Coastal Land Reclamation:  
Ecological Improvement or Partner in Crime

DESCRIPTION

Despite being widely criticized for its environmental impacts, the trend of coastal land reclamation is still prevailing in many developing countries. Some recent reclamation is at such an alarming scale and pace that it challenges landscape architects with the question: what is the profession’s proper (re)action to this reality?

LEARNING OBJECTIVES

- Mechanism and drivers of large scale coastal land reclamation in China and Southeast Asia.
- Challenges and opportunities of land reclamation projects to landscape architects, ecologists and developers.
- Environmental impacts of coastal land reclamation and strategies for ecological improvement.
- Landscape architects and ecologists’ lessons learned by working on land reclamation projects.

PRESENTATION OUTLINE

I. Introduction: Context, Challenges, and Design Saliency
   1. A brief comparison of the land reclamation history and trend between the developed countries (US.) and the developing countries (China)
   2. The current primary economic and social drivers of coastal land reclamation in developing countries.
   3. The broader ecological impacts of coastal land reclamation.
   4. Involvement of landscape architects, planners and ecologists in land reclamation.

II. Landscape Planning and Design: Promoting ecology and public good under constraints
   1. Critiquing the role of landscape architects and planners in the land use decision making (do nothing or do something good)
   2. Opportunities for ecological improvements even in the downstream of the development process.
   3. Introduction to the cases (case studies will be referred to throughout the presentation)
      B. Forest City; Johor Baru, Malaysia
      A. Xincunsha; Shanghai, China

III. Strategies and Feasible Design Solutions: Being pragmatic about the constraints and applying suitable ecological design solutions that are sensitive to unique coastal environments.
   1. Story from the other side: developer’s perspective.
   2. Knowing your audience and seeking solutions that will resonate with other stake holders in the process.
   3. Proposing solutions based on strong technicality.
   4. Land-fill substance and its influences on design solutions.

IV. Phasing and Implementation: Unprecedented mega land reclamation requires thoughtful phasing and implementation plans in order to achieve the proposed ecological goals
   1. Integrating ecological phasing with developing phasing to form a mutually beneficial relationship
   2. Long term monitoring and maintenance plan for sensitive habitats.

V. Discussion / Q&A
Michael Grove, ASLA, Sasaki Associates, Inc.

Michael Grove, ASLA is a Principal at Sasaki Associates, leading the firm’s international projects. His 17 years of global experience embraces a wide range of project types including regional plans, urban districts, and waterfronts. As a landscape architect, Michael collaborates with planners, urban designers, and ecologists to restore damaged ecosystems, understand local cultural influences, and balance social equity with economic development. His work has been recognized with awards from the APA, Architectural Record, and the ASLA. Michael has presented at Greenbuild, the Urban Land Institute, and the ASLA in addition to lecturing at numerous universities around the world.

Tao Zhang, ASLA, Sasaki Associates, Inc.

Tao is a senior landscape architect and ecologist at Sasaki Associates. With 10 years’ of experience in design practice and ecological research, he believes in landscapes that offer unique experiences and help maintain healthy ecosystems. Tao strives to create aesthetically pleasing design rooted in a deep understanding of its ecological and cultural contexts. Tao has also published in peer-reviewed journals and spoken frequently at ecology and design conferences. Tao received his MLA and MS in Sustainable Systems from University of Michigan.

Steven Apfelbaum, Applied Ecological Services, Inc.

Mr. Apfelbaum has conducted ecological research, designed award-winning projects, successfully navigated regulatory programs, and contributed his unique creative scientific expertise and enthusiasm to over 1,500 projects throughout North America and beyond. He is one of the leading ecological consultants in the U.S., providing technical restoration advice and win-win solutions where ecological and land development conflicts arise. Mr. Apfelbaum has authored hundreds of technical studies, peer-reviewed technical papers, books, reports, ecological restoration plans, and regulatory monitoring and compliance reports. He promotes using ecological and conservation design principles in developments, industrial projects and parks that help clients save money while increasing ecological functionality, improving public perception and generating award-winning outcomes.

Yuran Shen, Previously at Greenland Group; Currently SmithGroup JRR

Ms. Shen has diverse experience in urban planning and design, ranging from Transit Oriented Development, medical campus to large-scale mixed-use projects. Previously, Yuran was a project manager at Greenland Group in Shanghai, overseeing planning and architecture for Xincunsha Project. She managed multiple design teams and coordinated with relevant parties, including government officials, environment-impact assessors, suppliers, and operators. Yuran is a Certified Planner and a LEED Accredited Professional. She received her Master of Urban Design degree from Washington University in St. Louis. She currently serves as a senior urban designer at SmithGroup JRR in Washington, DC.