

Why we want no more Oil & Gas prospecting, exploration and mining in Aotearoa – focus on Taranaki

Prepared for the Parliamentary Environment Select Committee

Crown Minerals (Petroleum) Amendment Bill

Hearing

17 October 2018

By

Climate Justice Taranaki

www.climatejusticetaranaki.info

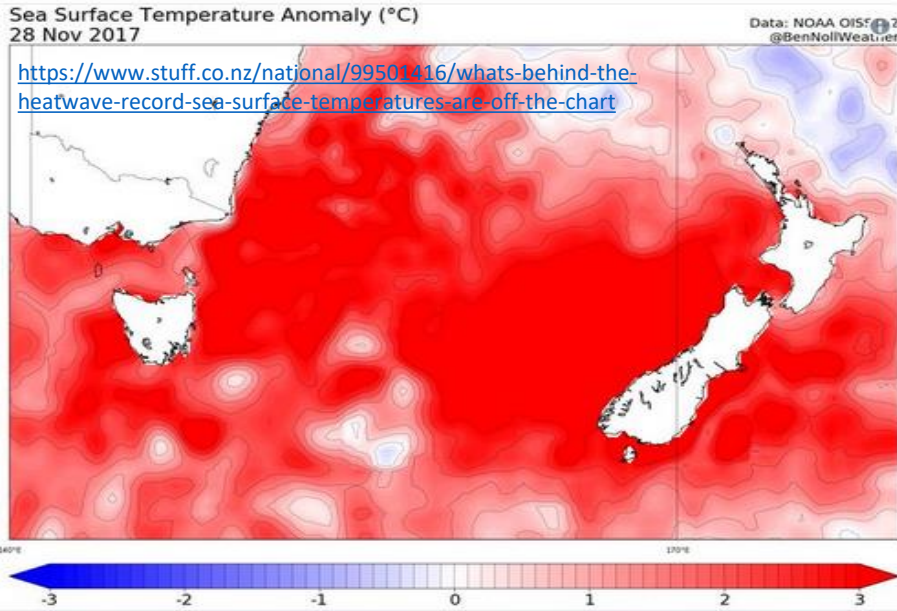
Our Key Points

- 1. Fully support no new petroleum permits offshore anywhere and onshore outside Taranaki**
- 2. Object to new permits in onshore Taranaki**
- 3. Object to any petroleum activities on and underneath conservation land**
- 4. Request a ban on extension of any expiring permits anywhere**
- 5. Request a full review of the CMA to ban new coal & seabed mining**

Climate Change

Impacts on our life-support system & inter-generational equity

2017: Our extreme year of weather



Tornados damage homes in central New Plymouth and Ohope

Leighton Keith · 23:18, Aug 20 2018
<https://www.stuff.co.nz/national/106424116/Tornados-damage-homes-in-central-New-Plymouth-and-Ohope>



Residents evacuated, breakwater closed and power cut as storm hammers region

Jane Matthews, Brittany Baker and Stephanie Mitchell
18:24, Feb 01 2018



Highest temperature in New Zealand for seven years recorded

07:23, Jan 26 2018
<https://www.stuff.co.nz/national/100902180/waiiau-records-highest-temperature-in-new-zealand-for-almost-six-years>

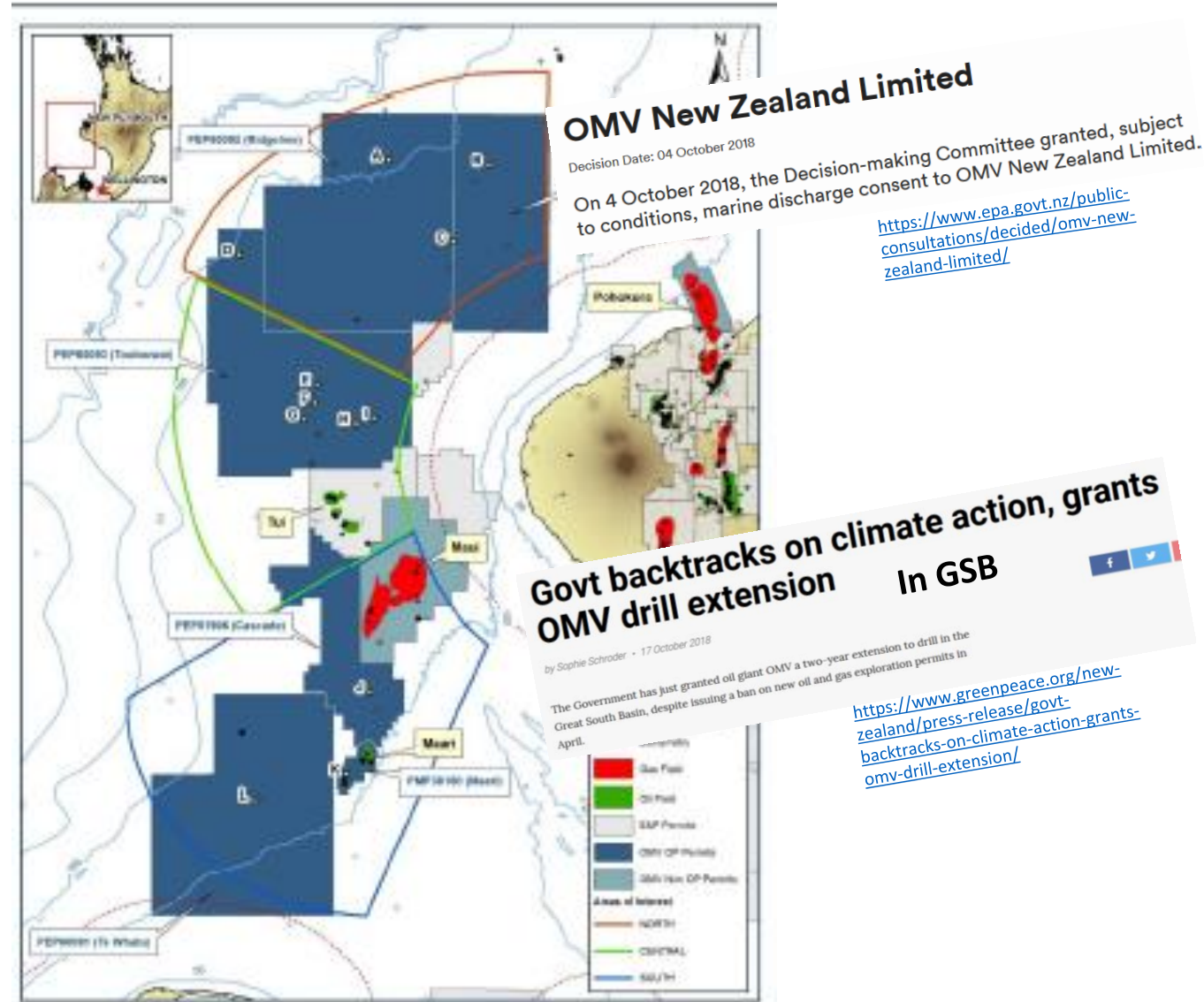


Waiiau recorded the highest temperature in New Zealand since 2011 on Thursday with a high of 37C.

Offshore Petroleum Mining Permits



OMV Proposed Well Locations in the Taranaki Basin

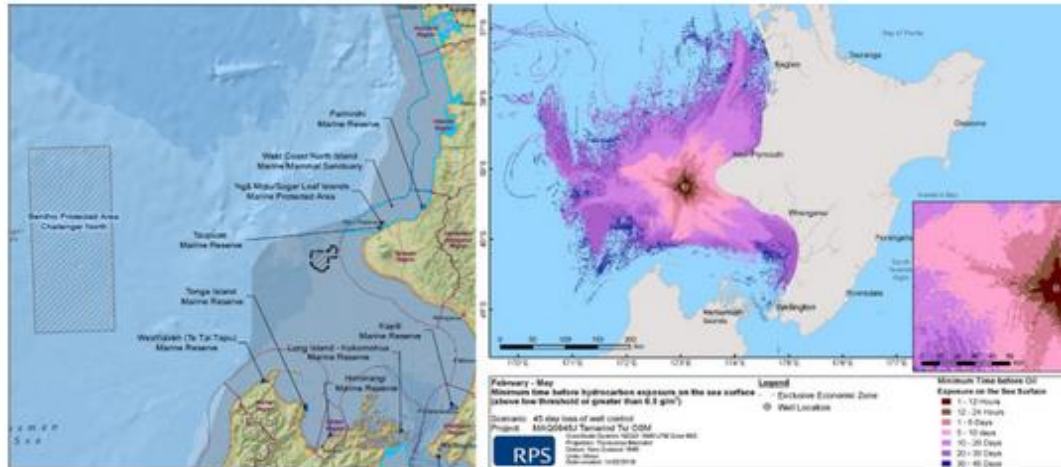


Threat to Marine Species & Ecosystems

99% chance of oil over Marine Mammal Sanctuary if there's a well blow-out

14/06/2018

<https://climatejusticetaranaki.wordpress.com/?s=seismic>



"Both the South Taranaki shoreline and Marine Mammal Sanctuary had a 99% probability of being exposed to visible floating oil..." according to Tamarind's modelling of a hypothetical 45-day subsea release of 356,780 bbl of Tui Crude, following a loss of well control at the Amokura-2H well over February to May.

Although Tamarind considers a major incident to be 'unlikely' or 'extremely unlikely', the consequence on the marine environment would be devastating if it happens. No marine sanctuary could protect our critically endangered Maui's dolphin, Blue whale (now found to be genetically distinct), Sperm whale and other marine creatures from an oil spill.

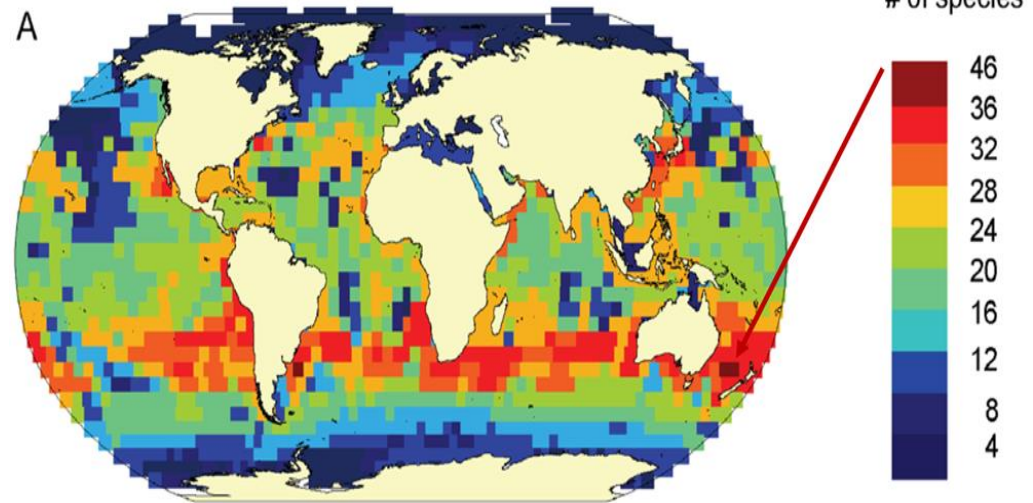
Media release: Climate Justice Taranaki questions the cause of Sperm Whale Death

28/05/2018

<https://climatejusticetaranaki.wordpress.com/?s=seismic>

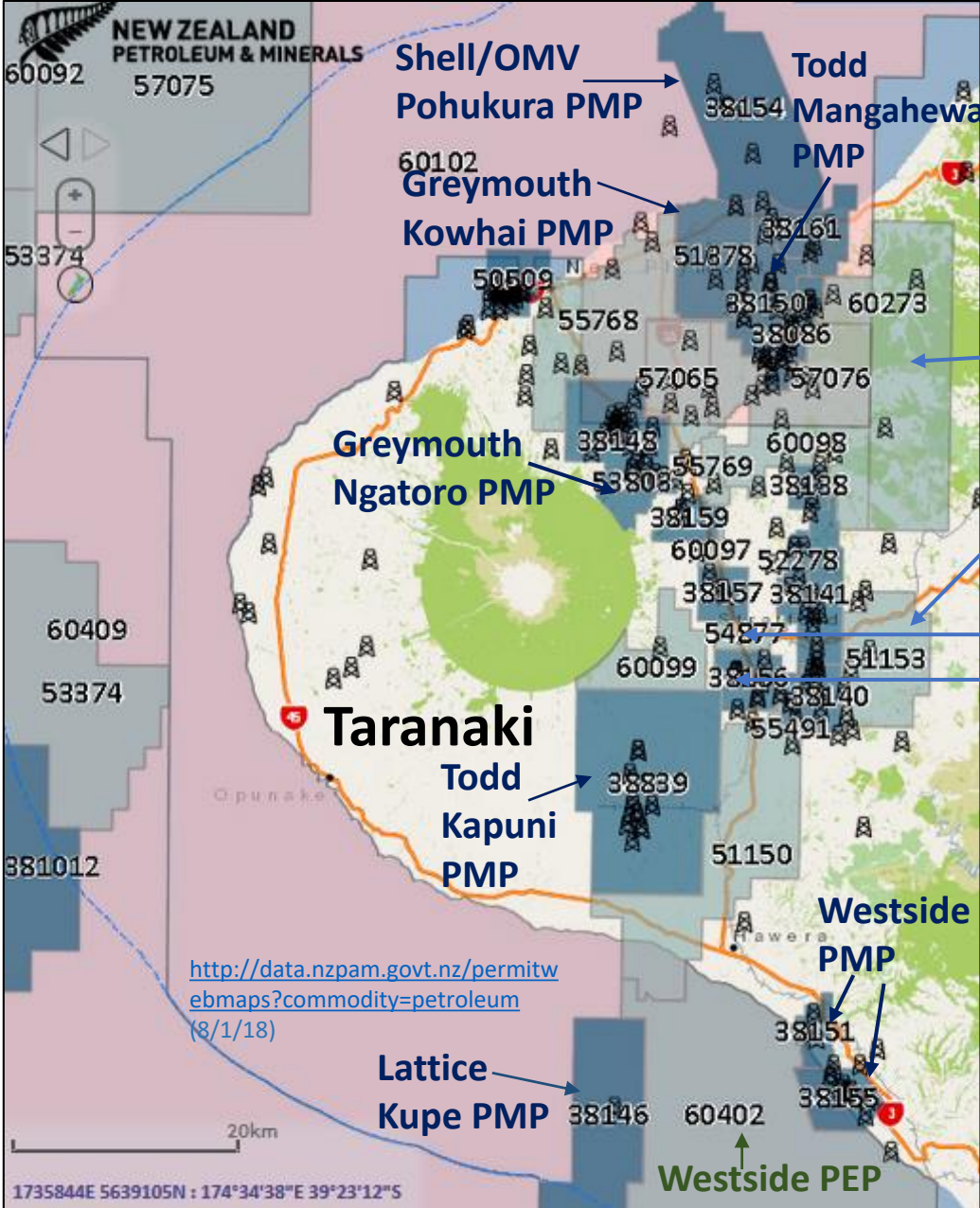


Seismic blasting
Cumulative impacts



Kaschner et al. (2011) Figure 4. Validation with empirically observed marine mammal occurrences (56x56 cells, 1990-1999). A. Predicted species richness of all cetaceans.

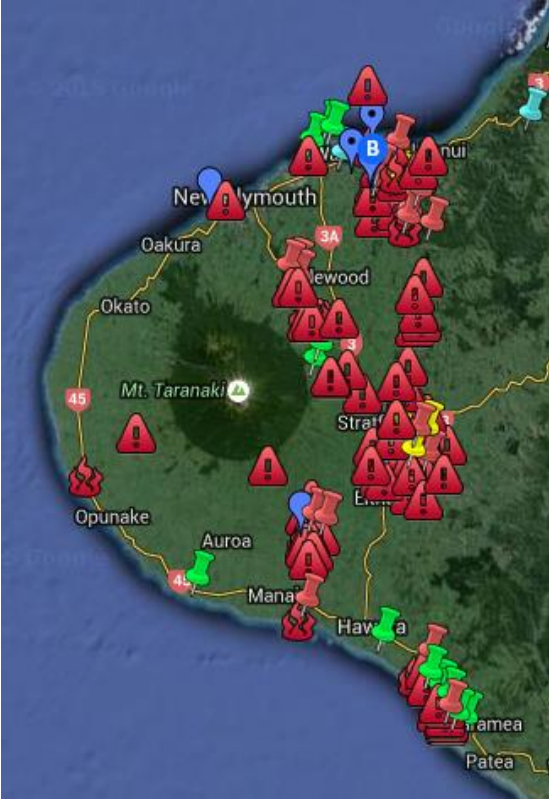
Onshore Petroleum Permits & Wells



It's NOT just the wellsites!

- Wells (active & abandoned)
- Production stations
- Deepwell injection sites
- Land farms
- Worm farms
- Tank farms
- Methanex
- Ammonia-Urea plant...

Over half of NZ's gas production is used to make methanol for export and urea for industrial agriculture; only 3% supplies homes



<http://climatejusticetaranaki.info>

<https://www.iea.org/publications/freepublications/publication/EnergyPoliciesofIACountriesNewZealand2017.pdf>

Multiple Impacts

- Environmental
- Health & safety
- Economic

**Taranaki
Sacrificial
Zone**

**Greymouth Ohanga-A
wellsite, Taranaki**

Photo by Fiona Clark, 26 Nov 2014

Drill Rig “Big Ben” at Todd Taranaki Mangahewa-E Wellsite

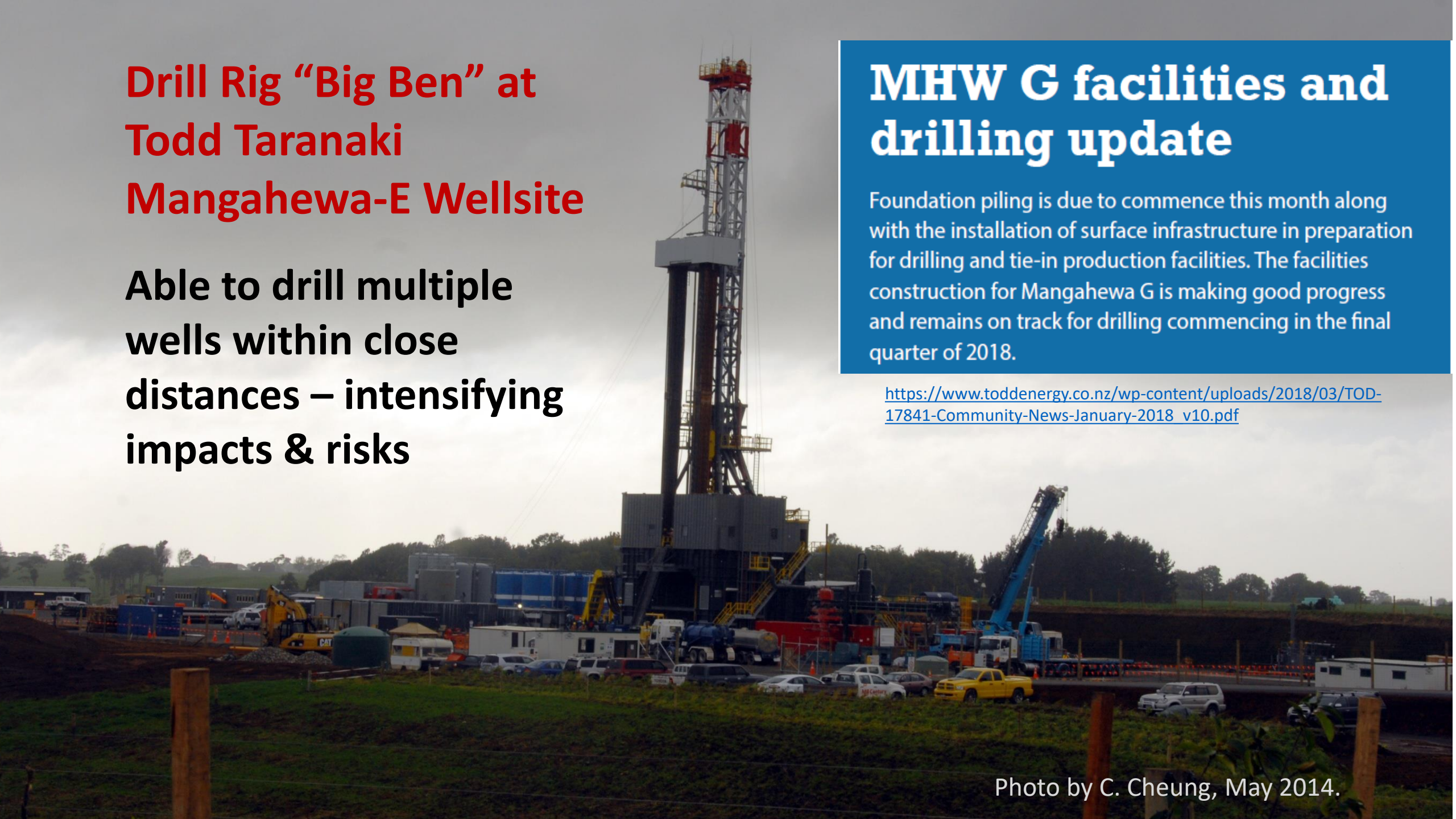
Able to drill multiple
wells within close
distances – intensifying
impacts & risks

MHW G facilities and drilling update

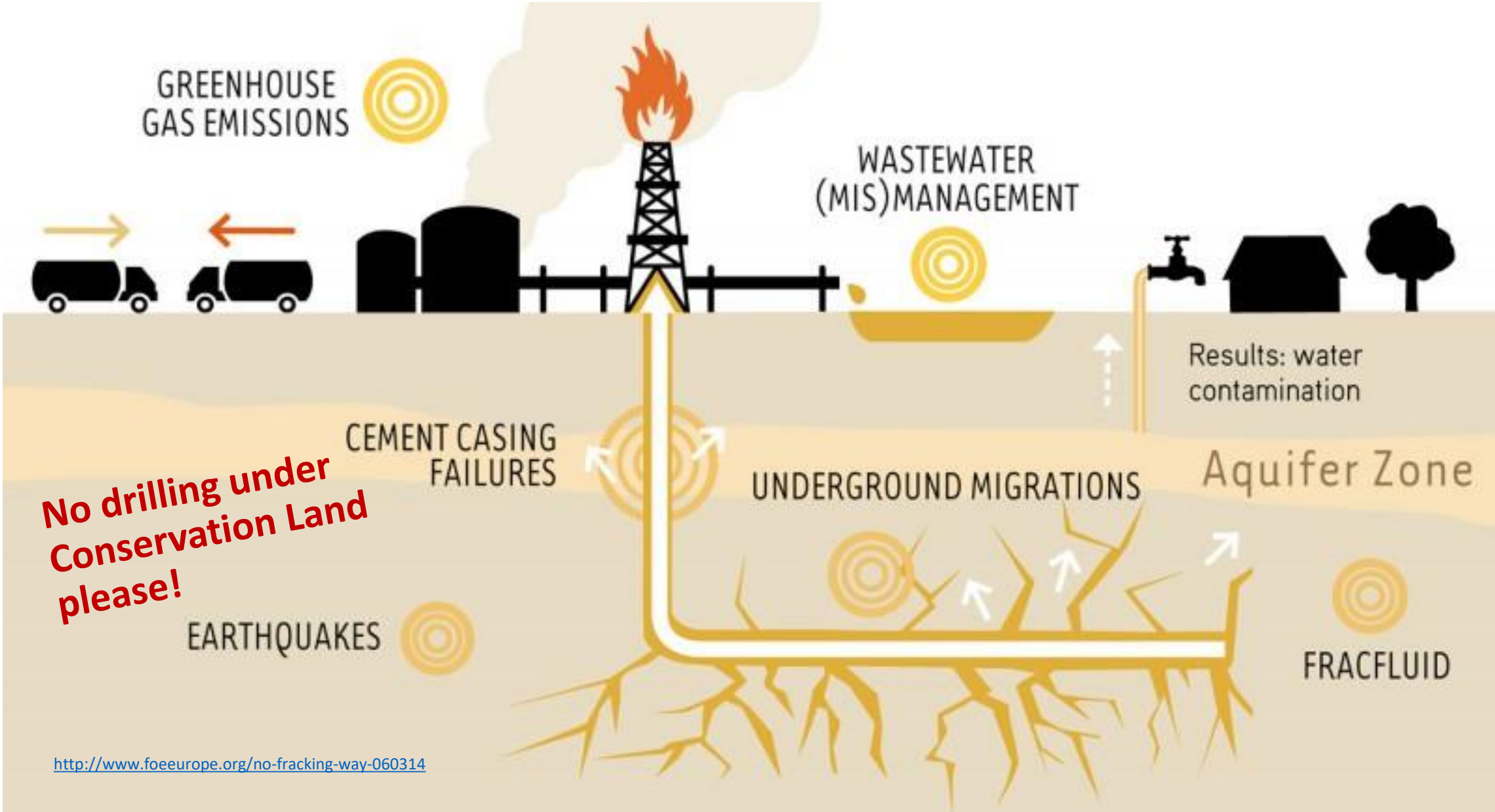
Foundation piling is due to commence this month along with the installation of surface infrastructure in preparation for drilling and tie-in production facilities. The facilities construction for Mangahewa G is making good progress and remains on track for drilling commencing in the final quarter of 2018.

https://www.toddenergy.co.nz/wp-content/uploads/2018/03/TOD-17841-Community-News-January-2018_v10.pdf

Photo by C. Cheung, May 2014.



Environmental Harm



**No drilling under
Conservation Land
please!**

Taranaki examples of well leaks

Reported in Sept 2009, two production wells at Austral Cheal-A: *“The discharge to the Urenui Formation was occurring due to **integrity issues** with casing patch seals within the wells.”* (TRC 1133945, 2013).

In October 2013, Tag Oil’s Cardiff-3 well at Cheal-C wellsite encountered a *“**well integrity issue**”,* as recorded on WorkSafe list of 61 *“petroleum dangerous occurrence notifications”* (8 July 2013 - 7 Feb 2014).

In May 2014, Tag Oil’s own news alert reported that at Cardiff-3 well, *“the fracture stimulation [fracking] was affected by a **poor cement bond** (Tag Oil, 2014) over the interval, or **skin damage** must exist in the near wellbore area, restricting flow.”*

In April 2015, Tikorangi residents were informed by Todd Energy that four of their Mangahewa-C wells were **damaged** and have become unstable with saline water intrusion. Two will be **plugged and redrilled** to different directions. A few of the Mangahewa-E wells appear to be also showing signs of **integrity issues**.

Call for Tender: Onshore Petroleum Wells Technical Assessment

MBIE's recent review of more than **960** onshore wells drilled over the last 150 years found a number of wells to have ***“outstanding plugging and abandonment (P&A) commitments, i.e. these wells are not recorded as having been plugged and abandoned. These wells represent an **unknown risk to health and safety, and the environment**”.***

MBIE has been looking for a **suitably qualified technical service** provider to assist in determining and describing the technical integrity of these wells, and provide a methodology that **ranks the risk these wells** pose, which will be used to prioritise any activities to **address this risk**.

Taranaki examples of environmental contamination

- Soil & groundwater contamination at wellsites, 'landfarm', urea plant
- Stream bed contamination at 'wormfarm'

Firefighting foam: Shell contaminates groundwater in New Plymouth

2:45 pm on 11 August 2018

Share this

Phil Pennington, Reporter
[@pjpenn](https://twitter.com/pjpenn) phil.pennington@radionz.co.nz

Oil company Shell has contaminated groundwater in New Plymouth using a firefighting foam banned in New Zealand 12 years ago.

<https://www.radionz.co.nz/news/national/363696/firefighting-foam-shell-contaminates-groundwater-in-new-plymouth>



Eels found to be contaminated with firefighting foam

1:44 pm on 11 August 2018

Phil Pennington, Reporter
[@pjpenn](https://twitter.com/pjpenn) phil.pennington@radionz.co.nz

Firefighting foam contaminants have been found at "elevated levels" in eels in two south Taranaki streams and in groundwater at five other sites.



<https://www.radionz.co.nz/news/national/363634/eels-found-to-be-contaminated-with-firefighting-foam>

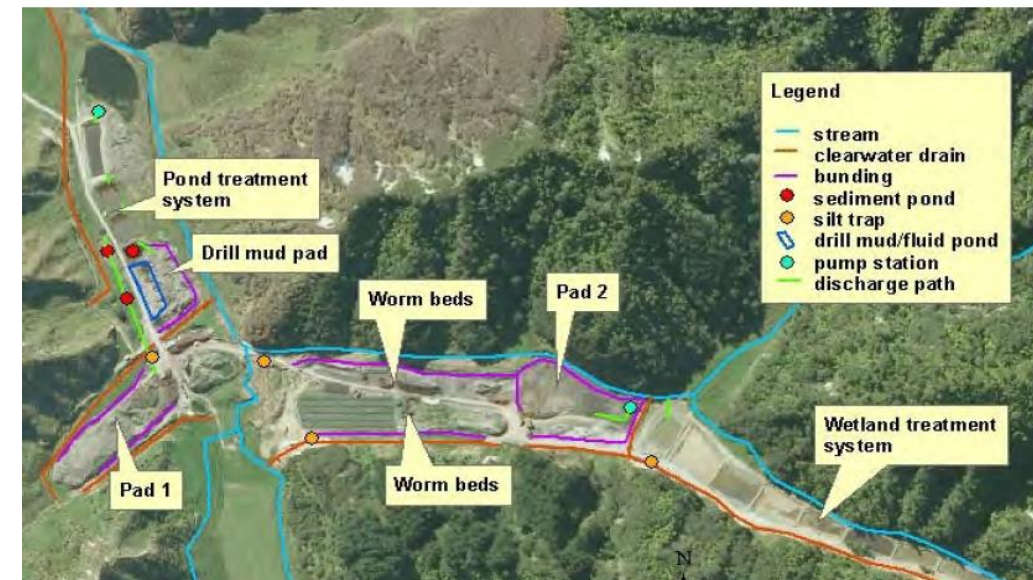


Figure 1 Aerial photograph showing the layout of the landfarming facilities on Brown Road, Waitara, and approximate regional location (inset)



Photo by Fiona Clark, 1/06/14

- <https://climatejusticetaranaki.files.wordpress.com/2011/04/rml12028-application-kapuni-flare-pit-removal.pdf>
- <https://www.tagoil.com/news/tag-announces-fy2015-drilling-program-and-provides-operations-update/>
- <https://climatejusticetaranaki.files.wordpress.com/2011/04/stdc-information-report-re-consents-for-kapuni-contaminated-soil-2012-08-7.pdf>
- <https://trc.govt.nz/assets/Documents/Environment/Monitoring-OGproduction/MR2016-ToddMckeeProductionStationPowerPlant.pdf>
- <https://trc.govt.nz/assets/Documents/Environment/Monitoring-OGwaste/MR2014-BTWWellingtonLandfarm.pdf>
- <https://trc.govt.nz/assets/Documents/Environment/Monitoring-OGwaste/MR2016-BTWWellingtonLandfarm.pdf>
- <https://trc.govt.nz/assets/Documents/Environment/Monitoring-Industry/MR2017-BallanceKapuni.pdf>
- <https://www.trc.govt.nz/assets/Documents/Environment/Monitoring-Industry/MR2017-RemediationNZ.pdf>



Climate Change Impacts



Fugitive emissions captured by a FLIR camera in Texas

<https://www.youtube.com/watch?v=RAo3mh8CwMU&feature=youtu.be>



<https://www.youtube.com/user/earthworksaction/videos>

<https://vimeo.com/205496570> (Australia)

https://d3n8a8pro7vhmx.cloudfront.net/lockthegate/pages/3861/attachments/original/1495068484/FLIR_Report_FINAL_20170501_Small.pdf?1495068484

**Gas is not as clean
as portrayed.
A bridge to no
where!**



EARTHWORKS
earthworksaction.org

FLIR video by ITC certified Optical Gas Imaging Thermographer

Using FLIR GF 320 camera



**Compendium of Scientific, Medical, and Media Findings
Demonstrating Risks and Harms of Fracking
(Unconventional Gas and Oil Extraction)**

Fifth Edition

March 2018



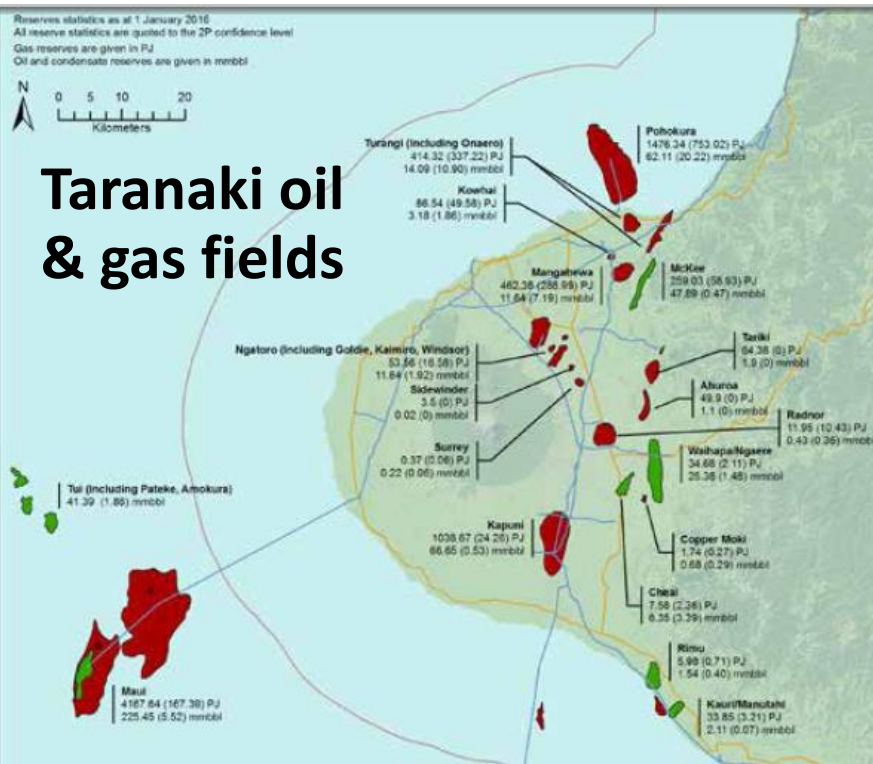
Taranaki District Health Board advised South Taranaki District Council:
“Because of the potential **adverse health effects** and the **lack of knowledge** in the New Zealand setting we strongly recommend that a **“precautionary approach”** is applied to planning decisions related to oil and gas exploration.”
22 July 2016

https://www.southtaranaki.com/uploaded_files/District-Plan/160810/Taranaki%20District%20Health%20Board.pdf

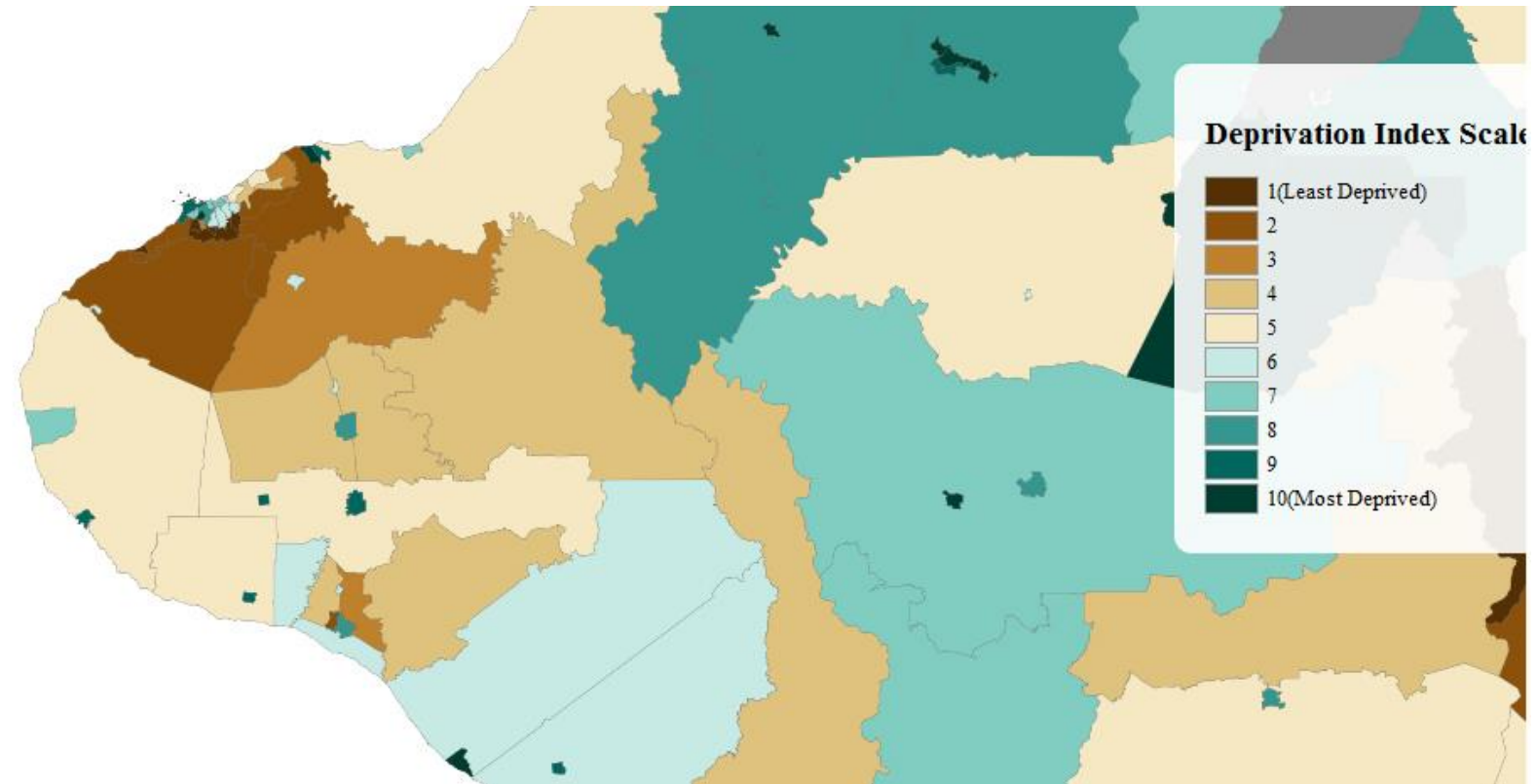
<http://www.psr.org/resources/fracking-compendium.html>

Economic Impacts

Deprivation index for Taranaki and surrounds



<http://www.mbie.govt.nz/info-services/sectors-industries/energy/energy-data-modelling/publications/energy-in-new-zealand>



Socioeconomic Deprivation Indexes: NZDep and NZiDep, Department of Public Health.

<http://www.otago.ac.nz/wellington/departments/publichealth/research/hirp/otago020194.html>

NZ Herald, 13 May 2014. Where are New Zealand's most deprived areas?

http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11254032

See also <https://www.fmhs.auckland.ac.nz/en/soph/about/our-departments/epidemiology-and-biostatistics/research/hgd/research-themes/imd.html>

<http://www.etu.nz/industry/energy-and-mining/>

*“The shift away from fossil fuels was real as renewable energy became cheaper and technology improved... We can’t continue to **put so many eggs in the oil and gas basket**,”* Ross Henderson, E tū regional organiser

Taranaki Daily News, 20/03/18

<https://www.stuff.co.nz/business/102420256/taranaki-oil-sector-ready-to-move-away-from-fossil-fuel-exploration>

*“Unions support a **Just Transition** to a low-emissions, zero-carbon economy. Meeting government goals of 100% renewable energy by 2035 and a net zero-carbon economy by 2050 requires **substantive action starting now**, with the full involvement of working people and their unions,”* NZ Council of Trade Unions, Oct 2018

<http://www.union.org.nz/wp-content/uploads/2018/10/NZCTU-Just-Transition-Ten-Point-Plan.pdf>

Just
Equitable
Inclusive
Transition



<https://blog.p2pfoundation.net/3-steps-to-building-just-transition-now-with-a-permanent-community-energy-cooperative/2017/05/09>

See also <https://www.stuff.co.nz/taranaki-daily-news/opinion/107832195/hydrogen-a-great-step-forward-but-first-we-must-dare-to-ditch-our-fossil-fuel-and-economic-growth-addictions>