

PIL406A Identify and analyse bioregional characteristics and resources

This competency standard covers the process of researching, extracting and providing information on bioregional characteristics and resources. It requires the ability to process a request for information on bioregional characteristics and resources, identify information sources, organise self or others, ensure information meets request, prepare and finalise reports. Researching, extracting and providing information on bioregional characteristics and resources requires knowledge of bioregional issues, relevant bioregional issues, types of information sources, methods and means of accessing data and means of validating information.

Note: For Indigenous contexts, the delivery and assessment against this competency standard must comply with community protocols and guidelines and be supported by elders and custodians of country.

Element		Performance Criteria	
1	Identify information sources of information on bioregional characteristics and resources	1.1	Relevant sources and locations of information for the bioregion are identified and researched.
		1.2	Access to identified sources is obtained.
2	Organise self or others to extract information on bioregional characteristics and resources	2.1	Information relevant to the particular request is located and extracted.
		2.2	Resolutions to problems accessing information are discussed with designated person and implemented where appropriate.
		2.3	Copy of extracted information is made.
3	Ensure information meets request	3.1	Information is assessed for its validity and reliability.
		3.2	Where information is unclear or difficult to understand, clarification and assistance is sought.
		3.3	Where available information is inadequate, additional information is obtained.
		3.4	Different types of information are combined, where appropriate, to provide a response to a request.
4	Prepare report	4.1	Report format, plan and structure are developed.
		4.2	Report is written using clear and concise language.

	4.3	Spelling, punctuation and grammar is checked and errors are amended.	
	4.4	Report is formatted according to client requirements.	
	4.5	Report is checked for accuracy and to ensure that its intended meaning is readily understood by recipient.	
5	Finalise report	5.1	Review and sign off of report is arranged with designated person where required.
		5.2	Record of report is made.
		5.3	Report is forwarded to client.

Range of Variables

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

What are the characteristics of a bioregion?

A bioregion is an area of land, usually defined by both natural and cultural boundaries, which can provide most of the needs of the people within that region. Typically a town or a segment of a city is at the main node of a bioregion, and this was the pattern of most settlement and economic development until the 20th century.

The recent focus by governments on water catchment management has given a new awareness to natural boundaries, even in urban areas.

A bioregion is a land and water territory whose limits are defined not by political boundaries, but by the geographical limits of human communities and ecological systems.

Water catchment is one of the key identifiers of the bioregion and one of the essential element as the productivity of a permaculture system is limited by its access to water.

The water catchment, storage, use/treatment of effluent and the water quality of rivers and creeks is essential to a permaculture designer. There are many “waterwatch” groups that can provide useful information.

The vegetation on catchment is also an essential feature of a bioregion. Plants and animal communities are directly related to the water retained in the soil and leads well to next point.

What sources of information may be relevant to this standard?	Specialist (eg permaculture and related books), government reports, relevant legislation, Codes of Practice, national and international protocols and charters, statistics, local knowledge, original research, media (television, video, audio), articles (academic, on-line, newspaper, journal), oral history, community histories and stories, letters, internal correspondence, and libraries.
What bioregional characteristics and resources may be included in this unit?	Bioregional characteristics and resources may include the natural (biophysical), built, social and cultural elements of the area, including water supply and catchment management systems, transport systems, LETS and co-operatives, food supply systems, fuel and fibre supply systems.
Who may be classified as a designated person?	Supervisor, manager, colleague, nominated representative of community group, mentor or relevant senior person.

Evidence Guide

What evidence is required to demonstrate competence for this standard as a whole?

Competence in providing information on environmental issues and policies requires a report/correspondence to be prepared detailing local, regional and national environmental issues and policies as requested by the client. The skills and knowledge required to provide information on environmental issues and policies must be **transferable** to a range of work environments and contexts. For example, this could include different environmental issues and policies, client groups and pertaining to different regions and areas.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Relevant bioregional issues including making available a supply of food, water and any other components of daily life from local sources as opposed to importing basic needs from long distance at a high cost to the environment
- Embodied energy (emergy) including how to measure it and compare it with the energy output over the life of the item, and consideration of the waste disposal of an item as part of its energy "cost".
- Types of information sources.
- Methods and means of accessing data.

- Means of validating information.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Identify information sources of information on bioregional characteristics and resources
- Organise self or others to extract information on bioregional characteristics and resources
- Ensure information meets request
- Prepare report
- Finalise report.

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

1. How can communication of ideas and information (3) be applied?	Through preparation of reports.
2. How can information be collected, analysed and organised (3) ?	Through extracting and filing of information.
3. How are activities planned and organised (2) ?	In response to requests for information and established processes and timelines.
4. How can team work (2) be applied?	Co-operation and collaboration in researching, extracting and reporting information.
5. How can the use of mathematical ideas and techniques (2) be applied?	Assembling and doing calculations based on data on bioregional issues.
6. How can problem-solving skills (2) be applied?	In dealing with potential conflict situations especially where there is community concern regarding issues and legislation.
7. How can the use of	Through use of computers and communication

technology (2) be applied? systems.

Are there other competency standards that could be assessed with this one?

This competency standard can be assessed on its own or in combination with other competencies relevant to the job function.

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the **Permaculture International Ltd Course Documentation**.
