



## Water Filtration System. Floating University Berlin. 2018.

Floating University Berlin re-envisions an urban water infrastructure that invokes public participation.

*How will life change as our relationship to water transforms and we shift from being consumers of water to stewards of water?*

Floating University Berlin is an experimental offshore university for cities in transformation. It is located in a polluted rainwater collection basin connected to Tempelhofer Feld in Berlin. During Floating University's inaugural year, I helped design, build, and maintain a water filtration system which uses biological filters to filter polluted water on site.

### FLOATING UNIVERSITY

[www.floatinguniversity.org](http://www.floatinguniversity.org)

Erected on a concrete basin built to gather rainwater runoff from Tempelhof Airport (the Nazi's prized airport during WWII) the location of Floating University provides layers of history that contribute to the symbolism of experimental water usage and conservation. Floating University, a collectively-organized school convened by architecture group Raumlabor ([raumlabor.net](http://raumlabor.net)), brings together neighborhood residents and students from 25 universities across Europe and the world to conduct interdisciplinary educational experiments reimagining how we can live together in contemporary urban space. In its inaugural year (2018), over 10,000 people visited and participated. A citizens' referendum won against the construction of high price housing in Tempelhof has frozen all development there, so the mid-century infrastructure of the rainwater basin must stay until the development debate is resolved.

### WATER FILTRATION SYSTEM

[www.floatinguniversity.org/water](http://www.floatinguniversity.org/water)

At Floating University, experimental water systems are constructed at every possible avenue. Water cascades down the laboratory stairs and spirals through a series of biological filters. Then, the filtered water journeys to the University kitchen, bathroom, auditorium, and greenhouse.

The filters are made out of plants, mushrooms, biofilms, sand, activated carbon, molluscs, and bacteria. They are located in a 'spiral of bathtubs', a 'membrane filter', and a 'moving bed reactor'.

The 'spiral of bathtubs' consists of 9 bathtubs suspended from the ceiling of the Laboratory Tower. A 'membrane filter' turns rainwater into drinking water, and provides water for washing dishes in the Spülküche. A 'moving bed reactor' filters our dirty dishwashing water into water that is clean enough to irrigate our greenhouse, which grows 35 varieties of tomatoes from across Europe.

