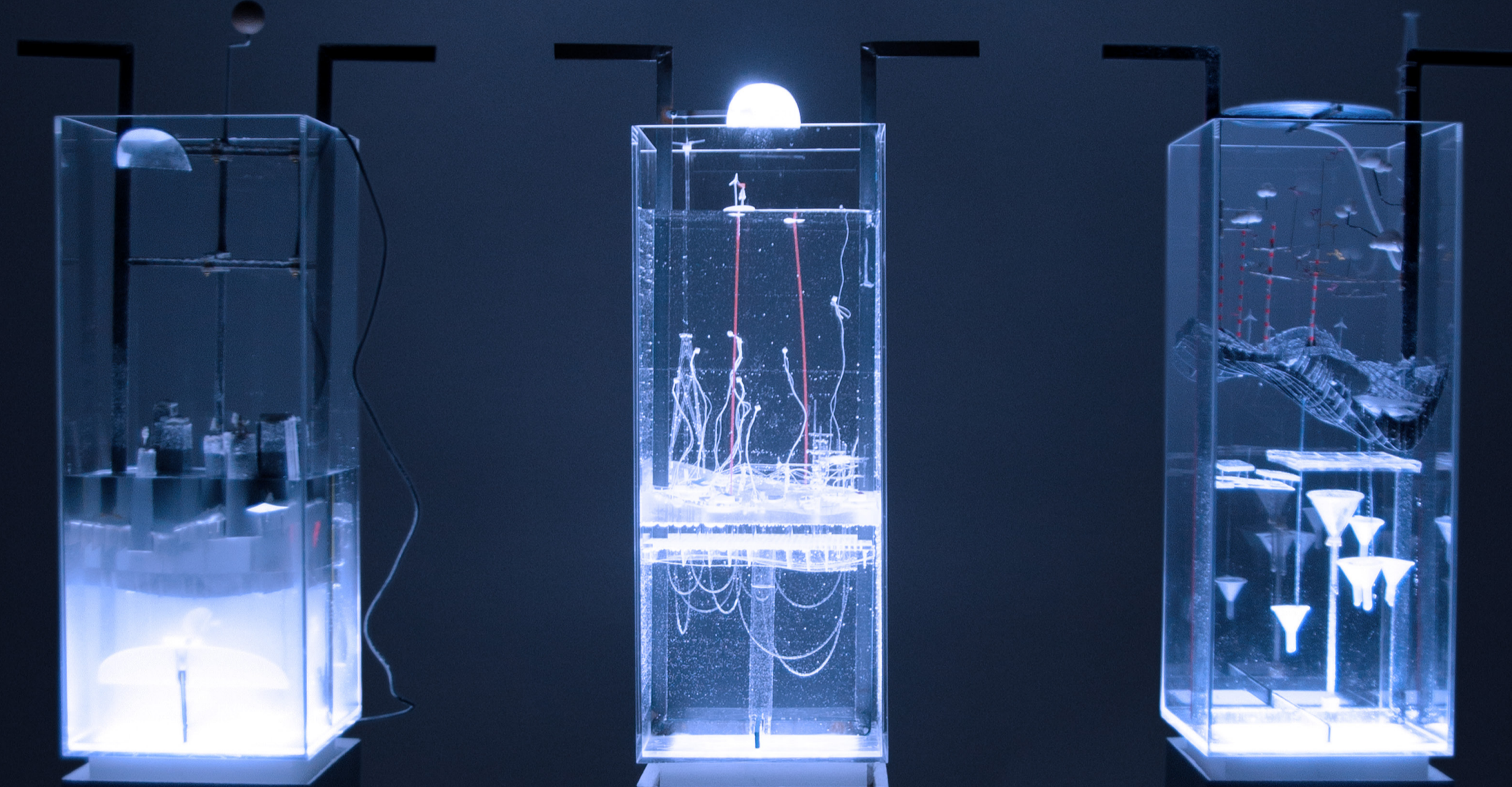


BUFFER LANDSCAPES 2060

A RECONSIDERED RESILIENT LANDSCAPE OF HYDROLOGY AND ENERGY
LEARNING FROM WATER STORAGE LANDSCAPES



TOPIC

Climate change and resulting weather conditions pose the biggest threat to our towns and cities in the future. Floods, droughts, melting glaciers and rising temperatures presage danger to many of our urban settlements.

Can rivers, lakes and glaciers be augmented on a larger scale to enable our cities to continue benefiting from freshwater and energy supplies, as well as be free from floods and droughts? Our cities will require a new level of hydrological and energy resilience in the future.

Artificial rivers, lakes and reservoirs, as well as ice in glaciers, help to buffer severe weather and are used today to provide a more resilient landscape for us to live and work in, but could these techniques be used differently or in other locations? Historically, altering the landscape with large bodies of water has displaced societies, but can these changes be seen as new opportunities for habitation? What could this look like in 2060?

OBJECTIVE

Opportunities resulting from climate change are often overlooked as these changes are seen as problematic. However, it is my intention to explore how severe weather conditions can be taken advantage of to provide new opportunities for inhabiting these resourceful landscapes in the future, thus helping our larger cities to prosper. The various locations on the trip will provide material from which to evaluate some of the most active, alternative and at risk methods of living with water and energy as resources. It is my intention for this research to contribute to existing environmental and architectural research, given the recent impact of flooding in the UK.

Image: SUPER-RIVERS: River, Lake, Mountain: Three microcosmic water columns, exploring habitation opportunities in a new hydro/energy landscape in the Swiss Alps, 2060.

LOCATION

KAMERIK POLDER – LADAKH - SÃO PAULO – LOS ANGELES – NYC

The proposed trip will take the following route:

1. Kamerik Polder, Netherlands - Dutch solution to floods dating back millennia: live with water, don't fight it.
2. Ladakh, India - will explore the low-tech methods of 'glacier grafting' in the Himalayan communities and surrounding landscapes which utilise simple techniques to seasonally preserve water for agricultural purposes.
3. São Paulo, Brazil - water-richest country in the world, it has focused on hydrological infrastructures for the past 70 years. I will explore opportunities in infrastructure and habitation already in place.
4. Los Angeles, USA – to evaluate infrastructural water supply on the most pressured city for water
5. NYC, USA – flood planning in NYC for severe weather events on the largest scale.

METHODOLOGY

PHOTOGRAPHIC ARCHIVE, SKETCHBOOK, MODELS

I will create a photographic archive documenting towns and cities in relation to exciting alternative techniques for water storage, energy and water buffers, and downstream flood mitigation around the world. I will synthesise text and photographs into a sketchbook exploring new constructions of architecture and systems from the gathered research. I intend to continue research and will make an architectural model for each of the five sites.

PROPOSED ROUTE MAP



DUTCH LIVING WITH FLOODS
KAMERIK POLDER, NETHERLANDS



ARTIFICIAL GLACIER GRAFTING
LADAKH, INDIA



RESERVOIRS CITIES
SÃO PAULO RESERVOIRS, BRAZIL



FRESHWATER SUPPLY LINES
LOS ANGELES, USA



NYC FLOOD PROTECTION PLANNING
NYC, USA