OUTLINE

• JOBS FRAME IMPACT ON GREEN INFRASTRUCTURE

• GREEN INFRASTRUCTURE JOBS IMPACT ON LOW-INCOME WORKERS

• COMMUNICATION STRATEGIES USING A JOBS FRAME

• DISCUSSION
FOCUS ON JOBS TO BUILD SUPPORT FOR GREEN INFRASTRUCTURE

JOBS FRAME

INCLUSIVE OPPORTUNITY & "HIGH ROAD" OUTCOMES

BROADER CONSTITUENCIES OF SUPPORT

JOBS AND ECONOMIC DEVELOPMENT

FAIR AND EFFECTIVE POLICY AND FINANCE SOLUTIONS

INCREASED INVESTMENT IN STORMWATER + GREEN INFRASTRUCTURE
GREEN INFRASTRUCTURE = JOBS

- Green roofs
- Graywater irrigation
- Permeable city surfaces
- Bioswale
- Rain catchment
- Rain storage

JOBS!

JOBS!

JOBS!

JOBS!

JOBS!
GREEN INFRASTRUCTURE RELATED JOBS

Installation and Design
- Landscape architect
- Engineers
- Plumbers
- Contractors
- Construction workers
- Urban planners
- Construction and building inspectors

Operations and Maintenance
- Landscapers
- Auditors
- Plumbers
- Janitors and cleaners

Supply Chain
- Nursery and greenhouse workers
- Horticulturists
- Civil and environmental engineers
- Truck drivers
- Stock clerks
JOB IMPACTS OF GREEN INFRASTRUCTURE

• Philadelphia’s $1.6 Billion investment in stormwater infrastructure has the potential to generate **15,266 green collar direct jobs** and nearly $7.4 billion in sales through the green stormwater infrastructure supply chain.¹

• In Northeast Ohio, **31,000 direct jobs** could be created between 2012-2016 from a $3 billion in stormwater infrastructure.²

• Montgomery County, Maryland expects to employ **3,300 workers** over the next 3 years building its new network of green stormwater controls.³

The Environmental Protection Agency estimates that an investment of $1.88 Billion is required to manage stormwater and preserve water quality across the US. Our Water Works report calculates that spreading this investment over five years would generate **$265 Billion in economic activity and create close to 1.9 million jobs.⁴**
JOB IMPACTS OF GREEN INFRASTRUCTURE

• Investments of $166 million in stormwater projects between 2009-2011 in Los Angeles produced an estimated 2,075 total jobs.⁵

• PlaNYC anticipates the creation of 266 total jobs from investing $23 million in green roofs and 1,446 direct jobs from a $346 million investment in watershed protection programs.⁶

• Installing green roofs on 5% of Chicago’s buildings would create 7,934 jobs from an investment of $403 million.⁷
GREEN INFRASTRUCTURE JOBS = LOCAL JOBS

- 74% of $165 Million recently invested in stormwater projects in Los Angeles County was spent locally\(^8\)
- 73% of workers involved in Los Angeles’ stormwater projects were employed by businesses located within the county, and many of the most frequently hired occupations employed a higher percentage of county residents\(^9\)

“Public money used for green infrastructure has the potential to create more opportunities locally than money spent on grey infrastructure.”

Janet Clements, Stratus Consulting
Green Infrastructure Jobs

Accessible jobs: Typically requiring a high school education or less

Good jobs: Many offering a family-supporting wage

Protected jobs: With considerable numbers of unionized occupations

Career ladder jobs: Many offering advancement opportunities through apprenticeships and training
GREEN INFRASTRUCTURE JOBS = LOW ENTRY BARRIERS

Installation and Design
• Plumbers
• Contractors
• Construction Workers

O & M
• Landscapers
• Auditors
• Plumbers
• Janitors
• Meter readers

Supply Chain
• Nursery and greenhouse workers
• Truck drivers
• Stock clerks
<table>
<thead>
<tr>
<th>Occupation</th>
<th>Starting Wage</th>
<th>Average Wage</th>
<th>% of Workers with H.S. Diploma or less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree trimmers &amp; pruners</td>
<td>$10.47</td>
<td>$15.80</td>
<td>88%</td>
</tr>
<tr>
<td>Roofers</td>
<td>$13.76</td>
<td>$21.83</td>
<td>86%</td>
</tr>
<tr>
<td>Landscape worker</td>
<td>$9.00</td>
<td>$13.65</td>
<td>78%</td>
</tr>
<tr>
<td>Construction worker</td>
<td>$10.62</td>
<td>$19.27</td>
<td>62%</td>
</tr>
<tr>
<td>Mgrs. of Construction trades</td>
<td>$20.80</td>
<td>$35.04</td>
<td>61%</td>
</tr>
<tr>
<td>Mgrs. Of Landscaping workers</td>
<td>$12.82</td>
<td>$24.27</td>
<td>55%</td>
</tr>
<tr>
<td>Installation maintenance &amp; repair workers</td>
<td>$8.84</td>
<td>$14.87</td>
<td>45%</td>
</tr>
</tbody>
</table>

Source: Economic Roundtable Analysis, Los Angeles County Water Sector Occupational Data (2010-2011)
GREEN INFRASTRUCTURE JOBS = REDUCED LEVELS OF SOCIETAL COSTS

A study of Philadelphia’s traditional and green infrastructure options for controlling CSO events found that hiring an unemployed person to do green infrastructure results in an estimated $10,000 per person/per year in avoided societal costs of poverty.¹⁰
LOCAL EXAMPLE: GENERATION WATER

WATER EFFICIENCY AUDIT AND IRRIGATION SYSTEM SURVEY TEAMS

<table>
<thead>
<tr>
<th>Team</th>
<th>Workers</th>
<th>Hourly Wage</th>
<th>Daily Wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Manager</td>
<td>1</td>
<td>$18</td>
<td>$144</td>
</tr>
<tr>
<td>Data Supervisor</td>
<td>1</td>
<td>$14</td>
<td>$112</td>
</tr>
<tr>
<td>GIS Analyst</td>
<td>1</td>
<td>$9.50</td>
<td>$76</td>
</tr>
<tr>
<td>Field Team Members</td>
<td>5</td>
<td>$8</td>
<td>$320</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8</td>
<td></td>
<td>$652</td>
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</tbody>
</table>

POTENTIAL IF BROUGHT TO SCALE

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of sites in LA</td>
<td>4,133</td>
</tr>
<tr>
<td>Possible Person Days</td>
<td>53,048</td>
</tr>
<tr>
<td>Total Possible Wages</td>
<td>$34,587,296</td>
</tr>
</tbody>
</table>

Source: Generation Water, Economic Roundtable analysis
<table>
<thead>
<tr>
<th></th>
<th>Direct Employment</th>
<th>Indirect Employment</th>
<th>Induced Employment</th>
<th>Total Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stormwater Projects</strong></td>
<td>6.6</td>
<td>2.4</td>
<td>4.0</td>
<td>13.1</td>
</tr>
<tr>
<td><strong>1 Year O&amp;M in Stormwater Projects</strong></td>
<td>7.4</td>
<td>2.4</td>
<td>4.0</td>
<td>13.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Direct Sales (Output)</th>
<th>Indirect Sales (Output)</th>
<th>Induced Sales (Output)</th>
<th>Total Sales (Output)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stormwater Projects</strong></td>
<td>$1,000,000</td>
<td>$408,934</td>
<td>$583,740</td>
<td>$1,992,674</td>
</tr>
<tr>
<td><strong>1 Year O&amp;M in Stormwater Projects</strong></td>
<td>$1,000,000</td>
<td>$426,970</td>
<td>$562,089</td>
<td>$1,989,059</td>
</tr>
</tbody>
</table>

Source: Economic Roundtable Analysis, Los Angeles County Water Sector Occupational Data (2010-2011)
COMMUNICATION STRATEGY USING A JOBS FRAME
MESSAGING BUILDING BLOCKS

- Celebrate local success
- Appeal to the future
- Emphasize innovation
- Focus on jobs
- Deliver
- Communicate success!
THE GREEN ECONOMY IS SUCCESSFUL!

- Green job growth outpaced traditional job growth in urban centers 2-1 between 2008-2010\(^1\)
- Inner-city green jobs grew at 10 times the rate of jobs overall in the last decade\(^1\)
- 45% of all green jobs in the US are held by people with a high school diploma or less\(^1\)
- 2011 clean energy investments in the United States experienced a 42% increase from the previous year\(^1\)

![Graph showing the clean economy compared with other sectors of the U.S. economy with millions of jobs.]
GREEN SUCCESS HAS BEEN OVERSHADOWED BY CONTROVERSY

GREEN BECAME POLITICAL

JOBS DID NOT MEET EXPECTATIONS
“It is important that the data and stories you provide are local, scalable, concrete and believable.”

Source: Spitfire Strategies
LINK CLEAN JOBS WITH CREATING A BETTER WORLD FOR FUTURE GENERATIONS

Hunts Point Riverside Park Redevelopment (South Bronx, NY)
EMPHASIZE INNOVATION!

- Innovation message counteracts regulation = “Job Killer” myth
- Evokes sentiment of American leadership and technological advancement
- Market shows innovation is a sellable amenity with customers
TWO-PRONGED APPROACH

TRADITIONAL INFRASTRUCTURE

GREEN INFRASTRUCTURE
FIVE PRINCIPALS FOR COMMUNICATING ABOUT WATER INFRASTRUCTURE:

1. Define problems, but always follow them with **solutions**
2. Detail the co-benefits: public health, public safety, and **jobs**
3. Capitalize on public support for conservation and recycling
4. Talk about fixing what we already have, rather than dramatically expanding it
5. Beware of hyper-technical language

Source: David Metz, FM3 and Barry Barnes, TBWB Strategies
**MESSAGES TO USE AND AVOID**

<table>
<thead>
<tr>
<th>Messages to Use</th>
<th>Messages to Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green jobs are part of the solution</td>
<td>Green jobs are THE solution</td>
</tr>
<tr>
<td>American ingenuity will produce jobs</td>
<td>Government will produce jobs</td>
</tr>
<tr>
<td>We are creating additional jobs and expanding the economy</td>
<td>Green jobs vs other jobs</td>
</tr>
<tr>
<td>Protections, safeguards, innovation</td>
<td>Regulation</td>
</tr>
<tr>
<td>Protecting the environment minimizes the challenges our children will have to face</td>
<td>You have to choose, clean environment or economic development</td>
</tr>
</tbody>
</table>

“**These are the jobs America needs right now!**”  
Source: Spitfire Strategies
EFFECTIVE COMMUNICATION BUILDS SUPPORT FOR “HIGH ROAD” OUTCOMES

- JOBS FRAME
- INCLUSIVE OPPORTUNITY & “HIGH ROAD” OUTCOMES
- BROADER CONSTITUENCIES OF SUPPORT
- JOBS AND ECONOMIC DEVELOPMENT
- FAIR AND EFFECTIVE POLICY AND FINANCE SOLUTIONS
- INCREASED INVESTMENT IN STORMWATER + GREEN INFRASTRUCTURE
Support businesses that want to thrive in a high-road market

Ensure job quality and equitable access to opportunity

Create workforce training pipelines that connect vulnerable people to green jobs

Increase demand for green goods and services

“HIGH ROAD” STRATEGIES = QUALITY WORK

GREEN GROWTH

HIGH ROAD STANDARDS

BUSINESS CAPACITY

CAREER PATHWAYS
SPECIAL THANKS TO

To download a copy of this PowerPoint or for more information visit us at: http://greenforall.org/focus/water/
REFERENCES

3. Chesapeake Bay Foundation, “Debunking the “Job Killer” Myth: How Pollution Limits Encourage Jobs in the Chesapeake Bay Region” (2011)

Interview with Janet Clements, Stratus Consulting, regarding a recent completed study of Washington DC’s gray and green stormwater investments and their job potential (2012)

Barns, Barry and Metz, David, FM3 and TBWB Strategies, Building Public Support for Water and Green Infrastructure (2012)
Spitfire Strategies, Green Jobs Research and Recommendations, Surdna Foundation (2011)
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IMAGE CREDITS

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