

strike and spatial distribution with the F1 anticlinal axes. This correlation between the F1 axes and the NW fault trends was not realised during the field stage of the study and therefore there is insufficient data to properly explain the nature of the field relationships. In theory the observed relationship between faulting and fold axes is to be expected. The late folding event is approximately orthogonal to the F1 folds and the plane of maximum extension is therefore close to the F1 axial plane. Structural weakness in the existing fold axes make them prone to failure as normal fault planes. It is unclear how such faulting relates to the formation of F2 folds, but it would be expected to postdate the folding as a response to changing stress due to fold thickening of the sequence. The relatively linear trace of the interpreted late faults is consistent with them being post fold events.

2.2.2 INTERPRETATION OF REGIONAL FAULTS

The faults described below have not been visited during this study. The interpretation of these structures is based solely upon their mapped character and displacement of lithology in conjunction with their correlation in style with faults in the study area.

2.2.2.1 QUE RIVER FAULT

Clearly post-dating most other deformation it appears the Que River Fault has a component of dextral displacement and may also have accommodated some reverse movement. This oblique dextral/reverse displacement probably ranges from dominantly dextral/sub-horizontal movement where the fault trends NE to a larger component of reverse movement where the fault swings more northerly.

Magnitude of displacement across the fault is difficult to calculate from the mapped geology. This may in part be due to differential displacement across the fault. This is possible if the fault is a boundary between areas of different amounts of shortening. To the north of the fault is the high strain zone through Cue River and Hellyer, due mainly to increased shortening in this zone. No such high strain has been recognised south of the fault hence it may be a differential strain boundary.