TO THE CEO:

TRANSITION TO ENFORCEMENT OF *NO CAMPING* AT A HIGHWAY PARKING BAY, SHIRE OF DENMARK, WESTERN AUSTRALIA

by Jim Goodsell 06/06/2013

Table of ContentsPage
VALLEY OF THE GIANTS HIGHWAY PARKING BAY (VHB)2
TOURIST CENTRES NEAR THE VHB3
CARAVAN PARKS and CAMPING GROUNDS REVISED ACT(1995)/REGULATIONS(1997)3
VALLEY OF THE GIANTS ECOPARK CARAVAN PARK4
DAILY DUSK/DAWN RECORDING AT THE VHB OF CAMPER-GROUP USE4
RESULTS OF RECORDING AT THE VHB OF CAMPER-GROUP USE4
MODEL OF DAWN CAMPER-GROUP USE OF VHB DURING NON-ENFORCEMENT OF THE <i>NO CAMPING</i> REGULATIONS 1996-20116
CONCLUSIONS7
RECOMMENDATIONS8
REFERENCES8
APPENDIX:
MAP 1VHB's EPHEMERAL CREEK9
GRAPH 1DAWN CAMPER-GROUP USE OF VHB FOR 76 CALENDAR WEEKS (MON-SUN) 2011, 2012 and 201310
TABLE 1MODEL OF DAWN CAMPER-GROUP USE OF VHB DURING NON-ENFORCEMENT OF THE NO CAMPING REGULATIONS 1996-201111

VALLEY OF THE GIANTS HIGHWAY PARKING BAY (VHB)

Illegal camping introduces hazards into an environment and compromises the success of tourist hubs (Morrison, 2011). This is a report of the VHB's transition from a non-enforcement regime to an enforcement regime of *No Camping* by Denmark Shire.

Since the 1990's illegal camping has been steadily increasing in response to the VHB's identification in published touring and camping guides (see References p8 *tourist guide publications*). The publications often do not discriminate between sites at which free camping is legal or illegal. Some have a disclaimer for incorrect information.

The VHB lies 50 km west of Denmark town, the administration centre for the Shire of Denmark (DSC). The VHB is sited in an enclave of the Giants Forest, 500 m east of the Valley of the Giants Road, the entrance road to the iconic Valley of the Giants Tree Top Walk attraction within Walpole Nornalup National Park. The VHB is within the Highway Crown Land Reserve vested with the WA Government Department of Main Roads (MRWA), (Map1,p9). The VHB lies upslope on the northern side of a curved section of the South Coast Highway and is on a former approximate 450 metre long roadwidth pavement remaining after upgrading of the Highway to suit modern traffic. This former road has no culvert, so drainage from its immediate catchment flows over its surface and then underground through well-drained sands into the VHB's ephemeral creek which flows through its Highway culvert and then to the west for 5.75 km through beef producing farmland to the Frankland River (Map1,p9). Immediately south of the Highway is a 3 km strip of beef-farmed sandplain which borders vegetated coastal dunes of the Southern Ocean.

The VHB with its two highway junctions approximately delineates a horizontal triangle with the height being about 70 metres north from the Highway and its area being approximately 1.5 ha. The triangle is covered with dense forest and a gully draining culvert is at the centre of the triangle's highway base which is concave to the south. By a Google air photo and by the odometer of JG's car, the triangle's two base apices are separated by 430 m of Highway pavement. At the triangle's western apex the angle is 23°. This apex is just below the Valley of the Giants Road's elevated western junction with the Highway. At the triangle's eastern apex the angle is 15° and is barely west of the Highway's junction with Conspicuous Beach Road (on the south) where the Highway sharply curves upward to the south east. These are dangerous configurations for access to this major Highway. Additionally, roadside vegetation and topography tunnels the Highway to such an extent that when motoring to the west, a head on collision occurred in approximately 2002 between a vehicle being driven by Mr Alan and Mrs Hazel Dumbrell then of Nornalup, later of Walpole and now deceased (not caused by the collision) and an international tourist motoring to the east on the wrong (southern) side of the Highway. This collision caused serious injuries but especially to Mrs Dumbrell.

Factors making the VHB unsuitable for camping and other uses include:

Poor sight distance, roadside vegetation and vision impairment by the sun due to the
Highway's east west axis contribute to the Highway's hazards despite double unbroken lines
along the centre of the Highway. The VHB's two Highway entrances exacerbate the hazards
of this section of the Highway.

- There are no water supplies or sanitation infrastructures on site. This has led to RV's
 (caravans and motor homes) discharging liquid and solid wastes and has also led to the
 deposition of faeces within the VHB's immediate catchment of approximately less than 5 ha
 (Map1,p9).
- The potential bushfire hazard is ever present among its campers whose recorded registration plates indicate that almost all are non-Western Australian tourists.
- Because of its angulation, conditions and numbers of its occupants cannot be assayed from only one of its entrances.
- It is electronically insulated (TV, cell phone & radio) by a ridge on its northern side and by overhanging forest branches which occasionally drop.

On 07/05/2012 DSC installed two custom three-in-one *No Camping* signs at each of its two entrances indicating \$100 on the spot fines for camping in the full profile of camping units. These signs accompany two MRWA *No Campfires* symbol signs and a third MRWA *No Camping* sign is attached with a standard *Parking Bay* sign 50 metres on the area's western approach. All signs are luminescent and are obvious day and night.

TOURIST CENTRES NEAR THE VHB

The iconic Valley of the Giants Tree Top Walk is 5.5 km to the north east accessible via the sealed Valley of the Giants Road. Settler's Park at Nornalup village is slightly more than 4.5 km to the west, on the banks of the Frankland River, DSC's western boundary with Manjimup Shire. Settler's Park has public facilities for parking, information, telephone phone, boat launching ramp/jetty and free toilets, electric BBQ's & children's playground. There is a gravel surfaced Highway parking bay within the Walpole Nornalup National Park on the banks of the Frankland River at the south western side of the River bridge. Nearby are three caravan parks whose fees reflect their active competition i.e:

- Coalmine Beach Holiday Park West on the Highway, 10 km;
- Peaceful Bay Caravan Park -East on the Highway, 22 km, or South on an unsealed road,
 12 km;
- Valley of the Giants Ecopark Caravan Park -West on the Highway, 1.5 km.

CARAVAN PARKS and CAMPING GROUNDS REVISED ACT (1995)/REGULATIONS (1997): "the Regulations"

In Western Australia wherever the venue, the Local Authority is obliged to administer *the* Regulations. Section 11 - Camping Other Than At A Caravan Park Or Camping Ground is directed at camping in tents and in any other temporary camping unit.

The Department of Environment and Conservation and MRWA are responsible for the designation of land uses of reserves under their control. Thus, there are legitimately managed camping areas in nearby national parks and forests.

Additionally, MRWA identifies these categories of roadside facilities:

- In remote less populous parts of WA, Road Side Rest Areas are designated by MRWA's
 distinctive signage along the Highway verges. Camping is allowed at these RSRA's under
 certain conditions. (Regulation 11 [3]);
- In less remote and more populous parts of WA *Parking Bays* such as the VHB are designated also by distinctive "P" signs. At these parking bays, overnight and longer stays are illegal and penalties of up to \$1000 for each offence can be imposed. Enforcement is by the Local Authority.

VALLEY OF THE GIANTS ECOPARK CARAVAN PARK

The Valley Of The Giants Ecopark is the closest caravan park to the VHB (1.5km). It occupies Hay Location 1839 which is zoned with a land use of *Caravan Park* in Denmark Shire Council's Town Planning Scheme (TPS Amendment gazetted 1995). The TPS assures that a caravan park so accredited complies with Local Government Regulations of amenity, safety and health. The TPS Amendment process occurred during 1994-1995, pre-dating by about two years the opening of the WA Government's nearby tourist attraction Valley of the Giants Tree Top Walk in the Walpole Nornalup National Park.

Jim Goodsell (B.App.Sc.[Nat.Res.Mgt.Canberra CAE]. [M.Sc.Zool.Phys.UWA]. [Retired DEC Wildlife Research Scientist]) is the Ecopark's sole trading owner/operator and is the author of this report.

DAILY DUSK/DAWN RECORDING AT THE VHB OF CAMPER-GROUP USE

This section reported here of on-going recording was undertaken from December 2011 onwards. After recording began, DSC initiated Action Plans to enforce *No Camping* on 21st February 2012 when ranger patrols commenced with the equivalent of (0.5 FTE [Staff full time equivalent]). JG assists the transition by instaneous messaging numbers of camper-groups at each dusk/dawn to the DSC Administration. This is equivalent at least to an additional 0.5 FTE.

Recording is conducted inconspicuously and the privacy of occupants of the VHB is never invaded. The numbers of camper-groups cited (Graph1,p10) are those that are camped at the VHB at early dawn of each day. As a standard, a camper-group is based on one (towing) vehicle. The number of adults making up a camper-group is adopted from the camper-group profile of 2.2 adults observed at the Ecopark. Recording enables the construction of a camper-group profile. Other sources of VHB anecdotal information are campers at, and visitors to the Ecopark and members of the local community. During the recording period reported here the value of the Australian dollar was consistently high and therefore was assumed not to influence variation of camping at the VHB.

RESULTS OF RECORDING AT THE VHB OF CAMPER-GROUP USE

Recording enables two summer holiday periods to be compared and contrasted. The first is of a non-enforcement regime of *No Camping* by DSC from 18th December 2011 to 20th February 2012 for 65 days. The second is of an enforcement regime for the same period exactly one year later (Graph1,p.10).

In the first period of non-enforcement 253 camper groups are recorded. In the second period of enforcement only 23 camper groups are recorded. Thus, camping has almost been eliminated.

Almost all vehicle registration plates are from outside of Western Australia. During non-enforcement, the components of the camper-group profile are:

- Motor Homes (MH) 15%;
- Caravans (CV) 22%;
- Standard Tradesmens Vans (STV's) 28%;
- Cars and station-wagons etc (VT's) 35%.

STV's and VT's are combined here into a single category (VTV's) 63%. These are often defective and are occupied by mainly young international travellers. (See link:

http://www.couriermail.com.au/news/queensland/wicked-campers-fail-roadworthy-tests/story-e6freoof-1225817662630)

After their departure from their campsite at the VHB, the VTV occupants usually leave domestic rubbish, faeces and toilet paper strewn around. Similar behaviour is recorded for other parts of Australia. (See link: http://www.dailytelegraph.com.au/news/dirty-tourist-vans-sent-backpacking/story-e6freuy9-1225982613423). Sometimes, as many as six people or more occupy a VTV vehicle. Wicked Campervan Hire promotes aberrant social behaviour by their hirers. (See link: http://www.ecampervanhire.com/review/wicked campers/). The site quality requirements of VTV occupants are low. This explains their relatively high occupancy rates of 63% during the poor site conditions of non-enforcement. This reduced to 53% during enforcement, possibly to avoid the law because of their defective vehicles.

Based on the camper profile and for sample sizes, it is estimated that during the non-enforcement (sample size 253) and enforcement (sample size 23) periods, 85% of adult campers were without onboard toilets. This has resulted in the deposition of faeces within the VHB's immediate catchment since 1996 by thousands of people from all over the world (Table1,p11).

Occupants of relatively mobile and insulated RV's (caravans and motor homes) might have a higher tolerance of poor camp site conditions than the low numbers of campers in relatively exposed sedentary tents and camper-trailers. This explains the relatively high compositions of RV's of 37% during non-enforcement and 43% during enforcement. It is also likely that quality of the camping experience is diminished by larger numbers of camper-groups and so far explains why high teen numbers were uncommon and why 20 was the maximum number recorded. Of course our future socio-economic environments may lead to an escalation of numbers of camper-groups that are prepared to tolerate third world conditions of the VHB as a "free camping area". Based on its size the VHB could simultaneously accommodate approximately 50 camper-groups. The following are some scenarios at the VHB during non-enforcement:

 Campers stay for days and/or longer than a week. They disperse during the central part of the day and return to camp at late afternoon;

- Vans and tents are sited within feet of each other. In the event of a bushfire threat, it is impossible for a rapid evacuation;
- Camper-groups haphazardly obstruct one-way passage through;
- The VHB cannot be used as a rapid assembly area for emergency services;
- Highway-using vehicles cannot unexpectedly detour into the VHB without the possibility of collision with campers;
- Burning camp fires are unattended. (Three campfires were extinguished by the local community on 19/12/11, 19/02/12 and 17/03/12);
- Campers cannot be warned electronically of impending emergency as the VHB does not enjoy cell phone or TV reception and radio reception at best is fitful;
- MRWA 44 gallon rubbish bins overflow and garbage, faeces toilet paper and RV waste drainage waters are scattered around and under campers' units;
- Washing hangs on vegetation;
- In the afternoon's alfresco environment, fortified wines flow freely among campers;
- 07/03/12 a small low dining table for toddlers was set up at dusk twilight in the traffic way.

Use of the *tourist guide publications* continues as numerous visitors currently seek clarification of the "free camping area nearby" at the Ecopark. When advised that the information of these publications is incorrect, these visitors often become antagonistic to the payment of fees and if they stay at the Ecopark continue their hostilities. A common attitude is that their *tourist guide publications* authorize them to free camp at the VHB and that the prohibiting *No Camping* signs deprive them of an entitlement. These signs were vandalized by removal on 30/06/12 and were replaced by DSC and MRWA within two weeks. During that time camping increased.

MODEL OF DAWN CAMPER-GROUP USE OF THE VHB DURING NON-ENFORCEMENT OF THE NO CAMPING REGULATIONS 1996-2011

The exact numbers of groups that have camped at the VHB are not known. Apart from the 65 days of recording (18/12/2011-20/02/2012) no other data collecting has been performed during its non-enforcement regime. This model explains the ever-present sights of campers during highway drive-pasts, cursory drive-throughs and enquiries at the Ecopark by travellers re the "free camping area". Consequently, the model (Table1,p11) generated by a relatively small data-set is included to add depth to this report.

During the brief recording of the non-enforcement regime, no correlations of camper numbers are identifiable with any of the local activity records such as automated counts of road use and Tree Top Walk visitor use. The lack can be explained by illegal camping at the VHB being externally driven since the 1990's by national (& international) use of the *tourist guide publications*. The many decimal places used initially in these calculations are demanded by the logarithmic (Ln) values of the exponential regression equations below. However, for this report numbers used in calculations are

rounded to 3 decimal places. The 65 days of the non-enforcement regime are comprised of 45 days for a holiday period per day average of 4.432 camper-group dawns and 20 days for a non-holiday period per day average of 2.700 camper-group dawns. Extrapolation from these averages gives a total of 1155 camper-group dawns for a 2012 model of a non-enforcement regime.

The *tourist guide publications* generated an increase of camper-groups to the observed 14 groups before Christmas 2010 and then to 20 camper-groups 2011. This arbitrarily includes the selection here of a third data pair of 1 camper-group one week before Christmas 1996. This year is selected for several reasons: The *tourist guide publications* were published in the 1990's and remain concurrently in use from the beginnings of the Ecopark's and the Tree Top Walk's operations from 1996 onwards. The three data pairs can be described by a commonly used tool of demographers that is applied to self-perpetuating populations, namely the exponential regression equation Y=Ae^{BX} (Equation 1) which can be transformed to linearity as Equation 2 i.e. LnY=LnA+BX, where N=3, R=0.998, Y=the number of camper-groups at dawn one week before Christmas, X=the year, LnA=-388.986 and B=the annual rate of increase of Ln values of camper-group use (0.195). This last value can be viewed as an index of the incessant force of the *tourist guide publications* driving camper-groups to the VHB not only on the day a week before Christmas but assumed also for 52 weeks of each year.

Another linear regression equation LnY=LnA+BX can be constructed as Equation 3. For this equation, LnA=-385.047 can be derived from: B=0.195, Y=1155 camper-group dawns during X=2012 (a 366 day leap year). Equation 3 can generate numbers of camper-groups occupying the VHB annually for the 16 year period 1996 - 2011 (Table1,p.11).

The exponential increase exhibited by this model explains why camping at the VHB erupted virtually overnight. In this model, the cumulative value at 2011 for numbers of adult campers is 11,257. This can be translated into a total revenue loss from the community of \$123,827 which is based on the current approximate charge per adult per night at an unpowered camping site of \$11. Additionally, the model also portrays that 9,569 adults from all over the world have camped without sanitation within the headwaters of the VHB creek's catchment (Map1,p9). Water flow events could transport such contaminants as RV drainage wastes, faecal materials, parasites and the causal agents of exotic diseases into the bio-systems comprised of people, farmed animals and vegetation on the southern side of the Highway via the VHB's ephemeral creek. Effective sanitation is an ancient bastion of western culture. There is a wealth of articles on the impacts of human wastes on environmental health. Their citation here would divert attention from the theme of this report.

CONCLUSIONS

The VHB is an artefact of the upgrading of the Highway. It is a community liability. Its purpose of accommodating a driving break is already well catered for at Nornalup village, 4.5 km to the west and at other sites along the Highway and in the surrounding National Parks. Additionally, camping is accommodated 24/7 at the Valley of the Giants Ecopark Caravan Park, 1.5 km to the west. This recording of enforcement of *no camping* demonstrates that camping inevitably resurges and is only being suppressed by constant surveillance. Camping has not yet been completely eliminated by the equivalent of 1.0 FTE and 0.5 of this is currently supplied voluntarily by JG and cannot be sustained indefinitely. Thus, the VHB continues to impose costs for staff and law enforcement as well as potential extrinsic costs in the forms of campfires, highway hazards, contamination by faeces and by

drainage wastes, loss of revenue from the community and also intrinsic hazards to any of the VHB's users. Continued camping, even under the current enforcement regime of the equivalent of 1FTE, could result in closure of the Ecopark.

RECOMMENDATIONS

- (1) Denmark Shire Council in collusion with the WA Department of Main Roads and other relevant Authorities should recognise their duty of care to farmers downstream from, and potential users of the VHB by commencing negotiations aimed at permanently closing and quarantining the VHB by a fencing exclosure with locked gates and retaining the VHB as a community asset such as a gravel dump and/or emergency assembly area. This would minimise its administrative cost and would avoid socio-environmental liabilities.
- (2) If the VHB is not closed:
 - (2.1) The Denmark Shire Council should appoint a permanently employed or contracted Ranger responsible for the western end of the Shire; and
 - (2.2) Contamination of water flow events out of the VHB by faecal materials and other wastes should be monitored; and
 - (2.3) A ground-water observation bore should be installed at the VHB's sand gully to sample/monitor faecal/bacterial contamination of underground water.

REFERENCES

TOURIST GUIDE PUBLICATIONS:

Collis, S & S (1994). The guide to Free-Camping in the SOUTH of WA. (Free Camping Australia, Donnybrook, Western Australia).

Fennell, C & P (2001). CAMPS AUSTRALIA WIDE. (C&C Offset Printing Co Ltd, Hong Kong).

Holland, J (1998). A Guide to PRICELESS CAMPSITES & REST AREAS in the South of Western Australia. (Success Print. Bayswater, Western Australia).

Savage, C and Lewis, C (1996-2006). CAMPING GUIDE TO WESTERN AUSTRALIA. (Boiling Billy Publications. Wyndham, New South Wales).

Yelland, D and L (1992). CARAVAN CAMPING AND FISHING GUIDE TO THE SOUTH-WEST. (GUMTREE PUBLICATIONS. Wangara, Western Australia).

Western Australian Caravan Parks and Camping Grounds Act (1995) and Regulations (1997)

Hyperlinks (NB: In Windows Internet Explorer some webpages do not print hard copy directly. Sometimes, a way to overcome this is to email the page to yourself, then print the page from your email. Also, some links do not connect from a document. Sometimes, a way to overcome this is to copy the link [ctrl+c], then paste [ctrl+v] into the website address bar.)

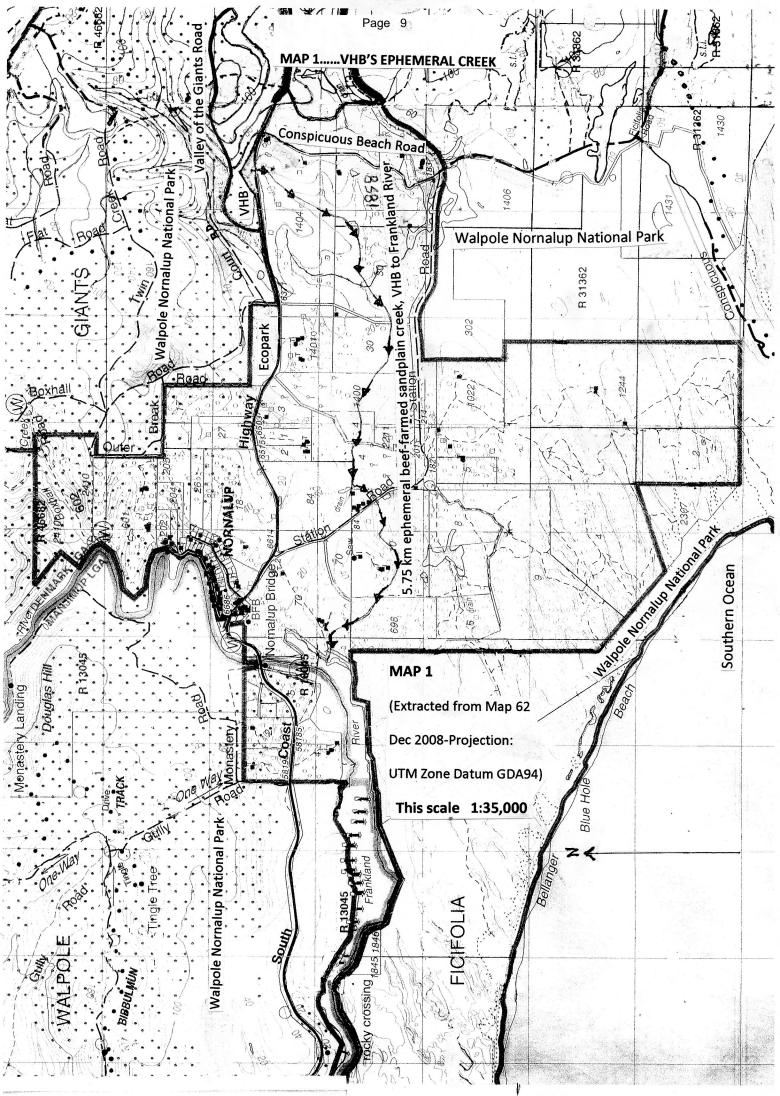
Courier Mail: (http://www.couriermail.com.au/news/queensland/wicked-campers-fail-roadworthy-tests/story-e6freoof-1225817662630)

 $\textbf{Daily Telegraph: (\underline{http://www.dailytelegraph.com.au/news/dirty-tourist-vans-sent-backpacking/story-e6freuy9-1225982613423)}}$

Morrison, G. (2011):

http://www.goseeaustralia.com.au/article/776/Free_Freedom_llegal_Camping_are_vexed_questions_for_life_on_road_R Vs/

Wicked Campers: http://www.ecampervanhire.com/review/wicked_campers/



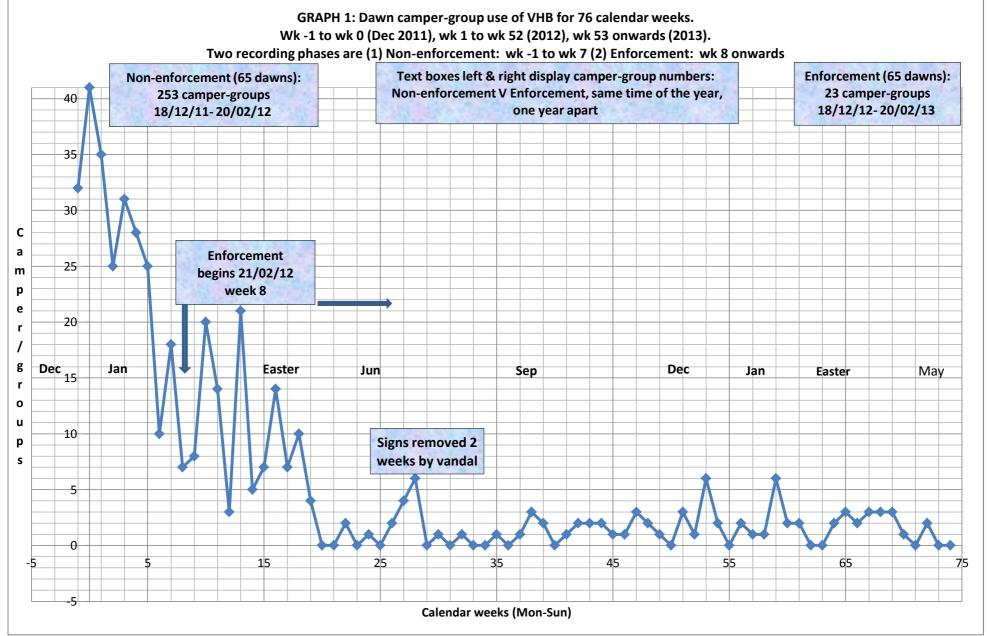


Table 1

Model of Dawn Camper-Group use of the VHB during Non-enforcement of the *No Camping* Regulations.

Constructed exponential linear regression equation page 7 (Eqn.3): LnY=-385.047+0.195X generates annual numbers of camper-group dawns for the 16 year period 1996 - 2011.

Year (X)	Nos Camper- Group dawns. All @ 366 day leap year values (Y)	Nos Adults @ 2.2 per CG. Non- leap years adjusted to 365 day values	Cumulative Adults	85% Adults without onboard toilets	Cumulative 85% Adults without onboard toilets
1996	51	112	112	95	95
1997	62	136	248	116	211
1998	75	165	413	140	351
1999	92	202	615	172	523
2000	111	244	859	207	730
2001	135	296	1155	252	982
2002	165	362	1517	308	1290
2003	200	439	1956	373	1663
2004	243	533	2489	453	2116
2005	295	647	3136	550	2666
2006	359	788	3924	670	3336
2007	436	957	4881	813	4149
2008	530	1163	6044	989	5138
2009	644	1413	7457	1201	6339
2010	782	1716	9173	1459	7798
2011	950	2084	11257	1771	9569

Pictures of Bay Taken 5.30pm, Friday 23 Dec 2011



Fire Site 1



Fire Site 2



Fire Site 3



Bay Has No Campers 5.28pm Friday 23 Dec 2011



Our Ref: HLTH.1, FIRE.1, ICR12111006, ICR12111237, OCR12312246, GH/GH

Enquiries: Gregg Harwood

26 March 2012

The Department of Health
P.O. Box 8172
Perth Business Centre WA 6008

Attn: Jim Dodds, Director Environmental Health

Dear Jim

Re: Camping and Fires in Road Side Rest Area & Valley of the Giants Eco Park

I am writing in response to your letter dated the 30 December 2011 regarding camping and fires in the road side rest area (bay) that is adjacent to the Valley of the Giants Eco Park and my responses to questions that Jim Goodsell and Nelia Pumphrey have raised are as follows:

1) That uncontrolled illegal camping in the bay is occurring.

There has been a history of overnight camping at the rest area and this was tolerated by Council's Rangers on the basis that as a road side rest area it is under the jurisdiction of Main Roads and the land around it is controlled by the Department of Environment and Conservation and the fact members of the public are allowed to camp in roadside rest areas for up to 24 hours under Regulation 11(1)(b & c) of the Caravan Parks and Camping Grounds Regulations 1997 unless they are sign posted otherwise.

This regulation reads as follows:

11. Camping other than at a caravan park or camping ground

- (1) A person may camp
 - (a) for up to 3 nights in any period of 28 consecutive days on land which he or she owns or has a legal right to occupy, and may camp for longer than 3 nights on such land if he or she has written approval under subregulation (2) and is complying with that approval;

- (b) for up to 24 consecutive hours in a caravan or other vehicle on a road side rest area;
- (c) for up to 24 consecutive hours in a caravan or other vehicle on a road reserve in an emergency, unless to do so would cause a hazard to other road users or contravene any other written law with respect to the use of the road reserve;

The Main Roads Department have recently clarified the bay's status by clearly sign posting it as a "no camping" area and Council's Rangers now perform two morning and evening patrols per week subject to competing operational requirements. Main Roads have also erected "no fires" signs in the bay and to date these signs have significantly reduced the incidence of camping and camp fires in the bay.

2) That illegal camping at the bay is being actively promoted by a free camping magazine.

This statement is correct. Illegal camping at the site is being promoted by a free camping magazine and the Walpole Visitors Centre has taken the step of removing these magazines from sale and the editor of the magazine has been advised that camping is no longer permitted at the site.

3) That significant litter and excremental pollution is occurring.

While litter and excremental pollution in any road side camping area is inevitable and in fact has occurred at this location my inspections to date have indicated that this is minimal and is far less than most other bays.

This can be observed from the attached photographs that I took during an inspection 5.30pm on Friday 23 of December 2011.

4) That illegal campers have lit campfires.

While the campfires that have been lit at the rest area do represent a risk this also needs to put in context when compared designated camp fire areas that are listed in Council's fire regulation notice which is attached. There are several bushland camping areas where Council permits camp fires by specifying them as "designated areas" in Regulation 13. The reason I have raised this is that in the past and when officer reports have recommended ceasing this practice both Council's Bushfires Advisory Committee and the Council itself they have been reluctant to do so as it sees campfires as part of camping.

In reading Council's Fire Regulation Notice it should be noted that the reason why Council has never permitted campfires in this location is that Council has never sought to promote the usage of this bay as a camping area.

5) That the excremental pollution associated with illegal camping is placing nearby beef cattle at the risk of bovine spongiform encephalopathy infection (Mad Cow Disease) or other diseases and parasites.

As a former Meat Inspector and Environmental Health Officer with 24 years experience I do not support this scenario for the following reasons.

a) The level of excremental pollution at the site is minimal and bacteria, parasites and viruses typically do not migrate unless the environment (i.e. excrement) migrates intact or there is so much of that medium that its associated microenvironment migrates thorough significant off site discharges.

Given that the bay is in an elevated position, has a gravel roadway, a well drained loamy gravel soil type, is surrounded by tall timber forest on both sides which has significant mulch layers and under growth, has a main road separating it from the adjoining beef farm and the bay itself has very low pollution levels it is a virtual impossibility that any exotic stock diseases or parasites would be able to reach the down slope beef property.

Given these factors if the concerns being expressed by the complainants were a reality then there should already be a well proven association of road rest areas with outbreaks of stock diseases as many bays have far higher levels of excremental pollution.

b) Mad Cow Disease or BSE outbreaks have been mainly associated with the usage of meat meal and other abattoir by products as stock feed additives in the United Kingdom in the 1980s and once this practice was stopped the numbers of new cases fell off markedly. While some pasture related cases these have been reported they been on land that has been heavily grazed by BSE affected cattle in the past. In closing I thank you for your correspondence and I hope this response satisfies your inquiry.

Should you wish to discuss this response further please contact the undersigned on telephone (08) 9848 0300 or email enquiries@denmark.wa.gov.au.

Yours faithfully

Gregg Harwood

Director of Community & Regulatory Services

CC: Main Roads Great Southern Region P.O. Box 503 Albany WA 6330

Attn: Andrew Duffield

CC: Valley of Giants Eco Park 6398 South Coast Highway Nornalup WA 6333

Attn: Jim Goodsell

CC: Nelia Pumphrey ianel@westnet.com.au