

Regional Methods

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The Powells Creek catchment is located in the Inner Western Suburbs of Sydney and drains stormwater runoff from an urban area into Homebush Bay. A stream gauge operated on this stormwater channel in the period 1958 to 2005. The catchment area upstream of the gauging station is 2.4km² while the total catchment area of Powells Creek is 8.4km². The catchment centroid is 151.093°E, 33.8774°S and the catchment outlet is 33.8702° S 151.091° E.

1. Calculate the 50%, 20%, 5%, and 1% flows using the RFFE tool.
2. Compare the results obtained from different methods (RFFE, At-site FFA from Assignment 1, and the Probabilistic Rational Method). Discuss the reliability of these predictions given the assumptions used in the development of that model.

Design Runoff Coefficient Contours (ARR87 Figure 5.1)

[Figure 5.1.pdf \(https://canvas.uts.edu.au/courses/34405/files/9037002?wrap=1\)](https://canvas.uts.edu.au/courses/34405/files/9037002?wrap=1) [↓](https://canvas.uts.edu.au/courses/34405/files/9037002/download?download_frd=1)
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Zones for FF_y (Frequency Factor ARR87 Figure 5.2)

[Figure 5.2.pdf \(https://canvas.uts.edu.au/courses/34405/files/9037029?wrap=1\)](https://canvas.uts.edu.au/courses/34405/files/9037029?wrap=1) [↓](https://canvas.uts.edu.au/courses/34405/files/9037029/download?download_frd=1)
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FF_y for Rational Method in Eastern NSW (ARR87 Table 5.1)

[Table 5.1.pdf \(https://canvas.uts.edu.au/courses/34405/files/9037049?wrap=1\)](https://canvas.uts.edu.au/courses/34405/files/9037049?wrap=1) [↓](https://canvas.uts.edu.au/courses/34405/files/9037049/download?download_frd=1)
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Assignment 2 Presentation

The report is to be written as a memo from an employee to a manager outlining the basis of the study, the methods of analysis used, and will develop some conclusions and a recommendation. Hence the report will include an introduction, the main body, and some conclusions. The report itself is not to exceed 10 typed pages with a 12 point font and single line spacing - pages in excess of this will not be marked. Excessive diagrams will be considered as additional written pages.

[Assignment 2 - Rubric-1.pdf \(https://canvas.uts.edu.au/courses/34405/files/9101478?wrap=1\)](https://canvas.uts.edu.au/courses/34405/files/9101478?wrap=1) [↓](https://canvas.uts.edu.au/courses/34405/files/9101478/download?download_frd=1)
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Points 20

Submitting a file upload

Due	For	Available from	Until
Apr 1	Everyone else	-	-
Apr 4	13 Students	-	-

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