

# **Experiences with Back-Propagation Neural Network (BPN)**

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**Abstract.** Based on the computation using Back-Propagation Neural Network (BPN) for predicting monthly streamflow of Boulder Creek, CO., the effects of several BPN options, including network initialization, network layout, and training intensity, on the performance of the BPN in both training and validation phases are illustrated. By summarizing the findings, a general guideline to configure the BPN for streamflow prediction is given.