**5th Topic Presentation Problem 2017**

Mr. & Mrs. Johnson have recently inherited a property from the wife’s parents, across the road from their current farm. The property inherited was a dairy farm however there has not been any dairy production for the past 10 years. There are currently 10 fields planted (247.4 AC) with corn and soybeans in rotation, 2 fields (44.4 AC) are fallow and have been maintained but not managed and 149.1 acres of forest. There are spring heads and flowing streams (shown on the aerial photo.) There are also four gullies forming in the fields (shown on the aerial photo.) There is also a farm pond and a wetland on the property. The farm has not been enrolled in the cover crop program.

The corn and soybean fields are planted with reduced tillage, and planted to achieve a yield corn of 125 bu/ac and a yield soybeans of 40 bu/ac. The fallow fields have approx 60% grass ground coverage.

Mr. Johnson would like to add 50 head of dairy cows to his current operation. He currently milks 40 on his home farm. Mr. Johnson is currently in compliance with all State of Maryland Mandates. Mr. Johnson has no objections to moving the new herd to the newly acquired property or just updating his current farm to handle the new herd.

Your task is to write a plan for the inherited property. You must ensure that the new plan will be compliant with all State Mandates and Federal Guidelines.

Conservation plans are generally good for ten years. Not all Best Management Practices (BMP’s) have to be installed at one time. Prioritize the BMP’s. Explains which BMP’s you have chosen and why.

Show your calculations on erosion rates from existing fields, and your proposed fields.