Current Calhoun Hydrologic Sensor Network, Selected Data, and next steps!

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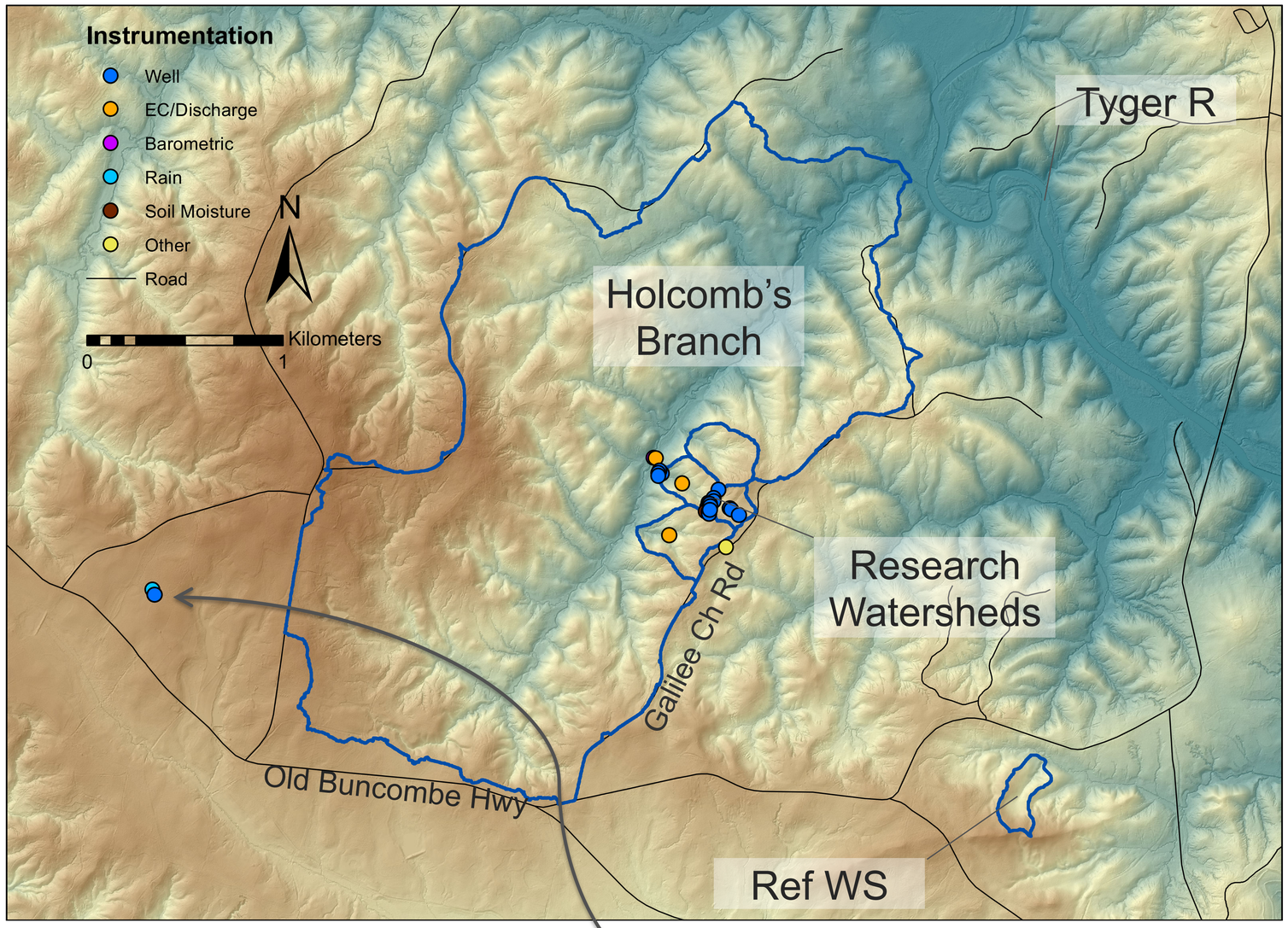
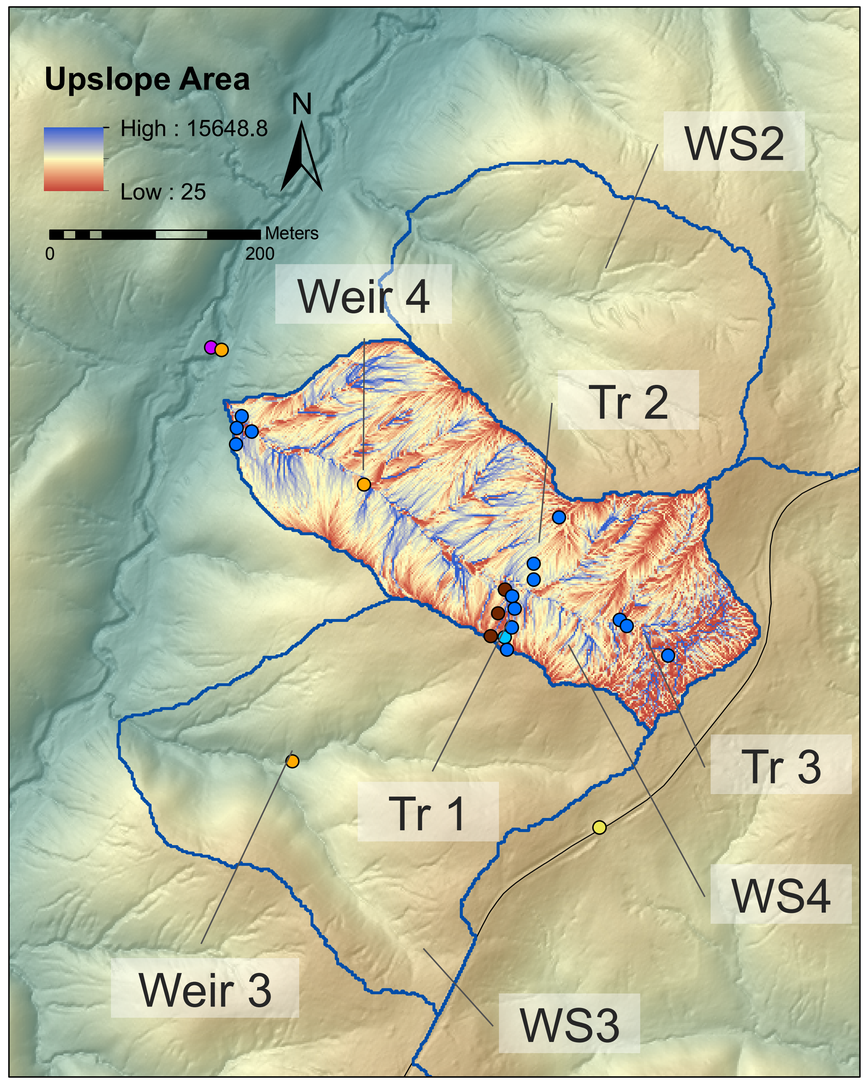




Well installation

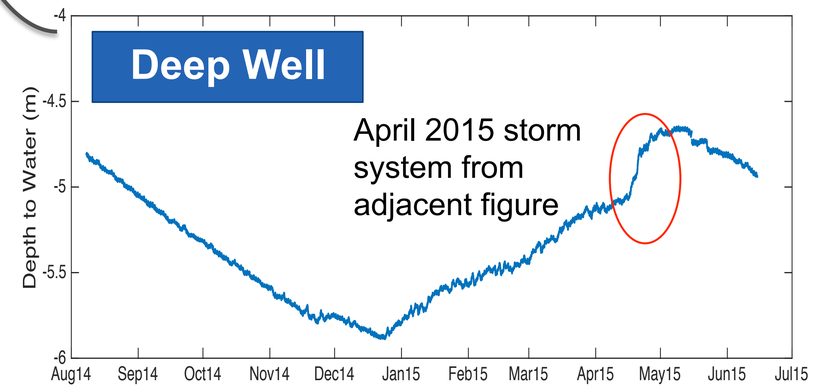
23 x 2" PVC screened fully or below B horizon: current wells range in depth from 0.5 m to 5 m

- WS 4 floodplain: 4 x wells to refusal
  - 0.8 m – 1.6 m
  - Screened fully
- Transect 1: 8 x wells in 4 nests
  - Nest: One well completed in B horizon, one well to refusal screened only below B
- Transect 2: 6 x wells in 3 nests
- Transect 3: 5 x wells in 2 nests and 1 single

Measurements logged

- Stage at weirs 3,4 (capacitance rod) and in Holcomb's Branch (cap rod and sonic depth)
- Water level in 23 wells (cap rod or pressure transducer)
- Electrical conductivity and temperature at weirs 3,4 and in Holcomb's Branch (Campbell 547A)
- Soil moisture at 3 depths (above, in, below B horizon) in 3 soil pits (Campbell 655-L; TDR)
- 2 Tipping bucket rain gauges
- 2 Barometric sensors to correct transducers

Deep Well



Next up!

- Installation of well transects in Reference and WS3. Discharge and EC in Reference
- Enhanced sensing along Holcomb's branch to include 2 more discharge and EC stations and addition of biogeochemical sensors such as EXO fDOM and SUNA nitrate
- Additional wells in the floodplain below WS4 and possible expansion to WS3
- Measurements of soil saturated conductivity (Ksat) profiles colocated with wells
- Intensive storm event sampling of geochemical tracers as possible

Rainfall - GW - Streamflow response to April 2015 storm system