



LONGRIDGE

EST. 1998

Setting Up or Expanding a Grove

HARRISON ROWNTREE



About Longridge Olives

- First high-density orchard planted in 1998.
- Super high-density orchard planted in 2008.
- Olive mill operational in 2018.
- Three on the ground workers (Jim, Lachlan and Harrison)
- 86 ha of olives.





The Next Planting

About Harrison

- Studied Math, Physics, Computer Science and Teaching.
- Came back in 2018 to help build the olive mill.
- Integrating sensors and monitoring technology.
- Skills in networking, planning and infrastructure.
- Passionate about flying.





Major Considerations



WATER



LOCATION



PLANNING FOR LOW
MAINTENANCE



PLANTING

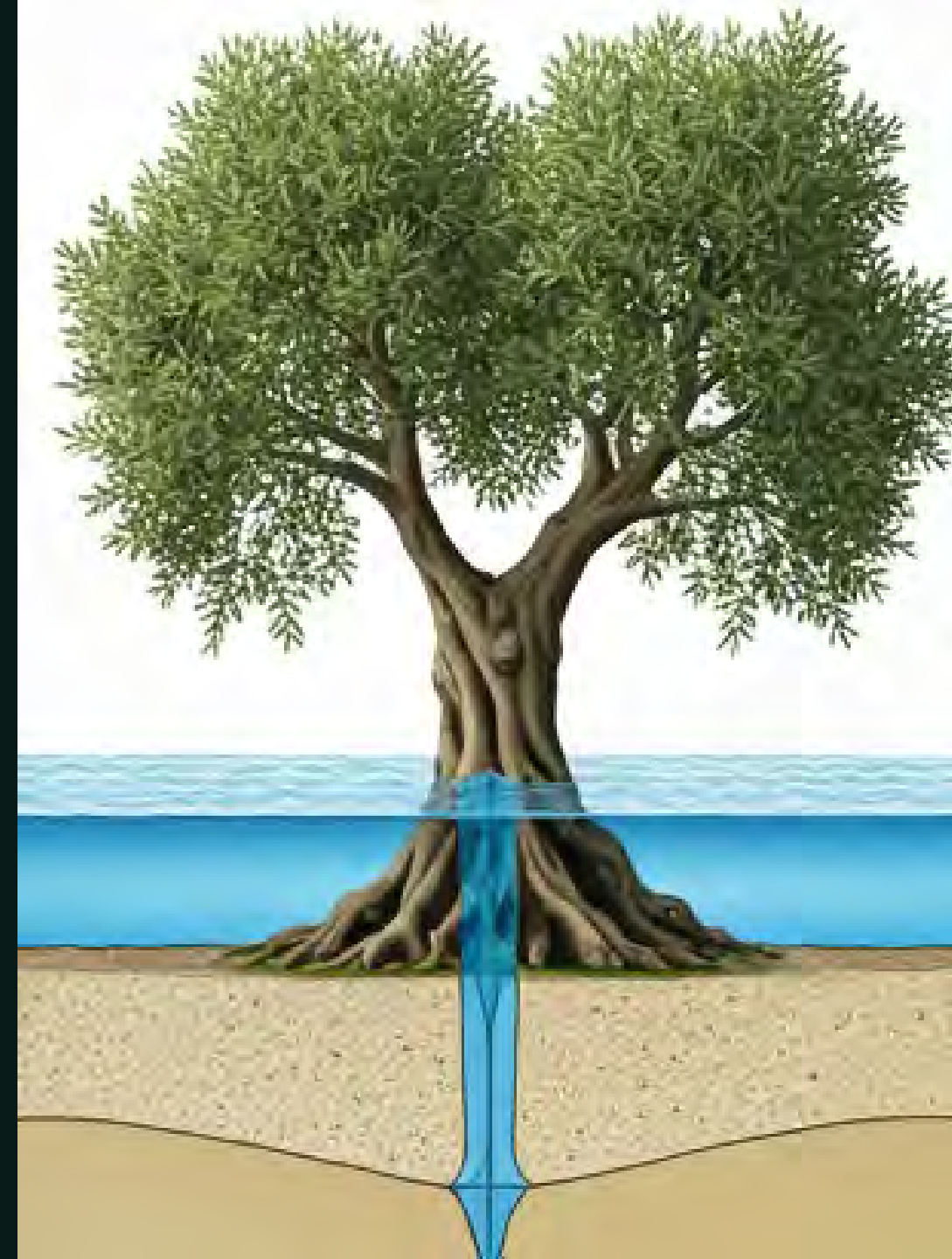
A black garden hose with a yellow nozzle is lying on a thick bed of dry, brown pine needles. Water is being sprayed from the nozzle, creating a fine mist that catches the light. The scene is outdoors, with sunlight filtering through the needles, creating a dappled light effect. The word "Water" is written in white text in the lower-left corner.

Water



Water

- Olive trees do require a lot of water.
- 10 Megalitres per hectare, annually.
- 1 full metre of water over the entire grove.



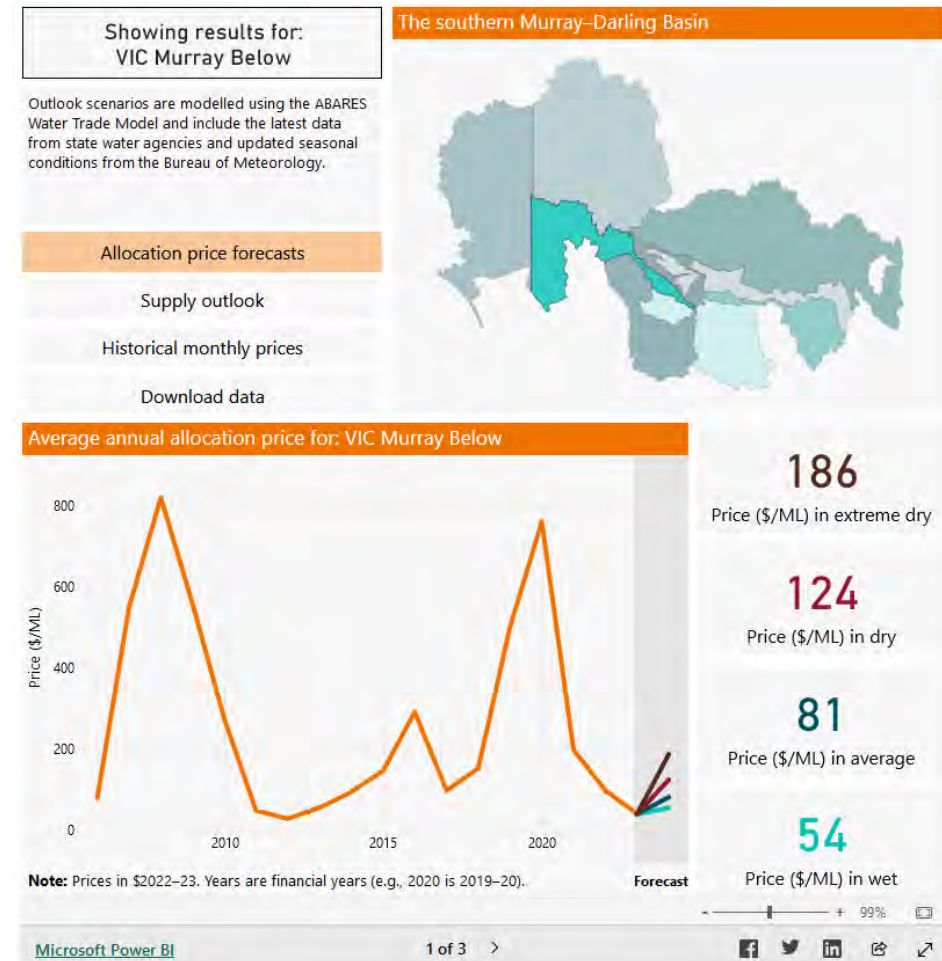
Water

- The price of river water is a cost you cannot control.
- Use bore water where you can.

Water Market Outlook – April 2023

Authors: John Walsh, Rhys Downham, Jordan Rose and Mihir Gupta

Data visualisation





336.0

2

560'9ha

Bore

Location

Frosts

- Location is the most important factor.



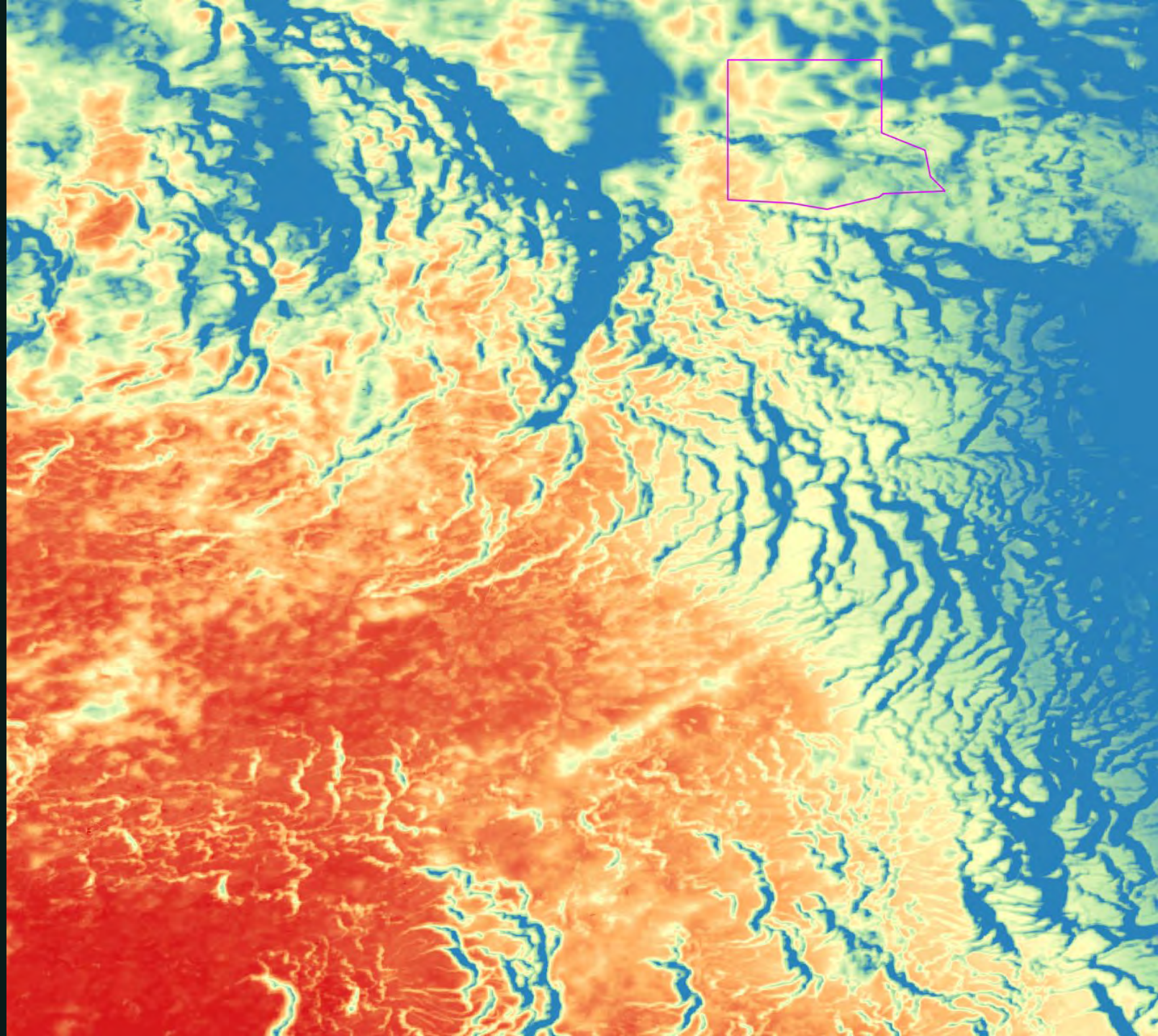


Find and use elevation data to plan your orchard



Starting Fresh

- Buy land on higher ground.
- Longridge is lucky as we didn't know this when we started.



Frost Fans

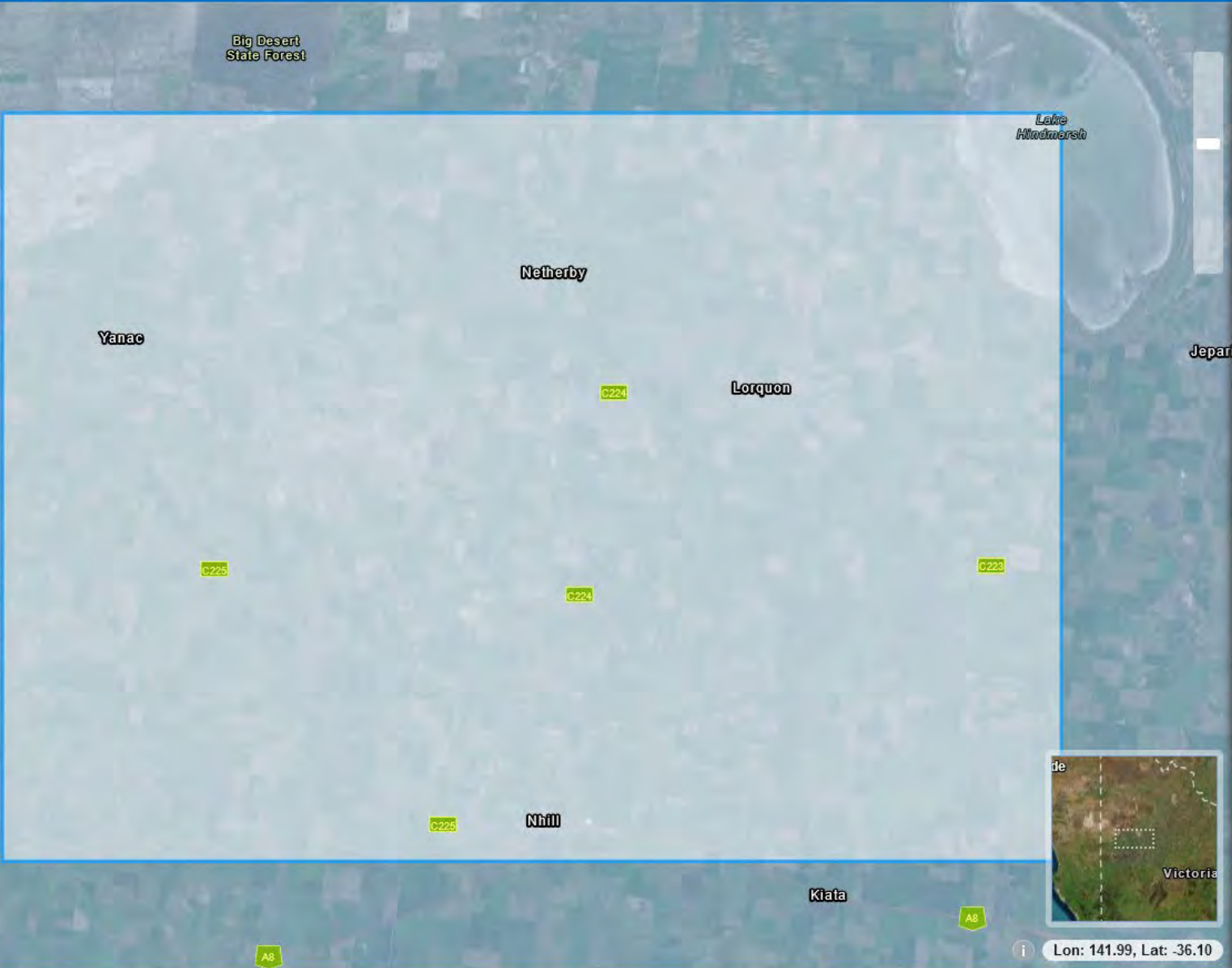
- May work better in different topography.







Elvis - Elevation and Depth - Foundation Spatial Data



Order Data

- ☒ Draw
- ☐ Manual
- ☐ Load File

Select 'Draw' to draw an area in which to search, click 'Clear' to cancel drawing.

- ☒ Box
- ☐ Circle
- ☐ Polygon
- ☐ Freehand

Clear

Search



Project ▾

Community ▾

Resources ▾

📄 Download

📄 Donate



News: [OSGeo Statement: EU Cyber Resilience Act](#) 🔗

Search



Free and Open Source

Spatial without Compromise

Spatial visualization and decision-making tools for everyone

Download

Available on Windows, Mac, Linux



Location – Solar Irrigation



A man in a dark blue long-sleeved shirt and blue jeans is kneeling in a deep trench, working on a black pipe. He is holding the pipe with both hands. To his left, a green and black power tool lies on the ground. To his right, a shovel with a wooden handle is leaning against the trench wall. The trench is filled with brown soil, and there are some green plants and branches at the top of the trench. The text "Low Maintenance" is overlaid in white serif font on the left side of the image.

Low Maintenance

Reasons for Low Maintenance



You can maintain more or enjoy your life more.



A lack of money and time.



Be profitable with a low bulk oil price.

Design for mechanical pruning and harvesting

- Our pruning regime is cut the trees, so they have space to grow new wood and fit in the harvester.
- These trees have already been harvested.



Design for mechanical pruning and harvesting

- This was August 2023.
- No fruit in harvest 2024.



Design for mechanical pruning and harvesting

- Unsure if it's the best idea, but it's the only affordable and practical one for us.
- Roughly 50c per tree.



Design for mechanical pruning and harvesting

- Very good flowering
for 2025



Low Irrigation Maintenance - Valves

- Irrigation design software works to best hydraulic solution, not most practical solution.
- Cluster your valves for easy maintenance and control.
- Get self flushing filters if you can afford them.

