

Once upon a time there was no water or sewer infrastructure. Slop buckets were poured out into the streets; and disease was a close neighbor. Water infrastructure dated more distantly than even the Roman aqueducts of which you have read much, I'm sure. But sewers – and sewer “systems” for the masses (as opposed to those created in ancient palaces and other small-scale conveyances B.C.) did not really arise until those in Germany in the mid-1800's.

Many of you have heard me refer to our modern infrastructure as coming to the fore when Butch Cassidy and the Sundance Kid were still alive. As is our habit, the newest pipes have primarily been laid most in the areas where cities are growing or where there are critical failures (except in the most sophisticated and well-funded communities). As our cities have grown, this practice of keeping up has magnified the “small losses”. At this point, many homes can lose enough water in a year (10,000 gallons) to fill a swimming pool; and as a nation that loss has equaled the annual water use of Los Angeles, Chicago and Miami combined according to EPA figures.

Although the losses attributed to water and sewer systems are alarming, of equal concern is the water we throw away each year in antiquated stormwater systems. Thoreau said in Walden, “There is no odor so bad as that which arises from goodness tainted.” Surely, there is a case to be made for his point as we overuse gray infrastructure in efforts to shed stormwater as quickly as we can. Not only do we lose over 20 tons of soil per acre every year from construction sites; we also contribute to drought as we essentially de-water our aquifers. Typically, we wring our hands at the occurrences of this in the Southwest; but there are an ever-growing number of examples happening in the Midwest and even the “water rich” Southeast.

Ewwwww, what a downer! But there is hope – and you can be a part of the solutions! Because (and again, to quote H.D.), “In the long run men(women) hit only what they aim at. Therefore, though they should fail immediately, they had better aim at something high.” Green infrastructure, properly applied, can reduce water loss, reduce sediment and other pollutant stream entry, reduce overall infrastructure cost and in many cases bring jobs! More and more case studies are emerging to support these claims and yet, we are still only slowly advancing the use of green infrastructure.

To help you become part of the solution, I have sent you (below) a guide from EPA on implementing green infrastructure practices on vacant lots and brownfield sites AND a notice on an excellent series of green infrastructure webinars coming up next month. Please, use them to *the maximum extent practicable* in your work and communities. You can use them personally, send them to your local and state officials and/or use them with partners and clients.

Sometimes people will embrace green infrastructure. Sometimes you will be rebuffed. As a parting quote from Mr. Thoreau, “I believe that men are generally still a little afraid of the dark, though the witches are all hung, and Christianity and candles

have been introduced.” Notwithstanding the religious reference if you are other than Christian, you still get the point. So, however slowly we progress, we can still accomplish great things if we all move forward together.

Moving on,
Margo

- **EPA has released a new guide to help communities, developers, and other stakeholders determine the appropriateness of infiltration at vacant parcels and brownfield sites.**

A brownfield is a property where redevelopment or reuse may be complicated by the presence (or likely presence) of contamination. Many cities are interested in revitalizing urban areas by redeveloping vacant parcels and brownfield sites; and integrating green infrastructure into these sites can provide many environmental and community benefits. In planning infiltration-based stormwater management practices, however, care must be taken not to mobilize contaminants in the soil and increase the risk of groundwater contamination. EPA’s new guide, [Implementing Stormwater Infiltration Practices at Vacant Parcels and Brownfield Sites](#), walks decision-makers through six questions to determine whether infiltration or other stormwater management approaches are appropriate for a specific brownfield property.

Download your copy
here: http://water.epa.gov/infrastructure/greeninfrastructure/upload/brownfield_infiltration_decision_tool.pdf

If you're having trouble viewing this email, you may [see it online](#).

SAVE THE DATES:

Investments in Green Infrastructure

A New Three-Part Webinar Series on Ecosystem Services

[October 2nd, 2013](#) / [October 7th, 2013](#) / [October 16th, 2013](#)

The Yale Center for Business and the Environment (CBEY) is pleased to continue Nature's Returns: Investing in Ecosystem Services, a webinar series that addresses the

growing importance of ecosystem service valuation and investment. This year CBEY is joined by co-sponsor Island Press and the Conservation Finance Network in presenting a new round of webinar mini-series. We will build on the previous years' webinar series by exploring current experimentation in ecosystem services across the US in the following focal areas: Investments in Green Infrastructure, Innovative Financial Tools, and Community Economic Development.

To begin, we will address **Investments in Green Infrastructure** through three webinar presentations

- [Private Investments in Natural Infrastructure](#) **Ricardo Bayon**, Co-Founder, *EKO Asset Management Partners*, October 2nd, 12pm - 1pm EST
- [Urban Stormwater Management in the Chesapeake Bay](#) **John Campagna**, President, *Restore Capital*, October 7th, 12pm-1pm EST
- [Green Infrastructure Tools in the Nation's Capital](#) **Bethany Bezak**, *DC Water and Sewer Authority*, October 16th, 12pm - 1pm EST

Email invitations for the Nature's Returns webinars will be sent as the dates approach. Visit the [CBEY website](#) for up-to-date information regarding these and other events.

Got this email as a forward? [Sign up](#) to receive future invitations on this topic.

Nature's Returns: Investing in Ecosystem Services

A Special Edition Webinar Series

Yale Center for Business and the Environment

The Yale Center for Business and the Environment (CBEY) is pleased to announce the third year of Nature's Returns: Investing in Ecosystem Services, a webinar series that addresses the growing importance of ecosystem service valuation and investment. The benefits that human populations gain from healthy and functioning ecosystems are vast. Clean drinking water filtered by forests, carbon stored in plants or soil, crop pollination by wild insects, and pharmaceutical uses of plants are just a few examples of services humans usually receive for free. A recent wave of efforts to monetize the value of Ecosystem Services presents an opportunity to both protect these assets and bring their worth onto the market. Public and private mechanisms exist to use payments to encourage responsible land management in order to preserve public benefits. Currently, conservationists and investors alike are moving into this space in hopes of achieving a win-win for the economy and the environment.

So, what do Ecosystem Services projects look like? Who are the practitioners involved and what skills are most important in terms of getting into the profession? What obstacles and opportunities does this field face? These questions and more (including those from the audience) will be addressed throughout the four focal areas of the series.

The *Ecosystem Services* webinars are supported by the Yale Center for Business & the Environment. They will be free and open to the public through online webcasts. Each presentation will be recorded and made available to the global community through [Yale University's iTunesU channel](#). More details about the speakers associated with each focal area will follow. If interested, please [subscribe](#) to the *Nature's Returns* newsletter for information about upcoming events.

The Conservation Finance Network - A Program of Island Press

The Conservation Finance Network (CFN) advances natural resource conservation by expanding the use of innovative funding and financing strategies. The Network sponsors training activities and supports a community of practice for professionals to develop knowledge and expertise in applying conservation finance strategies

Help us grow the Network!

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