

Evapotranspiration Evaluation, Dewberry

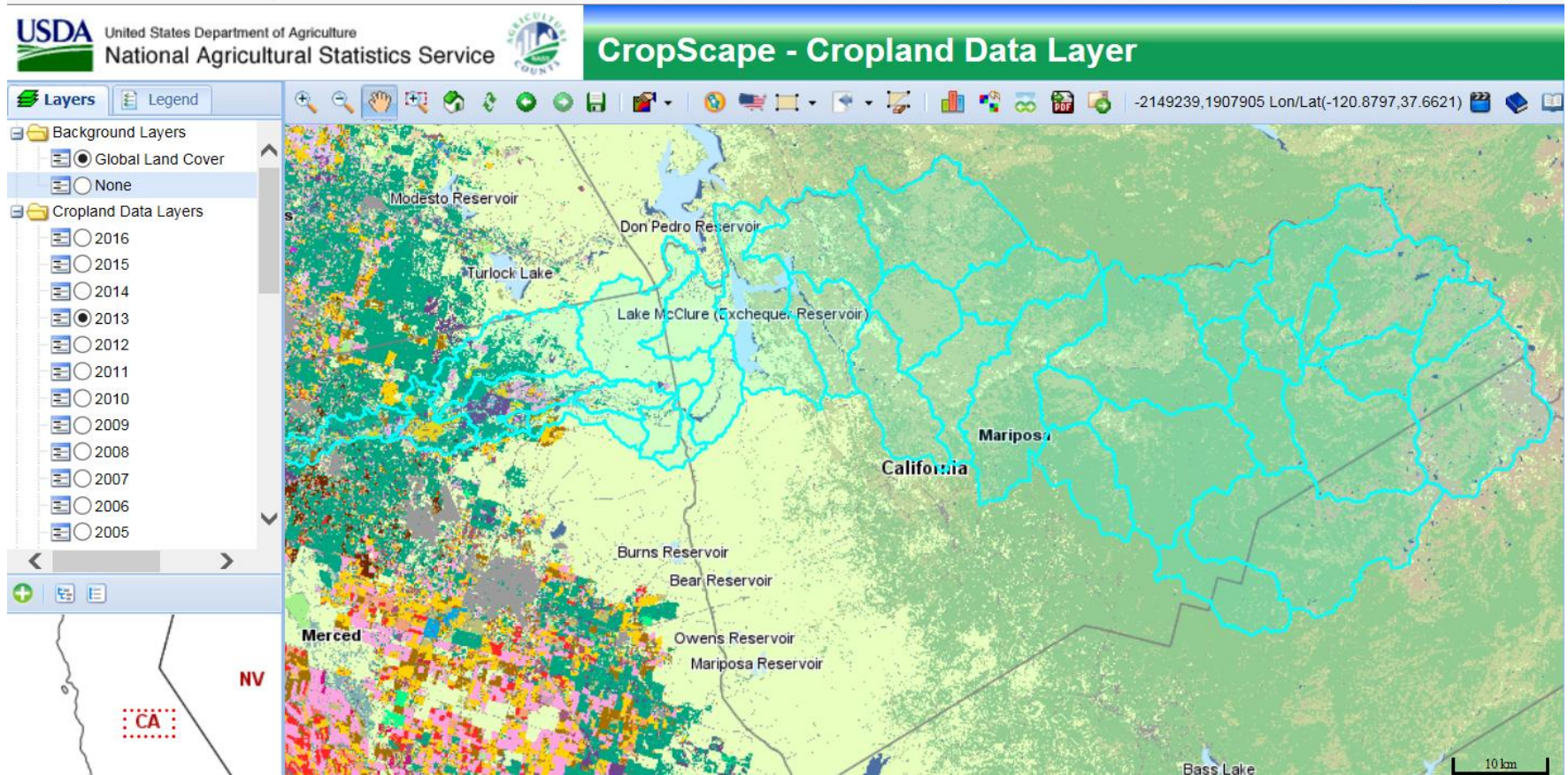
Evapotranspiration Evaluation

- Many different methods to measure, compute/estimate evapotranspiration
- Evaluation compares ET parameter in MIDH2O to other methodologies used to calculate ET
- Evaluation to gage “reasonableness” of current ET input to MIDH2O and provide recommendation for refinement of current method, if applicable

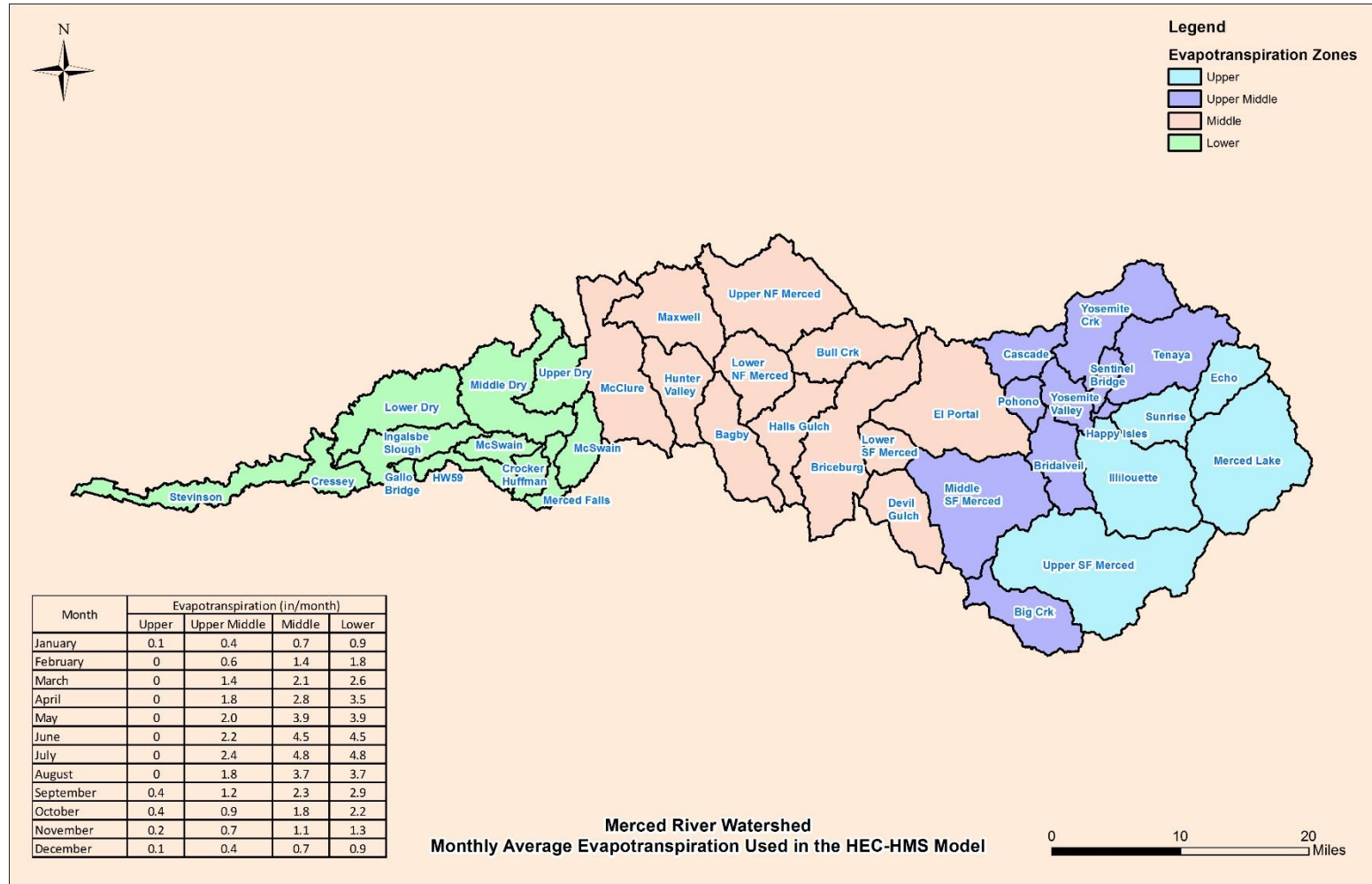
Available ET Methods in HEC-HMS

- Annual Evaporation: Rate (in/day) with an annual pattern
- Penman Monteith: Temperature, Windspeed, Relative Humidity (or Dew point temperature), Reference Albedo, Shortwave Radiation, Longwave Radiation
- Priestley Taylor: Temperature, Dryness Coefficient, Shortwave Radiation
- Monthly Average: Rate (in/day) that varies monthly
- Specified Evapotranspiration: ET time-series
- Gridded Penman Monteith: Similar data requirement to Penman Monteith
- Gridded Priestley Taylor: Similar data requirement to Priestley Taylor

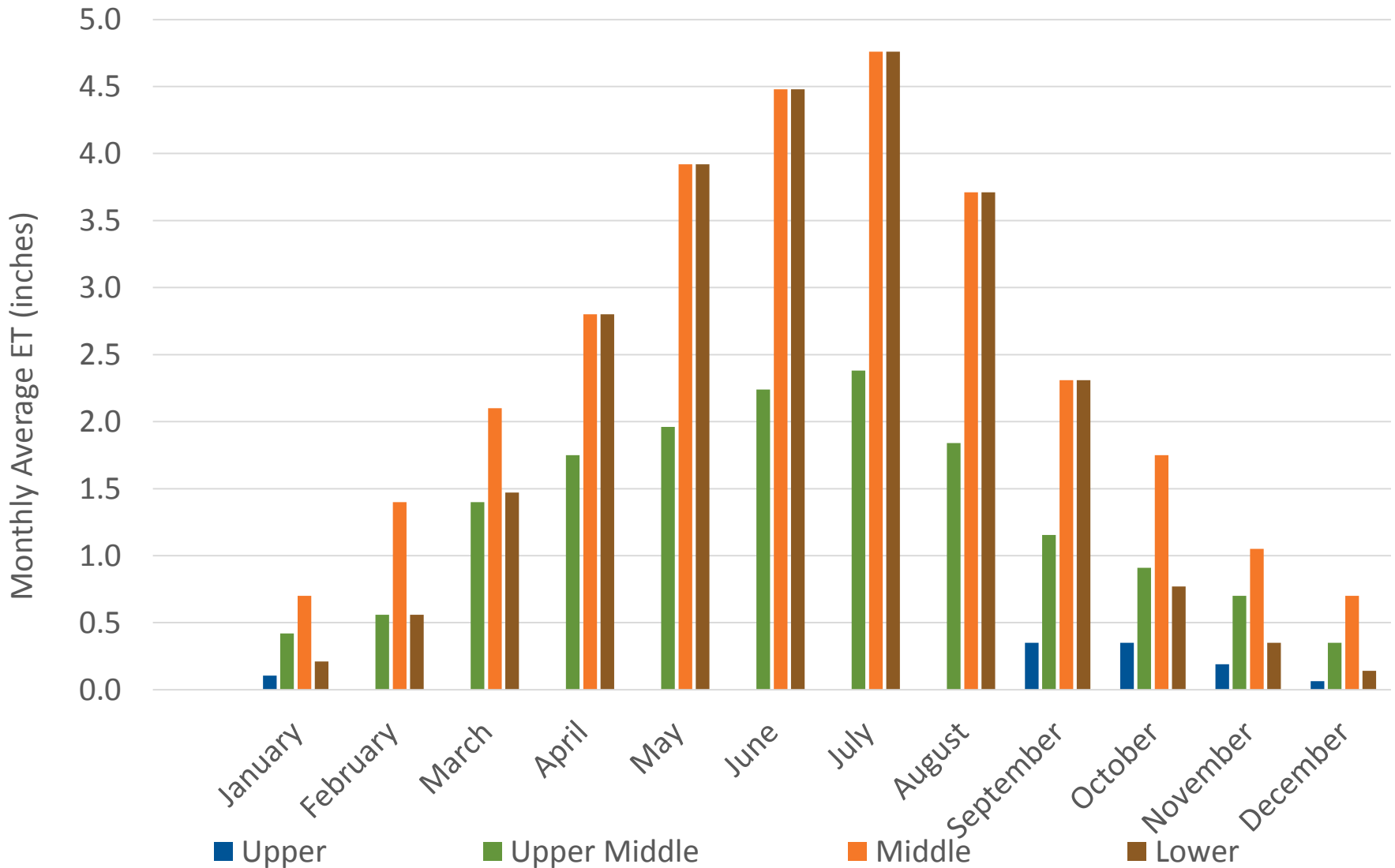
Land Use – CropScape 2013



ET Zones



MIDH20 ET



Methods for Comparison

- Current method to estimate ET in MIDH2O (based on Pan ET)
 - Custom Weather ET grids (based on CIMIS Penman equation)
 - ITRC modified METRIC (Mapping EvapoTranspiration at High Resolution with Internal Calibration)



Questions?