



**Watercom**  
DRAINS

**Practical Overview of the ARR  
2019 Guidelines  
Applied to Urban Drainage**

**Overview of configuring  
ARR 2019 procedures  
with DRAINS**

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## PROGRAM – ARR 2019 Seminar

The Australian Rainfall and Runoff (ARR) 2019 national guideline was released in May 2019 after the finalisation of the draft ARR 2016 guideline. Now is the time to adopt the guideline.

Since the release of ARR 2016 Authorities and Consultants had been hesitant in adopting the guideline. This 2.5-hour seminar will explain many aspects of the guideline for urban drainage modelling in an easy way to follow and understand the new terminologies and procedures.

In 2019 over 400 people from more than 130 companies and 60 Councils have already attended this ARR seminar. Topics covered include:

- Why do we have a new set of guidelines?
- Overview of past editions of ARR
- ARR 2019 Online & overview of each Book
- Refresh on what is Hydrology, loss models and routing models
- ARR 2019 Temporal Pattern Regions and Rural Loss Model Zones
- New ARR Probability Terminology
- Ensembles of Storms
- Understanding the ARR 2019 catchment terminology (TIA, DCIA, ICIA, EIA, RA)
- Watercom DRAINS application of the ARR 2019 catchment terminology using:
  - Effective Impervious Areas (EIA)
  - Remaining Impervious Areas (RIA)
  - Pervious Areas (PA)
- ARR Data Hub
- Initial Loss Continuing Loss Data
- Understanding Rural Initial Loss vs Urban Initial Loss
- NSW OEH Specific Requirements (Probability Neutral Burst Initial Loss)
- Median Preburst Depths
- Understanding Initial Loss Storm versus Initial Loss Burst
- Modelling Climate Change
- Bureau of Meteorology 2016 IFD Rainfall Data
- Comparing ARR 87 IFD to 2016 IFD at the location of the workshop
- Challenges with ARR 2019
- Demonstration of ARR 2019 Regional Flood Frequency Estimation (RFFE) Model
- Overview of Design Objectives (Safe Widths, Hazard Classifications, Freeboards)
- Overview of applying ARR 2019 procedures with the DRAINS software