



CWA ANNUAL CONFERENCE WASTEWATER MANAGEMENT AND BEYOND

16 -17 July 2019, Hilton Birmingham Metropole



TUESDAY 16TH JULY

09.30 - 09.35 **EWWM Conference opening and Welcome**

09.35 - 10.10 **EWWM Plenary**

10.15 - 11.05 **Keynote Speech: Dr Fabio Masi, IRIDRA, Italy**
'Constructed wetlands: A multi-benefit, nature-based solution for current and future environmental and social challenges'



An environmental chemist and founding partner of IRIDRA Srl, Fabio is the co-author of over 450 designs for constructed wetlands around the world, collaborator on numerous international programmes and author of over 95 publications including a wealth of peer reviewed papers. He will give us an Illustrated overview of the multiple benefits of constructed wetland projects around the world; historical perspectives plus recent developments in pollution reduction, flood risk mitigation, wildlife habitat, educational resources and the amenity value of constructed wetlands.

[More info on Fabio](#)

11.35 - 13.00 **Constructed Wetlands Workshop**
'How to shift from a single purpose (treatment) to multi-purpose treatment wetlands'



There will be presentation of research undertaken on the innovative french system installed at Severn Trent Water, Hulland Ward followed by a workshop lead by Dr Fabio Masi and Dr Gaby Dotro of Cranfield University.

Workshop presentation:

Two stage vertical flow constructed wetlands' performance and maturing in temperate climate

Khomenko, O.¹, Blanco, I.², Cook, A.², Cunliffe, D.², Dotro, G.¹, Jefferson, B.¹, Coulon F.¹, Jordan, T.², Shepherd, R.², Smith, R.², and Bajón Fernández, Y^{1*}. ¹Cranfield University, UK, ²Severn Trent Water, Coventry, UK

Workshop session:

1. Envisioning a multipurpose system: What are some of the compatible uses / objectives for a wastewater treatment wetland? Are there any potentially conflicting uses that should be managed or avoided altogether?
2. Engaging within co-productive model for wetland systems: what are some potential partnerships that could help maximise the success potential of a multipurpose wetland scheme? *Think about end use, finance, regulation, national or international strategies.*
3. Working with your site limitations: what are some of the key attributes of a candidate physical site that could help or hinder the construction of a multipurpose wetland system?

14.00 - 17.20 Site Visit

The site visit will include a tour of Severn Trent Water's Hulland Ward wastewater treatment works presented in the workshop. It is an innovative constructed wetland that treats raw wastewater (including sludge) in a two-stage vertical flow constructed wetland treatment system.

[Hulland Ward case study](#)

[Hulland Ward video](#)

18.30 Evening social event

After the site visits, we will book some taxis and head off to a [The Malt Shovel](#), a nearby pub, for dinner and drinks.

WEDNESDAY 17TH JULY

10.00 – 10.10 Welcome introduction

Welcome address from the CWA Chair, Geoff Sweaney

Multiple benefits of a partnership approach to treatment wetlands

10.10 – 10.35

The Ingoldisthorpe Wetland one year on; nature, community and waste-water treatment

Tosney, J., Norfolk Rivers Trust, UK

10.35 – 11.00

Mires on the Wyre; Wetlands and the Catchment Based Approach. How collaboration between the NGO's, Local Authorities, Regulators and Landowners can lead to effective delivery in both urban and rural environments

Myerscough, T.¹ and Sweaney, G.², ¹Wyre Rivers Trust, UK, ²Wetland Engineering, UK

11.00 – 11.30 Break

11.30 - 11.55

The health and wellbeing benefits of access to green infrastructure

Naismith, D., WWT Consulting, UK

Understanding wetland treatment processes

11.55 – 12.20

Role of design and operational factors in the removal of pharmaceuticals by constructed wetlands

Ilyas, H.1*, Masih, I.1,2, van Hullebusch, E.D.3, 1Water Treatment and Management Consultancy, The Netherlands, 2IHE Delft, Institute for Water Education, The Netherlands, 3Institut de Physique du Globe de Paris, Sorbonne Paris Cité, Université Paris Diderot, France

12.20 – 12.45

An innovative constructed wetland system to treat edible oil refinery wastewater

Kumar Ragen, A., University of Mauritius, Mauritius

12.45 – 13.10

Understanding the impact of vertical flow constructed wetlands sludge layer properties on its permeability

Khomenko, O., Dotro, G., Jefferson, B., Coulon F., and Bajón Fernández, Y., Cranfield University, UK

13.10 – 14.10

Lunch and poster session

Treatment wetland applications

14.10 – 14.35

Rural Sustainable Drainage Systems: Experience on Ayrshire farms so far

Moir, S, E., Moir Environmental Ltd, UK

14.35 – 15.00

Willow constructed wetlands for wastewater treatment and biomass generation

Avery, L.M.¹, Beeseley, L.¹, Stockan, J.¹, Abel, C.¹, Tamburini, M.¹, Randerson, P.² and Hough, R.¹, ¹James Hutton Institute, UK, ² Cardiff School of Biosciences, UK

15.00 – 15.25

Constructed wetlands in the urban landscape / achieving wetland ecosystems services where space is limited

Fulford, G., Biomatrix Water Solutions, UK

15.00 – 15.25

Treatment of rural agri-food production process water using low energy aerated wetlands

Freeman, A.¹, Hawes, P.¹, Mathews, M.², Cooper, D.¹, ¹ARM Group Ltd, UK, ²Peak Associates Environmental Consultants, UK

POSTERS

There will be a cash prize for the best student poster

Sustainable project management approach - Deerplay reed bed refurbishment

Pramekalan, M.¹, Button, S.¹, Hargreaves, A.¹, Osborne, I.¹, Sweaney, G.², ¹Coal Authority, UK, ²Wetland Engineering, UK

Role of design and operational factors in the removal of pharmaceuticals by constructed wetlands

Ilyas, H.^{1*}, Masih, I.^{1,2}, van Hullebusch, E.D.³, ¹Water Treatment and Management Consultancy, The Netherlands, ²IHE Delft, Institute for Water Education, The Netherlands, ³Institut de Physique du Globe de Paris, Sorbonne Paris Cité, Université Paris Diderot, France

The use of a 1D hydraulic drainage model to aid the design of a 500ha constructed wetland

Haw, R., Envireau Water

REGISTRATION and FURTHER INFORMATION

To become a member and benefit from reduced conference fees, please [join the CWA](#)

Register for the conference online with our conference organisers [AquaEnviro](#)

For further details about the CWA please visit constructedwetland.co.uk

For any other information, please [contact us](#)



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