

Main data table with columns for state (Colorado, Arizona, Nevada, etc.), river name, and various flow statistics (9/25 to 10/10). Includes a 'Hyper-matrix (River/Weather/Snowpack/Hyperlinks)' section on the right.

Summary table for Grand Canyon with columns for date (10/2007 to 10/2018) and flow volume (18,000 to 13,645).

22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132

Association table listing various organizations like American Whitewater, Colorado River District, and their respective websites and roles.

Data Hyperlinks and acknowledgements: NCRC SWE-Q(Snow-to-Flow) graph; NOAA hydrograph and river forecast; NOAA long-range river forecast; NOAA Basin Forecast Center river forecast; USGS WaterWatch Raster Hydrograph; USGS Waterwatch Average Daily Flow for life of gage; Gaging location weather from weather.gov; American Whitewater Association; United States Geological Survey; State Division of Water Resources/Colorado Division of Water Resources; NOAA River Forecast Hydrograph; All About Rivers; Brad Goettmeyer; Rafting the West-Will Hansen; White Water Campsites-Will Hansen; Kay waypoints downloadable into handheld GPS, mostly from Rivermaps(contact me if you need assistance); South-West Paddler-Marc W. McCord; CA Creeks-Bill Tuthill; Poudre Rock Report; IDAHO Power; US Forest Service; Official website where information, permits and maps may be obtained; Miscellaneous map, guide or trip report of significance; Guidebook or map available from Downriver Equipment; Various other sources of information; Canoe and Kayak Magazine; RiverBrain website; Regulations; Local River Guide; Jerry Nolan; Fishing Info; Dam Release Info.

The Down River Report summarizes the two most recent weeks vital statistics of weather, snowpack and river flow data of interest to Western River/California and Washington only minimally represented. The data is color coded to optimize rapid assimilation of the information. Historical comparisons of snow pack and flows are included. With little imagination, the data permits near future empirical predictions of flows across the Western US. Runnability determinations are based on in-depth research and personal experience. Enhancements to the report are nearly daily with many features planned for future releases. Feedback is welcomed and will be properly acknowledged.

Increase in flow >0% >10% >20% >30% Decrease in flow >0% >10% >20% >30% from previous day or long term average

"Runnability" is based on extensive research of published/online sources and personal experience. "Runnability" has not yet been completely automated and determinations are still evolving. Feedback is welcomed. The color codes in three columns attempt to express as broad a range of status as possible. Black indicates too low. Green indicates runnable. Red indicates to high for average fun, or flows considered unsafe except for true experts or the suicidal. If you wonder if you are a true expert or want to be, this is not the right time to roll the dice, or, it is the right time if you are suicidal. Combinations of colors express fringes of runnability. A special status of "too low/Runnability" with an "S" means "sacrifice or self-suffice on socks" depending on who you are. While many people have considered it a desperate act to have fun(probably), but if others have had delightful times on almost all of the rivers denoted "S" at the current low flow.

The Hyper-matrix is a matrix of hyper links designed to provide instant access to the best available on-line information concerning the river on which a link appears.

Spot data from high-country and headwaters is summarized by state for the last two weeks. Blue colors are Spotet water values and red colors are Spotet temperature values that contribute to the understanding and forecasting of rising or dropping down distance flows. The top left row line value is total inches of rain falling on all spot sites on a date. The right top line value is total inches of rain falling on all spot sites on a date. The middle line left value is the average minimum temperature and the right value is the average maximum temperature for all spot sites in the state. The bottom line value is the average average temperature for all Spot sites in the state. Assessment of these values permit determination of thermal/snow water content in present/seasonal generalities.

Higher resolution Spotet data for specific river basin areas are percentages relative to average for the snow water equivalent and precipitation in the current water year. The snow water equivalent(SWE, pronounced "swee") is the number of inches of water in the snow pack. The water year begins on October 1st. \* Indicates that greater than 50% of the spot sites in the basin are not reporting, essentially insufficient data to properly determine the SWE.

All daily river flow data except the current date are averages reported in CFS unless otherwise noted(Selway,Paradise,MF Salmon,Lower Poudre Rock Report). The current data is the instantaneous flow at the time indicated. River flow was sourced from the USGS unless noted \*Colorado Division of Water Resources, US Forest Service, Poudre Rock Report. Colorado rivers are categorized north to south(west to east) by flow, as possible, assist the analysis of weather systems that either add rain or indicate to runoff events.

Suffix symbol @ indicates that a dam upstream strongly controls the flow. Suffix symbol ! indicates an upstream dam with a ramping release scheduled according to hydroelectric demands.

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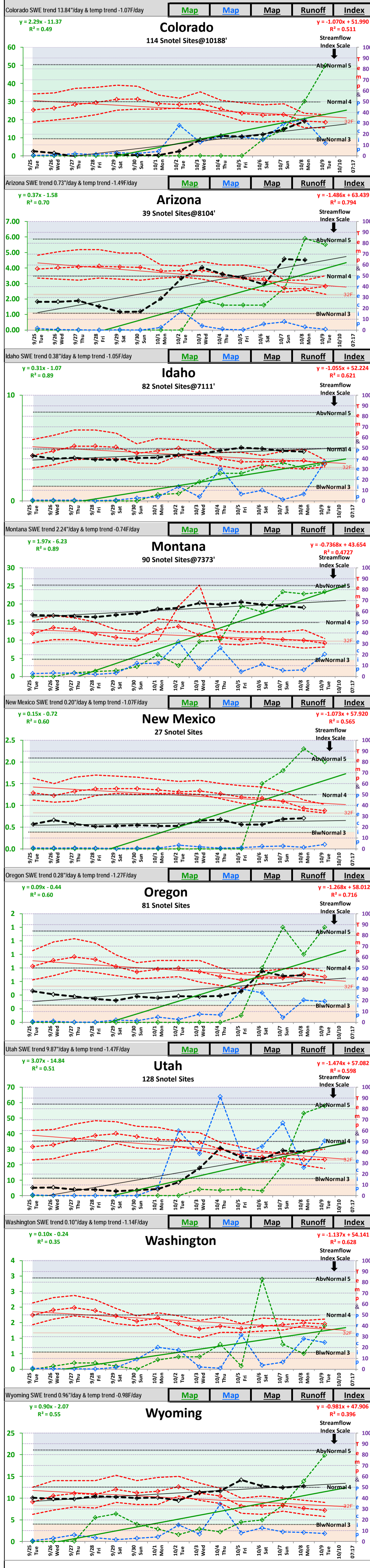
Grateful for feedback, support and commiseration from: Chris Shackleton at DreamFlows.com; Beau Uliona NRCS SLC-Utah Data Collection Office; Rashawn Tama NRCS Portland-Water and Climate Center; Susan Novak Behery BOR Durango-Western Colorado Area Office; Paula Galloway CSU/NPS; Carter Freericks DRE; Cori Peter DRE; Zach Svoboda DRE; Peg Young; Alisa Mast USGS; Andrew Halperin; Logan Gill and many other.

# The Down River Report Graphs

For Optimal Hyperlink Performance, Download PDF Report to your Computer

## Two Week SNOTEL Plots by State of

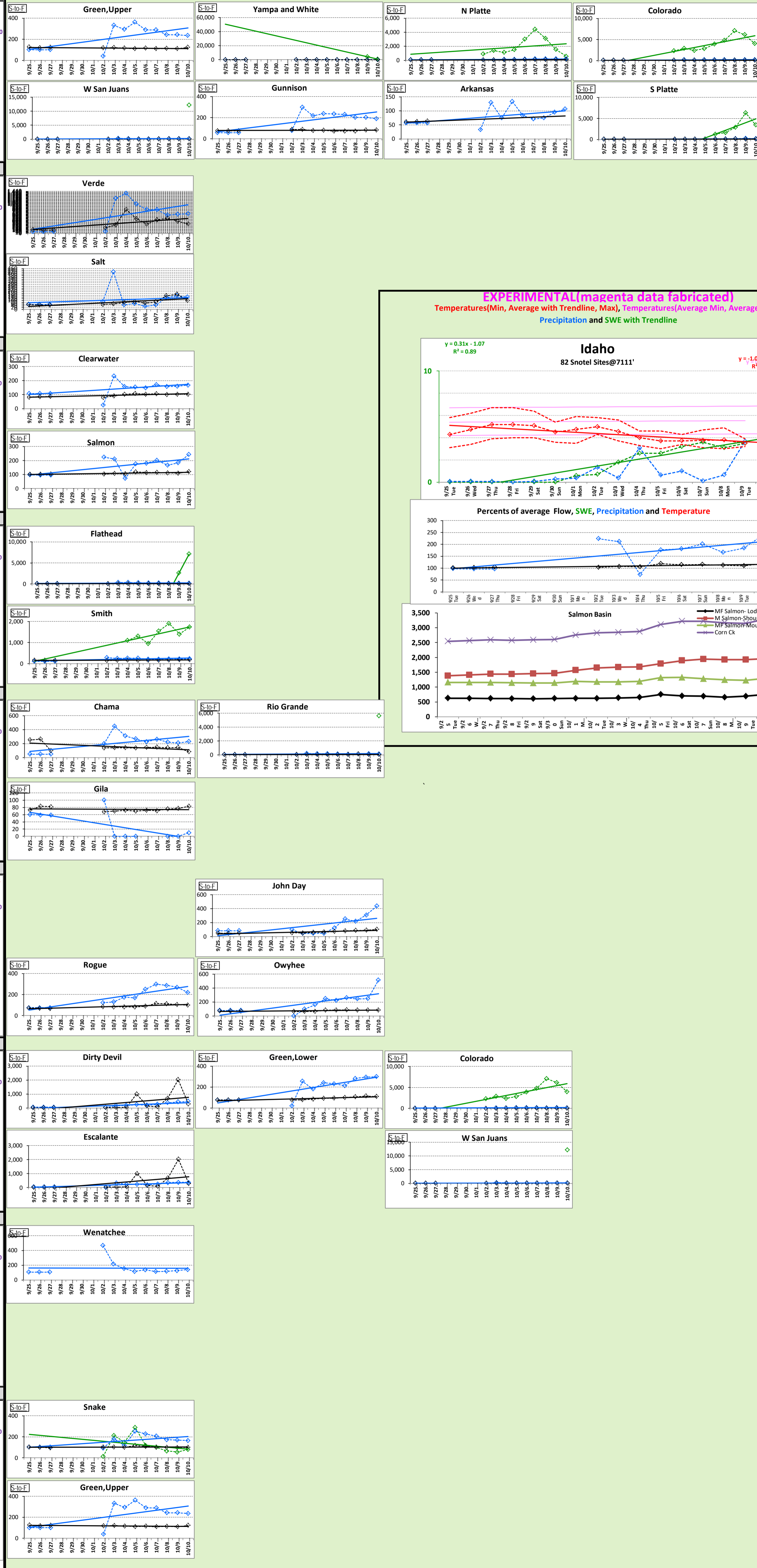
Streamflow Index with Trendline(associated base layer and hyperlinks),  
Temperatures(Min, Average with Trendline, Max), Precipitation and SWE with Trendline



## Two Week SNOTEL and USGS Plots by Basin of Percent of Average

Precipitation with Trend Line, SWE with Trend Line and 'Select Rivers' with Trendline

(In future, compute snotel percent of average temp and plot red.)



**EXPERIMENTAL(magenta data fabricated)**  
Temperatures(Min, Average with Trendline, Max), Temperatures(Average Min, Average, Max)  
Precipitation and SWE with Trendline

