



## Principles of Waterfront Design Based in Aotearoa New Zealand

# Water Fronting

Text by Nick Jones, Martin Bryant, and Megan Wraight  
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## Waterfronts are both palimpsest and ecology: layered and connected, continuous and evolving.

In recent decades there has been a proliferation of waterfront redevelopment projects worldwide. The transformed technologies of the maritime industry, trade and distribution—most notably the advent of containerisation—have relinquished new urban land at the water’s edge. These recovered edge spaces have been exploited to civic, recreational and commercial ends, while forming opportunities for the reimagining of cities themselves. The city’s edge has been a subject of contemporary intellectual and interdisciplinary fascination,<sup>1</sup> and urban waterfronts hold unique spatial and conceptual importance: they are the privileged limits of relentless cities; the sites of journeys commenced and completed; and liminal spaces of abrupt, primal juxtapositions. The transition of these complex margins is being witnessed in Aotearoa,<sup>2</sup> New Zealand, whose major cities have recently embraced several new waterfronts. This article discusses three such developments and their informing design principles, completed by architects Wraight and Associates (WA) and collaborators.

The product of a nineteenth-century colonial mindset, New Zealand’s cities typically comprise a gridded layout, which was centred, somewhat paradoxically, on the edges where ports operated. This pattern did not provide for substantial public open spaces within city centres, an unfortunate legacy for modern cities, exacerbated by a more recent car-commuting culture and suburban model of living. New Zealand is a coastal nation: 75 percent of the populace lives within 10 kilometres of the sea, and 97 percent within 50 kilometres,<sup>3</sup> figures that will increase with continued urbanisation. The national psyche is seawater-infused: recreation on and food of the seas are commonplace and celebrated, and beach-going is sacrosanct. These factors make the articulation of the marginal urban waterfront, as both a scarce and culturally-laden public space, a unique and growing importance.

There are three core concerns that have been essential in WA’s experience of waterfront design, as distinct from approaches to landlocked landscapes. First, the scale is different—of a geographic not an urban order—and the vast expanse of water invites a reconceptualising of traditional spatial definition. Second, the edges are phenomenologically rich and dynamic, prompting diverse and dynamic design responses. And third, waterfronts are spaces loaded with complex cultural, industrial, and ecological histories and narratives, offering opportunities to interpret, adapt, and elicit these. Resulting from these concerns are the core design considerations: scale of promenade; diversity of edge treatment; and an interpretation and adaption of existing site conditions and narratives. At WA, a landscape architecture and urban design practice, the design approach is predicated on a layered cultural, natural, and historical interpretation of site. This approach also acknowledges the Maori conception of “whakapapa”—the laying of one thing upon another—an epistemology integral to the culture and the interconnectedness of people, religion, place, and history.<sup>4</sup>

Waterfronts are both palimpsest and ecology: layered and connected, continuous and evolving. Elaboration on the three core approaches to waterfronts follows in discussion of three case study projects, all on harbour edges and on reclaimed, ex-industrial land. The design process for each was intense and explorative. Each site was interrogated beyond its boundaries, which allowed its richness, both industrial and ecological, to be engaged. Cultural narratives are explored to see how they can be expressed in the landscape, either implicitly or explicitly. Responses not only adapted the physical fabric but also actively fostered and diversified waterfront uses and industries to create a new cultural fabric, part old, part new.

### Working the Waterfront

Taranaki Wharf transformed a major working pier that extended from Wellington's commercial district into a civic focus. It is the first, pivotal project of a series along the Wellington waterfront. The design principally addresses the harbour via a succinctly detailed, wide promenade, which allows for a high volume and range of users and creates a democratic, civic amenity at the water's edge. A city square, albeit a lengthy one, is defined as one that borrows from the harbour's volume, while defying traditional figure-holding-ground patterns of city-making. The promenade's width and clarity engages the water's uncluttered expanse, allowing one to be simultaneously on the edge and within the harbour arena, exposed to its dramatic and nuanced environment.

The design approach is both adaptive and additive. Selected fabric is retained and revealed, which, along with new insertions, allow a multitude of experiences and meanings. The primary edge of extant timbers and tie-ups is accompanied by varied, adventurous interpretations of the water threshold. The "cutout" allows people beneath the promenade level and amongst the forest of vast, weathered wharf columns, connecting people to a forgotten substructure. The "lagoon" supplies a graduated and vegetated edge—recalling a local, natural margin—as well as stepped and ramped conditions that provide for recreation access and direct contact with the water. "Treasure island" is an industrial-ecological narrative of maritime artefacts set amongst a labyrinthine pathway, and "Jump Taranaki" is a multilevel platform that compounds the attraction and challenge of jumping in. These varied edge interpretations promote engagement with the water, its tangible and tidal phenomena, and the harbour, so long a neglected element of the cityscape.

Taranaki Wharf folds into Waitangi Park, within which there was neither the same wealth of industrial archaeology nor the same expanse of water directly adjacent. At the park's core is a large, green open space, much needed in central Wellington, but its key structuring device is a new wetland that uncovers a lost city stream and spatially expresses its journey to the harbour. The wetland forms an ecological system that draws upon the site's history. Its route revives lost industrial elements of the former graving dock, reinterprets the watery morphology of the site and its context, and forms one of a series of programmatic spines that is suggestive of the shifting, pre-reclamation shoreline. The benefits are not only cultural but also environmental: urban storm water is filtered, detained, and reused via the wetland, a pioneering example of water-sensitive urban design in New Zealand, another tenet central to WA's practice, and all planting is seed sourced from the nearby coastal ecology.



Whereas Taranaki Wharf is fundamentally about being on the water's edge, exposed within the harbour's expanse and industrial memory, Waitangi Park, through its integral ecological spine, fosters a different awareness of water, edge, and history, through an estuarine language drawn into the site.



2, 4. Taranaki Wharf  
(Photos: Neil Price).

3. Waitangi Park  
(Photo: Neil Price).

5. Waitangi Park  
(Photo: Wraight + Associates).

A locally grounded ecological system is created that draws upon the site's historic narratives and provides a rich, multilayered negotiation between land and sea. Whereas Taranaki Wharf is fundamentally about being on the water's edge, exposed within the harbour's expanse and industrial memory, Waitangi Park, through its integral ecological spine, fosters a different awareness of water, edge, and history, through an estuarine language drawn into the site. This approach of interpreting site histories and textures was developed further at Auckland's Wynyard Quarter, where operational maritime industries interface and integrate with new mixed-use spaces.

The Wynyard projects—comprising North Wharf, Silo Park, and Jellicoe Street—were completed in 2011 and developed from the guiding 2007 Urban Design Framework. The framework's principles, however, required significant reassessment. The document treated the waterfront spaces in generic urban terms, framing a series of spaces with over-scaled built forms. It inadequately addressed the unique waterfront and edge conditions, as well as its richness and history, treating the spaces as conventional canvases rather than palimpsests. Amongst revisions to the framework's principles was the substantial widening of the North Wharf promenade, which shifted the focus to this edge space while better connecting it to a major city axis. Coupled with a concise furniture palette, the promenade's effect is again to provide immersion in the harbour's expansiveness and horizontality by creating an edge space commensurate with these qualities. A civic space was created, of a scale that allows an optimal balance of public and private interests, which includes mooring for the fishing and other maritime industries. Tidal steps and a linear wetland—both articulated with locally salvaged concrete modules—and a promontory, claimed with industrial sheet-piling, offer varied opportunities to engage and experience the water. Once more, the promenade's scale and diversity of edge treatment were focal aspects. Pervading these elements, however, and most notable throughout the Wynyard projects, is the approach to the site's industrial heritage and uses.

The treatment of the main promenade, western wharf, and gantry at Silo Park are all configured to support and promote existing waterfront uses and industry. Physically, most conspicuously retained are two imposing concrete silos but the most significant relic is arguably the entire North Wharf, complete with rail lines, tie-ups, and other rusty remnants. It offered an—almost—readymade, ready-textured 450-metre promenade. Previously lost wharf surface was revealed and reclaimed, having been buried by industries with no need of the rail

lines, a defunct infrastructure of past waterfront eras. This approach to heritage and programme, and the resulting diversity, keeps the site activated, colourful, and evolving. The Wynyard projects are now completed, the first, catalytic moves of the extensive redevelopment of the Wynyard Quarter, in a large and largely industrial precinct on Auckland city's western flank, reclaimed from the harbour in the early 1900s. Rather than purging site memory, as has typified many waterfront developments, wherever possible (and desirable) the existing waterfront character has been retained and appropriated in the design.

### Discussions on the Waterfront

An approach utilising retention and reuse concerns not just memory but also the quintessential qualities of places. This idea is popularly dealt with through urban design and architectural tropes such as “genius loci”, “sense of place”, and “character”, terms frequently confused and conflated.<sup>5</sup> Regardless, however, of the terminology or slant preferred, they point to a subtler psychological aspect of place unable to be discerned through any number of mappings. Time spent in and around a site remains the essential means to decipher and extract its nuances. It is a necessary precursor for avoiding a top-down, site-less imposition and effectively engaging existing conditions.

A place's qualities and uniqueness can be more pronounced for retaining selected fabrics and attributes. Objects and operations of different worlds and eras can instill the subtle sense of adventure and intrusion, their residual meanings subliminally registered. An excess of insensitive artifice can be alienating and distracting; places already laden with texture and meaning benefit from considered interpretation, adaptation, and addition. Placelessness<sup>6</sup> and sterility can result from contrived iconography that competes with a site's inherent qualities and values. This approach is not preservationist but curatorial, which, coupled with the actual accommodation and integration of maritime industries, creates a uniquely layered environment. It acknowledges the city as palimpsest: layered, continuous, and evolving. And, as the “best types of public space allow for the inclusion of multiple meanings and all levels of society”,<sup>7</sup> resisting exclusivity is essential. Selectively retaining a site's fabric and uses goes a way toward tempering the forces of globalisation and gentrification—forces, paradoxically, of the city itself and those which beget new waterfront sites. All the case studies discussed are permeated by a strong urban logic. So long divorced from their cities by industrial uses, design moves necessarily integrate a city's rationale. Waterfronts should become part of their cities, not cosmetic appendages.



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6. Jellicoe Plaza  
(Photo: Simon Devitt).

7-9. Silo Park  
(Photos: Simon Devitt).



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### Conclusion

Waterfronts are at the juncture of city and sea, “one of the most important environmental juxtapositions of the twenty-first century”.<sup>8</sup> Waterfront projects provide the unique opportunity to interpret and articulate an increasingly important margin. The scale and clarity of promenade, diversity of edge treatment, and an approach that interprets a site’s specific qualities, heritage, and existing uses are crucial considerations. These approaches can be thought to respectively: allow *exposure* to the water while creating a civic amenity; promote *engagement* with the water; and distil the *essence* of waterfront spaces. Combined, they seek to optimise the experience of waterfronts, spaces infused with unique expressions, phenomena, and opportunity. In WA’s experience, these approaches have been essential in the creation of culturally sensitive and socially successful waterfronts that bring harbours to cities and water to the fore. 

*Taranaki Wharf was designed in collaboration with Athfield Architects. Waitangi Park was designed in collaboration with Athfield Architects and NSW Government Architects Office. North Wharf Promenade, Jellicoe Street and Silo Park were designed in collaboration with Taylor Cullity Lethlean.*



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1 Richard Marshall, eds., *Waterfronts in Post-Industrial Cities* (London: Spon Press, 2001), 4.

2 Aotearoa, meaning “land of the long white cloud”, is the Maori name for New Zealand.

3 Statistics New Zealand, 2006.

4 Martin Bryant, “Urban ecology and site histories: mutually inclusive themes of urban public space design in Aotearoa New Zealand” (published Proceedings of 7th International Water Sensitive Design Conference, Melbourne, February 21-24, 2012).

5 Gunila Jivén and Peter J. Larkam, 2003, “Sense of Place, Authenticity and Character: a commentary,” *Journal of Urban Design* 8, no. 1: 68.

6 See *Place and Placelessness*, by Edward Relph, 1976.

7 Marshall, *Waterfronts in Post Industrial Cities*, 4.

8 Diane Brand, 2007, “Bluespace: a typological matrix for port cities,” *Urban Design International* 12: 69.

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10, 11. North Wharf Promenade (Photos: Simon Devitt).

12. North Wharf Promenade (Photo: Think Photography 2011).