

5 April 2023

Deanne Sheppard
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Dear Deanne

Greenvale North PSP Part 2 ecological advice

Our ref: Matter 38699

Regarding the area referred to as HZ1 in the Greenvale North R1 native vegetation precinct plan (NVPP) (GAA 2011) we can provide the following. The subject land was assessed on 19 January.

Previously documented ecological features on the subject land are shown in Figure 1.

NVPP HZ1

Habitat Zone HZ1 described in the NVPP as Stony Knoll Shrubland EVC 649 does not exist. There is no stony knoll and no stony knoll vegetation where the map polygon is located, and there is no stony knoll on the subject land or in the immediate area. Consequently (GAA 2011) is also in error.

An October 2007 aerial photo, taken before Ecology Partners was there in March and June 2009 (EP 2009), shows the terrain exactly as it is now, with no stony knoll but with two small rocky areas to the west on the upper slope of the Yuroke Creek ravine (Figure 2).

EP's description of the 'Stony Knoll Shrubland' matches the vegetation on the rocky areas to the west:

Stony Knoll Shrubland (EVC 649)

The review identified a previously unrecorded small (approximately 0.64 hectares) remnant patch of Stony Knoll Shrubland (EVC 649). This is located in a rocky area on the rise of a steep gully near the centre of the study area (Figure 2). The patch is modified but contains significant cover of spear grasses *Austrostipa* spp. (approximately 35%) and wallaby grasses *Austrodanthonia* spp. (approximately 20%), together with one woody shrub species, Tree Violet *Melicytus dentatus*. Several exotic grasses are also present including Bearded Oat *Avena barbata* and Serrated Tussock *Nassella trichotoma*.

'A rocky area on the rise of a steep gully' is not a stony knoll. A stony knoll is a basalt stony rise with slopes on all sides arising from a basalt plain. 'A rocky area on the rise of a steep gully' is not the Stony Knoll Shrubland landform. It is the Escarpment Shrubland landform and Escarpment Shrubland EVC 895 is the vegetation on the adjacent rocky areas referred to above.

EP (2009) clearly attempts to document the Escarpment Shrubland, but misclassifies the EVC (it is not the EPBC Act listed Stony Knoll Shrubland), maps it in the wrong location to the east of where it actually is, and overmaps it by delineating one large area when there are actually two small areas.

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Vegetation of NVPP HZ1

The banana-shaped 0.645 hectare NVPP HZ1 map polygon area has a level to gently sloping surface supporting grassland dominated by exotic Chilean Needle-grass *Nassella neesiana* with some native plants. There is no stony knoll.

Nine native plant species were recorded within the NVPP HZ1 map polygon area (Attachment 1) but they do not reach 25% of the perennial vegetation cover required to be a patch in the *Guidelines for the removal, destruction or lopping of native vegetation* (DELWP 2017). A habitat zone can only be within a patch so there is no habitat zone in the mapped location.

Part of the NVPP HZ1 map polygon area, an area of Grey Willow-herb *Epilobium billardioreanum*, was not a habitat zone but was almost so in having just below the 25% relative perennial native cover required to be a patch at the time of assessment (Figure 3). The area was created by a mob of kangaroos regularly grazing and lying down at rest. Willow-herb is not eaten and could in future increase to reach the required 25% to become a patch and is thus a potential habitat zone of Plains Grassy Woodland (not Stony Knoll Shrubland).

The natural (pre-1750) ecological vegetation class (EVC) of the NVPP HZ1 map polygon area is Plains Grassy Woodland EVC 55 as indicated by remnant River Red-gums *Eucalyptus camaldulensis* on the same gently sloping landform nearby on the subject land.

Photos of the vegetation are in Attachment 2. Note the surface is basically flat and there is no stony knoll.

Existing habitat zones to the west

To the west of NVPP HZ1 are two habitat zones of Escarpment Shrubland EVC 895, termed HZ1 and HZ2 (Figure 3). Characterised by outcropping basalt rocks on a slope with tall grassland dominated by Kneed Spear-grass *Austrostipa bigeniculata*, they are near the top of slope of the Yuroke Creek ravine.

From their landform, topography and position in the landscape HZ1 and HZ2 are not stony knolls. They also lack Dense Spear-grass *Austrostipa densiflora*, the distinctive dominant grass of stony knolls in the district. Escarpment Shrubland is also on the other side of the ravine.

HZ1 has four and HZ2 has seven recorded native plant species (Attachment 1).

The larger HZ2 has one individual each of the shrubs Tree Violet *Melicytus dentatus* and Lightwood *Acacia implexa*.

Shallow soil has restricted growth of Chilean Needle-grass which surrounds the rock outcrops.

HZ1 is 0.036 hectares and HZ2 is 0.074 hectares in area.

They are smaller in area than NVPP HZ1 which is 0.645 hectares in area.

HZ2 has a small overlap with NVPP HZ1 of 36 m².

While Stony Knoll Shrubland EVC 649 is part of the EPBC Act listed *Grassy Eucalypt Woodland of the Victorian Volcanic Plain*, Escarpment Shrubland EVC 895 is not EPBC Act listed (TSSC 2009).

Photos of the vegetation are in Attachment 2. Note the rocks are on a slope and so are not a stony knoll.

References

DELWP 2017. Guidelines for the removal, destruction or lopping of native vegetation.

Department of Environment, Land, Water and Planning, Victoria.

www.environment.vic.gov.au/_data/assets/pdf_file/0021/91146/Guidelines-for-the-removal,-destruction-or-lopping-of-native-vegetation,-2017.pdf

TSSC 2009. Commonwealth listing advice on Grassy Eucalypt Woodland of the Victorian Volcanic Plain. Threatened Species Scientific Committee, Department of the Environment, Water, Heritage and the Arts, Canberra, now Department of Climate Change, Energy, the Environment and Water, Canberra.

<http://www.environment.gov.au/biodiversity/threatened/communities/pubs/46-listing-advice.pdf>

EP 2009. Flora and fauna assessment, and targeted Golden Sun Moth and Matted Flax-lily surveys for land at 1170 Mickleham Road, Greenvale, Victoria. Report to Peet Ltd, Ecology Partners Pty Ltd, August 2009.

GAA 2011. Amendment C119 to the Hume Planning Scheme: Greenvale North [R1] - Precinct Structure Plan, includes the Greenvale North Native Vegetation Precinct Plan. Growth Areas Authority, Victoria, January 2011.

<https://www.vpa.vic.gov.au/wp-content/Assets/Files/PSP22%20-%20Greenvale%20North%20PSP%20-%20JANUARY%202011.pdf>

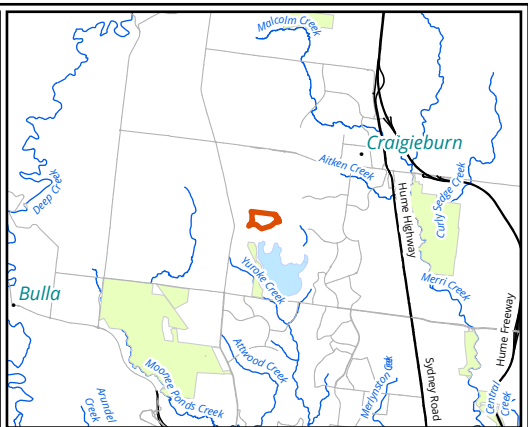
Please contact me if you have any enquiries.

Regards

A handwritten signature in black ink, reading 'Jeff Yugovic' in a cursive style.

Dr Jeff Yugovic

Senior Associate Ecologist



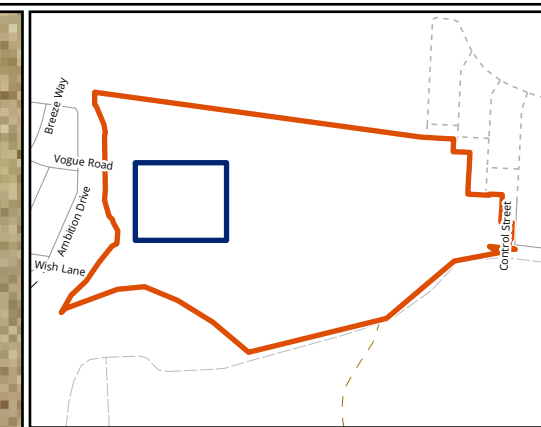
- Legend**
- Subject land
 - Golden Sun Moth record as shown in Greenvale North (R1) Precinct Structure Plan Jan 2011
 - Golden Sun Moth record from Victorian Biodiversity Atlas (VBA)
 - NVPP vegetation**
 - (VVP_0649) Stony Knoll Shrubland
 - Scattered tree

Figure 1 Subject land, Greenvale

0 25 50 75 100 125
Metres
Scale: 1:3,500 @ A3
Coordinate System: GDA 1994 MGA Zone 55

biosis

Matter: 38699,
Date: 02 February 2023 ,
Prepared for: JY, Prepared by: GO, Last edited by: smitchell
Layout: 38699_F1_SubjectLand
Project: P:\38600s\38699\Mapping\38699_GreenvaleNth_PSP_Eco.aprx



Legend

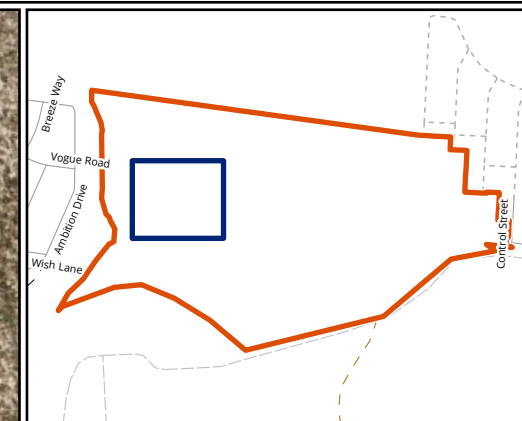
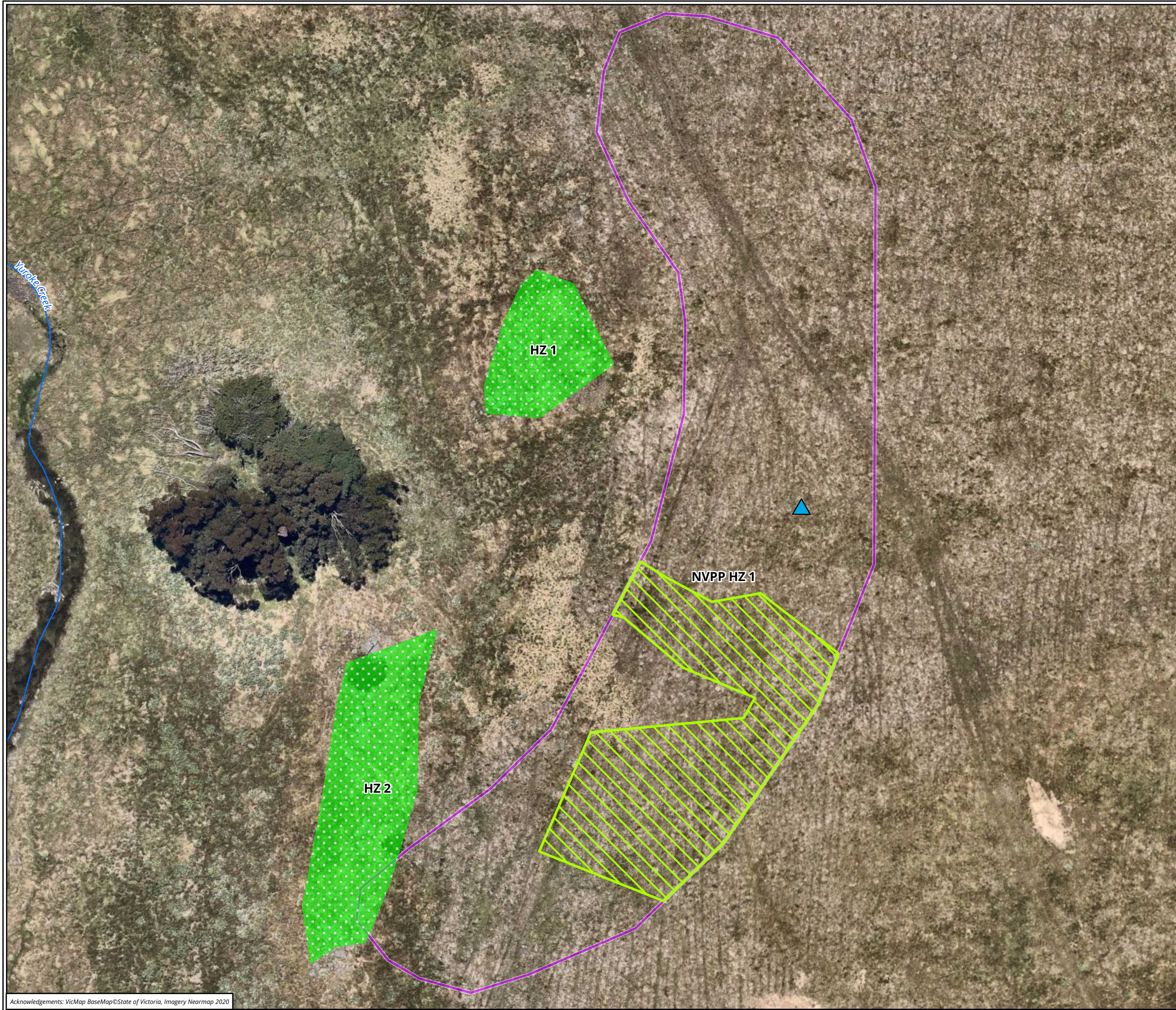
- Subject land
- Golden Sun Moth record from Victorian Biodiversity Atlas (VBA)
- Habitat Zone current assessment**
- (VVP_0895) Escarpment Shrubland
- NVPP Habitat Zone 1**
- (VVP_0649) Stony Knoll Shrubland

Figure 2 NVPP HZ1 (October 2007), Greenvale

0 5 10 15 20 25
Metres
Scale: 1:600 @ A3
Coordinate System: GDA 1994 MGA Zone 55



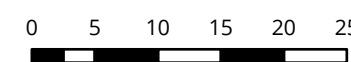
Matter: 38699,
Date: 23 March 2023,
Prepared for: JY, Prepared by: GO, Last edited by: gologhlin
Layout: 38699_F2_NVPP_HZ1(Oct2007)
Project: P:\38600s\38699\Mapping\
38699_GreenvaleNth_PSP_Eco.aprx



Legend

- Subject land
- Golden Sun Moth record from Victorian Biodiversity Atlas (VBA)
- Habitat Zone current assessment**
 - Potential habitat zone (VVP_0055)
 - Plains Grassy Woodland (not habitat zone)
 - (VVP_0895) Escarpment Shrubland
- NVPP Habitat Zone 1**
 - (VVP_0649) Stony Knoll Shrubland

Figure 3 NVPP HZ1 (current), Greenvale



Metres
Scale: 1:600 @ A3
Coordinate System: GDA 1994 MGA Zone 55



Matter: 38699,
Date: 15 March 2023,
Prepared for: JV, Prepared by: GO, Last edited by: gologhlin
Layout: 38699_F3_NVPP_HZ1(current)
Project: P:\38600s\38699\Mapping\
38699_GreenvaleNth_PSP_Eco.aprx

Attachment 1. Plant species

Species	Common name	NVPP HZ1	HZ1	HZ2
Native species:				
<i>Acacia implexa</i>	Lightwood			✓
<i>Acaena echinata</i>	Sheep's Burr		✓	
<i>Austrostipa bigeniculata</i>	Kneed Spear-grass	✓	✓	✓
<i>Carex inversa</i>	Knob Sedge	✓		
<i>Dichondra repens</i>	Kidney-weed			✓
<i>Epilobium billardioreanum</i>	Grey Willow-herb	✓		✓
<i>Geranium</i> sp.	Crane's Bill		✓	
<i>Juncus bufonius</i>	Toad Rush	✓		
<i>Juncus flavidus</i>	Gold Rush	✓		
<i>Juncus homalocaulis</i>	Wiry Rush	✓		
<i>Juncus subsecundus</i>	Finger Rush	✓		
<i>Lomandra filiformis</i>	Wattle Mat-rush			✓
<i>Lythrum hyssopifolia</i>	Small Loosestrife	✓		
<i>Melicytus dentatus</i>	Tree Violet			✓
<i>Microlaena stipoides</i>	Weeping Grass		✓	✓
<i>Oxalis perennans</i>	Grassland Wood-sorrel	✓		
Introduced species:				
<i>Avena barbata</i>	Bearded Oat			✓
<i>Convolvulus arvensis</i>	Common Bindweed	✓		
<i>Cynara cardunculus</i>	Artichoke Thistle	✓		✓
<i>Holcus lanatus</i>	Yorkshire Fog	✓		
<i>Hypochaeris radicata</i>	Flatweed	✓		✓
<i>Nassella neesiana</i>	Chilean Needle-grass	✓	✓	✓
<i>Nassella trichotoma</i>	Serrated Tussock	✓		
<i>Plantago lanceolata</i>	Ribwort	✓		✓
<i>Scolymus hispanicus</i>	Golden Thistle		✓	✓
<i>Sonchus oleraceus</i>	Common Sow-thistle			✓
<i>Vulpia bromoides</i>	Squirrel-tail Fescue	✓		✓

Attachment 2. Photos



Photo 1. Centre of NVPP HZ1, view to north, not Stony Knoll Shrubland



Photo 2. Centre of NVPP HZ1, view to south, not Stony Knoll Shrubland



Photo 3. HZ1, Escarpment Shrubland, view to south



Photo 4. HZ2, Escarpment Shrubland, view to south