WELL MANAGED FISHERIES

OVERVIEW

The Marine Stewardship Council sustainable fishing standard requires fishers to demonstrate 'well managed' fisheries. Kaitiakitanga [guardianship] plays a significant role in how we manage fisheries well in Aotearoa New Zealand.

As kaitiaki / tiaki [guardians] we have a responsibility to ensure our fisheries and marine environment remain healthy for this generation and the next. Well managed (sustainable) fisheries use science and observation to ensure stocks are fished responsibly and marine habitats preserved. Well managed fisheries use controls to manage fishing effort to ensure fishing is environmentally and economically sustainable.

Activities in this topic investigate kaitiakitanga and the Marine Stewardship Council's model for 'well managed' fisheries.

See also slide sets Well Managed Fisheries.

FOCUS QUESTIONS

- What are some indicators of 'well managed' (sustainable) fisheries?
- What new words and concepts have we learnt?

LEARNING OBJECTIVES

- Describe some indicators of well managed (sustainable) fisheries?
- Use scientific and fishery management related vocabulary

LOCATION Indoors

DURATION

50 mins +

Level 3 - 5+

CURRICULUM

Science; Social Science; Geography; Pūtaiao; Tikanga-ā-iwi; Hauora

Key competencies:

Thinking; Managing Self; Using language, symbols & texts; Relating to others

NEXT STEPS

- Traditional Fisheries
 Management
- Quota Management System (QMS)

PRIOR LEARNING

- Overfishing & Sustainable fishing
- Science & the Sustainable Catch







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MATERIALS

- Slide set Well Managed Fisheries
- This Teacher Outline
- Access to internet (for film clips and extra learning on worksheet)
- Copies of Worksheet Kaitiakitanga
- Something to write with

PROCEDURE

- 1. CONSIDER the concept of kaitiakitanga as it relates to sustainable fisheries management [slides 9-10]
- 2. READ and ANSWER questions about Kaitiakitanga using the Kaitiakitanga worksheet and on slide 10
- 3. INVITE a kaitiaki or tiaki to visit and speak [teacher notes slide 10]
- WATCH the short film on the <u>Marine Stewardship Council's standard</u> [0:52] [slides 11 & 12]
- 5. BRAINSTORM (using the prior knowledge chart) what we already know about fisheries management [slide 13]
- 6. DISCUSS 'good' sustainable fisheries management [slide 14]
- 7. WATCH the short film <u>The fishery is well managed</u> [2:11] [slide 15] and label the diagram provided on slide 15 [answers slide 16]
- 8. BRAINSTORM indicators of good fisheries management. Brainstorm template provided [slide 17] [Answers on slide 18]
- 9. REVIEW: Use the following INQUIRY to reflect on what we have learnt? What more would we like to learn. Where might we find this information?
 - a. What different perspectives exist around what makes good fisheries management? (Do you think recreational, customary and commercial fishers differ or align in their thinking on good fisheries management for fish stocks they fish? Who else might have an opinion on how fisheries are managed – consumers, conservationists... What is your opinion?)







- b. How might fisheries management decisions affect you and your whānau? (*Think as a fisher and purchaser of fish*)
- c. How might management of a fish stock change over time and why? (*Might include increase in catch limit, reduced catch limit, limits on how we catch fish (methods and gear), limits on timing of fishing, closure of fishery...*)
- d. Who has responsibility for deciding about how a fishery is managed? (*Māori* customary regulations enable local communities to implement rāhui and restrictions, taiāpure and mataitai... But otherwise it is Fisheries NZ that has responsibility)
- e. Who has *responsibility* for ensuring fisheries management results in sustainable fishing? (ALL OF US! We all play a part no matter how small! We can do our bit by buying only legal and Marine Stewardship Council certified seafood; ensuring we follow fishing rules...)
- f. How does management of a fishery actually work? (Scientists collect data and fishers make observations. This information feeds in to Fisheries New Zealand and kaitiaki / tiaki who decide on changes needed)
- g. What do fishery management rules mean for people and the environment in real life? (Fishery management rules affect peoples ability to make a living from fishing, they affect manakitanga and our ability to provide from traditional kete moana [food baskets], they affect the ability of fish and marine environments to thrive...)
- h. Why do we even need fisheries management? What would happen if there was no management of fisheries? (Could play the first round of the game in 5.5 as a way of experiencing this first hand! Or look at orange roughy. Before the QMS it was a free for all and the fishery collapsed!)

KEY WORDS

Kaitiakitanga Fisheries Management Kaitiaki / Tiaki Sustainable fishing









CURRICULUM LINKS

Nature of Science (Level 3-5)

- Investigating in science
- Communicating in science
- Participating and contributing

Living World (Level 3-5)

Ecology

Science (Level 6+)

- Participating and Contributing
- Ecology

Social Science (Level 3-5)

- Understand how groups make and implement rules and laws (Level 3)
- Understand how people make decisions about access to and use of resources (Level 3)
- Understand how formal and informal groups make decisions that impact on communities (Level 4)
- Understand how producers and consumers exercise their rights and meet their responsibilities (Level 4)
- Understand how people's management of resources impacts on environmental and social sustainability (Level 5)

Geography (Level 6, 7, 8)

Geographic research Contemporary New Zealand geographic issue Geographic topic at a global scale Application of geographic concepts







<u> Pūtaiao</u>

- Uses of Science: Learn about the people and the work they do to produce science knowledge. Apply knowledge of science to community decisions and actions, in order to think about iwi and wider issues impacting on the individual, society and the environment (Level 4+)
- The Natural World: The Biological Environment: Investigate the effect of human actions, and natural processes, on an Aotearoa ecosystem (Level 6+)

<u> Tikanga-ā-iwi (Level 3-5)</u>

- *Kotahi tonu te matua o te tangata Māori, ko Ranginui e tū nei, ko Papa-tū-ā-nuku e takoto nei.* Place and Environment
- *E tama, e hine, tangata i ākona ki te whare, tū ana ki te marae, tau ana.* The Changing World
- *E kore e ngaoko te rākau ki te tīkina i te pūtake whakangaoko ai engari, me tiki ki te matamata.* The Economic World

<u>Hauora</u>

• Relationships to earth and sky (natural environments) (Level 4+)



