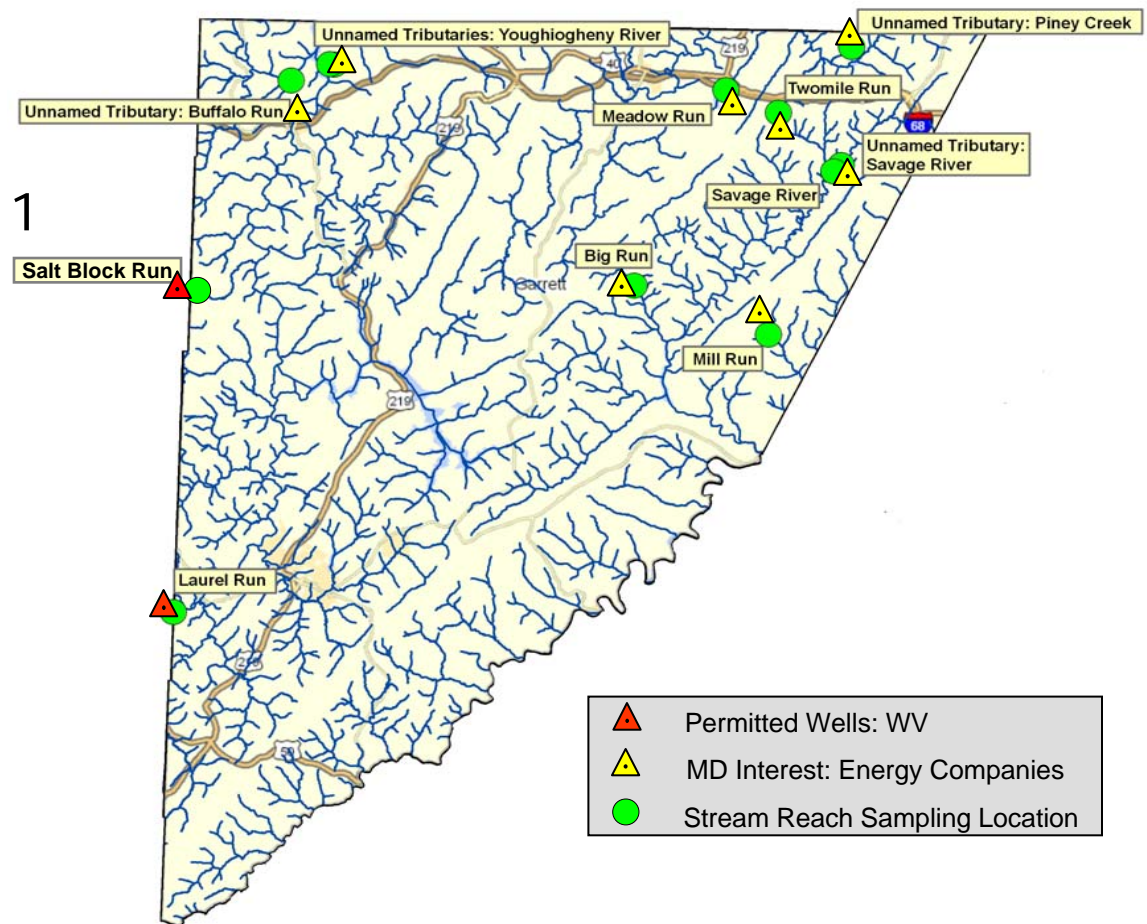


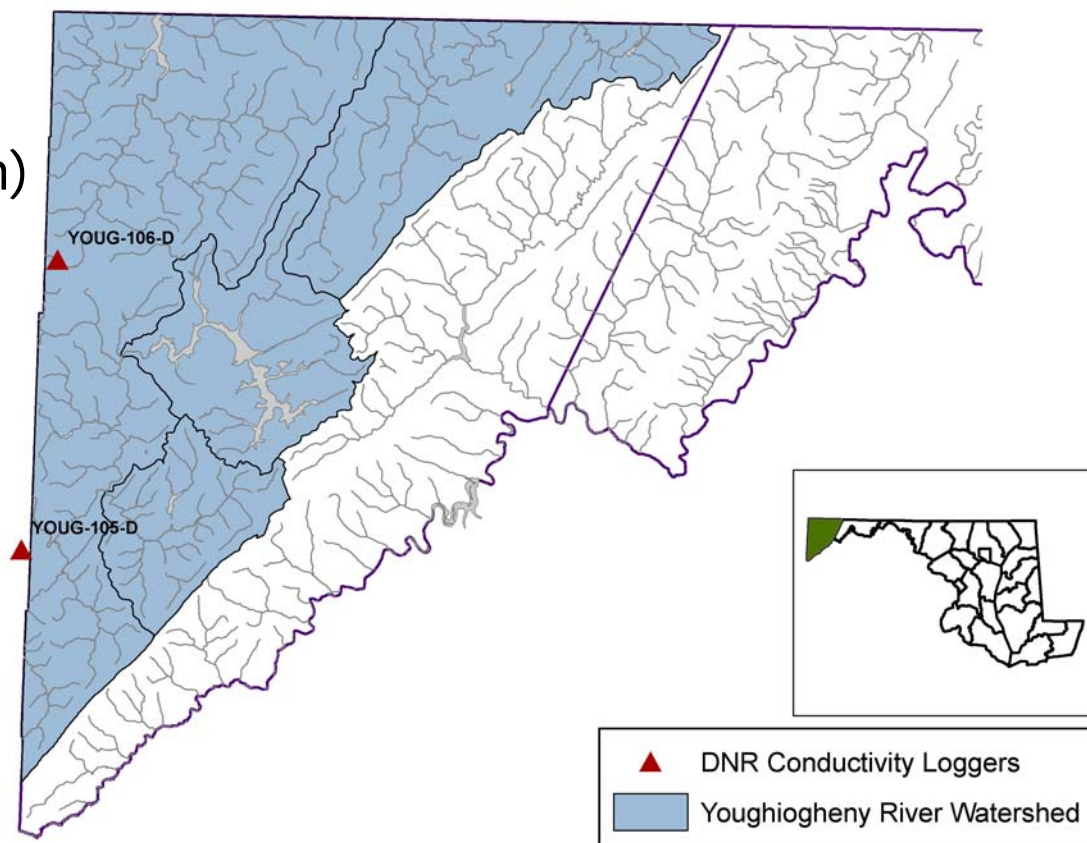
## MDNR's Current Stream Monitoring Specific to Marcellus Shale Natural Gas Development

- 12 Stream Reaches Monitored by DNR in 2011
- Continuing in 2012



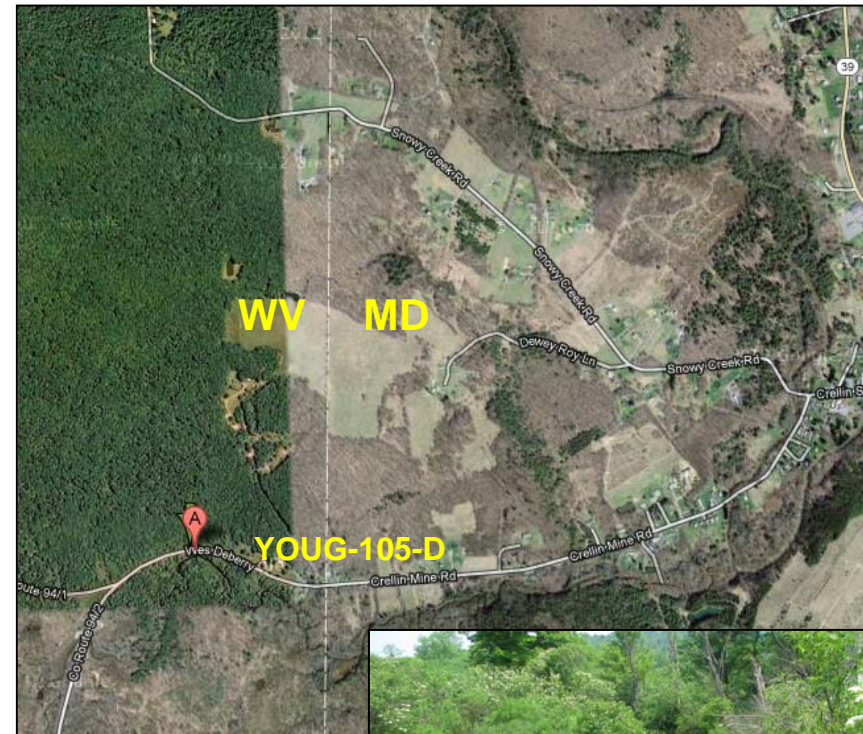
## Streams Monitoring Associated with Permitted Wells in West Virginia

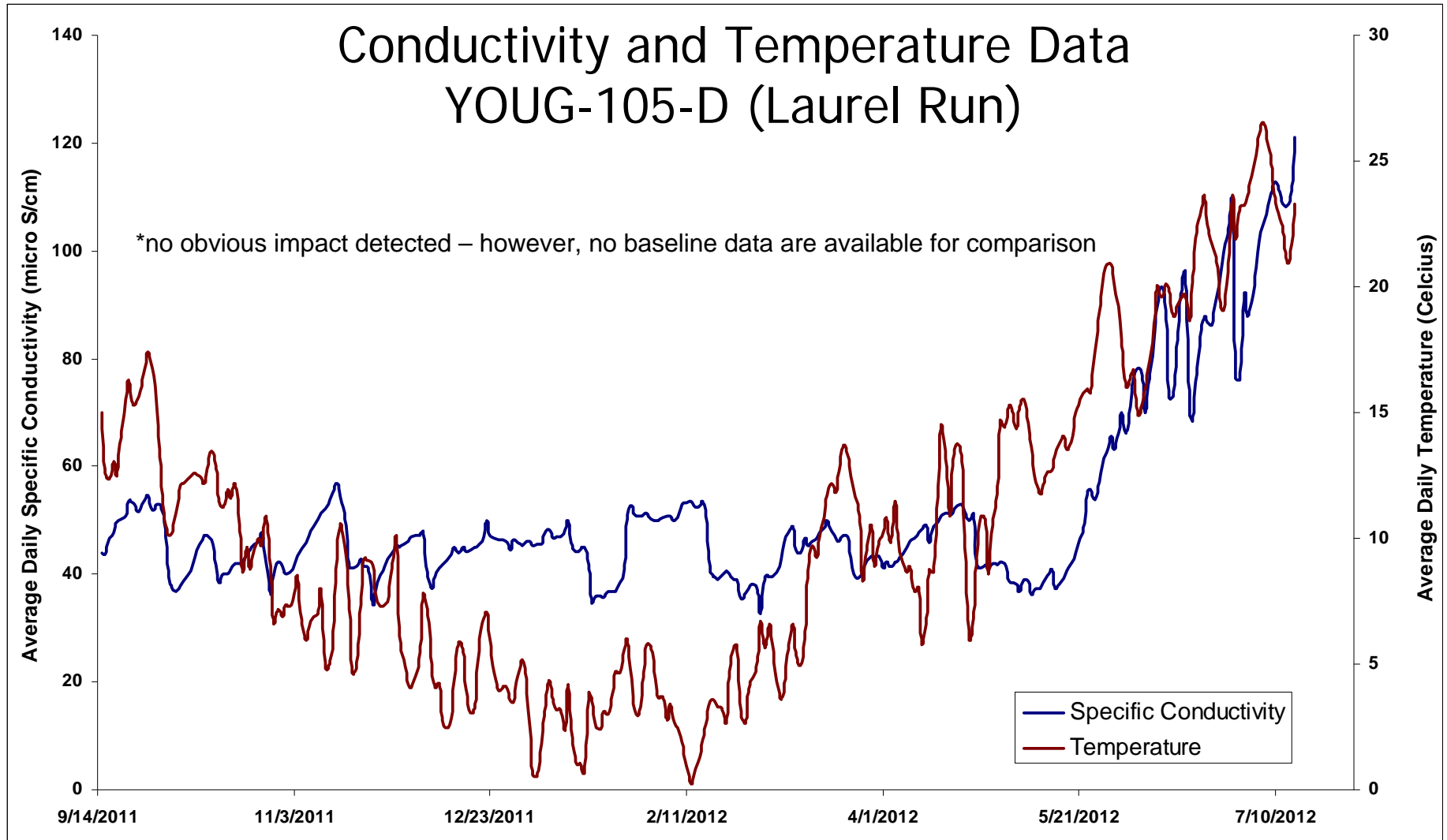
- YOUG-105-D (Laurel Run)
- YOUG-106-D (Salt Block Run)



## YOUG-105-D (Laurel Run)

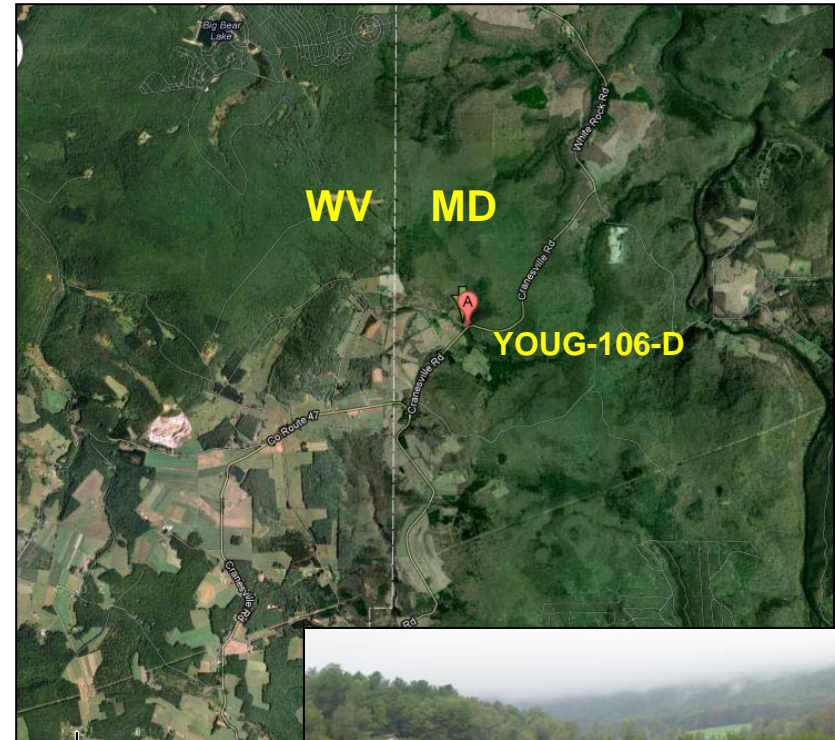
- Laurel Run is a tributary to the Youghiogheny River
- Two wells were drilled and hydraulically fractured on the well pad prior to stream data collection
- No baseline data available

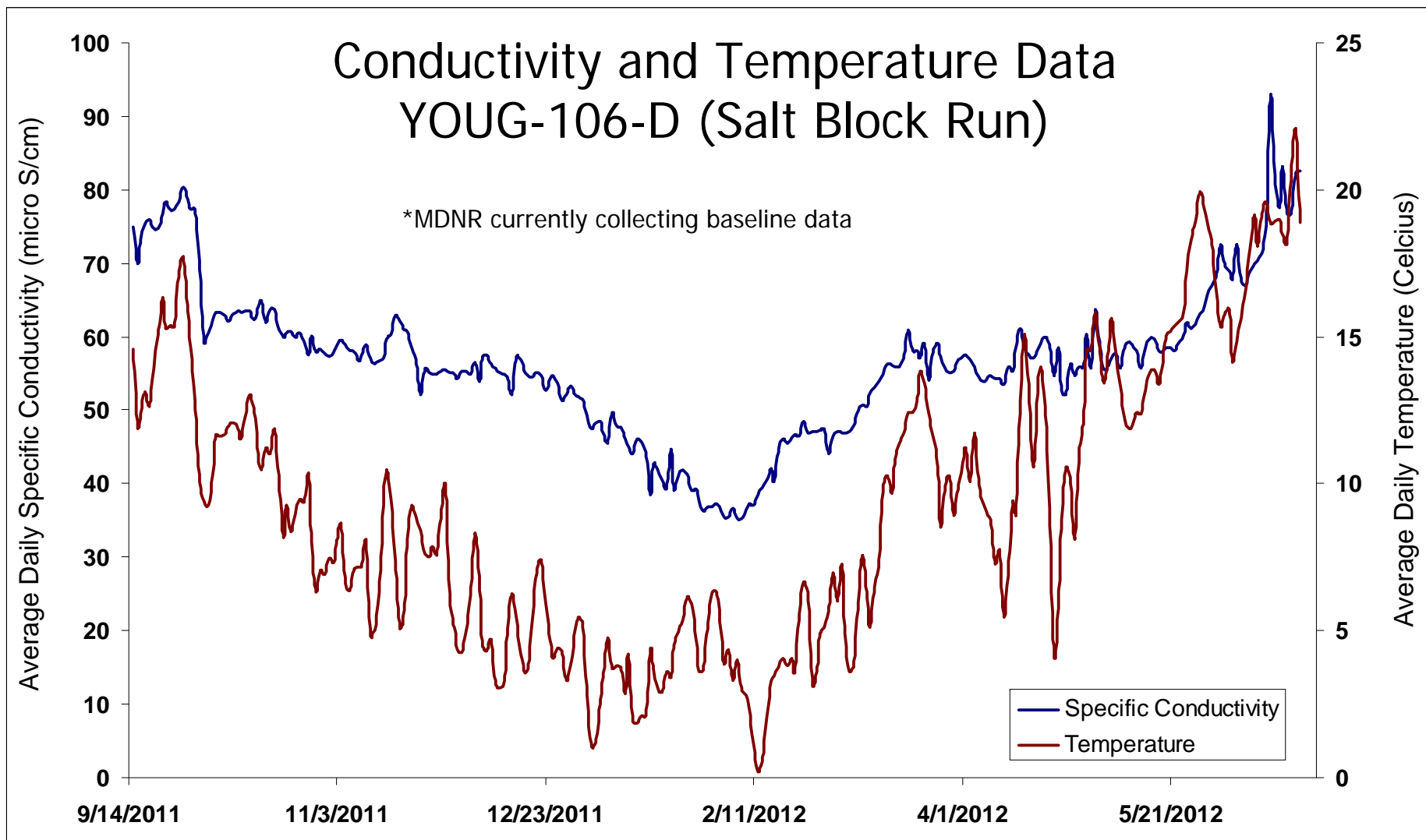




## YOUG-106-D (Salt Block Run)

- Salt Block Run is a tributary to the Youghiogheny River
- No infrastructure has been built (e.g., roads or well pad) and hydraulic fracturing has not occurred
- MDNR currently collecting baseline data





## Box Plots of Conductivity Data for All 12 Monitoring Locations (September 2011 - March 2012)

