

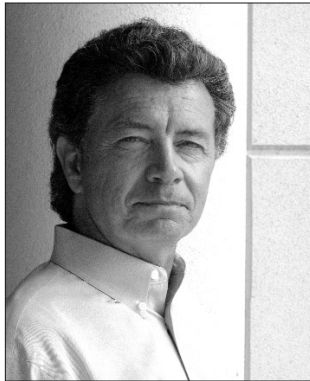


Wednesday, April 30, 2008
Stream G – Brownfield Remediation

Topic Keynote

LOCATION: GRAND BALLROOM C

8:45 am - 9:40 am



Storm Cunningham,
Author: *The Restoration Economy*

Storm Cunningham is the author of 2002's *The Restoration Economy*, which has been hailed by government and business leaders around the world as “Extraordinary”, “Remarkable”, “A modern classic”, “A landmark work”, “Required reading”, and “The most important and valuable business book I have read in many years.” His new book, *ReWealth*, is coming from McGraw-Hill in June of 2008.

He is CEO of Resolution Fund, LLC in Washington, DC. Resolution Fund helps communities, counties, tribes, regions, and nations ignite rapid, resilient renewal of their economy, their natural resources, and their quality of life. He is founder of Revitalization Institute, the non-profit academy for community renewal and natural resource restoration, based in Toronto. He is also a Distinguished Visiting Professor at Seneca College (Canada's largest college).

Storm Cunningham was, from 1996 to 2002, Director, Strategic Initiatives at the Construction Specifications Institute, a 50+ year-old association of 18,000 architects, engineers, contractors, and manufacturers. A former Green Beret SCUBA medic, he is an avid SCUBA diver, motorcyclist, and amateur herpetologist. He lives in Arlington, Virginia, USA.

**WEDNESDAY, APRIL 30, 2008**

9:40 am - 10:05 am

Overcoming Financial Barriers to Brownfield RedevelopmentsM.E. Billowits¹, J.J. Westeinde¹, J. Westeinde²¹Quantum Murray LP²Windmill Development Group

This paper will present various case studies related to the acquisition, remediation, and redevelopment of brownfield sites and explain the methods used to overcome financial barriers associated with brownfields.

To set the stage, the presentation will begin by outlining the key barriers in the 2003 study “Cleaning up the Past, Building the Future” by the National Round Table on the Environment and the Economy. Case studies will then be used to describe how these barriers have been overcome to successfully redevelop brownfields in various municipalities in Canada. The case studies will explain how a multi-disciplinary team and extensive project planning was crucial to overcome the barriers at an early stage in the process. Additional detail will be provided in terms of describing how the team was able to efficiently and expeditiously combine remediation and redevelopment planning to ensure the properties were developed in the most economical way possible, and to do so following sustainable design principles. The approach will also describe how non-traditional capital financing and government incentives were mobilized to initially finance the early evaluation and remediation efforts, as well as reaching agreement on how liability would be managed by the remediation and development team.

The presentation will end by outlining how these market responses to address barriers could be expanded upon by the federal government to possibly capture the ‘lower tier’ brownfields through strategic federal investments, divesting surplus real property, and promoting a design build approach in its redevelopment procurement processes.

10:05 am - 10:30 am

Application of the Development Feasibility Assessment™ to Address Brownfields Redevelopment Challenges

Jeanette M. Southwood, M.A.Sc., P.Eng., QPESA, QPRA, Steve Simmering, P.Eng., Berend J. Velderman, P.Geo., QPESA, Eric Wilson, P.Eng., QPESA, Megan Farnel, P.Eng. Golder Associates Ltd.

Across Canada, federal departments are evaluating numerous sites, including brownfield properties, for redevelopment or divestiture. To assist with decision-making and prioritizing future action, the Development Feasibility Assessment™ (DFA) is a multi-disciplinary overview of the feasibility and risks associated with the redevelopment of such sites. Application of the DFA is intended to provide the federal government with an alternative for consistently managing the redevelopment of sites in a cost-effective manner or improving marketability in the case of divestiture.

The DFA is based on readily available environmental, site servicing, planning, legal, archaeological, and geotechnical information, as well as agency input. The objective of the DFA is to allow the owner or potential purchaser to: make more informed decisions on the development and marketing potential of the property; identify potential development constraints and risks; and, control due diligence and development expenditures through a logical coordinated approach to the site assessment process.

The DFA document also includes guidance and strategies regarding further studies and investigations, approval requirements, work plans, and development timing, as well as highlights obstacles which may be encountered during development. The presentation will include an example of how the DFA has been applied.

**WEDNESDAY, APRIL 30, 2008**

10:50 am - 11:15 am

Remediation Strategies in an Urban Park Setting on Toronto's WaterfrontMeggen Janes¹, P.Eng., Christine Patterson¹, P.Eng.,
Tom Li¹, P.Eng., Hon Lu², P.Eng.¹Earth Tech Canada Inc.²Toronto Economic Development Corporation

Cherry Beach Park is centred in an area of historical lake-filling and industrial uses. These former practices have led to subsurface contamination including a LNAPL plume. The impacts stretch beneath a mature and publicly valued tree grove. The primary drivers in the remediation were: protect the public; remediate/manage to risk based goals; prevent LNAPL from reaching Lake Ontario; and, achieve waterfront sustainability objectives. These key objectives were achieved, balancing the protection of tree groves and preserving functionality of the beach park.

The contaminations of concern were vast including PCB's, volatile organic compounds, petroleum hydrocarbons and metals. A vacuum enhanced product removal system was installed as the primary remediation technology. In addition, soil capping and phytoremediation have also been incorporated into the remediation. To preserve the area, an in-situ approach was preferred over other more intrusive and disruptive technologies. Proximity to Lake Ontario and high groundwater transmissivity precluded use of other types of product removal strategies.

In order to minimize disruption for park users, a narrow installation window for subsurface system installation was allowed. Product interceptor trenches were strategically located through openings in tree stands. The final installation program, performance results, and challenges (both technical and institutional) to the installation will be presented.

11:15 am - 11:40 am

From the Industrial Age to Recreation and a Residential Neighbourhood: The Different Faces of the Lachine Canal National Historic Site of CanadaJean-Claude Prévost and Réjean Malo
Parks Canada Agency

The history of the Lachine Canal, classified as a national historic site, is marked by the different historical periods that have shaped the industrial face of Montreal and Canada. Built in 1825 and expanded twice, the canal has served as a way for merchant vessels to bypass the Lachine Rapids, and as a site for multiple industries due to its hydraulic potential. After the opening of the St. Lawrence Sea-

way, the canal fell into disuse and eventually closed for good, leading to plant closures and a legacy of dilapidated buildings littering the outskirts of poor neighbourhoods.

Using typical brownfield remediation models such as Stelco, Redpath, the Quai des Éclusiers and the Peel Basin, we propose to highlight the many challenges faced by Parks Canada Agency in revitalizing this exceptional site (i.e., contamination, environmental issues, protection and development of historic and cultural resources, minimizing of risks related to recreation/tourism, residential, commercial and industrial uses, etc.). Lastly, we are considering projects that promise to radically transform part of the Lachine Canal's surroundings in the near future (i.e., by reconstructing the Turcot and St-Pierre interchanges, and redeveloping the old CN rail yard).

11:40 am - 12:05 pm

Environmental Disclosure and Infrastructure Reduction in the Sale and Transfer of a Former Military Barracks: Lessons LearnedR. Sherstabetoff¹, R. Swyer¹, J. Sisetsky¹, T. Druett²¹Department of National Defence²Canada Lands Company

The Department of National Defence's (DND) former Griesbach Barracks, located within 250 hectares in north-west Edmonton, Alberta, was used for training, logistics and supply since 1951. In 1996, DND moved its military operations, closed the Barracks and, following DND's environmental disclosure, infrastructure reduction and remediation of twenty contaminated sites, sold and transferred the Barracks in 2003 to Canada Lands Company (CLC). In conjunction with CLC's ongoing redevelopment and their assistance, completion of DND's remaining site remediation (four sites) is expected by 2008.

Consistent with policy, DND is required to disclose contaminated sites prior to disposal and to ensure infrastructure is decommissioned or transferred in a mutually agreed ("as is") condition. Sixty-four suspect contaminated sites were identified and remediation carried out by DND at twenty-four of these sites, disposing of 6,500 m³ of contaminated soil off-site. Sixty-nine buildings were present at the time of property transfer; almost half of the fifty-one buildings accepted "as is" were non-functional, while the remaining (eighteen) were demolished by DND to their floor slab.

This presentation summarizes lessons learned relating to environmental and infrastructure disclosure and the process within a federal department as it executes a strategic realty disposal.

All presentations will be delivered in English, unless noted otherwise.

**WEDNESDAY, APRIL 30, 2008**

1:30 pm - 1:55 pm

The Role of Consensus Building and Conflict Management in Contaminated Site Remediation and Redevelopment

John S. Andrew, Ph.D., MCIP, RPP, Queen's University

Properties contaminated with hazardous substances are widely recognized as a serious threat to the health of humans and the natural environment. They also present a significant impediment to the productive and efficient use of land in urban environments. However, as property values rise and political pressure mounts to revitalize and intensify urban areas, remediation and redevelopment of these so-called "brownfield" sites becomes both more necessary and more feasible. Recent technological advances and legal mechanisms have also made this easier and more cost-effective.

However, these scenarios often become embroiled in considerable controversy, especially for properties owned by the public sector, due to its mandate for public consultation and full disclosure. Paradoxically, stakeholders often ignore contaminated sites that have sat dormant for decades, only to voice ardent opposition to announced plans for their decontamination and redevelopment. In other cases, land transactions trigger considerable controversy. Disputes over contaminated sites tend to be high-profile, volatile, political, and protracted. This presentation will explore the causes and characteristics of conflicts arising from contaminated sites and their remediation.

Drawing on the greater experience of the United States and his own research and mediation practice over the past decade, Dr. Andrew will propose a model for managing these disputes from the early planning stages for a property through to redevelopment, with an emphasis on stakeholder consultation and dispute prevention.

1:55 pm - 2:55 pm

Panel Discussion – Live and Unplugged