

IN THE MANJIMUP MAGISTRATES COURT  
SITTINGS COMMENCING 6 December 2012  
BEFORE MAGISTRATE HAMILTON

PROSECUTION NOTICE MJ 92/12

DEPARTMENT ENVIRONMENT AND CONSERVATION

-v-

PETER ROBERT SWIFT

In this matter Peter Robert Swift (the Accused) pleaded not guilty to a charge that between 22 November 2007 and 13 December 2009 at Lot 1 on Diagram 67189 Bunnings Log Road Frankland River he caused or allowed clearing of native vegetation to occur without authorisation, contrary to sections 51C and 99Q of the Environmental Protection Act 1986.

Evidence has been heard over three days and the matter has taken a lengthy time to conclusion. This is no fault of the parties but rather is a simple reflection of the pressure to find time for listings in our busy circuit courts. I acknowledge the frustration and anxiety this produces and can only apologise in that regard.

In this matter as in any matter in a Magistrates Court I sit and perform two functions that of the finder of fact and the finder of law. In my performance as the finder of fact I simply act as any jury member would in a trial in a superior court. That is I bring to bear my common sense and my life experience when listening to the evidence and considering it and any exhibits that might be tendered during the course of the trial. I then apply the law as it relates to the charge, to the evidence and to the facts as I find them.

In this matter as in all criminal matters the Prosecution bring the charge against the accused and they bear the onus of proving the charge to the requisite standard, ie Beyond Reasonable Doubt. It is the highest standard known to the justice system. There is no legal definition to that phrase it is to be taken and given its ordinary meaning.

In the matter before this court the charge is a simple offence pursuant to s51C of the Environmental Protection Act. It alleges that between 22 November 2007 and 13 December 2009 at Lot 1 on Diagram 67189 Bunnings Log Road, Frankland River the Accused caused or allowed clearing of native vegetation to occur without authorisation, contrary to sections 51C and 99Q of the Environmental Protection Act 1986. (EPA) Section 51C sets out some exceptions in which the alleged clearing would not amount to an offence. However as it was conceded that the CA substantially falls within an environmentally sensitive area, being wetland, as that is mapped in V & C Semeniuk Research Group "Mapping and Classification of Wetlands from Augusta to Walpole in the South West of Western Australia", Exhibit PPa, the defences prescribed by regulations do not apply.

For the purposes of s51R of the EPA where the prosecution prove clearing has occurred on the relevant land then the owner is deemed to have allowed the clearing in the absence of proof to the contrary. There is an evidentiary onus on the Accused to either establish that he is not the owner or did not allow the clearing on the relevant property or that he falls within one or more of the exceptions set out in s51C. However in regard to the latter see paragraph above. Section 78 of the Criminal Procedure Act 2004 (CPA) is then of relevance and clearly sets out that the standard of proof in relation to this evidentiary onus is On the Balance of Probabilities.

An Accused person bears no ultimate burden of proof because in our criminal justice system there is the concept of the Presumption of Innocence i.e an Accused person is

presumed innocent of any charge they face until proven to the requisite standard otherwise.

Allied to that concept is the Right to Silence. In general terms an Accused person, bearing no burden of proof, is entitled to have the State prove the case against them without giving or calling evidence on their own behalf. In this case the Accused did give evidence and called evidence on his behalf. I simply evaluate his evidence as I do any other witness.

In assessing a witness I can accept everything they say or reject everything or I can accept some things and reject others. I can also take note of the way in which a witness gives their evidence on oath ie their demeanour. However even if I reject everything an Accused says or calls to be said on their behalf I still return to the Prosecution case and ask the question “On their evidence have they proved the case against the Accused Beyond Reasonable Doubt.”

In all criminal prosecutions the State must prove each of the elements of an offence Beyond Reasonable Doubt. If there is reasonable doubt as to the evidence of any of the elements then the charge will not be made out against an Accused.

From the outset of this trial a Statement of Agreed Facts was handed up. This included a number of non-contentious exhibits, at that time numbered PA through to PM. The State called four witnesses; the Accused gave evidence and called evidence from two other witnesses. I note that the Accused changed Counsel during the course of the trial and it may be that in regard to the Agreed Facts and tendered material his second Counsel may have been, or may not have been, constrained as it relates to those concessions.

I intend to refer briefly to some of the evidence of each of the witnesses both in evidence in chief, cross examination and re- examination. In saying that I have carefully read and re read the evidence of each witness as it is reflected in the transcript and my notes.

## **NOEL RAYMOND PHILLIPS**

### **Evidence in Chief**

Mr Phillips gave evidence of being the previous owner of the property in question having been involved with it for some 35 years. He had met the Accused once, when he purchased the property.

The witness said that he originally applied to the Department of Agriculture to clear land on the property. He did not say when he first obtained this permit. He said that the permit allowed him to clear anything as long as it was 30 metres from the waterline and that it was for the purposes of replanting vegetation, tree planting and all general farm running.

In July 1993 he had some concerns about the permit and sort clarification from a Nick Cox. He did not say who or where this person worked. He received clarification by

way of letter – Exhibit PK –which he described as saying “Basically don’t annoy me no more. You’ve got a clearing permit on the conditions until such time as you sell it.”

The witness then proceeded to indicate on Exhibit PL, an aerial photograph, the various areas he had cleared. PL had hand drawn annotations in black drawn by the witness as reference points relative to the clearing. One of those areas he marked has black lines within the black outline and the words “bare ground” under it. He said this was bare because of being inundated by water from levy banks on the neighbouring property.

The Exhibit also has a yellow marking (this refers to the “contentious area” CA) on it that he said would have been cleared by him some 35 years earlier and that it had also been burnt by someone who leased the property from him in the early 1980’s, specifically 1983.. He said the country was fairly low; it had a little bit of Boronia scrub and no trees to speak of when it was sold in 2007. He said he never used that area but that he had a little experiment of some 4 acres to the north of it where “we’ve played around”. As the Court understands this is a reference to growing pumpkins.

### **Evidence in Cross Examination**

The witness was asked questions about a visit to him by an officer from Department Environment and Conservation (DEC). He was not able to answer whether he drew the yellow outline on PL, whether the DEC officer drew it or whether it was already on the Exhibit at the time of that visit. He did recall though signing the bottom of that Exhibit on the date marked being 12 August 2010.

He also recalled that the officer had a computer and printer with him and he gave and signed a statement that day as well.

He said that his neighbour Glen Bevan came to the area some five years after his family did and that his property was to the west. The boundary being some 300 metres from the yellow CA marked on PL.

In reference to PL his attention was drawn to a white line running north south through the yellow CA. He recalled it being a track or road probably put in when the fire went through the area. He did not recall it being a drain as that was further to the west closer to the pine plantation.

He said in relation to the yellow CA that the fire had been through and “.. that country doesn’t grow back that quick”..... “it takes a long time to grow back”.

He was asked further questions relating to what Counsel suggested were tracks within the area. He said that he wouldn’t have a clue what they were. That of course is not logically consistent with his evidence that he had been associated with the property for 35 years and that in the last 10 years of ownership had been spending 6 months a year there. (see RXN)

The witness admitted to owning a D7 and a D8 (which in my experience refers to different size tracked bulldozers) but was adamant that they had not been used within the yellow CA. He gave no evidence as to how, where or when they had been used on the property. He did give evidence that he had pulled out an old fence on the southern end of the yellow CA and replaced it with a new fence line and firebreak.

He said the only burning in that area occurred when there was the fire in 1983 and that he had not raked the area.

He said that the pine plantations to the west and east of the yellow CA were planted in 1993. He admitted that in response to a request from CALM at about the same time a drain and road went in and that as a consequence there may have been one or two piles of dead vegetation towards the southern portion of the yellow CA on the western side.

In response to a question about drought he recalled one in 1987 but that for a period of time after that he had been working up north and the property had just been left unattended.

He said for the last 10 years prior to sale he had been running a caravan park in Denmark and a peat milling operation at the farm. No one lived or worked at the farm full time. He agreed there were stray and feral stock roaming the farm and that the fences were a bit neglected.

He was again questioned about the 1993 letter from Nick Cox and further questioned about clearing in the yellow CA. He reiterated he had only done clearing for the drain and road in the CA and singly pushed an area to the east of it that had not been burnt. He estimated there was 18 ha still to be burnt.

He stated that he had sold the property to the Accused privately and not through an agent. A document (later D1) was put to him and he agreed that it was on his letterhead and that he had drafted it and it was in relation to the property for sale. He agreed that the document indicated there were 60ha knocked down and still needing to be burnt. He denied that any of that was within the yellow CA.

It was put to him that he had cleared the area and that when the DEC officer put the aerial photograph to him with the yellow line marked on it he deliberately sought to mislead the officer as to the areas that he had and had not cleared.

It was put to him that he had made a statement to the DEC officer in relation to this matter and at paragraph 8 of that statement he had said

“I don’t remember exactly, but I think the area outlined in yellow was cleared around 30 years ago, or even longer. Since then I did not clear this area again because it’s a wetland and its under water. The area is of no value to me because it has ironstone less than two inches below the ground and water on the surface.”

It was put to him that was not true and that he had cleared on his evidence the southern end of the yellow CA. He said he had not “cleared that totally there. We just pushed a fence line”.

He then agreed that he had put the black marks on Exhibit PL indicating where he had cleared, and that the yellow CA outline was already on the photograph when he did that.

### **Re Examination**

In re-examination the witness confirmed that the 60ha of land that had been knocked down and needed to be burnt related to the area outlined in black to the north west of the property and to the east of two black marks he had drawn to the east of the yellow CA one of which marks cut through part of the yellow CA. These portions are marked on PL.

He stated that during the last 10 years of ownership he would go to the property for approximately 6 months of any one year spending five nights at a time before travelling back to Denmark.

He said in relation to piles of timber remaining on the property at the time of sale, this was material pushed over near the west pine plantation where CALM had requested a road and drain be put in. He said this was on western the edge of the yellow CA. He estimated that might have been 10 or 20 tonne of timber.

The witness also identified that the new fence line on the southern boundary was outside the yellow CA and would have been 15 metres wide.

### **Observations**

From the outset of this trial it appeared that it would principally be resolved on the basis of the scientific observations of the witnesses and the supporting data and documents. However it became apparent that issues of credibility would also have a considerable bearing on the trial.

I observed Mr Phillips to be a somewhat reluctant witness and one who was either impatient with the process particularly of cross examination or somewhat tetchy by nature.

He was the previous owner of the property and was a person who believed, as he said at p9 transcript, could basically remove anything, meaning vegetation, on his property except for certain very limited provisos. This begs the question why would a witness who says he had a permit to clear in perpetuity not tell the truth if he had cleared in the CA.

It is clear that in 1990 he obtained a permit to clear in relation to the property. I accept that. It is unfortunate that we have no evidence in relation to that permit. Then in 1993 for whatever reason he had some concerns about the permit and sought some clarification. We certainly have in evidence the letter containing that clarification.

Nobody was called from the Department of Agriculture in relation to the information contained in that document.

My reading of that does not give rise to a view consistent with the belief and assertion of the witness as to his rights in relation to clearing. The contents are somewhat ambiguous. They refer to “your property” and “the site” and “my re-assessment on the 1 July 1993 (sic) the area you wish to develop for tree production....” They go on “You may selectively remove species or develop the site at your discretion, as may you proceed with the remainder of the clearing associated with your tree planting programme.”

That raises the question whether the clearing could only be in relation to a tree planting programme. The letter then goes on to stipulate the areas within a black outlined area on a map of the property attached to the letter (but photocopied onto the back of Exhibit PK) that specifically could not be cleared. These included low lying areas that become seasonally inundated.

It is clear from the witness statement to the DEC officer in August 2010 that he considered the yellow CA a wetland of no value to him and also because the underlying rock was very close to the surface. There was no evidence from the witness in the trial as to when and how he made the observations about the underlying rock or if they related to the period when he said that he had cleared it some 30 years previously. Or as will later be seen whether they related to evidence of clearing in the 1990’s observed by his neighbour Mr Glen Bevan.

It is open to the Court to form the view that Mr Phillips was not entitled to “open slather’ clearing on his property, including the CA , that the letter made that clear, and that possibly the clearing could only be in relation to tree planting and not to an experiment related to the growing of pumpkins.

This is an area of some 14ha. It’s an area that also appears to have tracks and drains in it that the witness says are not there but if there is a track there he has no idea why it’s there. The property is not a large farming enterprise or an extensive pastoral leasehold it is relatively small. This is a property he has been associated with for 35 years and these observations or lack thereof are not consistent with that degree of association. I have some difficulties in relation to credibility when it comes to Mr Phillips’ evidence.

It is also clear from his evidence and from the document regarding the sale of the property, Exhibit D1 that he conceded he drew up, that at the time of sale there were “approximately 60 hectares of country that has been knocked down and needs to be burnt up.” That is a significant amount of land equating to over 12.5% of the total property. Exhibit D1 is a significant piece of evidence because it tells us a number of things about salient features of the property that can then be carefully considered when looking at other Prosecution exhibits.

## **GILLIAN ANNE STRYKE**

### **Evidence in Chief**

Ms Stryke said that she had worked for DEC for a period of some 7 years and prior to that for CALM for 2 years. She had a Certificate in Horticultural Practice and Tree Surgery and a BSc in sustainable development and land management.

She attended the property in question with a colleague on 30<sup>th</sup> March 2010. I note that this was some 15 months after the last of the satellite images tendered as Exhibits PSa and PSb which were the images that caused the property to be brought to the attention of her colleague.

Exhibit PI was put to the witness who then using that document indicated where she and her colleague entered the property and the observations she made at each of the numbered sites (referred to as Waypoints) on that document.

She compared the heights of vegetation within the CA (on this Exhibit outlined in red) with that to the east of the CA. She referred to the land within the CA as being cleared with the land to the east as not being cleared and with taller vegetation. Her evidence was that the growing material in the CA was about knee height. She reiterated on a number of occasions that the land to the east had not been cleared. She gave evidence of observing one long windrow running north south in the eastern area of the CA with numerous other smaller piles of dead vegetation. She described the species within the windrow and piles as clearly being varieties of native vegetation.

She gave evidence of her observations in relation to the species within the piles and windrow shown in the photographs taken at each of the Waypoints listed on the Exhibit.

She was of the opinion, based on her horticultural experience that the material had been in the piles and windrow for a “little while”...”quite some months, I would say, but I can’t go into anymore than that.”...”it wouldn’t be hundreds of years, but it’s definitely a while”.

### **Cross examination**

She was asked about her observations at a number of the waypoints and if she had observed tracks within the CA, with which she agreed she had seen areas looking like tracks.

The witness said that she could not give an accurate estimate of how long the material had been in the piles and windrow. She could however identify it as “various native vegetation”. She stated that it had been there for months but she couldn’t give any more detail than that. She said “it could be longer than a few months definitely yes”.



She was not of the view that it had been there for years and years as it would have reeds growing in it if it had.

She indicated that she had observed sedges growing in the CA. She was asked if she had any qualifications in determining the age of flora. She replied “I’m a horticulturalist.” It was put to the witness that she had no formal qualifications in ageing dead plant material and therefore could not date with any specificity the age of the piles. She initially replied that in horticulture one is taught how to grow things “and the whole life cycle of plants” and that experience teaches what happens when a plant dies. She subsequently agreed she had no formal qualifications in that regard ie into ageing dead plant material.

### **Re examination**

The witness confirmed that she had had experience as a horticulturalist since the 1990’s and that she had worked in production nurseries, particularly in relation to producing native vegetation for rehabilitation work, and in wholesale and retail nurseries.

She said a number of factors need to be taken into account when determining how long vegetation had been dead. These included the weather.

### **Magistrate’s Questions**

The witness confirmed that she and her colleague had walked the property during their inspection and that she had noticed tyre and track marks in the course of that on the southern and western boundaries.

### **Observations**

Ms Stryke in cross examination appeared to be extremely defensive and Counsel at one point even commented on this.

It is unfortunate that an important question in this matter, and that of all the witnesses this person was best qualified to answer, was not put at any time. That is as to the age of the vegetation actually alive and growing in the CA. Here was a witness with qualifications and experience in horticulture who said “You’re taught how to grow things, and the whole life cycle of plants”.....and she was not asked that critical question. There may have been a forensic reason for that not to have been asked but it is highly probable that the answer may have assisted the determination of a relevant matter ie when the clearing occurred.

Further a careful look at Exhibits H1 and H2 do indicate the piles having reeds growing in them. This on the evidence of Ms Stryke would indicate that they had been there for some time.

Critically her assessment of the length of time the piles and windrow may have been in existence does not sit easily with what the image PSb is said to portray at that time it was captured in January 2009. That is a distinctly denuded area of land.

## **CRAIG STEPHEN JACQUES**

This witness' evidence went for some 40 pages of transcript. Principally his evidence was directed to his observations of the property at the various waypoints he visited in March 2010 with Ms Stryke. These observations are confirmed by the photographs that he took on the day in question. These form a bundle, or rather 2 bundles, being Exhibits PHa and PHb. PHa being the computer generated photographs and PHb being some glossy image photographs. They mirror each other.

### **Evidence in Chief**

Mr Jacques has worked with DEC since it was created in 2006. Before that he worked for the Waters and Rivers Commission since 1996. He is a senior environmental officer with DEC and under the EPA he is an inspector and has been for 10 years.

He has a BSc majoring in environmental science, a graduate diploma in computer studies, a graduate certificate in environmental compliance and a diploma of government in investigations.

In the course of his duties he said that he does a satellite monitoring project and from the land monitor project there was some change monitored on the Accused's property and this came to his attention in early 2010.

Through him were tendered the images of the Accused's property that came to his attention. These became Exhibits PSa and PSb. The former relating to an image captured on 26 January 2008 and the latter on 5 January 2009.

His evidence was that the different colours in the images represent different features on the ground as follows;

The bright green colours represent vegetation

The brighter colours are the pine trees,

The brown green areas are native vegetation

The pink areas are probably pasture

The dark or black areas are wetlands or water

The very bright green areas are where there are pastures growing

He went on to clarify

The very light green areas are grass and pasture

The pink areas are probably dead pasture, like dry grass.

His evidence was that the analysis of the image is undertaken by the land monitor group that is comprised of a combination of different departments who fund a team of people that analyse the imagery and produce the data sets he uses. He said he had

looked at and analysed aerial photography since 1996 and satellite imagery, particularly Landsat imagery, since 2003.

He said his attention was drawn to change identified on the property. The images identifying this change were tendered as Exhibits PSa and PSb. He said they related to a change in colour in the CA (the relevant “contentious area” area) from a green colour to a pink colour. He said that this indicated a loss in vegetation cover in the southwest of the property it indicates vegetation has gone from very dense cover to very little cover. He said that the colour pink indicates more soil being reflected and picked up by the satellite. He described the area as rectangular in shape with a dogleg running off to the east. Exhibits PSa and PSb were tendered through the witness for the purpose of indicating a loss of vegetation in the CA.

Mr Jacques gave evidence of visiting the property with Ms Stryke in March 2010. With the assistance of Exhibits PH (bundle of photographs taken by him and tendered at the outset of trial by consent) and PI (document with diagram of waypoints at which the photographs were taken)

He said that on the visit to the CA he observed windrows of dead material that was native vegetation. He also saw machinery marks on the ground in parallel rows running north and south. He said that most of the marks were outside the boundary of the red line but followed it, that there were some marks at waypoint 24 within the CA and these are indicated in the photographs he took at that point, numbered 49 and 50.

He said that between the windrows there were principally sedges growing and these were about 30cm in height. Later in his evidence he describes grasses and sedges depicted in a number of photographs as being less than half a metre in height. (The witness Stryke described these as being knee height).

Jacques indicated that the vegetation in the windrows was 12 – 18 months old. I take it that he meant that the vegetation that was dead appeared to have been in that state for 12 to 18 months. His evidence in this regard is somewhat equivocal in that he could mean the vegetation had been dead for 12 – 18 months or that it had been dead but only in windrow for 12 – 18 months.

He was asked about the age of the vegetation growing between the windrows. In essence he said that it was difficult to give an opinion as to whether that vegetation was re-growing or at its maximum height. He did say that these plants were not as tall as the same plants in the wetlands surrounding the property. He then went on to describe the vegetation in the surrounding wetland areas.

The witness then went through the photographic evidence and the waypoint diagram also referred to by Stryke. I do not propose to address that evidence in detail.

He was then taken to Exhibit PG. He described his observations of the contents of that exhibit. It is a little confusing as he talks about what he observes in the area outlined in red. My understanding of that is that he is saying that he recognises on PG the area he has just been speaking about in relation to the photographs and the waypoints that on Exhibit PI is outlined in red.

He describes the vegetation to the eastern and northern areas outside the area described as outlined in red. He then goes on to say that the vegetation in the nature reserve immediately to the south of the property is the same as the vegetation in the area referred to as the area outlined in red. Further in his XN he then said that the vegetation in the area to the east of the area referred to as outline in red was the same as in that area.

He said he could see no windrows in the photograph and that if they had been in existence he would have expected them to be depicted on the image. He was asked about salinity and said that an increase would normally inhibit the growth of native vegetation and may kill it. He said there were no visible signs of salinity in the exhibit PG and he did not observe any on his 2010 visit.

Finally he Exhibits PTa, PTb and PTc relating to rainfall records and a relevant graph were tendered through him by consent.

### **Cross Examination**

He said that in relation to Exhibits PSa and PSb light green colours would indicate green grass or pasture and that sedges would be brown or green colour, like a darker brownie green.

He agreed there were dangers or potential problems in drawing conclusions from aerial and satellite images as they may indicate change but they do not indicate the cause of change.

He was taken to the series of photographs and said that Number 42 depicted disturbed soil as if a machine had dragged a blade or rake over it possibly only a month before his visit. Number 43 he conceded may depict a firebreak . He did not agree 46 depicted a firebreak. He was not sure 49 depicted the same windrow shown in 44 and 45 but that it was similar. He did not agree 52 and 53 depicted a drain or firebreak respectively. He agreed 55 depicted a firebreak and that 56, taken looking west, depicted a cleared area shown in PG as at 2007. He agreed 58 were looking along the line of a drain.

He agreed that 59 appear to be a road or a firebreak, that foreground depicted in 60 could depict a road and a firebreak, likewise the foreground in 61. He agreed 63 depicted looking north up the firebreak and road.

He said that if the pushed over material had been in the piles for any length of time, being years, it would be more decomposed. In his view it would have been there for less than 5 years at the time of his inspection. This of course is significantly different to the time frame he suggested in evidence in chief but seems to clarify that the state of the vegetation also refers to the state of it being in the windrows or piles.

He denied having a preformed view that the Accused had caused the clearing prior to his inspection but he said that when he interviewed the Accused he knew who had done the clearing.

## **Re-examination**

He agreed that areas depicted from waypoints 28 and 30, shown in the photographs in PHa and PHb, were outside the area outlined in red on PO. He said however that all of the knocked over trees he observed were inside the red outlined area except for a couple at waypoint 32.

## **Observations**

I note in relation to Exhibits PSa and PSb that these are admissible pursuant to s79C (1)(b)(ii). What is of concern is that there is no “provenance” in relation to these images. They appear to have come into the possession of the witness via some land monitor project. The images come from what the witness refers to as a “land satellite”. There is no evidence from the witness as to what agency or organisation captured the images and how they came to be in the possession of the land monitor project group.

There is no evidence as to who or whom “enhanced” the images. There is no evidence as to the process of enhancement. There is no evidence as to whether the same entity enhanced both images or whether a different entity enhanced each of them. There is no evidence as to whether they were enhanced for the purpose of monitoring vegetation change or some other change. Certainly I accept that they were brought to the attention of the witness because they indicated to the land monitor group some change had occurred on the property.

## **RICHARD JOHN VAN DONGEN**

### **Evidence in Chief**

Mr Van Dongen said that he had been employed by DEC for just over 3 years as at 14 March 2013. In terms of qualifications he had a Bachelor in Environment Science where he had studied units in remote sensing. He undertook an Honours thesis while doing this degree which considered vegetation and deep drain sites in the Wheat belt areas. He was at the time studying his Masters in Special Science which also involved studying units in remote sensing and a project to consider satellite photography in mapping vegetation.

Two reports compiled by him and his statement in respect to the matter before the Court were tendered during the course of his evidence. See Exhibits PU<sub>i</sub>, ii and iii.

He explained that in the course of his work at DEC he did work for Craig Jacques (also a prosecution witness). He said Mr Jacques would send him a property identification that he wished to look at and some dates, between which he, Craig Jacques, wanted to consider land cover change.

Mr Van Dongen said that Jacques would have identified the aerial photograph that is in his, Van Dongen's report, and then requested a satellite image to look at change between the aerial photograph and a specified date.

The witness stated that he would then have gone and looked to see what satellite imagery was available and then purchased that. Again he would have checked with Jacques to ensure the image was appropriate and then undertaken an analysis on where he thought vegetation had changed or been lost on the property between the 2 images. This process is explained in the first of his reports.

He said that the images are loaded into mapping software and then the area of interest can be traced around.

He was asked to explain the similarities and or differences between images captured by a handheld camera, an aerial photograph and satellite imagery. He said that in his view they were essentially the same process ie they all were measurements of reflectance, albeit taken at very different distances. He said in relation to a satellite that it was just a sensor taking measurements of reflectance and "then we can make an image out of that."

Finally he said that in relation to the report compiled on behalf of the Accused by a witness Christopher John it referred to weather data gathered at Rocky Gully and that there were in fact much closer weather stations to the Accused's property than that one.

### **Cross Examination**

The witness was asked to explain a comment in his statement about "consistent processing" and whether in fact there could be consistent processing when a person was comparing aerial photographs to satellite imagery. His view was that across those two fields, comparisons between the two could be considered to be consistent processing.

Exhibit PSa and PSb were put to him. He said that he was familiar with the data sets used in those images and how they are produced. It was put to him that there were some puzzling differences between the 2008 and the 2009 images and the individual areas within those images. In particular he was directed to look at a pink area in the north in 2008 which is green in the 2009 image. He said that he would interpret that as stubble from a crop or recent growth. He said that "maybe it's an annual crop that has sprung up...."

He stated that these images were produced from Landgate ( there appears to be no evidence to corroborate this) and that they would have made the enhancements of the images. He stated that these are different from an aerial photograph and that is why those images were not used in his report. He said that he could not remember the exact bands used in the enhancement of the images but he was aware that they had used a "near infrared band" which highlights green vegetation and that is something that you "doesn't (sic) get that in a normal aerial photography."

He said that satellite images are enhanced to show particular features be they vegetation or geology. He said that the purpose was to make the images as close to true colour as possible. In relation to the images before the Court he said that he did not enhance the images in question.

### **Re Examination**

In re examination he was asked if the enhancement process was something undertaken by a software package or was an individual person colouring in various images. His evidence was that the individual analysing the image would select the red, green and blue bands then stretch those colours across the digital values and make it look normal. He said that the process is a fairly standard process but was difficult to describe.

He said that the desire is to balance the colours and the important aspect is that having done that you can compare areas within an individual image and then another image.

In relation to Exhibits PSa and PSb he said that he did not use them in his report as he used an image with a higher resolution.

### **Observations**

The images in the reports prepared by Mr Van Dongen do have provenance attached to them as opposed to Exhibits PSa and PSb. From this witness' evidence he clearly did not enhance those two images.

In relation to Exhibits PSa and PSb and the questions asked of him in XXN as to the changes in colour in the north, it is interesting what he ascribes those differences to. One being stubble which is clearly dead material not giving much ground cover or an annual crop that has sprung up. That suggests something green and of denser cover. In itself this answer would seem internally inconsistent.

I found Mr Van Dongen to be a witness who gave his evidence in a balanced manner ie he did not appear to be partisan in his approach to the prosecution.

At the close of the Prosecution case Counsel for the Accused made a No Case Submission. I considered that submission but did not rule in favour. I do not propose to canvas that issue in these reasons.

## **DEFENCE WITNESSES**

### **PETER ROBERT SWIFT**

#### **Evidence in Chief**

The Accused said that he was a mechanic employed state-wide by Charles Hull contracting. He stated that he purchased a property at Pindicup near Manjimup (the property in issue in this trial) in approximately July 2007. The purpose of the purchase was for a lifestyle property purely for pleasure.

The property was some 485ha and was located within the Shire of Cranbrook. At the time of taking over the property the witness described it as being in a very rundown state with the fences needing maintenance, particularly in relation to the northern end of the CA.

The Accused said that there were four pine plantations on the property which he believed had been planted between 1989 and 1991 in a profit a' prendre arrangement with the Forest Products Commission. (This evidence is confirmed by the Certificate of Title Exhibit PB which lists a number of these arrangements in the Second Schedule). This arrangement was for 30 years before eventual harvest. He said that he had not considered using any part of the property as a productive agricultural venture it was purely for lifestyle. In his opinion to support a viable agricultural venture in that location the property would have to be between 1500ha and 2000h

He said that since purchase he had only improved the property by maintaining and replacing run-down fencing and by keeping up firebreaks, access to water points and service tracks as per the Forest Products Commission guidelines.

He was taken to Exhibit PI and identified a white line running north south through the CA. He said that this was a drain (I will refer to as the central drain) put in before he purchased the property to drain water running north south on the property to prevent salinity problems in the local area.

He strenuously denied having;  
any commercial interest in the CA,  
ever removed, pushed down, killed, injured or otherwise affected vegetation in the CA,  
taken a bulldozer onto the CA.

He said that the first maintenance of the firebreaks after he took over occurred "around 2008" and that this had been a contract organised by the Forest Products Commission. Since then he had carried out that maintenance using a tractor pulling a Pederick root rake that had been left on the property and that he had "resurrected".

A photograph of the root rake was tendered as Exhibit D3. The Accused described how the blades on the rake can be set at various heights above the ground so as to catch up loose material that might present as a fire hazard, and remove it out to the side of the rake into windrows on one side.



The Accused then described various features on the property by way of pointing to these on a large aerial photograph. These included another man made drain entering the property in the central north and running west south west to meet up with the larger drain that runs north south through the CA. He said that these drains only flowed seasonally.

He went on to describe the rainfall patterns locally and that because of an ironstone ridge to the west of the property the predominantly west south westerly rain bearing winds would track to the north or south east of the property. As a consequence of this a property 5 to 10km from him could have significantly higher rainfall than his property.

His evidence was that he did not visit the CA regularly. He had however replaced the fence to the north of the CA using a grant from a Commonwealth funded agency South West NRM. His evidence was that this agency is funded to help protect and preserve natural vegetation and to try to enhance existing habitats.

He said that currently in the local area there were, at times, up to 5000 Carnaby cockatoos for whom the pine plantations have become a significant food source. It was not only that species for whom the pines had become a food source. He was anxious to ensure by fencing the area to keep livestock out of it that it would regenerate the previously cleared area and provide an alternate food source.

The Accused said he knew the area had been cleared because of the heaps of timber on it and the windrow. He said there would be some 13 or 14 heaps of dead timber that contained paperbark, melaleuca, banksia and a type of gum that was “pretty predominant” in the local area.

He then went on to describe how he maintained the central drain using the Pederick root rake. He said that he did this so that water would not be held back on the property and that it was needed to flush the saline water that flows after the beginning of the wet season. He said that as far as he was aware the drain had been put in for that purpose.

He again went into detail as to how the machine is set to rake over loose debris in the drain, that it is not designed or set to plough the land. He described the drain as being a shallow spoon type drain that was quite wide, in some areas up to 20m to 30m wide. He said that it was approximately half a metre deep.

He described how the loose debris is taken out the sides of the rake to be placed on the sides of the drain some 15m away from the centre of the drain.

In relation to the heaps of dead timber in the CA he said that they appeared to have been put there by a track type machine with a blade. His experience as a mechanic meant that he worked on large mining machinery and he was particularly familiar with bulldozers.

He described other features he had observed in the CA as tracks that might have been early seismic lines. Another track, being an access track, that runs west east across the area and some herringbone drains, being fine indentations, that ran into the large

central drain he had previously described. He also gave evidence of other service tracks within the area that had windrows to the side where the track had been pushed through.

He described the soil as sand over coffee rock with quite salty areas to the south of the CA some of which were covered by limited vegetation and were bare scorched earth.

He repeated that there was no reason for him to want to farm or develop the land he had purchased. His intention had always been to have the CA and beyond put back to its native state. He was asked if he had wanted to grow timber in the CA. He replied that it was not suitable for growing plantation timber

He gave evidence that after purchasing the property he had gone to work in the northwest of the State and was “not really at the property” during the period alleged in the prosecution notices. He thought that in 2009 or 2008-2009 there had been a big drought at the property as he had visited the property once and observed that the paddocks were all bare. He thought that this visit occurred in January 2009.

He said that vermin, as in feral animals, would track through the property, being the CA, to get to water in the north of the property. He said that this was the only water source in summer for about 10 to 15 kilometres.

In relation to fencing the CA he said that he had made the application for the grant after seeing an advertisement in The Countryman magazine. He said two officers from the organisation, based in Albany, drove out to view the property. That in company with himself they drove and walked through the property including the CA. His evidence was that this occurred in 2010 about the time he was contacted by Craig Jacques from DEC.

He said that as a consequence of receiving a message from Mr Jacques he called him back and spoke with him. Mr Jacques told him that he was organising a prosecution against him. He described feeling “deeply offended. I asked for an explanation and he wouldn’t explain himself”.

### **Cross Examination**

At the commencement of cross examination he was asked a series of questions relating to his operation of the Pederick rake and what he had used it to do. There appeared to be a degree of confusion both on the part of the witness and the cross examiner as to how the rake worked and exactly what areas it had been used in. The Accused clarified that, in relation to the CA, he had only used the rake to take debris from the central drain and that this had been done only once in May 2010.

He denied clearing any trees or any other vegetation in the area and maintained that the piles of timber and windrow already existed in the CA. The windrows to the side of the drain were as a result of his raking that feature. He repeated that the piles of timber existed within the CA and were mainly to the northwest corner and ran south along the west side. Then there were some isolated heaps within the CA separate to the windrows that did not result from his work on the drain.

Exhibit PO was put to him. He said that it was not a representation of his property as he knew it. He said it did not represent the state that he had ever seen his property in.

He was then asked about the firebreaks on the property. He said he referred to the southern boundary and the western side near the pine plantation where there was a track and a firebreak. He said that those firebreaks were outside the boundary of the contentious area. He was asked about the Forest Products Commission firebreaks and whether they related to the pine plantations. He replied that they related to the whole of the property. He explained that there was a firebreak around the vegetated area to the east of the CA.

He was asked if he knew of a business called Cardinal in Collie. He said that he drives past their yard, knows where they are and that they are an earthmoving business. He gave evidence that he had never hired a bulldozer from them and did not hire a bulldozer from them to clear the CA.

He said that he may have visited his property twice in 2009.

He was asked if he had ever cleared any land outside of the contentious area within the two years after purchasing the property. He said that he had never cleared any land on his property. It was put to him that he had stick raked about 100acres of vegetation on the property. He clarified that by saying that he had stick raked the paddocks on the property, which had already been cleared, to clear them of sticks.

He denied stick raking in the CA, other than maintaining the drain, and he denied undertaking any other mechanical activity in the CA. He also said that he had not allowed any other person to carry out mechanical activities in the CA.

In respect to the paddocks he observed affected by drought in 2009 he said that they were pasture paddocks with no native vegetation in them.

He was then taken back to the issue of the drain and reiterated that he had only cleared debris out of it to allow water to flow unobstructed through the property. In doing so, he said, he did not disturb the soil. He said that the windrows thus created by the use of the Pederick rake contained sticks, twigs and debris from the drain. He agreed that he did not speak to any government authority before doing maintenance on the drain.

## **Re examination**

In re examination he said that when he visited the property during the drought the whole of the vegetation throughout the general area was very dry and sparse. He stated that the contentious area is fenced.

With respect to Exhibit PI he said that the red outline on that exhibit lies inside the fence line at the northern end of the property and next to the fence on the western side and in the south the fence is on the north of the redline. In respect to Exhibit PO he said that the fence line was further to the west of the red outline compared to PI.

A photograph, number 54, from Exhibit PH was put to him and he was asked if he recognised that as being a windrow he created with the Pederick rake in May 2010. He appeared a little confused as to what he was looking at but thought it would have been part of his actions. He was asked if Mr Jacques took the photo in March 2010 could he, the Accused, have been mistaken about his date of May 2010. He said he wouldn't have thought so.

He agreed that if he needed a bulldozer he had access to any of 200 bulldozers that belonged to his employer.

## **Observations**

The Accused impressed as a witness of truth and genuineness. He was clearly not only frustrated by the bureaucratic process but the process of trial itself. At times in cross examination he appeared cross, either with himself or the prosecutor, as he seemed unable to make her understand his answers, particularly in relation to the operation of the Pederick rake. That in my view was understandable. Here was a witness with mechanical knowledge and experience trying to explain something to someone who on the face of it did not possess such knowledge. I found his answers quite clear in relation to that issue. He was not rude and he did not obfuscate.

On being shown Exhibit PO he was shocked. Again this appeared to be a spontaneous reaction even though he had seen the photograph before. From his evidence he seemed unable to comprehend the image, as he was very clear that he had never seen his property in the condition depicted by that image.

In respect to his evidence regarding his application for a grant to fence the CA and the visit by the two officers from south west NRM (which I take to be part of the Federal government's national resource management initiative, as it is commonly understood) he was not challenged in any way. I am of the view that is of some significance. It begs the question why would a person, whose evidence is that they have purchased this property as a lifestyle property to rehabilitate it, so it will be able to support birdlife when the pine plantations are harvested, wholesale clear approximately 18 hectares. Then why would they go and make an application for a Commonwealth grant to fence the area off. That is illogical. The Accused was not challenged as to his motives to purchase the property. It was not put to him that he had some other agricultural purpose in mind.

In considering issues of credibility as they relate to the witnesses generally and this witness in particular, I have paid careful attention to the guidance offered in *State Rail Authority of New South Wales v Earthline Constructions Pty Ltd (in liq) and Others (1999) 160 ALR 588*.

In *Bropho v State of Western Australia (No 2) [2009] WASCA 94* Miller JA made note (at p13) that in dealing with the credibility of witnesses the Judge, at first instance, had paid particular attention to the evidence of the complainant and despite

acknowledging some matters that militated against credibility came to the following conclusion:

I have....come to the firm and unshakable conclusion that she is telling the truth when she says that she was sexually abused by the accused from the time she was 11 years of age through until she was 22 years of age. I have no doubt about it whatever. Her evidence before me had the ring of truth and all the conviction of a truthful witness who had endured the acts of which she complained. There was not to me any hint of fabrication or malice or hidden motive for making a false complaint. Rather, she was, as a witness, for me, entirely credible.

I too form a similar view about the Accused. Despite the imagery of some of the aerial and satellite images he impressed me as a witness of conviction and truth.

## **GLYNN KENNETH BEVAN**

### **Evidence In Chief**

Mr Bevan gave evidence that he owned properties on Pindicup Road, Mordalup and that one of these, "Hafta", bounded Mr Swift's property to the west on what he referred to as the "high side". He said that he owned 3000 acres or 1200 odd hectares and had been farming the properties for 30 years.

He gave evidence that that particular property ran all the way along the Accused's western boundary. He also said that he visited the area sometimes up to three times a day depending on the season and the farming activity at the time.

He gave evidence in relation to Exhibit PI that his property was to the west of the pine trees in the western area of the Accused's property. His evidence was that his property was at a higher, steeper elevation than that of the Accused's. He said that his property was quite an elevation from the boundary fence and that he could look down into the Accused's property that was in a gully below his.

He said that when the Accused purchased the property it was in an "abandoned" condition. The fences "were gone, no fertilizers, abandoned". He said it was not viable in any way.

In respect to Exhibit PI he said that the drain in the CA was rundown when the Accused purchased the property .that it was full of sticks and debris. He gave evidence that he understood that the drain had been commissioned by a government department in the very early 1990's to ensure runoff from the area.

He gave evidence that the area is subject to significant problems with feral animals. He described them as “monstrous”. He said that this was because the animals needed to get to water as there was only salty water in the surrounding reserves.

He described the CA as being a sheet of rock with very little soil on it. He said that the rainfall in the area had been awful for the last nine years and these had been, on his evidence, the worst farming years he had ever had. He said that the years 2009 and 2010 had been the worst years, describing the effect a “devastation, cruel”.

He gave evidence that he had never seen the Accused carrying out any clearing in the CA. He was very firm about this in his evidence. He said that he would drive past that area four or five times a day and would work the paddocks above it “a fair bit of the time”. He described the Accused’s property as being in a gully below his and that if someone was using a tractor or bulldozer on that property he would hear the echo in the gully.

He had not seen any evidence of clearing on the property since Mr Swift had purchased it. He had seen clearing, including in the CA, by the previous owner, Mr Phillips, in the early 1990’s, although he said he was not good on dates. He described that Phillips pushed over the vegetation then heaped it up, then burnt it and spread it. He said it was not all burnt and that you could still see the heaps on the land.

Mr Bevan said that one day when the Phillips was working in the CA he walked over to him because he thought that the machine he was using had a mechanical problem. He said that there were two bulldozers working at the time.

He described that after the pine plantations had been planted he and some employees of Phillips constructed a fence on the western side of the property to stop feral cattle. In the course of this he had driven his tractor through the CA. He observed dead vegetation (my words) and that that was presently still visible. He had also checked on the drain in that area.

He gave evidence that the drain had been planned and constructed by a government department under the auspices of a Nick Cox as part of a drainage system for the general location. I take it that this is the same Nick Cox referred to in Exhibit D1. He described it as a shallow drain that you could drive vehicles through. He said that by the time the Accused bought the property the drain was a concern to him because of the amount of debris in it. He described that this can build up a dam of water behind it that then bursts and then destroys fencing.

### **Cross Examination**

Exhibit PI was put to the witness and he was asked if the image looked like the property when it was sold. He said that he imagined it looked similar to it. He said that there were a few trees but any that were still standing were dead on the top. He said that these were mostly in the north of the property where Phillips had been burning heaps.

He said that the CA was mostly a sheet of rock with little soil on it and that there was mainly salt type bush and reeds growing in it. He said that the area to the east of the CA had tea tree, scrub, prickly bushes and introduced species. He said there was not “lagoon” type vegetation in that area and he would not agree with the Prosecutor that that area contained vegetation that had until recently existed in the CA. He said the reason for this was because the two areas had different profiles. He agreed that there were reeds growing in the area and to the south. He said that he was concerned about their growth because they helped prevent salinity.

Thereafter followed a very confused series of questions and answers between the witness and the Prosecutor. It was apparent this was partly as a result of the witness being hard of hearing and partly because his use of the vernacular thoroughly confused the Prosecutor.

He recalled that Phillips had cleared land to grow pumpkins. These were grown a little to the north of the CA. He guessed that it might be 50m to the north “...that’s a guess. Because he cleared land along there until he could find the best bit.” He said that it was all cleared and pushed over and that the logs were still there in heaps. He said that was Phillips’ pattern of clearing.

He described droughts on the property and plagues of grasshoppers. He said that he had never seen the Accused clear anything on the property. He had noticed that the drain had been cleaned out but had not seen it being done. He had noticed that the Accused had fenced the CA.

He was asked if the Accused was a friend of his and he replied that he had not known him long. He agreed he had strong feelings about the prosecution before the Court.

### **Re examination**

He was asked about the effect of the 2009 drought on the CA. He said that the drought wiped it out. He said everything died and blew. He described the area as having a unique microclimate and agreed that was different to areas five to ten kilometres away. He said that the Accused had fenced the CA and more of the property, pointing out the areas on Exhibit PI.

### **Observations**

While the witness was a little hazy as to dates when he made certain observations I have no doubt that he was a witness of truth to the best of his recollection. I accept he holds strong views about the prosecution before the Court and about bureaucracy but he could not be shaken about what he could observe and hear from his own property as to what was or was not occurring on the Accused’s property.

His use of language, his phraseology were clearly of another era but they did not detract from the fact that he was a very experienced farmer who had made observations over a lengthy period of time. I find that the most compelling of his evidence related to the manner in which the previous owner, Noel Phillips, had gone about clearing his property. That is it appears to have been wholesale and indiscriminate. He said that Phillips cleared everything until he found the best bit .....“that was his pattern of clearing”.

## **CHRISTOPHER DAVID JOHN**

### **Evidence in Chief**

This witness prepared a report in respect to the property in question and it was tendered as Exhibit D5

Mr John gave evidence that he had an Honours Degree in Agricultural Science and a Doctor of Philosophy from the University of Western Australia. He described his occupation as an Environmental Management Consultant and had practiced this since 1990. Prior to that, he had been the Environmental Manager at Worsley Alumina. Between 1975 and 1980 he said that he worked as an academic and researcher in universities in Britain, Germany and Melbourne.

He said that he had been involved in the mining, oil and gas resources sectors and in agriculture. He was familiar with the use of aerial photography, satellite images and had used both to interpret vegetation cover. He said that he visited the Accused’s property in March 2013 and that he had made notes in relation to what he had observed at each of the waypoints depicted on Exhibit PI.

In relation to windrows and heaps that he observed he said he could not date them with precision but that clearly some were very old. He said that some of the windrows contained smaller vegetation that had been cleared out of a waterway he described as running north south through the CA.

The witness was asked to comment on the age of the vegetation in the windrows and how that might be assessed. He said although such an assessment would be subjective, experience would assist. He observed that some of the vegetation had fire marks on it and this coupled with the fact that some “dumps” had “volunteer vegetation” growing up and through the heaps suggested they were relatively old. He estimated of some 5 to 10 years.

He said that although there were some heaps on or near firebreaks they tended to be spread throughout the area currently partially revegetated. His notes, made on the day



of the visit, stated “on ground many years (more than a few)” He repeated that he couldn’t be more specific except to say at least 5 and probably not more than 10 years.

In his opinion the hydrology of the area indicated that the water naturally flows north to south. He described the area as relatively low lying compared to the surrounding terrain and that it would “pond” after rainfall. He gave evidence in relation to rainfall in the area and the effects of topographical differences on weather saying that rainfall could vary over a few kilometres or less. In describing the physical features of the CA he said it was “typical, very sandy poor quality soil underlain by what the locals call coffee rock.” None of this evidence appears in contention and I accept it.

He observed that in some parts of the CA the coffee rock was at the surface and elsewhere a half metre below the surface. He said that the soils on top of the coffee rock were very sandy light soils.

He gave evidence as to the effects on vegetation growing in these environmental physical conditions and particularly the effects of the water table dropping below the coffee rock and its impenetrability to plant roots.

Mr John said that he did not see any other evidence of vegetation being cleared in the CA other than that in the heaps and one Xanthoria that had fallen over as a result of borers. His evidence was that in his opinion that since late 2007 there had been no serious disturbance of living vegetation except for some windrowing of dead material from the drain.

He then gave evidence regarding the comparison between satellite and aerial photography images and the distinctions in the pixel sizes used in the two images. He considered the differences in the images and how that impacts on the interpretations of the contents of the images.

With respect to Exhibits PI, PO and PM he said that of particular concern was that the waterway (which I understood from his evidence to be the drain in the CA) was that it was non-existent in the 2009 satellite image. His opinion was that that was a lack of resolution in the imagery. With respect to PO he said that what is depicted as white in that exhibit was not necessarily bare earth but could be a difference in reflectance as a result of drought or disease. In his opinion it would be preferable to compare like with like – in other words as I understand his evidence it was not reliable to compare satellite images with aerial photographs.

He then went on to give evidence as to the difference in processing of the two images i.e. satellite and aerial (see p 73 transcript 27/6/2013) and in particular the process of colour to be applied to a satellite image to depict a particular desired feature.

### **Cross Examination**

From the outset the witness agreed that he did not have any technical qualifications with respect to aerial and satellite imagery but that his general scientific background was of assistance to him. He said that most of the satellite imagery that he had used

in his course of his work was “Landsat” satellite imagery. He agreed that he had been shown some Landsat images in relation to the property subject to the prosecution.

He indicated that he had also used other imagery that had higher resolution. Exhibits PSa, PSb, PO and PM were all put to the witness. He agreed with the proposition of the Prosecutor that in relation to the two latter exhibits they were certainly in relation to scale “of the same order”. He would not concede that the images could be reconciled. He indicated that even if the pixel sizes in the images were identical- and there was no evidence that it was- there could be differences in the images occasioned by the fact that an image can be an original or a multiple generation of reproduction. He did agree that on the face of it PO and PM appeared to be images with the same pixel size.

He conceded that vegetation visible in 2007 was no longer visible in 2009. He would not agree with the Prosecutor’s assertion that the Exhibits indicated a substantial loss of vegetation between 2007 and 2009 in the CA.

He did not agree that in relation to the area to the east of the CA, in 2007, the vegetation and its density was the same as in the CA. He said the vegetation may have been similar in some areas. When pressed he said that the vegetation in the CA and in the area to the east was different and suggested that this was because of different soil types.

He was asked who had been present on the property when he inspected it. He responded that there had been the Accused, his neighbour Mr Bevan and his legal Counsel. He readily admitted that they had discussed the facts of the case during the course of his inspection.

It was put to him that during the inspection he was looking for some “non-human explanation for the deaths of those plants” in the CA. He disagreed saying that it was clear that there had been clearing in the area 30 – 40 years previously and 10 years previously. He described the regrowth as “typical regrowth” (p 82 transcript June 2013). He reiterated that he did not believe that there had been significant clearing activity in the area in 10 years and certainly not within 5 years.

He said that he was able to distinguish material that had been windrowed out of the drain from material otherwise lying in the area. He described the former as very fine material. He was then taken to Exhibit PH and in particular to photographs that the Prosecution asserted indicated ground disturbing activity. He agreed that in relation to photographs of disturbed ground that these related to firebreaks or access ways and that he did not see evidence of ground disturbing activities (I take it from the tenor of his evidence this was in relation to recent activities) in the CA.

He said that in his opinion that what appeared to have happened in the CA in the relevant period was not inconsistent with a drought. In response to being questioned about his expertise he said that he had been involved in environmental management in the Swan Coastal Plain of the State for 32 years. He had been involved in a number of instances involving compliance with environmental protection policies involving wetlands and had developed a familiarity and competence in the field.

He was then asked again about hand held cameras, aerial and satellite images and he said that the method of detecting reflected energy by those three modes was markedly different albeit there is “the same sort of fundamental methodology in the same was that amphibians breathe air just like humans.”

## **Observations**

I accept that Mr John did not have the equivalent formal qualifications as did the prosecution witness van Dongen in relation to satellite imagery. However he did have, on his evidence which I accept, lengthy experience in the use of aerial and satellite imagery and extensive hands on experience in environmental management. In my view this experience qualified him to make a report on his observations of the area in question and in particular with respect to vegetation living and dead.

I did not find him to be a partisan witness. Although he held firm views in relation to distinctions in aerial and satellite imagery and the efficacy of comparing the two, he was prepared to concede points on which he did not have material experience or qualifications.

## **COUNSELS’ SUBMISSIONS**

The Court has had the benefit of detailed and lengthy written submissions from both Counsel and those are incorporated into these reasons.

I simply wish to make one comment in relation to an issue raised by Counsel for the State. Ms Elliot suggests that on the evidence of the Accused that he maintained the drain in the CA with a Pederick rake, this would amount to clearing for the purposes of the Act. She suggests that if the Court was to accept that this occurred within the relevant period then the case would be proved.

Counsel directed the Court’s attention to the decision of Martin CJ in *CEO of Department of Environment and Conservation v Szulc [2010] WASC 195* at 9 as authority that “raking” comes within the definition of clearing. I do not read this passage of His Honour’s decision as a finding in that regard. His Honour was simply stating the terms of an injunction with a degree of specificity that included the terms of clearing in the relevant definition sections of the Act as well as the word raking..

In the circumstances of this matter the State’s case against the Accused was never put on the basis that his maintaining the drain amounted to the clearing alleged. Even if I did find that this occurred within the relevant period, which I do not, to say that maintaining a drain constructed by one government department, or under instructions from that department, in relation to the growing of trees under a contract with the same or another government department amounts to an offence under legislation administered by another government department is to create a farcical situation whose proportions could only be envisaged by Sir Humphrey Appleby.

Both Counsel made submissions about the approach to interpretation of the relevant legislation. Counsel for the Accused says that s51C of the EPA operates to regulate and limit owner's rights and points to the High Court decision in *Fazzaroli v Parramatta City Council (2009) 237 CLR 603* to support his submission that where more than one interpretation of such a provision is open "the one to be favoured is that which interferes least with private property rights" (page 8 Counsel's written submissions).

Counsel for the Prosecution submit that the objects and purpose of the Act colour the interpretation which ought be given a broader application in the light of the principles enshrined in the Act. I have considered both submissions.

## **NON CONTENTIOUS ISSUES**

No doubt that as of the 12 June 2007 the Accused was the owner of Lot 1 Diagram 67189 Bunnings Log Road, Frankland River.

It is not in issue that he purchased the property from Noel Phillips who had owned or who had had an association with that property for 35 years.

The qualifications and employment positions of the Prosecution Witnesses Stryke, Jacques and Van Dongen are not challenged. It does not appear to be in contention that the Prosecution witnesses Stryke and Jacques observed piled up material when they visited the property in late March 2010, ie they observed a windrow (Stryke) windrows (Jacques) and separate piles of dead material. Again it is not in contention that the material was native vegetation.

It is not challenged that the witness called on behalf of the Accused Glenn Bevan was his neighbour and was also the neighbour of Noel Phillips when he owned the property.

The rainfall records from the Bureau of Meteorology were not challenged as to their accuracy although their relevance to this property is in question.

Nor is it in contention that the area in question fell within an "Environmentally Sensitive Area as that is defined.

## **CONTENTIOUS ISSUES**

It is apparent that there are two main issues of contention.

1. That “a person” cleared the land – in that regard see Counsel for the Accused’s submissions which I do not repeat here.
2. That the person who cleared the land was the Accused – in that regard see the presumption as it relates to ownership and the onus on the Accused.

Despite the Accused’s Counsel’s submissions I am of the view that the evidence presented by the prosecution and the defence, in particular the oral evidence of Stryke, Jacques, Jacques photographs, PHa and PHb and Exhibits PO and PR, the evidence of Phillips, Bevan and the Accused, the land in question was cleared at some time. It also seems to have been cleared by some large machinery possibly with a blade or bucket.

There is no doubt in my mind that such a machine must have been operated by “a person”. The live issue is whether it was the Accused who was that person. A fact he strenuously denies.

## **FINDINGS**

Putting to one side the aerial photographs and the satellite images there are the direct observations of witnesses and the admission of Phillips that the land had been cleared. The evidence of Stryke and Jacques in this regard is referred to as “ground truthing”.

On the face of the aerial photographs and the satellite imagery the case against the Accused may seem conclusive. However the acceptance of what those images portray without reservation and consideration of other evidence carries with it the potential for a miscarriage of justice.

The Prosecution in this regard rely on a comparison between aerial photographs and satellite images. In essence the witness van Dongen says that the principles related to the making of the images by the two processes are the same, just as they are with the creation of an image by a handheld camera.

As I understand it the Accused’s witness Johns disagrees and says that the method of production of the image and interpretation of the content of these images is different. Principally because different computer programmes are involved.

In his report, Exhibit PU1 the prosecution witness Richard van Dongen explains how he came to be in possession of the satellite images. That is he purchased them

through a local reseller as agent for the company DigitalGlobe who captured the imagery. Likewise in Exhibit PU2 he sets out how he acquired the WorldView-1 image also supplied by the same agent Sinclair Knight Merz Pty Ltd. I accept that evidence.

I accept that the images in question are admissible pursuant to s79C (1) (b) (ii) of the Evidence Act 1906. That is they are images captured of the property on 13 December 2009. For simplicities sake I simply refer to these as the raw images. These are not, as I understand it, “enhanced” or “manipulated” images used to analyse the vegetation change as we see in PSa and PSb.

van Dongen’s evidence is that when “consistent processing is applied to images over time, changes in texture indicate changes in surface cover.” (see PU3) As I understand this he is actually referring to a physical location when he is using the word “image” as opposed to consistent processing being applied to a satellite created image. So that consistent processing applied to the location subject to this trial would over time give a clear picture of any changes in vegetation. The difficulty is that we do not have consistent processing applied to this location over time. The prosecution are relying on a number of different processes applied to the location, albeit as van Dongen states in relation to comparisons of those processes “...essentially it’s taking measurements of reflectance and making and (sic) image out of it. The exact same principle applies to a satellite.” (see p49 14/3/2013)

He gave some evidence as to the general manner in which a band combination would be used in relation to the creation of images such as Exhibits PSa and PSb. He said in XXN that those enhancements had been done by an outside agency “Landgate” and were not something he would use in his reports as in his opinion they did not represent true colour. (See p52 transcript 14/3/2013). Also at the same page of the transcript he said that the images PSa and PSb created by Landgate were different to an aerial photograph. I accept that the method of enhancement and analysis may be complex to explain but without that explanation it is an unsatisfactory situation. In that regard by way of comparison I note the detailed evidence given in relation to these circumstances in *Department of Environment and Climate Change v Olmwood Pty Ltd (2010) NSWLEC 15* (Land and Environment Court of New South Wales). In that instance the Court held strict views about the provenance of the aerial and satellite images or lack thereof.

It would appear from the numerous cases in the New South Land and Environment Court that I have considered (some of which are listed at the end of these reasons) that the Court has found against an Accused on the basis of the use of both aerial and satellite images tendered as Exhibits at trial. However in the cases that I have read and referred to, the Court has always been able to compare like for like. That is, where the Court has had both kinds of images before it, it has had a number of consecutive images of the same kind by which to make comparisons and find facts. See *Olmwood above; Director-General, Dept of Environment and Climate Change v Caloman Australia Pty Ltd; Iroch Pty Ltd; GD & JA Williams Pty Ltd t-as Jerilderie Earthmoving (2009) NSWLEC 182; DalmienP/Lv Director General Dept of Infrastructure Planning and Natural Resources (2005) NSWLEC 2004* That is a very different situation to the matter before this Court.

If this were a criminal trial involving the analysis of DNA evidence then the evidentiary matters involving the forensic trail leading to that analysis and the method of analysis would be closely examined.

With respect to the evidence of the enhanced satellite images PSa and PSb there appears to be a conflict in the evidence of Jacques and van Dongen as it relates to what the colours represent. Jacques' evidence is that "...the very light green areas are grass and pasture", that pink indicates "probably dead pasture, like dry grass." van Dongen says bright green is "stubble from a crop or recent growth.....maybe it's an annual crop that's sprung up..." So there is a conflict not only between the two as to what the colours indicate but there is an internal conflict in van Dongen's evidence. I say that because stubble is very different to an annual crop that's sprung up. By its very nature stubble is dry and sparse and an annual crop would be expected to be green and more dense.

While I accept what van Dongen said in relation to the comparison between areas of land on the one image that can be made as a result of the technology I do not think of its own it is conclusive of the matter. Clearly "ground truthing" is required and that also needs to be rigorous.

Jacques was asked in XXN if he had conducted this in 2007 and as a matter of logic I accept why he had not as the issue had not come to his attention at that time. However it is also obvious from the evidence before the Court, see Exhibit D1, that Noel Phillips had taken photos of his property for the purposes of its sale in 2007. Those were not before the Court.

The Accused called evidence from Christopher David John who had prepared a report in relation to the property following a ground inspection of it on 11 March 2013. As I have referred to earlier in these reasons he was XXN'd at length in relation to that report.

In essence he questions the validity of comparing aerial photography with satellite imagery. Counsel for the prosecution questioned him extensively regarding the process of creating aerial photographs and satellite images and enhancements of images. I remind myself that Counsel's questions are not evidence only the answers of the witness are. Counsel also questions the witness's qualifications in regard to this evidence as opposed to the qualifications of the prosecution witnesses Jacques and van Dongen. It is submitted by the Prosecution that the evidence of these two witnesses should be preferred.

I do not have a difficulty in accepting the witness's evidence as he has clearly demonstrated that his experience coupled with his academic qualifications makes him qualified to give that evidence. See *Bennett v R (1998) 100 A Crim R 228*, *R v Duncan (1969) 90 WN (Pt 1) NSW 150 (CCA)* and *Makita (Australia) Pty Ltd v Sprowles (2001) 52 NSWLR 705 at 743-4* Heydon JA

I also accept that as the finder of fact I am not bound to accept and act upon the "expert" evidence of any of the witnesses. I am also as the finder of fact not to disregard it capriciously. See *R v Hall (1988) 36 A Crim R at 370* Roden J. As finder

of fact I am bound to consider that evidence together with all of the other circumstances that I find to be proved.

The State clearly asks the Court to draw the conclusion that the Accused caused or allowed the CA to be cleared between the relevant dates. If one looks to Exhibit PO and PR the inference to be drawn is that the clearing was more likely than not done by a machine with a blade or a bucket.

Exhibit PR bears no date on it as to when it was captured (it has a date on it when it was produced). There is no evidence before the Court from any other witness as to its date of capture. The exhibit does indicate it is a satellite image and it does look remarkably similar to the satellite image of 13 December 2009 Exhibit PO.

On 6 December 2012, at the commencement of the trial, Counsel for the Accused voiced his objection to the tendering of Mr van Dongen's report "by consent". He also voiced his objection to the tendering of the proposed Exhibits N and O on the Proposed Exhibit List of Items to be Tendered by Consent. Later at the end of that day of trial Counsel for the Prosecution clarified that proposed Exhibits N and O were 2 versions of satellite image 1312/2009. (see pages 57&58 of that date) They were then marked for identification.

On the resumption of trial on 14 March 2013 the satellite image 1312/2009, which shows two distinct areas outlined in red, was tendered by consent (see transcript p3).

PO has two areas on it marked in red indicating two CAs. The area to the east shows no indication of the type of markings shown in the larger marked area to the west. There is no evidence as to whether this image was enhanced to show vegetation for the purposes of analysis or to show geology or some permanent ground feature or some ground activity. There is no evidence that PO is the same image as the satellite image described in van Dongen's reports (see Exhibits PU1 and PU2 and PU3 ) or that it is an enlarged version of a part of the satellite images in PU1 and PU2. Common sense and life experience indicate that this imagery can be used to show features that are not visible to the naked eye but depict earlier activity. So while I accept that it has been tendered by consent (for how this came about see above) and therefore its contents are not challenged it does little more than tell the court that at that date this image was captured. Without knowing more about this image it must be treated with caution.

However I accept that the report of van Dongen (PU2) clearly refers to a certified WorldView-1 satellite image captured on 13 December 2009, how that came into existence and how it came into his possession. That however is not Exhibit PO.

What is clear from PO is that there has been, at some time, ground activity that by inference is a result of human intervention. That is I find that the human intervention has been the use of a machine. What very clearly is NOT depicted in that image and were later observed by Jacques, Stryke and John are windrows or the central drain that runs north south through the centre of the larger outlined area so clearly visible in the aerial photographs.



This begs the question were the windrows pushed up sometime after 13 December 2009 and before the visits to the property by Jacques and Stryke in late March 2010. On the evidence of both Jacques and Stryke that is not an inference that could be drawn and the photographs taken by Jacques at that time bear that out. That is that the material in the windrows had been there in that state for some time. It is clear from some of the photographs in Exhibit Hb (the glossy photographs see Nos 45, 54, 55, 56 and 61) that the windrows have sedge like plants growing up and through them.

I form the view on the evidence of Jacques and John in relation to the length of time the material had been in the windrows that it is more than probable that it had been there for up to five years at least.

PO also does not indicate any activity to the east of the larger area marked thereon that would indicate the areas that Noel Phillips said that he had singly pushed over and that needed burning. Further the area to the east outlined in red does not seem to indicate that it has been subject to the same type of activity as indicated in the larger outlined area.

Jacques evidence, which I accept and find as fact, as to what he observed of machine like markings on the ground are that they were substantially outside the red outline and related to firebreaks, again is inconsistent with PO.

It must also be remembered that the photographs that principally show large cleared tracts do on the evidence of Jacques and John relate to firebreaks or tracks.

When one considers other features in the image, such as the pines in the pine plantation, one would think that the very long windrow, and others, described by Jacques and the drain described by the Accused as being 30 – 35m wide in places, would show up. The drain of course being observed by Jacques and subject to his view as it relates to photograph 58 taken looking southwest at waypoint 29.

Is there some other rational explanation for what PO indicates. John says that the lighter reflectance could well be as a result of drought affected or diseased vegetation. I do accept the evidence of the Accused and Bevan that the area has a weather pattern that does not reflect that of surrounding areas. As the Accused said it is unique and can differ significantly from any area only 5 kilometres away.

Although I accept the area has a unique weather pattern the rainfall records of the nearest rainfall station at Balgarup do give a general indication of the rainfall received in the local area. It must be borne in mind that on the face of Exhibit PTa that this rainfall station is at least 20km, as the crow flies, east of the Accused's property. The records clearly indicate less rainfall in the latter part of the relevant period and early 2010.

When one looks at Exhibit F, an aerial photograph from 13 December 2004 the relevant area and the area to the east is much more denuded than in Exhibit PE an aerial photograph from 23 April 2000. Many more tracks show up and what appeared in PE as a thin dark line running north south in the eastern area of the CA appears in PF as a much lighter colour than the surrounding vegetation. In fact the red outline in

Exhibit PI sits relatively comfortably over the CA in the year depicted in PF and over the same area depicted in PG.

I have looked very carefully at PF, with a magnifying glass, and it is clear that human activity as it would relate to clearing activity has occurred in the past. This is most easily discernible on the southern boundary to the eastern area of the CA. An L shaped sharp edged area is apparent with what appear to be underlying marks of clearing travelling from this to the north east.

As at 31 December 2004 the area had received some 230mm less rainfall than the year before. In my view it is open to inference that the loss of vegetation is as a result of that lower rainfall. Equally so Exhibit PTb indicates that as at the end of 2009 the Balgarup rainfall station indicated nearly some 139mm less rainfall than the previous year. Particularly of note is that in the final 3 months of the year there was 153.4mm less rainfall than in the same period in 2008.

The State submits that the Court should use the comparison of the aerial photograph Exhibit PG with the satellite image Exhibit PO to conclude that the clearing has occurred in the relevant period. They say that images created by two different methods or computer programmes are able to be compared like for like.

The State say, that on the evidence of Jacques, there are no windrows visible in PG therefore at that point in time they did not exist. There are no windrows visible in PO so applying the same logic they cannot exist. Yet the State submit at paragraph 41 of their submissions that the windrows were created before the end date of the relevant period covered by the charge ie 13 December 2009. If that is so and hypothetically they were created after the image of 13 December 2009 was taken, yet on the same day, could the vegetation depicted in the photographs taken by Jacques on 30 March 2010 have grown to that extent? In that regard it must be borne in mind that this is in a time of lower rainfall than usual and described as a drought by at least one witness.

There is no evidence to suggest that is possible and common sense applied to a study of the photographs suggests otherwise.

Let us also go back and consider Exhibit D1 and Exhibits PL and Exhibit D4, the latter two being aerial photographs purported to be taken on the same day 25 February 2008.

D1 sets out the built features of the property and then lists a breakdown of what various hectares of land are put to use. One such item is that at 26<sup>th</sup> March 2007 there is a 40 hectare lake. This cannot be a typographical error as it is consistent with an addition of the other hectares adding up to approximately the total number of hectares which appears at point 1 of that document. But when one looks at the aerial photographs, tendered in the trial, no lake is visible. There is no large body of water nor is there any bare area that would suggest an empty dried up lake. This is particularly significant given the so called lake would be slightly more than double the area of the CA.

These matters, these unexplained inconsistencies, along with all the others that I have referred to in these findings, simply go to the vexed question of the reliability of the

images both aerial and satellite when considered with that other evidence. These matters coupled with the evidence of John as it relates to the caution to be applied to comparing the two types of images, as opposed to like for like, cause me to be satisfied that the Accused has on the basis of his evidence, which I accept, discharged the onus upon him to the requisite standard.

I find on the totality of the evidence that the case against him is not made out.

## **CASES REFERRED TO IN CONSIDERATION**

John Nominees Pty Ltd v Dixon [2003] WASCA 51

State Rail Authority of New South Wales v Earth Line Constructions Pty Ltd (In liq) and others (1999) 160 ALR 588

Bropho v The State of Western Australia [No 2] [2009] WASCA 94

CEO of Department of Environment and Conservation v Szulc [2010] WASC 195

Fazzaroli v Parramatta City Council (2009) 237 CLR 603

Department of Environment and Climate Change v Olmwood Pty Ltd (2010) NSWLEC 15

Bennett v R (1998) 100A CRIMR 228

R v Duncan (1969) 90 WN(PTI) NSW 150(CCA)

Makita (Australia) Pty Ltd v Sprowles (2001) 52 NSWLR 705

R v Hall (1988) 36A CRIMR

Archibald v Byron Shire Council [2003] NSWCA 292

Director-General, Department of Environment Climate Change v Walker Corporation Pty Ltd [2011] NSWLEC(2)

Dalmien Pty Ltd v Director-General, Department of Infrastructure Planning and Natural Resources [2005] NSWLEC 204

Director-General Department of Environment Climate Change and Water v Venn [2011] NSWLEC 118

Pollock v Wellington (1996) 15WAR 1

Director-General, Department of Environment and Climate Change v Mario Mura [2009] NSWLEC 233

Director-General, Department of Environment and Climate Change v Jack & Bill Issa Pty Ltd (No 5) (2009) NSWLEC 232

Director-General, Department of Environment and Climate Change v Calman Australia Pty Ltd; Iroch Pty Ltd; GD & JA Williams Pty Ltd t-as Jerilderie

Earthmoving (2009) NSWLEC 182 (Land and Environment Court of New South Wales, Australia)

Kermode v Department of the Environment & Climate Change (2009) NSWADT 120

Slack-Smith and Another v Director General of the Department of Land and Water Conservation (2003) NSWLEC 189