



Fruit Fly Contingency - a few things to think about



Managing Movement Control Zones

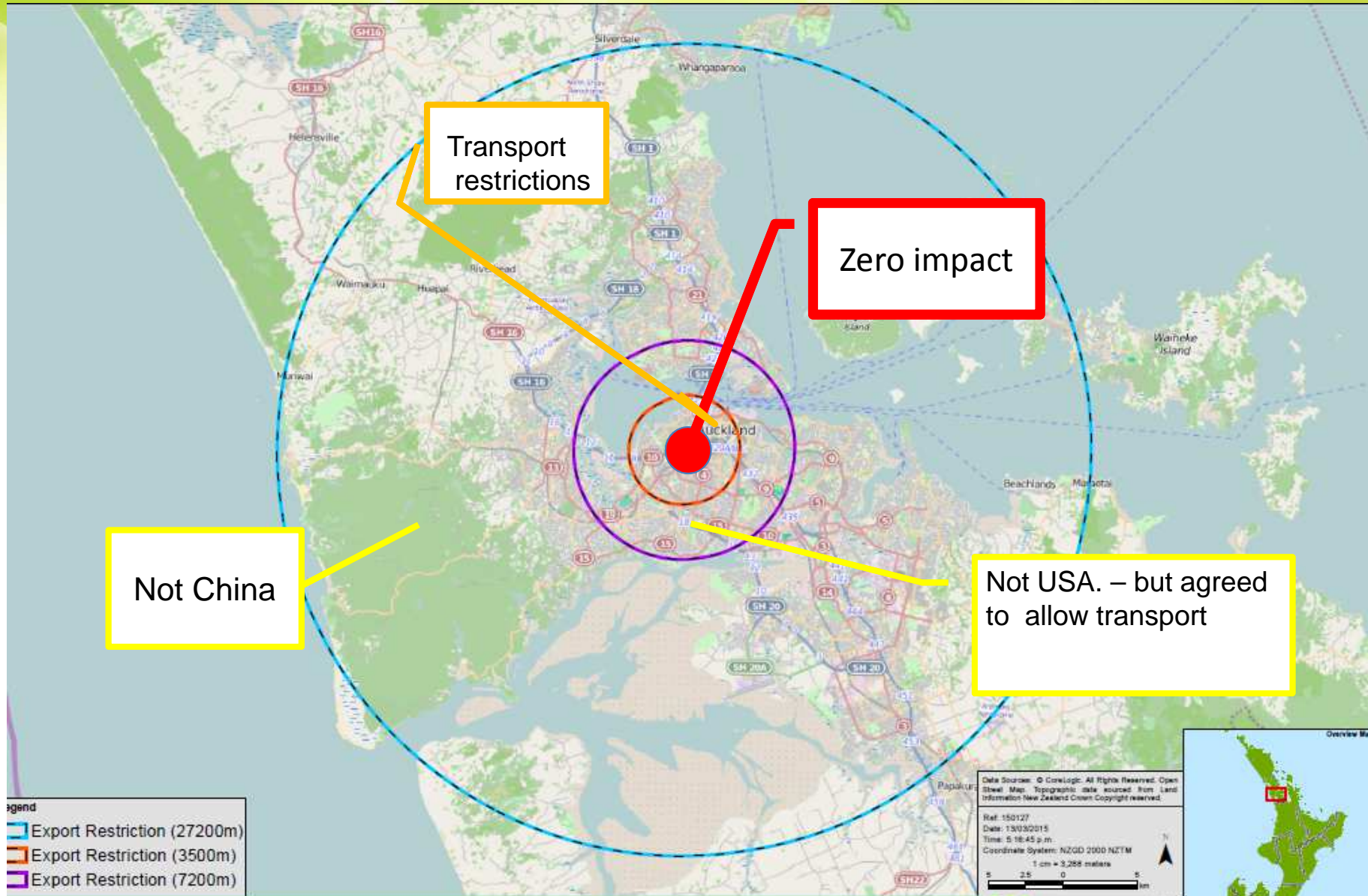
- Currently no fruit fly host material can be moved out of a movement control zone
 - Fruit on an orchard will need to remain there
 - Fruit at a post harvest facility will need to remain
 - Any post harvest facility in a control zone will be inoperable
- “One fly scenario” - control zone in place for approx. 4 weeks
- For breeding population – control zone remains for at least one season
- No host material can be transported through the zone without permit
- Fruit moved near control zone - need to verify route
- Treatment option not currently available



Managing an ERZ

- Market restrictions applied to all fruit grown, packed or stored in the zone
- If fruit grown in a zone is packed at a facility outside the zone that facility is impacted
- Will affect 90%+ of our markets
- Can expect different sized Export Restriction Zones (ERZs)
- Smallest may be > 3.5 km
- Need verification of transport route for fruit moving close to an ERZ
- Will ERZ be imposed 48 hr retrospectively

Impact of 2015 incident on Zespri





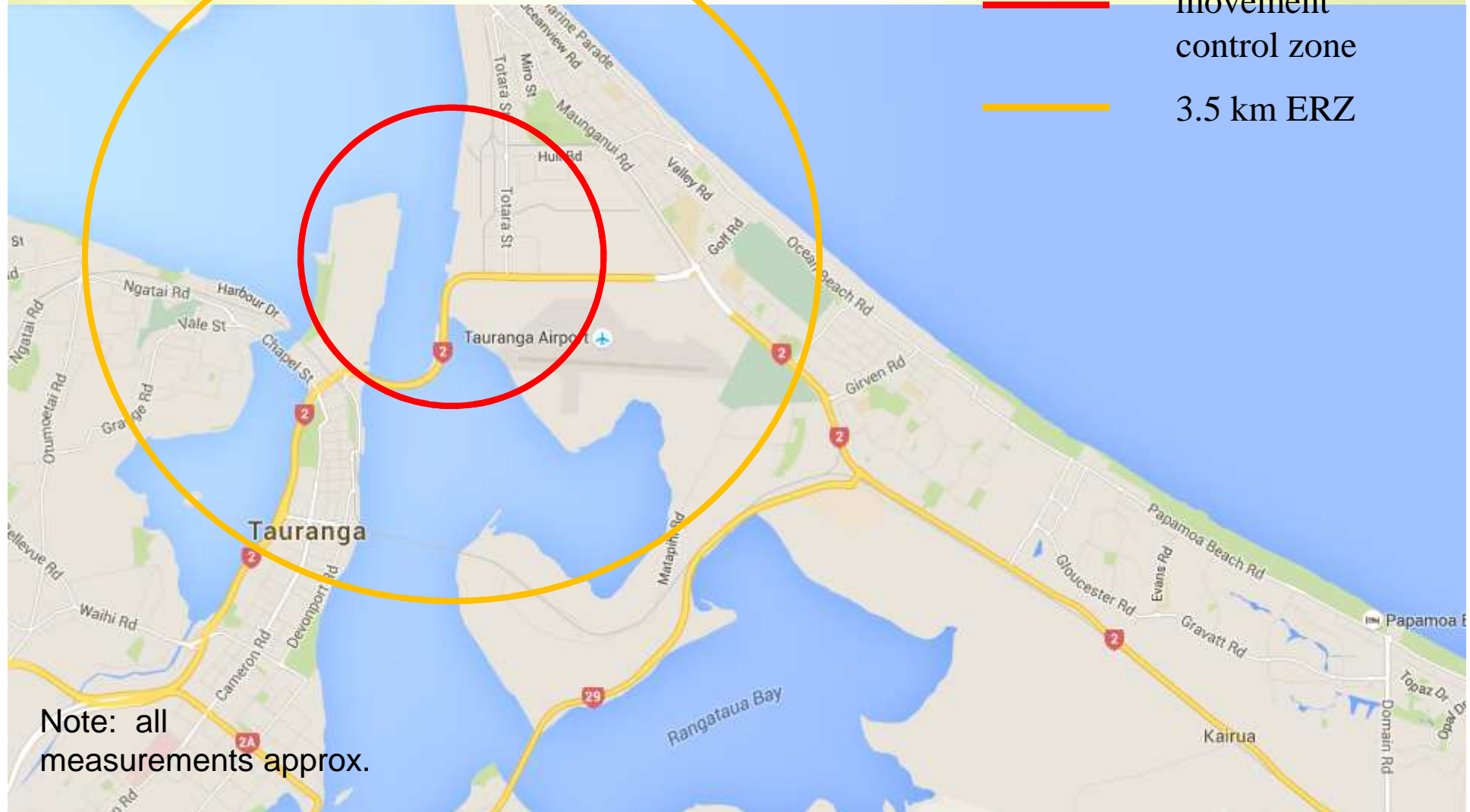
Other possible scenarios

- What happens if a fruit fly trapped in BoP in April
- What happens if there is a fruit fly incursion in BoP?



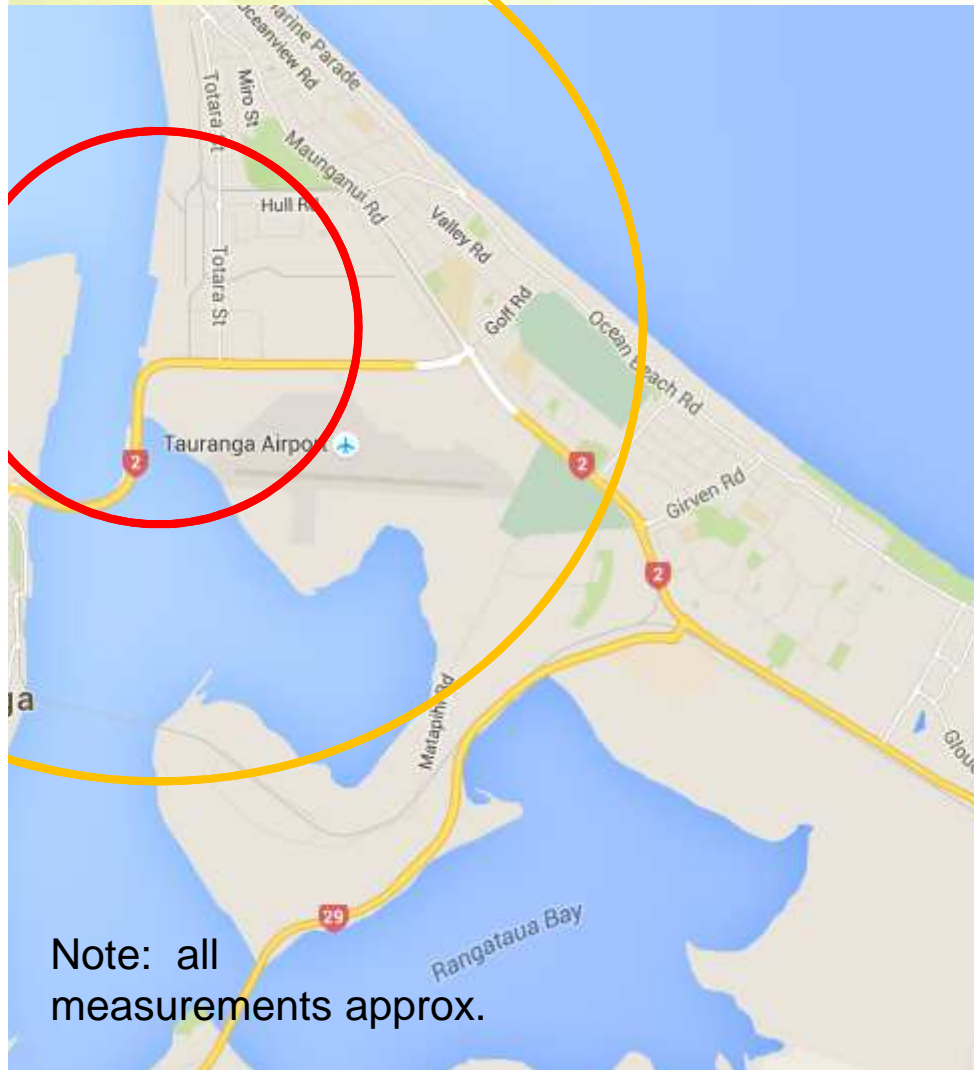
Example 1 – What if?

- movement control zone
- 3.5 km ERZ



Note: all measurements approx.

Example 1 – What if?



- Cannot load charter ships – inside ERZ
- Containers OK - provided they are loaded outside ERZ and 100% pest proofed
- Some Mount postharvest facilities may be in Control Zone
 - no fruit can leave this zone
 - These stores become unusable for duration of control
- All Mount post harvest facilities (packhouses and coolstores) would be in ERZ:
 - Fruit packed/stored in these facilities can go to very few markets without approved treatment
 - This likely to severely limit capacity

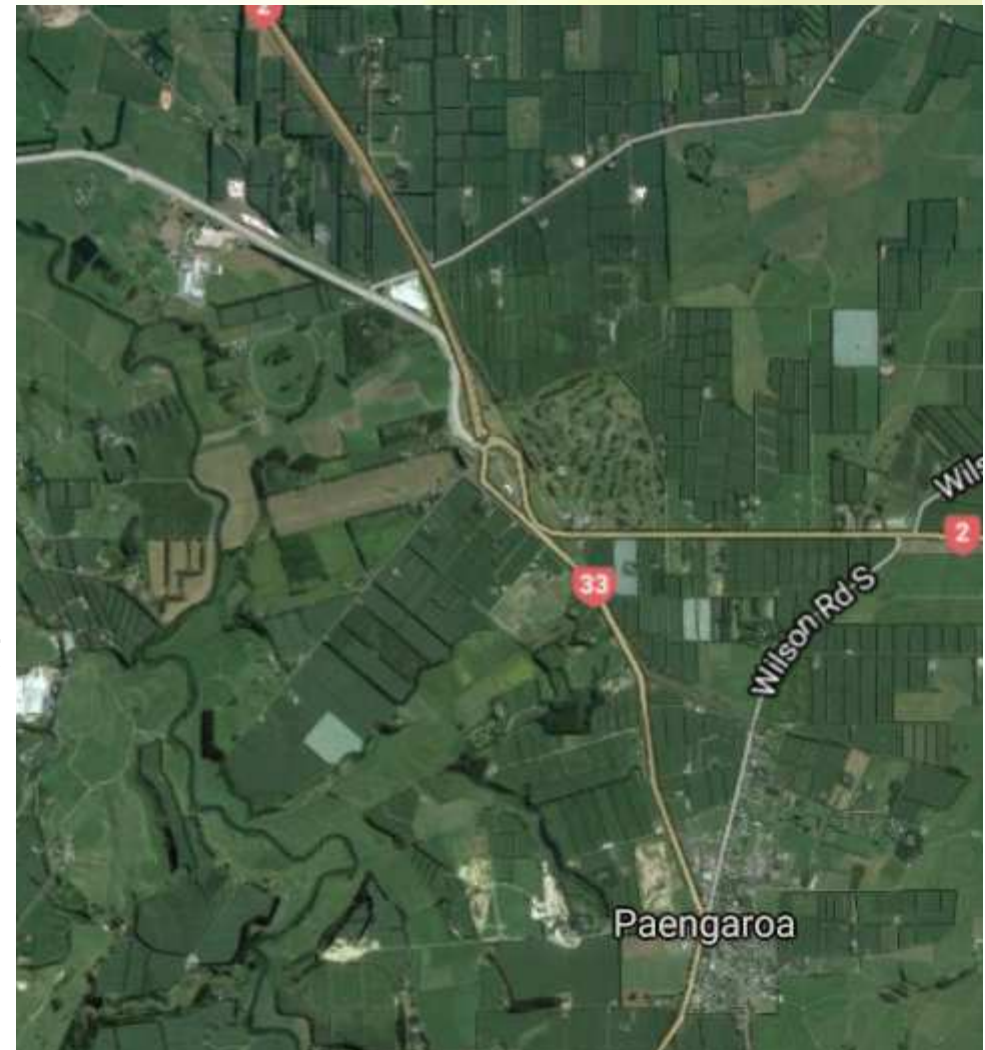


Example 2 – What if?

- Facilities are inside movement control zone?
 - during packing - fruit must remain inside zone
 - before packing – facilities inoperable
 - significant impact on industry packing and storage capacity
- Orchards in ERZ but no packing facility in ERZ?
- Some orchards in movement control zone?
- Look at putting a movement control or ERZ around your facility or orchard – what does this look like?
 - Remember that ERZs may be more than the 3.5km

Example 3

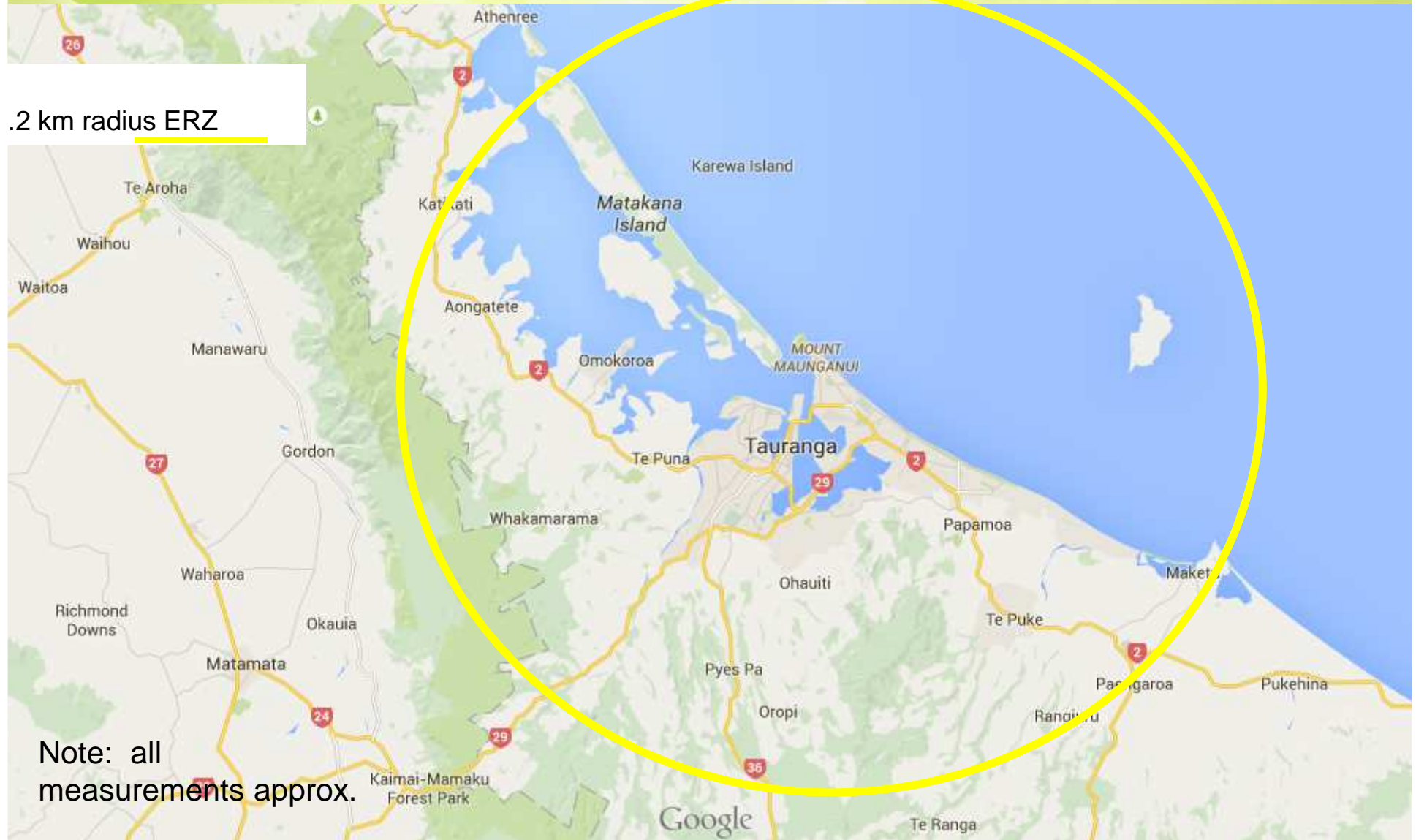
- A transport route from East. BoP to port is through movement control zone - alternate via Rotorua? Are permits possible?
- A post harvest facility in ERZ – can only be used if treatment protocol in place - capacity for treatment?
- Need to minimise volume of fruit that has ERZ restrictions - so best to pack all fruit grown in the ERZ in the zone. Better not to move fruit into the zone for packing





27.2 km ERZ

27.2 km radius ERZ



Note: all measurements approx.

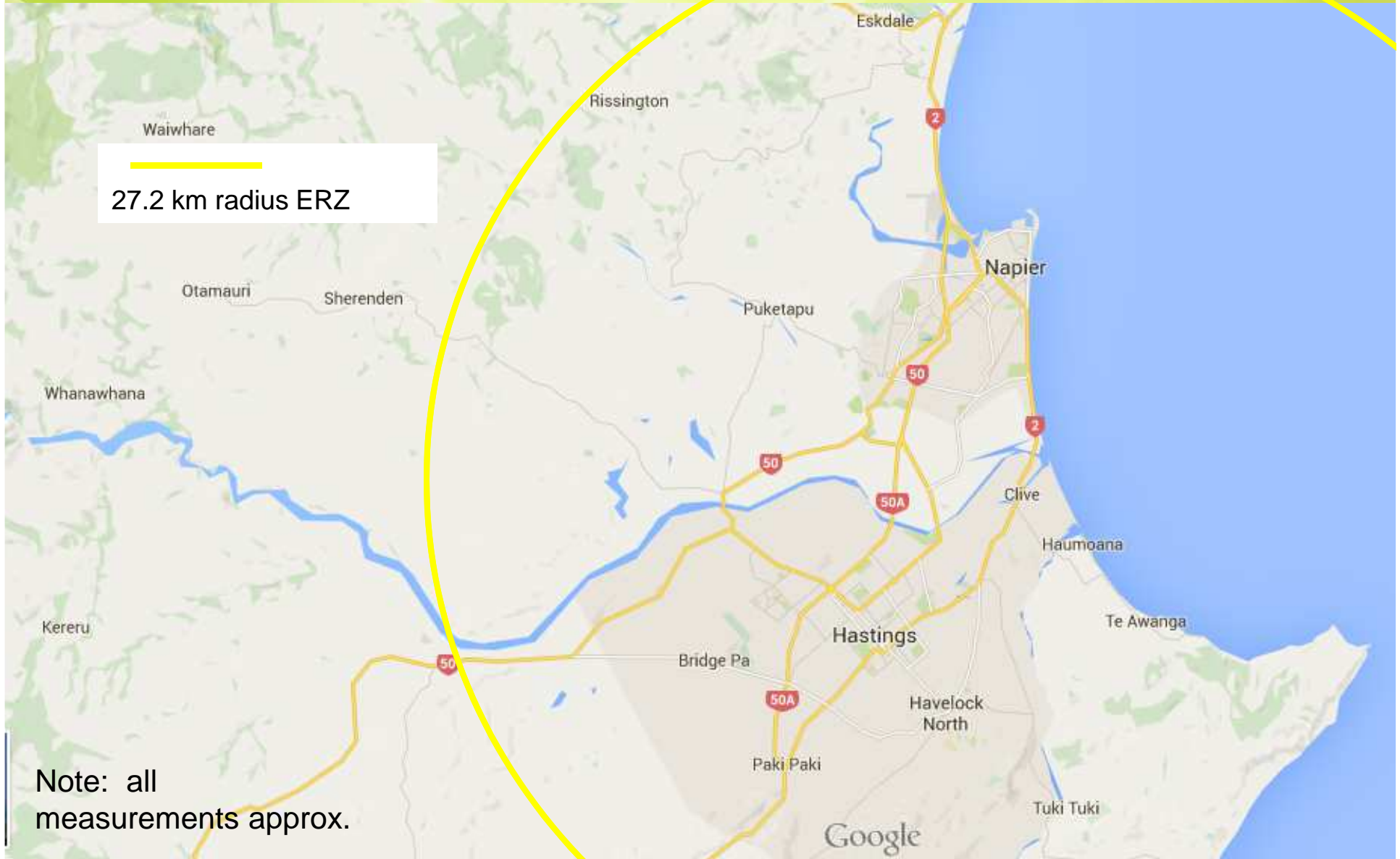


27.2 km ERZ

- Large volume of fruit “Not China” (assuming 27.2 km ERZ – unlikely to be less)
- Moving any fruit from this zone for packing outside the zone will increase volume of “Not China”
- Cannot load China charters at Tauranga Port



27.2 km ERZ



Note: all measurements approx.



Pre-negotiated protocols

- What will they deliver?
 - Pre-agreed protocol for defining pest free zone / export restriction zones (ERZ)
 - Science based modelling to provide rationale for size of ERZ
 - In 2015 agreeing ERZ took several days for most markets – these may still need ratification even if agreement is in place
 - Pre-agreed treatment protocols e.g. cold treatment
 - Reciprocity may make agreement difficult
 - Need capacity and capability to treat
 - Ability to implement pre-agreed protocol depends on having pre-approved, and “living”, procedures in place
 - Movement control zone will remain
- Of limited value unless industry is well prepared



Progress to Date – area freedom

- Protocols at final draft stage
- Science completed:
 - methodology for calculating size of zone
 - methodology for closing out a response
- Have been peer reviewed – 5 international reviewers
- NZ consultation completed
- Ready for negotiations



OAP (Official Assurance Programme)

- OAP – used to define requirements for specific Market Access programmes e.g. apples into Australia
- Completed and published July 2016
- Requirements will be included in Zespri's System - and be part of each facility Zespri phytosanitary system.
 - Industry discussion to assist with incorporation into current operating process
 - Needs to be incorporated into system for 2017



Treatment Options

- Several different options used globally
 - Cold treatment
 - Methyl Bromide fumigation
 - Heat treatment
 - Irradiation
- Cold Treatment fits into our supply chain
- Straight forward in principle but logistics are very difficult – don't underestimate how difficult!
- Global search for treatment data – Zespri contracting treatment trials



Cold Treatment

- No protocols agreed yet for NZ kiwifruit
- There are protocols in place for other kiwifruit - e.g. Med Fly in Italian fruit
- Currently assembling data and carrying out some trials in Australia with QFF in Gold3
- Any treatment proposed for export fruit must be acceptable for imported fruit – reciprocity
- NZ industry requires rigorous data for import standards – won't accept USDA treatment manual without data for import health standards



Cold Treatment Fundamentals

- Fruit held at defined temperature (typically in 0-2 °C range) for defined time (≈15 – 20 day range)
- Can be done prior to export or during transit

But.....

- All fruit must be down to temperature before treatment begins – and often before container/vessel leaves
- Requires USDA approved temp loggers – approx. \$US1000 per container
- Many countries require their inspector (or approved inspector) to be at loading
- Temp cannot rise between store and container / ship
- Logger fails - return container to sender
- Temperature spike – treatment time starts again
- Treatment prior to export requires pest-proof container loading capability
- May only allow one variety and one pack type per container



Some Difficult Questions?

- If we have a large volume of fruit needing treatment – is it possible??
 - do we have sufficient cooling capacity to get every pallet down to temperature prior to loading out
 - do we have sufficient coolstore rook to hold fruit for longer
 - what is the impact on market programme if we cant deliver RTE?
 - can we get sufficient high quality, USDA approved containers?
- Can we minimise ERZ by packing fruit at the closest facility?
- What is the impact on industry capacity if one (or more) large facilities is inoperable because it is in a movement control zone?
- What happens to fruit if there is no packing facility in the same ERZ?
- If we cant load charters in Tauranga?



Thank you