## Citation

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## Introduction

This file includes mean streamflow plots for each watershed, grouped by watershed type. The purpose of this file is to visualize and explore sample sizes and hydrograph variation *within* watershed types. Captions provide a narrative description of within-type variability in some cases. Hydrographs for the continental watersheds are not shown here because they are included in the Supporting Information files.

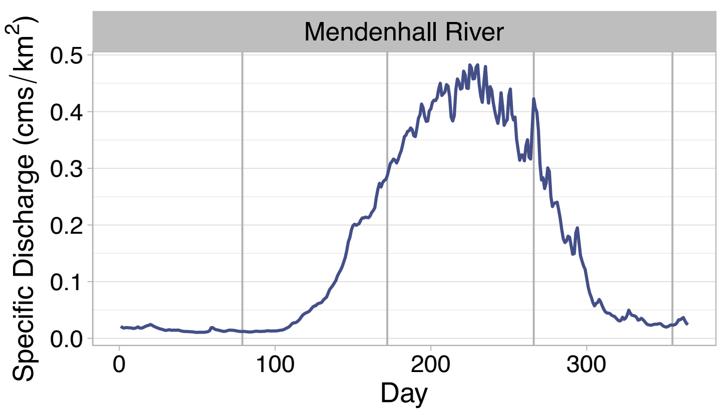


**Figure 1.** Hydrograph for the only gauged GMH type watershed. This was the most glacial dominated hydrograph in the study.

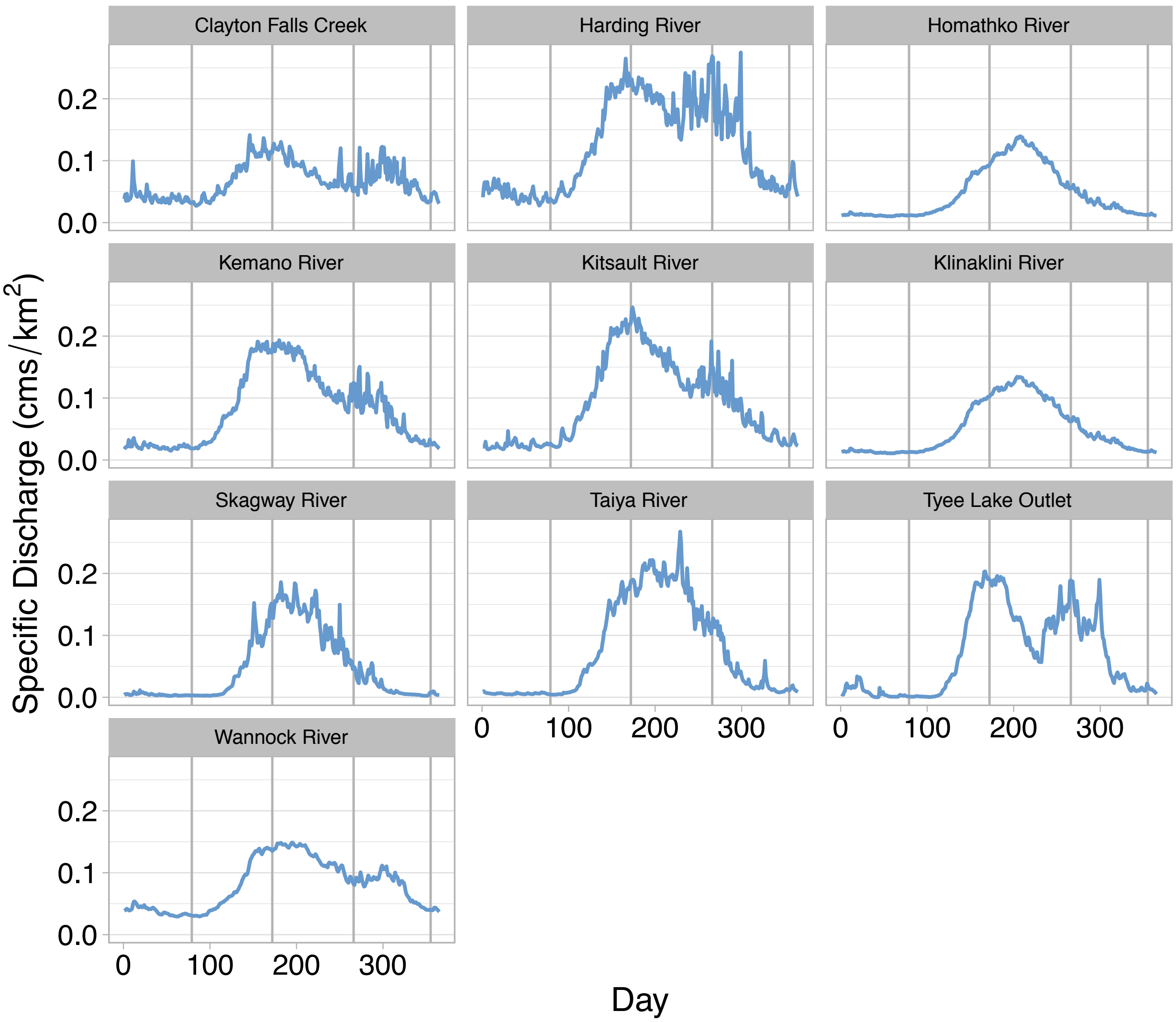


**Figure 2.** Hydrographs for all gauged GMM type watersheds. Within the GMM type (*n* = 10 gauged watersheds), 9 of 10 gauged watersheds showed a glacier supported nival runoff regime but with varying degrees of glacial and pluvial influence. Of these, the five wettest (MAP ≥ 2147 mm) and warmest (MAT ≥ 1.6 °C) watersheds (Wannock, Clayton Falls, Harding, Kemano, Kitsault) also showed a secondary peak in the fall, presumably associated with fall rains – including atmospheric rivers – and likely rain-on-snow runoff events (Eaton & Moore, 2010; Curran & Biles, 2020). The four watersheds with a clear single peak (Klinaklini, Homathko, Taiya, Skagway) had lower MAP (≤ 1945 mm) and lower MAT (≤ 1.2 ℃). Furthermore, GMM catchments with higher ice cover reached maximum summer flow later, reflecting a shift from snowmelt to icemelt controlled peakflow timing (Fleming, 2005) and potentially also reflecting the effect of elevation on snowmelt timing and summer precipitation (Curran & Biles, 2020). The only GMM watershed without a glacial supported runoff regime (Tyee Lake Outlet) had only ~1% ice cover and thus a nival dominant hybrid regime.

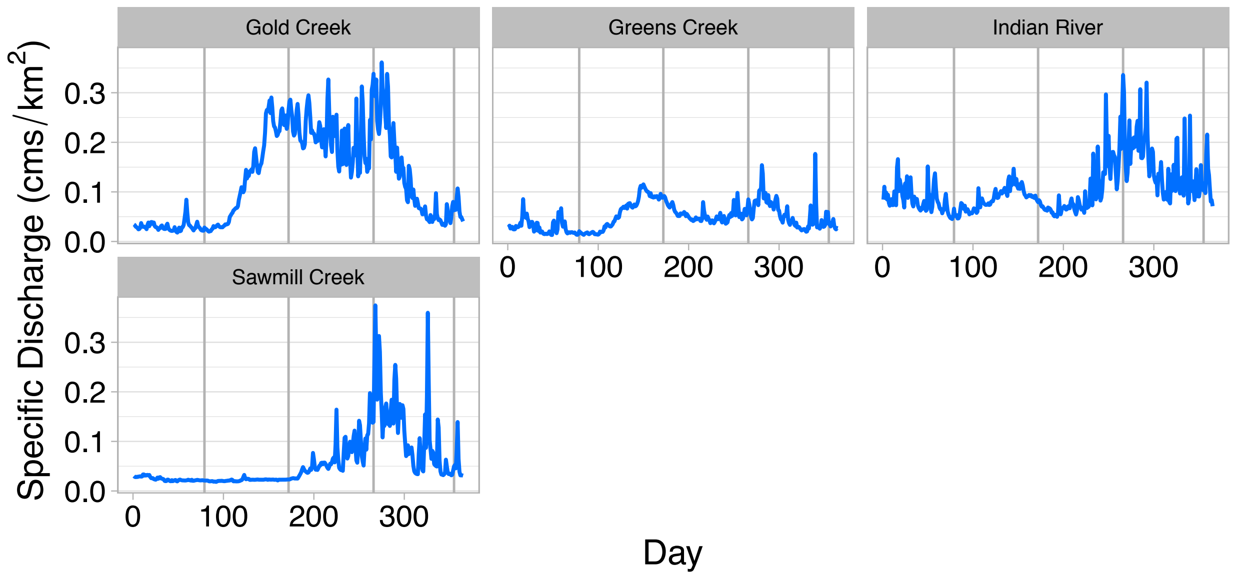


**Figure 3**. Hydrographs for all gauged SMX type watersheds.

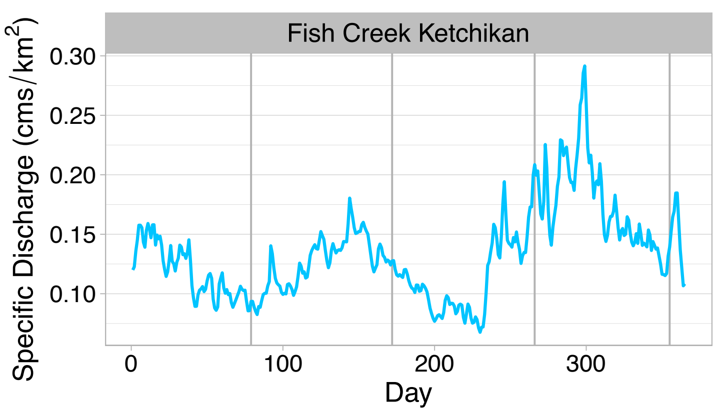


**Figure 4.** Hydrographs for all gauged SMN type watersheds.

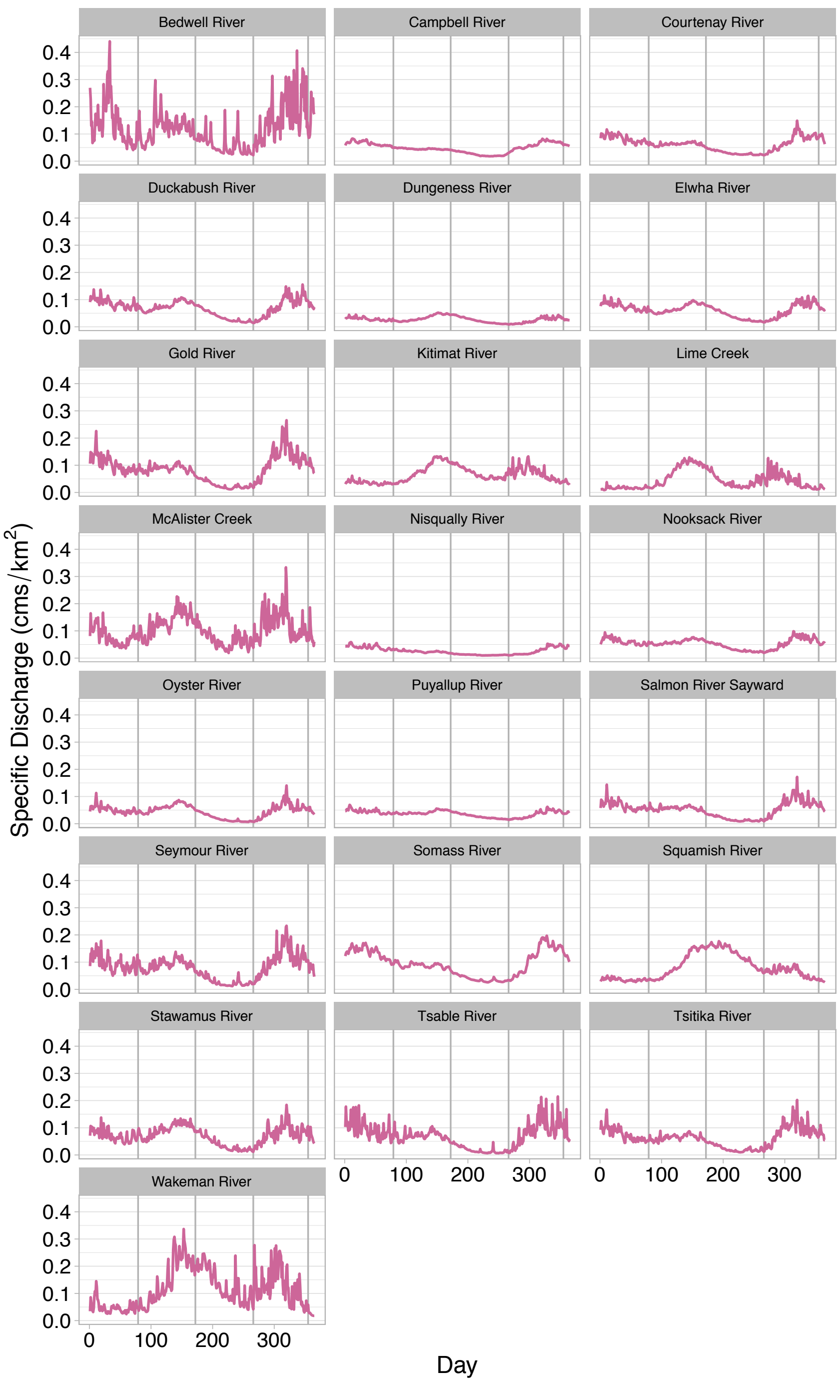


**Figure 5.** Hydrographs for all gauged SMC type watersheds. Within the SMC type (*n* = 22 gauged watersheds), two watersheds with a high % precipitation as snow (43-50%) but low ice cover (0.0-2.2%) had a nival dominant (spring>fall) hybrid regime (Lime Ck. and Kitimat R.) and two watersheds (Squamish and Wakeman R.) had sufficient ice cover (14.3-4.9% respectively) to produce a glacier supported nival regime (the Wakeman also had a secondary fall peak). By contrast, the other 18 watersheds in SMC had a lower % snow (12-28%) and thus had a runoff regime this is a pluvial dominated (fall > spring) hybrid, approximately balanced hybrid (spring = fall), or less frequently a pluvial regime – where the spring snowmelt signal was very subtle (e.g., Nisqually River, with 12% precipitation as snow).

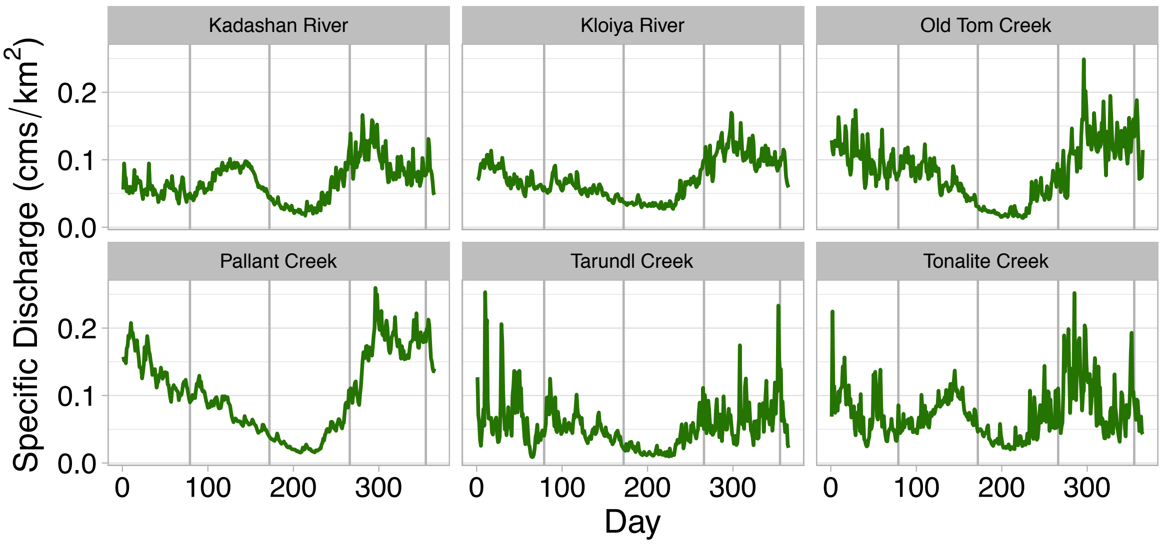


**Figure 6.** Hydrographs for all gauged RMN type watersheds. Only two of the 57 gauged rain-type watersheds showed enough of a spring freshet to recognize a clear pluvial dominant hybrid regime (Tonalite Creek and Kadashan River in RMN), which were both associated with higher proportion of precipitation as snow (26-27%) than typical for these watershed types.

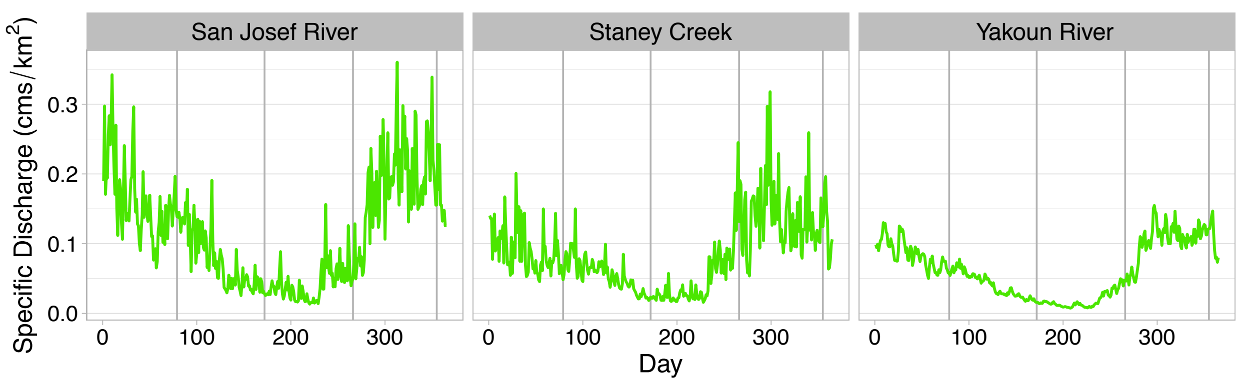


**Figure 7.** Hydrographs for all gauged watersheds in watershed type RHN.

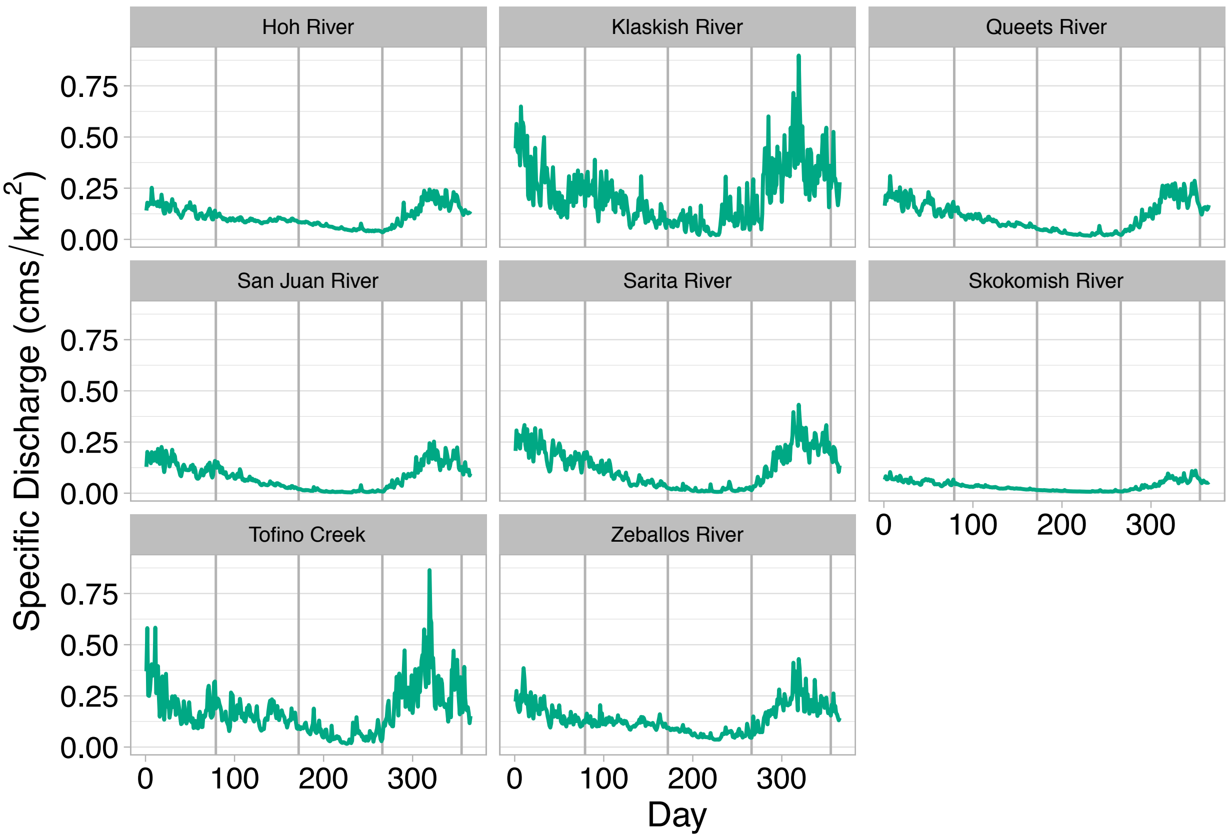


**Figure 8.** Hydrographs for all gauged RMC type watersheds.

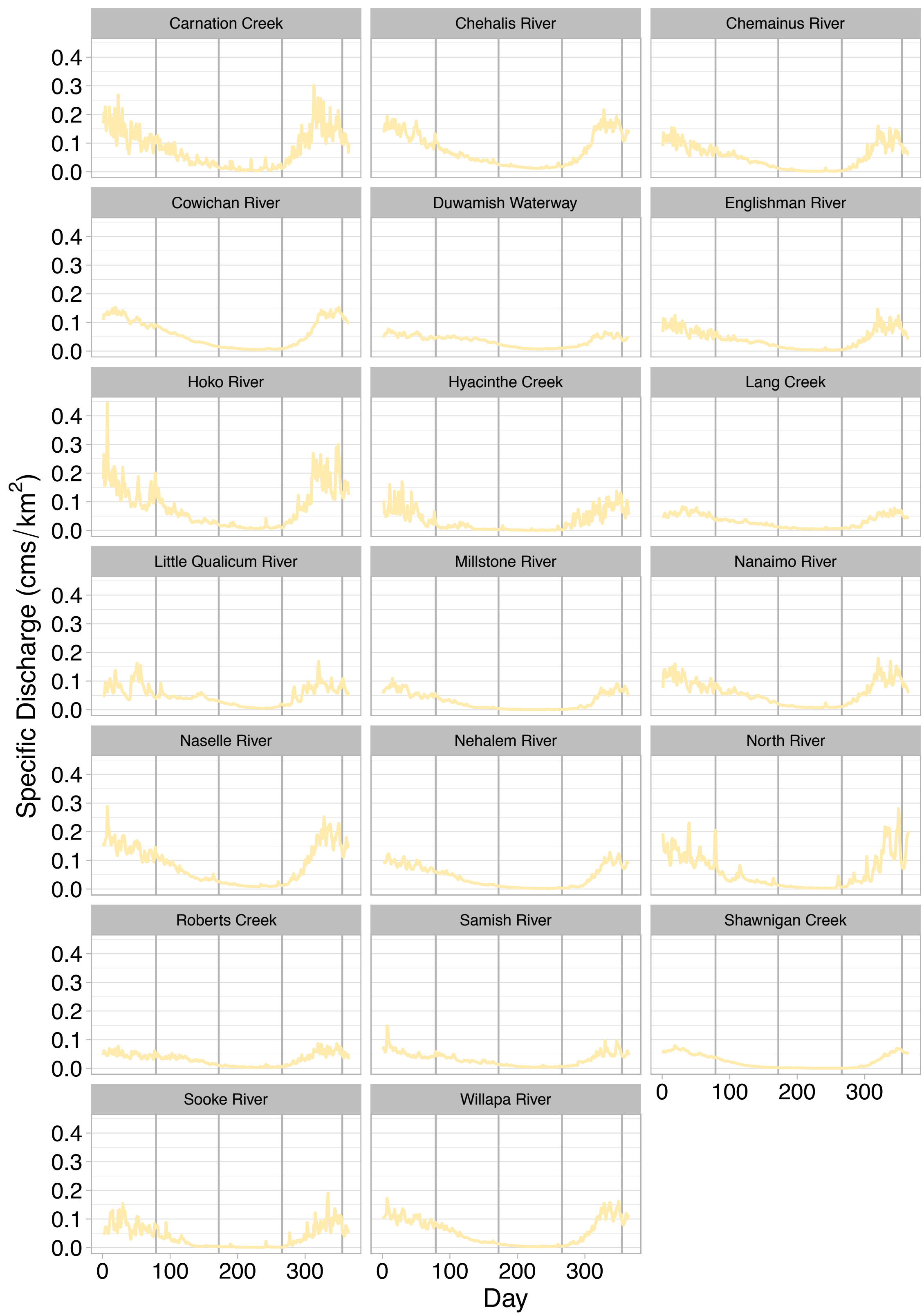


**Figure 9.** Hydrographs for all gauged RHC type watersheds.

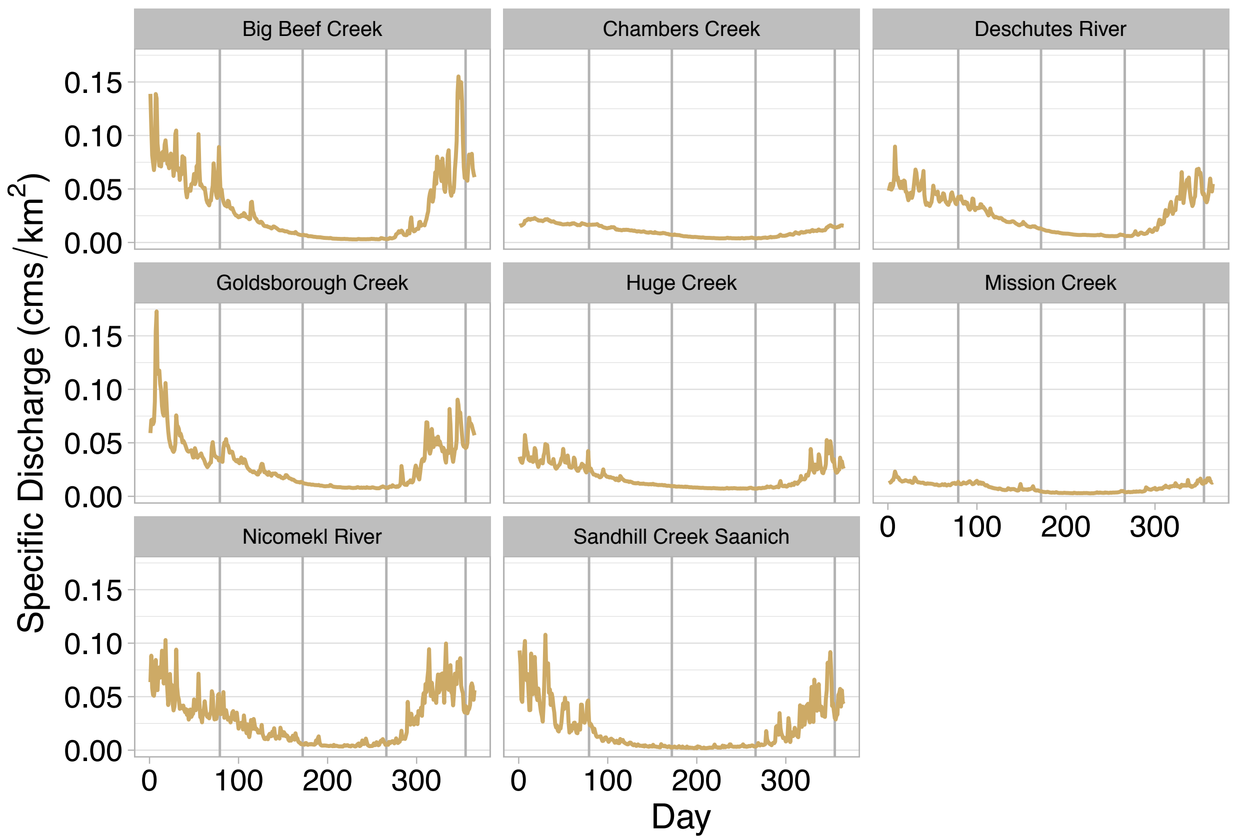


**Figure 10.** Hydrographs for all gauged RLC type watersheds.

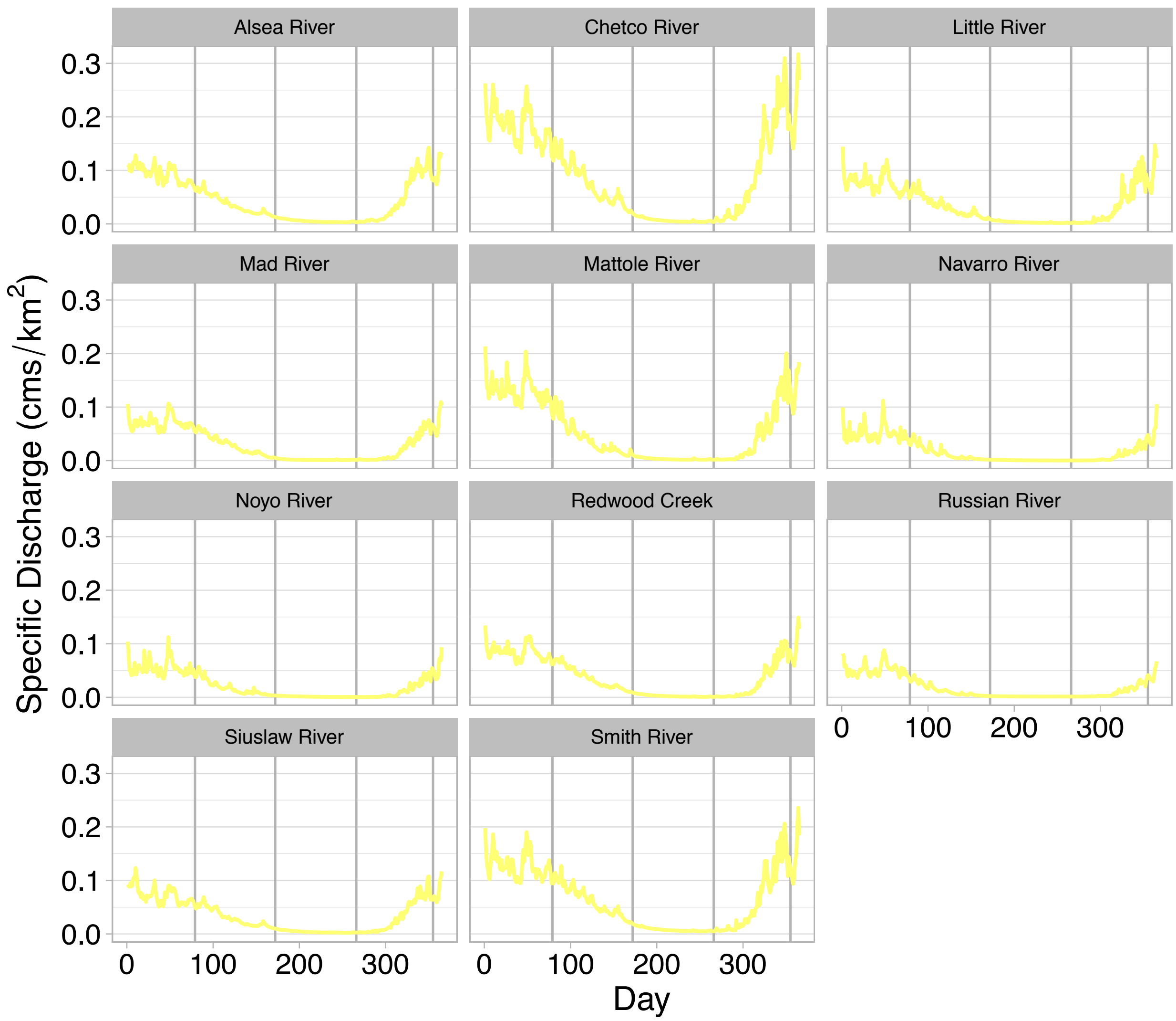


**Figure 11.** Hydrographs for all gauged RHS type watersheds.