



Cheat Sheet for Coordinators

Introduction

The aim of this cheat sheet is to give coordinators a list of some of the aspects of Run of the River which can be highlighted during pd / teacher training sessions. You need to be familiar with these aspects so that you can prompt players to think about what is being illustrated on the board and during game-play, and to reflect on how this occurs in real-world situations. There are also some ideas for pre/post game activities to supplement and explore the messages which come out during game-play.

As well as pointing out the things the Run of the River can show players, it is probably worth noting some of the things it does not show:

- It is not a comprehensive representation of the water allocation system in Victoria, it merely aims to give some indication of the different uses that have to be accommodated in the allocation system;
- The penalty/reward system used in the game is not a reflection of good/bad action in real life. For example, though a *Waterways Card* may penalise a player in water disks for a withdrawal for town drinking water, this does not illustrate a 'bad' use of water, just one of many needs for water which removes it from the natural system.
- It does not advocate for environmental flows, but aims to illustrate some of the effects of water allocation on aquatic ecosystems and the implications for the long-term viability of this resource. This point is particularly important given the sensitivities around the release of the game, and why it should be stressed that pre/post game activities should be used in conjunction with the game to provide a balanced view.

Ultimately, the game seeks to prompt thought about the demands human need for water places on riverine ecosystems, the consequences of this demand for both the environment and various human uses, and some ways individuals, communities and organisations can help to sustainably manage this important natural resource.

Remember that no one has all the answers to the problems created by human demand for water, but the way to find answers is by understanding all user's needs, including the environments, and working together to find the solution that provides for everyone. Run of the River was developed to help this process, and so it should be the key message people take with them.

Elements illustrated on the board game for discussion

The following aspects illustrated on the board can be used for discussion to highlight the hydrological, ecological and social impacts of various flow regimes and extraction practices, and the implications of these for management strategies.

Hydrological

How might connectivity in the river system change with different seasons and/or flow alterations (see diagram in powerpoint slide 13's diagram)?

- longitudinal connectivity between main river channel and tributaries from headwaters to estuary/terminal lake
- lateral connectivity with floodplain and wetland (possibly groundwater)

Why is connectivity important? (Fish migration/breeding, population viability through genetic diversity, discharge needed for channel maintenance/estuary opening, nutrient cycling through system)

What elements illustrated on the board exist on players local river (dam? weir? landuse practices? fish ladders? – connects players to their own 'patch' for easier visualisation of aspects of the game)

Ecological

How many different species are represented on the board (66 plants and animals)?

How are they connected with the different waterways, what do they rely on to survive, and how could they be affected by flow changes (or lack of it)? See pre-game activities 2 and 3.

Which species are found in the local area? How is local river health effecting them?

Social

How are the waterways being used by people on the game board – for rural/urban communities, recreationally, aesthetically, economically (eg primary industries, commercial towns, hydropower)?

Where does the water come from to fulfil this use?

How could these uses be affected by a reduction in water availability (surface and ground water) and/or flow changes? See post game activity 4.

Regulation of water

How many different types of dams or weirs are along the length of Main River and its tributaries (3)?

What is the difference between the unregulated tributary (Wild Creek) and the regulated tributary (Tame Creek)?

For what purposes/uses have these regulatory structures been built?

What impacts are they likely to have (positive and negative) on people and river systems (ecologically? geomorphologically? socially? economically?)?

Eg. Fish themes to discuss: cold water pollution, fish ladders, lack of spring flushes for triggering spawning, lack of connectivity between protected backwaters (popular with juvenile fish) and main river channels.

Management of river health

What management initiatives are illustrated on the board/in the game cards (revegetation efforts, fish ladders for fish migration)? Who is responsible for these initiatives (individuals? community? Waterwatch? local councils? DSE?)

What do these activities aim to achieve in terms of river health?
What about the EWR? How does this initiative aim to improve river health?

Aspects of game-play for discussion

During and following game-play, some of the following questions can be asked to highlight the 'real life' scenarios the game seeks to convey.

Winning the Game

Why did the winner win and the loser lose?
What effect did the players actions or decisions (as represented by the cards they received) have on the outcomes of the game?
What about the possible real-life implications of these actions for river health?

What proportion of players received a water licence?
How many of them chose to buy/sell water to other players with Water Licences?
Did this reliability of water (and ability to buy and sell water) make life easier or harder for players to finish the game?
In real life, is any man or dog able to buy and sell water?
What happens if the water banker runs out of water discs?
Does this happen in real life (inability to supply water for all social/economical/ecological needs)?

What is the aim of the game (in Level 2), to get water or money?
Why is having a water licence an advantage? (allows a 'perceived' security in water supply)
Do you think this is what people are trying to do in real-life?
Can you do both? How? (May help to go back to the cards players receive and assess how the decisions that were made could be changed to produce win-win solutions, or just identify what conflicts between water uses arose as a result of the decision)

People Power and Water Ways card were developed with a combination of true/false, multiple choice and consequence statement cards. These and some locations of the board represent the decisions and actions of waterway users during the game. It is important to reflect on these for students to gain an understanding of the issues involved in waterway management and the consequences of these decisions, rather than the focus being who got the most water!

Did the rating system at the end of the game (level 2) make a difference in deciding who won the game (as compared with who got the most money/water discs)?
How does the rating system in Level 2 account for the value of water in terms of river health (as opposed to the economic values of licence and money)?

Seasonal differences

What proportion of people actually finished the game for each season?
How does the degree of difficulty in finishing the game in a drought year reflect the difficulty in managing water for all uses (including an environmental needs) in a drought? (eg. What could be done to make sure everyone gets enough water?)

Personal impacts on river flow

How do I personally impact on a river's flow? Consider the water used for the food you eat, the materials you use at home/school/work, the water you drink?

Why am I saving water in my home/school/work environment? Is it just because water is precious or is it so that there is enough water available for all of the different users of water (including the aquatic environment)?

Future stressors on water availability

How might the following scenarios affect water availability and river flows?

- climate change (reduced rainfall reliability, increase in freak storm events)
- population growth
- landscape change (eg blue gum plantations)
- rejuvenation during bushfire recovery