

OURTOPIAS

Ecological Design for the Toronto Region

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Overview

- Challenges
- Ecological Design Workshop
- Ecosystem Services
- Tools and Methods
 - Open Space
 - Pattern Language
- Presentations
- Working Groups



Challenges



Ecological Design



Challenges ...



“No economy, however technologically advanced, can survive the collapse of its environmental support systems.”
(Brown)



Ecological Design Workshop

- Developed for the Design Exchange
 - Partnered with Toronto and Region Conservation and the Canada Green Building Council
 - Sponsored by Sustaining Design Fund, Tides Canada Foundation
- Objectives:
 - Design for a flourishing, liveable, green Toronto in a post-carbon world
 - Facilitate collaboration amongst diverse participants



Ecosystem Services

- Financial Times:
 - **“Purified sewage is unpalatable”**
- Ecosystem services
 - New York City expects to save \$6-7B by investing \$1.2B over 10 years in Catskills watershed
- Richard Register: Ecocity Principles
 - The ecology of cities
 - How cities fit into the surrounding ecology



Tools and Methods

- Support multi-disciplinary problem solving
 - Bridge differences in language and approaches
- Easy access to insight and content outside of own domain
- Multi-scale, systems approach
- Overcome psychological inertia



Psychological Inertia (D. Mann)



- * Problem solving is like digging for treasure in a field
- * If a hole already exists, our inclination is to dig it deeper
- * The deeper the hole, the more difficult it is to see what's happening in other parts of the field
- * If someone else comes along, we encourage them to jump in the hole with us
- * The overall effect is called **PSYCHOLOGICAL INERTIA**

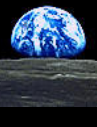
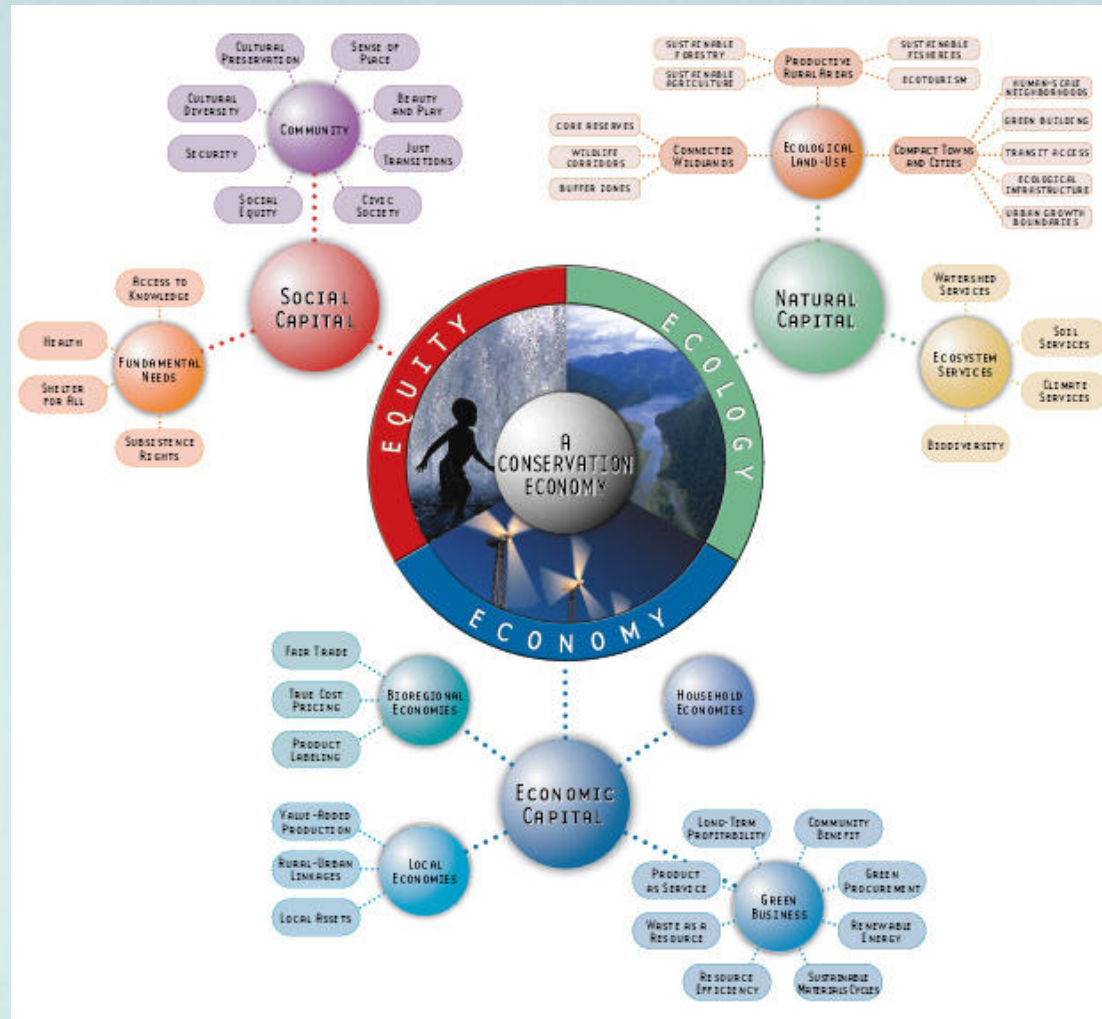


“Open Space” Technology

- Important ideas explored by those most interested
- Based on principles of “self-organisation”
 - Tap passion of participants
 - Encourage participants to take responsibility
- Both ‘loose’ and ‘tight’
 - Participants propose, lead and participate in discussion topics
 - Guiding by a clear goal or theme



The Conservation Economy Pattern Language

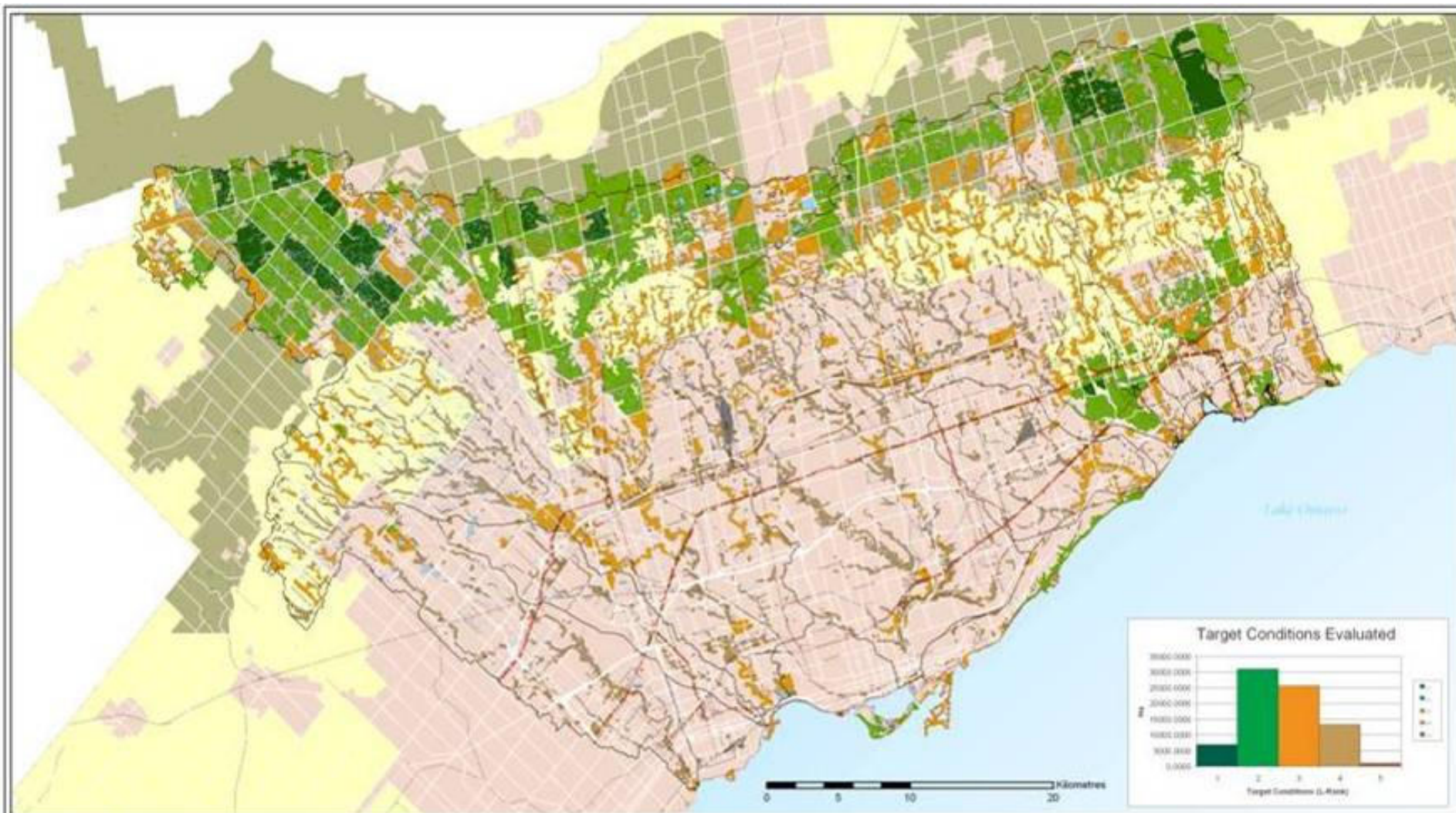




Moving Toward a Vision for

The quality of life on Earth is being determined in rapidly expanding city regions. Our vision is for a new kind of community, The Living City, where human settlement can flourish forever as part of nature's beauty and diversity.

The Living City



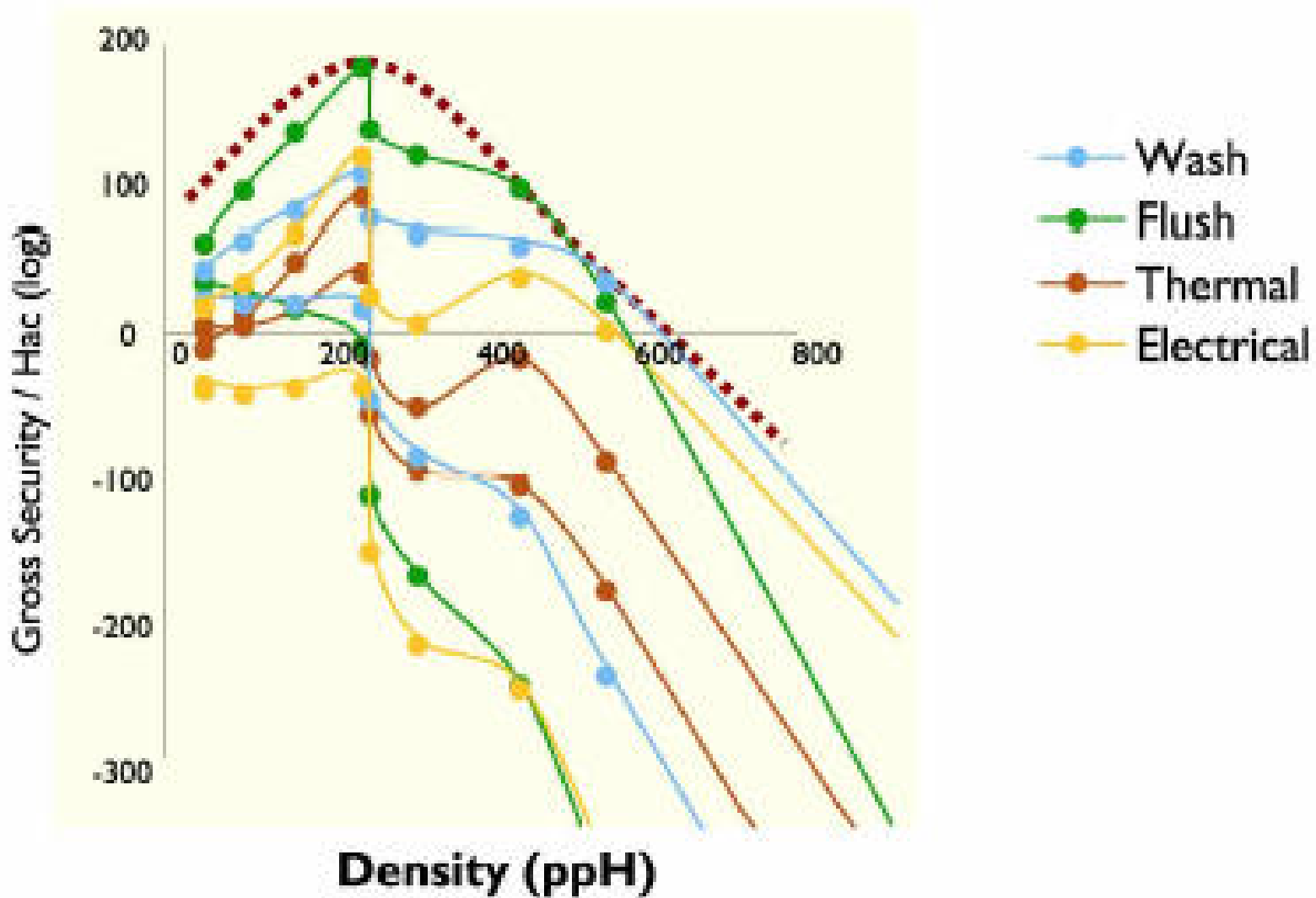
Date: April 14th, 2004
 Created By: T.R.C.A. Information Services/ Information Technologies

Conservation
 FOR THE REGION AND BEYOND
 for The Living City

Legend		Target System Evaluated	TNHS Planning Zones
Major Roads	Municipal Boundary	13 - Excellent	Urban & Urbanizing Zone
Hydro Corridors	Watershed Boundary	11-12 Good	ORM Niagara Escarpment Zone
Railways	Ponds/Lakes	9-10 Fair	Rural Zone
Watercourses		6-8 Poor	
		6-5 Very Poor	

Landscape Analysis
 Target System
 TNH Map # 4

Goa 2100 Project: International Competition for 100 Year Sustainability Strategic Plan



Eco-Density



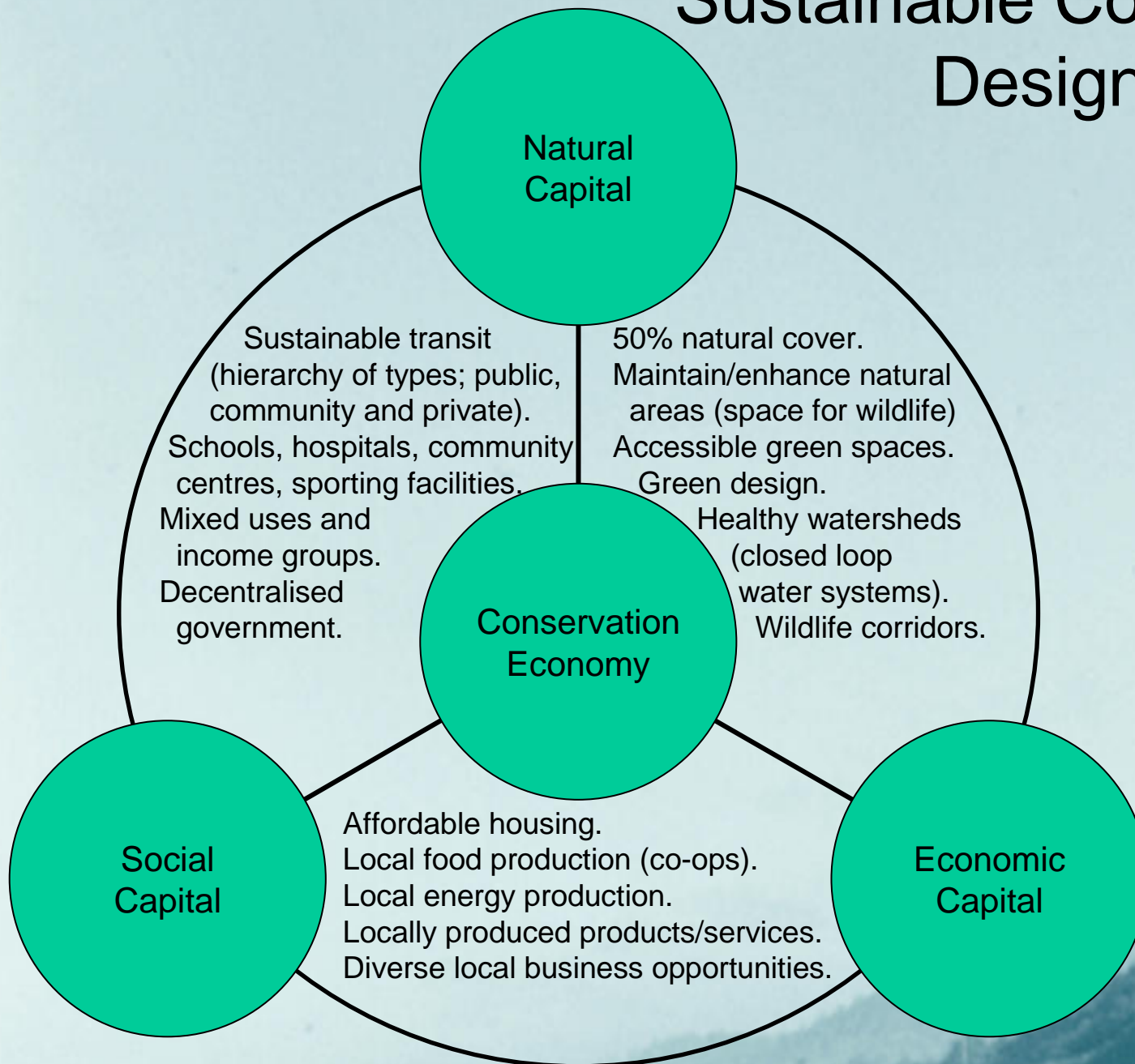
By understanding the “structure of wholeness” of a region

and overlaying the existing cultural and economic context, it is possible to design products, buildings, infrastructures, towns, cities, landscapes, and economies

that are consistent with a post-carbon future.



Sustainable Community Design



Seaton Bio-Regional Planning

Patterns

- Order and chaos
- Cause and effect
- Change over time
- Look at status quo
- Connection between water and land
- Resource vulnerability
- Multiple scales
- Cultural heritage (local and traditional knowledge)
- Sense of place
- Distributed (but connected) self-sufficient communities

Elements

- Fresh water
- Topography
- Climate and wind
- Vegetation type
- Soil types and uses
- Local resource usage and recharge



Parting Thoughts

- ‘Ecological Footprint’ as measure of our personal and collective impact on the planet
 - What is the ‘ecological footprint’ of other species?
 - Are some net contributors?
- Could our cities have a positive impact on the surrounding environment?



Acknowledgements

- Lester Brown: Plan B 2.0: Rescuing a Planet Under Stress and A Civilization in Trouble
- Financial Times: April 18/ 2007, “Purified sewage is unpalatable”
- Richard Register: Ecocities: Rebuilding Cities in Balance with Nature
- Darrell Mann: Hands-On Systematic Innovation



Acknowledgements ...

- The Conservation Economy
 - Ecotrust, <http://conservationeconomy.net>
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Acknowledgements ...

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