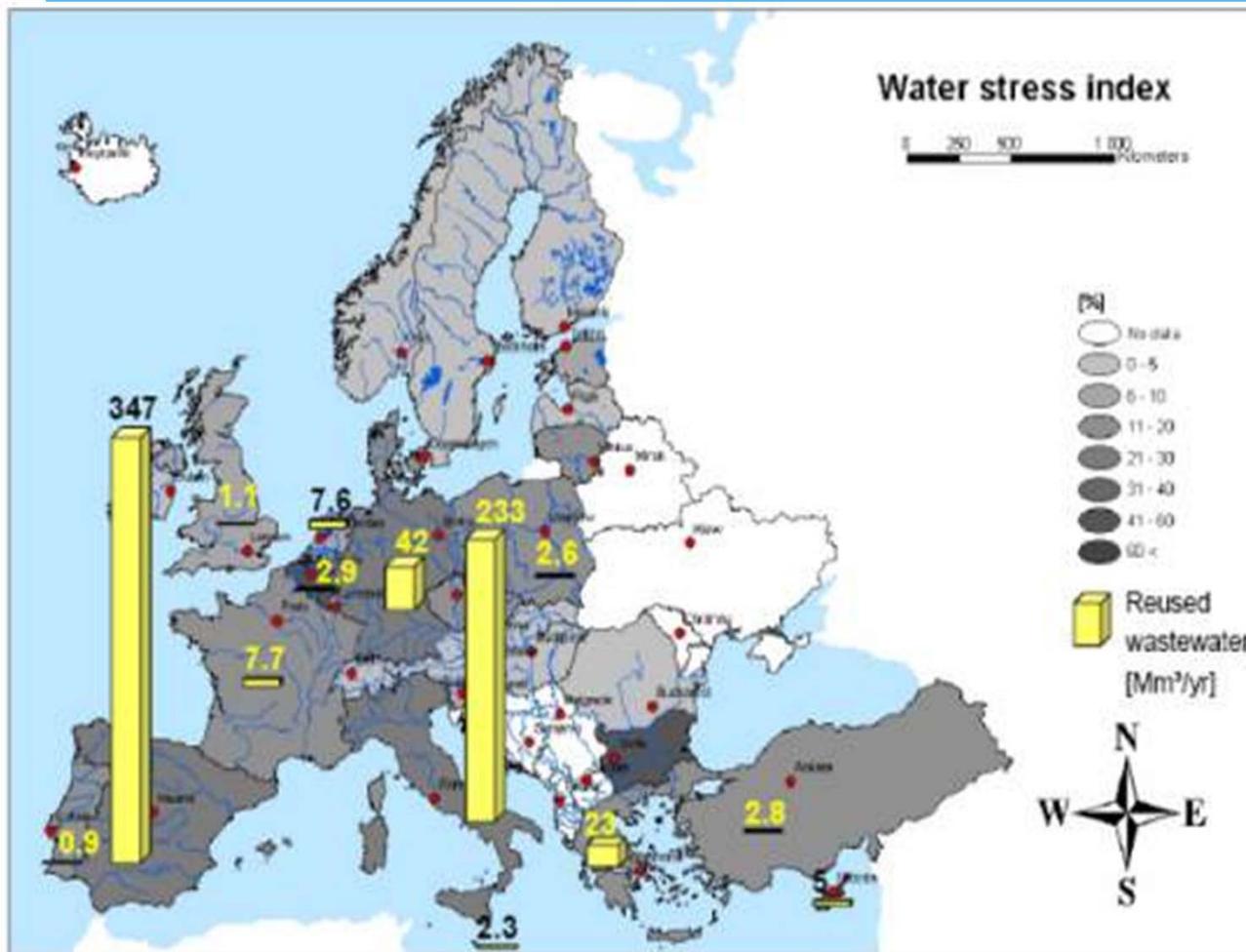


Singapore

- * Large investment in desalination, reuse, and storm water catchment for diversity
- * Have achieved >30% Reuse (including indirect potable)



Europe

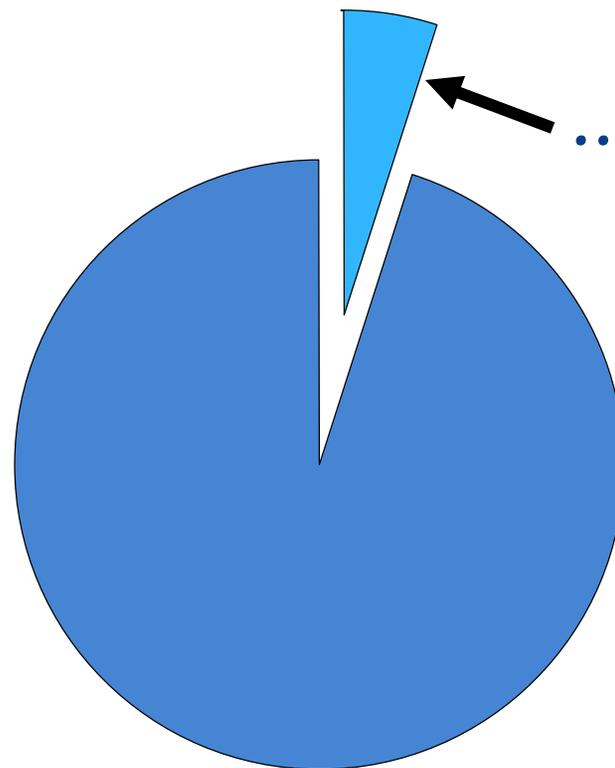


■ >3,300 projects

- 75% for agricultural irrigation
- Belgium has a large indirect potable reuse project
- Two aquifer recharge projects in England

United States

Of 34.9 BGD municipal effluent in the U.S....



... only 5-6% is reclaimed

The Problem?

- * Mixed messages, terminology, and implementation strategies cause confusion
- * Need coordination both within the US and internationally
- * The industry is changing quickly – policy must be backed up with sound science that protects public health
- * We need the water. For agriculture, for cities, for the environment.



Sustainable Solutions for a Thirsty Planet™

- Advocacy
- Education / outreach
- Membership
- Research



A New Partner

Pacific Northwest Section

Board of Trustees

Harry Bludworth (Oregon Trustee)

Clean Water Services

Rock Creek AWWTP

Hillsboro, OR

Dan Ferguson (Washington Trustee)

City of Cheney

Cheney, WA

Karla Fowler (President)

LOTT Clean Water Alliance

Olympia, WA

Steve Kebbe (Treasurer)

Clean Water Services

Treatment Plant Services

Tigard, OR

Tressa Nicholas (Idaho Trustee)

Idaho Department of Environmental Quality Water Quality Division

Boise ID

John Poppe (Secretary)

Silverdale Water District Commissioner

Kitsap Industrial Group, Inc.

Silverdale WA

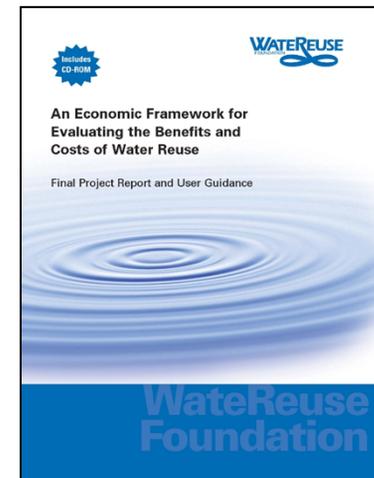
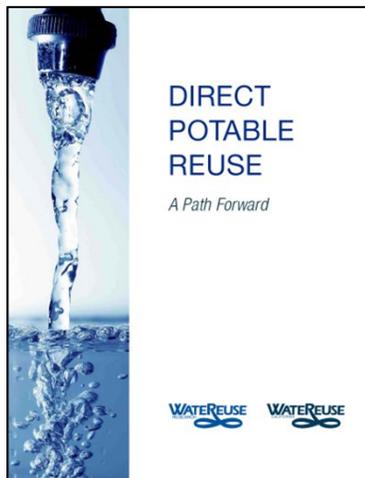
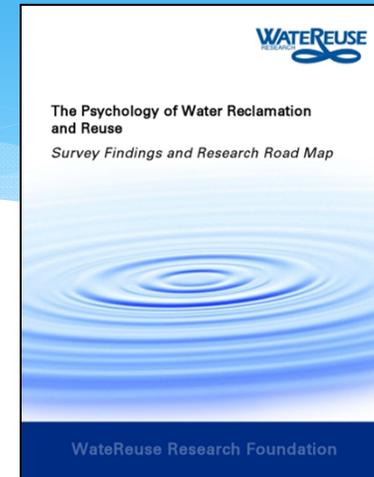
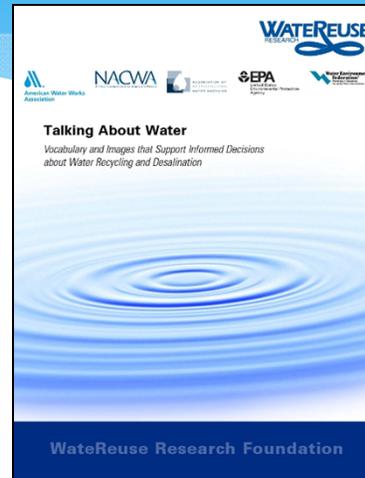
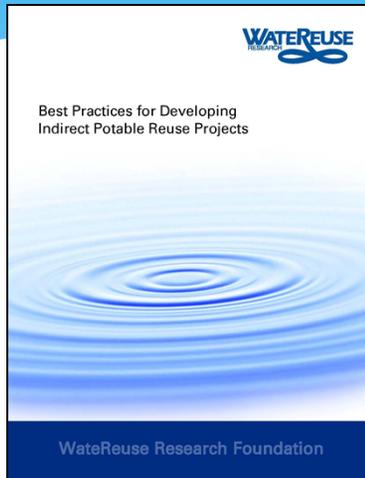
Kristina Westbrook (Vice President)

King County

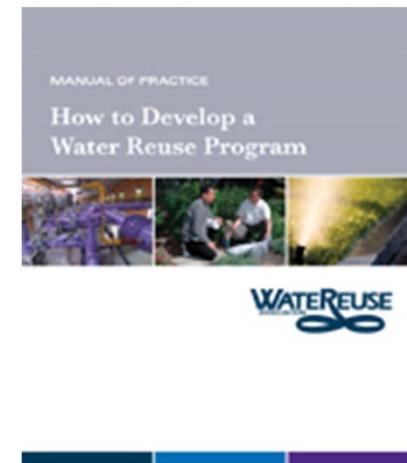
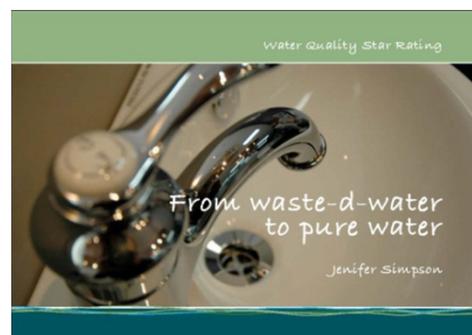
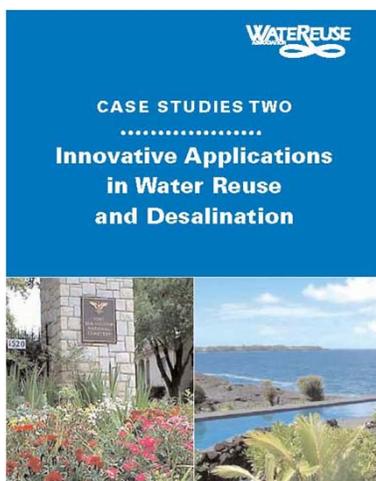
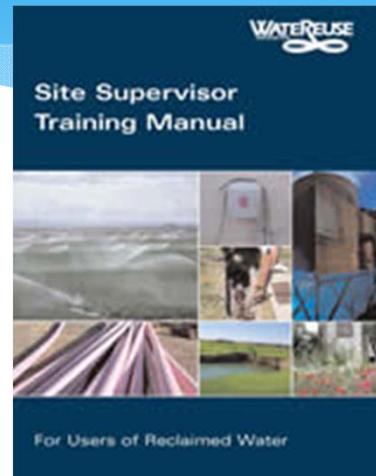
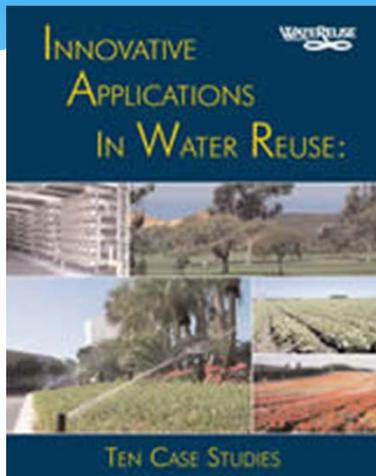
Seattle, WA



WaterReuse Products



WaterReuse Products



Other Resources



www.watereuse.org

A screenshot of the website www.athirstyplanet.com. The top navigation bar is orange and contains links for Home, What Is..., Your Water, Did You Know?, Research & Real Life, and About Us. The main content area has a dark blue background with a stylized, colorful globe. The headline reads "Sustainable Solutions ... for a Thirsty Planet." Below this is a paragraph: "Communities are finding new and innovative ways to extend the life of our world's water resources every day." There is a circular logo on the left that says "THE WATER BUZZ". At the bottom, there are three circular icons with labels: "Downstream", "Our Water Cycle", and "How Safe is Recycled Water?". To the right of these icons is a paragraph: "In a world where less than one percent of our water is available for human use, we must find new and innovative ways to extend the life of our water resources. By finding creative ways to use our planet's water supplies, we can ensure that our world's water is safer, cleaner, and more sustainable today—for our generation, and generations to come." A search bar is located in the bottom right corner.

www.athirstyplanet.com

Future Trends

- * More reuse globally – even in wet climates
- * Indirect potable reuse will become commonplace
- * More utilities will use direct potable reuse
- * Concept of “Maximum Reuse” will emerge

Come Learn More!

- * Join us Thursday morning at 7:00 a.m.
- * Board Meeting of WaterReuse Pacific Northwest
- * Sign up at registration desk



Come Join Us!



The poster features a central blue water drop with a yellow banner across its middle containing the text "28TH ANNUAL". The drop is set against a background of stylized grey mountains. Below the drop, the title "WATEREUSE SYMPOSIUM" is written in large, bold, blue capital letters. Underneath the title, the location and dates "DENVER MARRIOTT CITY CENTER • DENVER, CO • SEPTEMBER 15-18, 2013" are listed in smaller, dark grey capital letters. At the bottom of the poster, three logos are displayed: the American Water Works Association logo on the left, the WATEREUSE logo in the center, and the Water Environment Federation logo on the right.

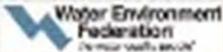
28TH ANNUAL

WATEREUSE SYMPOSIUM

DENVER MARRIOTT CITY CENTER • DENVER, CO • SEPTEMBER 15-18, 2013

 American Water Works Association

 WATEREUSE
WATER REUSE SYMPOSIUM

 Water Environment Federation
The Water Quality Authority