

Ōtākaro Avon River Corridor Regeneration

Case Study for the Aotearoa Design for Biodiversity Guide
www.aotearoadiversity.org



Authors:

Dean, D.; Pedersen Zari, M.; Walker, E.

Key Stakeholders:

- Christchurch City Council
- New Zealand Government
- Ngāi Tūāhuriri (mana whenua)

Historical planning agency:

Regenerate Christchurch (2016–2021)

Location: Ōtautahi / Christchurch - rohe of Ngāi Tūāhuriri (Ngāi Tahu)

Project type: Large-scale ecological restoration, flood management, recreation, and community space.

Project Area: 602 Hectares within Christchurch's Red Zone

Estimated Project Value: Around \$1,250 million in total [1].

Status / Estimated Date of Completion: Ongoing (initiated post 2011 earthquakes)

Context of Place: Taiao, People, and Culture

The Ōtākaro / Avon River originates from spring sources in Avonhead and flows east through the city of Ōtautahi Christchurch before entering Te Ihutai / the Avon–Heathcote Estuary, eventually reaching the Pacific Ocean [2]. The river forms part of a spring-fed freshwater system, supported by groundwater inputs from the Canterbury Plains aquifer system that help maintain relatively cool and clear flows throughout the year [3]. These hydrological conditions support a range of freshwater, riparian, and estuarine ecosystems within the wider catchment despite the highly urbanised setting of the river corridor [4]. Ecologically, the Ōtākaro Avon River catchment supports several native aquatic species including Īnanga (whitebait), Tuna (longfin eel), Kōkopu species, and Kākahi (freshwater



People, Cities, Nature



mussels) [3]. These species rely on the river system for key stages of their life cycles, including migration, feeding, and spawning [2]. Although aquatic biodiversity within the urban catchment has declined over time and is often dominated by pollution-tolerant species, the continued presence of these species highlights the ecological importance of the river corridor and its remaining habitats [5].



Tuna Longfina Eel, Aotearoa New Zealand. Image by Squeegie

The landscape character of the catchment reflects its position within the low-lying alluvial floodplain of Christchurch, shaped by historical river processes and sediment deposition across the Canterbury Plains [6]. As a result, the river corridor contains a mosaic of freshwater, riparian, wetland, and estuarine environments that support diverse terrestrial and aquatic habitats [4]. The interaction between groundwater and surface water is a defining feature of the system, helping sustain spring-fed flows and relatively stable water conditions [2].

For Ngāi Tahu, and particularly Ngāi Tūāhuriri, the Ōtākaro River is a culturally significant landscape and traditional mahinga kai (food gathering area) [7]. Historically, the river provided access to fish, birds, plants, and other resources essential for sustaining Māori communities while also functioning as an important travel route through the wider Canterbury landscape [8]. These relationships are embedded within whakapapa and cultural identity, reinforcing the ongoing responsibility of kaitiakitanga (guardianship) in caring for the health of the river and its ecosystems [9]. The name Ōtākaro, commonly translated as “a place of play,” reflects traditional associations with the river as a place of gathering, recreation, and learning [7]. Oral histories describe how children would play along the riverbanks after daily gathering activities had been completed, illustrating the river’s role not only as a source of sustenance but also as an important social and cultural space [10].



Over time, the ecological and cultural integrity of the river system has been significantly altered by human settlement and landscape modification [2]. During the nineteenth and twentieth centuries, extensive drainage of wetlands and modification of natural waterways occurred to enable agricultural development and later urban expansion across Christchurch [5]. These changes led to the loss of large areas of wetland habitat and reduced the availability of traditional mahinga kai resources historically relied upon by Māori communities [8]. Urbanisation within the catchment has also contributed to declining environmental conditions [4]. The construction of roads, bridges, and buildings, along with the replacement of native vegetation with lawns and exotic plantings, has altered natural hydrological processes and reduced habitat quality [3]. Stormwater runoff, wastewater discharges, and sedimentation have further contributed to declining water quality within the river system [1].



Ōtākaro. Image supplied by Christchurch City Council

Cultural health assessments conducted within the wider catchment of Te Ihutai / the Avon–Heathcote Estuary have identified waterways as being in poor to very poor cultural health [5, 10]. These assessments emphasised the need for improved stormwater management and restoration of springs, wetlands, and riparian environments to improve ecological and cultural outcomes [9]. Flooding also remains a significant challenge within the catchment due to the low-lying topography and extensive urban development across the floodplain [2]. Following the 2010–2011 Canterbury earthquakes, land subsidence and altered drainage patterns increased flood vulnerability in several parts of the city [1]. These conditions have reinforced the need for integrated catchment management and long-term landscape regeneration strategies within the Ōtākaro Avon River Corridor [4].



Te Ao Māori Drivers and Values

Cultural and Ecological Values Influencing the Project

"All wetlands contain a certain cultural and spiritual significance for Māori. They are regarded as taonga (treasures)." For Ngāi Tūāhuriri and the wider Ngāi Tahu iwi, the Ōtākaro / Avon River is understood not simply as a physical waterway but as a living entity with its own mauri (life force) [7]. This worldview positions the river as a taonga and emphasises the responsibility of people to maintain the health and integrity of the natural environment [9, 10].

Historically, the river and surrounding wetlands supported a diverse range of mahinga kai resources, including tuna (longfin eel), īnanga (whitebait), waterfowl, and plant materials used for weaving and food preparation [6]. These resources were integral to Ngāi Tahu identity, seasonal harvesting practices, and the transmission of ecological knowledge across generations [7]. However, extensive wetland drainage and urban development throughout the nineteenth and twentieth centuries significantly altered the ecological systems of the catchment [5]. These landscape modifications resulted in the loss of large areas of wetland habitat and the decline of many traditional food gathering areas associated with the river [5].

The Canterbury earthquakes of 2010 and 2011 created an unexpected opportunity to reconsider land use along the river corridor [11]. Large areas of residential land were declared Red Zone due to severe land damage and increased flood risk [1]. Rather than reinstating previous development patterns, planning authorities and mana whenua recognised the potential to transform the corridor into a landscape of ecological and cultural regeneration [8]. Within this context, the regeneration project represents a shift away from conventional post-disaster redevelopment toward a landscape-led recovery grounded in Te Ao Māori values [9]. Restoring wetlands, re-establishing indigenous vegetation, and revitalising mahinga kai systems therefore became key objectives that linked ecological restoration with cultural renewal [5].

The regeneration of the Ōtākaro Avon River Corridor reflects a broader shift in how post-disaster landscapes can be understood and managed within Aotearoa. Rather than restoring pre-earthquake urban land uses, the project reframes the corridor as a cultural and ecological landscape where environmental repair and cultural revitalisation occur simultaneously [10].



The Ōtākaro / Avon River is recognised by Ngāi Tūāhuriri and Ngāi Tahu as a living entity with its own mauri, positioning ecological restoration not simply as environmental management but as a process of restoring relationships between people, water, and whenua [10]. This perspective encourages landscape interventions that prioritise wetlands, riparian systems, and indigenous biodiversity, strengthening the life force of the river while supporting long-term environmental resilience [2].

Within this framework, regeneration initiatives such as wetland restoration, indigenous planting, and the revival of mahinga kai practices can be understood as expressions of kaitiakitanga in action, reinforcing responsibilities of stewardship across generations [12]. These strategies also align with wider aspirations for the corridor to function as a connected green spine within Christchurch, providing space for ecological recovery, cultural learning, and community engagement with the river environment [13]. By embedding cultural values alongside ecological design, the project demonstrates how landscape regeneration can support both environmental health and the transmission of mātauranga Māori through lived interaction with place [10].

Kaitiakitanga, Tikanga, and Mātauranga Māori Guiding Design Decisions

The principle of kaitiakitanga played a central role in shaping the long-term vision for the Ōtākaro Avon River Corridor [10]. Rather than treating Red Zone land as surplus urban space, the regeneration strategy framed the corridor as a landscape requiring ongoing guardianship and stewardship [1, 8, 10]. This perspective recognises reciprocal relationships between people and the environment and emphasises that human wellbeing is inseparable from the health of the river and its ecosystems [10]. Tikanga Māori also influenced the structure of engagement and decision-making processes associated with the project [1].

Cultural protocols guided how interactions occurred between mana whenua, government agencies, and local communities throughout the planning process [8]. Engagement therefore extended beyond standard consultation requirements and involved ongoing dialogue through hui, partnership frameworks, and collaborative governance arrangements [1]. Mātauranga Māori contributed important ecological knowledge to the design and restoration strategies developed for the corridor [3]. Traditional understandings of wetland systems, hydrological processes, species relationships, and seasonal cycles informed restoration planning and landscape management [2].



This knowledge was applied within a ki uta ki tai framework, which recognises the interconnected relationships between mountains, rivers, wetlands, and the sea [2]. Understanding the catchment as an interconnected system enabled restoration strategies that addressed ecological processes across the wider landscape rather than focusing only on isolated project sites [5].

Planting strategies therefore prioritised indigenous species with cultural and ecological significance, particularly those associated with mahinga kai ecosystems [3, 5]. By integrating mātauranga Māori alongside scientific and technical expertise, the regeneration project embedded Indigenous knowledge as a guiding framework for ecological restoration rather than treating it as supplementary cultural information [9].

Redefining Priorities Through Cultural and Ecological Values

The incorporation of Te Ao Māori principles significantly reshaped redevelopment priorities within the Ōtākaro Avon River Corridor [9]. Conventional post-disaster recovery strategies typically prioritise rapid rebuilding, economic recovery, and engineered infrastructure solutions [11]. In contrast, the regeneration plan foregrounded ecological restoration, wetland recovery, and cultural revitalisation as foundational objectives for the corridor [8].

Flood resilience, for example, was addressed through nature-based approaches such as restored floodplains, riparian planting, and wetland systems capable of absorbing excess water during extreme weather events [5]. These ecological systems help mitigate flooding while simultaneously improving water quality, restoring habitat, and supporting biodiversity [5]. By embedding Indigenous values at a strategic level, the project reframed the corridor as a multifunctional cultural landscape that integrates ecological resilience, cultural identity, and community wellbeing [9]. Within this framework, landscape systems are understood not as residual green space but as essential infrastructure supporting environmental health, climate resilience, and cultural continuity [12].

Design Process and Engagement

Engagement of Mana Whenua, Local Communities, and Stakeholders

The regeneration of the Ōtākaro Avon River Corridor was guided through a formal co-governance structure that reflected collaboration between civic leadership and mana whenua in the planning and implementation of the project [10].



The Co-governance Establishment Committee, co-chaired by former Christchurch Mayor Lianne Dalziel and Ngāi Tūāhuriri Upoko Te Maire Tau, provided strategic leadership alongside appointed members representing iwi, technical expertise, and community stakeholders [1, 10].

This governance arrangement demonstrated a partnership-based approach that enabled mana whenua perspectives and cultural values to be incorporated into regeneration planning and environmental decision-making [10]. Engagement also extended beyond governance structures, with the Opportunities Assessment phase involving public submissions, environmental modelling, technical investigations, and cultural values mapping to guide land use and restoration strategies [10]. Community workshops and consultation events provided opportunities for residents and organisations to contribute aspirations relating to recreation, ecological restoration, and long-term resilience within the corridor landscape [4].

Utilising Hui, Workshops, and Wānanga in Co-Design

Participatory engagement methods such as hui, workshops, and collaborative planning sessions were used to incorporate community knowledge and cultural perspectives into the design process [4]. These approaches supported collaborative relationships between designers, planners, mana whenua, and local communities, strengthening shared stewardship of the river corridor [14]. Rangatahi engagement was also incorporated through collaboration with Whītau School, where students contributed their experiences and perspectives of the river and surrounding landscape [8]. Through these activities, young participants were encouraged to reflect on their role as future kaitiaki and develop stronger connections with the natural and cultural values of the corridor [8]. This type of engagement supports intergenerational knowledge sharing and community involvement in environmental restoration initiatives [4].

Influence of Mātauranga Māori and Tikanga on the Design Process

Mātauranga Māori informed key aspects of the design process, ensuring that planning responded to the ecological characteristics and historic landscape patterns of the Ōtākaro river system [5]. Design strategies considered natural hydrological behaviour, historic wetland systems, and the ecological significance of the river corridor [6]. Planting palettes prioritised indigenous species that support biodiversity and reflect cultural knowledge associated with native ecosystems [15].



Restoration initiatives also included māra kai and native planting programmes that reconnect communities with traditional food systems and ecological stewardship practices [8]. By integrating ecological restoration with cultural knowledge systems, the regeneration project reinforces the corridor as a living landscape where environmental recovery and cultural identity are interconnected [12].

Factors Affecting Effective Engagement and Collaborative Decision-Making

The regeneration process required balancing a wide range of stakeholder expectations, including community aspirations, ecological priorities, technical constraints, and funding limitations [1]. Challenges also emerged from the long-term nature of large-scale urban regeneration and the complexities associated with redeveloping earthquake-affected land [10]. At the same time, strong community advocacy and established relationships between iwi and local government helped support collaborative planning and decision-making [16]. Statutory regeneration frameworks and planning strategies provided guidance for implementing environmental restoration and community-focused land use within the corridor [10]. As a result, engagement was treated as an ongoing process throughout planning and implementation rather than a single consultation stage [9].



Otākaro. Image supplied by Christchurch City Council



Biodiversity Design Strategies

The regeneration of the Ōtākaro Avon River Corridor incorporates a range of biodiversity-focused landscape interventions designed to restore ecological function across the former residential red zone [10]. These strategies operate across multiple spatial scales, from site-specific habitat restoration projects to corridor-wide ecological systems that reconnect the river with surrounding wetlands and coastal environments [2].

One significant intervention occurred near the Pages Road Bridge at Waitaki Street, where Christchurch City Council removed sheet metal pilings along the riverbank to allow tidal waters to flow back into adjacent low-lying areas [1]. This intervention enabled the creation of approximately two hectares of tidal wetland habitat within the corridor [17]. According to Residential Red Zone Manager Dave Little, restoring this tidal connection allows the river to behave more naturally, noting that “the river can now flow into low-lying areas, which helps to restore some of the river’s natural floodplain function” [4]. The restored wetland also accommodates tidal movement and floodwaters, reducing pressure on the main river channel while creating an intertidal zone that supports a diverse range of native plants and wildlife [18].

Early monitoring of the wetland site has shown encouraging ecological responses, with more than twenty native bird species recorded since tidal water was reintroduced [18]. Ecologists involved in the project have observed that vegetation is transitioning from exotic grasses and weeds toward native saltmarsh species, creating a mosaic of wetland habitats suited to birds, fish, and invertebrates [18]. Large-scale indigenous planting has also played an important role in supporting biodiversity within the river corridor [4]. Approximately 17,000 native plants have been established along roughly ten kilometres of riverbank, contributing to improved habitat conditions, riverbank stabilisation, and enhanced ecological connectivity along the waterway [4]. These restoration plantings help reduce erosion and improve water quality while providing food sources and shelter for native wildlife [5].

Across the wider regeneration area, ecological planting programmes are being undertaken through partnerships between Christchurch City Council, community organisations, schools, and volunteers [6]. For example, restoration initiatives at Dallington Landing and surrounding sites have involved tens of thousands of native plants being installed to re-establish indigenous forest cover within the corridor [6].



These planting efforts aim to gradually “recloak” the former residential red zone in native vegetation, supporting the return of birds, insects, and lizard species to the urban landscape [6]. A central spatial concept guiding biodiversity restoration is the development of a continuous ecological “Green Spine” along both sides of the Ōtākaro Avon River [10]. Approximately half of the former residential red zone has been allocated to this ecological corridor, which prioritises wetland restoration, native forest regeneration, and riparian habitat creation while maintaining public access through walking and cycling paths [10]. Within this framework, different areas of the corridor are planned to support complementary activities such as ecological restoration, community recreation, māra kai initiatives, and educational spaces that reconnect residents with the river landscape [10].

Several large-scale wetland restoration projects are planned along the corridor, with future wetlands ranging from approximately two hectares to over fifty hectares in size depending on site conditions [17]. These wetlands are expected to significantly expand habitat availability and contribute to flood management by providing space for water storage and natural drainage processes [17]. The Lake Kate Sheppard area represents another example of biodiversity-sensitive landscape design within the corridor [14]. Following land subsidence during the Canterbury earthquakes, parts of the site naturally reverted to wetland conditions due to poor drainage and increased groundwater levels [1]. Rather than attempting to artificially drain the area, the regeneration strategy embraces these natural processes and integrates wetland restoration into the landscape design [1]. As Dave Little explains, the conditions created by the earthquakes presented “an opportunity for further ecological enhancement by supporting the natural processes underway.” [1]. Design strategies for the site therefore prioritise ecological restoration in wetter areas through native planting and wetland expansion while maintaining nearby open spaces for recreational activities such as sport and community events [1]. These strategies demonstrate how landscape design can respond to changing environmental conditions while supporting both ecological and social outcomes [14].

Beyond individual restoration sites, the regeneration of the Ōtākaro Avon River Corridor also reflects a broader ecological planning framework that recognises connections between freshwater, terrestrial, and coastal ecosystems [2]. Planning for the corridor aligns with the Māori environmental principle of *ki uta ki tai*, which emphasises the interconnectedness of ecosystems from the mountains to the sea [12]. This approach supports habitat connectivity, ecological resilience, and the movement of migratory species across landscapes [2].



For example, restoration efforts within the river corridor contribute to the ecological health of the nearby Avon-Heathcote Estuary / Ihutai, an internationally significant habitat for migratory shorebirds [2]. By restoring wetlands, riparian vegetation, and natural hydrological systems along the river, the project helps strengthen ecological links between inland habitats and coastal ecosystems [19]. Together, these biodiversity design strategies illustrate how urban regeneration projects can integrate ecological restoration, cultural values, and community participation to create resilient landscape systems within a rapidly changing urban environment [3, 10].

Outcomes

The regeneration of the Ōtākaro Avon River Corridor has produced a range of ecological, cultural, and environmental outcomes that demonstrate the benefits of integrating biodiversity restoration within urban regeneration projects [10]. One of the most significant outcomes has been the restoration of ecological connectivity between freshwater, terrestrial, and coastal ecosystems along the Ōtākaro river system [3]. The Avon-Heathcote Estuary / Ihutai, located downstream of the corridor, forms part of the internationally recognised East Asian–Australasian Flyway (EAAF), a major migratory route used by shorebirds travelling between Arctic breeding grounds and southern hemisphere feeding areas [2]. This flyway network supports migratory birds that travel thousands of kilometres annually between East Asia, Southeast Asia, Australia, and New Zealand [2].

During the southern hemisphere summer, migratory shorebirds arrive in Christchurch and use the estuary as a feeding ground where they build energy reserves before beginning their return migration northward [2]. Among the most well-known of these species are bar-tailed godwits (kuaka), which undertake one of the longest non-stop migrations recorded for any bird species [2]. Approximately 1,000 godwits return to the Avon-Heathcote Estuary each year after completing a continuous flight of around 11,000 kilometres from Alaska to Aotearoa New Zealand [2]. The restoration of wetlands, riparian habitats, and natural hydrological systems along the Ōtākaro Avon River therefore contributes to maintaining ecological conditions that support these internationally significant migratory species [5].



Local biodiversity within the river corridor has also improved through targeted habitat restoration and predator management initiatives [3]. One example is the Ōtākaro Urban Trapping Project, which has removed more than 1,000 invasive predators such as rats, stoats, and hedgehogs from the corridor and surrounding neighbourhoods [3]. These predator control efforts have helped create a safer environment for native wildlife, allowing bird populations and other species to recover within the restored landscape [4]. As a result, several native bird species have become increasingly visible within the corridor, including pīwakawaka (fantails), riroriro (grey warblers), and the occasional kōtare (sacred kingfisher) [19]. The return of these species reflects improving habitat quality and the gradual restoration of ecological balance within the former residential red zone [5].

Native planting programmes have further strengthened these biodiversity outcomes [14]. Across the regeneration area, approximately 17,000 indigenous plants have been installed along roughly ten kilometres of riverbank [4]. These plantings contribute to stabilising riverbanks, reducing erosion, and improving water quality while creating habitat for birds, insects, and aquatic species [5]. Over time, the expansion of native vegetation is expected to increase ecological resilience within the corridor by strengthening habitat networks and supporting greater species diversity [19]. Beyond ecological outcomes, the regeneration project has also sought to integrate biodiversity restoration with urban design and the built environment [17].

Public promenades, pedestrian pathways, cycling routes, and community spaces have been designed alongside ecological zones, allowing people to interact with restored natural landscapes within the city [13]. This integration encourages everyday engagement with the river corridor and strengthens public awareness of environmental restoration efforts [17]. At Te Papa Ōtākaro / Avon River Park, landscape design incorporates Māori cultural narratives and symbolism as part of the regeneration process [13]. Elements such as whāriki-inspired patterns integrated into the river's edge reflect traditional weaving forms and represent interconnected relationships between land, water, and people [13]. These design features contribute to creating a distinctive cultural identity within the landscape while reinforcing connections to the cultural history of the Ōtākaro river [7]. The integration of ecological restoration, public space design, and cultural expression demonstrates how urban regeneration can create landscapes that support both environmental sustainability and cultural identity [12].



Collectively, the outcomes of the Ōtākaro Avon River regeneration illustrate the potential for post-disaster urban landscapes to evolve into multifunctional ecological corridors that support biodiversity, community wellbeing, and cultural recognition [10].

Insights and Reflections

Key Lessons from Process and Outcomes

The regeneration of the Ōtākaro Avon River Corridor demonstrates how post-disaster recovery can extend beyond rebuilding damaged infrastructure toward broader landscape transformation [11]. Following the Canterbury earthquakes, large areas of residential land along the river were designated as Red Zone land due to ongoing ground instability and flood risk, creating an opportunity to reconsider future land use across the corridor [10]. Rather than reinstating previous residential land uses, the regeneration strategy reframed these areas as an ecological and recreational landscape centred on restoring the health of the Ōtākaro river system [3].

One of the key lessons emerging from the project is the recognition of landscape systems as essential infrastructure capable of contributing to environmental resilience within urban environments [12]. Wetlands, riparian planting, and restored floodplain areas provide natural functions such as floodwater storage, habitat restoration, and water quality improvement [2]. These approaches reflect broader planning strategies that prioritise nature-based solutions, where ecological processes support environmental management and climate adaptation [12]. Large-scale native planting, wetland restoration, and ecological corridor development along the Ōtākaro river have gradually re-established habitat networks and improved ecological conditions within the corridor [4]. At the same time, the project demonstrates how landscape regeneration can support multiple outcomes including ecological restoration, public recreation, and cultural recognition [13].

Public walkways, parks, and open spaces have been designed alongside restored ecological areas, allowing residents and visitors to experience the river landscape while supporting environmental recovery [17]. While the regeneration strategy incorporates Māori cultural narratives and acknowledges the cultural significance of the river, ongoing opportunities remain to further strengthen the integration of Te Ao Māori values throughout the evolving landscape [7].



For example, the regeneration plan identifies opportunities to support practices such as mahinga kai and other cultural activities connected to the river and surrounding ecosystems [14]. However, many areas of the corridor are still in early stages of development or remain open for future projects, suggesting that additional cultural programming and whenua-based practices may continue to emerge over time [10].

Expanding opportunities for cultural landscape expression, māra kai initiatives, and community-led environmental stewardship could further reinforce the relationship between people, place, and the Ōtākaro river system [16]. In this way, the project illustrates that landscape regeneration is not a single completed intervention but an evolving process where ecological restoration, cultural recognition, and community engagement can continue to develop together [12].

How Te Ao Māori Values and Drivers Influenced Project Practice

Te Ao Māori perspectives have played an important role in shaping the regeneration strategy for the Ōtākaro Avon River Corridor [7]. The Ōtākaro Avon River Corridor Regeneration Plan recognises the cultural significance of the river and emphasises the importance of restoring environmental health alongside community wellbeing [10]. Within this framework, ecological restoration is closely linked to the concept of kaitiakitanga, which emphasises guardianship and long-term responsibility for the health of natural environments [12]. The regeneration strategy therefore prioritises environmental restoration activities such as wetland recovery, native planting, and habitat creation as key components of the corridor's future development [5].

Mana whenua involvement has also influenced the planning and governance of the project [10]. Through formal governance and consultation processes, Ngāi Tūāhuriri representatives have contributed to the strategic direction of the regeneration programme [10]. This collaborative approach reflects an effort to incorporate cultural values and Indigenous knowledge within planning processes for the corridor [3]. The inclusion of cultural narratives and Māori design principles within public landscape spaces further reinforces the cultural identity of the Ōtākaro river corridor [13]. For example, landscape design elements within Te Papa Ōtākaro incorporate Māori cultural motifs and storytelling within the public realm [17]. These elements contribute to creating a landscape that recognises both the cultural history of the river and its continuing significance to mana whenua [7].



Transferability of Insights to Other Urban Contexts in Aotearoa

The Ōtākaro Avon River Corridor provides valuable insights that may inform future regeneration and climate adaptation strategies in other urban environments across Aotearoa [11]. Many New Zealand cities are increasingly experiencing pressures associated with flooding, environmental degradation, and the long-term impacts of climate change, particularly in low-lying coastal or river-adjacent areas [2]. The corridor demonstrates how ecological restoration strategies such as wetland regeneration, riparian planting, and habitat restoration can contribute to strengthening environmental resilience within urban landscapes [5].

By restoring natural floodplains and ecological processes, the project illustrates how landscape-based approaches can complement or reduce reliance on traditional engineered infrastructure for flood mitigation and environmental management [5]. Another important lesson is the value of integrating ecological restoration with governance structures and community engagement processes [3]. The regeneration programme has involved collaboration between local government, mana whenua, community organisations, and environmental groups, creating a shared framework for long-term stewardship of the river corridor [16]. Such partnerships can help ensure that regeneration initiatives reflect local cultural values, environmental priorities, and community aspirations while fostering collective responsibility for the care of restored environments [3].

The project also highlights the importance of addressing ecological systems at a landscape scale rather than focusing on isolated sites or individual projects [12]. By restoring wetlands, riparian habitats, and ecological corridors along the river, the regeneration contributes to broader environmental connectivity between inland ecosystems and the Avon-Heathcote Estuary / Ihutai [2]. This integrated approach supports biodiversity, improves habitat continuity, and strengthens the ecological relationships between freshwater and coastal environments [2]. Ultimately, the Ōtākaro Avon River Corridor demonstrates how environmental risk and post-disaster landscapes can be reframed as opportunities for ecological restoration, cultural recognition, and long-term urban resilience [10].



Reference List

1. Christchurch City Council. (2024). *Otakaro Avon River Corridor (OARC)*. <https://ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/Long-Term-Plan/ltpdraftactivityplans2024/Otakaro-Avon-River-Corridor-OARC-Draft-Activity-Plan-LTP-2024.pdf>
2. Environment Canterbury Regional Council. (2025). *Avon River/ Ōtākaro catchment*. <https://www.ecan.govt.nz/your-region/your-environment/water/whats-happening-in-my-water-zone/christchurch-west-melton-water-zone/local-projects-and-priorities/avon-riverotakaro>
3. Otakaro Living Laboratory. (n.d.). *Biodiversity*. <https://www.otakarolivinglab.org.nz/copy-of-historical-data-2>
4. Christchurch City Council. (n.d.). *Otakaro Avon River Corridor*. <https://ccc.govt.nz/parks-and-gardens/regenerationareas/otakaro-avon-river-corridor>
5. Bates, K., et al. (n.d.). *From red zone to green corridor: An ecological approach to remediation of the Avon/ Otakaro River red zone*. https://www.canterbury.ac.nz/content/dam/uoc-main-site/documents/pdfs/d-other/geography-repository/GEOG309_2012_Avon_Ecological_Corridor_Report.pdf
6. Avon River/ Otakaro and Tributaries. (n.d.). *Christchurch District Plan site of ecological significance*. <https://districtplan.ccc.govt.nz/Images/DistrictPlanImages/Site%20of%20Ecological%20Significance/SES%20LP%2024.pdf>
7. Christchurch City Libraries Ngā Kete Wānanga o Ōtautahi. (2026). *Ōtākaro – Avon River*. <https://my.christchurchcitylibraries.com/ti-kouka-whenua/otakaro/>
8. Regenerate Christchurch. (n.d.). *Ōtākaro Avon River Corridor*. <https://regeneratechristchurch.nz/oarc/>
9. Ministry for the Environment Manatū Mō Te Taiāo. (2024). *Implementation of the Ōtākaro Avon River Corridor Regeneration Plan*. <https://environment.govt.nz/acts-and-regulations/acts/fast-track-approvals/fast-track-projects/implementation-of-the-otakaro-avon-river-corridor-regeneration-plan/>
10. Department of the Prime Minister and Cabinet. (2021). *Ōtākaro Avon River Corridor Regeneration Plan*. <https://www.dpmc.govt.nz/our-programmes/other-work/historical-programmes/greater-christchurch-recovery-and-regeneration/recovery-and-regeneration-plans/otakaro-avon-river-corridor-regeneration-plan>
11. AECOM. (2026). *From devastation to regeneration: Rebuilding New Zealand's second largest city for a better future*. <https://publications.aecom.com/pgm/projects/from-devastation-to-regeneration-rebuilding-new-zealand-s-second-largest-city-for-a-better-future>
12. Isthmus. (2025). *Ebb and Flow: Ōtākaro River Regeneration*. <https://isthmus.co.nz/project/otakaro-river-regeneration/>
13. LandLAB. (n.d.). *Te Papa Ōtākaro / Avon River Park*. <https://finch-cow-2sxx.squarespace.com/work/te-papa-otakaro-avon-river-park>
14. Boffa Miskell. (2026). *Otakaro Avon River Corridor: Lake Kate Sheppard*. <https://www.boffamiskell.co.nz/projects/otakaro-avon-river-lake-kate-sheppard>
15. Citycare Property. (n.d.). *Dallington Landing native planting marks a final flourish*. <https://citycareproperty.co.nz/our-projects/dallington-landing-native-planting-marks-a-final-flourish-by-citycare-property>
16. Avon Otakaro Network. (n.d.). *Corridor wide*. <https://avonotakaronetwork.org/corridor-wide/>
17. New Zealand Institute of Landscape Architects. (n.d.). *Te Papa Ōtākaro Avon River Park*. <https://nzila.co.nz/showcase/te-papa-otakaro-avon-river-park>
18. Aurecon Group. (2026). *Otakaro Avon River Corridor: Bringing regenerate Christchurch's vision to life with digital tools*. <https://www.aurecongroup.com/projects/transport/otakaro-avon-river-corridor-regeneration>
19. Otakaro Limited. (2022). *Te Papa Ōtākaro / Avon River Precinct*. <https://ndhadeliver.natlib.govt.nz/webarchive/20220421065518/https://www.otakaroltd.co.nz/anchor-projects/avon-river-precinct/>

