

### Hamideh Nouri<sup>1</sup>, Sattar Chavoshi Borujeni<sup>2</sup>, Pamela Nagler<sup>3</sup>, Armando Barreto-Muñoz<sup>4</sup>, Kamel Didan<sup>4</sup>, Arjen Hoekstra<sup>5</sup>

<sup>1</sup> Department of Agronomy, University of Göttingen, Von-Siebold-Strasse 8, 37075, Göttingen, Germany;

<sup>2</sup> Soil Conservation and Watershed Management Research Department,, AREEO, Isfahan 19395-1113, Iran

<sup>3</sup> U.S. Geological Survey, Southwest Biological Science Center, 520 N. Park Avenue, Tucson, AZ 85719, USA

<sup>4</sup> Biosystems Engineering. The University of Arizona, 1177 E. 4th St., Tucson, AZ 85719, USA

<sup>5</sup> Faculty of Engineering Technology, University of Twente, 7500 AE Enschede, the Netherlands

## Study area

Adelaide, Australia.



## Data and methods

# of water inflows and outflows.



# Changes in the water footprint of urban green spaces over time

## Improving citizens' wellbeing in sustainable green cities (e.g. SDG 6 & 11) introduces an uneasy tension between "greening a city" & "water saving".

Graphic designer : Hamed Nour

The mean total water footprint of the Adelaide Parklands was about 7.75 gigaliter per year over 2010-2018 varying from 7.19 gigaliter/year in 2018 to 8.45 gigaliter/year in 2012.









- Don't ignore WF of urban greenery in water budgeting of cities.
- Green spaces heavily rely on blue water resources, even in the wet months of the year.
- "Sponge city" and "Water Sensitive Urban Design – WSUD" help using green water resources efficiently.



**59%** from blue water **41%** from green water

