

Green Infrastructure Challenges/Strategies for Financial Professionals

GAWP Stormwater Committee/GAWRA

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Marietta, GA



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Introduction



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Dedicated to enhancing the ability of governments and other organizations to provide environmental programs and services in fair, effective and financially sustainable ways.

How you pay for it matters!



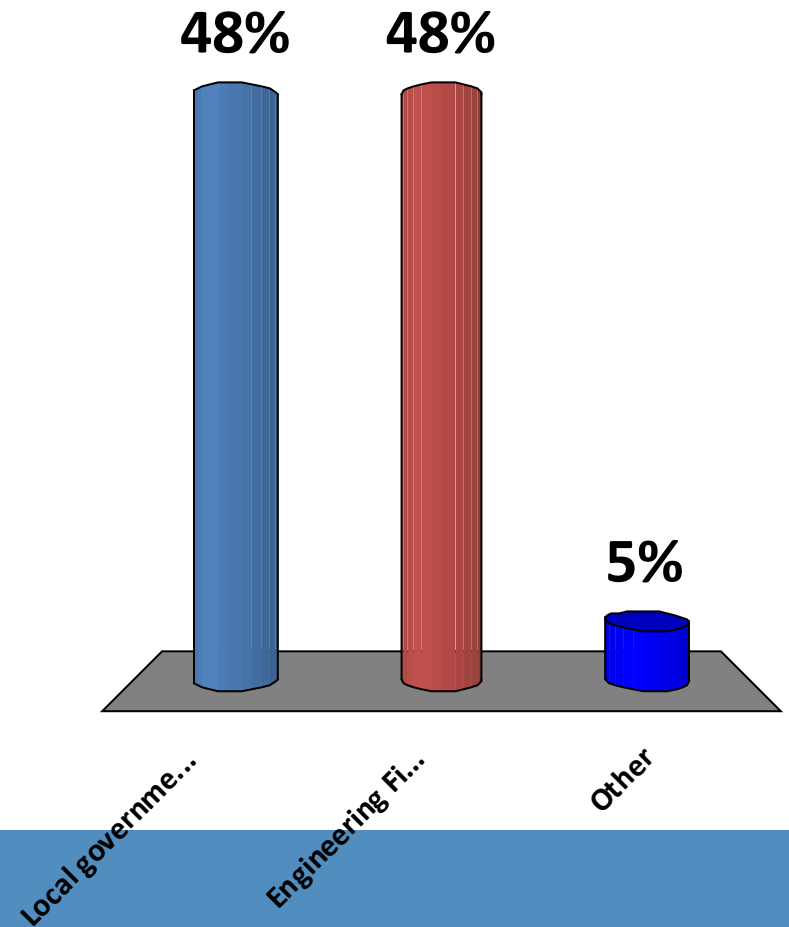
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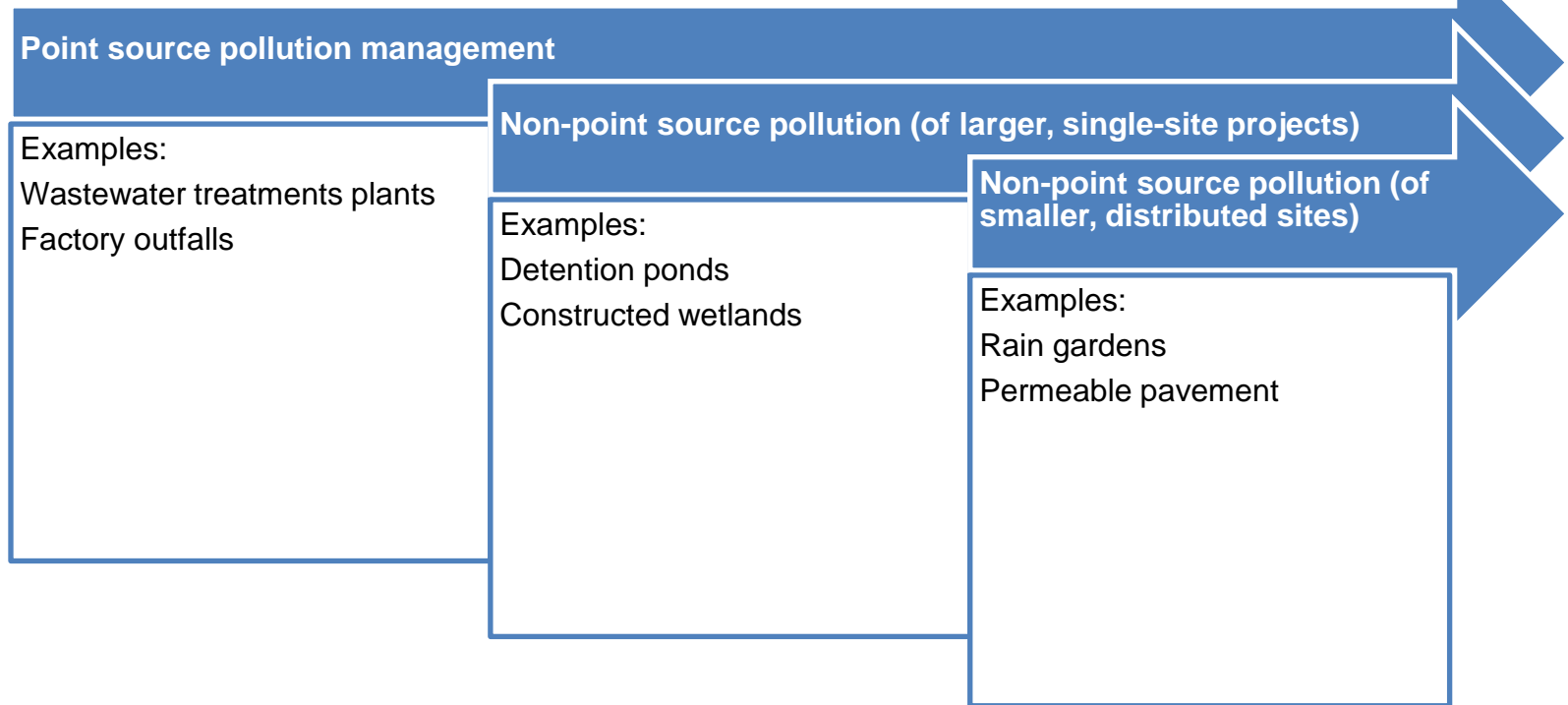
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Which group do you more closely align with?

1. Local government
2. Engineering Firm
3. Other



Evolution of Water Quality Management in the US

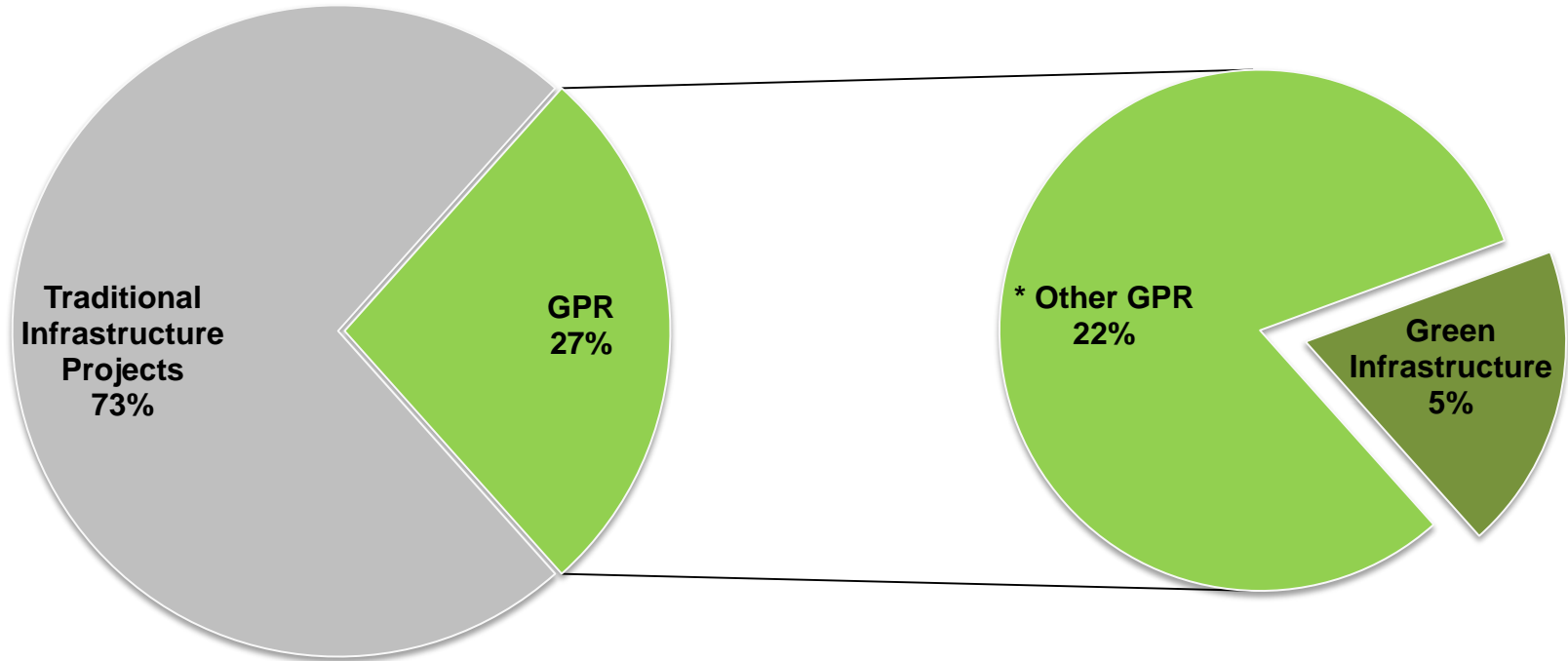


Gray vs. Green in Clean Water State Revolving Fund (CWSRF) Spending

- Historically, about 4% of the \$3.8 billion in CWSRF went to nonpoint source projects
- In 2009, ARRA appropriations required that 20% of funds be used for green projects (Green Project Reserve – GPR)



CWSRF Spending from 2009 - 2012



Data Source:

http://water.epa.gov/grants_funding/cwsrf/upload/CWNIMS_National.pdf

* Energy Efficiency,
Water Conservation,
Green Innovative



CWSRF - “Tapping its Untapped Potential”

- Land that will be a part of the water treatment process
- Source water protection
- “Land and easements for water quality purposes” (via easements of fee simple purchase)
- “... groups can serve as brokers to bring priority projects within their watershed to the CWSRF for funding.”



Group Exercise: What are Examples of Green Infrastructure?



Defining “Green Infrastructure” in CWSRF

- *“...green and sustainable water infrastructure”*
- *“They also include **green infrastructure**, such as green roofs, infiltration basins, curb cuts and landscaped swales, and wetland protection and restoration.”*
- *“... Guarantees for green infrastructure and other innovative technology”*
- *Real example: ... land acquisition services and the actual cost for the purchase of land or easements is also included in the scope of work*



Budgeting

- Budget - An instrument to implement and manage public policy by obtaining and appropriating the necessary resources for service delivery
- Budget Process – activities that encompass the development, implementation, and evaluation of the budget for the provision of services: **usually at least a 5-month process**



Important Factor: Depreciation

- Definition:
 - Loss of use & value; or
 - “The systematic & rational allocation of the cost of tangible noncurrent operating assets over the period benefited by the use of the asset”
- *How do we handle trees - Appreciate/Depreciate??*

Source: Government and Not-for-Profit Accounting: Concepts and Practices, By Michael H. Granof, Saleha B. Khumawalas

Important Factor - Capitalizable Asset

- Example Definition: Two years or more of useful life and has *materiality* (e.g. cost \$500 or more; or cost \$10,000 or more)
- *How do plants fit in with this definition?*
 - *New plants*
 - *Plants that already exist in the community*

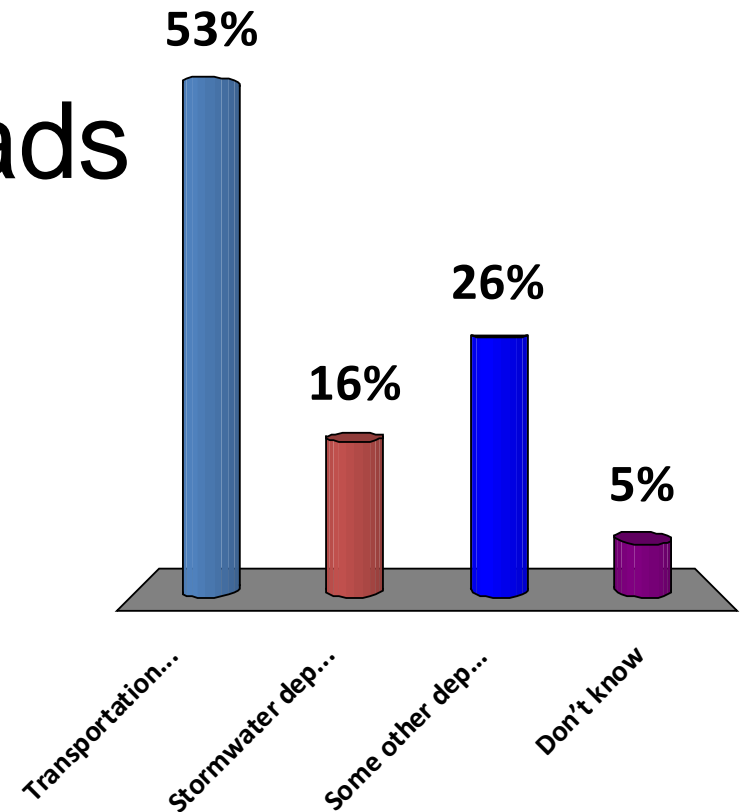


Other Tricky Areas



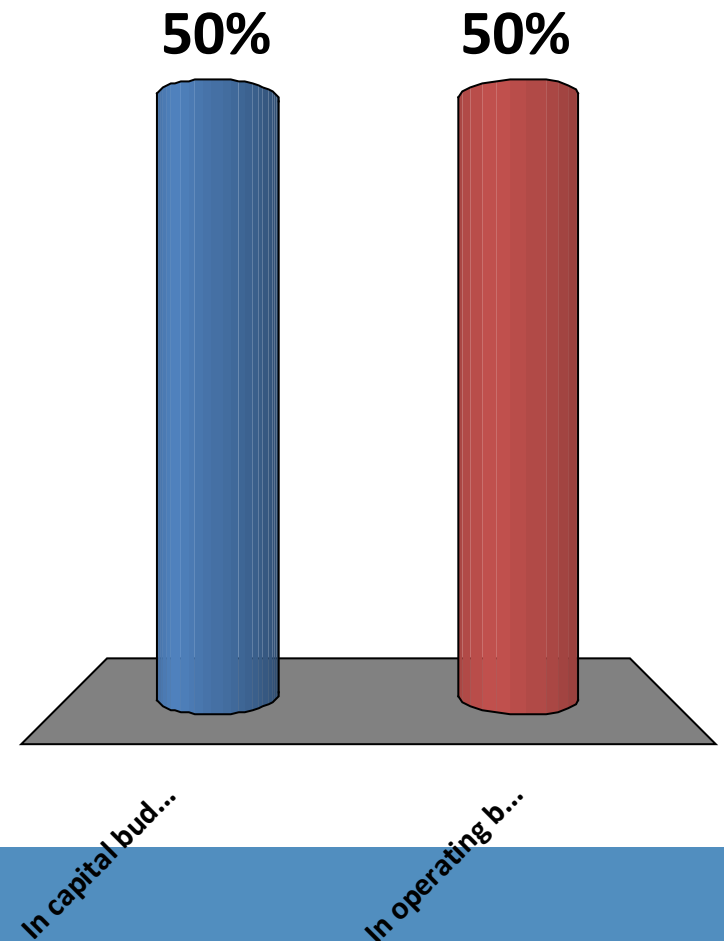
Which department budget includes street sweeping?

1. Transportation/roads
2. Stormwater dept
3. Some other dept
4. Don't know



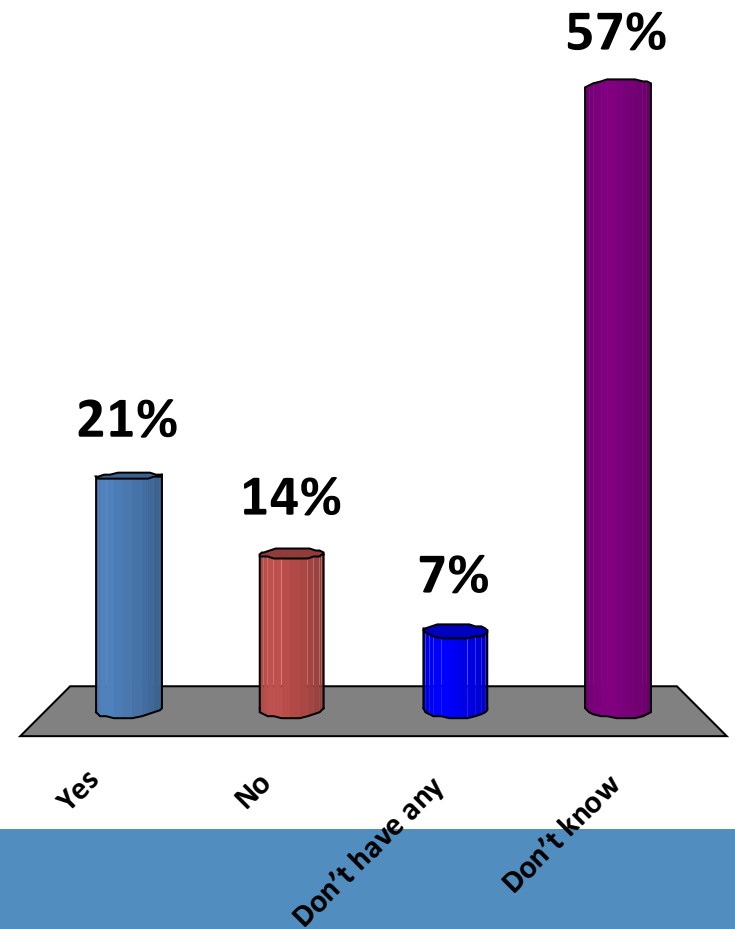
Where has tree planting been included?

1. In capital budget
2. In operating budget



Are tree buffers considered a capital asset?

1. Yes
2. No
3. Don't have any
4. Don't know



Blog post comment on trees:

While the facts might be that the average municipality spends 75% of their budget on tree maintenance, I would disagree with the assertion that most cities need more trees (ergo more money for tree plantings). Too often the “infrastructure” is ignored and poorly maintained. When budgets get tight maintenance is the first to get cut. Yet, everyone wants a photo op with a tree being planted. If trees planted 3,5,25, and 50 years ago had been properly maintained the cities would have more trees. Plus, these trees would be healthier, more vigorous hence sequestering more carbon, etc....



Possible Ways Forward

- Conversation with your budget officers
 - Redefining/caveats for “assets” etc.?
- Forming stakeholder groups
- Using emerging tools
 - i-Tree (<http://www.itreetools.org/>)



Trees

- Long lives, which is part of the definition of a capital asset.
- But unlike many other types of capital assets, they **appreciate** in value over time
- Accounting:
 - GASB 34 did not recognize trees as capital assets
 - In accounting language, trees are a ‘free good’ that can’t be depreciated



More Resources

- **PLANNING AND FINANCING FUTURE URBAN FORESTS - A Capital Asset Hybrid Proposal**

Prepared by Kenneth A. Knight, AICP,
Certified Arborist, Certified Urban Forester

With assistance from the US Forest Service,
Pacific Southwest Research Station

Center for Urban Forest Research, June 17,
2008

More Resources

- GASB 34: Urban Natural Resources as Capital Assets, by Dudley R. Hartel
Technology Transfer Specialist Southern
Center for Urban Forestry Research &
Information,
Southern Research Station, RWU 4901,
USDA Forest Service

To access these: efc.sog.unc.edu Resources → Presentations

The screenshot shows the website for the Environmental Finance Center at UNC. The browser address bar displays efc.sog.unc.edu. The website header includes the UNC logo and navigation links: About, Services, Programs, Resources, Events, and Blog. A search bar is located in the top right corner. The main content area features a large banner for "STORMWATER WETLANDS WATERSHEDS". Below the banner, there is a "Featured Work" section with three items: "Welcome to the New Environmental Finance Center Website!", "Association of Metropolitan Water Agencies 2013 Annual Meeting", and "New Report: Assessing Water System Revenue Risk". On the left side, there are sections for "Mission Statement", "Upcoming Events", and "Latest News". A red arrow points to the "Presentations" link in the top navigation menu.

←
Here

Just this week ...



The United Watershed States of America



Source: <http://communitybuilders.net/the-united-watershed-states-of-america/>



Water Into Trees Form

Customer Information

Customer I.D. * Account Number: *

Contribution Information

I wish to support Durham's tree planting efforts by contributing the following:

Select One...

- Select One...
- Round up to the nearest dollar each billing cycle.
- Please discontinue my enrollment in this program.
- One-Time Lump-Sum Donation: (added to next bill)
- Increase my Water Bill each Billing Cycle by the Following:
in the billing of my account.

anges

Submit Form

Reset Form

http://durhamnc.gov/ich/op/gs/Pages/Water_Into_Trees.aspx



← [How Do We Measure the Importance of Water?](#)

Green Infrastructure . . . Evolving from an Innovative to Mainstream Stormwater Management Practice

By [Hannah Mellman](#) / On [November 14, 2013 10:07 am](#)



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Source:

<http://blog.nacwa.org/innovative-stormwater-infrastructure-from-innovative-approach-to-mainstream-practice/>



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