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Institute for Integrated Management  
of Material Fluxes and of Resources

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# CWetlands - Constructed Wetlands Knowledge Platform

Dr. Tamara Avellán

‘Using Information Tools on Multifunctional Nature-Based  
Solutions to Achieve SDGs’

World Water Week, 26 August 2018

Advancing a Nexus Approach to the Sustainable  
Management of Environmental Resources



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# 2 years developing the platform

Float idea  
by  
experts/  
understan  
d the  
issues

Collect  
preliminar  
y data

Develop  
comprehe  
nsive  
database  
structure

Prototype



Understan  
d user  
needs

Analyse  
preliminar  
y data

Design  
web-  
structure

Test &  
refine

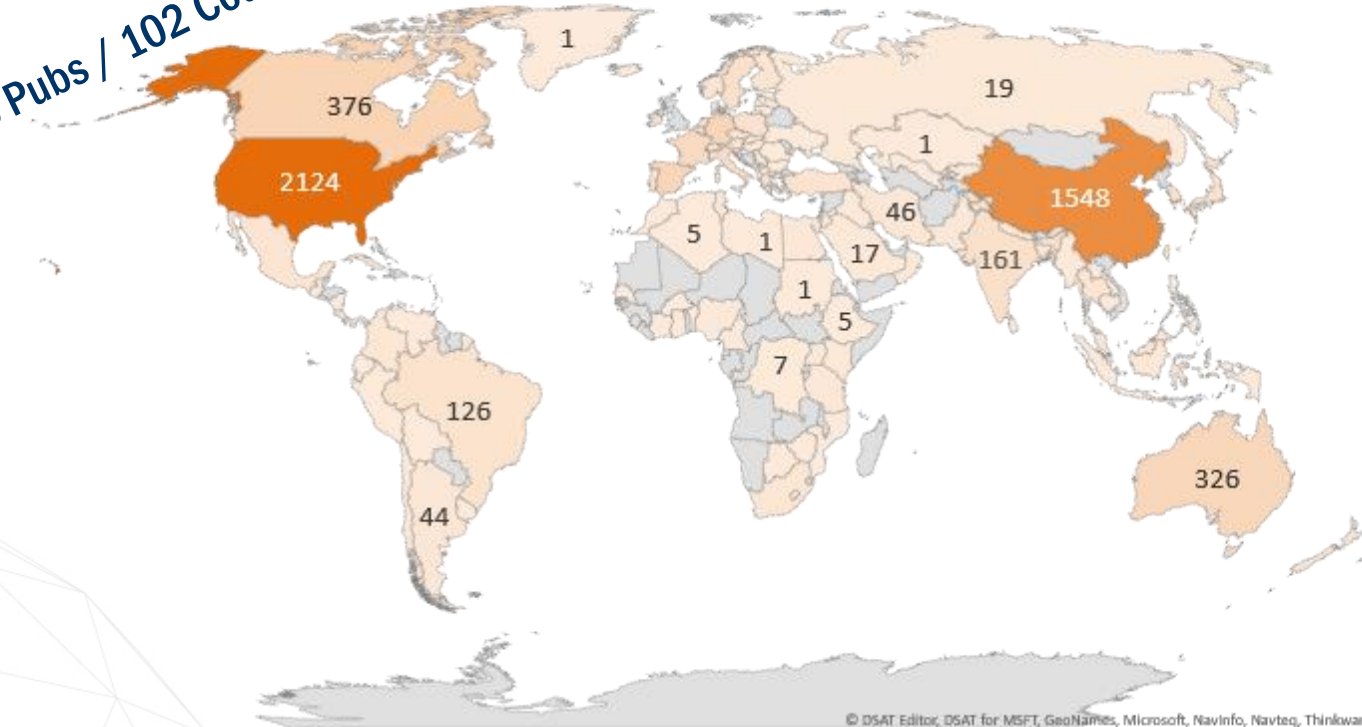


# Number of publications since 1990

UNU-FLORES

7586 Pubs / 102 Countries

Publications  
1 2124



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# Available databases on CW are fragmented

Table 4. Existing databases and WebGIS on Constructed Wetlands

Geographic Scope	Name	Type	Key document	URL
Flanders, Belgium	-	Database	(Rosseau, Vanrolleghem and De Pauw 2004)	-
France	-	Database	(Morvannou, et al. 2015)	-
France	Les données 2016 des STEU de toutes les agglomérations [2016 WWTP data for all agglomerations]	Database	(Ministère de la Transition écologique et solidaire 2017)	<a href="http://assainissement.developpement-durable.gouv.fr/services.php">http://assainissement.developpement-durable.gouv.fr/services.php</a>
Germany	Referenzanlagen (CW good practices)	Database	(Geller and Höner 2003, Fehr, et al. 2003)	-
Global	ClimateScan	WebGIS	(Tipping, et al. n.d.)	<a href="http://www.climatescan.nl">www.climatescan.nl</a>
Global	Global Wetland Technology – References	WebGIS	(Global Wetland Technology 2017)	<a href="http://www.globalwettech.com/en/references.html">http://www.globalwettech.com/en/references.html</a>
Global	Ramsar Sites Information Service	WebGIS	(The Ramsar Convention on Wetlands n.d.)	<a href="https://rsis Ramsar.org/ris-search/?f%5B0%5D=wetlandTypes_en_ss%3AHuman-made%20wetlands&amp;f%5B1%5D=wetlandTypes_en_ss%3A8%3A%20">https://rsis Ramsar.org/ris-search/?f%5B0%5D=wetlandTypes_en_ss%3AHuman-made%20wetlands&amp;f%5B1%5D=wetlandTypes_en_ss%3A8%3A%20</a>
Ireland	Constructed Wetlands of Ireland Database	Database	(Environmental Protection Agency 2018)	<a href="http://www.redbrick.dcu.ie/~space/water/public/http://erc.epa.ie/safer/downloadCheck.jsp?isoID=3115&amp;rID=10553&amp;atID=2283103">http://www.redbrick.dcu.ie/~space/water/public/http://erc.epa.ie/safer/downloadCheck.jsp?isoID=3115&amp;rID=10553&amp;atID=2283103</a>
Sweden	Vattenwebb [Water Web]	WebGIS	(Swedish Meteorological and Hydrological Institute 2012)	<a href="https://vattenwebb.smhi.se/wetlands/">https://vattenwebb.smhi.se/wetlands/</a>
United Kingdom	CWA UK Database	Database	(Cooper 2008)	-
United States & Canada	Livestock Database	Database	(CH2MHILL and Payne Engineering 1997)	<a href="http://www.wetlandsolutionsinc.com/resources/">http://www.wetlandsolutionsinc.com/resources/</a>
United States & Canada	NADB V1	Database	(Knight, et al. 1993)	<a href="http://www.wetlandsolutionsinc.com/resources/">http://www.wetlandsolutionsinc.com/resources/</a>
United States & Canada	NADB V2	Database	(CH2M HILL n.d.)	<a href="http://www.wetlandsolutionsinc.com/resources/">http://www.wetlandsolutionsinc.com/resources/</a>

Kurt Brüggemann (2018) *Analysing data and requirements for the design of a web-accessible database and GIS of Constructed Wetlands* (TUD Hydro-Science and Engineering MSc thesis)



Constructed wetlands features

Data analysis of the collected information

Test version under development – data visualization of non-quality-controlled data

Amount of wastewater treated by constructed wetlands in the current database record.

The map displays the sum of the average inflow rate of the constructed wetland systems, in liters per day. Values are dynamically displayed with the zoom and by selection of country.



CWs Inflow sum (l/d) 5,863,208

Table with 2 columns: Country name and value. Includes entries for JAPAN (32), SPAIN (28), CHINA (16), ITALY (16), POLAND (14), and OTHER (82).

SEARCH IN 29 CATEGORIES



cwetlands.net

CWetlands

Constructed Wetlands Knowledge Platform

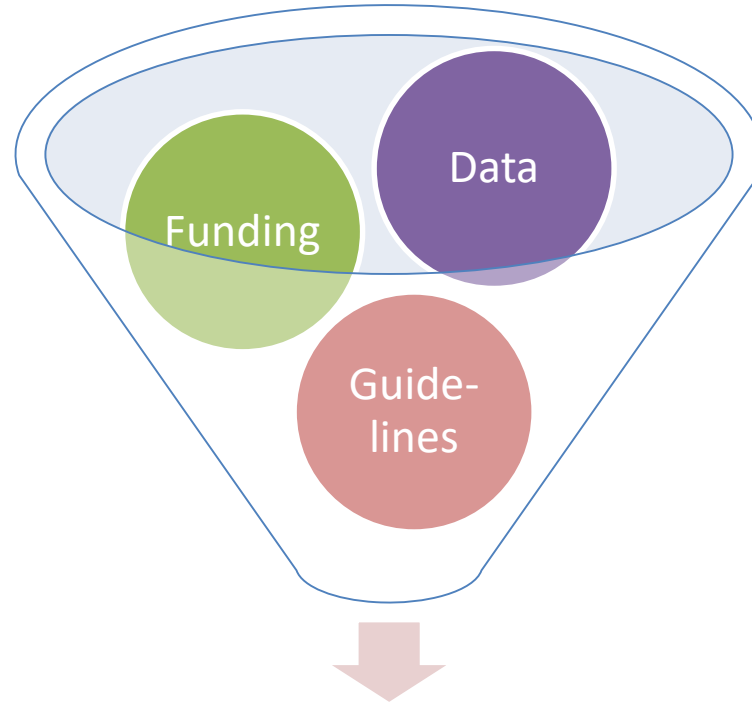
The one-stop platform for information and data sharing on constructed wetlands.



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# Help us get better!



Cwetlands for all



# Thank you for your attention.



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