

Water, Water Everywhere... Clean Water... Here!

Global Networks of Water Museums

's Hertgonbosch, NL

14 May 2018

Green Infrastructure

(Far more than greenspace and habitat corridors!)

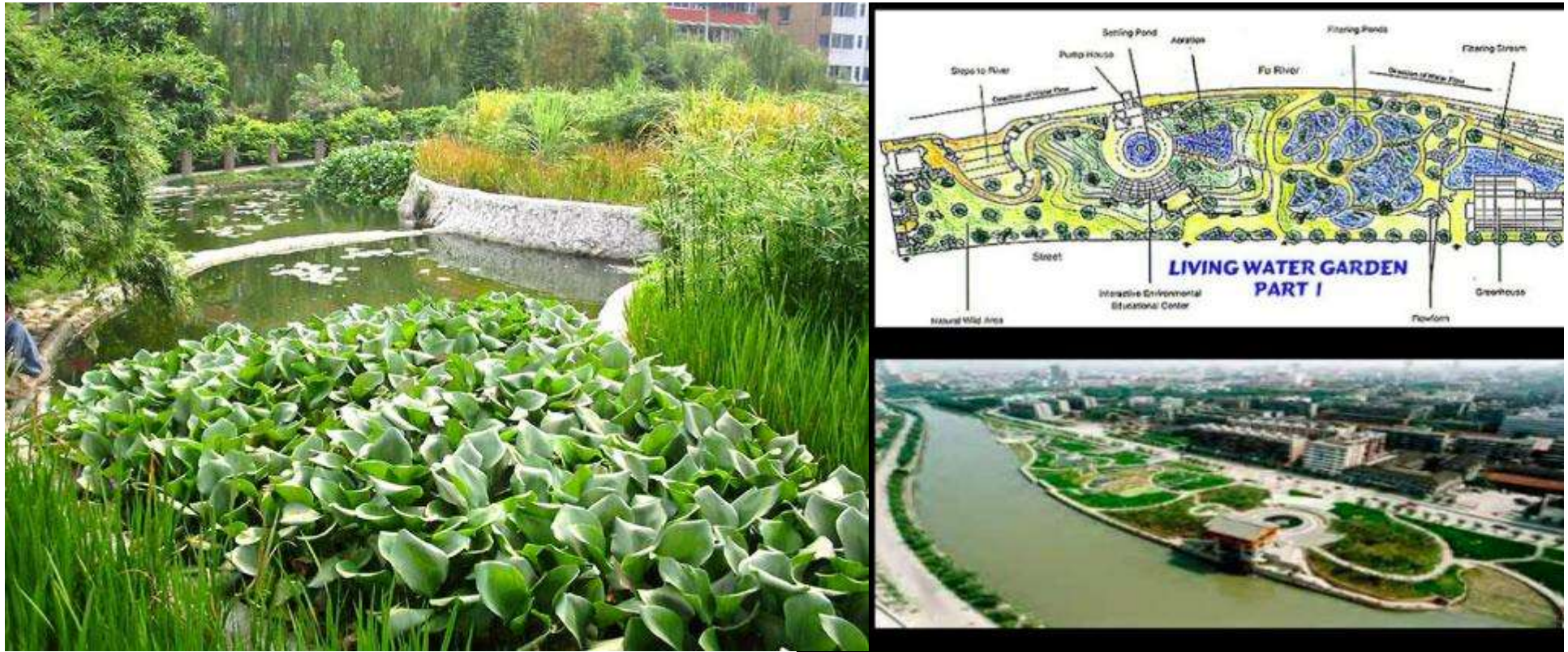
1. Water Treatment Plants
2. Water Reclamation Systems
3. Stormwater Retention Ponds
4. Collecting/Cleaning Roof Runoff
5. Flood Control Basins/Dams
6. Urban Forests
7. Urban Meadow/Wetland/Marsh Restoration
8. Creating Urban Habitat
9. Industrial Use
10. Agro-forestry

1. Water Treatment Plants



Viet Ngo, Lemna Wastewater Treatment Center,
1990 Devil's Lake, US (world's second largest (58
acres) natural filtration system using duckweed)

1. Water Treatment Plants



Betsy Damon, *The Living Water Garden*,
1998, Chengdu, China

1. Water Treatment Plants



Patricia Johanson, Ellis Creek Water
Recycling Facility, 2000-2008/present
Petaluma, US

1. Emscher River Mini-Water Treatment Plant



Marjetica Potrč/Ooze,
*Between the Waters:
The Emscher
Community Garden*
2010/2013

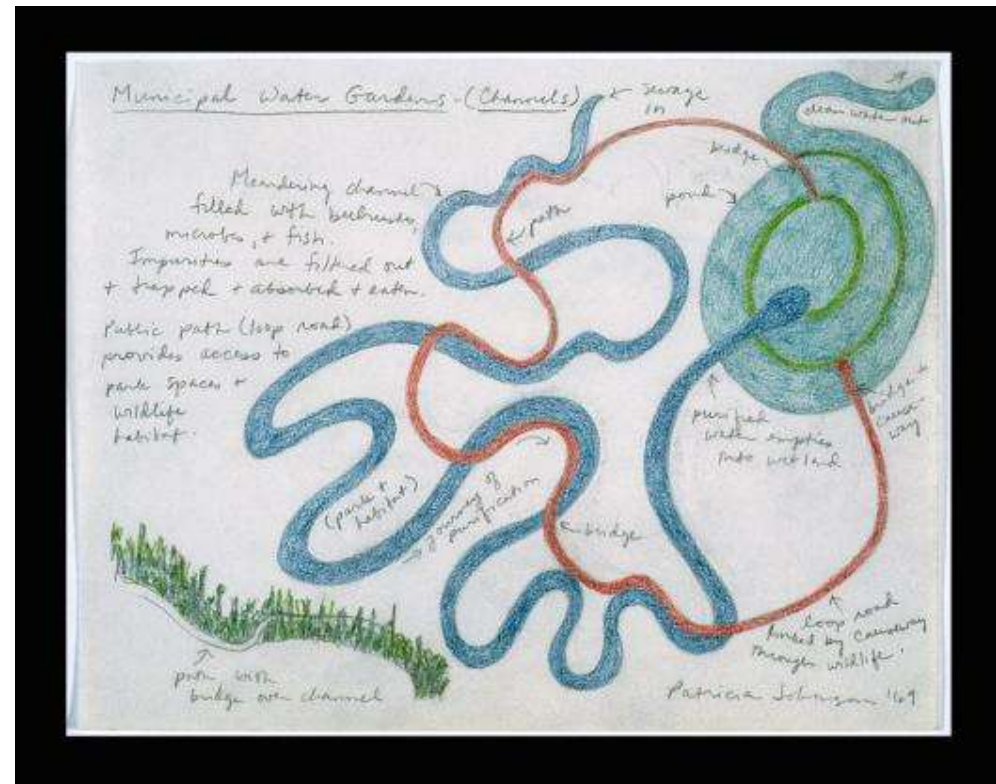
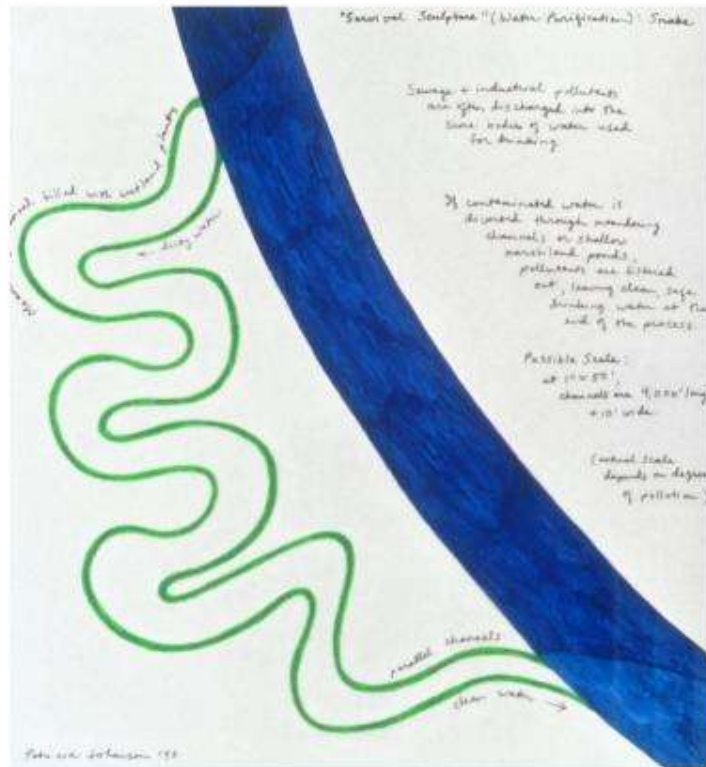


2. Water Reclamation Systems



Hans Haacke,
*Rhinewater
Purification
Plant, 1972*
Museum
Haus Lange,
Krefeld, DE

2. Water Reclamation Systems



Patricia Johanson
Survival Sculpture (Water Purification) Snake, 1990
Municipal Water Gardens (Channels), 1969

2. Water Reclamation Systems



Jackie Brookner
The Gift of Water,
2001, Grossenhain,
DE

Marjetica Potrč/
*Ooze, King's
Cross Pond*
2015-2017
London, UK



2. Water Reclamation Systems



Studio Orta treated water from: the Grand Canal for Fondazione Bevilacqua La Mesa in Venezia (2005), Emmersingel Canal for Boijmans van Beunigan (2006) and from Huangpo River for Shanghai Art Biennale (2012).

2. Water Reclamation Systems



Betsy Damon, “Chengdu Case Pavilion,”
Shanghai World Expo, 2010

2. Water Reclamation Systems



Marjetica Potrč/OOZE
Source de Friche, 2012
Brussels, BE

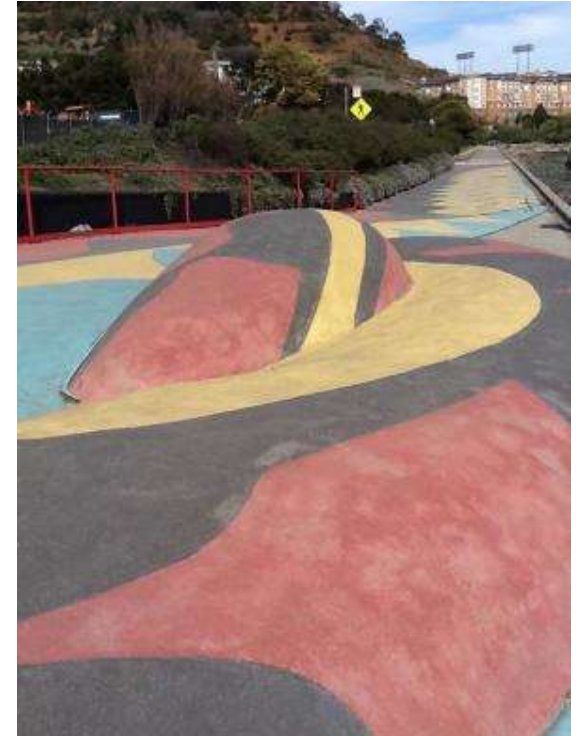
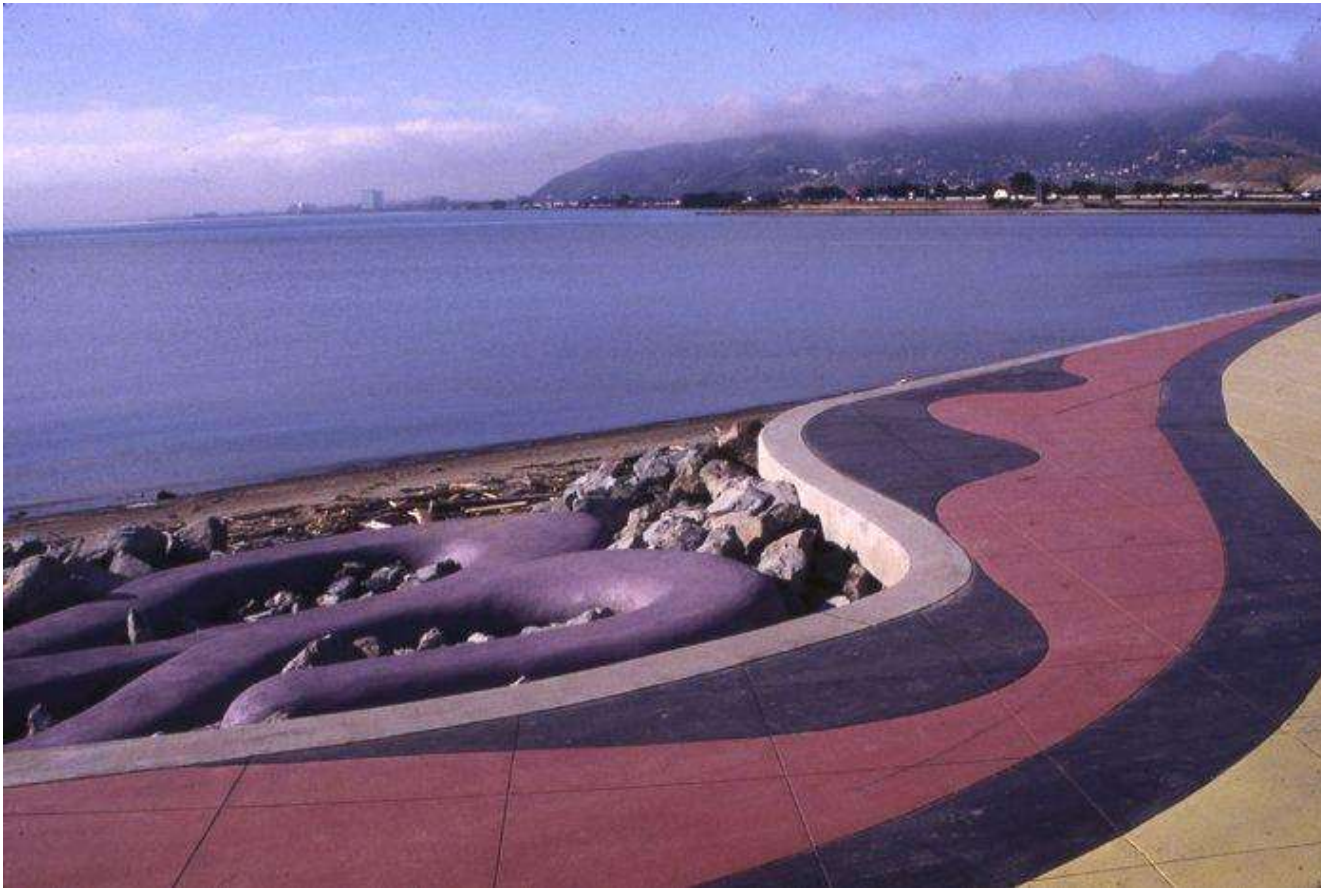


2. Water Reclamation Systems



Betsy Damon, "Living Waters of Larimar: A Fresh Infrastructure," 2013, Pittsburgh, PA
This map shows 303,000 cubic meters rain.

3. Stormwater Retention Ponds



Patricia Johanson, *Endangered Garden*, 1987-1996, San Francisco, US. Pump-station stores stormwater and sewage, preventing them from entering the bay. Also provides tidal habitat and trails.

3. Stormwater Retention Ponds

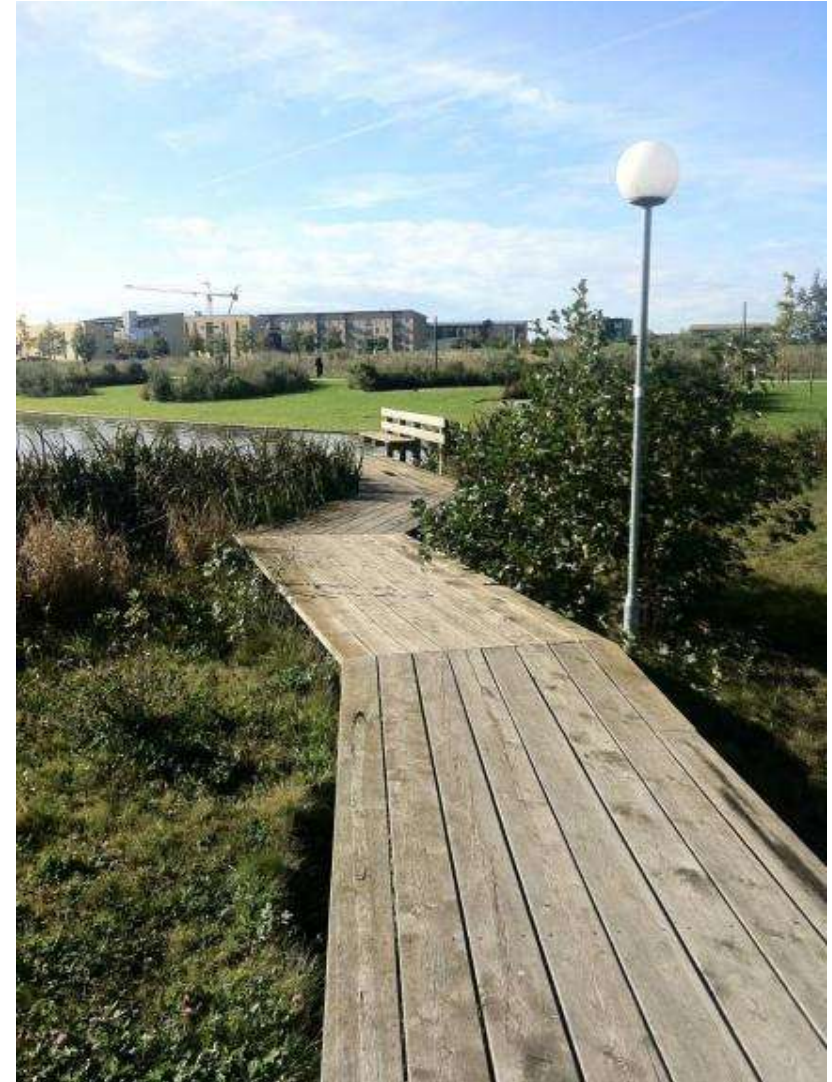


Patricia Johanson, *Fair Park Lagoon*, 1981-1986, Dallas
Healthy urban lagoon provides stormwater retention,
animal habitat and human trails.

3. Stormwater Retention Ponds



Nils Norman and Ib Asger Olsen
Clean stormwater runoff and Add public space
Trekroner Bridge and Islands
2004-2006/present,
Trekroner, DK



4. Collecting/Cleaning Roof Runoff



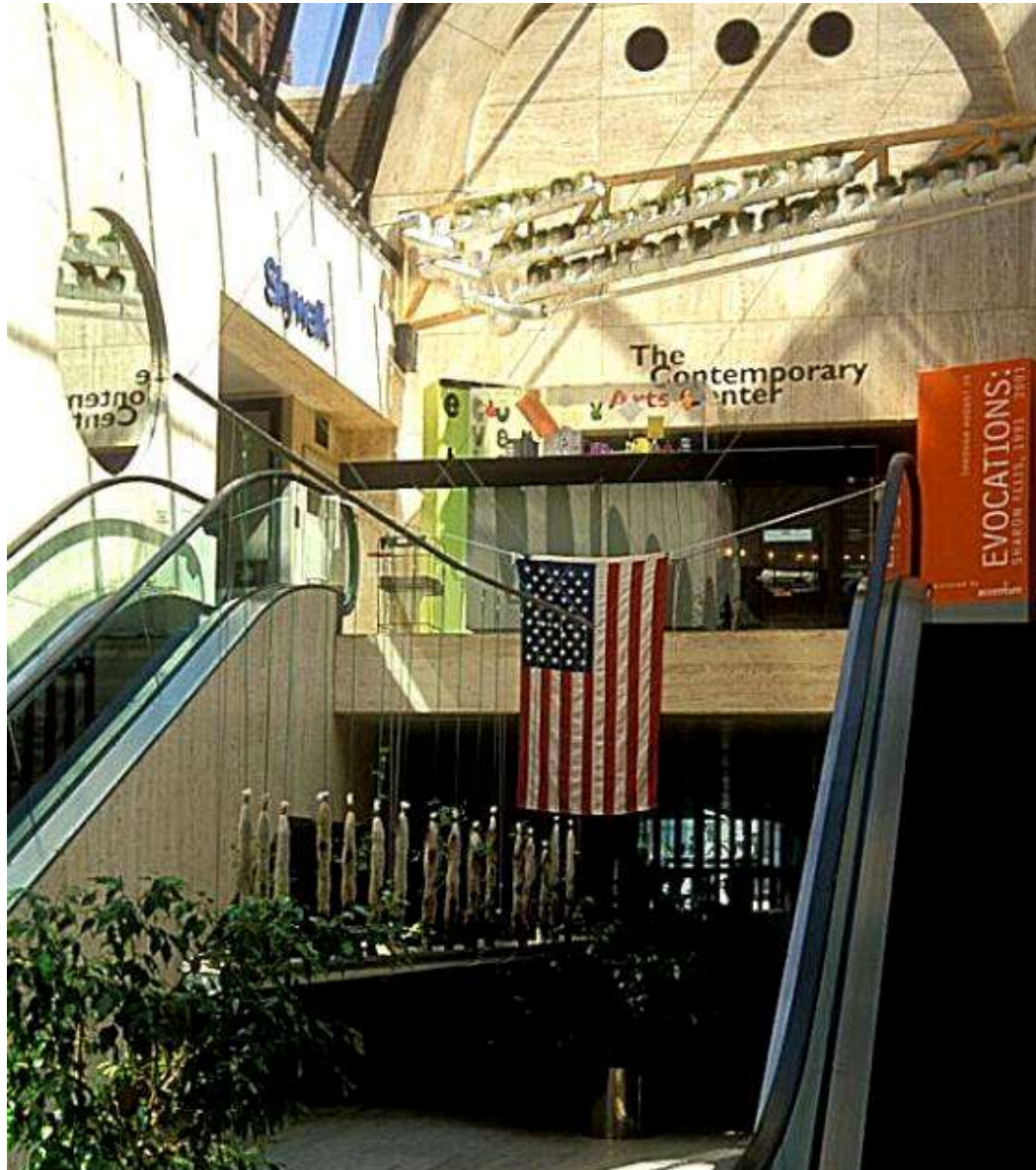
Buster Simpson, *Growing Vine Street*, 1999
-present, Seattle, US

4. Collecting/Cleaning Roof Runoff



Friedensreich Hundertwasser, Thermal Village, 1993-97 Blumau, AU

4. Collecting/Cleaning HVAC Runoff



Buster Simpson
HVAC system,
2002, Shopping
Mall, Cincinnati, US

Laurie Lundquist
Wicking System
for indoor plants,
2002, Shopping
Mall, Cincinnati, US

4. Harvesting/Purifying Rainwater Runoff



Vera Thaens, 2017-2018
Sittard, NL

Using plants, this portable water treatment system purifies water to a level unavailable industrial wastewater treatment plants, since it removes hormones.

5. Flood Control Basins/ Berms and Bio-Swails



Daniel McCormick,
Thicket, 2012, Adobe Creek, CA
100 community volunteers
built this much-needed berm.



6. Urban Forests



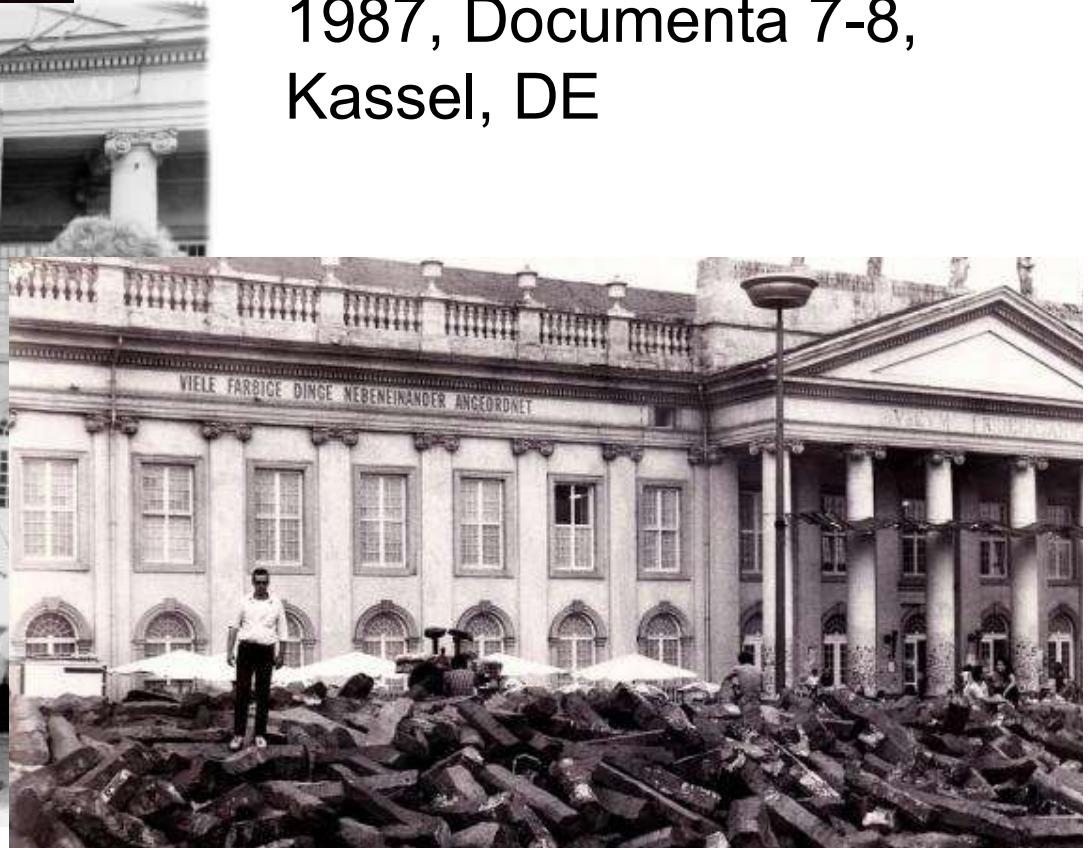
Alan Sonfist, *Time Landscape*, 1965-1978/present

6. Urban Forests



Joseph Beuys, *Forest Action*, 1971, affirm the need for progressive urban ecology.

7000 Eichen, 1982-1987, Documenta 7-8, Kassel, DE



6. Urban Forests



Dominique Perrault
Bibliothèque Nationale
de France (Fôret
Jardin), 1989-1996

6. Urban (pocket) Forests



In 1965, Alan Sonfist proposes NYC's mini-landscapes. Today, every city has a "greenstreets" program! (NYC, 2002)

6. Urban Forests



herman de vries,
bomenmuseum (tree
museum, 1996-2011/present,
Wateringse Veld, NL. de vries
proposed lining each of 400
streets of a newly built town
with a different tree,
effectively creating an
urban arboretum.



7. Urban Meadows/Wetland/Marsh Restoration



Harrison Studio, *Future Garden-Part I*, 1996-1998, Kunst-und Ausstellungshalle der Bundesrepublik Deutschland, Bonn, DE

Future Garden-Part II: A Mother Meadow for the Parks of Bonn. 1998-

8. Creating Urban Habitat



Lynne Hull, “Dragon Tail,” (both 2002), Powell-Crosley Lake, Rowe Woods, Milford (private) and Todd Pond, Swaim Park, Montgomery (public park)



9. Industrial Re-Use



Robert Smithson
Broken Circle/Spiral Hill
1971, Emmen, NL
As part of the Stedelijk Museum's «Buiten de Perken, » Smithson convinced a sand quarry owner to let him construct this earthwork.



9. Industrial Re-Use

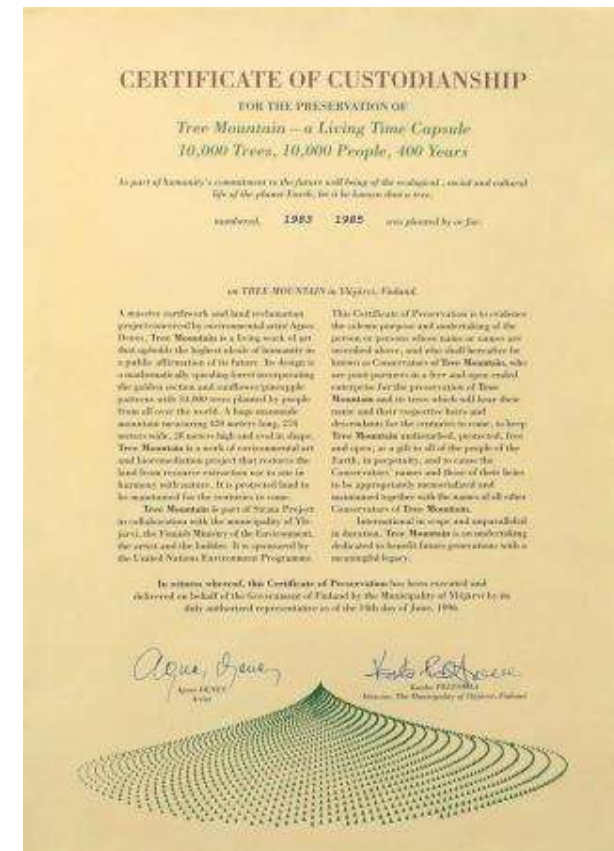
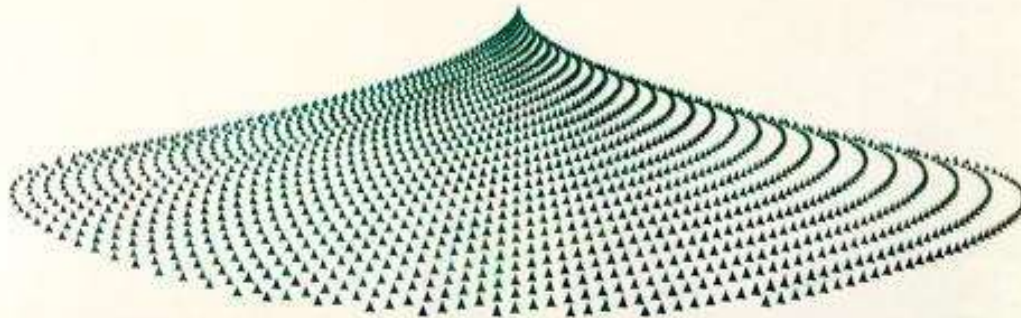


Jackie Brookner
Veden Taika (The Magic of Water), 2007-2009/present
Salo, FI. Working with scientists and local art students, Brookner transformed the former Salo Municipal Sewage Plant into the Halikonlahti Bird Pools.

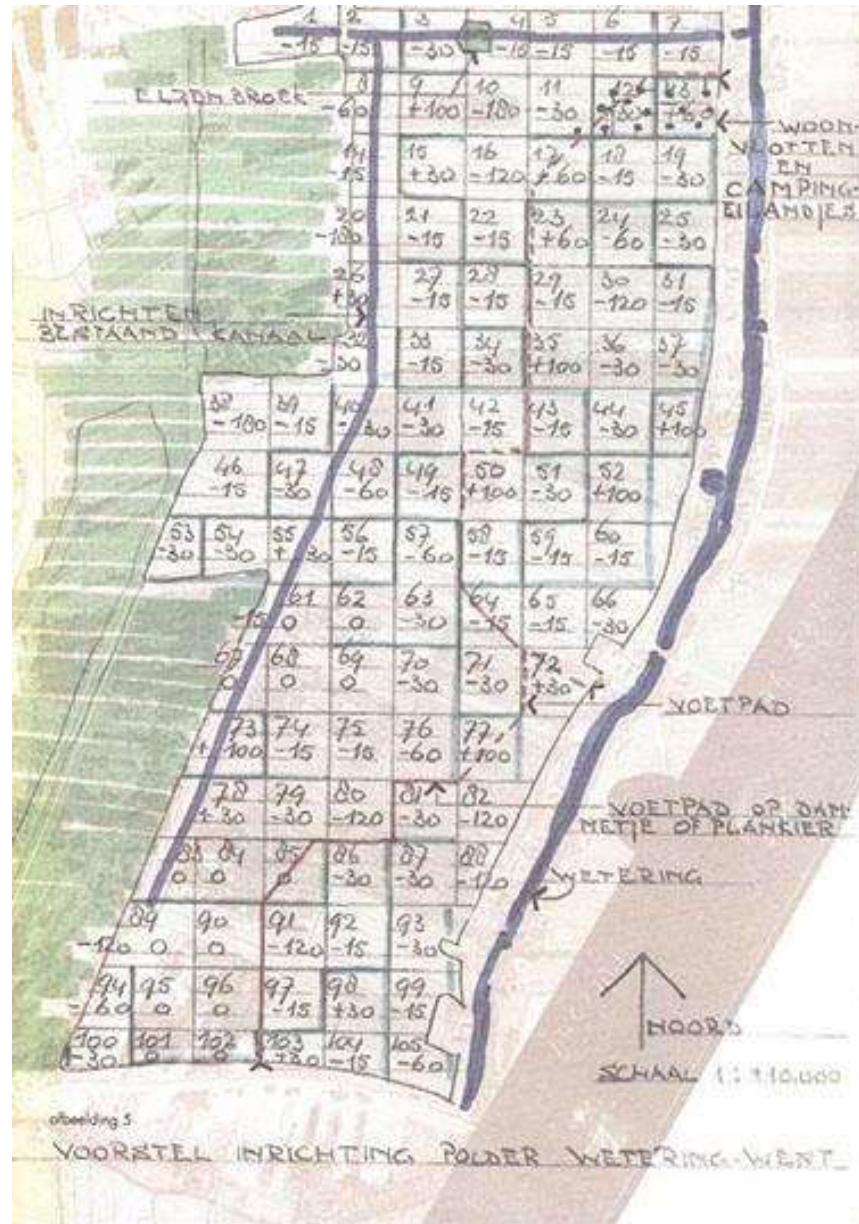


9. Industrial Re-Use

Agnes Denes
Tree Mountain
1992/1996-present
Ylöjärvi, FI



9. Industrial Re-Use



herman de vries,
Watergoed
 Kop van Overijssel, NL
 (source), 1998-2014/present
 Since the 1990s, the Dutch government has been transforming farm lands into wetlands, to slow sinking.

9. Industrial Re-Use

Harrison Studio, *The Krimpenerwaard*, 2000-2007. For this project, the Harrisons recommend that the Dutch water authority cease pumping out the water, naturally returning it to its wetland state, enabling the economic development for fishing, cranberries, tourism, and orchards.



10. Agro-Forestry



Above: Debra Solomon/
Urbaniahoeve
Demo Tuin Nord
2011-present,
Amsterdam, NL
In less than five years,
this fire station parking
lot became an agro-
forestry model farm.
Below: *Foodscape*
Schilderswijk, 2009-
present, Den Haag, NL

DANK U WEL!