



Kaipara Moana
He Mahere Rautaki Whakakotahi
Integrated Strategic Plan of Action

2011-2021

Final
Creating
a healthy and productive Kaipara Harbour

November 2011



Te kete kai o Ngāti Whātua, Te Wahapū Moana o Kaipara e ngūngūru tonu nei, ko ngā ngāru o te moana e pāpaki ana ki te takutai moana. Koina te mauri o te iwi nei, te aroha hoki hei wairua mo te rohe nei.

No reira, e Kaipara Moana e horahia atu, e horahia mai,

Ko Pokopoko te taniwha ka mataara

Ko Rangiriri te rakau e ngāu i te ngāru

Ko Hoeroa te Ngāru

Ko Mahūhū ki te Rangi te Waka

Ko Ngāti Whātua te iwi

Final





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SECTION 1:

The Kaipara Harbour, Ngā Kaitiaki Tai Ao o Kaipara, and the IKHMG

1. He Timatanga - Introduction

The Kaipara Harbour is New Zealand's largest estuarine ecosystem and is the receiving environment of a massive 640,000ha catchment that extends across the Auckland and Northland regions. The indigenous Māori people of the Kaipara, Ngāti Whātua, are spiritually and physically intertwined with their most sacred treasure – the Kaipara Harbour. To address the ongoing environmental degradation to the health of the Kaipara, tribal elders have led the establishment of a multiple-stakeholder partnership combining two approaches to environmental management: one indigenous (Mātauranga Māori) and the other derived from western knowledge. This forms the basis for future research, planning, policy development and management of the Kaipara ecosystems, harbour and catchment.

The Kaipara forest, freshwater, shrublands, dunelands and estuarine ecosystems have suffered significant loss, continue to decline and under ongoing stress. The Kaipara also contains some of the rarest ecosystems in New Zealand namely sand dune, seagrass, freshwater and estuarine wetland ecosystems. Evidence exists that the Kaipara Harbour plays a significant fisheries role in the wider west coast north island ecosystem as a nursery ground for key commercial and recreational species – snapper, grey mullet, flounder, white shark, hammerhead shark and rig.

The impetus for action started from the community and hapū ongoing conflict with commercial fishing activities. Since the late 1990s, community, hapū and multiple agencies have worked together to address this conflict and the ongoing decline of the natural world of the Kaipara.

Socially and economically, the Kaipara predominantly supports pastoral farming, agriculture and fisheries. It is governed by six government departments: Kaipara District Council, Whangarei District Council, Auckland Council, Northland Regional Council, Department of Conservation, and Ministry of Fisheries. All agencies apply a plethora of various statutory regulations to manage the Kaipara however, it is applied at different management scales using different management philosophies. This current management approach has contributed to the continuing decline in the health *mauri* of the Kaipara Harbour.

The Integrated Plan of Action (The Plan) is the first stage of managing Kaipara ecosystems, harbour and catchment in a way that will achieve integrated management. This can only be achieved through a collaborative, multi-stakeholder approach and partnerships.



The Plan has four sections: **Section 1** introduces the world of Kaipara, the indigenous people and the multiple stakeholder group the Integrated Kaipara Harbour Management Group (IKHMG). **Section 2** provides the context, purpose, introduces the tools / methods and why the Plan has been developed. **Section 3** outlines a set of Goals that will address the common vision and achieve our long-term objectives. Lastly, **Section 4** identifies our key actions and strategies that will achieve our Goals.

2. Ngāti Whātua ki Kaipara hapū

The Kaipara hapū, Te Uri o Hau¹ and Ngāti Whātua Ngā Rima o Kaipara², claim a long traditional relationship with the Kaipara Harbour and the many catchments of the rivers that enter the Kaipara. Ngāti Whātua has held mana over both land and water taonga through numerous generations of occupation. The Kaipara is a sacred taonga and kaitiaki are responsible for protecting it for the benefit of all people.

Traditionally, Kaipara hapū believed that small shifts in the mauri (life force³) of any part of the environment, for example through use or misuse, would cause shifts in the mauri of immediately related components, which could eventually affect the whole system. Guiding values and concepts such as kaitiakitanga, tapu, and rahui, were used through an elaborate system of ritenga or rules. The purpose of their use was to regulate and sustain the wellbeing of people, communities and the natural world.

Restoring and protecting the mauri of the Kaipara is of utmost importance to Kaipara hapū. Tribal elders (Ngā Kaitiaki Tai Ao o Kaipara) gathered in 2005 and with their tupuna's guidance declared a tribal approach to restore the health of the Kaipara. Ngā Kaitiaki Tai Ao o Kaipara has a vision:

*'Ka mau tonu nga taonga tapu o nga matua tupuna, Koinei nga taonga i tuku iko, na te Atua'
'Hold fast to the treasures of the ancestors for they are the treasures that have been handed down to us by God'*

Their vision is focused on 'the realisation of rights as Te Uri o Hau' and Ngāti Whātua Ngā Rima o Kaipara and 'a natural environment that is rich in diversity and life-supporting capacity'. Ngā Kaitiaki Tai Ao o Kaipara see their role as providing the leadership to coordinate the various resource management agencies and stakeholders in a united vision

¹ Haumoewarangi is the recognised eponymous ancestor of Ngāti Whātua. Te Uri o Hau tribal groups include: Ngāti Tahuu, Ngāti Tahinga, Ngāti Rangi, Ngāti Mauku, Ngāti Kauae, Ngāti Kaiwhare & Ngāti Kura.

² Ngāti Whātua Ngā Rima o Kaipara is comprised of those Ngāti Whātua hapū: Ngāti Whātua Tuturu, Te Taou, Ngāti Rango / Ngāti Rongo and Ngāti Hine whom exercise customary interests in the south Kaipara. The five marae are: Te Haranui, Puatahi, Araparera, Kakanui and Reweti.

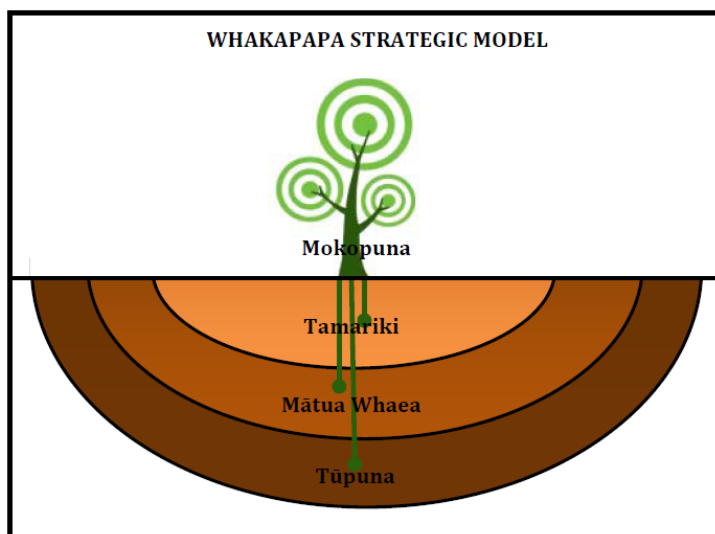
³ Mauri is more than just a philosophy, but a framework for understanding balance and the interconnections within ecosystems.

for the management of the Kaipara Harbour and catchment. Hence, this leadership grounds and shapes the work of the Integrated Kaipara Harbour Management Group (IKHMG)⁴.

3. An Integrated Approach to Different Worldviews

The IKHMG approach values and incorporates Mātauranga Māori (Māori knowledge) and Western knowledge paradigms. The concept of whakapapa (genealogy /origins) is at the core component of any strategic thinking for Māori. A Whakapapa approach (Figure 1) ensures that we are guided by the wisdom of our Tupuna (ancestors), and are required, as Kaitiaki of the present, to leave our mokopuna (grandchildren) with a healthy and improved environment to inherit. The IKHMG embraces this approach and its values of long term visions, sustainability and intergenerational equity.

Figure 1. Whakapapa Strategic Model



4. Te Tiriti o Waitangi - Treaty of Waitangi

Giving effect to the principles⁵ of the Treaty of Waitangi (both English and Māori version) is captured in most of New Zealand's environmental legislation. Of relevance, is Resource Management Act (1996), Local Government Act (2002), Conservation Act (1987), Fisheries

⁴ The IKHMG is the vehicle to assist in meeting their responsibilities under the Te Uri o Hau (Treaty of Waitangi) Settlement Act and a number of Memoranda of Understanding and Protocols established between Te Uri o Hau Settlement Trust and key stakeholders. For Ngā Rima o Kaipara, this also applies to Memoranda of Understanding and Protocols established between Ngāti Whātua o Kaipara and a number of agencies under the Ngāti Whātua o Kaipara Deed of Settlement 2011.

⁵ Principles are: 1) Kawanatanga, 2) Tino Rangātiratanga, 3) Full Exclusive & Undisturbed Possession, 4) Oritetanga, 5) Kaitiakitanga, 6) Whakawhanaungatanga, 7) Tautiaki Ngangahau, 8) He here kia mohio, and 9) Whakatika i te mea he.



Act (1996), NZ Coastal Policy Statement (2010), Marine and Coastal Area Bill (2010), Auckland Regional Policy Statement, Northland Regional Policy Statement (1999).

Treaty settlement legislation (e.g. Te Uri o Hau Claims Settlement Act 2002, Te Roroa Claims Settlement Act 2010) also imposes specific duties for local government and iwi/hapū. This legislation provides for recognition of traditional, historic, cultural and spiritual associations of Ngāti Whātua ki Kaipara hapū have with the Kaipara Harbour and catchment ecosystems.

Statutory provisions exist in respect of iwi/hapū role as kaitiaki, which if implemented correctly, support and assist iwi/hapū.

This strategic plan of action recognises the principles of the Treaty of Waitangi

5. IKHMG Ngā Take Kaitiaki, Common Vision, Guiding Principles & Long-term Objectives

Common Vision for the Kaipara

Central to the integrated management of the Kaipara Harbour has been the development of a common vision, guiding principles and long-term objectives for all parties who have jurisdictional functions or interests relating to the Kaipara Harbour and its catchment.

In 2005, as a result of two large hui held with interested stakeholders and hapū, a common vision was established:

“A healthy and productive Kaipara Harbour”

Also identified at the hui was what was the cause of the declining health mauri of the Kaipara. They can be broadly placed under eight themes:

- Declining fish and shellfish stocks
- Declining biodiversity
- Increased sedimentation and poor water quality
- Increased resource use and development
- Limited opportunities to exercise kaitiakitanga
- Limited socio-economic opportunities
- Impacts of climate change
- Lack of integrated management and coordination of action

Further detail and analysis of these issues are provided in the IKHMG Information Review and Gap Analysis⁶ (IKHMG 2010).

Integrated Kaipara Harbour Management Group (IKHMG)

⁶ Visit: www.kaiparaharbour.net.nz



The vehicle in which to achieve the common vision and address these issues *take*, was through establishing a group representing key crown agencies, community and regional council representatives. This group, the Integrated Kaipara Harbour Management Group (IKHMG) was established in 2005 by Ngā Kaitiaki Tai Ao o Kaipara. The IKHMG is led by the Te Uri o Hau Settlement Trust through its Kaitiaki Unit, Environs Holdings Trust and is co-chaired with Ngāti Whātua Ngā Rima o Kaipara.

The purpose of the IKHMG is to promote integrated and co-ordinated interagency management and kaitiakitanga of the Kaipara Harbour and its catchment.

The IKHMG does not direct the executive roles of its constituent parties nor the conduct of their respective functions duties and powers. Rather the IKHMG has been formed in support of the kaitiakitanga exercised by Ngāti Whātua, and in recognition of the opportunities that it presents to promote integrated and co-ordinated management of the Harbour.

Today, the IKHMG is made up of the hapū, community groups, agencies and stakeholders listed in Appendix 1: IKHMG parties . The IKHMG also engages with a wider representation of stakeholders, interested contributors and iwi listed in Appendix 2: Interested parties and wider stakeholders. The IKHMG is supported by interagency funding which has provided for dedicated executive assistance through the Environs Holdings Trust.

Guiding Principles

The work of the IKHMG is guided by a set of four principles. They are: **1) Kaitiakitanga, 2) Integrated ecosystem-based management, 3) Manaakitanga respect, 4) Co-management.** Our approach engenders an innovative solution that considers traditional (Mātauranga Māori) and Western knowledge models.

Long-term Objectives

To better define the outcomes of our work, a set of long-term objectives in support of the Common Vision have been identified. Across these six objectives our issues have been addressed as illustrated in Figure 2.

Figure 2. How each long-term objective addresses each of the IKHMG issues.

Issue:	Objective:					
	Biodiversity	Fisheries	Mauri	Climate Change	Socio-economic	Integrated Management
Declining native biodiversity	●	●	●	●	●	●
Declining fish & shellfish stocks	●	●	●	●	●	●
Increased sedimentation & poor water quality	●	●	●	●		●
Increased resource use & development	●	●	●	●	●	●
Limited opportunities practice kaitiakitanga	●	●	●		●	●
Impacts of Climate Change	●	●		●		●
Limited socio-economic opportunities	●				●	●
Lack integrated management & coordination of action	●	●	●			●

SECTION 2:

The Context of the Integrated Strategic Plan of Action

6. He Take - Purpose

The purpose of the Integrated Strategic Plan of Action (the plan) is to promote integrated and coordinated inter-agency management and kaitiakitanga of the Kaipara Harbour and its catchment. This long-term strategic plan achieves the common vision (Figure 3) of a healthy and productive Kaipara Harbour over the next ten years (2011-2021).

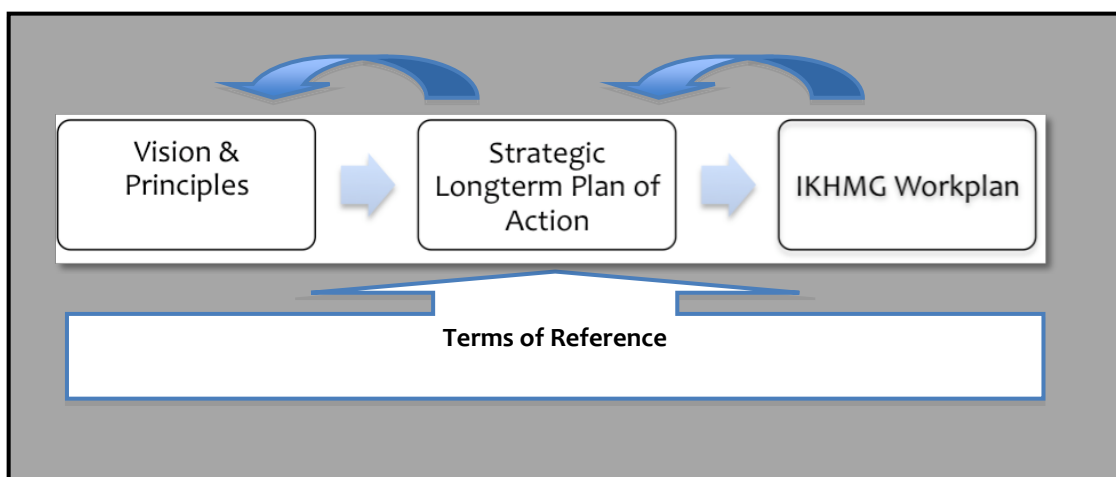
The plan of action adds value by promoting integrated management of the whole harbour.

Integrated management of the Kaipara Harbour is a process of utilising both traditional Māori philosophy and western science philosophy to manage the Kaipara as a interdependent system. Management is cross-sectoral and activities are co-ordinated across all levels. Management, planning and research recognise that the catchment, harbour and coast are linked and achieves the common vision and longterm objectives for the Kaipara Harbour.

This is a 'one' plan for the Kaipara Harbour directing the work of the IKHMG for the next 10 years. It also influences, at a strategic-level, the work of organisations and resource management agencies by addressing particular gaps in the management system. The plan will influence each agency policy, regulation, direct information and knowledge gathering, projects and programs, and priorities.

Our approach is shaped and grounded with Ngāti Whātua ki Kaipara hapū tikanga and values. Therefore, this plan is positioned at a catchment-harbour scale identifying, utilising, traditional and western tools applicable to this scale.

Figure 3. The relationship between key documents that inform the work of the IKHMG.



7. Ma wai e Meinga - Who will use the Plan?

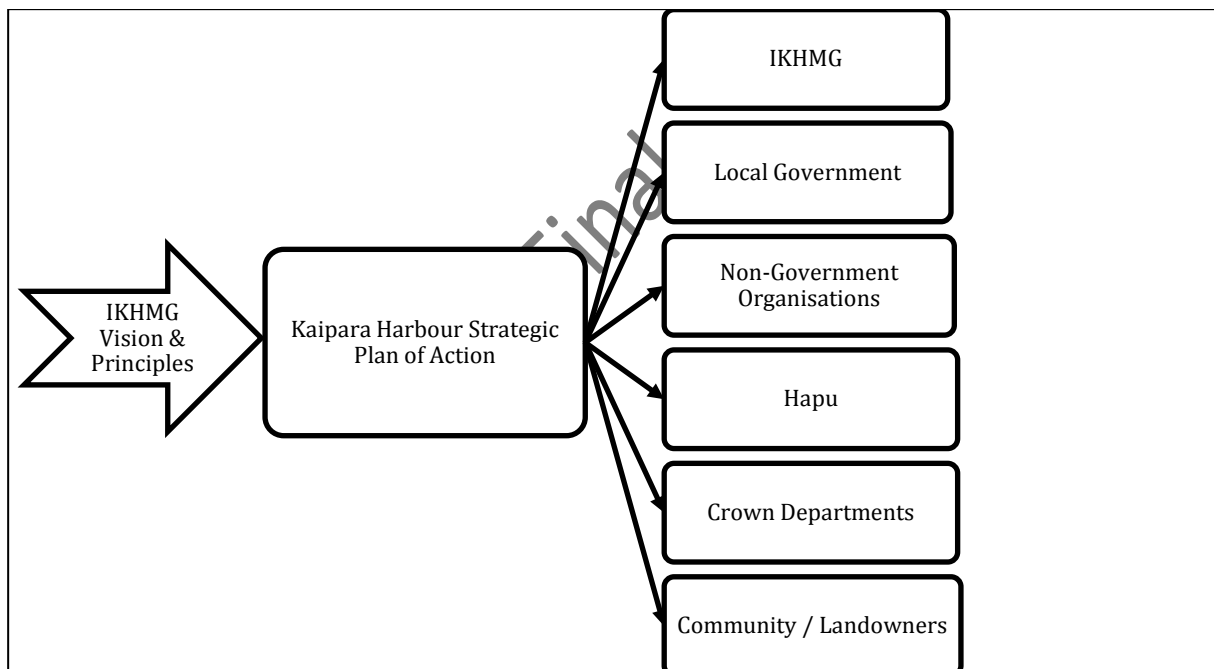
This Plan is for parties to the IKHMG. It will strategically guide their work relevant to the Kaipara Harbour (Figure 4).

Achieving the common vision will require an integrated, cooperative approach that will harness the cooperative activities of all levels of government, industry, non-government organisations, resource users, tribal authorities and community.

This Plan is based on the principles of developing partnerships, to add value and build on existing activities already underway in the coastal marine and catchment areas of the Kaipara.

The Plan intends that all stakeholders, community and hapū/iwi are to connect and have a role in achieving this vision and course of action.

Figure 4. Linkage between the Strategic Plan of Action and who will use the Plan.



8. The World of Kaipara Information Review & Gap Analysis

The Information Review & Gap Analysis (the gap analysis) has directed the development of the goals and actions outlined in the Plan. The gap analysis was a process carried out to understand the current status of information across three knowledge-bases (i.e. biogeophysical, Mātauranga Māori, socio-economic) for each of the six long-term objectives. A 'gap' is defined as "*the space between where we are and where we want to be*". Gaps and opportunities were identified in light of the two approaches to management of the Kaipara; one indigenous (kaitiakitanga) and the other derived from western knowledge.

The gap analysis explicitly identified what needed to be done to close the gap, including targeted research and management initiatives. As a result, the 'gaps' guided the development of the goals and actions in the Plan.

Key outputs of the Gap Analysis are: **(1)** A Summary document **(2)** an Information Review and Gap Analysis report, and **(3)** The Kaipara Atlas: an Integrated Database.

Over a thousand references have been organised into reference management software and a Geographic Information System (GIS) database was established to store and organise spatial information. The Kaipara Atlas document is composed of three knowledge-bases each containing spatial data, literary references and temporal/occurrence data.

The gap analysis supports the marine environmental information review for the Kaipara Harbour carried out by Auckland Council and Northland Regional Council (see Haggitt *et al.* 2008).

Readers seeking the basis for conclusions of the Plan goals and actions are referred to the full report, which is available from the Integrated Kaipara Harbour Management Group.

9. Ngā Rautaki - Tools Available

Tools that are used in this strategic plan include *kaitiakitanga*, *partnership*, *information and knowledge*, *community-led initiatives*, *innovation*, *regulation* and *policy*.

Kaitiakitanga represents responsibilities, obligations, guardianship, care and reinforces spiritual attachment to the natural world; wise management; and is inextricably linked to *mana* (authority, responsibility). This kaupapa provides an opportunity for Kaipara hapū to apply their responsibilities and knowledge and achieve particular cultural aspirations. To restore the mauri of the Kaipara we must address and restore the health of the Kaipara whenua.

Partnership recognises that the future of the Kaipara relies on partnership initiatives across sectors, agencies, industry, groups and private land owners to achieve the common vision and restore mauri of the Kaipara Harbour.

The Plan recognises and supports *community-led initiatives*. The Plan will seek linkages with other programs and activities, such as:

- Working and supporting community groups and catchment groups, including Coastcare, NZ Landcare Trust, Otamatea Harbourcare, South Head Landcare, which play a significant role in implementing grass-roots and property-scale action.
- Promoting and supporting industry initiatives, such as improvements or developments of best practice or codes of practice relevant to the longterm objectives

- Supporting Government initiatives, treaty settlement processes and research planning
- Information sharing and building relationships

Information and knowledge, both western and Mātauranga Māori, must be utilised, gained, and respected; be utilised in decision-making processes and integrated management of the Kaipara Harbour.

Innovation methods are required to address the large sphere of issues and longterm objectives for the Kaipara. Such methods recognise that no individual agency, group and community can achieve the Common Vision. Innovation tests the realms of planning, research, socio-economic activities. For example, the Plan recognises the need for social-ecological coupling of research rather than a single disciplinary approach to research programs. The Plan encourages the development of innovative methods that can be applied at farm-level, encouraging leadership amongst the Kaipara community.

Regulation and policy tools are essential to achieve restoration and sustainable, integrated landuse practices across a catchment that sits across Auckland and Northland jurisdictions – healthy land means a healthy harbour. Use of this tool allows for recognising and linking with current and future statutory planning and policy programs.

We envisage that this Plan will influence the operations, planning (annual, regional, district, conservancy, inshore fishery) and policy development for parties to the IKHMG relevant to their work in the Kaipara Harbour and catchment. These planning programs each have varying terms and review processes. Therefore, an opportunity arises for them to deliver on a number of the actions/tasks identified in the Plan of Action.

The Plan will seek linkages to these planning programs by:

- Identifying for each action what program can assist with delivery.
- Influence planning to improve delivery of biodiversity protection and restoration, kaitiakitanga, reducing sedimentation and eutrophication, spatial management and integrated holistic management.
- Broadly identify the major source areas of pollutants/contaminants, major land-seascape areas at risk and recommend priorities for action.
- Influence any new policy development to improve delivery of biodiversity protection and restoration, reducing sedimentation and eutrophication, kaitiakitanga, spatial management and integrated holistic management.
- Promote property and farm-level planning that delivers improved integrated sustainable land management practices, kaitiakitanga and biodiversity protection.



- Securing funding for delivery of the Plan
- Promoting integrated management of Kaipara ecosystems, harbour and catchment.
- Well-targeted sub-catchment scale initiatives

10. Te Ao Hurihuri – the ever changing world – the need to review & monitor what we are doing

Monitoring and reporting of the Plan will be carried out 5-yearly and presented at IKHMG report back hui to community and stakeholders.

Monitoring of actions will involve measuring against: 1) outcomes, 2) timeframes, 3) relevance to long-term objectives, 4) new knowledge and progress, 5) monitoring data and; 6) uptake and use of IKHMG principles.

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SECTION 3: The Integrated Strategic Plan of Action

11. Te Ara ki Mua – way to move forward – strategies

Vision:

A healthy and productive Kaipara Harbour

Purpose:

To promote integrated and coordinated inter-agency management and kaitiakitanga of the Kaipara Harbour and its catchment.

Goals:

For ease of interpretation, the goals have been summarised under each long-term objective

Longterm Objective	Goals:
To restore & protect biodiversity	<ol style="list-style-type: none"> 1. Establish spatial priorities and strategies for conservation and restoration initiatives in order to be implemented through statutory and non-statutory methods. 2. To halt biodiversity and fish stock decline investigate then apply spatial arrangements that includes protected areas, spatially compatible use zones and addresses integrated management across sectors.
To restore sustainable use of fish & invertebrate stocks	<ol style="list-style-type: none"> 3. Pro-active spatial management and planning that will benefit local fish populations (or sub-stocks), fisheries habitats and shellfish.
To protect & restore the Mauri of Kaipara	<ol style="list-style-type: none"> 4. Enable Ngāti Whātua ki Kaipara to be the primary driver for protecting and restoring the mauri of the Kaipara. 5. Develop iwi/hapū management plan(s) and ensure uptake of the plan(s) by relevant agencies
To increase understanding of Climate Change impacts	<ol style="list-style-type: none"> 6. That regional and local government works with iwi and community to address climate change and implements adaptation strategies.
To promote socio-economic opportunities	<ol style="list-style-type: none"> 7. To identify and support local socio-economic opportunities that ensure the health and productivity of the Kaipara Harbour 8. Investigate innovative sustainable income-generating opportunities & identify resources to implement them 9. Develop community environmental partnerships to support local economy and labour (e.g. Centre of Excellence in Land-Sea Restoration Practices)

Longterm Objective	Goals:
Integrated co-management of Kaipara ecosystems, catchment & Harbour	10. Promote integrated and co-ordinated management of the Kaipara Harbour and its catchment through regulation, policy, research, monitoring, partnerships, planning and collaborative initiatives.

12. Key Tools / Responsibilities:

In addressing the longterm objectives, the IKHMG parties must utilise the following key tools or responsibilities – that is the parties must *mainstream* them across their work relevant to the Kaipara harbour, catchment and ecosystems:

- Kaitiakitanga
- Community-led initiatives
- Innovation
- Partnership
- Information and Knowledge
- Regulation & Policy

Final

13. Assumptions

Our assumptions for achieving our longterm objectives and goals include:

- Parties to the IKHMG have the mandates and resources to carry out the Plan so this needs to be put in individual agencies and groups plans and budgets.
- That parties to the IKHMG have the skill and expertise to achieve the actions defined in the Plan and if not subcontract that expertise and skill.
- The purpose of the IKHMG remains the same over the duration of the Plan (2011-2021).
- The IKHMG guiding principles be reflected in IKHMG parties work programs and decision-making relevant to the Kaipara Harbour and its catchment over the duration of the Plan (2011-2021).
- That the Kaipara Harbour is considered as ‘one’ harbour.
- The spatial coverage of the Plan encompasses the harbour, its catchment and adjoining open (Tasman Sea) coastal ecosystem.
- There are co-governance aspirations for the Kaipara which are being recognised in future Treaty of Waitangi negotiations.

14. Longterm Objective 1: To protect and restore native biodiversity

The longterm objective to protect and restore native biodiversity is defined as addressing, recognising, caring for the natural world of Kaipara for its own sake. This objective focuses on re-establishing natural capital so to allow ecosystem function and services to continue for our mokopuna, future guardians, kaitiaki and users.

Issue:

Biodiversity simply means ‘the variety of life’. Biodiversity is both an outcome of, and essential to, ecosystem integrity and health.

“Māori view the environment as a construct of physical (te taha kikokiko), mental (te taha hinengaro) and spiritual (te taha wairua) realities. The same applies of course to ecosystems. Māori ‘see ecosystems beyond the terrestrial sites in which an ecosystem might be located...an ecosystem includes the air above, the earth below and the species within...”⁷. Hence, to Māori the sea is their kin, known as Tangaroa.

Although biodiversity offers enormous economic, environmental and spiritual value to humanity, providing services we want and need, it is being critically threatened by unsustainable consumption and rapid population growth (Department of Conservation 2000; MEA 2005; Ministry for the Environment 2007). Expanding agriculture, industry, mining and urbanisation are fragmenting, degrading and eliminating natural ecosystems; non-native species are displacing and fundamentally changing indigenous communities; pollution and resource use activities such as fishing cause stress.

Only 0.4% of freshwater ecosystems, 19.1% of forest ecosystems, 2% of dunelands and 5% of estuarine ecosystems remain in the Kaipara harbour catchment. The ability of these ecosystems to provide natural and economic services that the local and regional community want and need is highly questionable. Spatial analysis and landuse modeling conducted for the gap analysis provided significant detail on the spatial extent of various landuse types across the catchment; sediment load, nitrogen and phosphorus, and *E.coli* load of rivers and streams; spatial prioritisation of freshwater ecosystems of national importance were also analysed and defined for their role in contributing towards freshwater biodiversity conservation and future ecosystem integrity of rivers in the Kaipara catchment.

Strategy

Effective protection and restoration of Kaipara biodiversity needs to be undertaken using an ecosystem-based approach and at a catchment-harbour scale; and lastly, must be integrated. This is to recognise that any activity undertaken in the Kaipara has direct or indirect effects on the ecosystem, and most importantly, the human population and its culture, are an integral part of the ecosystem.

⁷ Charles Royal (1993). ‘The perspectives of Māori knowledge holders,’ in Geoff Park: ‘The State of New Zealand’s ecosystems: a questionnaire of ecologists, conservation managers, resource planners and iwi kaitiaki’ (unpublished). Science & Research Unit, Department of Conservation, Wellington.

Our priorities include a need to systematically protect and restore key ecosystems through policy, partnerships, regulation and tree planting.

Goals:

1. Establish spatial priorities and strategies for conservation and restoration initiatives in order to be implemented through statutory and non-statutory methods.
2. To halt biodiversity and fish stock decline investigate then apply spatial arrangements that includes protected areas, spatially compatible use zones and addresses integrated management across sectors.

15. Longterm Objective 2: To restore sustainable use of fish and invertebrate stocks

The longterm objective to restore sustainable use of fish and invertebrate stocks is defined as managing use of Kaipara Harbour fisheries, including invertebrate/shellfish, within a manner that achieves local aspirations and values; manages fisheries activities for system functioning rather than as a commodity; management has a longterm perspective and is integrated.

Issue:

The Kaipara Harbour is New Zealand's largest enclosed estuary and the second largest harbour in the world (Haggitt *et al.* 2008), has long been recognised as an important nursery area for juvenile fish and sharks, particularly snapper, grey mullet, flounder and mako and great white sharks. Early European explorers and settlers to the Kaipara commented on the bounty of the harbour ecosystem. Evidence of this is described from explorers' journals, ship's logs, and settler narratives. The record shows that Kaipara Māori were indeed fine fishermen and were capable of operating on large-scales, with enormous nets, to capture schools of fish. There exists a significant cultural and spiritual relationship to Kaipara fisheries for Ngāti Whātua hapū Te Uri o Hau and Ngāti Whātua Ngā Rima o Kaipara. Kaipara hapū readily refer to the Kaipara as their 'food basket' and family member.

Through a combination of increasing part-time fishers, the ability to work many areas of the Kaipara in various weather conditions, trawling and long-lining operating along and adjacent to the Kaipara entrance, and changing fishing rules, brought growing conflict on the harbour (KHSFMSG 2003). The fishery has been subject to many attempts to manage the conflict and fishing pressure however, declining fish stocks, particularly snapper, grey mullet, eel, toheroa, flounder and rig are a concern to the sustainability of commercial fishing in the harbour. The unknown status of their relative biomass is of particular concern, which provides tremendous uncertainty to the future of these stocks. In addition, information, which would assist management decisions, is lacking (Haggitt *et al.* 2008).

The Kaipara estuarine ecosystem has a significant role in the wider West Coast North Island ecosystem particularly as a natal nursery ground for snapper (SNA8), and most likely grey mullet (GMU1) and school shark (SCH1) stocks.

The Kaipara marine estuarine ecosystem contributes an outstanding example of intact seagrass meadows to the West Coast North Island ecosystem. Little information exists on fisheries habitat within the Kaipara especially the relationship with fish habitat connectivity throughout the life-cycle of species.

The use of Mātauranga Māori (traditional knowledge) in the current management regime and policy framework is lacking. Avenues for this to exist are possible but have yet to be established.

There is a strong desire within Ngāti Whātua ki Kaipara (Hapū) and local fishing community for a co-managed fishery. However, there is no room for local management or co-management arrangements to exist under the New Zealand fisheries legislation.

Strategy

To restore sustainable Kaipara fisheries stock requires an ecosystem-based management approach where management recognises the natural boundaries of ecosystems rather than jurisdictional boundaries. The approach also includes moving from being species-focused to ecosystem-focused and requires a balance of spatially protected areas with general fishing areas. To support implementation the approach must be grounded in both worldviews.

Goals:

1. Pro-active spatial management and planning that will benefit local fish populations (or sub-stocks), fisheries habitats and shellfish.

16. Longterm Objective 3: To protect and restore the mauri of the Kaipara

Te Ripo o Te Awa, kei runga o Kaipara, e tohu aroha mo nga tupuna

The longterm objective to protect and restore the mauri of the Kaipara addresses Ngāti Whātua ki Kaipara sacred relationship with the Kaipara Harbour. The Kaipara is a symbol of the existence of Ngāti Whātua. The Kaipara is deeply embedded in tribal and individual consciousness. This objective brings their worldview and management philosophy to the Kaipara Harbour, catchment and ecosystems.

Issue:

Ngā rangatira state that the mauri of the Kaipara Harbour is unhealthy and disconnected. This is causing a tremendous loss of mana to the hapū. From an Mātauranga Māori perspective, natural resources are imbued with mauri, an intangible and intrinsic value. Ensuring the mauri of natural resources are maintained is an integral part in defining Kaitiaki of natural resources. Māori believed that small shifts in the mauri or life force of any part of

the environment, for example through use or misuse, would cause shifts in the mauri of immediately related parts, which could eventually affect the whole system. Māori ontology acknowledges the inherent or intrinsic values within an ecological system: encapsulated in the concept of mauri.

Māori have been observing and interacting with their environment for centuries (Chetham 1998; Murton unpublished). The traditional Māori worldview acknowledged a natural order to the universe, built around the living and non-living, and the central belief was that all parts of the environment were interrelated or interdependent through the domains of Atua or departmental gods (Marsden 1975). All activities and relationships with the environment were governed by mythology, religion, and Māori values (Marsden 1975).

There is a need to understand and articulate Māori values of ecosystems within environmental management frameworks. Current State of Environment reporting does not report on the status of cultural health. This is primarily due to the Māori worldview being difficult for resource managers and scientists to accommodate within existing management regimes; lack of resources; lack of support to practice kaitiakitanga of ecosystems; and capacity for hapū/whānau/marae to undertake this quantitative approach to assessing environmental health.

Strategy

To resolve these issues, restoring the mauri will require decision-making, planning and policy to be informed by Mātauranga Māori; be undertaken in collaborative partnership approach and hapū have the capacity to participate and practice kaitiakitanga. Mechanisms to achieve this are through understanding the cultural values of Kaipara land-seascapes, hapu management plans, customary title and building capacity.

Goals:

1. Enable Ngāti Whātua ki Kaipara to be the primary driver for protecting and restoring the mauri of the Kaipara.
2. Develop iwi/hapū management plan(s) and ensure uptake of the plan(s) by relevant agencies

17. Longterm Objective 4: To increase understanding of climate change impacts

The longterm objective to increase understanding of climate change impacts to the Kaipara Harbour, catchment, ecosystems and communities addresses the global and national concern of climate change.

Issue:

Climate change is real. Human activities such as driving cars, farming, burning coal and removal of forests has made the planet hotter. In 2007, the Intergovernmental Panel on Climate Change (IPCC) delivered its fourth assessment and stated that New Zealand's climate

is “virtually certain” (greater than 99% probability) to be warmer with noticeable changes in extreme events. Major climate change impacts include:

- Sea level rise
- Heat waves and fire are virtually certain to increase in intensity and frequency
- Floods, landslides, droughts and storms are likely to become more frequent and intense
- East Northland and Auckland is likely to have lower than average soil moistures causing an increase in demand for freshwater
- Increased storm surges
- Increase in frequency of high intensity, short duration rainstorms.

Natural ecosystems, particularly freshwater, are identified as being most vulnerable to these changes and their ability to adapt is uncertain. The rate at which climate change will occur is well in excess of the evolutionary adaption rate for many species and communities.

Climate change is not just an environmental issue but also a socio-economic and cultural issue. Climate change policy, planning and management are focused not just on the environment but also on people’s homes, business, workplace and playgrounds.

In terms of adaptation planning and understanding the Kaipara’s vulnerabilities there is virtually none at the regional and landscape scale. The DoC Conservation Management Strategies for Northland and Auckland currently do not look at adapting for climate change. Also, there is no climate change policy for fisheries management.

Strategy

Information regarding what levels of GHG emissions are for the Kaipara and what effects climate change will have on ecosystems and local communities is nil. However, the Kaipara is fortunate to have large amounts of climate, hazard and environmental data to begin to understand climate change impacts and begin to adapt.

Tools and mechanisms are available to adapt and reduce GHG emissions such as incentive schemes, decoupling subsidies to production and switching to environmental and, off-setting carbon (ie., carbon credits, carbon farming, Emission Trading Scheme (ETS)).

Goals:

1. That regional and local government works with iwi and community to address climate change and implements adaptation strategies.

18. Longterm Objective 5: To promote socio-economic opportunities

The longterm objective to promote socio-economic opportunities addresses the need to emphasis the inextricable link the Kaipara has with society; the emotional, spiritual and community links and values. Managing sustainable and integrated use of the Kaipara is an integral part to achieving the common vision.

Issue:

The World of Kaipara is a rural landscape with a southern rural-urban relationship. The Kaipara is largely split into three land districts: Rodney (now Rodney ward), Whangarei and Kaipara. Up to 55% of the total Whangarei District area lies inside the Kaipara catchment, which brings the population and socio-economic characteristics of Whangarei to the Kaipara. Other characterising cities and townships include Auckland, Wellsford and Dargaville.

Investigations found that key drivers that shape and change socio-economic characteristics and future opportunities include: community profile (e.g., age, education, income, employment, ethnicity), values, cultural and ethical frameworks of communities; climate change; biogeophysical resources; economy (ie., local, regional, national, global), population growth patterns; aging population; production and consumption patterns; globalization; landuse change; southern Kaipara / Auckland urban-rural relationship.

Patterns of population growth, coupled with economic growth, have been predominantly ad hoc, being driven by private development and investment. The social and economic demographics of the Kaipara have been shaped by the past and its location to Auckland. The Kaipara currently, and historically, has been a resource-based economy. In the late 1800's, the Kaipara serviced both international and domestic markets principally through the export of native timber. Some first European settlements have survived to be thriving primary production service centres to the wider rural community (e.g., Dargaville, Helensville, Wellsford). Investment into strategic and pro-active growth planning is virtually been nil up till the early 21st century. Whangarei District Council (Sustainable Futures 30/50), Rodney District Council (Rural Strategy) and Auckland Council (Metropolitan Urban Limit) have recently developed growth strategies.

The southern Kaipara, or Rodney District, has a population estimated at 89,559 for 2006 and is expected to increase more than 50% in the next 20 years.⁸ The Kaipara District in the north has one of the lowest population densities in the North Island and is expected to decrease 3% over the next 20 years. This demographic trend exists across other characteristics such as Māori, income and unemployment.

Strategy

To provide future livelihoods for our mokopuna we need to re-couple/re-establish sustainable use of Kaipara resources and ecosystems by investing in our local economy and social labour. There is a need to address unemployment, low education, and poverty, unsustainable use of resources and development, adhoc growth, lack of kaitiakitanga opportunities and lack of collaborative and community-based management. Innovative opportunities that generate dollars and jobs need to be identified.

Goals:

1. To identify and support local socio-economic opportunities that ensure the health and productivity of the Kaipara Harbour.

⁸ These are only projections based on trajectories taken from historical trends. This information does not necessarily imply that this is the cause of the difference in demographics.

2. Investigate innovative sustainable income-generating opportunities & identify resources to implement them.
3. Develop community environmental partnerships to support local economy and labour (e.g. Centre of Excellence in Land-Sea Restoration Practices).

19. Longterm Objective 6: Integrated co-management of Kaipara ecosystems, catchment and Harbour.

The longterm objective integrated co-management of Kaipara ecosystems, catchment and harbour defines and emphasis a management approach that considers the whole harbour, including people; cumulative impacts of different sectors; interconnectedness between realms; integrates all perspectives; is a partnership and collaborative approach; where knowledge and information is shared and, there are strong links between planning and monitoring.

Issues:

The Kaipara harbour and catchment has a complex environmental management structure. Governance and management by multiple territorial and iwi and hapū authorities, has resulted in a plethora of western legislation, policies and planning instruments. This has created conflicting management philosophies, conflicting management scales and a highly fragmented legislative framework.

The main regulatory agencies are: Auckland Council, Northland Regional Council, Kaipara District Council, Whangarei District Council, Rodney Local Board; Northland Conservancy, Department of Conservation, Auckland Conservancy Department of Conservation; and the Ministry of Fisheries (MFish). Te Iwi o Ngāti Whātua hapū hold mana whenua status over the Kaipara harbour and catchment, and Te Roroa, Te Parawhau, Ngāpuhi and Ngāti Hine hold mana whenua in the northern parts of the catchment. Te Kawerau a Maki hold mana whenua status over part of the south-western catchment that encompasses the foothills of the Waitakere Ranges to Taupaki.

Key issues are encapsulated in two broad areas: (1) number of regulatory agencies; and (2) existing environmental issues, namely, declining fish stocks, environmental effects of fishing, increasing land-based derived sedimentation and declining water quality; increasing resource use and development; unhealthy mauri; loss of biodiversity.

Biodiversity management objectives in council statutory planning documents are comprehensive and provide scope for protecting and restoring indigenous biodiversity. However, problems lie with implementation of district plans arising where planners are not making full use of the available information base; a lack of monitoring and, failures by planners and ecologists to properly understand and communicate information for effective planning. The majority of biodiversity protection and restoration is voluntary without any



clear leadership or national policy directions to halt the decline of biodiversity across Kaipara ecosystems.

The integrated co-management initiatives of the IKHMG are hindered due to the lack of any statutory framework in which to ground them. Co-management and integrated management is justified under both the RMA and the Conservation Act but very rarely occurs. The prospect for integration to occur between Kaipara District Council and Auckland Council planning for coastal development looks bleak as they both take different approaches (Kirchberg 2007; Peart 2007). To then integrate fisheries planning, marine protection planning and regional coastal planning poses a greater challenge to address a truly integrated management approach for the Kaipara Harbour.

Strategy

Transitioning to a truly integrated Kaipara Harbour will require governance. Governance affects not only how management will be executed, but also how information will be collected, synthesised and shared – well in advance of a management response. Our strategy is to achieve the necessary steps to move towards a truly integrated, ecosystem-based management of the Kaipara Harbour.

Goals:

1. Promote integrated and co-ordinated management of the Kaipara Harbour and its catchment through regulation, policy, research, monitoring, partnerships, planning and collaborative initiatives.

SECTION 4: He Mahi - Actions

All actions have been developed to promote integrated, holistic (whole-of-system) management of the Kaipara Harbour. The following tables list actions that will assist in achieving our common vision.

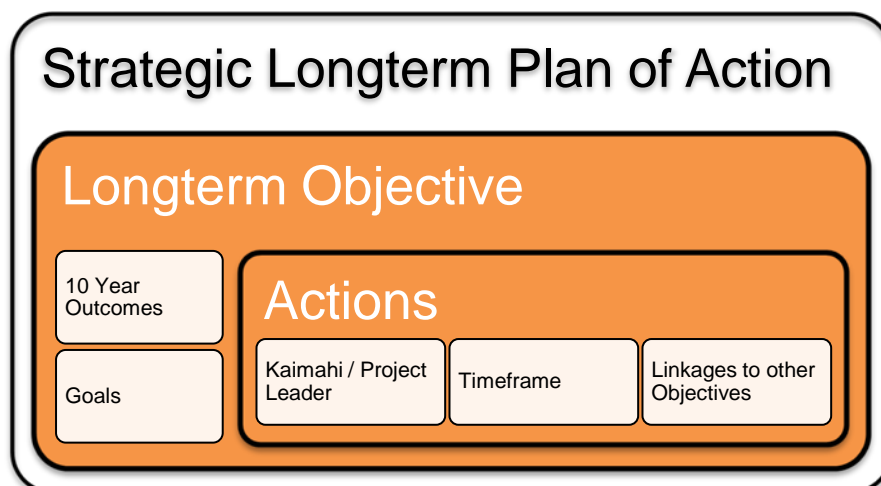
Emphasis is put on implementation that is participatory, collaborative, iterative, integrated and transparent. To cope with this, the Plan, is adaptive and flexible; as our approach and partnership is learnt.

Our goal setting is ecosystem-based. That is, the ecosystem, including humans, and its services have become the organizing framework for management action. This requires a cross-sector approach to achieve these goals rather than having sectors work in isolation. It also requires management action at a catchment-harbour scale rather than the artificial authority boundaries that exist across the natural world of Kaipara.

Integrated management for the Kaipara Harbour is about taking steps to practice cross-sectoral and decentralized governance that works to meet policies and regulation into a internally consistent and mutually re-enforcing planning and decision-making system. Such as, linking up fisheries management actions with water quality management and coastal development is key to an ecosystem approach; and overlying this with an integrated set of principles and values to produce appropriate tasks, plans and action.

For each long-term **objective**, **goals** and **outcomes** are indicated (Figure 5). For each goal key **actions**, project leader(s) or **kaimahi**, **linkages** to other objectives and **timeframes** are provided.

Figure 5. The sections of the Strategic Plan of Action.



20. Longterm Objective 1: To protect and restore biodiversity

10-Year Outcomes:

In 10 years time we wish to see:

- Strategic sub-catchment programs for priority rivers implemented
- Integrated sustainable land management practices

Goals	Actions	Timing	Kaimahi / Project Leader	Linkage with other Objectives
Establish spatial priorities and strategies for conservation and restoration initiatives in order to be implemented through statutory and non-statutory methods.	1. Complete a stocktake of current spatial and strategic biodiversity initiatives to identify opportunities to implement, through statutory and non-statutory mechanisms, integrated biodiversity outcomes.	2011-2012	AC, NRC, DoC	Fisheries
	2. Consider options and agree on a single spatial prioritisation tool for systematically aiding conservation and restoration efforts.	2011-2012	DoC	Fisheries
	3. Spatially map ecosystem stressors to help guide prioritisation of conservation and restoration efforts.	2011-2012	DoC	Fisheries
	4. Develop and implement priority subcatchments restoration workplans and integrated catchment	2012-2021	NRC, AC, KDC,	Fisheries

Goals	Actions	Timing	Kaimahi / Project Leader	Linkage with other Objectives
	programs.		WDC	
To halt biodiversity and fish stock decline investigate then apply spatial arrangements that includes protected areas, spatially compatible use zones and addresses integrated management across sectors.	5. Using agreed planning criteria and objectives, apply prioritisation tool to Kaipara Harbour and its catchment to identify priority locations for conservation and restoration action. Spatial plans to be produced.	2011-2013	IKHMG	Fisheries
	6. Plant 2 million trees by 2015. To be achieved by, but not limited to: riparian planting, coastal foreshore planting, gully planting, supporting active community groups.	2011-2015	IKHMG, community groups, landowners	Fisheries, Mauri, Climate Change, Socio-economic
	7. Investigate the feasibility of establishing a 'Plant Trust' initiative to facilitate the planting of 2 million trees.	2011-2012	TBC	Fisheries, Mauri, Climate Change, Socio-economic
	8. Promote through regulation and policy mechanisms, rules and incentives that halt the decline of biodiversity and fish stocks and addresses key stressors to Kaipara ecosystems.	2011-2021	NRC, AC	Fisheries, Mauri, Climate Change
	9. Support and promote research initiatives that align with this objective and address knowledge gaps.	2011-2021	IKHMG	Fisheries, Mauri, Climate Change

21. Longterm Objective 2: To restore sustainable use of fish and invertebrate stocks

10-Year Outcomes:

In 10 years time we wish to see:

- *Local management arrangements*
- *Reduced fishing conflicts*
- *Spatial management arrangements*
- *Pro-active use of Kaitiakitanga in fisheries management of the harbour*

Goals	Actions	Timing	Kaimahi / Project Leader	Linkage with other Objectives
Pro-active spatial management and planning that will benefit local fish populations (or sub-stocks), fisheries habitat and shellfish.	10. Identify all habitats in Kaipara harbour that are significant for fisheries	2011-2012	<i>MFish/MAF</i>	<i>Biodiversity</i>
	11. Undertake sufficient consultation with relevant agencies to input into this goal.	2011-2012	<i>IKHMG</i>	
	12. Understand spatial and temporal extent of land-based stressors and impacts for the purposes of improved spatial planning and fisheries management	2012	<i>MFish/MAF</i>	<i>Biodiversity, Mauri</i>
	13. Gather information and report on the feasibility of establishing a separate Fisheries Management Area (FMA) for the Kaipara Harbour. Review to	2012-2013	<i>IKHMG</i>	<i>Biodiversity, Mauri, Socio-economic, Integrated</i>



Goals	Actions	Timing	Kaimahi / Project Leader	Linkage with other Objectives
	include biogeophysical, Mātauranga Māori and socio-economic information, and guided by Treaty of Waitangi, Deed of Settlements and other relevant statutes.			<i>Management</i>
	14. Re-establish the Kaipara Harbour Management Advisory Committee so to review the Fishing for the Future Strategy.	2013	<i>IKHMG, TUOH, NWNR, Local fishers</i>	<i>Biodiversity, Mauri, Socio-economic, Integrated Management</i>
	15. Link with and achieve Action 1 to 9.	na	<i>na</i>	<i>Biodiversity, Mauri, Climate Change, Socio-economic, Integrated Management</i>

22. Longterm Objective 3: To protect & restore the mauri of the Kaipara

10-Year Outcomes:

In 10 years time we wish to see:

- *2 million trees planted*



- *Whānau/hapū/iwi engaged in integrated management*
- *Iwi/hapū management plans informing local government plans*
- *Iwi/hapū are involved in resource management decision-making at Governance and Technical levels.*

Goals	Actions	Timing	Kaimahi / Project Leader	Linkage with other Objectives
Enable Ngāti Whātua ki Kaipara to be the primary driver for protecting and restoring the mauri of the Kaipara	16. Build, enhance, and maintain relationships with: whanau, community, kaunihera (local government) and other iwi/hapū	2011-2021	TUOH, NWNR	Biodiversity, Fisheries, Climate Change, Socio-economic, Integrated management
	17. Build, enhance and maintain relationships with iwi/hapū who Whakapapa to Ngāti Whātua rohe (particularly Ngāti Wai, Ngāti Manuhiri, Ngāti Hine, Te Roroa) to champion the IKHMG kaupapa.	2011-2013	TUOH, NWNR	Biodiversity, Fisheries, Climate Change, Socio-economic, Integrated management
	18. Form a contact list of key iwi/hapu engaged in catchment management.	2011-2012	TUOH, IKHMG	Biodiversity, Fisheries, Climate Change, Socio-economic, Integrated management

Goals	Actions	Timing	Kaimahi / Project Leader	Linkage with other Objectives
	19. Promote kaupapa of integrated management between mana whenua and partner agencies to enhance agency education and knowledge of traditional Maori environmental management. Look to use marae wananga or bicultural workshops.	2012-2014	TUOH, NWNR	Biodiversity, Fisheries, Climate Change, Socio-economic, Integrated management
	20. Engage Ngāti Whātua with wider community regarding the IKHMG kaupapa & hapu management plans.	2012-2021	NRC, AC	Biodiversity, Fisheries, Climate Change, Socio-economic, Integrated management
	21. Develop & build a toolbox/pātaka (e.g. Kaipara Atlas, IKHMG website) for a repository of ICM resources. Work with TPK, MoE, MfE, DoC, Ngā Whenua Rāhui & local government.	2012-2014	IKHMG	Biodiversity, Fisheries, Climate Change, Socio-economic, Integrated management
	22. Promote ICM through Treaty of Waitangi Settlement negotiations building capacity for IKHMG.	2012-2014	TUOH, NWNR	Biodiversity, Fisheries, Climate Change, Socio-economic, Integrated

Goals	Actions	Timing	Kaimahi / Project Leader	Linkage with other Objectives
				<i>management</i>
Develop iwi/hapu management plan(s) and ensure uptake of the plan(s) by relevant agencies	23. Identify a framework for recording significant sites including rights of access, information storage and use.	2011-2013	TUOH, NWNR, LCR	<i>Biodiversity, Fisheries, Climate Change, Socio-economic, Integrated management</i>
	24. Use IKHMG gap analysis to identify sites and/or land-seascapes of significance. Maintain a database.	2012-2013	IKHMG, TUOH, NWNR	<i>Biodiversity, Fisheries, Climate Change, Socio-economic, Integrated management</i>
	25. Establish iwi/hapu based monitoring framework linking with Manaaki Whenua research programs relevant to Kaipara Harbour	2013-2014	TUOH, LCR	<i>Biodiversity, Fisheries, Climate Change, Socio-economic, Integrated management</i>
	26. Apply the cultural monitoring framework for the	2014-2021	TUOH, NWNR,	<i>Biodiversity, Fisheries, Climate</i>

Goals	Actions	Timing	Kaimahi / Project Leader	Linkage with other Objectives
	Kaipara to significant sites.		LCR, NIWA	<i>Change, Socio-economic, Integrated management</i>

23. Longterm Objective 4: To increase understanding of Climate Change impacts

10-Year Outcomes:

In 10 years time we wish to see:

- *Kaipara communities resilient to Climate Change impacts*
- *Resource consents have conditions that address greenhouse gas emissions and climate change as a threatening process*
- *Adaptation strategies implemented*
- *Biophysical and socio-economic vulnerability assessments addressed in local government planning and policy.*

Goals	Actions	Timing	Kaimahi / Project Leader	Linkage with other Objectives
That regional and local government works with iwi and community to address climate change and implements adaptation strategies.	27. Using existing climate data, examine and map ecosystem and socio-economic information to identify 'hot spots' vulnerability to sea level rise and coastal inundation due to climate change	2012-2013	AC, NRC	<i>Biodiversity, Fisheries, Mauri, Socio-economic</i>

Goals	Actions	Timing	Kaimahi / Project Leader	Linkage with other Objectives
	28. Report on climate change scenarios at 10 years, 30 years and 100 years and provide appropriate adaption strategies to implement	2012-2013	AC, NRC	<i>Biodiversity, Fisheries, Mauri, Socio-economic</i>
	29. Investigate the role of the IKHMG as a broker for the provision of ecosystem services markets such as carbon-offsetting initiatives in New Zealand and overseas.	2013-2014	IKHMG	<i>Biodiversity, Fisheries, Mauri, Socio-economic</i>
	30. Develop & communicate best-practice guidelines for Kaipara Harbour communities to adapt to climate change impacts	2014-2021	IKHMG	<i>Biodiversity, Fisheries, Mauri, Socio-economic</i>
	31. Ensure the incorporation of climate change response in resource consent applications.	2014-2021	NRC, AC, KDC, WDC	<i>Biodiversity, Mauri, Socio-economic</i>
	32. Ensure the incorporation of vulnerability assessments of proposed development in resource consent applications.	2014-2021	NRC, AC, KDC, WDC	<i>Biodiversity, Mauri, Socio-economic</i>
	33. Support greenhouse gas abatement programs and carbon credit schemes in indigenous revegetation programs	2011-2021	IKHMG	<i>Biodiversity, Mauri, Socio-economic</i>

24. Longterm Objective 5: To promote socio-economic opportunities

10-Year Outcomes:

In 10 years time we wish to see:

- *Local community environmental partnerships established*
- *Landowners and farmers led sustainable land management practices and environmental benefits to Kaipara*
- *Support provided to innovative socio-economic business opportunities that achieve the Common Vision.*

Goals	Actions	Timing	Kaimahi / Project Leader	Linkage with other Objectives
To identify & support local economic opportunities that ensure the health and productivity of the Kaipara Harbour	34. Support companies/programs/organisations that provide partnerships, accreditation, education and employment relevant to health of Kaipara Harbour.	2011-2021	<i>IKHMG</i>	<i>Biodiversity, Fisheries, Mauri</i>
	35. Establish through regulation and policy the establishment of areas that are dedicated to ecosystem services.	2013-2016	<i>AC, NRC</i>	<i>Biodiversity, Fisheries, Mauri, Climate Change</i>
	36. Host a Kaipara jobs & dollars forum to discuss long-term socio-economic opportunities across multiple sectors	2013-2014	<i>IKHMG</i>	<i>Biodiversity, Fisheries, Mauri, Climate Change</i>
Investigate innovative sustainable income-generating opportunities & identify	37. Explore the viability & practicality of co-operative initiatives in relation to: a) fishing & aquaculture,	2013-2014	<i>IKHMG</i>	<i>Biodiversity, Fisheries, Mauri,</i>

Goals	Actions	Timing	Kaimahi / Project Leader	Linkage with other Objectives
resources to implement them	b) tourism, c) community services & assets			<i>Climate Change</i>
	38. Encourage development and use of innovative restoration technologies.	2012-2021	<i>IKHMG</i>	<i>Biodiversity, Fisheries, Mauri, Climate Change</i>
Develop community environmental partnerships to support local economy & labour (e.g. Centre of Excellence in Land-Sea Restoration Practices)	39. Through the IKHMG, invite partnerships with MED & TPK to enhance socio-economic opportunities in Kaipara.	2011-2015	<i>TUOH</i>	<i>Biodiversity, Fisheries, Mauri, Climate Change</i>
	40. Commission a scoping study on the viability, cost and practicalities of building a Centre of Excellence.	2015-2016	<i>TBC</i>	<i>Biodiversity, Fisheries, Mauri, Climate Change</i>
	41. Partner with the Gateway Program at Kaipara Harbour secondary schools to facilitate and enhance the opportunity for environmental education focused on integrated management.	2012-2021	<i>TUOH, DoC</i>	<i>Biodiversity, Fisheries, Mauri, Climate Change, Integrated management</i>



25. Longterm Objective 6: Integrated co-management of Kaipara ecosystems, catchment & Harbour

10-Year Outcomes:

In 10 years time we wish to see:

- *Meaningful & practical recognition of Mātauranga Maori in the management of Kaipara Harbour.*
- *Integrated management of Kaipara Harbour and its catchment recognised in statutory planning and policy mechanisms.*
- *Ten years of IKHMG workplans and annual report back hui*
- *Use of IKHMG guiding principles and integrated management in decision-making relevant to the Kaipara Harbour and its catchment*
- *Community-led restoration and management*

Goals	Actions	Timing	Kaimahi / Project Leader	Linkage with other Objectives
Promote integrated and co-ordinated management of the Kaipara Harbour and its catchment through regulation, policy, research, monitoring, partnerships, planning and collaborative initiatives.	42. Government agencies carry out their jurisdictional responsibilities to ensure integrated and co-ordinated management of the Kaipara Harbour and its catchment align with IKHMG vision and longterm objectives.	2011-2021	NRC, AC, KDC, WDC, MFish, DoC	Biodiversity, Fisheries, Mauri, Socio-economic
	43. Develop a Kaipara biodiversity policy that details best-management practices at a property-scale in priority subcatchments,	2013-2014	IKHMG, NRC, AC	Biodiversity, Fisheries, Mauri,

Goals	Actions	Timing	Kaimahi / Project Leader	Linkage with other Objectives
	freshwater ecosystem standards (ie., water quality, habitat, flows, levels), coastal development, protection strategies and local government monitoring of significant biodiversity.			<i>Socio-economic</i>
	44. Ensure that all research, information gathering and initiatives relating to the Kaipara align with IKHMG Vision and long-term objectives	2011-2021	IKHMG	<i>Biodiversity, Fisheries, Mauri, Socio-economic</i>
	45. Promote and ensure integrated Kaipara Harbour and catchment monitoring programs	2011-2021	AC, NRC	<i>Biodiversity, Fisheries, Mauri, Socio-economic</i>
	46. Monitor government, non-government and landowner restoration activities (e.g. riparian planting, coastal fencing, wetland restoration) across the catchment and harbour through spatial mapping, building on baseline data collected from wānanga held in April 2011.	2011-2021	IKHMG	<i>Biodiversity, Fisheries, Mauri, Socio-economic, Climate Change</i>

Goals	Actions	Timing	Kaimahi / Project Leader	Linkage with other Objectives
	47. Establish a statutory framework to ground IKHMG activities.	2012-2014	TUOH	Biodiversity, Fisheries, Mauri, Socio-economic
	48. Support Ngāti Whātua ki Kaipara and Forest & Bird Society RAMSAR Wetland of International Importance proposal.	2012-2014	Royal Forest & Bird Society	Biodiversity, Fisheries, Mauri, Socio-economic
	49. Maintain the functions and role of the IKHMG through annual workplans, report back hui, Kaipara Atlas and web portal, strategic planning and monitoring.	2011-2021	TUOH	Biodiversity, Fisheries, Mauri, Socio-economic
	50. Identify and implement collaborative projects that advance integrated catchment-harbour management. Particularly encourage and build collaborative partnerships with industry and landowners.	2011-2021	IKHMG	Biodiversity, Fisheries, Mauri, Socio-economic
	51. Identify and implement Plan provisions that address cross-boundary issues to advance integrated catchment-harbour management	2012-2021	AC, NRC	Biodiversity, Fisheries, Mauri, Socio-economic

References

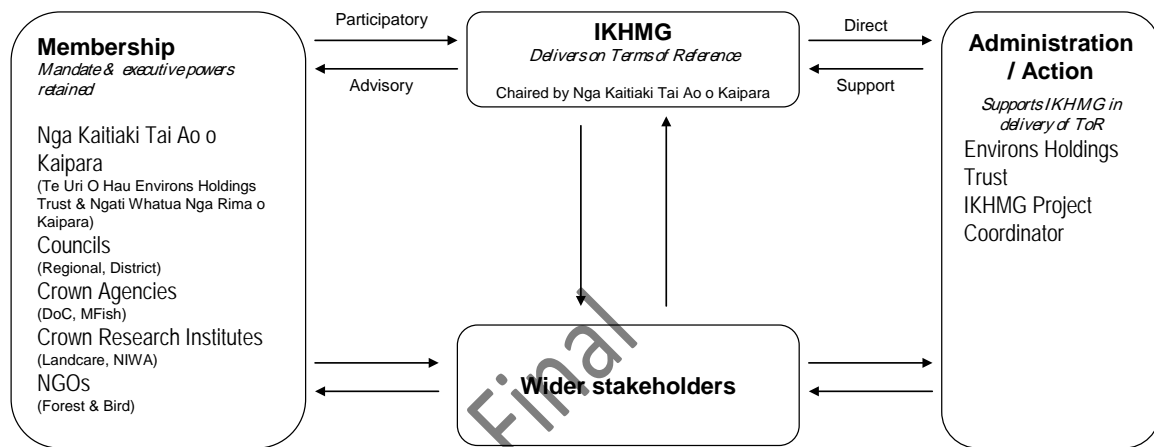
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Appendices

26. Appendix 1: IKHMG parties

Figure 6 provides the current organisational structure for the IKHMG. This may grow into another structure with further governance or organisational levels which may be necessary for future security and support of the initiative. **Ngā Kaitiaki Tai Ao o Kaipara**, is the joint roopu between hapū, marae o Ngāti Whātua, Te Uri o Hau and Ngāti Whātua Ngā Rima o Kaipara.

Figure 6: Conceptual organisational structure of the IKHMG



The **IKHMG** consists of the following members:

Te Uri o Hau Settlement Trust	Deborah Harding Willie Wright (Chair) Leane Makey (Project Coordinator)
Ngati Whātua o Kaipara	Tracy Davis (Chair) Glen Wilcox
Department of Conservation (DoC)	Nick Turoa Tim Brandenburg
Manaaki Whenua Landcare Research	Shaun Awatere
Kaipara District Council (KDC)	Mark Vincent Paula Hansen
Auckland Council (AC)	Craig Pratt Kim Morresey Alison Stilwell

	Dominic McCarthy
Northland Regional Council (NRC)	Dean Evans
Royal Forest & Bird Society of NZ	Mark Bellingham Karen Baird Bill McNatty
Kaipara Harbour Sustainable Fisheries Management Study Group	Doug Carter
Whangarei District Council (WDC)	Paul Dell Conal Summers David Coleman
NIWA	Mal Green Taoho Patuawa
Ministry of Fisheries	John Taunton-Clark Shannon Taylor
NZ Landcare Trust	Jon Hampson

27. Appendix 2: Interested parties and wider stakeholders

Te Runanga o Ngāti Whātua	Carter Holt Forest Resources
Guardians of the Kaipara	Federated Farmers
Firth Industries Ltd	Te Puni Kokiri
Northland Conservation Board	NZ Landcare Trust
Otamatea Harbourcare Group	Tapora Land and Coastcare Group
Fonterra Cooperative Ltd (Maungaturoto)	Kaipara Water Transport
Ministry for the Environment	Mt Rex Shipping Ltd
Winstone Aggregates	Auckland Conservation Board
Te Roroa	Kaipara Harbour Sustainable Fisheries Management Group
Rodney Local Board	Kaitiaki Tuna Heke Aōtearoa Trust