

Spółeczny aspekt adaptacji miast do zmian klimatu. Oddolne inicjatywy implementacji rozwiązań opartych o naturę w celu adaptacji miast do zmian klimatu przez lokalne społeczności.

Wykład 6 - NBS



<https://www.iied.org/community-solutions-for-nature-based-resilient-future-beyond-covid-19>



Compost
Fertilizante
ENVASE PROTECTOR
BIOCICLO S.A.
ESTAR LA ESPERANZA





FLOODS AFFECT EVERYTHING

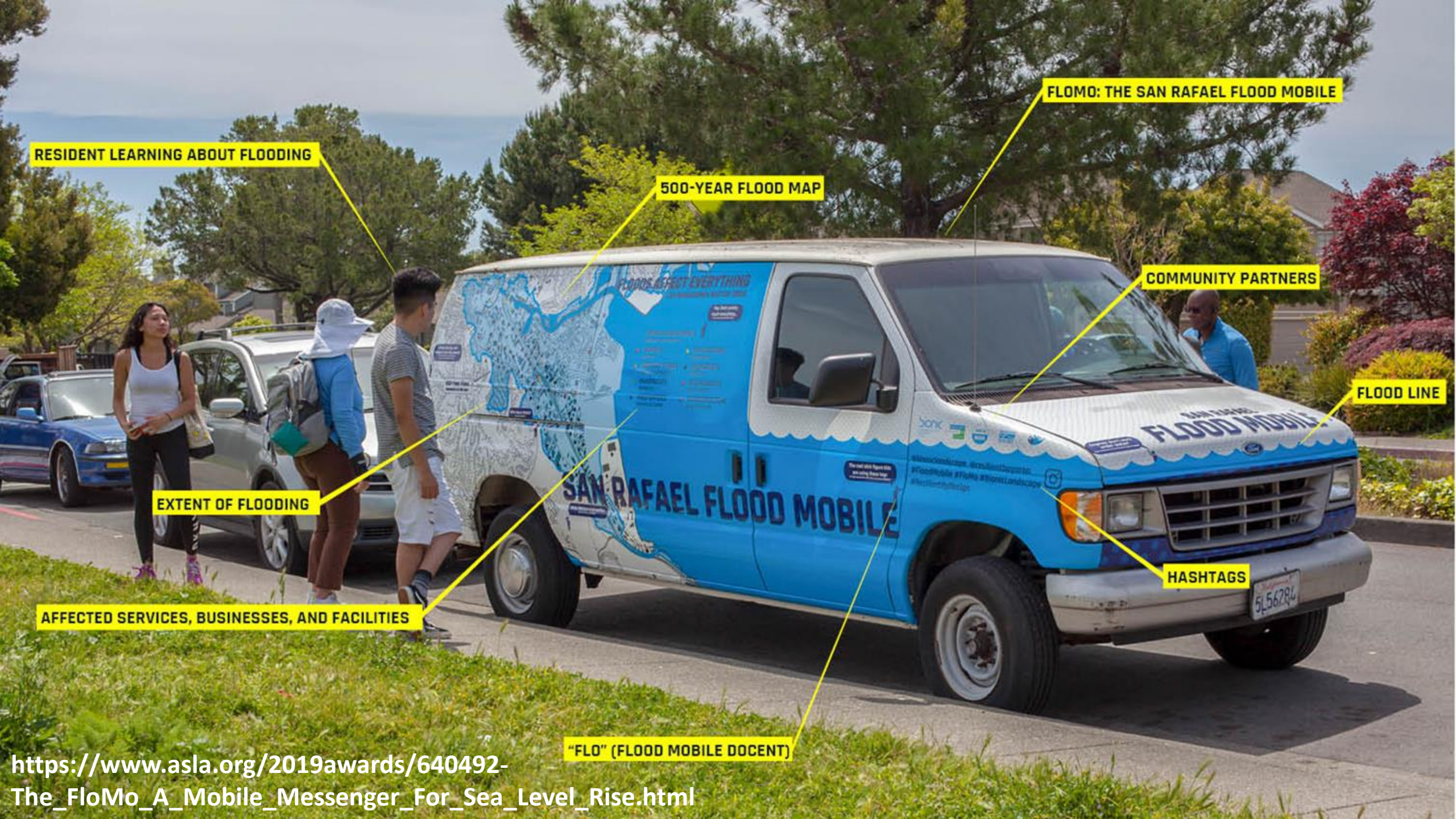
LAS INUNDACIONES AFECTAN TODO

Yes, that's pretty much everything...

A flood this big could happen in the rainy season!
Una inundación así de grande podría ocurrir en la temporada de lluvias

500-Year Flood
Inundación de 500 años

- HOMES & APARTMENTS (residential buildings)
- SCHOOLS (schools)
- GROCERY STORES (grocery stores)
- PHARMACIES (pharmacies)
- POST OFFICES (post offices)
- GAS STATIONS (gas stations)
- BUSINESSES (businesses)
- THEATRE (theatre)



FLOMO: THE SAN RAFAEL FLOOD MOBILE

RESIDENT LEARNING ABOUT FLOODING

500-YEAR FLOOD MAP

COMMUNITY PARTNERS

FLOOD LINE

EXTENT OF FLOODING

HASHTAGS

AFFECTED SERVICES, BUSINESSES, AND FACILITIES

"FLO" (FLOOD MOBILE DOCENT)

https://www.asla.org/2019awards/640492-The_FloMo_A_Mobile_Messenger_For_Sea_Level_Rise.html



COMMUNITIES AFFECTED BY FLOODING

CONSEQUENCES OF FLOODING

CAUSES OF FLOODING

CARBON OFFSET COMMITMENT

CUSTOM LICENSE PLATE

CARBON OFFSET COMMITMENT

LASER LEVEL

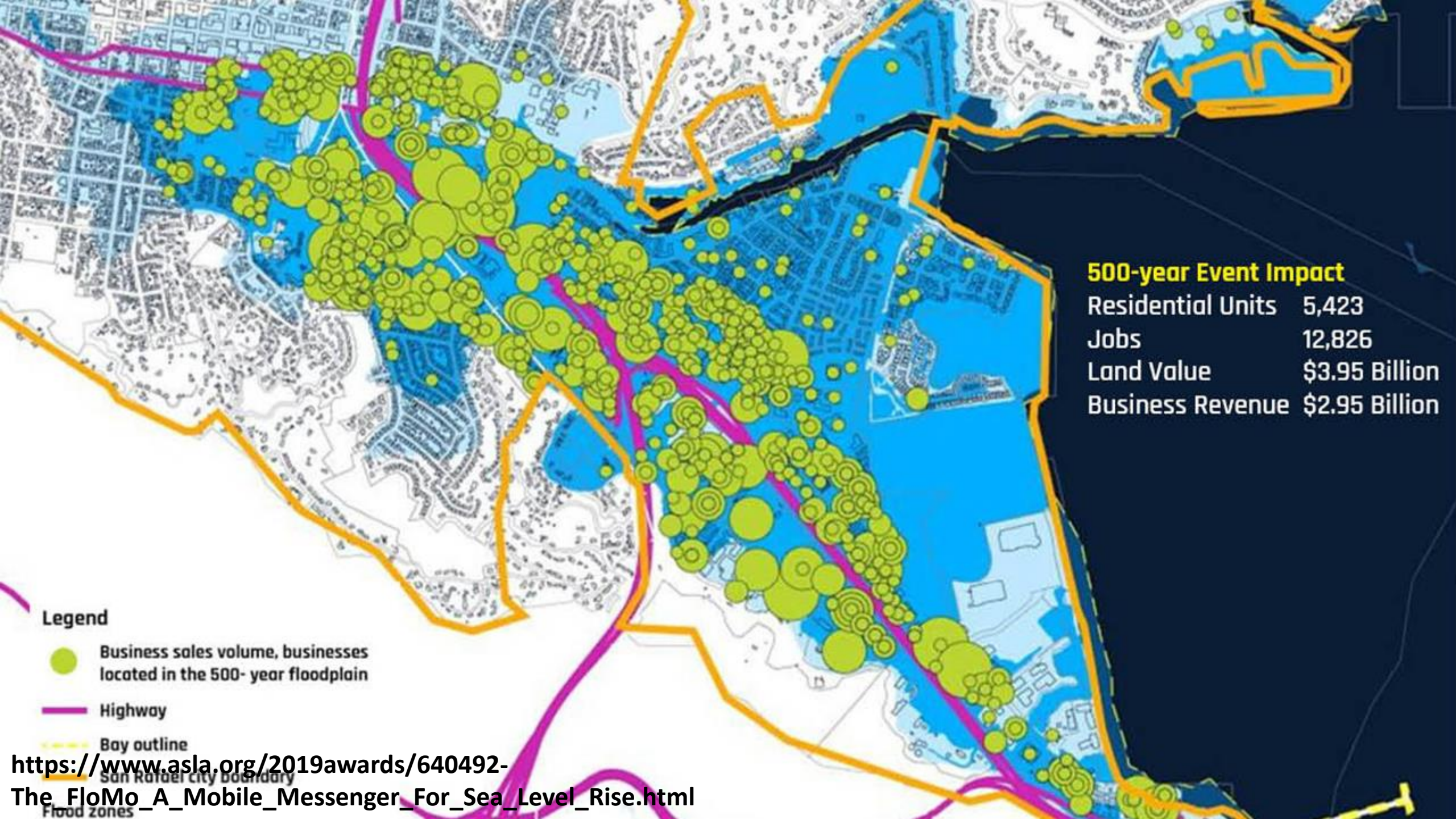
FLOOD LEVEL MEASURING STICK

COMMUNITY MEMBERS

DD KIT



https://www.asla.org/2019awards/640492-The_FloMo_A_Mobile_Messenger_For_Sea_Level_Rise.html



https://www.asla.org/2019awards/640492-The_FloMo_A_Mobile_Messenger_For_Sea_Level_Rise.html

COST BURDENED
RENTER
71%



PERCENT WORK LESS
THAN 10 MILES
FROM HOME
50.8%

IMMIGRATED IN
LAST 10 YEARS
36%



PREDOMINANT
RACE / ETHNICITY
HISPANIC



MEDIAN HOUSEHOLD
INCOME
\$43,448

LIVING BELOW
POVERTY LINE
**2,920
FAMILIES**



FOREIGN BORN
60%

PERCENT WORK
IN SAN RAFAEL

"FLO"



POTUS...even stick figures know climate change is real!
POTUS ... incluso las figuras de palo saben que el cambio climático es real!

Engines don't work under water!
¡Los motores no funcionan bajo el agua!

I live on a hill, why do I care?!
Vivo en una colina, ¿por qué me importa?

My car!
¡Mi auto!

Sorry boss, still stuck at home...
Lo siento jefe, todavía estoy atrapado en casa

No roads, no pizza delivery
Sin caminos, sin entrega de pizza

Wow, this is a lot of traffic!
¡Wow, esta es mucha tráfico!

The cool stick figure kids are using these tags
La figura genial de stick kids usa estas etiquetas

Wow, this is a lot of traffic!
¡Wow, esta es mucha tráfico!





Native Butterfly Meadow

A clean, planted edge borders this native meadow—a pollinator-friendly option for every neighborhood.

COST	PEOPLE
\$2,500 to \$5,500	Volunteer
UPKEEP	EXPERIENCE
Medium	Beginner
STORMWATER	SUN/SHADE
Good	Sun, Part Shade



3 for 1 Groundcover

Improve soil quality on your bald lot with this suite of low cost and low maintenance groundcovers.

COST	PEOPLE
\$50 to \$1,000	Volunteer
UPKEEP	EXPERIENCE
High	Beginner
STORMWATER	SUN/SHADE
Good	Sun, Part Shade, Shade



LOCAL EXAMPLE

Land Trust

A Policy Tool for Open Space

A Land Trust is a model for ownership that can be used to preserve vacant land as part of an Open Space Network.



Friendly Fence

Rain garden and living fence provide a soft way to split a lot between neighbors while managing roof runoff.

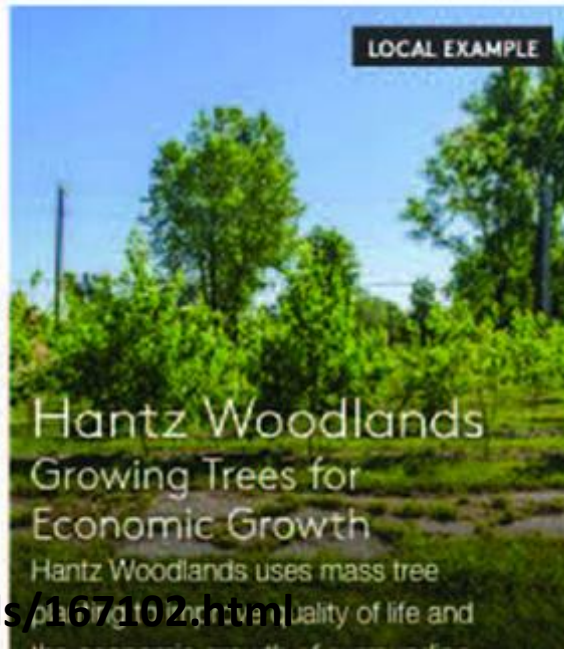
COST	PEOPLE
\$2,500 to \$5,500	Volunteer + Professional
UPKEEP	EXPERIENCE
Medium	Intermediate
STORMWATER	SUN/SHADE
Best	Sun, Part Shade



Holland Maze

A playful adaptation of the tulip fields found in the Netherlands.

COST	PEOPLE
\$5,500+	Volunteer + Professional
UPKEEP	EXPERIENCE
High	Advanced
STORMWATER	SUN/SHADE
Good	Sun, Part Shade

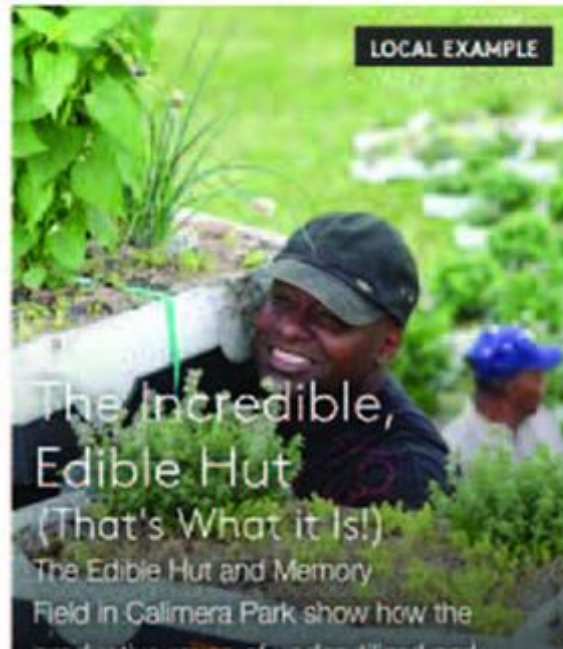


LOCAL EXAMPLE

Hantz Woodlands

Growing Trees for Economic Growth

Hantz Woodlands uses mass tree planting to improve quality of life and...



LOCAL EXAMPLE

The Incredible, Edible Hut

(That's What it Is!)

The Edible Hut and Memory Field in Calmera Park show how the...



LOCAL EXAMPLE

Lots of Love

Mobilizing Lot Maintenance and Stewardship Citywide

Lots of Love serves neighborhoods across Detroit from a sweet (former) ice...

**DETROIT
FUTURE
CITY**

working
with lots

A FIELD GUIDE

DETROIT
FUTURE
CITY
working
with lots

Budgeting: organize your time

GOAL:

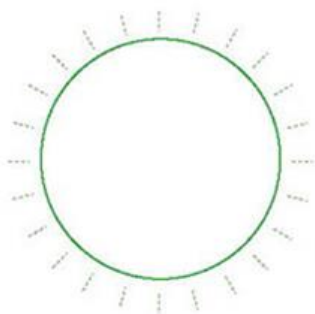
Discover the time required to make your landscape project a reality.

SUPPLIES:

- ◊ pens or pencils
- ◊ highlighters
- ◊ paper

SUGGESTIONS:

How much time do you have to dedicate to your landscape on a daily basis? Draw a circle like the one below to show how you spend your time in a typical 24-hour day.

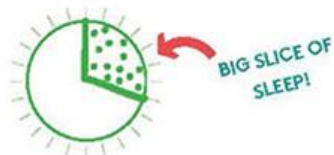


Activity instructions

1. Using page 35, brainstorm the next steps you will need to take to move your project towards completion.
2. Ask yourself: What can I do in the next hour to advance my project? How about in the next week?
3. Consider if these activities will be a one-time event or repeat events? Check the related boxes. If they will repeat, will it be on a weekly, monthly, or yearly basis?
4. Highlight the steps you will enjoy the most. How will you share responsibility for these steps with your partners?
5. Highlight the steps that feel challenging. Is there someone else you can speak with about this part of your project?
6. Make note if any of these steps will require money.
7. Finally, consider when you plan to build your lot design. The Field Guide recommends ensuring you have extra time available the two weeks prior to construction as well as the six weeks following construction.

NOTE:

Think of each slice of time as a part of your day. What does this mean for a week or month? Be honest with yourself!



ANSWER THE FOLLOWING QUESTIONS AND IMAGINE THE STEPS TO MOVE YOUR PROJECT FORWARD.



TIME: CONSIDER YOUR RESOURCES

1. How much time do I have to attend and organize neighborhood meetings?
2. Do I need to fundraise?
3. When will I be able to connect with local organizations to help with my project?
4. How much time will I need to organize my volunteers?
5. How will I transport materials to the lot?
6. Upkeep and watering are important, especially during the first six weeks after construction. How can I make time to be available during this 'establishment' window?
7. Will any of these steps require money?

STEPS	ONCE	REPEAT	\$	EST. TIME
Organize block club meeting, revisit existing visions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4 hours/mo
-----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-----
-----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-----
-----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-----
-----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-----
-----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-----
-----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-----
-----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-----
-----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-----
-----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-----

HIGHEST PRIORITY STEPS

TOTAL TIME REQUIRED

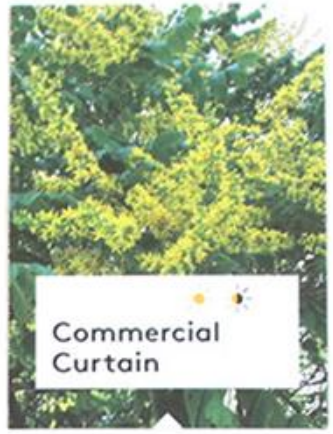
WHEN IN DOUBT, REACH OUT!
Surprised by how many repeating tasks you've identified? Check out the activity on page 8 to identify who in your neighborhood might be interested in working together.



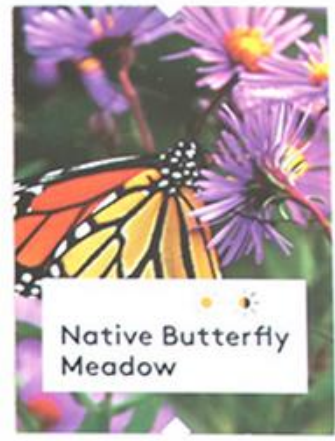
Turbo Till



8 Mile Rain Garden



Commercial Curtain



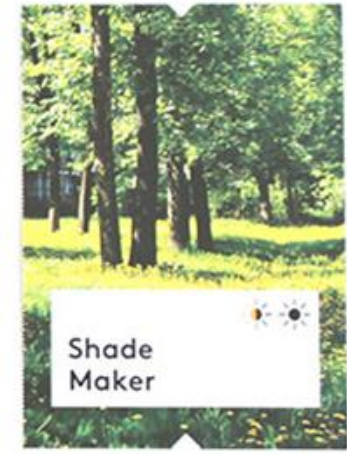
Native Butterfly Meadow



3 for 1 Groundcover



Dumping Preventer



Shade Maker



Quiet Remediator

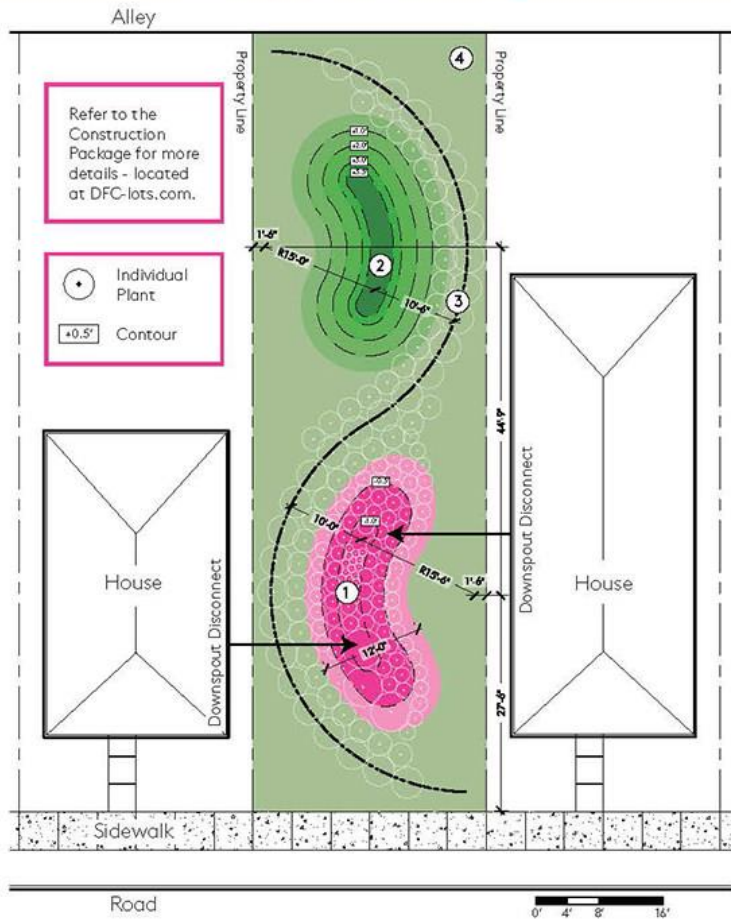


Holland Maze



Hedge Fund

Friendly Fence Lot Design



- ① Rain Garden
- ② Mound
- ③ Serpentine Hedge
- ④ Grass or Optional Groundcover

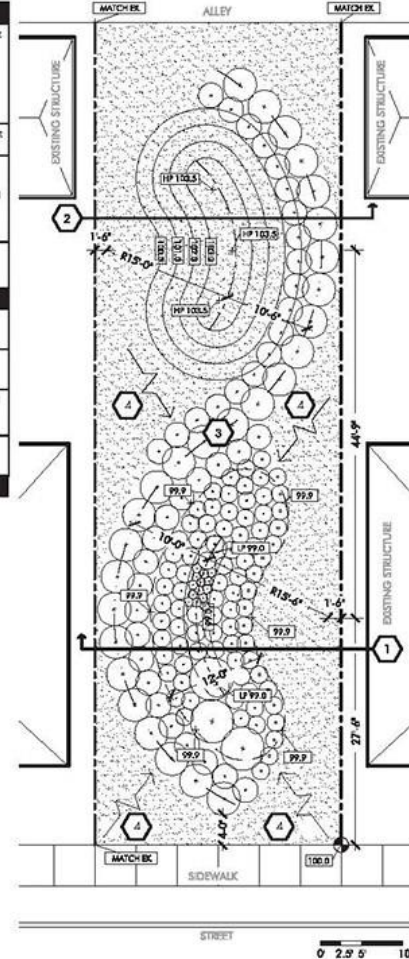
Refer to the Construction Package for more details - located at DFC-lots.com.

- Individual Plant
- +0.5' Contour

Friendly Fence Construction Plan

- Design Notes**
1. It is the responsibility of the contractor to construct treatment in accordance with the published specifications of [Detroit Future City Field Guide to Working with Lots](#). This information is available at www.DFC-lots.com.
 2. The design intent is for balanced earthwork, so that all excavated soil may remain on site.
 3. If it is determined that rain garden excavation must be deeper than illustrated, adjust size of earthen mound to accommodate soil, maintaining 50% slope and avoiding drainage onto adjacent property. If this cannot be achieved, contractor to remove excess soil and dispose of legally.
 4. Existing grade is assumed to be +100.0. Grades are relative and should be adjusted to work with the topography of the selected site.
- Keyed Notes**
- ① See Detail 1 - Rain Garden Section.
 - ② See Detail 2 - Earthen Mound Section.
 - ③ Align shrubs to central spine as shown. Use central spine to create rain garden and earthen mound layout.
 - ④ Slope entire site towards rain garden.

- Legend**
- Property Line
 - Point of Beginning
 - 100.0 Contour
 - Spot elevation
 - HP 100.0 High Point
 - LP 100.0 Low Point
 - Point of Beginning
 - Low Maintenance Turf
 - Shrub or Perennial



HELLO MY NAME IS Friendly Fence

The Friendly Fence is a large rain garden with a twist. The design captures stormwater and slowly releases it into the soil, keeping water from entering into Detroit's sewer system.

The Friendly Fence is ideal for two homeowners who are interested in sharing a side lot. The design has been sized to accommodate rainwater from up to two houses.

A serpentine hedge divides the lot - one side of the hedge has a rain garden while the other has a grassy mound. The plants in the Friendly Fence are a mix of well-suited native and non-native species, selected for beautification, habitat creation, and broad availability.

For more information refer DFC-lots.com

Cost	\$50 - 1,000	\$1,000 - 2,500	\$2,500 - 5,500	\$5,500 +
People	Volunteer	Professional	Volunteer + Professional	
Experience	Beginner	Intermediate	Advanced	
Upkeep	Low	Medium	High	
Stormwater	Good	Better	Best	
Location	Residential Lot in Full Sun to Shade (Between Two Houses is Ideal)			

What is the lot design likely to cost?

The estimated cost of the Friendly Fence is high (\$2,500 – \$5,500) and based on utilizing volunteer and professional labor. Residents can save money by hand digging the rain garden, but keep in mind, a rain garden of this size could require a significant number of volunteers. The cost assumes that residents or volunteers have access to basic safety gear and garden tools.

How much upkeep will this lot design require?

This lot design requires a medium level of maintenance to thrive. Maintenance will include weeding and watering the newly planted rain garden, particularly during the first two growing seasons while the plants establish themselves.

Will installation of this lot design require a professional?

The installation of this lot design will require professional assistance for the first few steps. The Field Guide identifies volunteer opportunities if you, with the help and support of friends, family, or neighbors, would like to complete the planting portion of this lot design. Refer to the Step-By-Step section for guidance on the recommended professional and volunteer steps. If you do not feel able to tackle the volunteer aspect of this lot design, a professional can construct the entire project.

How long will it take to install this lot design?

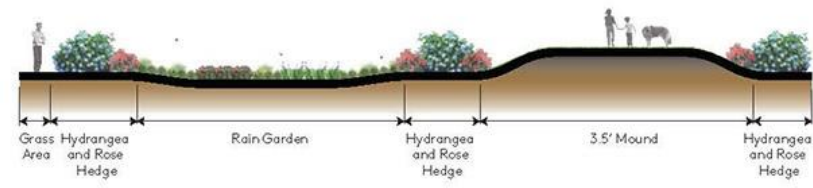
This lot design requires a professional for the completion of several steps. The projected installation time listed below only accounts for volunteer opportunities listed in the Step-By-Step section. While people tackle projects differently, the Field Guide estimates the installation time of the lot design to be one to two full weekends, utilizing a volunteer group organized by a knowledgeable lot leader. The Field Guide recommends the help of at least ten healthy adults or youth to construct this lot design. The Field Guide assumes that the lot is 'construction ready,' and all equipment and materials required for the lot design have been acquired and are ready to use.

Friendly Fence

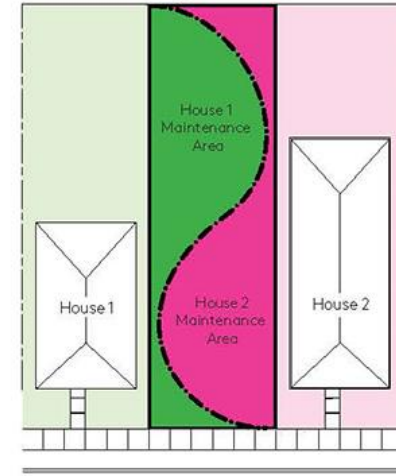
Examples of Friendly Fence Plants



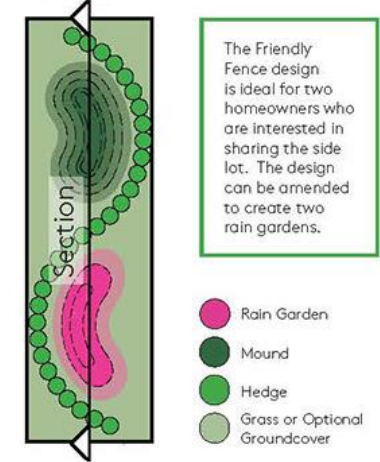
Section



Where Do I Grow?



Lot Design



The Friendly Fence design is ideal for two homeowners who are interested in sharing the side lot. The design can be amended to create two rain gardens.

Image Source: 1) Sarah Barker, "The Dell Lawn," 17 August 2014 via Flickr, CC BY-NC-ND 2.0; 2) Louise Blanchard, "2013-05-27_0169knockout," 26 May 2013 via Flickr, CC BY-NC-SA 2.0; 3) Northfield.org, "Rain Garden Planting," 19 May 2012 via Flickr, CC BY-NC-SA 2.0.

Side Lots Stoppable Time Spenders Difficult Spot Get Social Rain Gardens Stormwater Superstars

SORT BY

Name
 Cost
 Upkeep
 Experience
 Stormwater

FILTER

COST

- \$50 to \$1,000
- \$1,001 to \$2,500
- \$2,501 to \$5,530
- \$5,500+

PEOPLE

- Volunteer
- Volunteer + Professional
- Professional

UPKEEP

- Low
- Medium
- High

EXPERIENCE

- Beginner
- Intermediate
- Advanced

STORMWATER

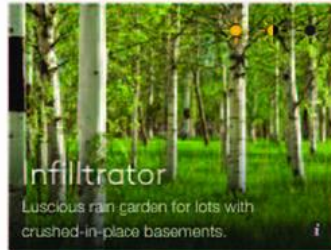
- Good
- Better
- Best

SUN/SHADE

- Sun
- Part Shade
- Shade

CLEAR

DONE



Infiltrator
Luscious rain garden for lots with crushed-in-place basements.

COST: \$5,500+
PEOPLE: Volunteer + Professional
UPKEEP: Medium
EXPERIENCE: Intermediate
STORMWATER:
SUN/SHADE:



Holland Maze
A playful adaptation of the tulip fields found in the Netherlands.

COST: \$5,500+
PEOPLE: Volunteer + Professional
UPKEEP: High
EXPERIENCE: Advanced
STORMWATER:
SUN/SHADE:



Laundry to Landscape
Save water and money with this sidelot greywater harvesting system.

COST: \$1,000 to \$2,500
PEOPLE: Volunteer + Professional
UPKEEP: Low
EXPERIENCE: Advanced
STORMWATER:
SUN/SHADE:



Summer Soil Booster
Temporary planting scheme improves soil health, prepares your lot for what's next.

COST: \$50 to \$1,000
PEOPLE: Volunteer
UPKEEP: Low
EXPERIENCE: Beginner
STORMWATER: Better
SUN/SHADE: Sun, Part Shade



Native Butterfly Meadow
A clean, planted edge borders this native meadow—a pollinator-friendly option for every neighborhood.

COST: \$2,500 to \$5,500
PEOPLE: Volunteer
UPKEEP:
EXPERIENCE:



3 for 1 Groundcover
Improve soil quality on your bald lot with this suite of low cost and low maintenance groundcovers.

COST: \$50 to \$1,000
PEOPLE: Volunteer
UPKEEP:
EXPERIENCE:



Friendly Fence
Rain garden and living fence provide a soft way to split a lot between neighbors while managing roof runoff.

COST: \$2,500 to \$5,500
PEOPLE: Volunteer + Professional
UPKEEP:
EXPERIENCE:



Dumping Preventer
Colorful, hardy plants form a clean and urban edge while creating a barrier to limit lot access.

COST: \$1,000 to \$2,500
PEOPLE: Volunteer
UPKEEP:
EXPERIENCE:



Friendly Fence

Rain garden and living fence provide a soft way to split a lot between neighbors while managing roof runoff.

COST	PEOPLE	UPKEEP	EXPERIENCE	STORMWATER	SUN/SHADE
\$2,500 to \$5,500	Volunteer + Professional	Medium	Intermediate	Best	Sun, Part Shade

- [Full Printable Lot Design](#)
- [Contractor Package](#)

The Friendly Fence is a large rain garden with a twist. This design is ideal for two homeowners who would like to split or share a side lot. A serpentine hedge divides the lot - one side of the hedge has a rain garden while the other has a grassy mound. Both sides are designed to add color and beauty to the lot while also creating a stormwater solution so that neighbors can disconnect their downspouts and re-route this water into a shared, larger rain garden. This functioning landscape provides privacy from your neighbor while better managing stormwater.

The design has been sized to accommodate rainwater from up to two houses. The Friendly Fence is a planted mound and depression (or berm and swale) that captures, directs and stores stormwater. Soaking this water in on-site prevents it from entering Detroit's sewer system, and contributes to the health and well-being of our Great Lakes waterways. The plants in the Friendly Fence are a mix of native and non-native species, selected for

- LIFESPAN**
Middle Term Long Term
- PLANTING TYPE**
Super Blooms Contains Natives
- MOST INTERESTING SEASON**
Spring Summer
- OTHER CONSIDERATION**
DWS Priority Area
May Attract Mosquitoes
Pollen Producing

Cost

The Friendly Fence is a high-impact, medium cost lot design. The majority of the cost of this design is from price of the plants, and based on utilizing volunteer and professional labor. Residents can save money by hand digging the rain garden, but keep in mind, a rain garden of this size could require a significant number of volunteers. The cost assumes that residents or volunteers have access to basic safety gear and garden tools.

The greatest potential cost saver is to use volunteers to dig the rain garden and then build the mound. Super Saver Tip: Use plant cuttings from a friend or neighbor to diversify the species in your fence! 'Endless Summer' Hydrangeas are easily propagated—simply clip a branch and place in dirt. If it is summer this can be next to plants or inside by a sunny window.

HABITAT BENEFITS
 Attracts Birds Attracts Butterflies Soil Friendly

OTHER BENEFITS
 Improves Air Quality Improves Soil Quality Water Saving
 Job Creating Kid Friendly Discourages Dumping Pet Friendly
 Social Space

[Cost Description]

Build

The installation of this lot design will require professional assistance for the first few steps. The Field Guide identifies volunteer opportunities if you, with the help and support of friends, family, or neighbors, would like to complete the planting portion of this lot design. Refer to the Step-By-Step section for guidance on the recommended professional and volunteer steps. If you do not feel able to tackle the volunteer aspect of this lot design, a professional can construct the entire project. Please note that digging the earthwork for the Friendly Fence requires quite a bit of physical effort—ten healthy adults, or youth, will have a vigorous weekend workout (or two) creating the shape as it is identified in this lot design. Working with a landscape contractor to install this lot design is a flexible option that the Field Guide strongly encourages. If you have access to a car, expect at least one full day for plant purchasing, and depending on the size of your group, at least one full day for planting and mulching. If you collaborate with your contractor, perhaps you can select, transport and plant the plants, and your contractor can create the earthworks and deliver you the mulch—at 15 cubic yards, this is a little less than half of a truckload!

BUILD DIFFICULTY
 Medium

NUMBER OF PEOPLE NEEDED
 10 or More People

NEIGHBOR LABOR
 Medium

TIME TAKEN TO BUILD
 1 Weekend

BUILD SEASON
 Spring Fall

TRANSPORTATION INTENSITY
 High

[Build Overview]

- Dashboard Attributes
- Printable Design Download
- Design Description
- Ideal Location
- Context + Location Description
- Cost Description

Green Infrastructure

Visibility

Image Gallery

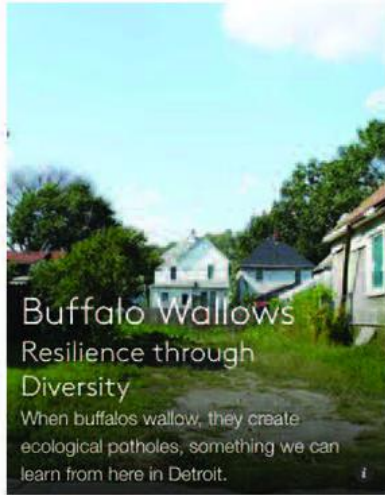
Build Overview

- Shopping List Download
- Maintenance Requirements

The screenshot shows a web page for the 'Friendly Fence' project. At the top, there are navigation tabs for 'Home', 'About', 'Projects', 'Resources', and 'Contact'. Below the navigation is a large image of pink hydrangeas. The main content area is divided into several sections: 'Cost', 'Build', 'Image Gallery', and 'Build Overview'. The 'Cost' section includes a detailed description of the project's budget and benefits. The 'Build' section provides information on the difficulty, number of people needed, and time required. The 'Image Gallery' features a grid of photos showing the project in progress and completed. The 'Build Overview' section includes a 'Shopping List Download' and 'Maintenance Requirements' link. The page is designed with a clean, professional layout and a green color scheme.

SORT BY
X Name Date

FILTER



Buffalo Wallows
Resilience through Diversity

When buffalos wallow, they create ecological potholes, something we can learn from here in Detroit.



Neighbors Building Brightmoor
Land Stewardship Through Community Building

Fifteen blocks of the Neighbors Building Brightmoor target showcase numerous ways land that stewardship can support community—especially youth.



Lots of Love
Mobilizing Lot Maintenance and Stewardship Citywide

Lots of Love serves neighborhoods across Detroit from a sweet (former) ice cream truck: a fully outfitted mobile tool library.



Local Lavendar Fields
Smelling Great in Southeast Michigan

At one acre, this Oakland County lavender farm demonstrates a large-scale version of lavender planting and production in southeast Michigan.



Michigan Community Resources
Neighborhood Exchange

The Neighborhood Exchange is an online platform to share ideas and resources for strengthening neighborhoods in Detroit.



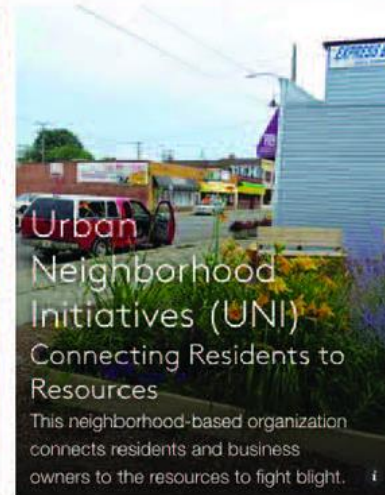
The Greening of Detroit
Cody Rouge Vacant Lot Treatment Program

This community-involved Greening of Detroit project installed a mix of four planting strategies on ten vacant lots in the Cody Rouge neighborhood.



Georgia Street Collective Aviary
Beehives, Honey and Other Sweet Things in Detroit

This Detroit-based bee collective keeps five active bee hives.



Urban Neighborhood Initiatives (UNI)
Connecting Residents to Resources

This neighborhood-based organization connects residents and business owners to the resources to fight blight.



The Incredible, Edible Hut

The Edible Hut and Memory Field in Calimera Park show how the productive reuse of underutilized park space can strengthen community.


One dream lead to another, until picnics, potlucks, community organization collaborations and the Friends of Calimera Park evolved.

Kate Daughdrill, artist and farmer, has a passion for connecting people. She built a farm in Hamtramck, next to her home, which is an artistic expression of her work and social interests. Food gatherings keep her surrounded with friends and neighbors. She co-founded SOUP, a public soup dinner whereby guests pay \$5 for a pot-luck variety of soups; listen to presentations about creative projects taking place in Detroit; and then vote on which project to fund with the proceeds from the dinner.

Four years ago, Kate and her collaborator, Mira Burack would spend time in Calimera Park, on Detroit's eastside, and talk of ways to improve the park and enhance the quality of life in the surrounding neighborhood. The concept for the Edible Hut was formed in conjunction with the community from the very beginning. Through a two-year community-driven public arts process with Community+Public Arts Detroit (CPAD), a program of the College for Creative Studies, they collaborated via monthly public meetings with the Greebrier/Pulaski community organization to plan a shady, peaceful, beautiful gathering space for their community—a shelter—to reactivate the park, bring neighbors together and strengthen relationships.



Discover Your Lot

Determining type of lot you are starting with is a great way to find the most appropriate lot design option(s). Browse and select from lot types below to learn more. Answer the quiz ( button) to narrow down.

Are you having difficulty determining which lot type you are starting with? Remember to reach out to someone with experience you trust in your neighborhood. You can always call 313-294-LOTS for additional assistance.

Click on an image to enlarge it and learn about each lot type.

QUIZ




Forest Patch



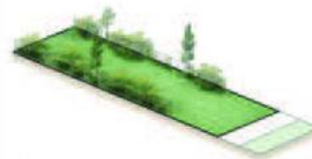
[VIEW LOT DESIGNS FOR THIS TYPE >](#)



Pangaea



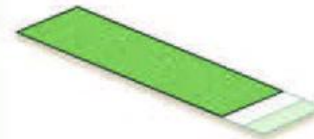
[VIEW LOT DESIGNS FOR THIS TYPE >](#)



Scrub Along the Fence



[VIEW LOT DESIGNS FOR THIS TYPE >](#)



Happy Lawn



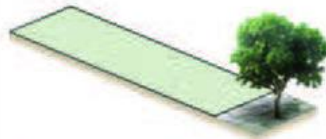
[VIEW LOT DESIGNS FOR THIS TYPE >](#)



Hustling Lawn



[VIEW LOT DESIGNS FOR THIS TYPE >](#)



Bigger Street Trees



[VIEW LOT DESIGNS FOR THIS TYPE >](#)



Fresh Demo



[VIEW LOT DESIGNS FOR THIS TYPE >](#)



Bald



[VIEW LOT DESIGNS FOR THIS TYPE >](#)





60 |

USING SOCIAL MEDIA DATA TO UNDERSTAND SITE-SCALE LANDSCAPE ARCHITECTURE DESIGN: A CASE STUDY OF SEATTLE FREEWAY PARK



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2010.08.18







50 m





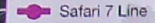
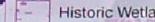
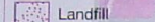
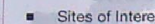
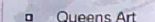
3,5

Nie dotyczy pojazdów
służb miejskich,
zaopatrzenia i wojska

50



WHO LIVES AT YOUR STOP?

-  Safari 7 Line
-  Historic Wetlands
-  Landfill
-  Sites of Interest
-  Queens Art Express venues





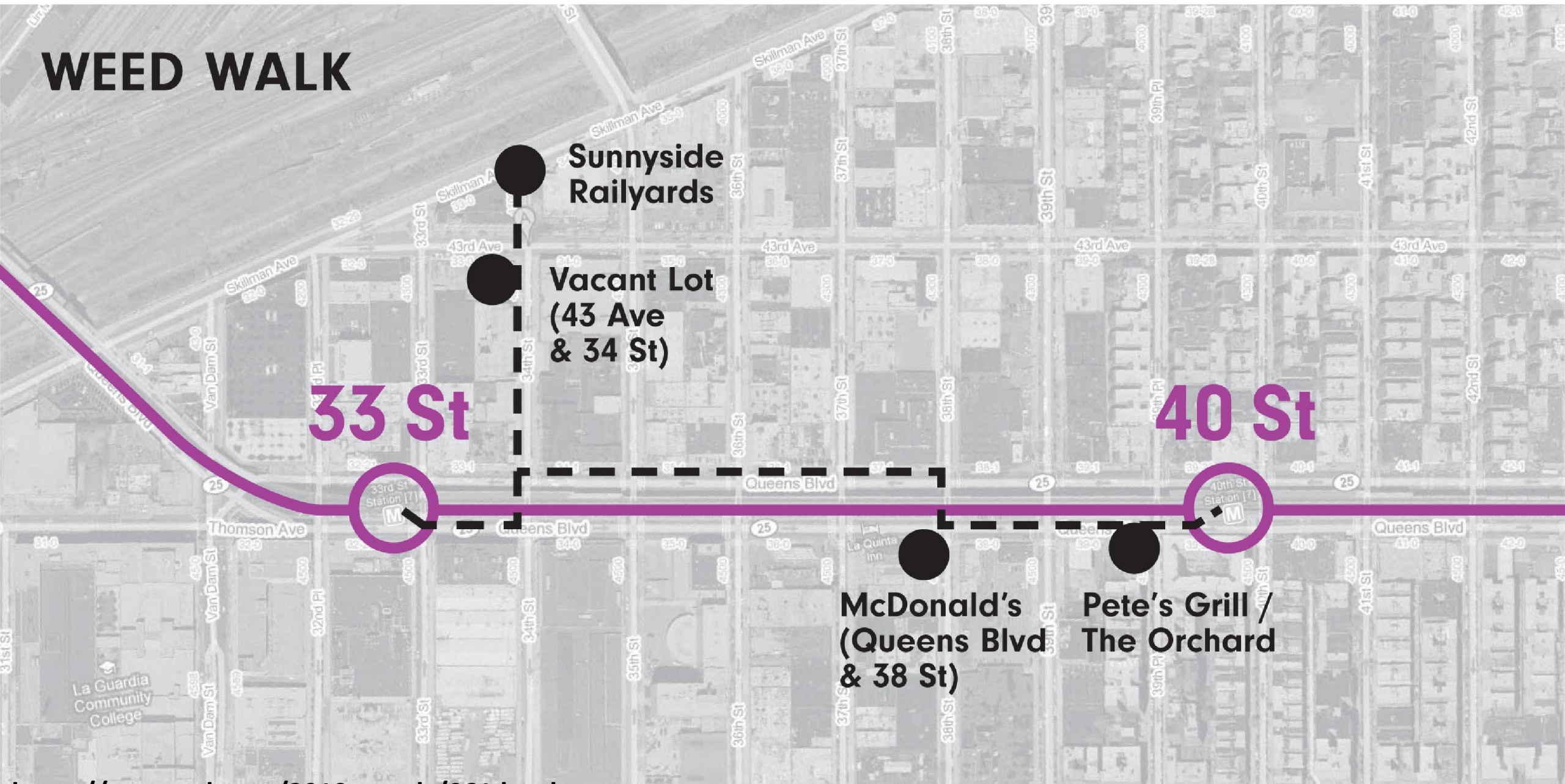
Those beautiful orange seed pods disguise a stone-cold tree killa!

NO TRESPASSING

Office DEPOT

1	...	...
2	...	...
3	...	...
4	...	...
5	...	...
6	...	...
7	...	...
8	...	...
9	...	...
10	...	...

WEED WALK



**Sunnyside
Railyards**

**Vacant Lot
(43 Ave
& 34 St)**

33 St

40 St

**McDonald's
(Queens Blvd
& 38 St)**

**Pete's Grill /
The Orchard**

Vacant and Full

Vacant lots are left behind as neighborhoods change, old buildings are demolished, or new projects are put on hold. Vacant lots are anything but empty. With their protected edges, typical vacant lots in Queens host higher-than-average urban temperatures, creating subtle microclimates of sun and shade that attract migrating butterflies and small mammals. Lots are converted to local dumps or appropriated by neighbors to plant sunflowers and tomatoes (pollinated by butterflies) for the evening's salad course.



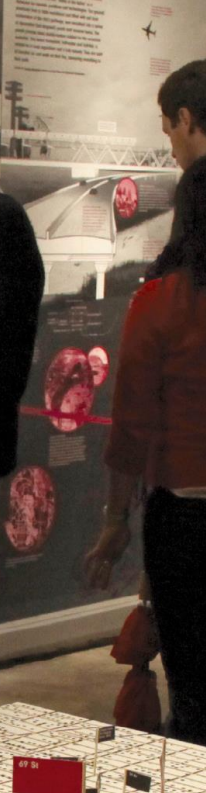
Woodside - 61 St Decomposers



103 St - Corona Plaza Urban Coop

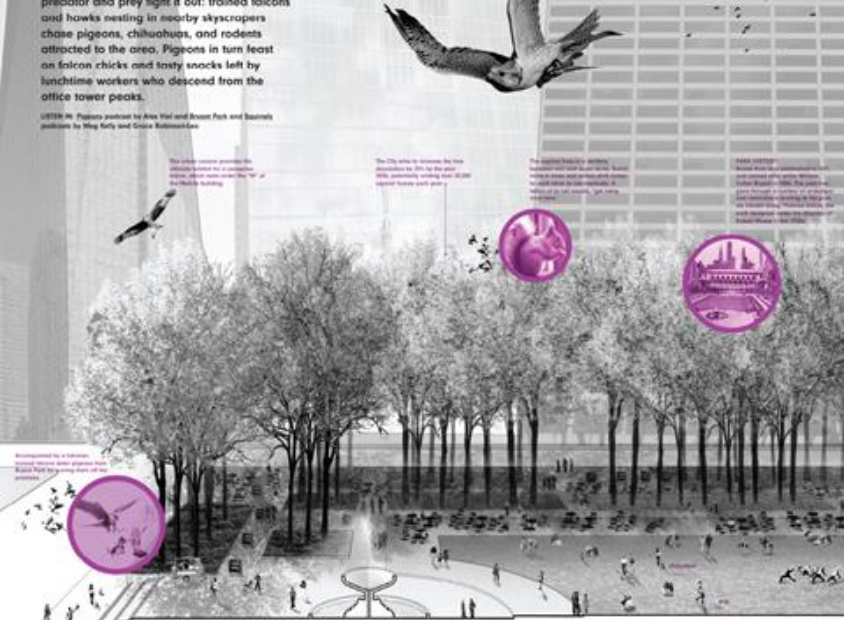


Flushing - Main St Frankenfish



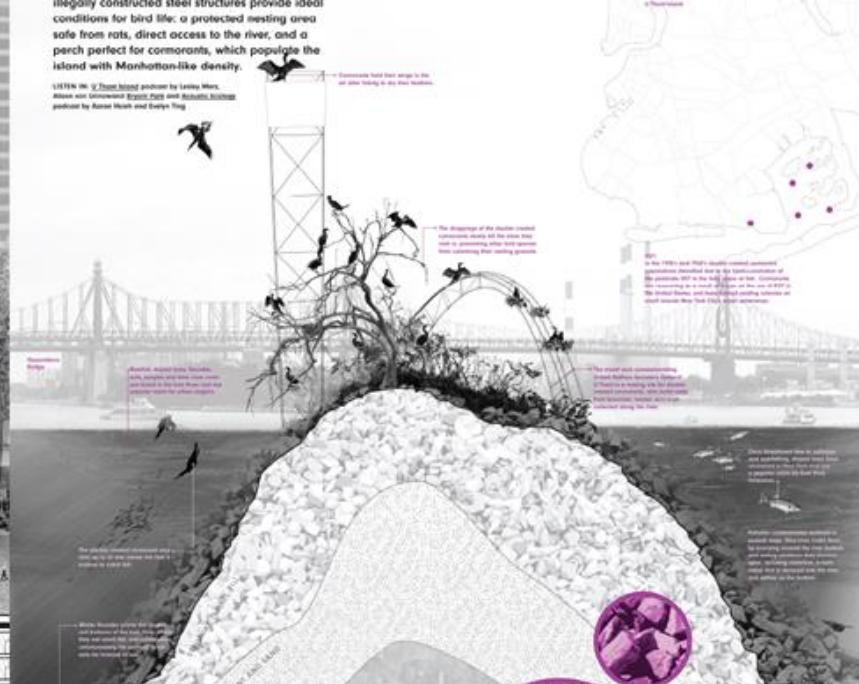
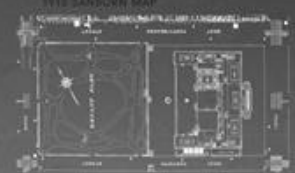
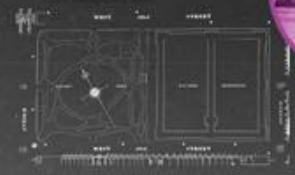
Safari 7 Reading





LISTEN III Pigeons perched by Shea Vial and Bryant Park and Borealis pavilion by Greg Kelly and Grace Hollander

The city park is designed to be a place for people to connect with nature and each other. It features a variety of trees and plants that are native to the area, as well as a large fountain and playground.



LISTEN III 2 Tower Island pavilion by Laura Marx, Michael and Christopher Grogan, Zapp and Robinson Kitchner, pavilion by Aaron Heuss and Danyang Ting

The design of the tower island pavilion is inspired by the idea of a protected nesting area safe from rats, direct access to the river, and a perch perfect for comorants, which populate the island with Manhattan-like density.

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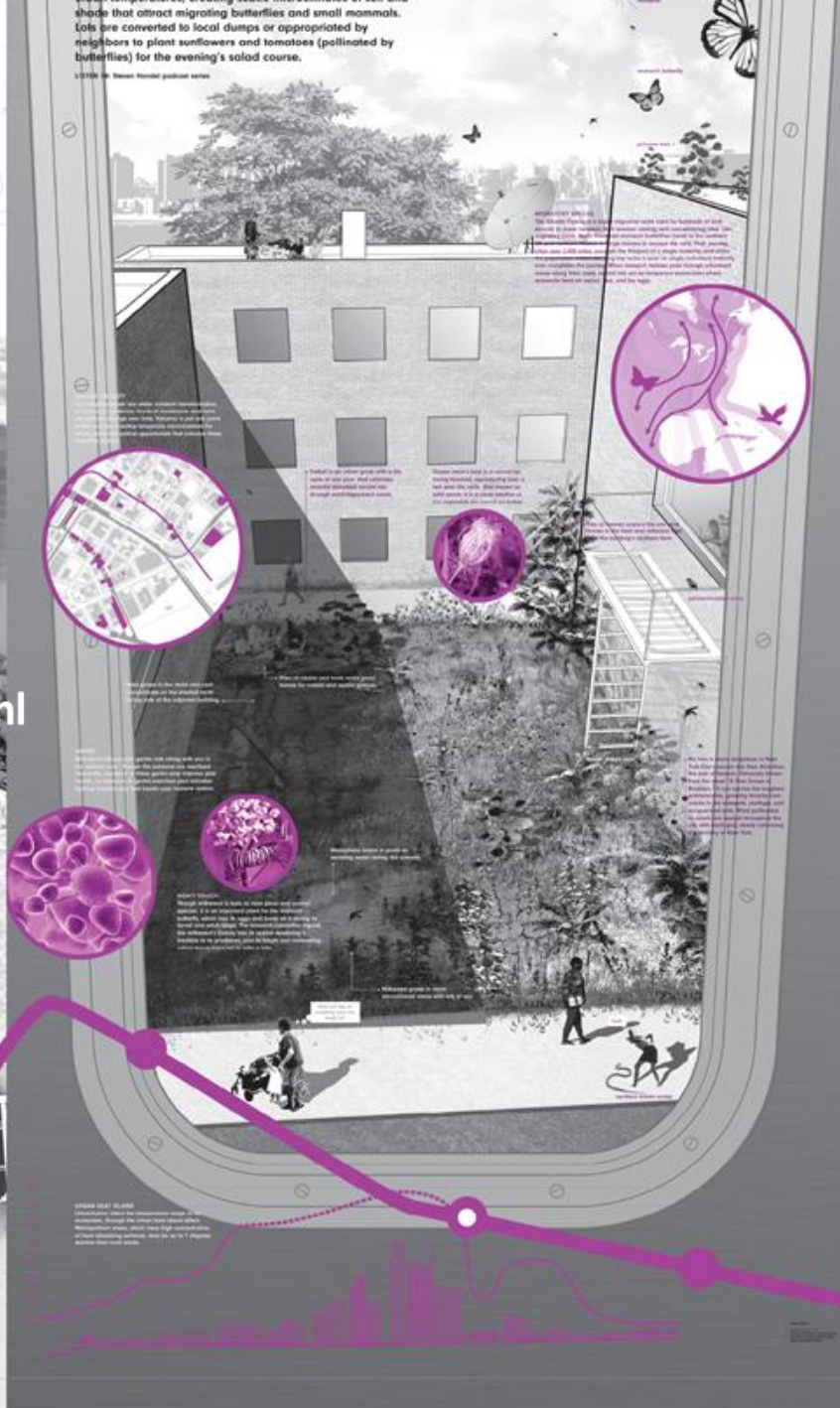
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<https://www.asla.org/2010awards/061.html>



STEINWAY TUNNEL C. 1890



LISTEN III Street Market pavilion series

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Woodside – 61 St Decomposers

Below the tombstones in Queens' Cemetery Row, cycles of decay and regeneration are at work. These cemeteries form a necklace of open spaces that span the borough and include the abandoned Ridgewood Reservoir. The carbon cycle comes into focus as decomposers become food for insects, migratory birds and owls. In nearby nests life examples of the new life forms generated by decomposition: a key part of a robust joint human-animal-vegetal ecosystem.

LISTEN IN: *Ecology of Death* podcast by Alex Cook and Ryan Julius



HISTORIC CEMETERY
Established in 1842 as the Old St. Nicholas Cemetery, Queens Cemetery and closed in 1960 by the Queens Borough Board of Health. It contains approximately 100,000 burials. One of the oldest cemeteries in the United States, this quiet rural cemetery now occupies a major open space within the dense neighborhood of Queens, providing valuable habitat for local urban wildlife.

BEHAVIOR
The nocturnal nightjar is a "ghost" species, appearing at night to feed on insects. It is a pest, appearing mostly in its nocturnal habitat around the region.

A typical hawk on a chase of a field mouse in the cemetery. The hawk is a common predator of the field mouse.

The impact of an invasive bird on a native bird is shown. The invasive bird is a starling, which has displaced the native bird.

Conservation of habitat. The cemetery is a valuable habitat for many species of birds and insects.

Over time, an invasive species of bird has displaced a native species. The native species is a starling, and the invasive species is a house sparrow.

CEMETERY ROW
Cemetery Row is a series of cemeteries in Queens, New York City. It is a valuable habitat for many species of birds and insects.

103 St – Corona Plaza Urban Coop

Divisions between countryside and city collapse in this domestic scene where chickens and roosters co-mingle with shoppers and urban dwellers. Illegal cockfighting is alive and well alongside egg production and a thriving live-poultry trade that serves up fresh and tasty arroz con pollo at local restaurants. Originally settled as a Dutch farming community, Queens has evolved through successive waves of migrants but has maintained a lively co-occurrence of agriculture and housing.

LISTEN IN: *Chicken* podcast by Meg Kelly and Bruce Robinson-Lov



EGG PRODUCTION
The chicken coop is a key part of the urban farm. It provides a source of fresh eggs for local restaurants.

Here legally for one year, many more are kept.

Pigeons are social birds that nest in the city. They are a common sight in urban areas.

Hygienic, healthy, and safe. The chicken coop is a key part of the urban farm.

Here are considered pests, but they are also a source of food for other animals.

COCK FIGHT
Cock fighting is a controversial, but legal activity in Queens. It is a source of income for many people.

BROILER BIRD
The U.S. is the world's largest poultry producer, raising over 42 billion broiler chickens annually. The average person eats 29 eggs per year, many from the top egg-producing states like Ohio, Pennsylvania, Indiana, and Michigan.

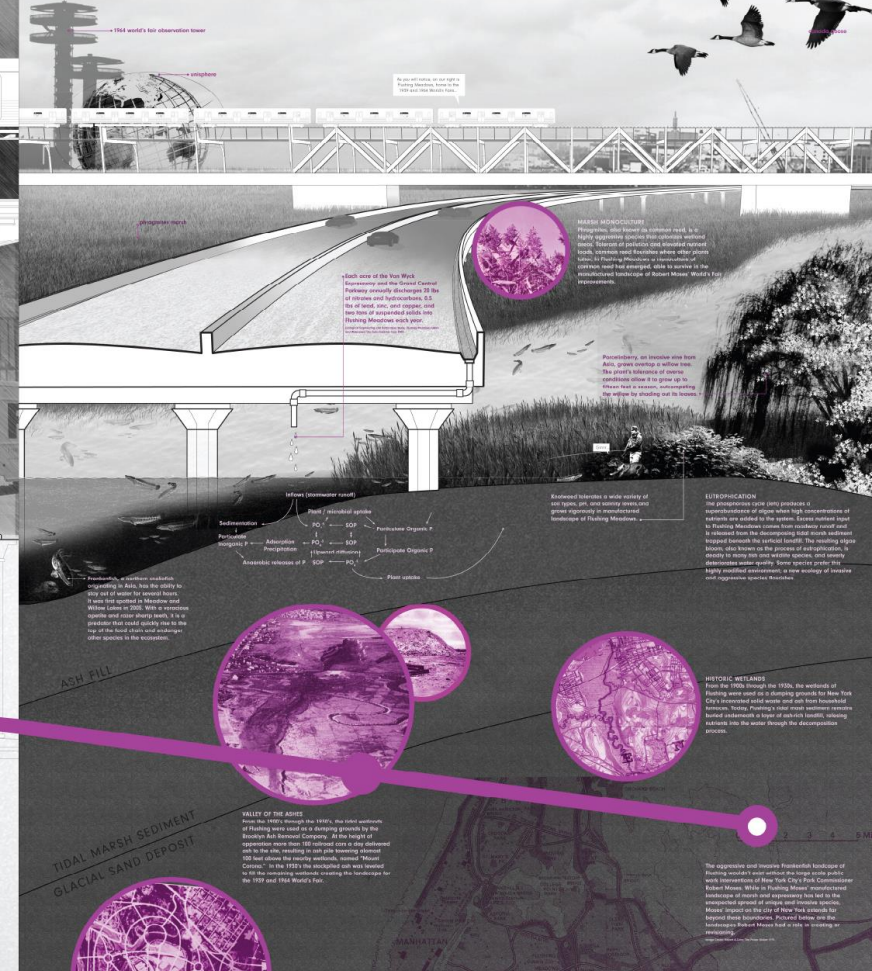
Cock fighting is a controversial, but legal activity in Queens. It is a source of income for many people.

This is an act of gentrification. It is a source of income for many people.

Flushing – Main St Frankenfish

Robert Moses seized on the World's Fair of 1939 to transform Flushing Meadows from the "Valley of the Ashes" to a showcase for futuristic pavilions and technologies. The ground, previously host to tidal marshland and filled with ash from incineration of the city's garbage, was smoothed into a series of decorative (but stagnant) ponds and massive lawns. The ponds provide ideal muddy-bottom habitat for the voracious snakefish. This Asian transplant, half-snake and half-fish, is valued as a soup ingredient and a folk remedy. They are said to breathe air and walk on their fins, devouring everything in their path.

LISTEN IN: *Flushing Meadows* podcast by Emily Glass and Stephanie Odenheimer



The region below of Ashes. Right after on January 15, 1957 has been cleared to a carbon with a bank of green.

More than one million geese travel seasonally along the Astor Avenue. They have the gray streak of the bay and are regularly visited by the birds surrounding the pond's two meadow beds.

1914 world's fair observation tower

As of 2011, the park is a public space, but it is still a source of income for many people.

Each year of the New York City's annual discharge of 2.5 billion gallons of water into the city's waterways. The water is treated and then discharged into the city's waterways.

MARSH ECOSYSTEMS
Flushing Meadows is a valuable habitat for many species of birds and insects. It is a source of income for many people.

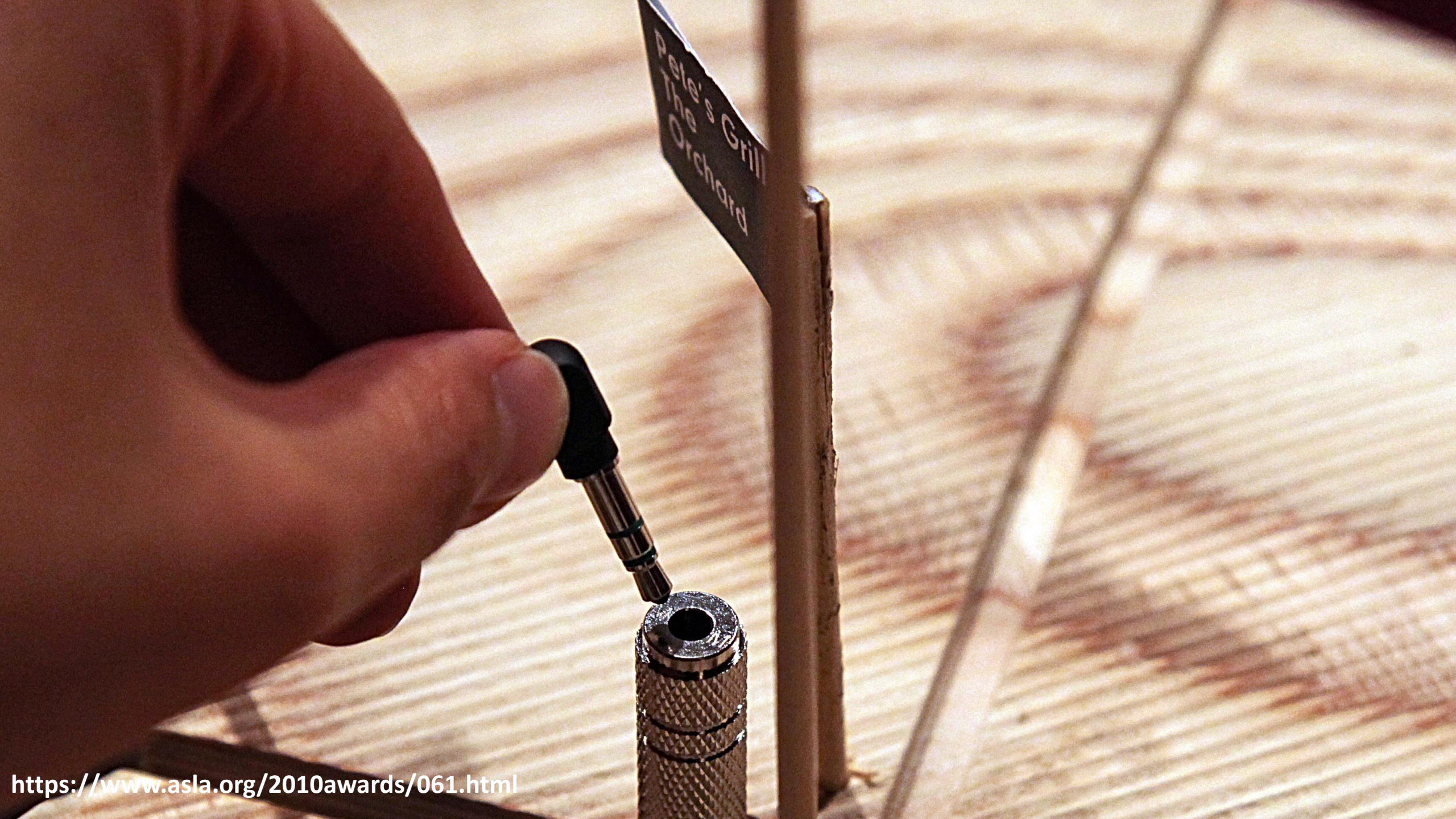
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HISTORIC WETLANDS
Flushing Meadows is a valuable habitat for many species of birds and insects. It is a source of income for many people.

The aggressive and voracious Frankenstein fish is a source of income for many people.



Pete's Grill
The Orchard





