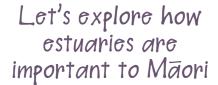
Activity 7: Estuaries and Te Ao Māori





CURRICULUM LINKS

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Science: Levels 1–4

- Living world: Planet Earth and Beyond.
- Nature of Science: Investigating in science; Participating and contributing.

Science capabilities

- Interpret representations.
- Engage with science.

Te Marautanga o Aotearoa

- Pūtaiao: The natural world.
- Tikanga ā lwi.

Learning intentions

Students are learning to:

 understand how estuaries are valued and protected in Te Ao Māori.

Success criteria

Students can:

- define what is meant by kaitiakitanga, mauri and whakapapa
- describe how estuaries are important to Māori.

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BACKGROUND NOTES

SIGNIFICANCE OF ESTUARIES IN TE AO MĀORI – THE MĀORI WORLD

Estuaries and landforms provide a context for passing on traditions, knowledge and cultural practices. Many iwi have connections and associations with estuaries, coastal areas and rivers, which provide a rich tapestry of resources, foods, transport pathways and materials. Estuary plants are used for many purposes, such as weaving and making goods. Natural features such as rivers and estuaries can also be a source of tuakiri (identity) and whakapapa (genealogy and ancestral connections).

WHAKAPAPA AND TANGAROA

Whakapapa is the genealogy or foundations of Māori society. It is about the connections of people to other living things and the wider world. Through whakapapa, ancestry can be traced through the past, right back to the beginning of creation – to Ranginui (the sky father) and Papatūānuku (the Earth mother). From Ranginui and Papatūānuku came their children, the atua (supernatural beings who existed before humans). Animals and plants are also a part of whakapapa traditions. In this way of seeing the world, all plants, animals and people are ultimately connected to each other and the environment.



Nga Roimata o Mangatawa (The Tears of Mangatawa). By Duane Moyle (all rights reserved) (CC BY-NC 3.0 NZ) http://www.duanemoyle.com/

TIKANGA (MĀORI CUSTOMS AND PROTOCOLS)

In Te Ao Māori, all of the natural world is seen as being interconnected. People, animals, plants and the environment are linked through mauri – a life force that exists in all living things.

Through kaitiakitanga (guardianship), humans have a responsibility to keep the physical and spiritual balance of the environment intact. Harbour resources are often governed by customary rules and traditions, including following tikanga. Traditional ways of managing hunting and fishing (eg eeling or whitebaiting) ensured that enough resources were handed down to the next generation to maintain the mana (power) and mauri of the ancestral land.

Practices, attitudes and values vary, and each iwi will have different management strategies and systems based on their own history, landscape and current practices. These tools and knowledge can provide important contributions to the health and wellbeing of estuaries.

KAITIAKI AND KAITIAKITANGA

Kaitiaki are tangata whenua (indigenous people) who hold the responsibility to protect and look after an area's resources. They act to restore ecosystems through a holistic approach, recognising that all things are interconnected.

Kaitiakitanga is a way of thinking about and looking after the environment to help maintain the balance of everything within it. It can be loosely translated as 'protection' or 'guardianship'.

For more information about kaitiakitanga, go to the *Pūtātara* resource.



The Marine Cultural Health Indicator Project of Ngāti Toa Rangatira. Photo: Ngāti Toa

A CHANGING LANDSCAPE

The Treaty of Waitangi and the Resource Management Act 1991 are examples of legal mechanisms that have been put in place to help iwi maintain mana whenua (authority) over their rohe (tribal area).

🔗 Te Ara: Treaty of Waitangi

🔗 Ministry for the Environment: Resource Management Act 1991

Iwi often share custodianship with the Crown and local authorities over specific pieces of land or water. There are many different scenarios around New Zealand, depending on the history of the area and changes in ownership. We are now seeing a return to some of the practices of tangata whenua as we look for more sustainable ways to look after our estuaries.

Many iwi around the country work independently or alongside DOC and other agencies to maintain or restore the mauri of traditional food-gathering areas with the hope of allowing them to recover and prosper into the future. They are also leading and partnering in projects to restore harbours and catchments. One example is the Integrated Kaipara Harbour Management Group (IKHMG), who coordinate the integrated management of the Kaipara Harbour and its catchment by applying traditional Māori philosophies alongside western science.

🧭 Creating a healthy and productive Kaipara Harbour

LEARNING EXPERIENCE 7: ESTUARIES AND TE AO MÃORI

Resources for this activity.

- Māori and estuaries student activity sheet (page 7).
- Kaitiaki of the stream article (School Journal Level 2, October 2013).
- Mihi template for students by Te Taura Whiri i Te Reo Māori the Māori Language Commission.

Arohatia te Reo: Mihimihi

- Ministry of Education video about mihimihi.
 - He korero whakamārama: The mihimihi
- LEARNZ virtual field trips.
 Virtual Experiences Field Trips for Aotearoa's Schools
- LEARNZ Onekawa Harbour video.
 Vimeo: Onekawa pa
- LEARNZ Preserving pipi video.
 - Vimeo: Preserving pipi
- Science Learning Hub's Estuaries a Māori perspective activity.
 - Estuaries a Māori perspective

Vocabulary

Whakapapa, mauri, mihimihi, mihi (singular), awa, moana, maunga, iwi, waka, kaitiaki, kaitiakitanga.

Links

To open the links throughout this resource without losing your place in the document, follow either of these steps:

Focus question

Why are estuaries important for Māori?

- Right click on the link and click **Open Hyperlink**. Now the link will be opened in new tab.
- Hit the **Ctrl** key while you left click the link. This will also force the browser to open the page in a new tab.

Either of these methods will open the link in a new tab leaving the teaching resource open.



INTRODUCING ESTUARIES AND TE AO MĀORI

Note: These learning experiences are suggestions only. Teachers are encouraged to adapt and change the material to suit their students' needs and interests.

Whakapapa, identity and connections to estuaries

• Discuss where your students come from and which landscapes and landforms they feel connected to. Have harbours, rivers or estuaries been an important part of their lives?

Invite your students to share their whakapapa. Explain that whakapapa is about ancestry and connections (see background notes). Whakapapa can be expressed through a mihi – an introduction of yourself that tells people a little about where you are from. Mihimihi often include references to local landmarks, such as awa/rivers, estuaries, moana/the sea or lakes and/ or maunga/mountains. When people hear a mihi they can find it easy to connect with a person and know a little more about them.

• View these Ministry of Education videos about the purpose and structure of mihimihi and a student finding out about his whakapapa and mihi.

🕩 He kõrero whakamārama: The mihimihi

🚺 Scene 3: Waka learns about his whakapapa

• Ask the students to develop their own mihimihi following the examples in the Māori Language Commission's mihi template for students.

🕑 Arohatia te Reo: Mihimihi

Example of a mihi

Ko (name of your mountain) te maunga Ko (name of your river) te awa Ko (name of your tribe) te iwi Ko (name of your waka) te waka Ko (your name) ahau Tēnā koutou, Tēnā koutou katoa

Ki uta ki tai – from the mountains to the sea

In a Māori world view, the river, the estuary and the sea cannot be thought of as individual elements but are interconnected.

Ki uta ki tai is a representation of how people are connected to their environment and how it all works together – what we do on land impacts our estuaries and oceans. Mihimihi express these connections and weave them together.

To find out more about ki uta ki tai, see this Ministry for the Environment resource.

🔗 Ki uta ki tai – from the mountains to the sea

My mountain is (name of your mountain) My river is (name of your river) My tribe is (name of your tribe) My canoe is (name of your waka) I am (your name) Greetings, greetings, greetings to you all.



Students from Okiwi School. Photo: Rebecca Gibson



Inquiry stage 4: Extending thinking

Kaitiakitanga and estuaries

 Discuss the concept of kaitiakitanga (see background notes). Students can read the journal article Kaitiaki of the stream (School Journal Level 2, October 2013). In this article, Pātaka Moore of Te Wānanga-o-Raukawa in Otaki talks about the history of Otaki and how Māori lived near the stream and used the water and estuaries for food and storing kai, and for harvesting tuna/eels. There was a gradual decline in the health of the estuary over time due to pollution and erosion. The article discusses what it means to be a kaitiaki and the concept of kaitiakitanga.

Traditional practices in estuaries

- Discuss possible traditional uses of our estuaries. How did iwi communicate with one another in the past across landscapes? How has the use of estuaries changed over time?
- View this LEARNZ video clip from the Ohiwa Harbour/Harbours and Estuaries field trip to find out more.



This clip describes a traditional Māori way of life for iwi. The kaumātua (elder) describes how pā (villages) were sited on hills around harbours/estuaries to enable iwi to be able to see over their lands and resources. Onekawa Pā is located on Ohiwa Harbour, with Ohiwa meaning voices/echoes.

 Estuaries are also very important places for gathering food. Learn about the traditional Māori methods for preserving pipi by watching this video.

Vimeo: Preserving Pipi

• These video clips are from the Ohiwa Harbour/Harbours and Estuaries virtual field trip by LEARNZ.

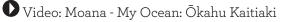
🕑 Summary Page: Harbours and Estuaries - investigating Ohiwa Harbour, a regional taonga

 Find out about other Māori traditions and beliefs regarding tuna/eels by visiting the DOC website.

🔗 Tuna – ā tātou taonga

Local iwi perspectives

- Students can explore local Māori perspectives and beliefs about estuaries and their focus species (see Activity 4: Life in an estuary). How has the estuary changed over time?
- What changes in the estuary and its animals have been noticeable for iwi? View this video clip from Auckland Museum's Moana – my ocean exhibition about how students are working with their local iwi, Ngāti Whātua, to investigate the history of Okahu Bay and work that is being undertaken to restore it.











• Local iwi will have their own beliefs, stories, ancestral connections and histories. Talk to your local iwi about their ideology, as it may differ from what is described here. To find out about iwi near you, see Te Kāhui Māngai (Directory of Iwi and Māori Organisations).

Te Kāhui Māngai (Directory of Iwi and Māori Organisations)

• Invite a member of your local iwi to come and talk to students about their views and perspectives, eg beliefs, whakapapa, traditions and customs relating to the estuary. How do iwi view and use local harbours and estuaries?

REFLECTING ON LEARNING

• Reflect on the vocabulary used during this activity using the *Māori and estuaries* student activity sheet (see pages 9–10). Match the Māori words to their English translations.

EXTENDING LEARNING

• See how students from Ngunguru School are working with tangata whenua and Northland Regional Council to help eradicate the Asian paddle crab (a pest species in New Zealand estuaries).

Pāpaka ecology lessons taught to Northland students

• DOC and Greater Wellington Regional Council are working with Ngāti Toa to develop a suite of marine cultural health indicators. Watch this video to find out more about the Marine Cultural Health Indicator Project by Ngāti Toa Rangatira.

Ngati Toa Marine Cultural Health Indicator Project

• Also see DOC's Protecting our Marine World education resource

🔗 Activity 5: The Marine World and Te Ao Māori

OTHER RESOURCES RELATING TO PEOPLE AND ESTUARIES

DOC's Harbours, Bays and Estuaries resource.

🧭 Harbours, bays and estuaries – at the edges of land and sea

• Science Learning Hub's Valuing estuaries article.

✓ Valuing estuaries

OTHER RESOURCES RELATING TO ESTUARIES AND TE AO MĀORI

• Science Learning Hub's *Estuaries – a Māori perspective activity*.

🕑 Estuaries - a Māori perspective

• Te Kāhui Māngai (Directory of Iwi and Māori Organisations).

🔗 Te Kāhui Māngai

- The Te Waihora Co-governance group's Ki uta ki tai/from the mountains to the sea webpage.
 Ki uta ki tai
- Stories of Tauranga Moana by Evelyn Stokes.

🧭 Centre for Maori Studies and Research: Stories of Tauranga Moana

• Ngāi Tahu's cultural mapping project, which is using geospatial technology to express Ngāi Tahu heritage in a modern landscape.

🔗 Kā Huru Manu

• Oranga Taiao Oranga Tāngata research programme, which is developing toolsets to assist iwi and hapū with the co-management of estuaries.

🔗 Oranga Taiao Oranga Tāngata

• DOC's Te Kete Reo o Tāmaki Makaurau app by Kiwa Digital, which provides a guide for the identification and pronunciation of place names in Tāmaki Makaurau/Auckland.

🕑 Pūkete Taiao o Tāmaki Makaurau

• New Zealand Marine Studies Centre's Te Reo Māori Shore Guides.

Marine Metre Squared Resources

ESTUARIES AND TE AO MĀORI

Match the English words to the Māori words they best describe.

Whakapapa and connections	Physical landscape and features
Whakapapa	Puwaha/ puaha
Tangaroa	Whanga
Tangata whenua	Awa
WACTING	Wai
Iwi	Moana
Mahinga kai and gathering resources	Tikanga and kaitiakitanga
Kai	Kaitiakitanga
Kaimoana	Mauri
Tuna	Kaitiaki
Mahinga kai	Tikanga
Mord hone	

Word bank

Food	Guardian/protector	Customs/protocols	Family history, genealogy, connections	Bay or estuary
Seafood	Estuary or river mouth	Eel	Water	Life force, connection
Ocean/sea	Natural resource	Cockles	Guardianship and protection of resources	Tribe
River	People of the land	Canoe	Atua or guardian of the sea	

For a Quizlet mini version of the vocabulary in this activity, see 🐼 Estuaries Māori vocabulary



ANSWERS TO ESTUARIES AND TE AO MĀORI

onnections	
Whakapapa	Ancestry, genealogy, connections
Tangaroa	Atua ∕ guardian of the sea
Tangata whenua	People of the land / local Maori people
Iwi	Tribo

Mahinga kai and gathering resources

Kai

Kaimoana

Tuna

Mahinga kai

Food

Seafood

Natural resource

Eel

Physical landso and features	cabe
P <u>u</u> waha/ puaha	River mouth / estuary
Whanga	Bay or estuary
Awa	River
Wai	Water
Moana	Sea/ocean

Tikanga and kaitiakitanga	
Kaitiakitanga	Guardianship and protection of natural resources
Mauri	Life force, connection
Kaitiaki	Guardian, protector
Tikanga	Customs, protocols

For a Quizlet mini version of the vocabulary in this activity, see 🖉 Estuaries Māori vocabulary

