A photograph of a large, ornate brick clock tower, likely part of a university building, set against a sunset sky with soft orange and pink hues. The tower features a large white clock face with black Roman numerals and a decorative architectural style with crenellated tops and arched windows.

CAES Industry Water-Energy Workshop

# WHY ENERGY-WATER and WHY NOW?

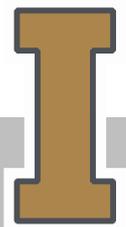
GREG MÖLLER



University of Idaho



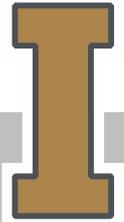
**Nutrient Recovery Summit, White House - March 30, 2016**



Reactive Filtration  
To Remove Nutrients

# SHIREBROOK, UK

July 2016 Commissioning



Reactive Filtration  
To Remove Nutrients

# CITRONELLE, ALABAMA

Lowest Total Phosphorus Discharge Permit in the US: 0.022 mg/L

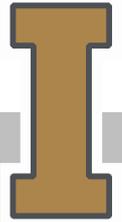
March 2016 Commissioning

0.25 MGD WWTP

Influent Phosphorous = 1.4 mg/L

Effluent Phosphorus = 0.006 mg/L

99.6% Removal

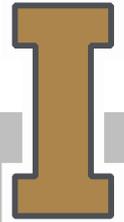


Reactive Filtration  
Catalytic Oxidation  
To Remove Nutrients  
and Destroy Pathogens  
and Destroy Organic Chemicals

**HORWICH, UK**



Horwich UK



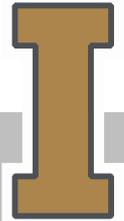
July 2016 Commissioning

# Reactive Filtration

## N-E-W Tech™

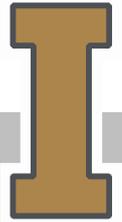
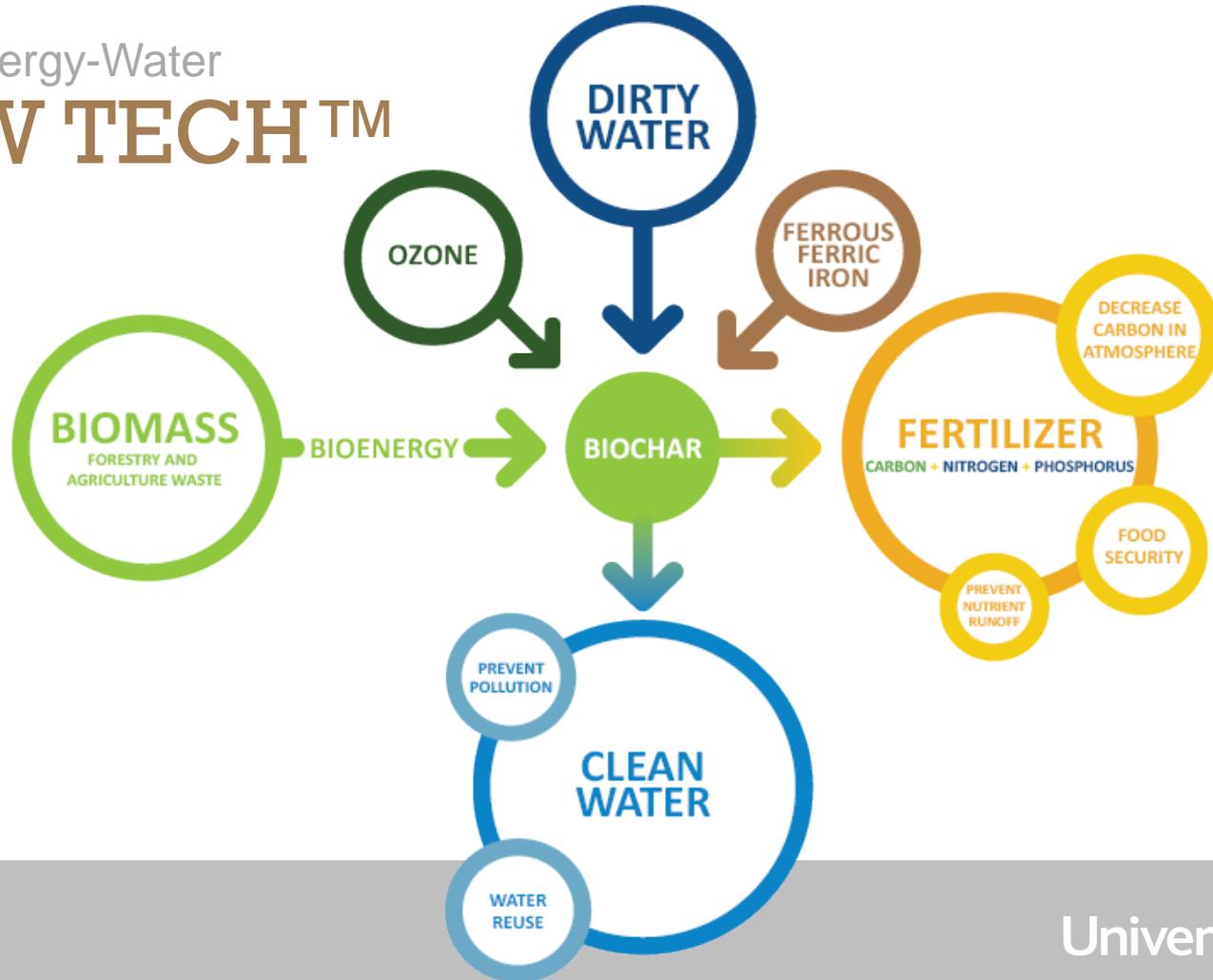
To Remove Nutrients  
and Destroy Pathogens  
and Destroy Organic Chemicals  
and Recover Phosphorus/Nitrogen

# N-E-W TECH™



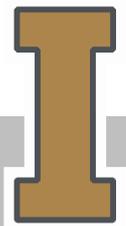
Nutrient-Energy-Water

# N-E-W TECH™



N-E-W Tech™

# BIOCHAR REACTOR



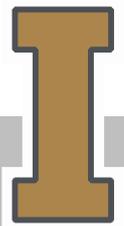
N-E-W Tech™

# N-E-W TERRA™ / MOO TERRA™

## N/P UPCYCLED BIOCHAR FERTILIZER

  
Simplot

  
coolplanet



University of Idaho

N-E-W Tech™  
**TROY, ID**

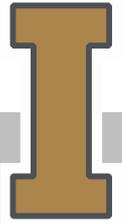
UI Research Pilot Technology

**17 KGD Treated WWTP**

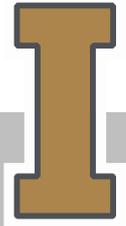
**Influent Phosphorous = 5.2 mg/L**

**Effluent Phosphorus = 0.046 mg/L**

**99.1% Removal**



EVERGLADES  
FOUNDATION  
\$10 MILLION  
GEORGE BARLEY  
CLEAN WATER  
SCIENCE PRIZE



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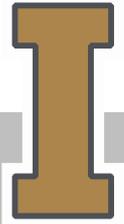
This Landsat 8 image captures the extensive algal bloom in Florida's Lake Okeechobee. NASA Earth Observatory

Everglades Foundation launches \$10 million prize to clean up toxic algae blooms

By Dianne Lugo | Jul. 21, 2016, 1:00 PM

The Vice President of the United States and an EU-UK Water Company CEO are sitting in a pub in Dublin Ireland...

One says to the other...





# WHY ENERGY-WATER and WHY NOW?

