

Methodological

An efficient networked Aquaponics garden  
to foster sustainable communities.

Affordable | Modular | Scalable

# Applying Ecological Design Principles

Sim Van der Ryn and Stuart Cowen's

## Five Principles of Ecological Design

1. Solutions grow from place
2. Ecological Accounting Informs Design
3. Design with Nature
4. Everyone is a Designer
5. Make Nature Visible

Engaging in processes that regenerate rather than deplete, we become more alive.

# Interpreting Successful Methods



# Edible Estates - Fritz Haeg

image source: <http://www.fritzhaeg.com/garden/initiatives/edibleestates/istanbul.html>



From: Michael Foti

Sent: Friday, December 09, 2005 7:44 PM

Subject: Interested in the project

Greetings,

I have just read about your Edible Estates project on the TreeHugger website and think I might be a good candidate for you to consider. Our home is about as typical a suburban mid-fifties tract home as you can get. We're located in the master of all master planned communities, Lakewood, CA. Our lawn is flat, gets plenty of sunlight, and is totally pesticide free. It's also one of the brownest on the street, as my wife refuses to waste water on it. Dimensions are about 20' x 38', so there's lots of space. We're semi-experienced, but enthusiastic gardeners. We have an established vegetable garden in our backyard already.

If you're interested, I can send photos of our house/yard.

Regards,

Michael & Jennifer

## Approach

Converting Lawns/public spaces into Edible Crop gardens.  
Crowd Sourced for Lawns for recognition

## Medium

Land and plants

## Planning

Acquiring sites, plant selection and layout

## Result

Becomes a 'show' and an exhibit.

Creates buzz which generates interest



# Window Farms

image source: <http://www.windowfarms.org>



## Approach

Converting Windows into Hydroponic gardens

## Medium

recycled materials, nutrients, pumps

## Planning

Make it yourself or purchase pre-made. Schematics, how-tos, community forums .

## Result

Community of window farmers is growing across the country



# Farm Fountain

image source: [http://farmfountain.com/gallery/pages/urban\\_garden2.html](http://farmfountain.com/gallery/pages/urban_garden2.html)  
[http://farmfountain.com/gallery/pages/urban\\_garden16.html](http://farmfountain.com/gallery/pages/urban_garden16.html)



## Approach

Using Urban space for garden as installation

## Medium

plants, fish, recycled materials, bacteria, lights

## Planning

plants, fish, recycled materials, bacteria, lights

## Result

exhibition installation, diy system,

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## Approach

Converting public spaces/urban spaces into edible accessible crop gardens.

## Medium

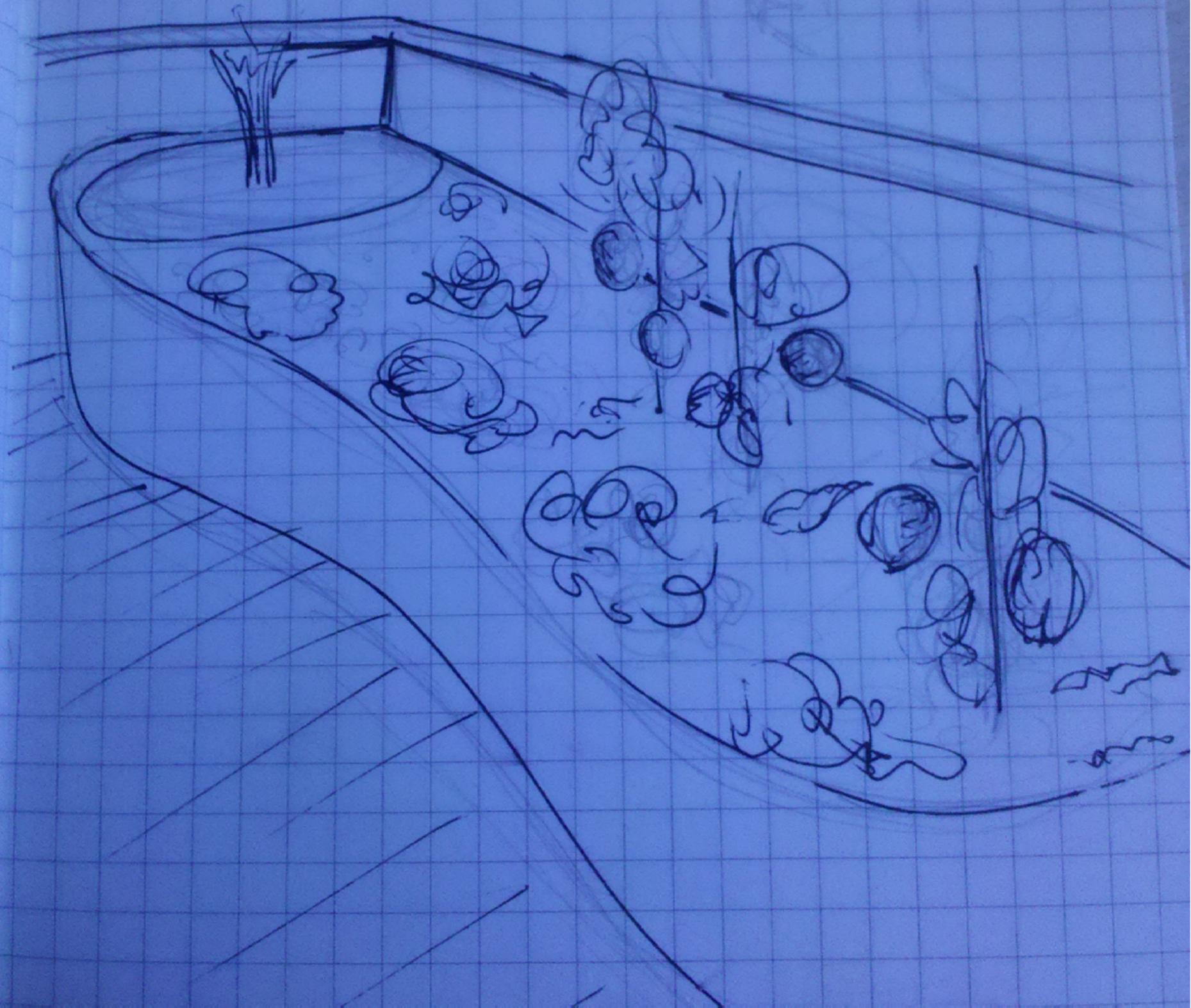
plants, fish, recycled materials, bacteria, lights, furniture

## Planning

Acquiring sites, plant selection & layout, interaction & automation, visitor & gardener experience design

## Result

The space becomes aesthetically pleasing to the public the food becomes a source of income or savings



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Usable | Aesthetic

Thanks