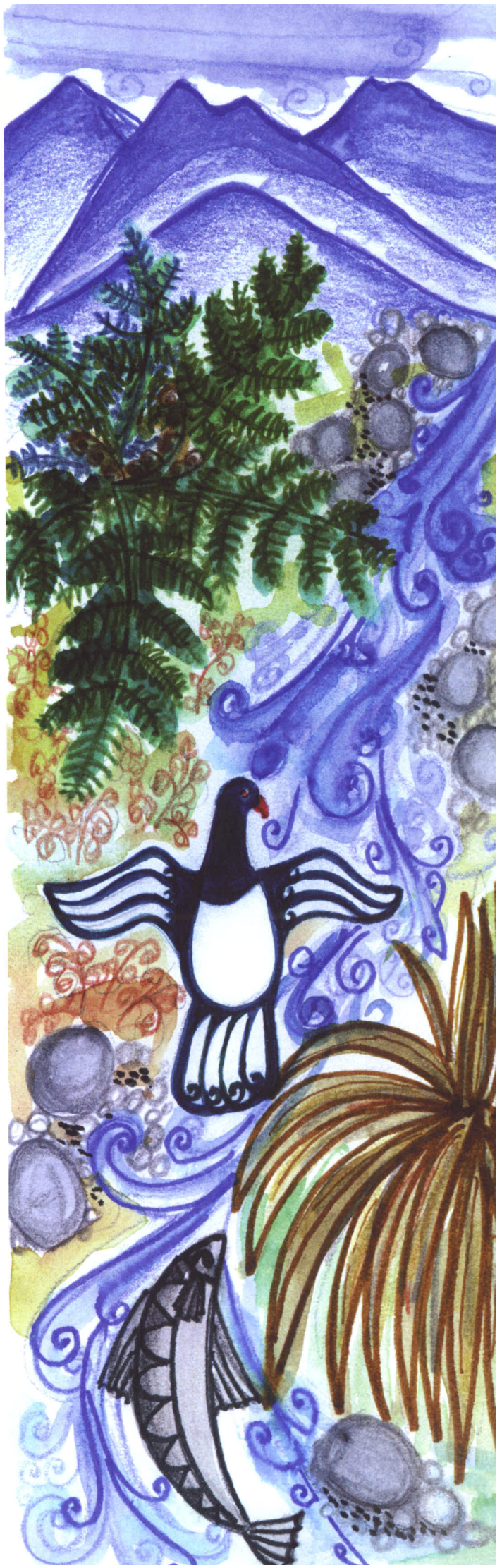
Wāhi tuatoru:

Ki uta ki tai
Ngā kaupapa

Part 3:

From the mountains to the sea - policy



Wāhanga tuatahi

Nō Raki
Ō Te Hau

Section 1

Atmosphere and Air

Air	Contaminants	Climate change
Celestial Darkness	Spray drift And top dressing	Tuahu
Greenhouse Gases	Tāwhirimatea	Snow
Stars	Navigation	Air Quality
Smog	Human health	Ice

Ō Te Hau - The Atmosphere and Air

Air is taonga, in its life supporting capacity for all other things. As with all other taonga, it is to be used with respect and passed on to the next generation in a healthy state. The air, sky, stars, moon, winds and weather are important to tāngata whenua in terms of both human health, history, and spiritual association. The use of stars for navigation, and the role of the moon in harvesting cycles and mahinga kai highlight the relationship between tāngata whenua and celestial bodies. The association with air and elements such as wind is captured in the story of Te Maru (The Nor'Wester) and the Rakaia Gorge. Stories such as this one link Ngāi Te Ruahikihiki to the landscape.

For Ngāi Tahu, the sky is Rakinui, father of Papatūānuku's earthly progeny. Raki is adorned by celestial bodies such as the moon and the stars and is associated with life and light. Following the separation of Rakinui and Papatūānuku (the sky and the earth), their child Tāwhirimatea fled with his father to the sky. From there, he controlled the wind and elements.

For Te Taumutu Rūnanga, discharges into air and the loss of air quality have both human health and cultural impacts. Air pollution degrades the mauri of air, and of all the taonga that rely on it for life. The contamination of air by human activity is a violation of the principle of kaitiakitanga. It also contributes to longer term impacts on atmosphere and climate.

1.1 Ngā Mea Hira - *Values*

- Cultural significance of winds (Tāwhirimatea)
- Cultural significance of the moon, stars, sun
- Air as taonga
- Ability to have darkness unimpeded by light and celestial darkness
- Maintenance of air purity
- Visibility of mountains and other landmarks
- Life supporting capacity of air for mahinga kai and all life
- Protection of waterways from contamination as a result of air discharges

The best weather was when it was cloudy. You never went eeling on a moonlit night but you also didn't go out on a new moon.

Mr. Ben Nutira, Past Upoko, Te Taumutu Rūnanga, in Nature and Extent of Te Waihora Customary Eel Fishery. Te Taumutu Rūnanga and Te Waihora Eel Management Committee.

Tūterakiwhāno – Te Atua Tiaki o Rakiaia me Te Waihora

Tūterakiwhāno was a kaitiaki taniwha who lived in the Te Waihora and the Rakaia River. He used to move from place to place through the underground streams that connect the river and the lake. He used to keep both Te Waihora and the Rakaia clean, so they were good places for ngā ika, ngā manu and ngā tāngata. He especially loved his gardens of ti kōuka, harakeke and toetoe that looked beautiful swaying in the wind.

But, he began to be very angry with Te Maru, the North West Wind, that raged through the mountains and blew rubbish into his river. He asked Te Maru to stop, but Te Maru laughed and blew even harder.

After a while Tūterakiwhāno decided that he would build a dam to stop the rubbish going down the Rakaia He worked and worked to block up the path of the river while Te Maru was away. While he was working he got very hot and when he wiped the sweat from his brow it landed on the rocks. You can still find it there today.

Because he was tired and sore after his hard work he moved off into the mountains to bathe in the hot pools. While he was resting after his hard work along came Te Maru. He was furious when he saw the dam. So he blew up a huge north west gale that tore out the ti kōuka, the harakeke, and the toetoe and made a hole in the rocks of the dam.

The place where he made the gap is now called the Rakaia Gorge. The rock walls are steep and rugged and the water rushes through the gap Te Maru made. When Tūterakiwhāno returned he saw that he would never beat Te Maru, so he warned his people never to cross the Rakaia when the north west wind blows.

Source: Tūterakiwhāno and the Rakaia. From a wānanga held at Ngāti Moki Marae, Taumutu. April 14, 1999. Story as told by Cath Brown and illustrations by Ngā Tamariki o te Taumutu Rūnanga.

1.2 Ngā Whāinga - *General policy objectives*

- *That the life supporting capacity of air be maintained and enhanced.*
- *That the concerns of tāngata whenua towards discharges of contaminants into airways are reflected in the resource consent process.*

1.3 Discharges to air

Discharges to air result in both localised air quality issues and visual (amenity) affects. The discharges may be composed of odour, particulate matter, combustion products and/or hazardous air pollutants. Resource consent applications for discharges to air include those activities related to: ground based applications and top dressing of agrochemicals, spray irrigation of effluent from piggeries and diary farms, earthworks, abrasive blasting units, coal fired timber drying kilns, burning of vegetation, spray painting units, wood waste/diesel/coal fired boilers and compost making plant emissions.

Ngā Take/Issues:

- Protection of wāhi tapu from odours or visible contaminants (contaminants can be corrosive)
- Loss of the air as taonga as a result of contamination and pollution
- Discharges to air from spray irrigation of effluents
- Discharges to air as a result of combustion and chemicals
- Discharges to air of dust and particulate matter from mining activity
- Smog from Christchurch drifting over the lake and impact on amenity values
- Adverse effects of discharge of particulate matter on human health
- Potential health hazard of contaminants that are not visible in the air
- Visual impacts of discharges to air
- The potential of air borne contaminants to enter waterways
- Lack of understanding of the potential effects of air borne discharges on waterways and mahinga kai
- Cumulative effects of discharges to air

KAUPAPA - POLICY

1. That the concerns of Te Taumutu Rūnanga towards discharges of contaminants into airways are reflected in the resource consent process. Tāngata Whenua must be recognised in the process, both in terms of a Treaty partner and an affected party.
2. Any harmful contaminants that may threaten the life supporting capacity of air should not be discharged or kept to an absolute minimum.
3. That any activity resulting in discharges to air evaluates and proposes measures to prevent adverse effects on public health.
4. Best practice must be used when spraying effluent or applying ground based applications of agrochemicals. Considerations must be given to wind direction, best possible application rate, and the

use of low pressure irrigators to minimise spray drift into air and waterways.

5. That the best practice is reviewed, and if necessary updated, every 5 years.
6. A buffer distance of a minimum of 20 m must be observed when spraying near waterways. This distance may need to be increased if there are insufficient natural riparian buffer zones.
7. Adverse effects should be minimised through monitoring.
8. That the materials used for activities such as dry abrasive blasting be only recommended materials, to minimise adverse affects.
9. That the duration of the resource consent is appropriate for the type of activity.

1.4 Global air issues

Contamination of the air, the depletion of the ozone layer, and high levels of solar radiation are all key global atmospheric issues of concern for tāngata whenua. The cumulative effects of localised discharges from urban smog, factory farming, and industrial emissions contribute to global scale impacts on climate. Climate changes can manifest in changes to sea level, the frequency, intensity or direction or winds and weather events such as storms.

Ngā Take/Issues:

- Cumulative effects of discharges to air
- Impact on land, significant sites, mahinga kai from climate change
- Potential impact on coastline areas from sea level change and increased frequency of storms
- Health effects of increased solar radiation from the discharge of greenhouse related gases

KAUPAPA - POLICY

1. Te Taumutu Rūnanga will work with and support other agencies to reduce emissions of greenhouse gases.
2. Te Taumutu Rūnanga will work with Te Rūnanga o Ngāi Tahu to contribute Ngāi Te Ruahikihiki ki Taumutu views to national scale climate change policy processes.
3. Te Taumutu Rūnanga will consider the development of a specific statement for climate change from Te Taumutu Rūnanga.

4. Promotion of the use of indigenous planting projects (i.e. stands of indigenous bush) by industry to offset and mitigate industrial discharges.

1.5 Celestial darkness and other amenity values

One the values that tāngata whenua associate with Te Waihora and Taumutu is the celestial darkness and clear visibility, along with the value of peace and quiet.

Ngā Take/Issues:

- Lights from squid boats off ocean shining into houses
- Lights from city and other settlements (light pollution)
- Inability to clearly see stars and full constellations as result of city lights
- Impact on mahinga kai (night eeling and other activities)
- Odour generated from spray irrigation of effluent
- Christchurch wintertime air pollution and smog

KAUPAPA - POLICY

1. Farmers (piggeries, dairy) will use best practice, consider wind direction when spraying effluent as to minimise odour.
2. Light suppression shall be used in any new subdivisions in Lincoln, Christchurch, Leeston, Rolleston and Templeton.
3. That existing lighting is replaced with light suppression techniques, when the such lighting needs to be replaced or upgraded.
4. Squid boat numbers should be limited from concentrating in any one area and a distance restriction should be imposed for proximity to the shoreline.