

# 2022 VCE Outdoor and Environmental Studies external assessment report

## General comments

The 2022 exam was well received by students, with the majority of students attempting all questions and being able to access a range of marks.

This exam required students to make more specific reference to, and provide examples from, the environment that they had visited and/or studied rather than just mentioning it by name.

As specified in a number of questions, students were still expected to reference a specific environment and Indigenous communities (and therefore environment). The concepts covered within the course usually take on more meaning for students when they are taught with reference to a specific environment. Students who were able to discuss different concepts with examples from a specific environment were better able to demonstrate their understanding of the subject.

Some general areas that students need to focus on when completing the exam include the following.

- Students should use the lines on the examination paper as a guide to how long their answers should be to answer the question fully.
- Students should clearly label when continuing the response in the extra writing space. This includes both stating that the response continues in the extra space at the question and then clearly and correctly labelling the response in the extra space section, and not in other parts of the paper.
- While studying the various concepts of the course, students should aim to apply this knowledge and look for examples of these in the environments that they are visiting and/or studying. This enables students to provide more in-depth responses with appropriate examples during the examination.
- Many students used acronyms without spelling out the name in full. Acronyms used in the study design (for example, VEAC) can be used without explanation. However, in all other instances students should write the name, followed by the acronym, the first time they use it, then use the abbreviated form.
- Students should ensure that they read all parts of the question before starting their response to ensure that they respond appropriately to all aspects of the questions and avoid repetition.
- Students are encouraged to use the extra writing space to plan out their responses for longer questions. This will help ensure that they cover all aspects of the question and correctly apply the command term.

## Specific information

This report provides sample answers or an indication of what answers may have included. Unless otherwise stated, these are not intended to be exemplary or complete responses.

Note: Student responses reproduced in this report have not been corrected for grammar, spelling or factual information.

The statistics in this report may be subject to rounding resulting in a total of more or less than 100 per cent.

## Question 1a.

Mark	0	1	2	3	4	Average
%	16	12	24	23	25	2.3

Students were required to apply their knowledge of characteristics of Australian outdoor environments prior to human habitation and the possible impacts that the characteristics had on the extinction of megafauna. Students were provided with stimulus to assist them in making this link. To achieve full marks, students needed to show specific understanding of two characteristics, demonstrating how these characteristics influenced the environment and how these changes to the environment may have contributed to the extinction of megafauna.

Some students showed limited understanding of the characteristic and were unable to link it to the environment. For example, some students stated that climatic variation resulted in floods and drought which led to extinction, but did not explain how or why this might happen. In this case, discussion of lack of food resources, availability of water, young animals not surviving a flood and so on would have been appropriate.

The following is an example of a high-scoring response.

*biological isolation, caused by tectonic movements 50 million years ago forcing Australia into its own land mass and making flora and fauna have to adapt without competition could have influenced megafauna like the giant kangaroo to deplete in numbers due to lack of kangaroos to mate with as populations were split between south-west Asia and Australia. Climatic variations, as influenced by hot periods of El Nino and cold periods for La Nina could have meant that thick coated giant wombats couldn't survive under intense conditions and due to overheating.*

## Question 1b.

Mark	0	1	2	3	4	Average
%	6	7	21	32	33	2.8

Students were expected to mention a specific Indigenous community by name and then with appropriate reference to the environment analyse how their practices may have contributed to the extinction of megafauna in the areas where they lived. This question was generally well answered by students and most students were able to identify a specific Indigenous community and make the appropriate analysis. Students should ensure when discussing Indigenous communities and their land that they are able to provide examples relevant to the community they are discussing and do not resort to generic responses.

The following is an example of a high-scoring response.

*The Gunai-kurnai found at Wilson's Prom saw the land as a place that, if they provided for it, it would provide for them (their mother) and as such used hunting and gathering methods as seen at Whiskey Bay in the shell middens from crustacean hunting. The effects of the Gunai-kurnai's extensive hunting practices are hypothesised to be part of the reasons that megafauna like the giant kangaroo went extinct.*

## Question 2

Marks	0	1	2	3	4	5	6	Average
%	7	4	15	22	23	16	15	3.6

Students had to select two of the historical influences from the list provided. This question sought a comparison between the relationship held with the environment by a specific Indigenous community at each time to that of the relationship held with the environment by the groups present during each selected historical influence. High-scoring responses focused specifically on an Indigenous community and provided different examples of the changing relationship held for each influence. They used comparative language when comparing to the relationship held by the other groups of people at the time.

Areas that needed improvement included following the direction to select two influences, ensuring that each influence selected was directly compared with the Indigenous community during the same time period and that comparisons were made and not just four descriptions of relationship were given.

The following is an example of a high-scoring response.

*The deeply spiritual relationship held by the Gunai-Kurnai people of Wilson's Promontory held deep respect for the environment acting as custodians of the land and caring for it. In comparison, the First non-Indigenous settlers of Wilson's Promontory viewed the land with fear and that is belonged to them through their 'terra nullius' principles. The perception held by the Gunai-Kurnai is directly contrasted from this. Industrialisation in which the inhabitants of Wilson's Promontory although beginning to respect its natural value saw it as a commodity and resource to be exploited. The Gunai-Kurnai people would engage in sustainable interactions such as semi-nomadism in which they travelled from Tidal River in the winter to Omeo in the summer, an interaction that allowed for vegetation to renew. In contrast the first non-Indigenous settlers, to make the land "more like home" farmed pastoral runs at Yanakie with cattle and sheep, compacting the soil and causing land degradation. Those of Industrialisation constructed tram lines from Mount LaTrobe to Mount Singapore to carry timber extracted via machine from native forest, this caused habitat degradation and thus a loss of biodiversity.*

## Question 3a.

Mark	0	1	2	3	4	Average
%	8	4	19	20	48	2.9

Students were required to use stimulus material to help them apply their knowledge about relationships between different groups.

Most students handled this question well and were able to adequately describe the potential relationships held by both parties.

Responses that just focused on the potential environmental impacts (the focus of Question 3b.) that the developers/development may have had did not adequately address the relationship held by the groups. Similarly, responses that focused on the views held by either group (for example, saw the land as a resource/cathedral) but didn't further describe the relationship did not score as highly.

The following is an example of a high-scoring response.

*The conservationists likely see the environment as a museum to protect, and subsequently interact by advocating against the proposed development at Wilson's Prom so that the land can be left for flora and fauna to thrive in. They have a conservational relationship where they want to see the land protected. However, the developers have a primary industry relationship where they see the land as a resource to*

*use to make money from. They want to build a resort and golf course to make money but this development would destroy areas of vegetation and increase pollution.*

## Question 3b.

Mark	0	1	2	3	Average
%	5	16	38	41	2.2

Students were required to analyse the possible environmental impact of the development mentioned in the stimulus material. With questions using 'analyse' as their command term, the response should focus on cause and effect.

Most students attempted this question, but it was common for students to simply describe the impact and not analyse; for example, describing clearing the land to make way for the development and/or golf course (the cause) but not explaining the effect this would have on the environment. Students need to make sure they understand the command terms used within the study and know how to apply them.

The following is an example of a high-scoring response.

*The development of the resort would result in vegetation being lost as land would be cleared to build on. This would decrease biodiversity in the area, and force animals to move away from their natural habitat. The golf course and other features would also attract more people to Wilson's Prom National Park, subsequently increasing pollution to the region.*

## Question 3c.

Mark	0	1	2	3	Average
%	29	34	24	13	1.2

Students were required to use their knowledge of increasing environmental awareness to explain how this may have led to the resort not being built.

A number of students found it difficult to apply their knowledge about environmental movements and increasing environmental awareness. Students appeared to find it difficult to explain why increasing environmental awareness may have caused the development to stop, simply stating that more people cared about the environment.

Higher-scoring responses included reference to environmental movements, the impact that they had on political decisions and policy making, and how they could have potentially influenced the Wilson's Promontory decision.

The following is an example of a high-scoring response.

*Increasing environmental awareness could bring environmental considerations to the forefront of public and government priorities. If people see the land at Wilson Prom NP as more valuable than development and industry they could advocate for it not being built. This could lead to the government taking away the 33-year-old lease and banning any development because that is what the public wants. The awareness would be successful in changing relationships as people will begin to interact more sustainably with a museum-like perspective over a resource.*

## Question 3d.

Mark	0	1	2	Average
%	38	20	42	1.0

Students were required to read an additional piece of stimulus about a current proposal for a development at Wilson's Promontory and outline how the government would investigate the impact of such a proposal. Students largely used the Victorian Environmental Assessment Council (VEAC), but other statutory/government bodies were also acceptable provided that there was a sufficient outline.

The following is an example of a high-scoring response.

*The government could request that the Victoria Environmental Assessment Council (VEAC) conduct an investigation into the land at Wilson's Prom, and send back a recommendation as to whether the eco-resort should be built or not.*

## Question 4a.

Mark	0	1	2	3	4	Average
%	25	6	17	7	45	2.4

To achieve full marks, students needed to correctly identify two different forms of primary industry and briefly outline them. It was essential that students read the question properly and outlined what was asked. Some responses saw a student outlining the environmental impacts of their selected primary industry rather than describing the actual industry itself.

Primary industry involves the production of raw materials. A number of students included examples such as commercialisation, tourism (and forms of tourism, such as surfing lessons) and cargo shipping, to name a few. These are not forms of primary industry. Examples of different forms of farming, mining and other resource extraction industries such as logging were acceptable.

The following is an example of a high-scoring response.

*Farming and agriculture – using the land to grow produce that can be sold and provide food, through cropping, livestock and more.*

*Mining – digging up areas of land to extract precious metals, rocks or similar that can be sold or used to earn money and boost industry.*

## Question 4b.

Marks	0	1	2	3	4	5	6	Average
%	32	9	16	12	14	10	7	2.3

Students were required to compare how the two forms of primary industry listed in Question 4a. influenced societal relationships with outdoor environments.

Responses that focused just on environmental impacts with no mention of societal relationships did not score high marks.

Students who had selected distinctly different types of primary industry (for example, a form of farming and a form of mining) tended to find it easier to compare the two. This highlights the importance for students to

make the most of their reading time and fully read each question, so they understand what is required of them and therefore select the most appropriate example to use in their response.

Students had to use comparative language to compare the relationships, not just describe them.

The following is an example of a high-scoring response.

*Mining activities due to their direct extraction of resources could influence people to perceive the environment of that of a limitless resource that can continuously be exploited to run society. In comparison, agriculture may influence people to view the environment as a means to support society although it must also be cared for to ensure sustainability. Mining could prompt individuals to engage in high exploitation of the environment such as burning of fossil fuels and encouraging in activities that promote environmental decline such as land clearing for infrastructure development. In comparison the agricultural aspect of primary industry may influence people to adopt more sustainable practices when using the environment as a resource such as rainwater collection. The impacts on a societal relationship influenced by mining could be worsening of greenhouse gas emissions contributing to climate change, whereas agriculture may prompt impacts such as less water taken from water sources such as rivers promotion habitats and vegetation protection, improving biodiversity.*

## Question 5

Mark	0	1	2	3	4	Average
%	16	10	26	32	17	2.2

Students were required to name a piece of music, art or writing that depicts an outdoor environment that they had visited and/or studied and evaluate the influence that the piece has on the societal relationships with outdoor environments.

There were two parts to this question that students appeared to find challenging. The first was applying their selected piece to an outdoor environment. The second was providing specific examples from that selected piece to link to an environment. In addition to these challenges, when evaluating, students tended not to make an overall judgment or statement; if they did, they did not provide reasoning behind it. A statement such as 'overall it positively changed relationships' is not sufficient. Students need to include a supporting statement demonstrating why their final position outweighs the other positions discussed.

The following is an example of a high-scoring response.

*Piece of music, art and writing: 'The Lorax' by Dr. Suess*

*The Lorax highlights the consequences of treating the environment as a commodity to make a profit and as such, positions individuals to perceive the outdoor environment as fragile, needing protection and conservation. This is positive as it will see individuals undertake conservation initiatives, to pursue a greater appreciation, understanding of and respect for the natural environment. However, individuals may see their efforts to conserve the outdoor environment as futile due to the impact of primary industries. As a result however, individuals will gain a greater respect for the natural environment, while also rejuvenating it and providing for improved biodiversity levels showing that overall, The Lorax has a significantly positive impact on societal relationships with outdoor environments.*

## Question 6a.

Mark	0	1	2	Average
%	13	46	40	1.3

Students were provided with stimulus material in the form of a written news report for Question 6. For part a., students were required to outline the role the media plays in depicting outdoor environments and experiences.

Some students outlined aspects of the article or the incident in the article rather than the role the media played; however, most students were able to gain some marks for this question.

The following is an example of a high-scoring response.

*Media outlets such as ABC News often exaggerate tragedies in outdoor environments and depicts the land as an adversary by describing “rough terrain.” Which can evoke fear with the public. They can change the public perception and therefore desired experiences through the way they present things.*

## Question 6b.

Mark	0	1	2	3	4	Average
%	10	20	36	25	9	2.0

With reference to the stimulus at the start of Question 6, students had to evaluate how the incident may have influenced social responses to risk-taking.

Some responses discussed relationships with the environment in general, or discussed personal responses to risk, personal levels of competence and whether people like a challenge or to feel safe. When discussing social responses to risk-taking, while competency levels and people’s personal perception of risk may come into play, the focus should be more on the implementation of safety measures and increasing or decreasing levels of participation across the population.

The evaluation aspect of the questions was also a challenge for some students with the same observations made in Question 5 relevant for this question.

The following is an example of a high-scoring response:

*Society may be influenced to put fences on cliffs of outdoor environments with high mountains such as the Grampians, as they could be shocked and scared by the man “slip[ping] and [falling] off a cliff” as stated in the extract/news report. This could result in people not feeling as worried as they originally did about the incident and their outdoor activities and encouraged to once again participate in these activities e.g. hiking, thus putting pressure on the environment e.g. erosion, trampling of vegetation. However, others may seek thrill and feel less inclined to participate in activities as it is too boring with fences. Overall, fences would have helped avoid this incident and would help protect participants and produce a less concerned relationship with the Grampians so they can participate.*

## Question 7

Mark	0	1	2	3	Average
%	22	23	35	21	1.5

Students were required to explain why the term 'sustainable development' is considered contradictory.

Students needed to understand what 'contradictory' meant and not simply repeat that it was a contradictory concept without explaining why this could be.

The following is an example of a high-scoring response:

*Sustainable development, that is development that meets the needs of the present without compromising future generations abilities to meet their needs, is considered contradictory because the term itself is an oxymoron. To sustain and ensure the earth is able to continue to support all life means the opposites of 'to develop' therefore it can be difficult to understand how the 2 can exist within harmony. For example, a area might want to develop by building new houses, but how do you do so sustainably when the most sustainable thing to do is not build at all. But then no development would occur.*

## Question 8a.

Mark	0	1	2	Average
%	43	26	32	0.9

Students were required to outline two processes that can be used to resolve environmental conflicts. Many students correctly identified processes but did not outline what they were. The command term 'outline' asks students to provide a brief description.

The following is an example of a high-scoring response.

*The use of the courts can be used to resolve conflicts, it allows both sides of a conflict to present their arguments to an impartial panel and for a ruling to be decided. Creation of laws involves the government making an internal decision often influenced by the leading parties values and establishing a resolution via a law.*

## Question 8b.

Marks	0	1	2	3	4	5	6	Average
%	28	9	18	19	10	8	8	2.3

Students were required to analyse how the two processes outlined in Question 8a. have been or could be used to resolve an environmental conflict studied this year. It was intended that students use the same conflict to analyse both processes to demonstrate their depth of knowledge on the conflict studied and their ability to apply knowledge.

It is important to note that when a question is asking for a current conflict, students should avoid discussing historical conflicts (like the Franklin River of the 1980s).

The following is an example of a high-scoring response and provides a good example of how to use acronyms within a response:

*The Alpine Grazing conflict between the Mountain Cattleman Association of Victoria (MCAV) and the Victorian National Parks Association (VNPA). After both parties used methods to advocate for their view*

*the Labour government created legislation that overruled previous laws and determined it was illegal to graze cattle in the Alpine National Park from 2011 onwards this ceased all alpine grazing and provided a clear resolution to the conflict. The use of the court systems to resolve the Alpine Grazing conflict would likely have included both the MCAV and VNPA pursuing reasons to support their cause to an impartial jury. The MCAV would pursue arguments stating that grazing reduces bushfire risk amongst other reasons whilst the VNPA would argue that grazing harms native flora and fauna, both sides arguments would be considered and ruling that would resolve the conflict would then be given.*

## Question 9a.

Marks	0	1	2	3	4	5	6	Average
%	11	4	12	20	14	17	22	3.6

Students were required to identify and explain one public and one private management strategy used to maintain the health of an environment that was visited and/or studied this year. To achieve full marks, students were required to use specific examples from the visited and/or studied environment and not just discuss management strategies in general terms.

Students who had visited and/or studied an environment were generally able to provide stronger responses.

Students need to clearly understand the distinction between private and public land. Private land cannot occur within a national park, but land adjacent to a national park can be private. Trust for Nature was widely used in response to this question; however there was often a lack of understanding of how it is applied to an environment. To assist with understanding and use of examples, incorporating visits to places where management strategies are clearly in place and talking to stakeholders and landowners can be a useful way to broaden a student's understanding.

The following is an example of a high-scoring response:

*A private land management strategy in private land in and around the Barmah Forest is the management and culling of pest species. Within this land contract shooters have managed fox and goat populations aiming to completely eliminate both species from the forest. Goats within Barmah have been identified as creating competition for food with native animals such as kangaroos and foxes pose a threat to threatened species such as the Australasian Bittern, culling aims to improve biodiversity with Barmah. The public land management strategy of public toilets with the areas of the Barmah Forest was for recreation such as camping and fishing. Parks Victoria aims to eliminate waste from entering the ecosystem and poisoning native foraging species such as the common wombat. Parks Victoria aim to improve native animal populations and improve biodiversity through the creation of public toilets.*

## Question 9b.

Mark	0	1	2	3	Average
%	21	19	34	27	1.7

Students were required to evaluate the effectiveness of one of the strategies in Question 9a. To adequately respond to a question asking for an evaluation, students should demonstrate the ability to look at both sides of the issue (in this case the effectiveness of a particular management strategy). They should show both positives and negatives and then provide a final judgement or 'overall' comment that clearly demonstrates their position on the issues and adds further weight or additional evidence to their final judgement.

Some responses demonstrated a lack of understanding or ability to respond appropriately to this command term. Some provided an in-depth discussion of the strategy, rather than an evaluation.

The following is an example of a high-scoring response:

*The culling of introduced species such as goats and foxes is expensive as it incurs high cost of manpower, time and equipment and is criticised as never being 100% effective. Although pest control and management has the positives of permanent removal of dangerous introduced species and protection and improvement of native animal population. Overall pest control and management is effective as it provides a reliable means of improving biodiversity with the Barmah Forest.*

## Question 10a.

Mark	0	1	2	3	Average
%	21	24	29	26	1.6

Students were provided with stimulus material about a wetland environment and were required to explain how either the Ramsar Convention (international treaty, 1971) or *The Flora and Fauna Guarantee Amendment Act 2019* (Vic) could assist in managing the health of a wetland environment. Both the Act and convention listed are specified content in the study design, and given that the Ramsar Convention specifically protects wetlands, students should have general knowledge about this type of environment.

Some responses did not address the question. Some included general comments about the selected Act or convention protecting the environment without showing specifically how it would do this. Other responses provided information about the formation of the Act or convention, which did not address the question.

The following is an example of a high-scoring response and again provides a good example of how to use acronyms within a response:

*The Flora and Fauna Guarantee Amendment Act 2019 (Vic) (FFGAA 2019) aim to protect threatened or at risk organisms through government regulation. The FFGAA 2019 could identify threatened organisms within the Edithvale-Seaford wetlands, then identify threatening processes to those organisms before creating a management plan in the form of an action statement that aims to protect the identified organism.*

## Question 10b.

Mark	0	1	2	3	4	Average
%	21	13	22	24	20	2.1

Students were required to evaluate the effectiveness of the selected Act or convention in managing and sustaining an environment that they had visited and/or studied this year. It was again important that students correctly use the command term 'evaluate'. Students needed to use examples from a specific environment in their response in order to access full marks. Ideally students should have used the same Act or convention from Question 10a., but were not penalised if they chose to use the alternate one.

The following is an example of a high-scoring response.

*The Flora and Fauna Guarantee Amendment Act 2019 (FFGAA2019) has the positive aspect of establishing clear management plans such as the action statements that identifies trout cod populations in Barmah and how the endangered fish are threatened by processes occurring in Barmah, aiming to cease such processes. Although the FFGAA has also been criticised as being hard to enforce, this is supported by only one conviction under the act in 20 years. Overall the FFGAA 2019 would be ineffective in protecting species in Barmah such as the trout cod as it lacks proper regulation to enforce its guidelines.*

## Question 10c.

Mark	0	1	2	Average
%	36	29	34	1.0

Students were required to describe an action that has been or could be used to sustain the health of a wetland environment. The specified content in the study design included Landcare, green building design, integrated farming and urban planning – all of which could have been used to respond to this question. Other actions such as strategies to minimise litter were accepted if they were appropriately described.

The following is an example of a high-scoring response.

*Landcare. Landcare is a government run program that establishes community volunteer based conservation groups that identify aspects of local environments (such as a wetland ecosystem) that need protecting and implement sustainable practices to improve environmental health.*

## Question 11

Marks	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Average
%	3	0	1	1	3	4	5	5	7	9	10	11	12	13	8	8	10.0

The stimulus material enabled a case study approach and students responded well. A number of students were creative in their response and provided a letter to the family in the stimulus material. These responses tended to score very highly as the students provided a high level of detail.

The correct identification of observable characteristics is specified content in the study design, so correct identification was necessary to gain full marks. Some students tended to either miss or just mention briefly the importance of healthy outdoor environments for society. Most students could discuss the importance of a healthy environment for individuals but for society either repeated part of their response, or linked society into their discussion of individuals, or missed discussing society altogether.

When discussing the importance of outdoor environments for society, students should focus on economics, future resources and education. Students are encouraged to plan out their response to ensure they cover all the necessary areas.

The following is an example of a high-scoring response.

*The level of biodiversity within the Acacia Farm could be assessed to determine environmental health. By identifying native and endangered species of flora and fauna such as the previously mentioned spot-tailed quoll and Barking owl and their population and distribution. Furthermore any aspects that may impact the health of flora and fauna such as land and air should be considered.*

*Air quality and adequacy could also be assessed, this involves examining visibility (lack of or presence of smog), any taste or smell and direct observable pollutants to determine whether the environments air quality and adequacy is healthy.*

*By improving the health of the Acacia Farm recreational activities could better be conducted on the property, bushwalking could improve ones physical health as it is proved by studies that exercise in nature is more effective whilst exercising in groups while outdoors on the farm could improve emotional wellbeing as it provides a break from the routine of life, a social encounter and allows for the individual to enjoy the tranquil surroundings of their surrounding environment. Society could benefit from the health of environments as it could provide a venue for education, for example the school tours conducted on the Acacia Farm. Whilst maintaining its health could also provide means for it to be better used as a resource to supply materials to society.*

*School groups visiting could employ the strategy of staying on marked tracks when engaging in recreation whilst on Acacia Farm. This strategy would prevent high numbers of participants from degrading the health of the land of the farm by reducing soil compaction and erosion from foot traffic. The implementation of this strategy and decrease in soil compaction and erosion would preserve soil health as well as allowing vegetation to survive and be maintained, as such this management strategy assists in preserving the biodiversity of the Acacia Farm.*

*Biodiversity could be improved via the fencing of identified 'old-growth native forest' preventing access by visitors preventing destructions of ecologically significant aspects from visitor interactions.*

*By engaging in the management and removal of pest species such as rabbits and blackberry bushes waterways could be improved and erosion from warrens and vegetation loss due to consumption could be further prevented.*

*By establishing the farm as a Trust for Nature (TFN) conservation covenant the TFN organisation would provide oversight and consultation towards how the property is managed. TFN would provide funding to establish sustainable projects that identify organisms of significant value or that are threatened and exist within the Acacia Farm such as the growling grass frog, aiding in biodiversity being improved on a genetic, species and ecosystem level.*