Outline—Excel for Hydrology, NWRA   January 31, 2022

01_ExcelNavigation

- Configure Excel—Stop autosave, clear default directory, trusted locations, show developer tab in ribbon.

- Keyboard navigation and blocks of data, function keys, F2, F4, F8, F9, F11, and heavily used keyboard shortcuts such as, **Ctrl+1**.

- Status bar –Quick sampling functions—01_PRISM_4.0km.NV.xlsx.

- Paste special—Values, math, transpose—02_NamedRanges.xlsx.

- Named ranges and data validation—02_NamedRanges.xlsx.

02_Plotting

- Create stacked bar and lines—01_BarLine.xlsx.

- Bar charts differentiate positive & negative—02_Departure.xlsx.

- XY Adding elements to charts –
  Copy-paste, Direct entry in formula bar—03_XYmap.xlsx.

- Specify labels from ranges—04_FC_isotope_PAIRS.xlsx.

03_Text+Logic_Functions

- Introduce LEFT, VALUE, LEN, FIND, MID, RIGHT, IF, and ISNUMBER functions— 01_TextManipulate.xlsx.

- Introduce SUBSTITUTE, TEXT, and HYPERLINK functions—
  01_TextManipulate.xlsx.

- If statements and logic— 02_IFplus.xlsx.
  Present 03_TransmissivityDV3.xlsx as example of categorizing data.

04_ConditionalFormatting

- Shade PRISM with generic flood—01_PRISM_4.0km.NV.xlsx.

- Controlled shading of PRISM—01_PRISM_4.0km.NV.xlsx.

05_Regression

- Analyze specific conductance-chloride from Death Valley—
  Regress in chart and duplicate with equations—01_linearQW.xlsx.

- Analyze log-transformed specific capacity-transmissivity relations and
  demonstrate limitations of regression equations—
  02_Example_T-SC-DeathValley+OtherSCeqs.xlsx.

06_Solver

- Explain weighted sum-of-squares objective functions and parameter transforms
  necessary for using the Solver add-in— 00_ParameterEstimation+SOLVER.pptx.

- 2-parameter Theis example—01_Theis_Solution+Sensitivity.xlsm.

07_UsingVBAfunctions

- Show examples of user-defined functions and moving modules with functions to
  new workbooks