## *New Phytologist* Supporting Information

Article title: **Dynamic regulation of water potential in *Juniperus osteosperma* mediates ecosystem carbon fluxes**

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The following Supporting Information is available for this article:

**Fig. S1** Model fit of ΨMD

**Fig. S2** Antecedent weights of soil moisture for two GPP residual models

**Chart, scatter chart

Description automatically generated**

**Fig. S1** Predicted (posterior mean) versus observed ΨMD from the hydraulic regulation model (Eqn. 3-6 in main text). Error bars represent the 95% CIs of predicted ΨMD, the solid diagonal is the 1:1 line, and the dashed line represents the line of best fit.

**A graph of a number of days

Description automatically generated with medium confidence**

**Fig. S2** Posterior mean and 95% CI of antecedent weights from (left) the GPP residual model with environmental covariates (Eqn. 5, 10 in main text) and (right) the GPP residual model with only antecedent soil water content (Eqn. 5, 11 in main text). Gray horizontal lines indicate the prior means and error bars represent the 95%.