**Year 12 Biology**

**Task 8**

**Environmental Investigation**

**Macroinvertebrate Wetland Reservoir**

**Weighting 10%**

**Term 3 Week 8**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Biodiversity is important in maintaining a healthy planet. In countries all over the world, areas of land and water are set aside as National Parks or Reserves to protect wildlife of that region. Often the species in an area are unique and may be at risk or an endangered species.

Western Australia has many unique organisms. In this task, you have to present a case study report about a wetland reserve area in Western Australia. In your case study report, you are to address the following areas of your reserve:

* Identify the reasons why the park/reserve was created.
* Describe the physical environmental (abiotic factors). Describe the biotic (living) part of the ecosystem within your nominated area.
* Illustrate the feeding relationships within your ecosystem.
* Discuss the possible human impacts of the area and how they affect the living environment.
* Discuss the non-human impacts of the area and how they affect the living environment.
* Moving forward some management regimes individuals and government organisations can use to benefit the area.

In your case study report, please include an introduction, subheadings and a conclusion. You may also include photographs from internet sources to illustrate your descriptions and observations, but remember to credit the photographer/site it is sourced from. All referencing is to be completed in Harvard format.

Use your planning from above and draft your case study report, being sure to then produce a final copy for submission with your references. You must use your Nearer to Nature incursion booklet for information when planning and drafting your report with additional research allowed if needed (or due to absence). **Please note all websites and sources used to be referenced in Harvard format.**

**PART B (30 marks)**

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| **Required Content** | **1** | **2** | **3** |
| **Reasons the reserve was created.** | Brief mention of why or how. | Detailed information on why and how. |  |
| **Species present** | Identify most species with some missing. | Identify all species. | Identify and explain in detail all species. |
| **Risk/Endangered** | Identify some species at risk. | Identify all species at risk. | Identify and explain all species at risk. |
| **Abiotic factors** | Identify some abiotic factors. | Identify all abiotic factors. | Identify all abiotic factors and describe their affect. |
| **Biotic factors** | Identify some biotic factors. | Identify all biotic factors. | Identify all biotic factors and describe their affect. |
| **Feeding relationships** | Discuss the trophic levels in area. | Discuss trophic levels in area identifying species in each level. | Present detailed food web of all species in area. |
| **Human Impacts** | Brief description of some human impacts. | Detailed description of multiple human impacts. |  |
| **Non-human impacts** | Brief description of some non-human impacts. | Detailed description of multiple non-human impacts. |  |
| **Individual and government support regimes** | Brief description of individual or government regimes. | Brief description of individual and government regimes. | Detailed description of individual and government regimes. |
| **Report structure** | Introduction and conclusion brief, no subheadings and no diagrams. | Introduction and conclusion, subheadings but no diagrams. | Introduction and conclusion, subheadings and diagrams included. |
| **References** | References present or in incorrect format. | 1-2 References present in correct format. | 3 or more references present in correct format. |