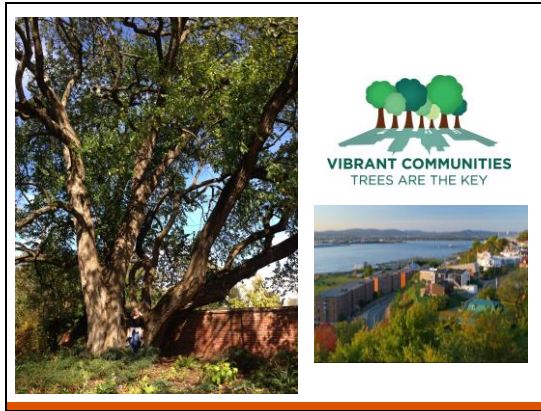


Slide 1



This presentation is based on an overview of the national U&CF program prepared by Jan Davis (Director Urban & Community Forestry, Washington, DC) that focuses on U&CF priorities developed collaboratively with national urban forestry partners (Vibrant Cities, President's Climate Action Plan, NUCFAC).

I am very pleased to have been selected by Jan to present this overview to your group today on her behalf.

When I refer to "urban" forestry programs, I'm referring to "urban & community forestry" programs. Where "community" is differentiated from "urban" based on scale, complexity of policy and management, and "distance" from the problem (or objective) and the solution (or activity).

The presentation is broken down in to 5 short parts:

- The national U&CF structure (2 slides)
- Vibrant Cities areas of interest and recommendations (2 slides)
- President's Climate Action Plan with USDA & Forest Service responses (2 slides)
- NUCFAC 10 Year Action Plan components (3 slides)
- The "top 3" U&CF challenges (3 slides)

Photo (left): *Maclura pomifera*, commonly called Osage orange, hedge apple, horse apple, bois d'arc, or bodark (Jan's favorite tree); American Horticulture Society grounds, Mt. Vernon Highway, River Farm; Lewis & Clark Expedition gift from Jefferson to Washington. Credit: USDA FS

Slide 2



So what is the USDA Forest Service (USFS or Forest Service) urban natural resource role?

As an agency of the US Department of Agriculture (USDA), the Forest Service mission is to **sustain the health, diversity, and productivity** of the Nations forests and grasslands **to meet the needs of present and future generations**. Our Forest Service motto is "caring for the land and serving people".

For the Forest Service, the Nation's forests are composed of:

- 154 national forests
- 20 national grasslands
- 193 million acres federal land
- 540 million acres of private (forest) land
- **130 million acres of "urban forest lands"**

The Urban & Community Forestry program operates within State & Private Forestry (not National Forests, or Research) and Cooperative Forestry (which includes Forest Legacy, Community Forestry, Forest Stewardship, U&CF).

Note: Community Forestry (within Coop Forestry) is more like the European concept NOT urban as an "urban & community forestry".

Slide 3



In Cooperative Forestry in particular, we work with other national partners.

Some examples of how we deliver our program nationally:

- Through the states and in partnership with National Association of State Foresters (NASF)
- Through national non-profit partners (e.g. Sustainable Urban Forests Coalition, Arbor Day Foundation and American Forests)
- In interagency partnerships with other federal agencies
 - ✓ Urban Waters with EPA
 - ✓ State Green Infrastructure revolving funds with EPA
 - ✓ National Disaster Resilience Competition with HUD
- National Urban and Community Forestry Advisory Council (NUCFAC) – USFS led council of 15 members that advise the Secretary of Agriculture

Core focus areas for our national U&CF program are currently:

- Urban forest health and resilience
- Green jobs and environmental justice
- Reduce storm water runoff and access to clean water and clean air
- Energy conservation
- Local wood and biomass
- Local food through urban agroforestry
- Economic development
- Improving mental and physical health and providing outdoor experiences

Slide 4



We'll start be quickly reviewing four recent reports or efforts to develop priorities related to urban forestry.

First, in 2010 the USFS and the New York Restoration Project with the Sustainable Urban Forests Coalition (SUFC) launched the **Vibrant Cities and Urban Forests Task Force**.

The task force was convened to advance conversations and bolster efforts that have been taking place for years aimed at developing strategies to more effectively support urban ecosystems, and in particular urban forests.

In 2011, the Task Force issued a report called **Vibrant Cities and Urban Forest: A National Call to Action** that looked broadly at issues like:

- Health and social services¹
- Landscape design and architecture
- Economics and social justice¹
- Green infrastructure and urban heat island effects (and dozens of others)¹

It is a good reference and can be found at www.TreesAreTheKey.org (see Online Toolkit); 23 pages

The 12 recommendations (see report for Suggested Action Steps):

- Create a national education and awareness campaign
- Foster urban forestry and natural resources stewardship and volunteerism
- Create sustainable jobs in urban forestry and green

¹ Triple Bottom Line – Social, environmental, and economic

12 recommendations summarized
in slide 5 that follows

- infrastructure
- Cultivate partnerships between public and private sectors
- Develop new public administration models for urban ecosystems
- Create comprehensive, multi-jurisdictional Urban Regional Natural Resource Plans
- Integrate federal agencies' green infrastructure goals
- Establish energy efficiency programs that emphasize the use of trees
- Ensure equal access to urban forestry and GI resources
- Support collaborative urban ecosystem-focused research
- Encourage open access to and use of social assessment tools
- Establish national **Vibrant Cities** standards

See <http://treesarethekey.org/background/> for a complete list of **Vibrant Cities and Urban Forests Task Force** members and the planning committee.

Social assessment tools like: Stew-MAP: <http://www.stewmap.net/>

(This is a slide from the Vibrant Cities Trees are the Key Toolkit; <https://vcuf.files.wordpress.com/2013/06/presentation-slides.pdf>)

Slide 5



From the **Vibrant Cities and Urban Forests Task Force** Vision Statement:

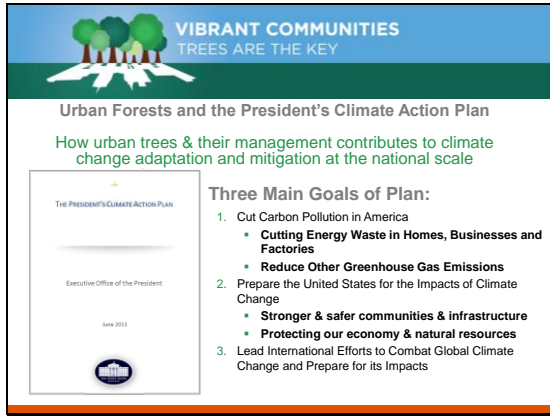
- **CITIES AS ECOSYSTEMS** - Recognizing that cities are ecosystems – with interacting human, structural and ecological components – creates great potential for urban forests and green infrastructure to improve life in urban areas
- **GREEN INFRASTRUCTURE** - Green infrastructure encompasses the naturally occurring and human-built features that manage stormwater, remove pollutants, conserve energy, reduce erosion and provide other ecological, cost-effective and environmentally sustainable services
- **URBAN FORESTS** - Urban forests are systems of trees, other vegetation and water within any urban area. They can be understood as dynamic green infrastructure that provides cities and municipalities with environmental, economic and social benefits. Urban forests are forests for people.

Emerging trends identified that impact urban forestry program and management strategies:

- Environmental
 - ✓ Climate
 - Frequency of extreme events – storms, heat waves & droughts
 - ✓ Biodiversity
 - Urban ecosystems threatened by invasive plants and diseases
- Economic
 - ✓ Funding
 - Move from government response to environment to public/private
 - ✓ Valuation
 - Accurate valuation of ecosystem services developing
- Social
 - ✓ Quality of Life
 - Lack of interaction with nature in cities leads to diminished childhood and adult physical & mental

- health
- ✓ Health (Human)
 - Healthcare and social services facing financial stress & strain of aging population

Slide 6



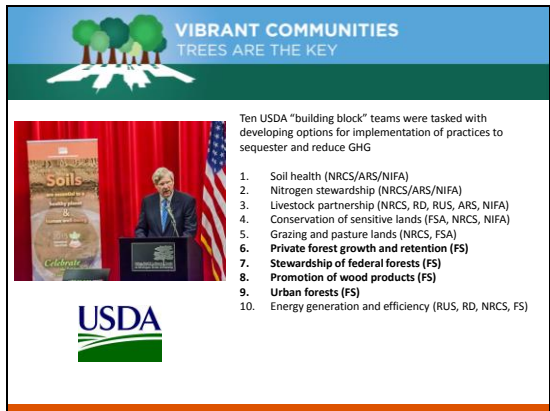
Second, in June 2013, the President announced the White House's Climate Action Plan. From the Action Plan the President said: "... we have a moral obligation to future generations to leave them a planet that is not polluted and damaged"....

How did we fit our UCF program in to it?

Our role in managing urban forests supports two of these goals:

- Cutting carbon pollution, urban trees can play a role in cutting energy waste in homes (by reducing energy demand) and in reducing other greenhouse gas emissions (through carbon sequestration and storage).
- Preparing U.S. for impacts of climate change, urban trees will play a role in "building stronger and safer communities" (managing tree structure and risk), and "protecting our economy and infrastructure" (green jobs, community resilience, sustainability, reduce wildfire risk).

Slide 7



Third, in April of 2015, USDA Secretary Tom Vilsack announced that USDA will contribute to meeting the goals of the President's Climate Action Plan and the GHG reduction commitment through a series of Greenhouse Gas "Building Blocks".

These building blocks are:

- Voluntary, incentive based approaches
- Provide economic and environmental benefits
- Meet the needs of producers
- Assess progress and measure success
- Cooperative and focused on building partnerships

Vilsack said some of the best opportunities for forestry were:

- Planting trees on marginal ag lands
- Planting in burned over areas (federal and private)
- Within our urban forests

So our U&CF Program partnered with the Arbor Day Foundation and created the **Energy Saving Trees** program. A tool that helps home owners pick location and species of trees to plant on their property in order to reduce energy bills and sequester carbon. The utility partner shoulders the cost of the tree.

Between 2016 and 2025, the return on investment for the USDA Forest Service's initial \$1 million investment will be \$4.9 Million. The Program builds off the i-Tree Design platform to generate potential environmental benefits.

Note: i-Tree is a state-of-the-art, peer-reviewed software suite from the USDA Forest Service that provides urban forestry analysis and benefits assessment tools that quantify the structure of community trees and the environmental services that trees provide. The 2014 version of i-Tree offers several urban forest assessment applications including i-Tree Eco, i-Tree Streets and i-Tree Vue. i-Tree Design and i-Tree

Canopy are accessible online assessment tools. www.iTreeTools.org

Slide 8

VIBRANT COMMUNITIES
TREES ARE THE KEY

Ten-Year Urban Forestry Action Plan (2015-2025)

National Urban & Community Forestry Advisory Council's Ten Year Action Plan

The 3 Overarching Principles:

- Advance health and wellness of forests, ecosystems, and people
- Maximize community and ecosystem sustainability
- Build community and natural ecosystem resilience

www.fs.fed.us/ucf/nucfac

To be released November 2015

And **fourth**, we'll look at the National Urban & Community Forestry Advisory Council (NUCFAC) 10 Year Action Plan (to be released November 2015).

This plan takes a comprehensive look at issues highlighted in **Vibrant Cities** and the **Climate Action Plan**.

Within 3 overarching goals:

- Advance health & wellness of forest, ecosystem, and people (i.e. the community)
- Maximize community and ecosystem sustainability
- Building community and ecosystem resilience

Slide 9

VIBRANT COMMUNITIES
TREES ARE THE KEY

Ten-Year Urban Forestry Action Plan (2015-2025)

National Urban & Community Forestry Advisory Council's Ten Year Action Plan

1. Planning

1. Integrate Urban and Community Forestry into all Scales of Planning

A. Support development of city wide and regional scale master plans for urban forests.

B. Support inclusion of trees and forests as elements of all community comprehensive and master planning efforts.

C. Launch public outreach and education campaign to secure the value of urban forests and urban forests ecosystems as essential contributors to community sustainability and resilience.

D. Increase community capacity to use urban trees and forestry in public space planning, infrastructure, and private development.

- Diversity & leverage funding
- Increase public awareness & education

www.fs.fed.us/ucf/nucfac

To be released November 2015

The 7 goals identified in the plan provide a focus for the next 10 years:

- Planning
- Human Health
- Diversity & Leadership
- Environmental Health
- Management
- Funding
- Education and Awareness

Strategies are identified for each of the goals.

Slide 10

VIBRANT COMMUNITIES
TREES ARE THE KEY

Ten-Year Urban Forestry Action Plan (2015-2025)

National Urban & Community Fore Advisory Council's Ten Year Action Plan

Within each of the 7 Goals:

- What we have done well
- What still needs to be done
- How to get there
- Case studies
- Funding needs
- Research needs

www.fs.fed.us/ucf/nucfac

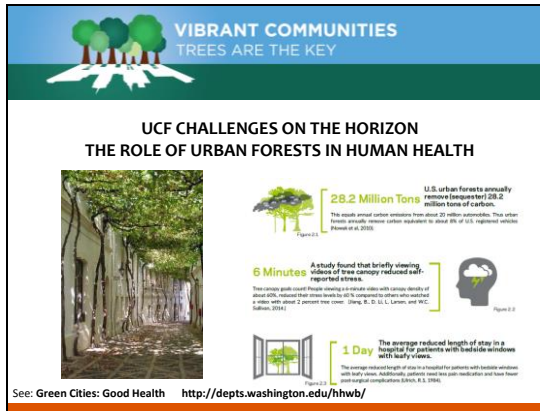
To be released November 2015

And for each goal the plan talks about:

- What has been done well in UCF (not just USFS – but all those practicing in the field)
- What still needs to be done
- Some actions that can be taken and case studies to support them
- Funding needs
- And research needs

Will be released in November 2015. www.fs.fed.us/ucf/NUCFAC

Slide 11



VIBRANT COMMUNITIES
TREES ARE THE KEY

UCF CHALLENGES ON THE HORIZON
THE ROLE OF URBAN FORESTS IN HUMAN HEALTH

28.2 Million Tons
U.S. urban forests annually remove approximately 28.2 million tons of carbon. This equals annual carbon emissions from about 20 million cars. The urban forest actually removes carbon equivalent to about 6% of U.S. registered vehicles. (Forest at 2010)

6 Minutes
A study found that briefly viewing images of tree canopy reduced self-reported stress. This change was most pronounced in people with existing levels of about 40% higher stress levels than 40% compared to others who watched a video with about 2 percent tree cover. (Song, G., Li, S., Li, L., Larson, and H.C., 2014)

1 Day
The average reduced length of stay in a hospital for patients with existing conditions with tree cover. Additionally, patients with new post-operative and bone fracture post-surgical complications. (Lynch, S., 2014)

See: Green Cities: Good Health <http://depts.washington.edu/hhwb/>

And now, after looking at recent work by the **Vibrant Cities & Urban Forests Task Force**, the **2013 Climate Action Plan with USDA's 2015 Building Blocks** for carbon, and the new **NUCFAC 10 Year Plan**, 3 opportunities appear on the horizon.....

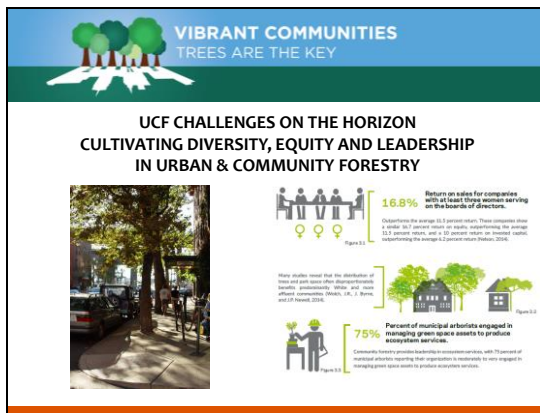
The role of urban forests in human health....

More and more data is becoming available about how exposure to green environments

- Reduces childhood ADD
- Removes pollution that causes asthma
- Increases recovery time in hospitals
- Reduces stress
- And in some cases, reduces crime

See Kathy Wolf, Green Cities: Good Health
<http://depts.washington.edu/hhwb/>

Slide 12



VIBRANT COMMUNITIES
TREES ARE THE KEY

UCF CHALLENGES ON THE HORIZON
CULTIVATING DIVERSITY, EQUITY AND LEADERSHIP IN URBAN & COMMUNITY FORESTRY

16.8%
Return on value for companies with at least three women serving on the boards of directors. (Observed the average 11.2 percent return. These companies show a higher 16.8 percent return on equity, outperforming the average 13.3 percent return, and a 32 percent return on invested capital, outperforming the average 10 percent return. (Forbes, 2014)

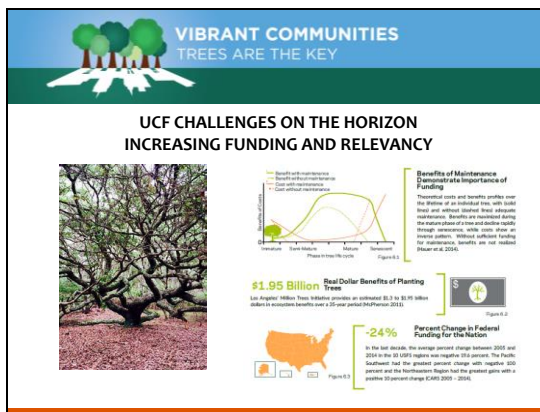
75%
Percent of municipal arborists engaged in managing green space assets to produce exceptional green spaces. (Community forest provides leadership in urban forestry, with 75 percent of community forest providing leadership in urban forestry, with 75 percent of community forest providing leadership in urban forestry, with 75 percent of community forest providing leadership in urban forestry. (Urban Forestry Institute, 2014)

The 2nd opportunity on the horizon...

Cultivating diversity, equity, and leadership in UCF...

- Among urban forestry professionals
- And the neighborhoods and communities served.

Slide 13



VIBRANT COMMUNITIES
TREES ARE THE KEY

UCF CHALLENGES ON THE HORIZON
INCREASING FUNDING AND RELEVANCY

\$1.95 Billion
Real Dollar Benefits of Planting Trees. Los Angeles Habitat Tree Initiative provides an estimated \$1.9 to \$2.15 billion dollars in ecosystem benefits over a 20 year period (HabitatPartners 2014).

-24%
Percent Change in Federal Funding for the Nation. In the last decade, the average percent change between 2003 and 2014 in the 50 US states was negative 24 percent. The Pacific Southwest had the greatest percent change with negative 30 percent and the Northeast Region had the greatest gains with a positive 10 percent change (USDOE, 2014).

And as always...

Importance of funding and relevancy...

- Ability to tell the story of the real benefits of urban forests
- Challenge of metrics in UCF Programs

Right now we believe that counting cities with sustainable UCF programs is better than actually counting trees planted... but that is changing with the increasing ability to calculate the value of tree canopy cover through tools & models like i-Tree (www.iTreeTools.org).

We consider a city's program to be sustainable if they do 4 things:

- Have dedicated professional staff (urban forester, park supervisor, city planner, etc.)
- Have an urban forestry management plan for the city
- Have tree management and protection ordinances
- Has an advisory council or advocacy group (likely a local non-profit)

Note: Region 8 has developed an **Urban Forest Sustainability and Management Audit Checklist** that identifies 10 categories of

management to measure and track local U&CF management programs over time. Currently being tested in Raleigh, NC. See: www.UrbanForestrySouth.org. Search for keyword: audit. <http://www.urbanforestrysouth.org/resources/library/ttresources/urban-forest-sustainability-and-management-audit-checklist> An Excel version is also available.

Slide 14

VIBRANT COMMUNITIES
TREES ARE THE KEY

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That is a quick look at the U&CF program at a national level including:

- The national U&CF Program priorities
- Vibrant Communities and their **Trees are the Key** report
- President's Climate Action Plan
- USDA's "building blocks"
- NUCFAC 10 Year Plan priorities
- Three principal U&CF challenges on the horizon
 - ✓ Human health
 - ✓ Building diversity and leadership
 - ✓ Funding and relevancy to communities

Through our network of partners we have hundreds and hundreds of U&CF projects at the local level.

This presentation is available as PDF at www.UrbanForestrySouth.org, search for "extension foresters".