

A CONSERVATION WALK

Conveying Conservation Messaging through a Garden Landscape



Jim Locklear

Panel Session: *Innovative Public Garden Engagement Strategies*
BGCI 2015 International Congress on Education in Botanic Gardens



A photograph of Warren Buffett, an elderly man with white hair and glasses, wearing a dark jacket. He is looking off to the side with a slight smile, his hands clasped in front of him. The background shows a city skyline at dusk or dawn, with several tall buildings and a body of water in the foreground.

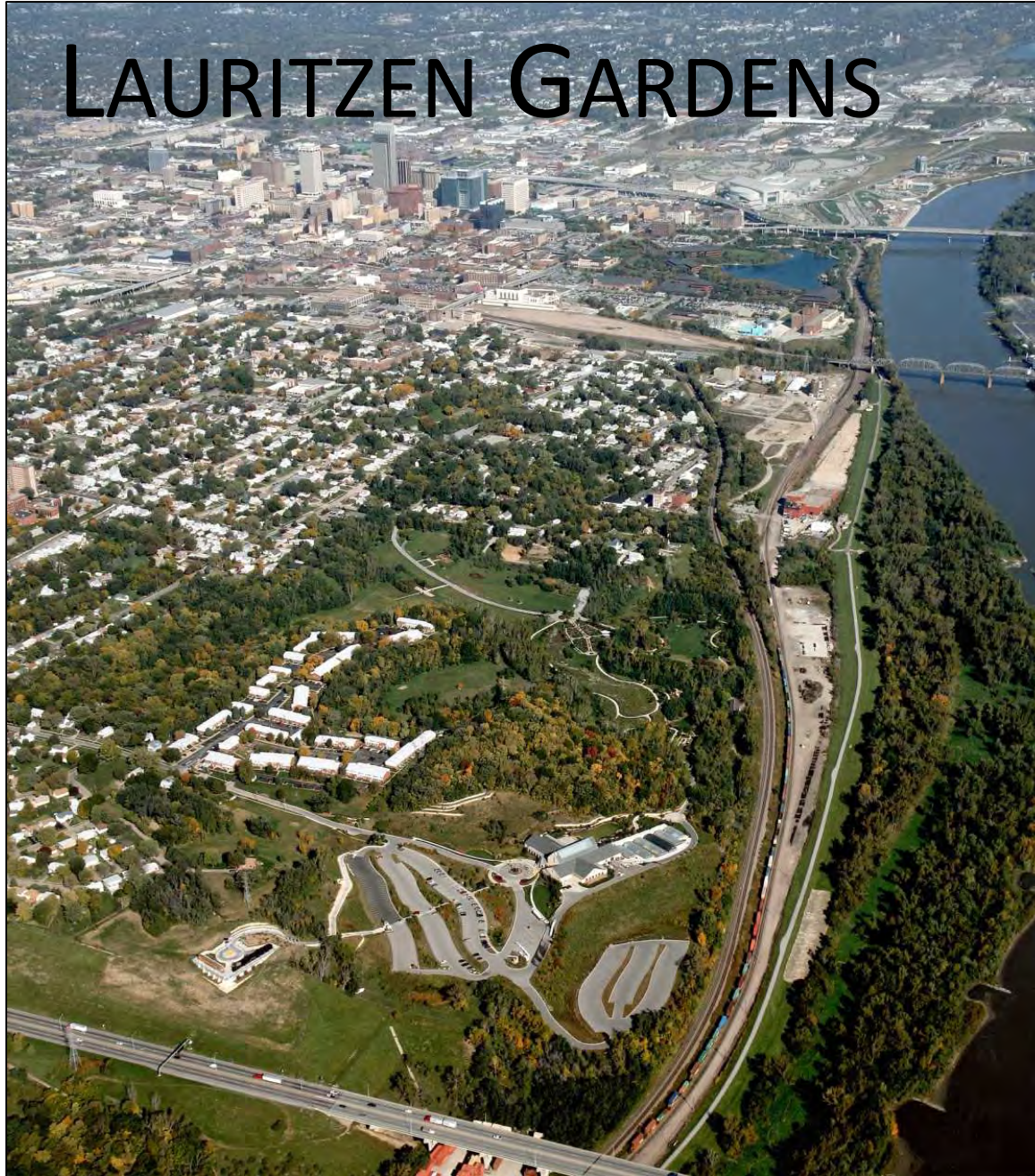
THE ORACLE & OMAHA

HOW WARREN BUFFETT AND HIS
HOMETOWN SHAPED EACH OTHER

STEVE JORDON

Omaha World-Herald

LAURITZEN GARDENS



LAURITZEN GARDENS





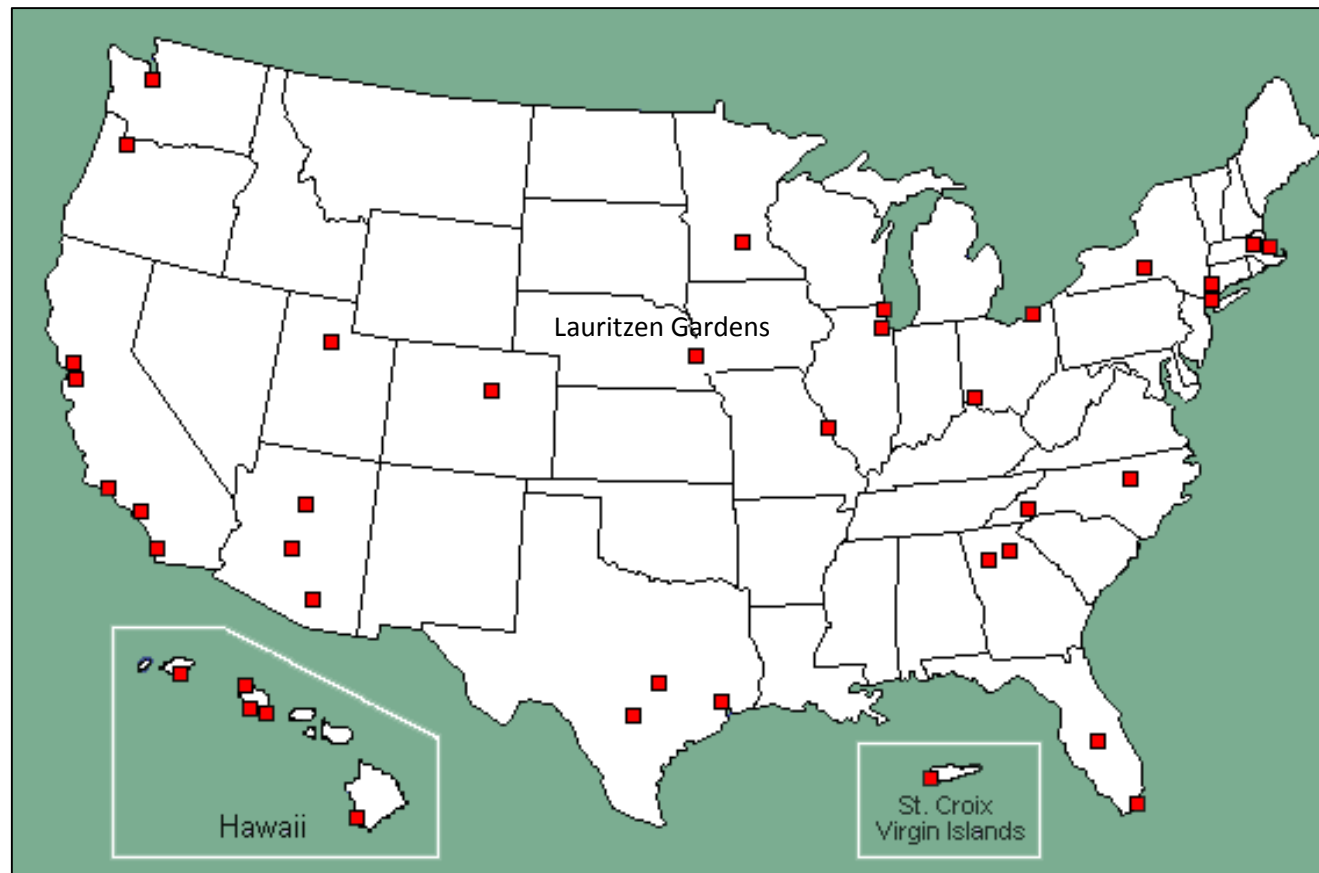
CONSERVATORY





THE CENTER FOR PLANT CONSERVATION

PARTICIPATING INSTITUTIONS



CONSERVATION DISCOVERY GARDEN

THE GENESIS



CONSERVATION DISCOVERY GARDEN

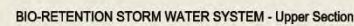
"A CONSERVATION WALK"



CONSERVATION CHALLENGE

SOLUTIONS

- “Bioretention” is a natural way to slow down and filter stormwater runoff in urban areas.
- Our bioretention system uses a series of three shallow ponds to slow the flow of water coming off our parking lot, plus special plantings to help filter pollutants from the water.
- The water captured and cleansed by our bioretention systems slowly soaks into the soil where it can be stored for future use by plants and recharge the groundwater.



- Plant a rain garden to capture and filter stormwater in your neighborhood.



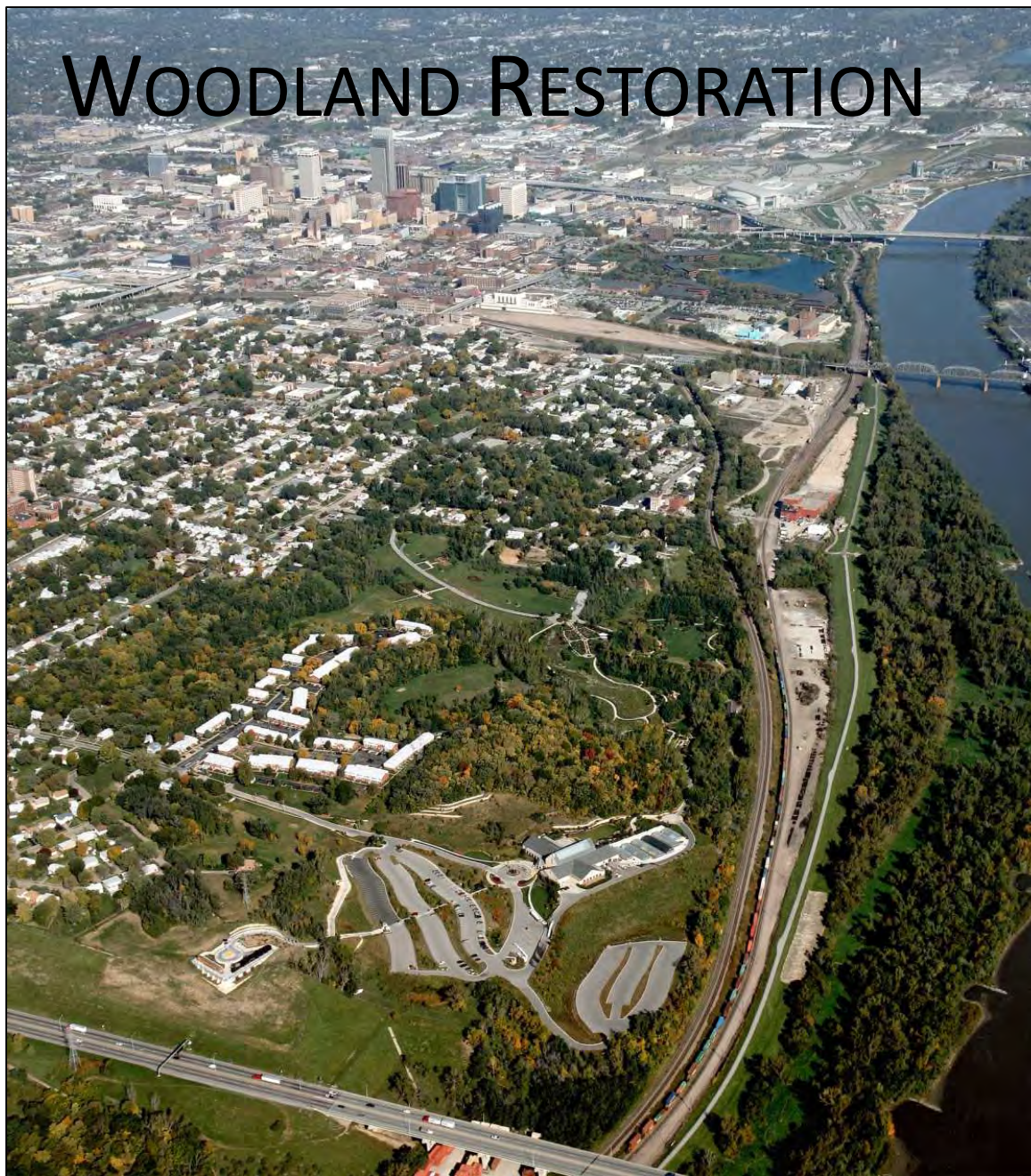


BIORETENTION



BIORETENTION

WOODLAND RESTORATION





WOODLAND RESTORATION

WOODLAND RESTORATION



Bur oak (*Quercus macrocarpa*)
Oak sedge (*Carex albicans*)



GUIDED BY NATURE

CONSERVATION CHALLENGE

It can take a lot of water to keep the landscapes of our homes and neighborhoods green during the summer, especially when we grow plants from regions that have higher rainfall. These plants often need more water than we receive in a year of rainfall, even more so in times of drought.

- Plants that occur naturally in our woodlands and prairies are well adapted to the local climate and rainfall patterns.
- Growing these “native” plants is a good way to use less water in the landscape.
- Growing native plants like the bur oak (*Quercus macrocarpa*) trees planted here is good for the native wildlife that depend on them for food and shelter.

YOU CAN HELP!

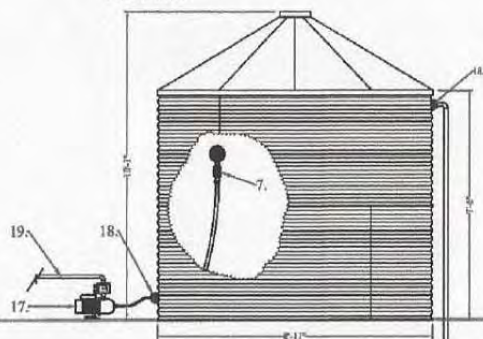
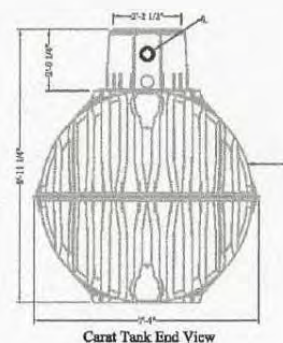
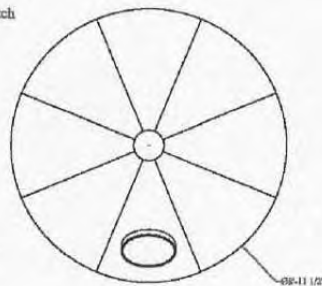
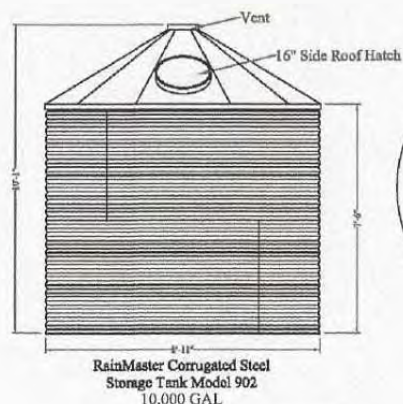
- Use less water by growing native trees, shrubs, grasses and wildflowers



RAINWATER HARVEST

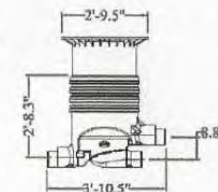


Legend	
1.	GRAF Cast S 1700 Gallon Underground Tank
2.	GRAF Optimax Industrial Filter
3.	6" Tank Overflow Line
4.	1-1/4" Bulkhead Fitting for plumbing thru tank or riser assembly
5.	Electrical Connection to Pump and Float Switch
6.	6" Overflow siphon
7.	GRAF Flooting 1-1/4" Extractor with check valve
8.	RainMaster 1.25 HP 115v Submersible Pump
9.	6" RainMaster Pipe Gasket (for Tank Penetrations)
10.	8" PVC from Roof Gutters and Downspouts
11.	1 1/4" Schedule 40 PVC Pump output to Use
12.	Calming Inlet to prevent the disturbance of the fine sediment layer at bottom of tank
13.	Adjustable Riser and Childproof Lid with Sealing Gaskets
14.	Flexible Couplers for Connection to Filter
15.	Pump Output Line to Above Ground Tank (1-1/4" Typical)
16.	Float Switch to Activate Pump When Water is Available to Fill Above Ground Tank
17.	RainMaster MHP75A 3/4 HP Centrifugal Pump with Automatic Operation
18.	2" Bulkhead Fitting
19.	Output to Irrigation or Other Non Potable
20.	8" Filter Overflow
21.	6" Line From Filter to Inlet of Tank



GRAF Optimax Industrial
High efficiency, self-cleaning, below ground filtration system.

- Variable installation depth from 31-59 inches
- Flush installation at ground level
- Only 7.87" height offset between inlet and outlet
- 0.33mm (01") mesh filter
- Lockable childproof cover
- Optional Optimax® Sprayhead
- Available with vehicle-loading cast iron lid
- Over 95% yield
- Self-cleaning filter
- 6" and 8" connections
- Max. 8,000 sq. ft. with 6" connections
- Max. 16,000 sq. ft. with 8" connections

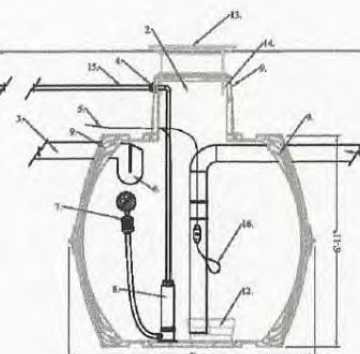


Tank height should be set and plumbing pitched to best utilize existing grade.

A site assessment should be done prior to installation to determine the optimum levels for filter and plumbing so as to provide positive drainage to tank and stormwater overflows.

USER'S Responsibility
Unreated Refusewater is NON-Potable water. Warning do not drink water supplied from RainHarvest Systems rainwater systems and related equipment. We will be happy to offer suggestions on the use of our various products either by way of printed material or through direct contact with RainHarvest Systems town managers. However, since we have no control over the use of our products once they are shipped, NO WARRANTY, WHETHER OF MERCHANTABILITY, FITNESS FOR PURPOSE, OR OTHERWISE is made beyond the repair, replacement, or refund of purchase price at the sole discretion of RainHarvest Systems. Users shall determine the suitability of the product for the intended application before using, and the users assume all risk and liability whatsoever in connection therewith, regardless of any town managers suggestions or statements as to the application or construction. In no event shall any remedy exceed the purchase price of the product. Consult local building codes for the system use.

NOTE: This drawing is for illustrative purposes only. Actual systems and designs may vary. Always check with local building codes as they will apply. Electrical work to be performed by licensed professional. Points of use shall be labeled as: "Non Potable water, Do Not Drink!"



Tank Side View

NOTE: This drawing is for illustrative purposes only. Actual systems and designs may vary. Always check with local building codes as they will apply. Electrical work to be performed by licensed professional. Points of use shall be labeled as: "Non Potable water, Do Not Drink!"

DATE:	APPROVED BY:	DRAWN BY:	QUANTITY:	SHEET:
		CMO		1 OF 1
RainMaster Rainwater Collection System for Lauritzen Gardens				
		RainHarvest Systems LLC 6075 Parkway North Drive Suite D Cumming, GA 30046 Tel: 770-889-2333 Fax: 770-889-2577		







PLANT COMMUNITIES

THE GREAT PLAINS



* Lauritzen Gardens

Map used with permission

***The Great Plains:
America's Lingerin Wild***
by Michael Forsberg (2009)



A GARDEN OF **WILD PLACES**

CONSERVATION CHALLENGE

The goal of plant conservation is to safeguard plants in their natural habitat. The survival of endangered plants depends on the health of the natural communities in which they occur. This garden presents a sampling of the wild places of Nebraska and Iowa that are home to rare and endangered plants.

SOLUTIONS

- Lauritzen Gardens scientists study endangered plants in the wild places where they grow to discover their conservation needs.
- What we learn about these plants often helps in the conservation of the natural community in which they occur.
- Getting to know rare plants and the places where they grow leads to a greater appreciation for and a desire to protect both plants and plant communities.

YOU CAN HELP!

- Get to know the beautiful native plants and WILD places of Nebraska and the Great Plains.



The plants of the following **WILD PLACES** are on display in this garden:

- 1** Prairies of the Loess Hills
- 2** Antonia's Chalk Bluffs
- 3** Chop-Hills and Blow-Outs
- 4** Rock Gardens of the Panhandle

Prairies of the Loess Hills





Antonia's Chalk Bluffs





Chop-Hills and Blow-Outs





Rock Gardens of the Panhandle





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LAURITZEN GARDENS

OMAHA'S BOTANICAL CENTER

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CONVEYING CONSERVATION MESSAGING THROUGH A GARDEN LANDSCAPE

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INNOVATIVE PUBLIC ENGAGEMENT ACTIVITIES

Tara Moreau

Associate Director, Sustainability and Community Programs
University of British Columbia Botanical Garden

Tamar Arbel Elisha

Head of Community Department
Ramat Handiv Memorial Gardens and Nature Park

Gilles Vincent

Special Advisor of the Executive President
Chenshan Botanical Garden

Jim Locklear

Director of Conservation
Lauritzen Gardens

