

# Parks can be Playful & Pragmatic



Photo credit: <http://elevatearchitecture.com>

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TEXAS A&M  
AGRI LIFE  
EXTENSION





## 5 Benefits of Urban Parks



**Environmental**  
Purify air and water, reduce urban noise, act as wildlife refuges



**Psychological**  
Stress relief, mental rejuvenation, peaceful atmosphere



**Physical**  
Places to exercise



**Social**  
Foster neighborly relations, increase social integration



**Economic**  
Tax revenue, added property value, tourism dollars, and reduced pollution costs

# Park Planning: The Basics



# Park Planning: Purpose

## Goals



## Benefits



# Park Planning: Input and Analysis



# Park Planning: Recommendations

Action Steps



Policies



(Long) Term Plans





## Park Planning: Feasibility Study



“a study designed to determine the practicability of a system or plan”

### Practical

“capable of being done, effected, or put into practice, with the available means; feasible: a practicable solution.

capable of being used”



# Park Planning: Hazard Mitigation

The **Colorado Springs** *Park System Master Plan* includes an entire page of recommendations to address floods, fires, and drought, including:

- Develop fire mitigation partnerships and create natural area management plans with land managers, utility providers, public safety officials and State Parks representatives.
- Work with natural resource managers of wildlife habitat to balance wildlife needs with management for fire, floods, and drought.
- Refer to the [drainage and stream buffer standards or guidelines] for recommendations regarding floodplain treatments, vegetation management, stream bank stabilization, and other elements that mitigate flood events.
- Provide education and enforcement to address unintentional forest fire starts and arson.
- Form stormwater, floodplain, and vegetation management partnerships with flood control districts, watershed managers, City and County public works departments, ditch companies, and other land managers.
- Install more drought-tolerant plant materials and reduce park dependency on water resources.
- Identify and re-route trails that are susceptible to frequent damage from flooding.

<https://www.planningforhazards.com/parks-and-open-space-plan>

# It's a win, win: cities needs parks to be more

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## Defining the Sustainable Park: A Fifth Model for Urban Parks

Galen Cranz and Michael Boland

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**Abstract:** *How can parks contribute to the overarching project of helping cities become more ecologically sustainable? The history of urban parks in America reveals more concern with social problems than with ecological sustainability. Four types of city parks have been identified—the Pleasure Ground, the Reform Park, the Recreation Facility, and the Open Space System—and each of them respond to social issues, not ecological ones. Yet today, ecological problems are becoming one of our biggest social concerns, so a new urban park type focused on social solutions to ecological problems would be consistent with this pattern. Using the same social and physical criteria that described the previous four models, Part I describes a fifth model, the Sustainable Park, which began to emerge in the late 1990s. Part II postulates three general attributes of this new kind of park: (1) self-sufficiency in regard to material resources and maintenance, (2) solving larger urban problems outside of park boundaries, and (3) creating new standards for aesthetics and landscape management in parks and other urban landscapes. It also explores policy implications of these attributes regarding park design and management, the practice of landscape architecture, citizen participation, and ecological education.*

(1) Self-sufficiency in regard to materials resources and maintenance,

(2) Solving larger urban problems outside of park boundaries, and

(3) Creating new standards for aesthetics and landscape management in parks and other urban landscapes,

Park Planning: Beyond the textbook

Beyond the textbook...reality strikes again

## Land Availability and Cost



Beyond the textbook...reality strikes again

## Deferred Maintenance



# Beyond the textbook...reality strikes again

Current Operations: Cost, Upkeep, Experience, Skill



# Beyond the textbook...reality strikes again

## Population Growth/ Density





# Beyond the textbook...reality strikes again

## Population Diversity



[sf.funcheap.com](http://sf.funcheap.com)

Free Zumba in the Park | SF | Funcheap

Free Zumba in the Park | SF



Beyond the textbook...reality strikes again

## Nature Deficit



**Nature Deficit Disorder/Hike**

With Olivia Chumacero

**Sunday, 3-19-2017**

**8:30a.m. - Noon**

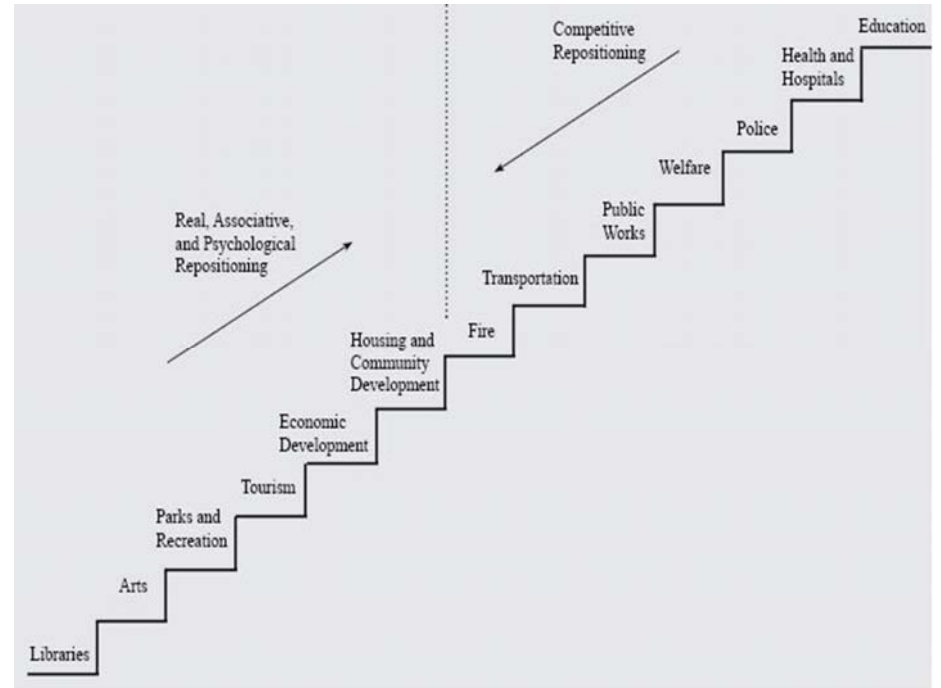
Corner  
E. Loma Alta Dr. & Lake Ave.  
Pasadena, CA

e.i.m.  
everythingismedicine@gmail.com

PayPal  
fee \$35.00

# Beyond the textbook...reality strikes again

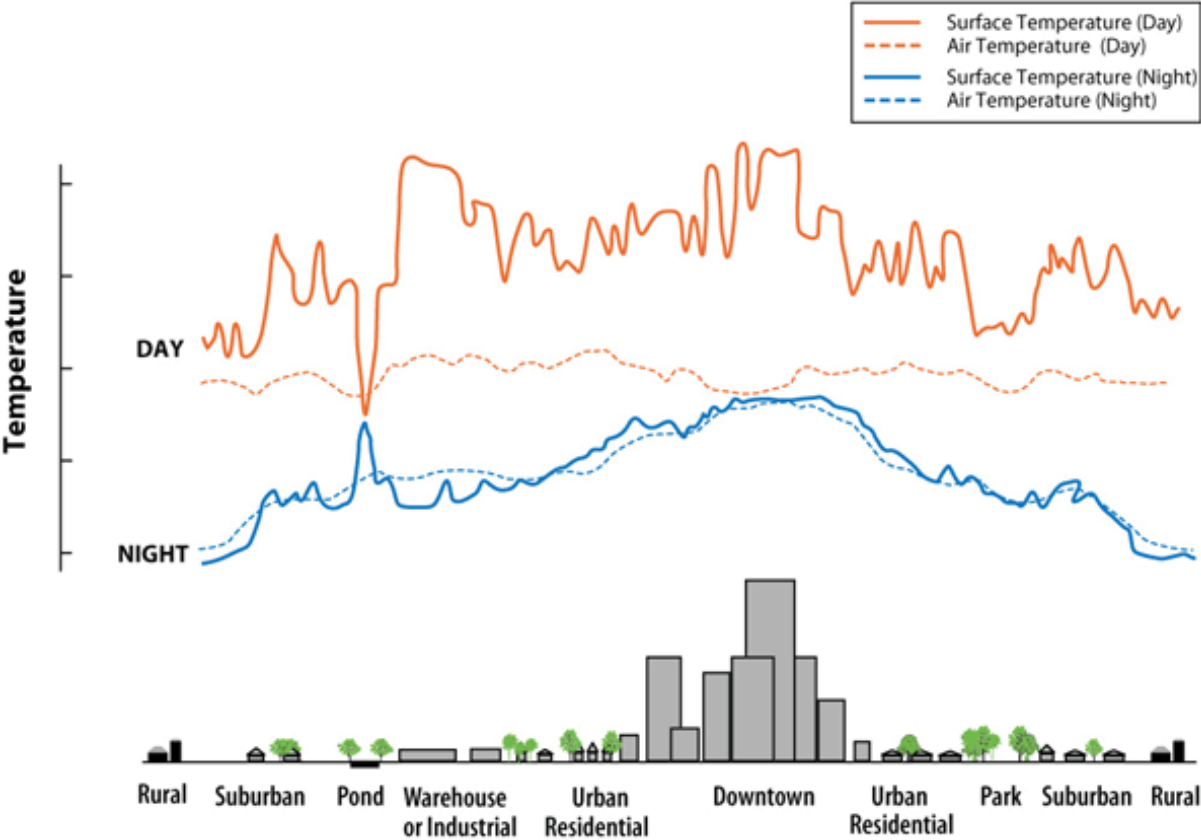
## Available Funding



It's a win, win: cities needs parks to be more...



# Heat



# Water: clean



***Benefits can include: reduced peak discharge rate, reduced TSS, reduced pollutant loading, enhanced site aesthetics.***

Pocket wetlands are shallow marsh-like systems constructed to control stormwater volume and remove pollutants for drainage areas of 5 to 10 acres. Because they are engineered structures, pocket wetlands have less biodiversity than natural wetlands yet still provide robust pollutant removal and habitat value.

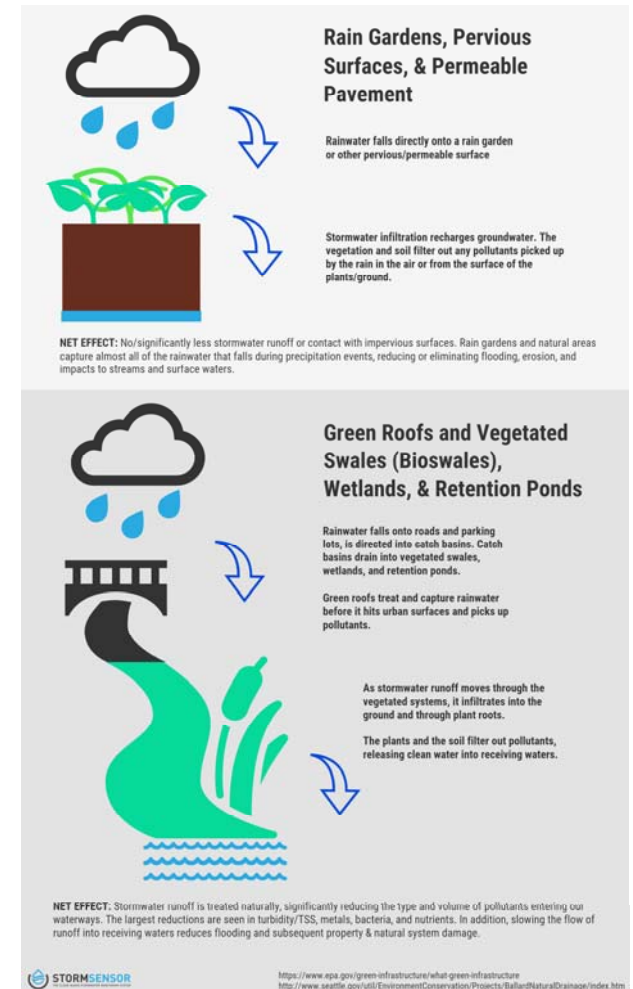


*Pocket wetland*

Pollutant removal in these systems occurs through settling, microbial biodegradation, and uptake by vegetation. By increasing the duration of discharge and controlling stormwater volume, pocket wetlands are able to significantly reduce peak discharge.

(Source: [LID Center](#))

# Water: Retention and Detention



# Land & Habitat Restoration & Reclamation





# Public Health




# Social Resilience & Recovery



## Park Planning: Hazard Mitigation Examples

# green·way

/'grēnwā/ 

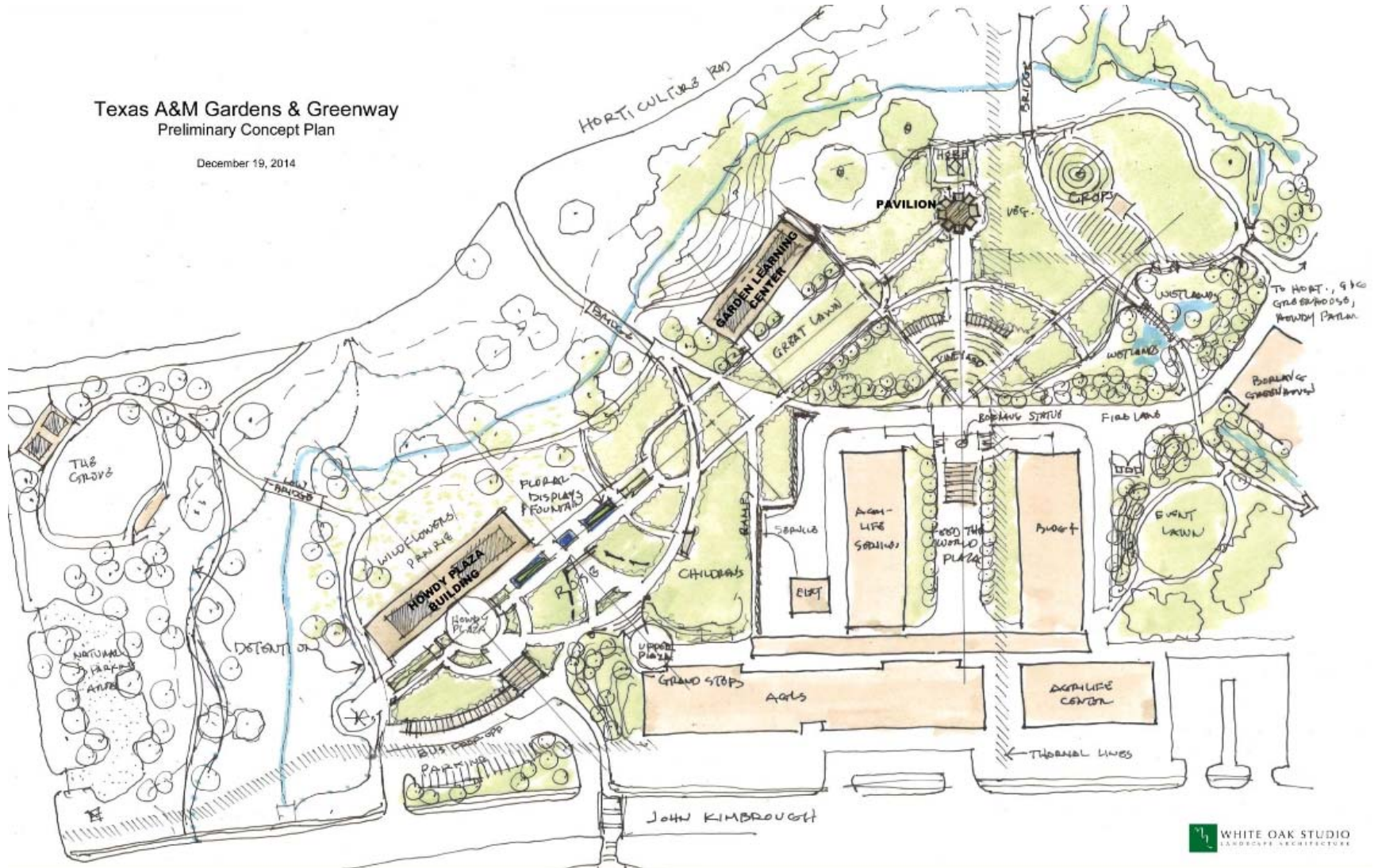
*noun* NORTH AMERICAN

plural noun: **greenways**

a strip of undeveloped land near an urban area, set aside for recreational use or environmental protection.

Texas A&M Gardens & Greenway  
Preliminary Concept Plan

December 19, 2014



## **Multiple Objectives of a Modern Greenway Infrastructure**

1. Help manage stormwater & water quality
2. Enhance recreation, health & fitness
3. Provide transportation choices
4. Maintain an ecological balance
5. Provide better visual quality
6. Enhance the economy



[http://www.bikewaysforeveryone.org/north\\_greenway](http://www.bikewaysforeveryone.org/north_greenway)



## \* Urban issues in Seoul

South Korea experienced rapid urbanization and the influx of people to Seoul

- Lack of parks and green open spaces → • How to expand green spaces?
- Urban heat island → • How to mitigate urban heat island effect?

\* Urban heat island is a city or metropolitan area that is significantly warmer than its surrounding rural areas due to human activities



\* Seoul's rooftop gardens are oases in busy capital

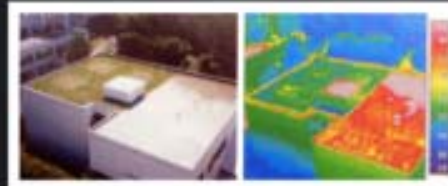


\* Benefits of Rooftop Gardens



• Social perspective

- Providing extra spaces for social and recreational spaces
- Increasing the feeling of well-being (relaxation and reducing stress)



• Environmental perspective

- Improving air quality
- Conserving energy
- Reducing urban heat island effect
- Mitigating storm water runoff
- Improving aesthetic views









The plan aims to stop runoff from 10 percent of the city's impervious surfaces in the 13 watersheds with combined sewer overflows. In addition to saving money and reducing pollution, planting vegetation and adding green space will beautify the city and clean and cool the air. The agency estimates that implementing the Green Infrastructure Plan would provide as much as \$400 million to New Yorkers in reduced energy costs, improved health and increased property values.



110<sup>th</sup> St & Amsterdam Ave, Manhattan



Pelham & Stillwell Aves, Bronx



Church & 14<sup>th</sup> Ave., Brooklyn



Amboy & Richmond Valley Rd, Staten Island

There are currently 2,468 Greenstreets citywide. These planting beds add more than 100 acres of green space to the roadways of New York City. The program is hugely popular, with at least 50 requests coming in each year from community members, elected officials, and Business Improvement Districts.



You're invited to the  
**Urban Watershed Planning Game**

# COME PLAY

**Saturday, November 16**  
Southeast Community Facility  
1800 Oakdale Avenue  
10:00am - 1:30pm

PERMEABLE PAVEMENT



PIPE UPGRADES



RAINWATER CISTERNS



RAIN GARDENS



SEWER SYSTEM IMPROVEMENT PROGRAM | Grey. Green. Clean.



THE CITY

PLN MTA SFPW



APPLICANTS

YOU

# PROPOSAL

6 weeks

**A** REQUEST FOR PARKLET PROPOSALS RELEASED  
*8 weeks*

**B** PERFORM PUBLIC OUTREACH

**C** SUBMIT PARKLET PROPOSAL

# PROPOSAL REVIEW & SELECTION

5 weeks

**D** PLN MTA SFPW  
REVIEWS PROPOSALS  
*3 weeks*

**E** PAY INITIAL INTAKE FEES TO SFPW

**G** DEVELOP PARKLET DESIGN  
YOU

**I** SUBMIT FINAL APPLICATION PACKAGE TO SFPW

**J** PAY FINAL PERMIT FEES TO SFPW

**L** NOTIFY MTA  
*3 weeks before installation*

NOTIFY SFPW  
*10 days before installation*

**P** POST-CONSTRUCTION SITE INSPECTION BY SFPW  
*Within 48 hours after installation*

MTA  
REMOVES PARKING METERS, BIKE RACKS, LEGISLATE/ REPAINT CURBS

**M** PRE-INSTALLATION SITE INSPECTION BY SFPW

PAVEMENT TO PARKS

# PARKLET O'MATIC

A STEP-BY-STEP

PROCESS OF IMPLEMENTING

A PARKLET IN SAN FRANCISCO

- PLN San Francisco Planning Department
- MTA San Francisco Municipal Transportation Agency
- SFPW San Francisco Public Works
- YOU Project Sponsor

**A** Refer to the Process Overview section of the San Francisco Parklet Manual for more information on each step.



ENJOY PARKLET!

REMEMBER TO KEEP IT CLEAR, WATER THE PLANTS & RE-SEAL PERMIT IN ONE YEAR.





# NOE VALLEY PARKLETS

[Home](#) / [Parklets](#) / [Parklet Projects](#) / [Noe Valley Parklets](#)

Noe Valley Parklet (24th and Sanchez St) / Image by San Francisco Planning Department

ELEVATING AND CELEBRATING PUBLIC SPACE SINCE 2005

WORLDWIDE ANNUAL EVENT

*Reclaim your City!*

# PARK(ING) DAY

ALWAYS THE THIRD FRIDAY IN SEPTEMBER



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CREATIVE ADAPTATION.

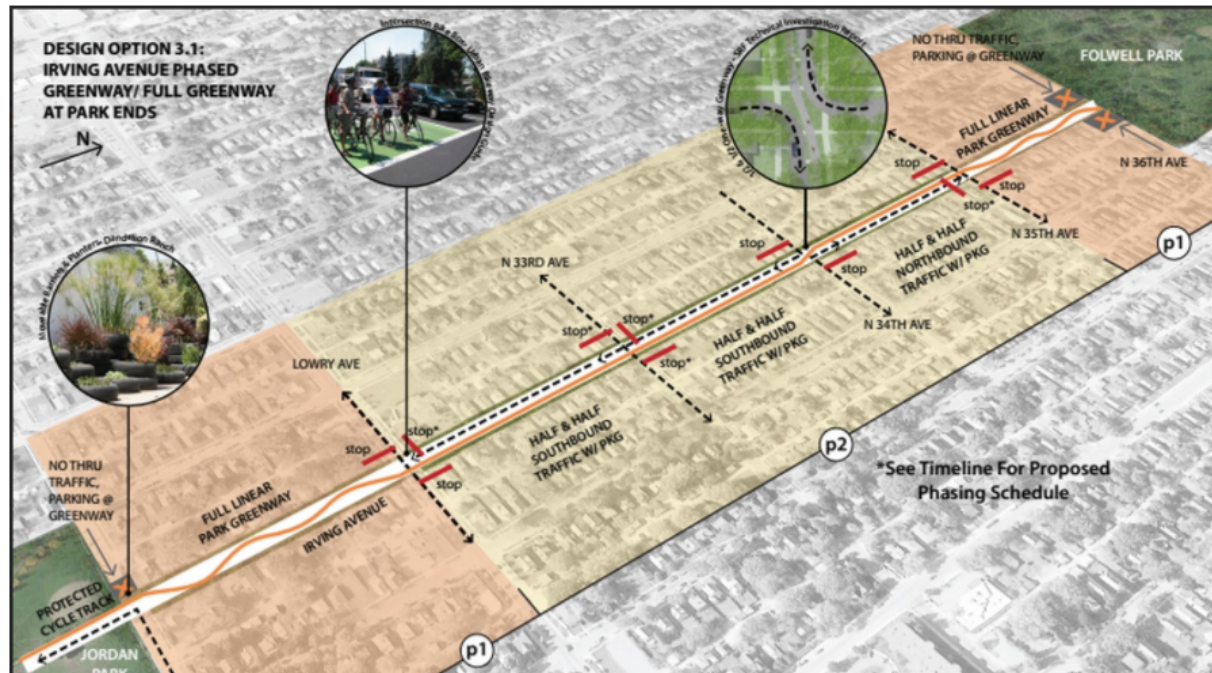
PARK(ing) Day is an annual worldwide event where artists, designers and citizens transform metered parking spots into temporary public parks.





## Demonstration Greenway Coming This Fall

The City of Minneapolis will install a greenway demonstration project on the proposed route so that people can see how a greenway could be used. The demonstration (which could last up to a year) will take place on Irving Avenue North between Folwell Park and Jordan Park, converting the street to a space for bicycles and pedestrians with low-cost elements that can be installed and removed easily. This demonstration will give you and your neighbors a chance to try it out and see for yourself how a greenway could possibly fit into your community. **If the temporary greenway is successful, it may be possible to convert the space to a permanent greenway in the future.**



## No Mow Areas



**"No-Mow" Zones** areas help promote the natural regeneration of the urban forest. By allowing these areas to remain undisturbed we allow a greater variety of native vegetation to re-establish itself, including both overstory plants (the uppermost layer of foliage that forms a forest canopy) and understory plants (the underlying layer of vegetation, especially the plants that grow beneath a forest's canopy). At the same time this method of regeneration helps conserve moisture in the soil which is a big plus to growing plants during our hot Houston Summers.

There are several "No-Mow" Zones in the City of Houston. These areas have been planned and intentionally placed. Grass and other plants will grow tall the first year but be assured these areas have not been forgotten by our grounds keepers. Soon, trees will sprout, grow and expand our urban forest.

## Natural Land Management in City Parks Benefits and Considerations

Erich R. Lehmann, Jamie Rae Walker, and Scott Shafer\*

Many urban park departments have adopted alternative land management (ALM) practices to reduce maintenance costs and to provide a more natural setting for park users and inhabitants. By allowing native grasses, trees, and wildflowers to grow, the parks have shifted from a manicured look—which requires mowing and edging grass as well as planting shrubs and flowers—to a more natural appearance.

Interviews with park managers and planners who have adopted ALM practices in Texas have indicated that the changes benefited their agencies, park visitors, and the environment. The managers also highlighted possible issues to address for other park officials considering whether to switch to alternative land management.

The managers interviewed were from the College Station Parks Department (Brazos County), Dallas Parks Department (Dallas County), Houston Memorial Park District (Harris County), and the Mueller development (Travis County).

### Agency benefits

ALM practices can significantly cut maintenance costs and efforts associated with land management, such as for fuel, labor, mowing,

planting, watering, removing trash, and transporting and maintaining equipment.

For example, at T. C. Jester Park in Houston, managers allowed tall native grasses to grow naturally along the edge of White Oak Bayou. The strip has developed into a “natural litter net” (Fig. 1): The grasses trap the trash that blows into the park, preventing it from entering the waterway. They also concentrate the debris into one area, so maintenance staffers do not need to roam the entire park.



Figure 1. Native grasses serving as a “natural litter net” that snags trash, preventing it from entering nearby waterways and making it easier to remove.  
 Image source: Erich Lehmann

\*Former Graduate Student, Department of Recreation, Park and Tourism Sciences; Assistant Professor and Extension Specialist Urban Parks; and Associate Professor and Associate Department Head, Department of Recreation, Park and Tourism Sciences, The Texas A&M University System

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## Park Planning: Hazard Mitigation Planning

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N.Y. / REGION

## *Treetop Falls in Bryant Park, Injuring 5*

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By KIRK SEMPLE and AL BAKER SEPT. 4, 2015

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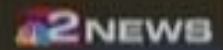
A worker removes pieces of a tree in Bryant Park on Friday afternoon after part of it broke off and injured several people. Michael Appleton for The New York Times



# MORE MULCH BED FIRES FROM DRY CONDITIONS

83°

5:32



RAIN TONIGHT

ACTOR'S TRAGIC DEATH

MOM SAVES SON FROM LION





## **TREES, MEMORIAL PARK, HOUSTON**

The drought had a devastating impact on the state's trees. The Texas Forest Service estimates more than 500 million trees were killed by the drought. The trees that were under the most stress were actually urban trees, when local governments restricted watering public landscapes. These pictures from the Texas Forest Service show Memorial Park in Houston, where trees turned brown and died over the course of a year.





Park Planning: **Where to start...**

Add “Green Infrastructure” to Park/Community System Priorities



Include Hazard Mitigation in the planning process



# Identify Key Partners



The screenshot shows the official website of the New York City Department of Parks & Recreation. At the top left is the NYC Parks logo, a green maple leaf inside a circle. To its right is the text "Official Website of the New York City Department of Parks & Recreation" and social media buttons for Facebook (104K likes), Twitter (Follow), and Instagram (Follow). Below this is a search bar with a green "Search" button. A navigation bar contains links for Translate, Accessibility, View FAQs, Get email updates, Shop Parks, Contact us, and Donate Now. A secondary navigation bar lists categories: Parks, Facilities, Events, Programs, Kids, Permits, Trees, Opportunities, and About.

The main content area is titled "Green Infrastructure" and includes a breadcrumb trail: "About NYC Parks > Sustainable Parks > Green Infrastructure". Below the title are icons for Email, Print, and Translate, along with social media buttons for Like (0), G+, and Tweet. A large photograph shows a vibrant green street garden with tall white flowers and purple blossoms, situated next to a road with cars. To the right of the image is a sidebar titled "Sustainable Parks" with a list of links: Sustainable Parks main page, Green Food, Green Concessions, Green Infrastructure, Green Roofs, Green Events, Landscape Guidelines, Compost/Mulchfest, Greening the Fleet, Green POP, and MillionTreesNYC.

**Green Infrastructure**

*Green Infrastructure is a citywide system of engineered landscapes that transform unused impervious areas into vibrant and pervious green space. Through inter-agency partnerships, we build spaces that provide a multitude of social and environmental benefits; the quality and performance of these spaces are enhanced through our ongoing research work.*

### History

Launched in 1996, the Greenstreets program began as a partnership between the NYC Parks and the New York City Department of Transportation (DOT). The program was created to change unused road areas into green spaces that beautify neighborhoods, improve air quality, reduce air temperatures, and calm traffic. Since its beginning, over 2,500 Greenstreets have been built citywide.

### What we do

In 2010, the Greenstreets program became the Green Infrastructure Unit, expanding our focus to active stormwater capture. The New York City Department of Environmental Protection (DEP) has partnered with the Green Infrastructure Program to build cost-effective stormwater capture to help reach its water quality goals. Because of our recent funding source, new greenstreets will be constructed in DEP-designated priority sewersheds, where the Combined Sewer Overflow (CSO) effect is most significant. [Learn more about DEP and their Green Infrastructure Plan](#)

Small steps can lead to change



Tie to other projects





Don't overlook the value of training



## Parks can be Playful & Pragmatic



Photo credit: <http://elevatearchitecture.com>

- Jamie Rae Walker . Associate Professor & Extension Specialist . Texas AgriLife Extension