



Community Meeting - Teacher's Notes

Drought

Drought is generally defined as an acute rainfall or water shortage and has been a common part of life for most Australian farmers since European settlement. Australian farmers have had to become experts in interpreting and predicting rainfall patterns to have any success in their business.

The Bureau of Meteorology has a lot of statistical data relating to drought including an interactive map on rainfall deficiency that can be found here:

<http://www.bom.gov.au/jsp/awap/rain/index.jsp?colour=colour&time=latest&step=0&map=drought&period=daily&area=nat>

Of course the definition and effect of drought is relative to the area in question as the relative amount of expected rainfall in the Amazon, for example, is totally different to expected rainfall in the Wheatbelt of Western Australia.

Areas of Queensland have not had a decent amount of rain for more than five years, which is having a huge impact on the farming communities there, and many areas in WA are in the same situation. Cape Town in South Africa was also recently in the news as they were potentially going to run out of water after experiencing drought conditions since 2015.



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Farming communities will often hold meetings if there is a crisis in their area such as bushfires, flood or drought. These meetings are held to assess the situation and hopefully come up with an action plan to help everyone in the community through the crisis.

In this activity, students will role play some of the members of a farming community and participate in a mock community meeting about a drought situation. Below are some suggested roles for students; however, it will depend on class size as to how this meeting will run (you may like to run it in small groups instead). The idea is that the students get to see the situation from the point of view of all stakeholders in a community. They should take some time to think about how their 'character' would react to the scenario and what their point of view would be.

Scenario: You are living in the small rural town of Palms whose main business is wheat and sheep farming. The area has had minimal rainfall for the last five years and has been declared a drought zone. The local community has come together to discuss the following point:

The possibility of developing an irrigation scheme by drilling into a newly discovered freshwater aquifer. This aquifer is located close to the town and is not too deep so it will be easy to drill down to access it. It is a completely confined aquifer meaning that it does not usually interact directly with surface water. The area that the drilling would take place in is very close to a local salt lake which has quite a fragile ecosystem, including a rare species of fish. The water coming up from the aquifer is likely to be quite warm so if this water enters the salt lake, it would impact on the ecosystem, potentially killing the fish.





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Some suggested roles:

- **Karen McRae** - the Shire President and Chair of this meeting. Karen was born and raised in the area and she runs the local petrol station with her husband. They have seen a big downturn in business for fuel as the farmers have not been running their heavy machinery at harvest time. She loves Palms and is dedicated to the people of the district.
- **Bob Hughes** - a fourth generation farmer with one of the biggest wheat and sheep farms in the district. He has been able to grow crops for two out of the last five years but the grain yields were low. Bob is quite wealthy as his family were quite successful at farming before the drought. He is buying in feed for his sheep and also buying in water for them. He is very keen to start an irrigation scheme.
- **Sarah Williamson** - a fifth generation farmer who has had to sell off some of her land due to debts so now has one of the smaller properties in the district. She decided three years ago to stop planting wheat and is concentrating on raising sheep. She is also having to buy feed and water for her sheep.
- **Peter Jones** - a representative of the government department dealing with water supply. His department discovered the new aquifer and have estimated it will cost \$30 million to drill down to access it. It will then cost another \$15 million to install all the pipelines for an irrigation scheme. They would expect some of this cost to be borne by the farmers.
- **Mark Brown** - is a Bureau of Meteorology long range weather forecaster who advises farmers on likelihood of rainfall within the next few months and how much rain is likely to fall. There is little prospect of any rainfall in the few months after this meeting, according to the computer model run by the Bureau.



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- **Silvia Wood** - is a local business owner whose family has been in the district for several generations. Her farming supplies store has around \$300,000 owing from farmers and she is having to refuse credit to some until their debt is paid. She has had to downsize her staff and let two part-time workers go.
- **Tom Fielding** - president of the local environmental group who also is a resident in the district, working as a teacher at the local district high school. He has seen how the drought is effecting local families through his students. Tom is against drilling into the aquifer as he believes it will affect the lake and therefore may harm the rare fish species.

You may like to print these roles out for the students and even add some of your own.

Some other topics you might like to discuss in this role play are:

- Long term weather forecast and whether a wheat crop should be planted this season.
- How the government is going to help the local community.
- What other species may be affected if the lake ecosystem changes.



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