Transcription details:

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| Date: | 6-Apr-2016 |
| Input sound file: | Smart Water – Precision Irrigation |

Transcription results:

**0:00 (peaceful music)**

0:14 So my name's Andrew Peace,

0:16 from Andrew Peace Wines.

0:17 We're a family operated wine company.

0:19 We've been living in this property

0:20 for about 35 years.

0:23 Our farm's situated 41 kilometres

0:25 from Swan Hill on the banks of the Murray River.

0:29 It's very diverse range of trees and

0:32 fruits and vegetables grown here,

0:33 we grow everything from stone fruit to avocados.

0:36 We grow apples, almonds, then the last couple of years

0:41 we've sort of tooled up and we're growing

0:42 different crops as well.

0:43 So we grow winter crops, which is

0:45 wheat, barley, and canola.

0:48 Our main crop is grapes, wine grapes.

0:51 One tonne of grapes gives you about 750 litres

0:55 of clean wine that's ready to go into bottle.

0:58 So we would generally make and export

1:01 about 2 million cases.

1:03 As a family, we feed about 50,000 people.

1:06 Which is a pretty good number,

1:07 we're pretty proud of that.

1:08 A lot of people don't realize that,

1:10 to make one litre of wine it generally takes

1:12 between two and four litres of water,

1:14 and it can take upwards of 200 litres of water

1:16 to grow one kilogram of beef.

1:21 We get a lot of our rain during the winter periods,

1:23 and the rain we do get, which is very precious,

1:25 is only, I would say generally is about

1:27 300 millimetres, so 12 inches.

1:30 If you're just talking about efficiencies

1:32 of pumping water for irrigated crops,

1:33 it's sort of an unwritten rule that

1:35 about five kilometres from the river

1:37 is usually efficient.

1:39 You need to work out how you're gonna get your water.

1:41 We're actually on the Murray River, so we're

1:42 a private diverter, as opposed to someone

1:45 who gets water pumped to them from a pipeline.

1:48 Being a private diverter, that means we

1:50 own all our own diversion pumps and all our pipes.

1:54 We've had to install them over the years.

1:57 So you need to have a license for it

1:59 that you can use annually,

2:00 it's called AUL, on your property.

2:02 And you get a license from the government,

2:05 you're allowed to use a certain amount

2:06 of water on the land.

2:09 And then obviously, once you've got that

2:11 then you need to actually purchase the water

2:13 that you would divert through your pump.

2:16 We have 4,000 acres, 1,600 hectares,

2:18 and all our land is licensed to irrigate.

2:23 So the watering system we currently use

2:26 is called WISA.

2:27 We've probably half the water use

2:29 that we use to, we flow to irrigation

2:31 and we're probably getting about

2:32 an extra 20% increase in the water

2:35 that we do put in the effectiveness of it as well.

2:38 - Working with WISA, we could actually program it

2:42 from our computer, start it from our computer,

2:44 monitor it from our computer.

2:46 Well having a good, fully-automated

2:49 irrigation system, you're using your time efficiently,

2:53 you're not chained to the pump

2:55 or in your vehicle continuously going around,

2:58 it gives you time to do your other day-to-day duties.

3:01 - We provide irrigation automation

3:03 and monitoring solutions like those

3:05 we've provided to Andrew Peace Wines.

3:07 - Well the company itself was brought about

3:09 to give farmers the edge over the rest of the world,

3:13 in being able to apply water to their crops,

3:16 in saving time which is very important

3:18 for them to do other jobs, and to save water.

3:22 - [James] Basically comprises three

3:25 main components, if you like.

3:28 Software, which runs on a PC and

3:31 controls the system.

3:33 Hardware out in the field, which is

3:36 radio linked back to that PC,

3:39 and the firmware on that hardware out in the field,

3:42 which allows us to connect all sorts of

3:45 different hardware to those actual units.

3:48 - [Anthony] This is all done either in your office,

3:51 on your phone, you can be in Swan Hill

3:53 doing the shopping.

3:54 - So we've got soil moisture monitoring,

3:57 talks to the computer.

3:59 We've got centre pivots. We've got drip tape.

4:03 Sub-service drip tape which is in the ground,

4:05 and then we've got drip tape for our vines.

4:07 So all those formats are controlled by a system.

4:10 So it makes the impossible, possible.

4:13 - This automation makes life a lot easier.

4:16 You still have to check it, it's not foolproof,

4:18 but it just takes a lot of the guesswork out.

4:21 - Certainly on a property like this,

4:23 the size of this one here,

4:26 one person running around

4:28 doing the water manually would be,

4:30 actually I don't think it would even be possible.

4:33 So in essence, the labour savings we gain

4:35 from automation here, probably

4:39 a good couple of labour units, if not more.

4:42 - With the infrastructure we have,

4:44 and being so close to the river,

4:46 if we didn't have water, we wouldn't have

4:49 this winery, these grapevines.

4:52 Water is gold to us.

4:55 Without that, we've got nothing.

4:58 (peaceful music)