



# Waterfront Design Strategies for Activating Marine Leisure & Tourism

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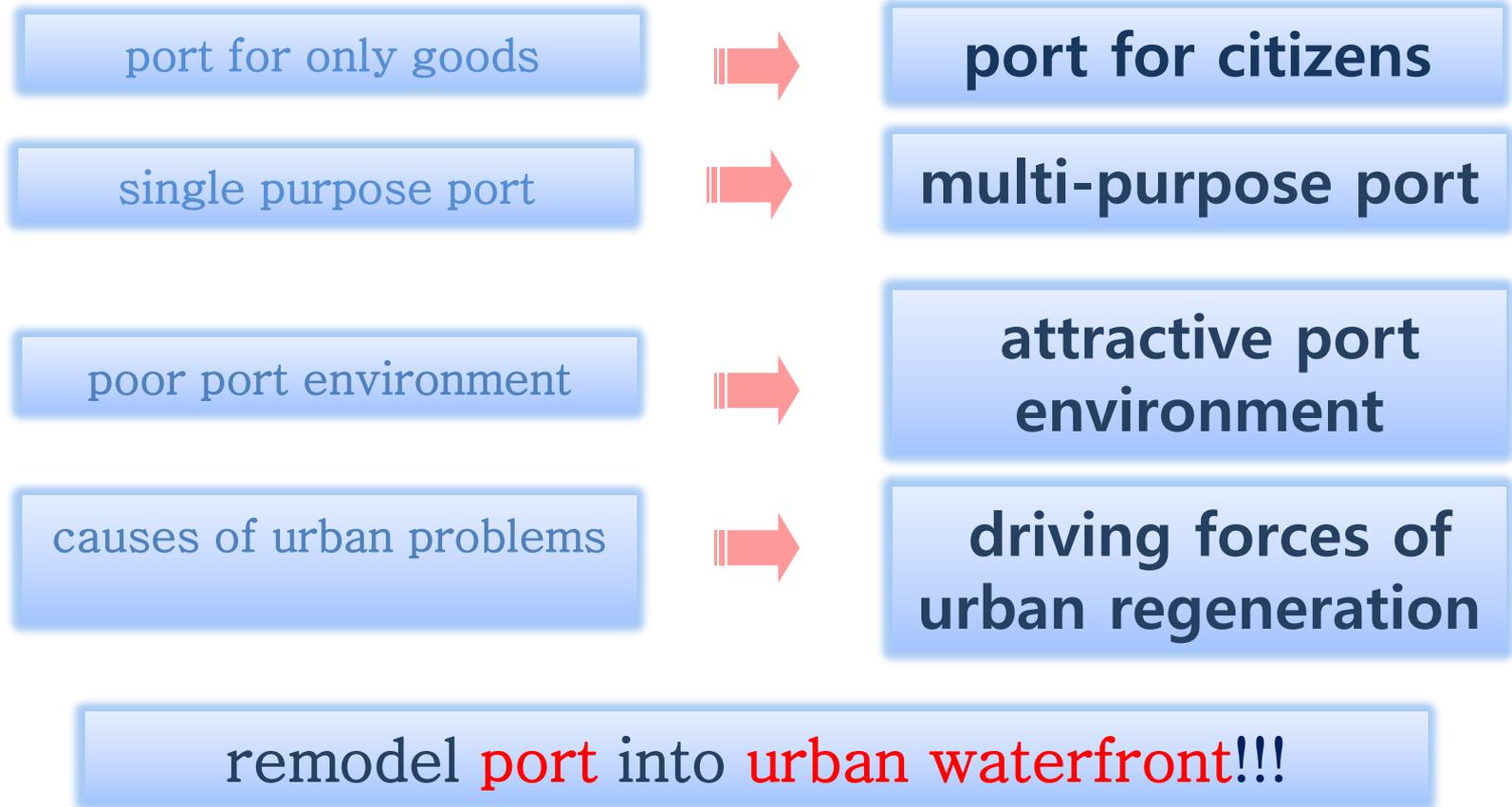


# 1. Port Remodeling





## ■ concept of Port Remodeling





## ■ Strategies of Port Remodeling

- remodel into citizens-friendly port

- remodel into clean & attractive port

- remodel into port for enjoying & learning

- remodel into sustainable & green port





## ■ Examples of Port Remodeling

1. Port of Shimizu, Japan

2. Port of Nagoya, Japan

3. Port of Seattle, U.S.A.

4. Port of Hamburg, Germany

5. Port of Marseille, France





## Port of Shimizu

- make the most attractive port in the world through color planning (on a background of Mt. Fuji)





## Port of Nagoya

- make port to be friendly to citizens and live together environment as the biggest industrial port in Japan





## Port of Seattle

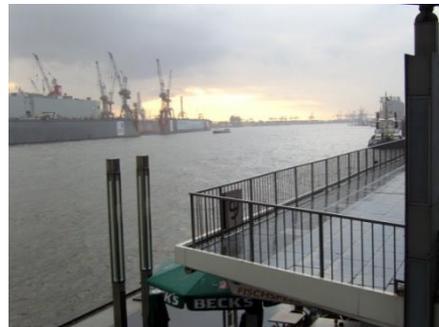
- make port to be friendly to waterfront and marine recreation





## Port of Hamburg

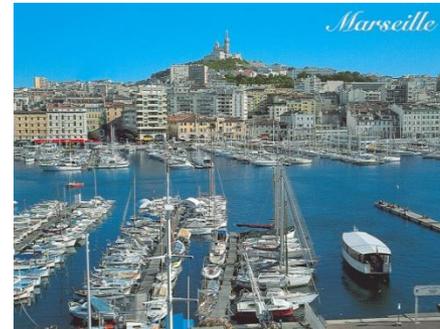
- make port to be abundant in **art** & **culture** for citizens and visitors





## Port of Marseille

- make port of antiquity giving life to long city history and cultural traditions





## ■ Elements of Port Remodeling

open spaces  
in Port Area

- human-friendly port structures
- open spaces(promenade, parks, etc.)

cultural spaces  
in Port Area

- multi-functional port tower (observatory, etc.)
- port museum, passenger terminal, visitor center, etc.

landscape plan  
of Port Area

- plan of landscape, green spaces, and color
- facility design guidelines

festivals  
In Port Area

- port tours
- port festivals





## open spaces

- open spaces on port structures  
ex.: breakwater, Takamatsu port  
breakwater, Nagoya port
- eco-parks, wetlands  
ex.: wild birds park, Osaka port
- parks, promenades, bike-roads  
ex.: central park, Sendai port  
marine park, Nagoya port
- marina, marine leisure spaces  
ex.: marina, Seattle port



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## cultural spaces

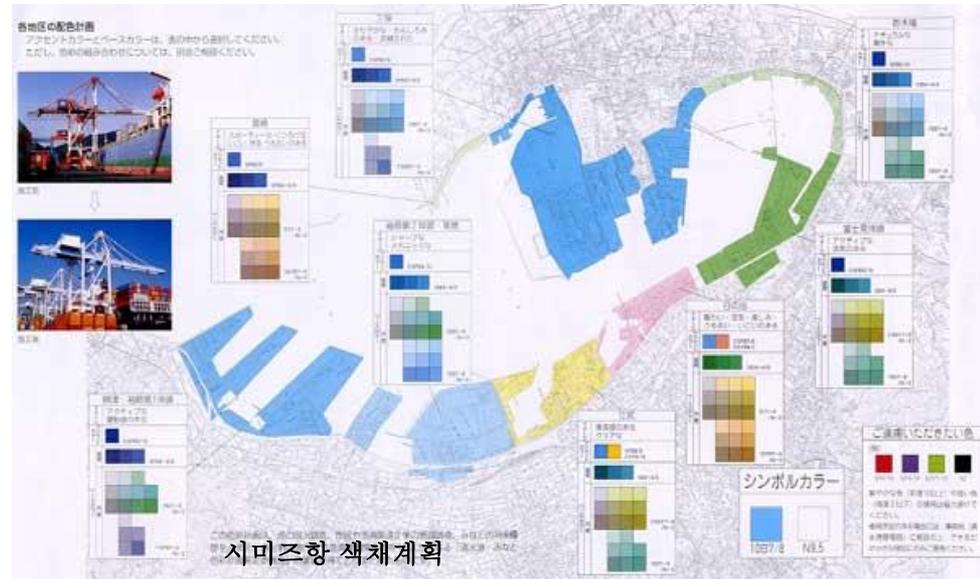
- port museum  
ex.: Osaka port museum
- marine science museum  
ex.: Tokyo marine science museum
- port tower & observatory  
ex.: port tower, Nagoya port  
Marine tower, Onahama port
- warehouse(converted to cultural & commercial spaces)  
ex.: warehouse, Hakodate port
- passenger terminal  
ex.: Baysideplace, Hakata port

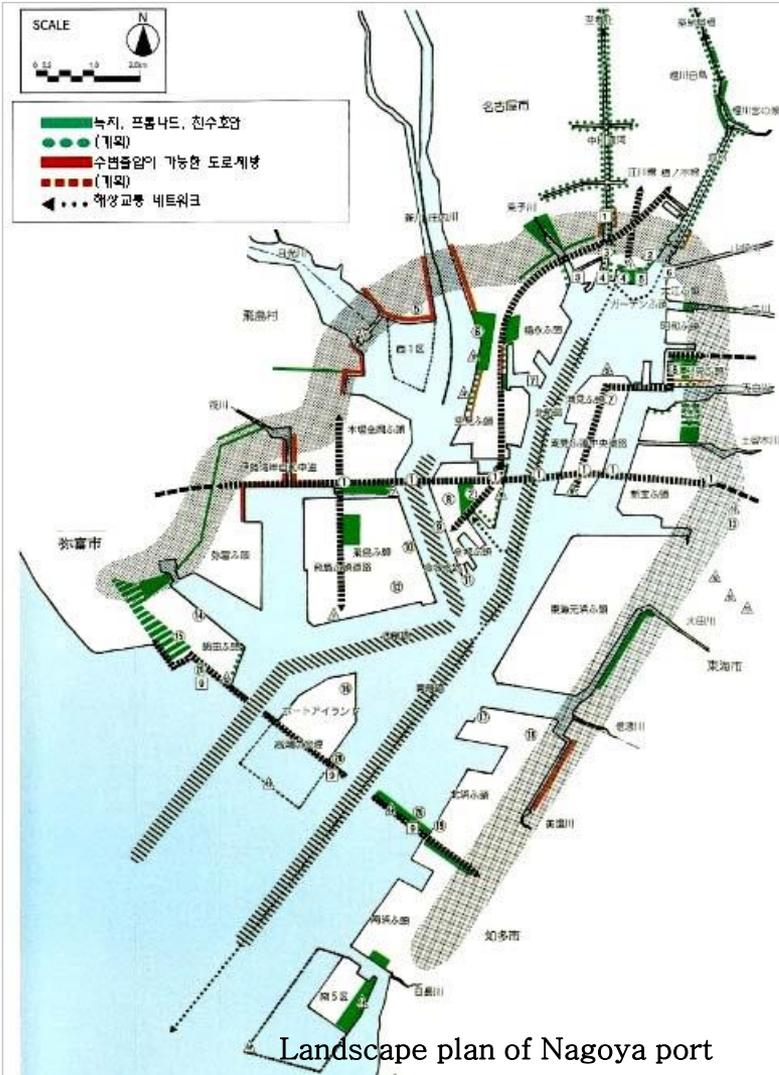




## Landscape plan

- port landscape plan  
ex.: landscape plan, Nagoya port
- port green sapce plan  
ex.: green plan, Nagoya port
- port color plan  
ex.: color plan, Shimizu port
- landmark  
ex.: port tower, Kobe port  
red lighthouse, Takamatsu port
- viewing point  
ex.: viewing point, Yokohama port







## port festivals

- festivals: marine day festival, etc.
- events: port opening day, etc.
- tour: boat tour, etc.





## 2. Waterfront Design





## ■ What is waterfront?

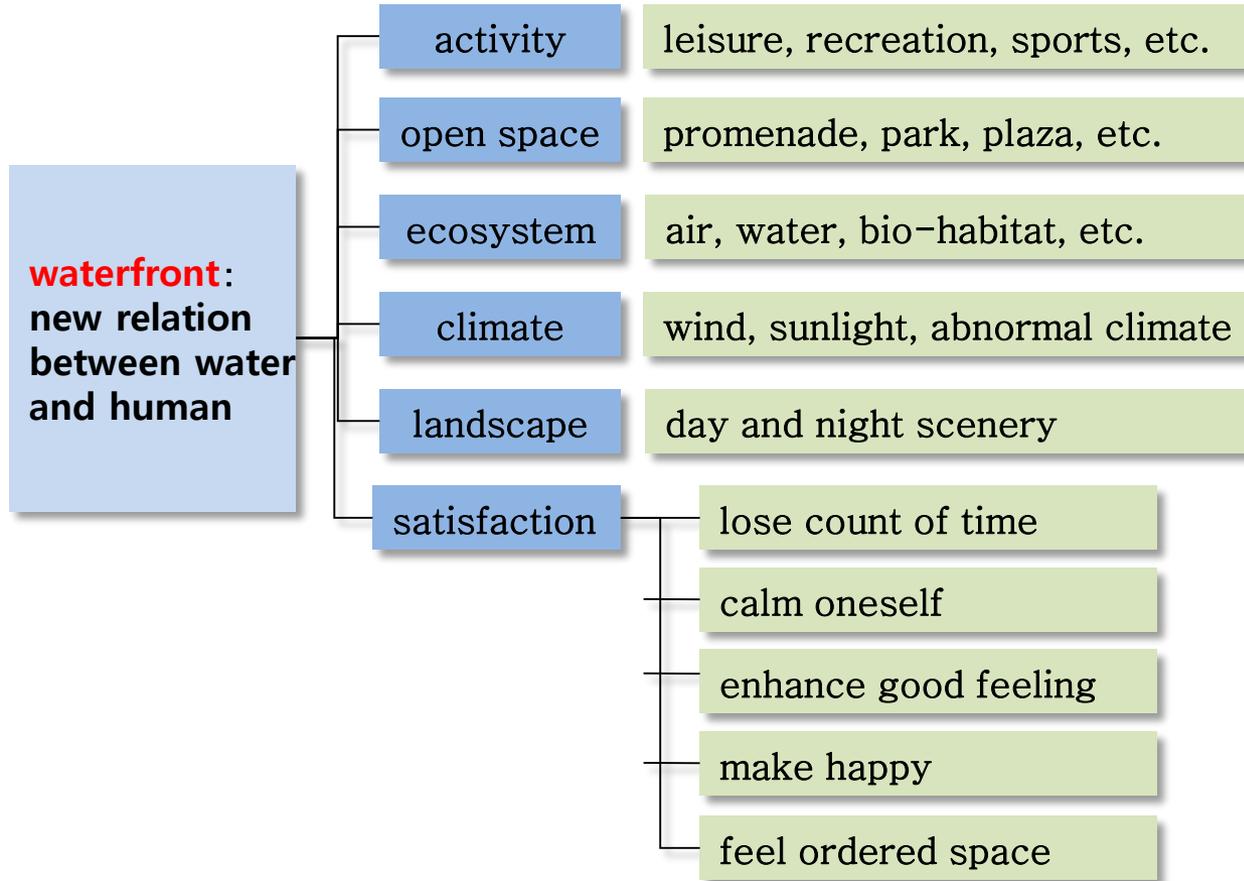
- public open spaces at seaside in urban area
- 「water amenity」 abundant spaces
- examples: promenades, parks, plaza, etc.

- 「water amenity(親水性)」 : the quality of spaces or places which makes human to enjoy and be intimate with water
  - important properties of waterfront & marine architecture
  - levels of 「water amenity」 : ‘high’ or ‘low’
  - 「water amenity」 is closely connected to the possibilities for ‘seeing’, ‘approaching’, ‘touching’ the water.





- To improve 「water amenity」 means to make better relation between human and water
  - High 「water amenity」 gives emotional pleasure and mental satisfaction which lead to the high regard for the quality of waterfront.
  - High 「water amenity」 needs water-friendly spaces and facilities, healthy and pleasant environment, good scenery in waterfront area.





## ▪ goals of waterfront Design

- Waterfront integrated with urban space
  - symbolic place for establishing identity of city
  - educational place for young people of city
  - waterfront-belt all over the city
  - linkage between city center and waterfront  
(river, access road, etc.)





- Waterfront for the citizens & visitors
  - cultural spaces & tourist attractions
  - facilities of playing & relaxing for citizens
  - multiple places to overcome seasonality
  - utilization of the body of water for marine leisure





- **Waterfront of high prestige**
  - high-quality open spaces(promenade, parks, etc.)
  - facilities & buildings of high standard
  - good natural scenery & nighttime lighting
  - viewing points for enjoying waterfront scenery





## ➤ waterfront design principles

### ★ 10 Principles for waterfront design

(by Urban Task Force, U.K.)

- Respect the site & setting.
- Recognize the context, scale & character around it.
- Priority to the public realm.
- Ease of access & "permeability".
- Optimize land use & density.
- Mix the activities.
- Mix the housing tenures.
- Build to last.
- Build environmentally-sustainable buildings.
- Enhance & respect the surrounding environment.





## ➤ waterfront design principles

### ★ 10 Principles for Sustainable Urban Waterfront Development (by Waterfront International Network)

- Secure the quality of water and the environment.
- Waterfronts are part of the existing urban fabric.
- The historic identity gives character.
- Mixed use is a priority.
- Public access is a prerequisite.
- Planning in public and private partnership
- Public participation is an element of sustainability.
- Waterfronts are long term projects.
- Revitalization is an ongoing process.
- Waterfronts profit from international networking.





## ➤ waterfront design principles

### ★ **Urban Waterfront Manifesto**(by The Waterfront Center)

- It is essential to keep in mind the inherent public interest in waterfronts.
- Waterfront planning should be long-range, comprehensive and holistic.
- Meaningful community involvement is integral to valid waterfront planning and development.
- Waterfront work is a fusion of related disciplines
- We encourage communities to think long-term in waterfront work.
- Every waterfront is an integral part of a watershed consisting of creeks, rivers, estuaries or bays.





## ➤ waterfront design principles

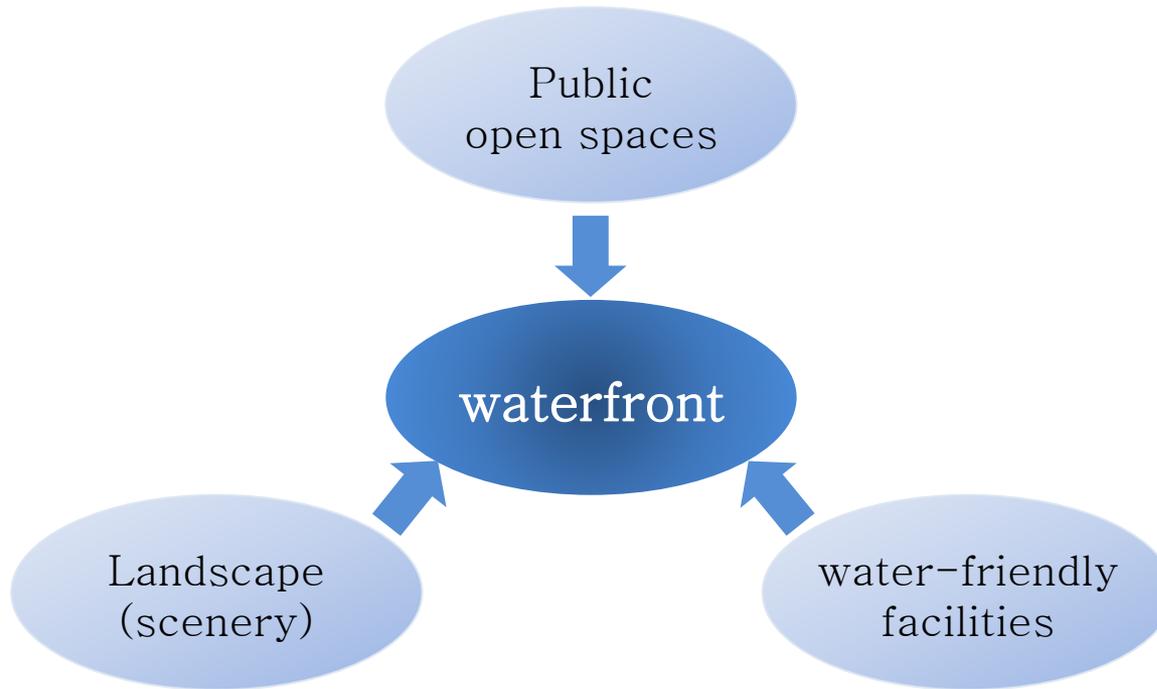
### ★ **Urban Waterfront Manifesto** (by The Waterfront Center)

- The best undertakings involve a partnership between the private sector, the public entities and the citizens.
- Public access to and along the urban waterfront should be the hallmark of all projects.
- Learn from good examples of waterfront planning and development elsewhere but never blindly copy them.
- A diversity of uses wants to be included along waterfronts, from parks to vibrant attractions.
- Waterfronts present unparalleled opportunities for interpretation and education.
- The tendency to clean up waterfronts should be approached carefully.
- The active participation of each city's arts community should be sought from the outset.





- waterfront design elements





- waterfront design elements

- how to approach

- from city center- through pedestrian circulation
- from nearby area- through river or access ways
- from ocean- through shuttle ships or boats





## ■ waterfront design elements

### ➤ shoreline & revetment

- remain existing shorelines as much as possible.
- design shorelines using soft curves.
- design promenades along the shorelines.
- design step curved revetments with natural materials.

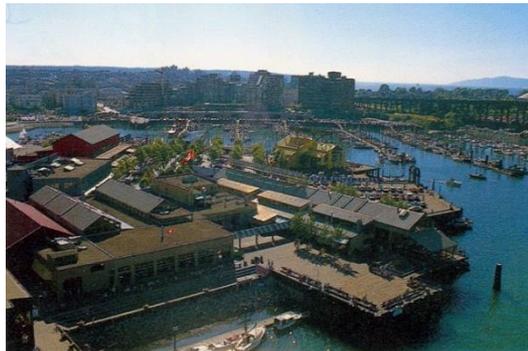




## ■ waterfront design elements

### ➤ sites & roads

- design sites adjacent to waters small.
- cut sites adjacent to waters as square as possible.
- design roads approaching waters as view corridors.
- design roads parallel to shorelines narrow for linkage between city & waterfront.

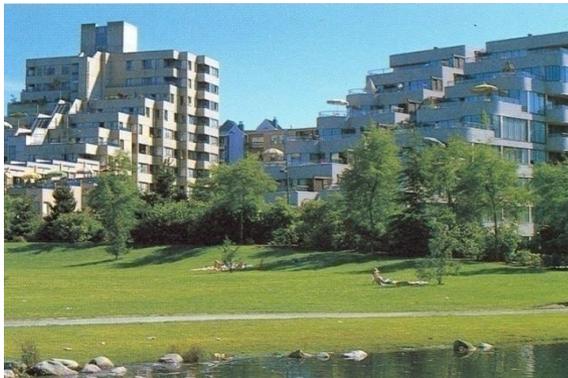




## ■ waterfront design elements

### ➤ buildings

- design high-rise buildings in tower type at waterfronts.
- create the voids as many as possible between buildings.
- design the top of buildings as viewing points.
- place small buildings in the vicinity of waters.
- mix a diversity of buildings and design multipurpose buildings





## ■ waterfront design elements

### ➤ promenades & public squares

- use barrier-free design or universal design for promenades.
- place public squares as many as possible along the promenades

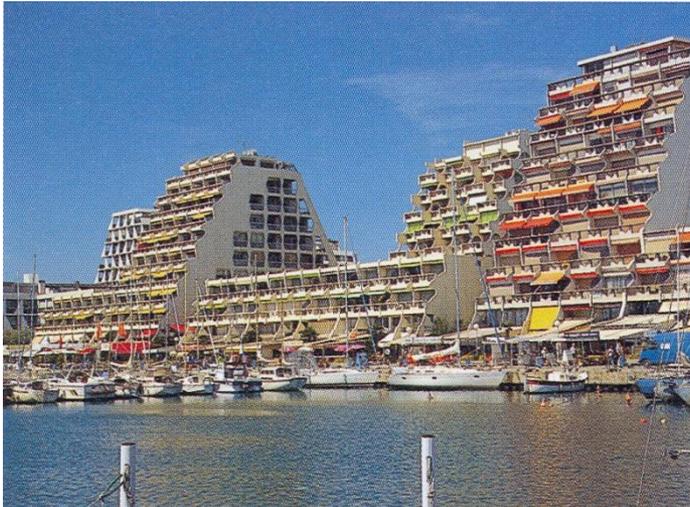




## ■ waterfront design elements

### ➤ human scale spaces

- design buildings & facilities on the human scale.
- develop sense of unity among artifacts & natural objects.
- create a little exceptions outside the sense of unity(landmarks).

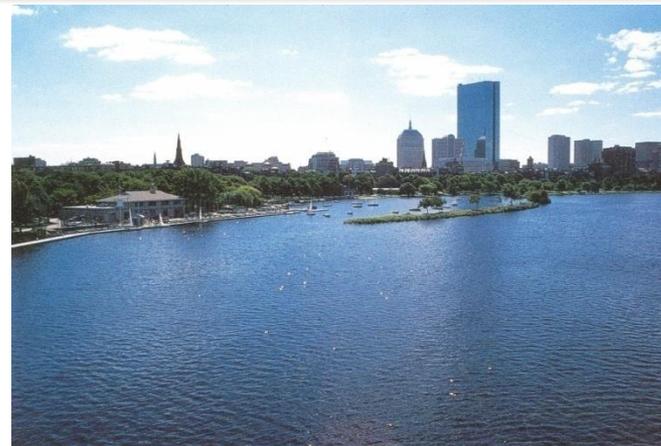
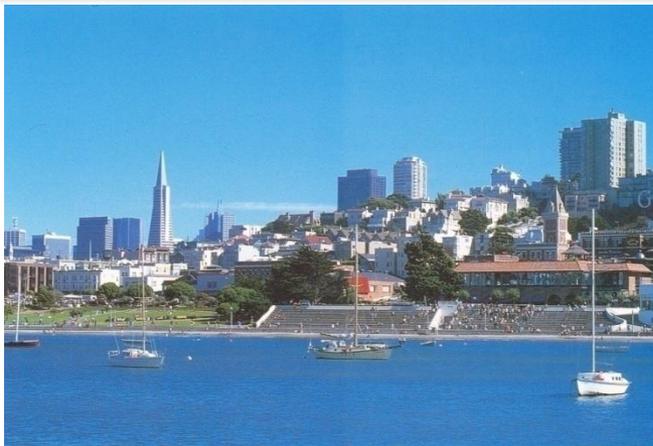




## ■ waterfront design elements

### ➤ skylines

- respect existing skylines.
- recognize skylines as important tourist attractions.
- do not break natural background skylines.
- create harmony between low-rise & high-rise buildings.

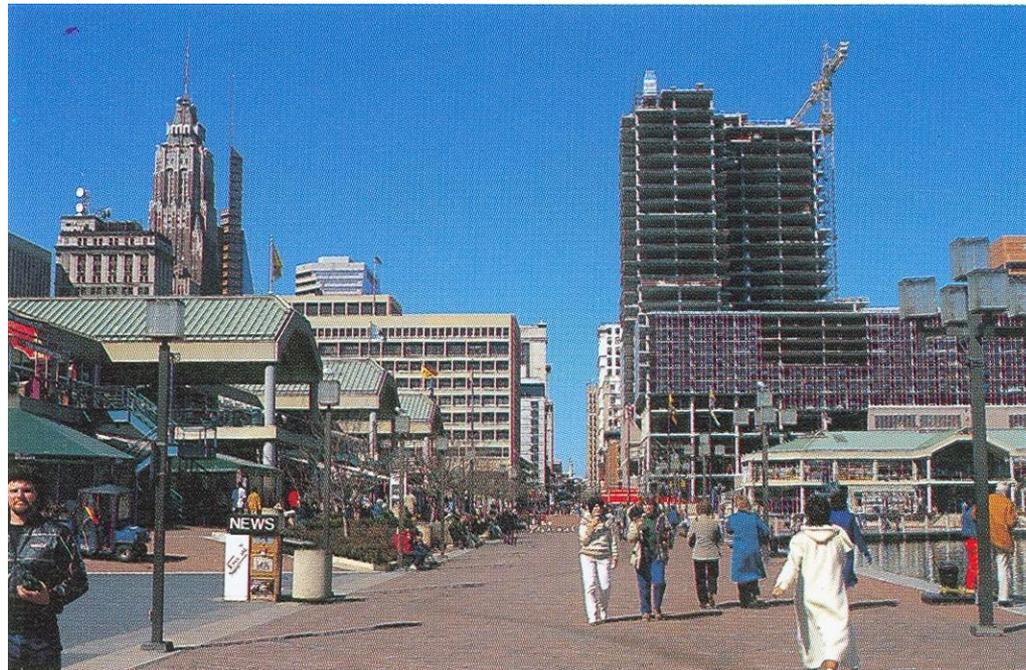




- waterfront design elements

- access routes

- secure diverse access routes from city center to waters.

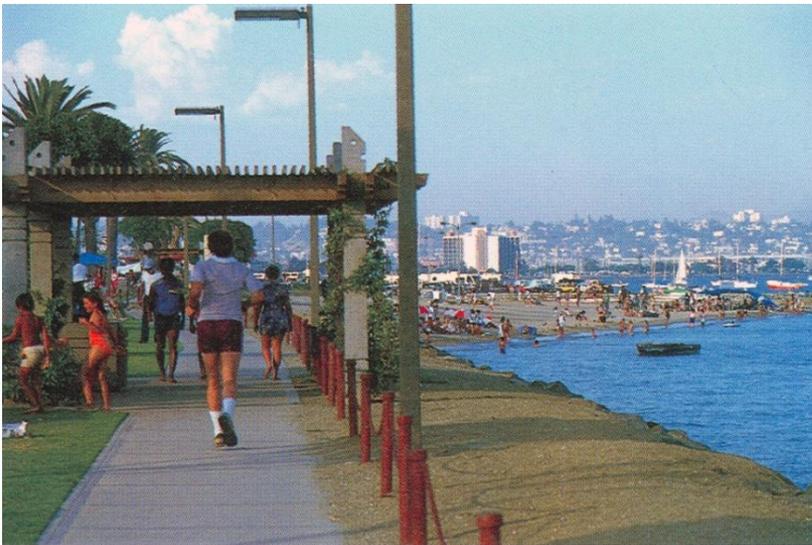




## ■ waterfront design elements

### ➤ natural spaces

- place diverse green spaces as many as possible.
- link up all green spaces with green ways.

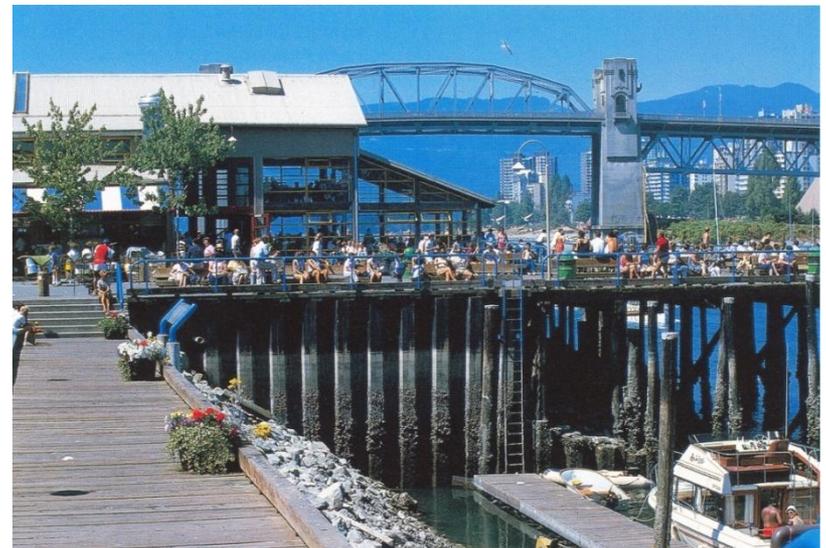




## ■ waterfront design elements

### ➤ open spaces

- design pedestrian networks linked to urban area.
- create integrated networks of open spaces.
- endow open spaces with water amenity & spontaneity.





## ■ waterfront design elements

- view corridor & viewing sequence
  - create view corridors from city to waters & landmarks.
  - design viewing sequences along the access to waters.
  - avoid demaging existing view corridors or viewing sequences.





## ■ waterfront design elements

### ➤ viewing points

- create good viewing points inside or outside waterfronts.
- design viewing points to look waters as wide as possible.
- get obstacles out of view lines from viewing points.
- place interesting viewing points near waters.

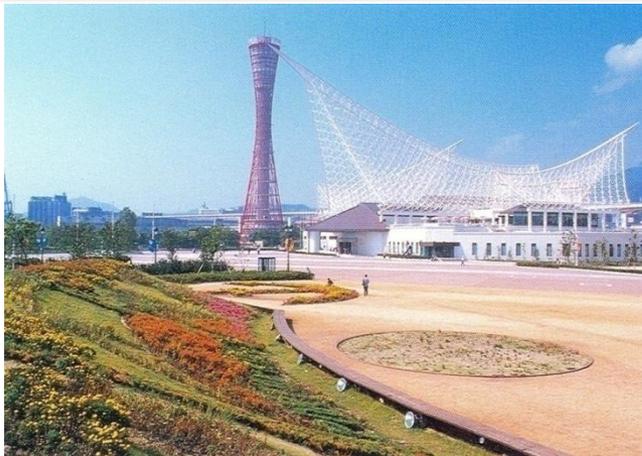




## ■ waterfront design elements

### ➤ landmarks

- design landmarks as symbols of waterfronts.
- place landmarks at appropriate places.
- design landmarks attractive and for mixed use.
- link landmarks to waters visually and physically.





## ■ waterfront design elements

### ➤ color coordination

- design color contrast between buildings and their background.
- make harmony among main-, secondary-, and accent- colors.
- design color coordination along with texture of materials.





## ■ waterfront design elements

### ➤ nighttime Lighting

- design lighting for security and attractiveness.
- make design guidelines of nighttime lighting.
- pay attention to lighting of landmarks & big buildings.
- consider on reflection of lights from the surface of water.





# Thank you!

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