

# Martin Relicensing Study Plan 12(a)

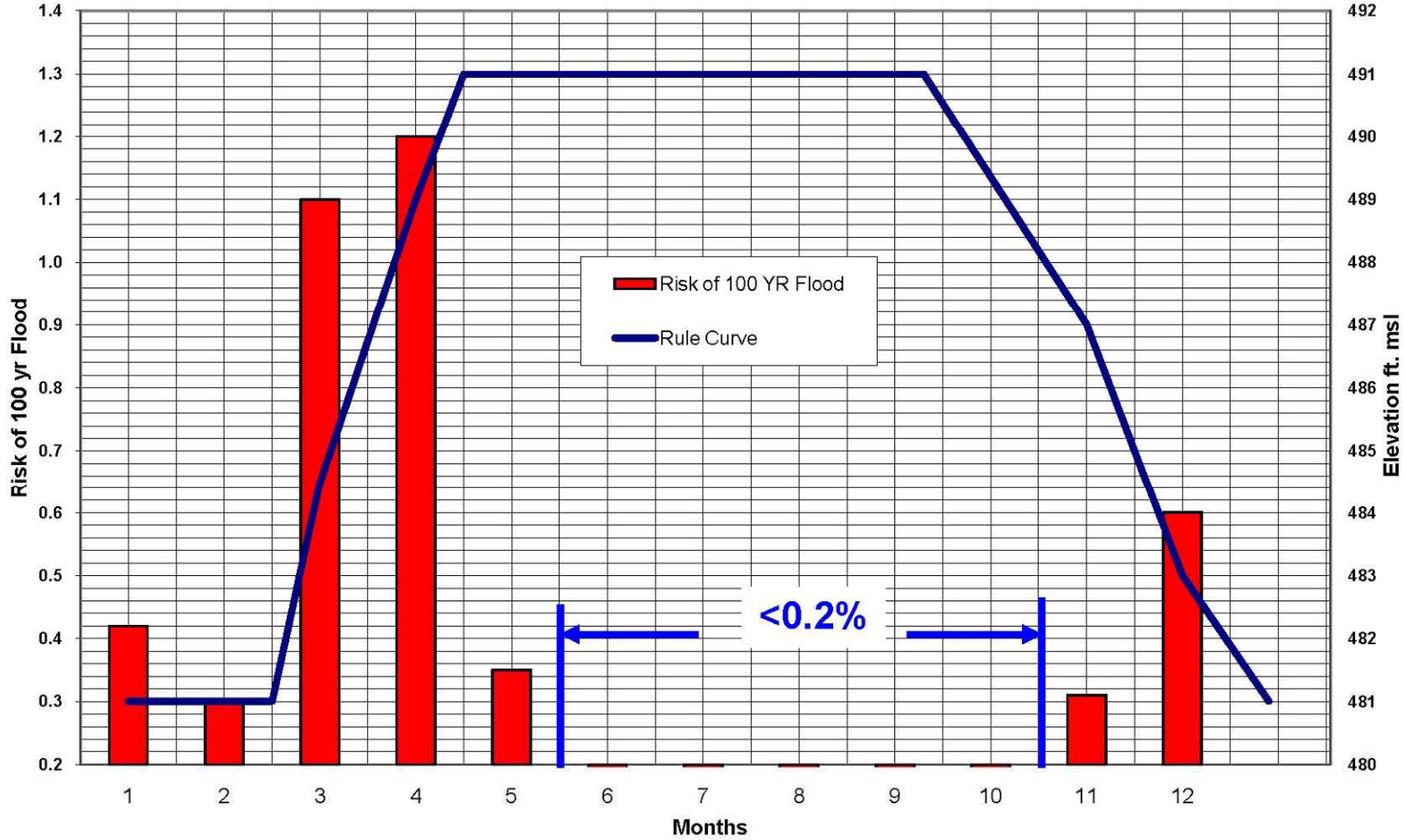
## Short Term Impact Modeling Recap



# Martin Relicensing

- Models to evaluate short term impacts
  - Hourly time step models that look at a snapshot in time.
    - Evaluate 100 yr flood impacts on Martin & Downstream for base condition and all alternatives

# Martin Pool



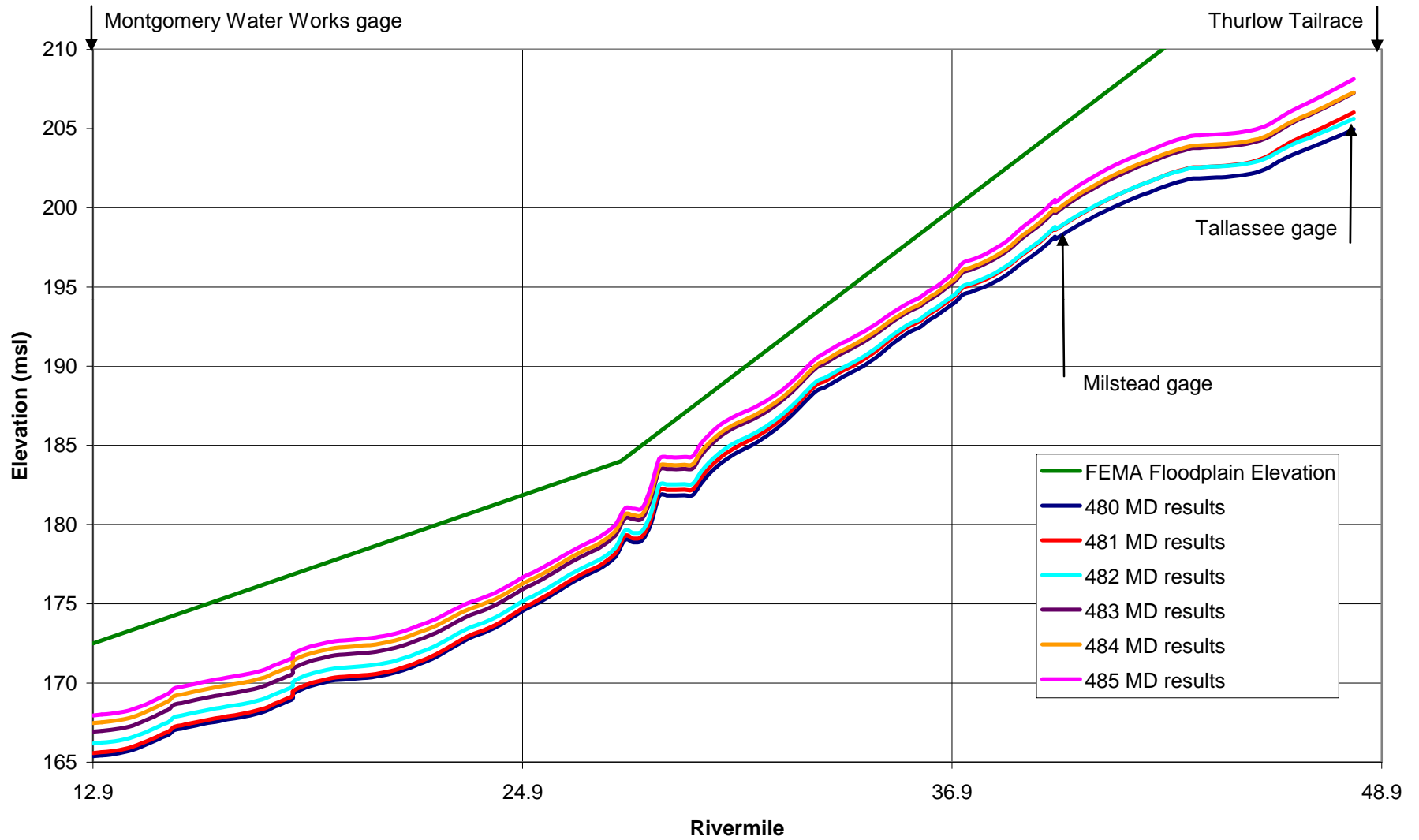
# Martin Relicensing

- Fall Extension Alternative
  - Alternative with the least potential of having a 100 yr flood event (Sept. & Oct.)
  - Could still result in higher flooding downstream than current baseline. (hurricane, etc.)

# Martin Relicensing

- Higher Winter Pool Alternatives
  - Alternatives with a higher potential of having a 100 year flood event (Nov – Feb) when compared to the fall alternative
  - All alternatives stay within 490' MD for 100 yr flood centered on Martin
  - Increased outflow above baseline results in .75 ft to 3 ft higher elevations downstream

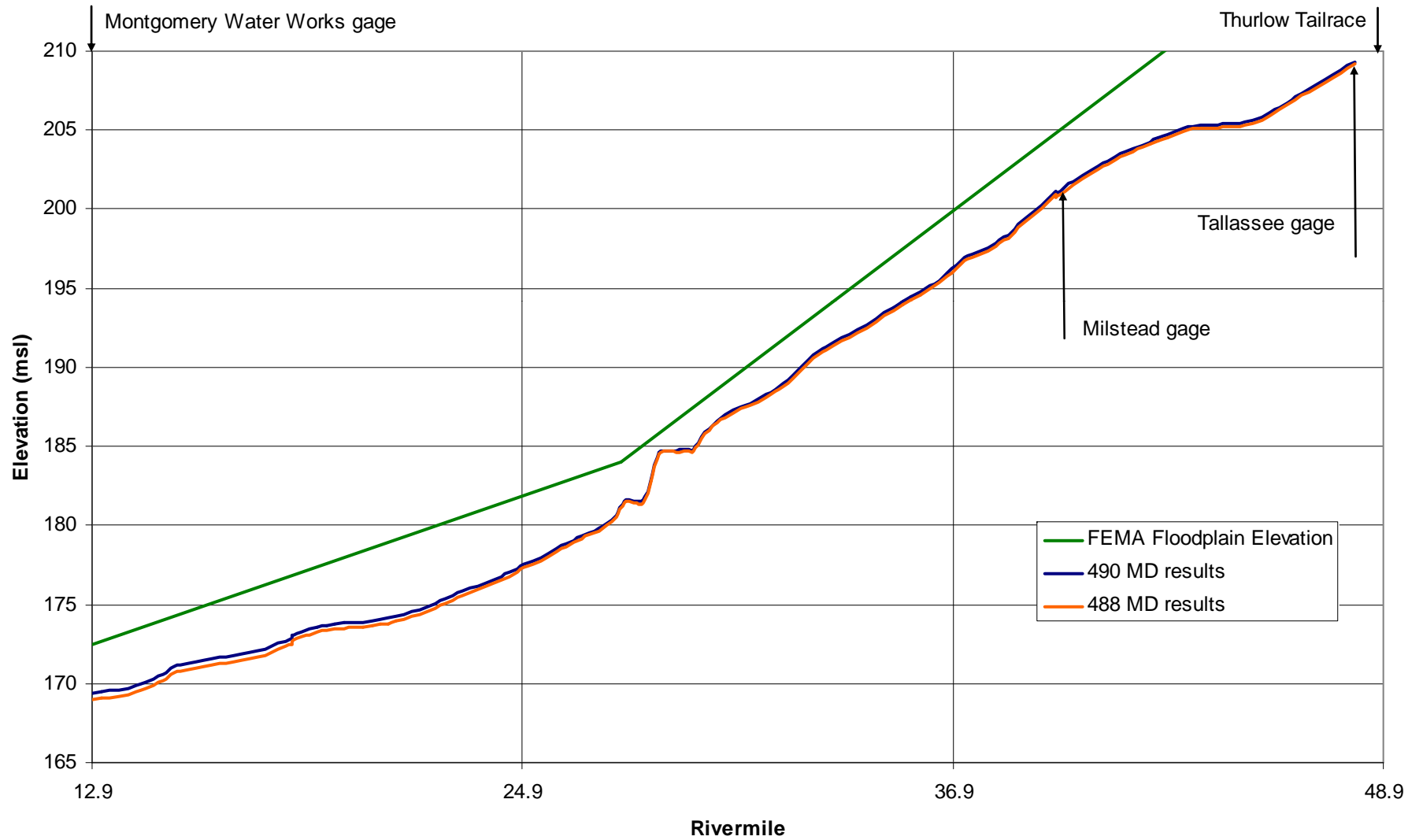
### Lower Tallapoosa Profile Elevations Winter Pool Evaluation



# Martin Relicensing

- Early Spring Fill Alternative
  - Alternative with the highest potential of having a 100 yr flood event (Jan - April) as compared to other alternatives
  - All alternatives stay within 490' MD for 100 yr flood
  - Increased outflow above baseline results in .13 ft to .45 ft higher elevations downstream (488'MD vs 490'MD)
  - In addition, the higher winter pool impacts are also realized (Feb 15<sup>th</sup> example)

### Lower Tallapoosa Profile Elevations Early Spring Fill Evaluation



# Martin Relicensing

- Where we left off
  - 100 yr flood on Martin Lake routed thru the dam and downstream
  - Elevations given to AMEC to be mapped