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*Water Resources Research*

Supporting Information for

**Regional Base-Flow Index in Arid Landscapes Using Machine Learning and Instrumented Records**

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**Contents of this file**

Figures S1 to S3

**Additional Supporting Information (Files uploaded separately)**

1. Full dataset of USGS streamgages used in analyses for this manuscript. Contains spatial information for each gage and list of years used in this analysis.

**Introduction**

This supporting information contains descriptive datasets, expanded tables referenced in the manuscript, and additional figures to illustrate model performance on subsets of data.

A graph with red and blue squares

AI-generated content may be incorrect.Figure S1. Histogram of BFI trends grouped by long-term instrumented BFI. Significant trends (>0.05) are indicated with bolded borders. More significant negative trends are apparent in low-BFI gauges. Significant positive trends are equally distributed among BFIs.

A graph with red and blue dots

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A graph with a line and dots

AI-generated content may be incorrect.Figure S3. Plot of residuals of predicted BFI vs. observed BFI.