Urban Waterfronts

Keynote Presentation

Amos Brandeis, Israel

Panelists

Nick Schofield, Australia
Njeri Cerere, Kenya
Piotr Lorens, Poland
Gayle Wood, Canada
Amos Brandeis

Ambassador of the International Riverfoundation (IRF, Australia)

ISOCARP member (International Society of City and Regional Planners) and General Rapporteur of it’s 50th Congress (Poland, 2014)

Former Chairman of Israel Planners Association (2006 - 2012)

Architecture, Urban & Regional Planning Ltd
1. Introduction

2. Deterioration and Restoration of Rivers

3. What Makes Waterfronts Successful?

4. Planning principles for Waterfronts

5. Conclusions

6. How to Become Involved
Urban Waterfronts

Almost all cities around the world were built along rivers, or along a coast of an ocean, sea or lake. Waterfronts are actually everywhere! They have a vital urban role and they are a major asset.
Deterioration of Rivers

During the 20th century many of the rivers have been polluted, deteriorated, and they lost their significant roles. The rivers became a nuisance to the urban environment.
Restoration of Rivers

In recent years, major efforts of river restoration have brought many rivers back to life.

Alexander River Cross border river - Collaboration between Israeli and Palestinian neighbors. Planning and Managing: Arch. Amos Brandeis

Before - 1996

After - 2013
River restoration is on the catchment (basin) level. Urban areas are usually just a very small part of the catchment, even in the case of urban rivers.
A Comprehensive and Interdisciplinary Approach - To Restore a River is Like Solving the Rubik’s Cube

Before (1996)

After (2006)
Restored Rivers and Urban Waterfronts

The restored rivers, flowing through both historic and new parts of cities, can become an “Urban Celebration”.

Mersey River, First Winner of the International Riverprize (1999)
Urban Waterfronts

The place in the city for the people to meet and enjoy.
A huge urban potential.

Hong Kong Light and Sound Evening Show
What Makes Waterfronts Successful?

Not only beautiful, but also alive.
Part of the Urban Structure and life.
What makes places successful?
How to Plan a Successful Waterfront?

No planning prescriptions. Every place is different. Planning principles can be defined based on analyses of case studies. These should be critically examined when planning a waterfront.
Public Participation

The best (and actually the only) way to plan an urban waterfront, is with the people who live there and use/will use the place. They can best define what they need and want & what are the key values.
Planning Principles - Urban Planning Scale

Planning must begin on Urban and even Metropolitan scale: Planning, not only Urban Design, Architecture or Landscaping. Definition of the role and vision on a wide scale.

Kishon River, Israel

Planning: Arch. Amos Brandeis

Arch. Amos Brandeis

www.RestorationPlanning.com
Mixed Uses and Variety of Urban Activities

Mixed uses are essential to make a place alive 24/7. Liveable cities are based on the presence of people...

Kishon River, Israel
Planning: Arch. Amos Brandeis
Public versus Private

The waterfront belongs to the public.
Open, accessible, free entrance, continuous

Kishon River, Israel
Planning: Arch. Amos Brandeis
Proportions

Human proportions of buildings, squares, and open spaces.

Prague, The Czech Republic

Budapest, Hungary

St. Julian, Malta

Prague, Czech Republic
The Water is the Resource

The People should experience and feel the water close as possible.

Thailand

Gothenburg, Sweden
Open Views to the Water

The water is the show. Water is always changing. Fascinates people.
“Amphitheatre” with Open View to the Water

The water must be visible from as many buildings and public spaces. The people are the spectators.
The buildings should be transparent and use the advantages of looking at the water and the promenade. No “sealed” buildings on the water edge.

Sydney Opera, Australia
Promenades

Promenades are for People. Not for cars to ratrun.
A place to enjoy, relax, walk, run and cycle.

Northbank - Brisbane, Australia

Southbank - Brisbane, Australia
Outside Seating

Promenades, terraces, food & view.

Freemantle (Perth) Australia

Budapest, Hungary
A Livelihood Promenade

Urban life…
A place to enjoy.
A celebration…

Amsterdam, Netherlands

Freemantle, Australia

Bergen, Norway

Arch. Amos Brandeis

www.RestorationPlanning.com
Alive 24/7. Urban celebrations start at night...

Brisbane (Riverfeast), Australia

The Bund, Shanghai, China

Sydney, Australia

Pudong, Shanghai, China
People Friendly

People friendly attitude. This place is for people…

www.RestorationPlanning.com
Local & Regional Values

Respect, preservation and strengthening of local values and atmosphere

Hobart, Tasmania

www.RestorationPlanning.com
Local Flavor

Bergen, Norway
Working Waterfronts

Preservation of activities: fishing, ships & boats, docklands, small businesses, etc.

Maine, USA

Auckland, NZ

www.RestorationPlanning.com

Arch. Amos Brandeis
Built Heritage

A delicate integration of built heritage and new development

Bergen, Norway

Melbourne, Australia

Melbourne, Australia
Existing Urban Patterns and Buildings

Restoration of urban patterns and buildings, with waterfront orientation, and creation of attractive flavor and sense of entity

Melbourne, Australia

Sydney, Australia
Public Institutions

Important public buildings on the waterfront, to attract local people and tourist, and become a lively place.

NEMO Science Museum, Amsterdam

Maritime Museum, Perth, Australia

London
Urban Landmarks / Icons

Sydney Opera

Copenhagen Opera

Gorthenburg Opera

Oslo Opera

Arch. Amos Brandeis

www.RestorationPlanning.com
Connections to Built Urban Environment

“Green Fingers” into the depth of the urban surrounding pattern - parks, boulevards, paths, bicycle routes, axis, etc.

Rahat, Israel
Planning: Arch. Amos Brandeis

Freemantle, Australia

Yarkon River, Israel
Planning: Arch. Arie Rahaminoff (Arch. Amos Brandeis - part of the planning team)
Art

Copenhagen, Denmark
Urban Nature

Design of some areas in the middle of a city, where people can feel in nature. A pause from the urban pace.

Yarqon River in Tel Aviv
Overcome Challenging Linear Infrastructures

Plan innovative ways to connect cities to their waterfront, despite challenging linear infrastructures.

Budapest, Hungary

Wuhan, China

Bergen, Norway

Spain

Arch. Amos Brandeis

www.RestorationPlanning.com
Overcome Challenging Linear Infrastructures

Plan innovative ways to connect cities to their waterfront, despite challenging linear infrastructures.

The Bund, Shanghai
Uniqueness

Riverfestival - world known international river city

Brisbane, Australia
Conclusions

1. Waterfronts are an extremely important urban asset - they can become an “Urban Celebration”.

2. Successful waterfronts champion urban development, economic growth, and contribute to a liveable and sustainable city.

3. Most successful case studies of waterfronts represent: good planning, sense of place, delicate balances, and uniqueness.

4. Principles for successful planning of waterfronts can be defined, but should be critically examined, as every place is different.
Invitation to be part of the global Urban and River networks and activities

**ISOCARP**
International Society of City and Regional Planners

50th ISOCARP Annual World Congress

“Urban Celebrations: Cities and Water”

Gdynia, Poland 22-26.9.2014

[www.isocarp.org](http://www.isocarp.org)

**IRF**
International Riverfoundation

17th International Riversymposium

Canberra, Australia 15-18.9.2014


Arch. Amos Brandeis

Dr Nick Schofield, Australia

Has recently joined the International River Foundation as its CEO.

Brings a wealth of experience in water research, management and policy across multiple land uses including urban settings.

Has run 14 major water programs in Australia and undertaken key projects in many other countries.
Water & Planning: The Fluid Challenge

Riverprize Winners and Urban Waterfronts

Dr Nick Schofield
CEO, International RiverFoundation
About the International RiverFoundation (IRF)

• River Focused NGO
• Vision: “a future in which every river system around the world is healthy and sustainably managed”.
• Programs: Riverprize, Twinning, River Knowledge, River Recovery
• IRF contribution to sustainable development in urban settings
• Holistic and collaborative approaches to urban waterfront development

www.riverfoundation.org.au
Riverprize

• World’s most prestigious environmental award
• Awards excellence in river restoration, protection and sustainable management
• Thiess International Riverprize first awarded in 1999
Sha River, China
Thiess International Riverprize Winner, 2006
• Part of the Minjiang Tributary, flows through Chengdu City.
• Provides 90% of industrial and drinking water for the city
• Pollution, industry and deforestation caused river to be virtually dead by 1999
• Chengdu Sha River Restoration Project – key challenges and achievements (emphasis on urban waterfront)
• Establishment of green belt, relocating residential and industrial precincts away from river
• Improving community attitudes toward the river
• Holistic approach to urban waterfront development
• Outcomes and results
Charles River, USA
Thiess International Riverprize Winner 2011
• Flows through Boston, heavy industrialisation in the 1950’s
• Charles River Watershed Association Established to restore river in 1965
• Now cleanest urban river in the USA
• Blue Cities initiative – incorporating natural processes into urban design
• Understanding the natural function of the river to build a successful waterfront
• Beneficial results of collaboration and a holistic approach to urban waterfront development
Conclusion

• Importance of participatory approach
• Sense of place, providing improved social, economic and environmental outcomes
• Successful urban waterfronts provide for healthy and sustainably managed river systems – different approaches achieve same results
Njeri Cerere, Kenya

A planning, development and environmental consultant based in Nairobi, Kenya.

Co-founder and serves as co-executive director of “Naipolitans”, an organization comprised of urban enthusiasts, residents and professionals trying to figure out how, when, where, and what can be done to actualize liveable urban spaces.
Leveraging Urban Waterfronts for Sustainability and Livability

Njeri Cerere
Urban and Regional Planner
Nairobi, Kenya
Overview
Managing Waterfronts in Rapidly Densifying Cities
Water is a shared resource traversing geo-political boundaries.
Economies rely on water resources for industry, trade, tourism
Water security drives livelihoods in critical sectors e.g. agriculture
Challenge: Predominantly rural regions now fastest urbanising globally.

Cairo, Egypt

Nairobi, Kenya

Lagos, Nigeria

Kinshasa, DRC
Proliferation of informal settlements on environmentally fragile areas

Manshiet Nasser, Cairo, Egypt

Deep Sea, Parklands, Nairobi, Kenya

Makoko, Lagos, Nigeria

Kinshasa, DRC

Image Sources: Cairo [www.imagecat.com], Lagos [www.enviromentalbraffiti.com], Nairobi [www.kathleenlandry.ca], Kinshasa [www.flickr.com]
Leveraging Waterfronts
Reclamation for Sustainability and Livability
Opportunity for substantial social, economic and environmental impact

Nairobi River Cleanup

Improving Livability, Kibera, Nairobi

Reclaimed Land, Kibera, Nairobi

Image Sources: Nairobi River (www.teasets.com), Improving Livability (www.engineering.org) and www.keuski.org, Reclaimed Land (www.engineeringforchange.org)
Improving Livability = Investing in Local Economy

Reclaimed Multi-Purpose Productive Public Space, Kibera, Nairobi

Image Sources: www.arskimminskibera.wordpress.com/ and www.vounkuev.org
Reclamation => Unleashes Creativity => Vibrant, Productive Space
Conclusion

• Well managed waterfronts and livability in the face of rapid urbanization are not mutually exclusive
• Urban waterfronts can be leveraged for sustainability (social, economic and environmental impact)
• Stakeholders on all fronts can contribute to creative solutions that enhance livability and vitality in cities
Thank You
Prof. Piotr Lorens, Poland

Head, Department of Urban Design and Regional Planning, Gdansk University of Technology, Poland.

Vice President, International Society of City and Regional Planners.

His professional career and research is focused on issues associated with urban regeneration and waterfront redevelopment.

Was actively involved in the initial stages of planning for the Young City project in Gdansk and Gdynia waterfront regeneration scheme.
Reconnecting City and Water
Redeveloping the Gdynia waterfront

Piotr Lorens
Gdańsk University of Technology
Faculty of Architecture
Structure of the metropolitan area

- Gdynia – part of the larger metro area
- Multi-functional urban structures
- Large concentrations of the distressed areas
- Concentrations of the specialized, mono–functional areas
- Clear linear structure of the entire metro area
Basic facts

• City developed in the 1920-ties and 1930-ties as the major Polish harbour
• Form part of the Tri-City metropolitan area (along with Gdansk and Sopot)
• Now undergoing major changes in its waterfront structure
• Key new projects – under development
Final remarks

- Gdynia – part of the “waterfront metropolis”
- New chances for the metropolitan area – emerging from the transformation of the industries
- Large-scale planning – providing new spatial framework for the urban development
- Gdynia waterfront can provide a new chance for the city – BRING IT BACK TO THE ROOTS
Dr. Gayle Wood, Canada

Chief Administrative Officer of Lake Simcoe Region Conservation Authority, Ontario, Canada.

Specializes in Integrated Watershed Planning and Management.

Received the Thiess International Riverprize in 2009.
The Importance of Integrated Watershed Planning and Implementation – Ensuring Healthy, Clean Urban Waterfronts

World Planning Day Online Conference

November 6, 2013

D. Gayle Wood
Chief Administrative Officer
Purpose of this Presentation

• To support the presentation by Amos Brandeis which speaks to the health of urban waterfronts being linked to catchment planning and river restoration.
Watershed Planning – Lake Simcoe

- Lake Simcoe Region Conservation Authority
- Watershed agency
- Created in 1951 under provincial legislation
- 35 sub watersheds
- Planning and restoration are done on a sub watershed and catchment basis
Why Watershed Planning?

• Built on science (defendable)

• Plans involve a collaborative partnership of all government agencies and stakeholders

• Provides clear direction for action “Road Map to Success”
Why Subwatershed Planning?

Utilizes an iterative/adaptive management approach to solve complex water and water related issues.
Watershed Planning – Spatial Scale

Watershed
Subwatershed
Catchment
Site Level

Increasing Level of Detail

Lake Simcoe Region Conservation Authority • A Watershed for Life
Plans Use a Pressure – State – Response Approach

**PRESSURE**
Factors that affect the health of a system

**STATE**
Condition or health of a system

**RESPONSE**
Effort taken to restore or preserve a system

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Lake Simcoe Region Conservation Authority – *A Watershed for Life*
Recommendations

A.1 Stormwater Management

A.1.1 That the applicable partner municipalities, in conjunction with the LSRCA, develop stormwater master plans that include maintenance schedules and funding requirements, as per the requirements set out by the LSPP

A.1.2 That the Province of Ontario, through the implementation of the Lake Simcoe Phosphorus Reduction Strategy, provide significant incentive funding to the LSRCA to maintain, construct and retrofit stormwater facilities as identified by the LSRCA Stormwater Rehabilitation program

A.1.3 That the partner municipalities, in conjunction with LSRCA, re-evaluate stormwater management techniques and practices to determine whether a standard better than Level 1 can be achieved
Develop Interim Watershed Goals

- Based on the analysis results develop interim/draft watershed goals, objectives and targets using SMART principles:
  - **Specific** - identify clearly 4 w’s (what, why, where, who),
  - **Measurable** - develop performance indicators,
  - **Attainable** - ensure targets can be achieved (cost, tech.),
  - **Relevant** – effort is worthwhile (priority),
  - **Time bound** - establish a time frame for reaching targets.

- Involve all the partners in the development of goals and test by consulting with the public – revise as necessary.
Identify and Evaluate Strategies/Options

Identify multiple solutions to achieve the draft goals, objectives and targets.
Stewardship
- 2000 projects in 20 yrs
- Estimates phosphorus reduction to be 12 T/yr

Phosphorus Management: Achievements
City of Barrie Waterfront:
swimmable – fishable – drinkable – natural
Thank you!
Urban Waterfronts Panel

Amos Brandeis, Israel
Nick Schofield, Australia
Njeri Cerere, Kenya
Piotr Lorens, Poland
Gayle Wood, Canada

Q & A