#### World Water Week, Stockholm, 26-31 August 2018



## **Replacement Water Cost of Global Inland Fisheries**

UNIVERSITY OF Hull International **F**isheries **I**nstitute HIFI



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## **Dependence on Inland Fisheries**





<sup>•</sup> Orange outline indicates LIFDC

Dams

Pollution

#### Climate change

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exp

Fish exploitation

Habitat loss

FOR HARMING FLORIDA NON-NATIVE FISH ROUNDUP Sat, April 8, 2017 | 7 a.m. to 3 p.m.



Help native fish by catching invasive species like Mayan cichlids, Oscars, Spotted Tilapia, and more. All fish must arrive at the Gazebo located at the Conservancy of Southwest Florida by 3 p.m. for measurements and weigh in Stay for the cook out and awards!

Target Fish, Awards, and More Info at www.floridainvasives.org/Southwest Hored by the Southwest Florida Cooperative Imasive Species Management Area.

pressures

multiple

Channelization

Irrigation

FAO 2015 Global and regional capture fisheries production (11.47 million tonnes)



Water footprint, land use and energy content of alternative foods Additional water demand (km<sup>3</sup>), land conversion (km<sup>2</sup>), and food production to replace kilojoules from fish (million tonnes)

# Kilojoule replacement



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- Aquaculture- 6 times global production,
- Livestock- 8% of global production,
- Crops- 2% of global production.

## Water demand



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• Beef- 4% of global agricultural water use,

# Land use





- Aquaculture- 24% of global inland water area,
- Beef- 4% of global pasture land.

### Pressure on water resources





### African Great Lakes (1.1 million tonnes)



Water demand

• Beef- 1.2 times regional water use

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#### Land use

- Aquaculture- 51% regional inland water area
- Beef- 14% of regional pasture land

## South- East Asia (2.5 million tonnes)





Water demand

• Beef- 7.6% regional water use,

#### Land use

- Beef- 1.4 times regional pasture land area,
- Aquaculture- 1.5- 3.1 times regional inland water area.

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### The delicate balance



### Recommendations

Recognition of inland fisheries as a major food production sector

Inclusion of inland fisheries in water policy and food security discussions

Cross- sector cooperation between competing water use sectors



# Thanks for listening!

Any questions?

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