

# Oral Component Scenario – 2017

## Agricultural Soil and Water Conservation Stewardship

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### **The Scenario:**

A young couple in their early thirties, one of whom is a veteran, wants to purchase their first farm. They have picked out an 80-acre farm in Everyton, Pennsylvania. The farm is in a state of disrepair due to poor management by the previous owner. They would like to get their start in farming by setting up a poultry flock and a small beef herd. They are considering their options for marketing specialty products from those commodities, and from crops or produce they could potentially grow in their fields.

The crop fields have some gully erosion, and the barnyard is directly adjacent to a stream. The barnyard was previously overcrowded and now contains only bare soil and excess manure. Runoff from the barnyard goes directly to the stream. The farmland is considered highly erodible and has very low organic matter, but the Phosphorus (P) levels in the fields around the barnyard are very high, over 200ppm. The new farmers want to install Best Management Practices (BMPs) to boost the productivity of the farm and improve water quality in the stream.

As an Envirothon Team, you should play the role of a group of conservation professionals from various state, federal, and county agencies, and private consulting firms. You are meeting with the young couple and several of their advisors (role-played by the judges) to offer recommendations for technical and financial assistance.

### **Your Presentation:**

Create a 10-minute presentation for the young couple and their advisors highlighting potential opportunities for the future of their farm. Incorporate at least three (3) spoken, relevant, and reputable references as you present. During the 10-minute presentation, teams should address the following:

**I. Task 1-** Improve Soil – What BMPs could the couple utilize to repair the erosion issues, avoid future erosion problems, and improve soil health and soil quality? What crops or products would be most appropriate for the couple to grow considering both environmental sustainability and their ability to generate a sustainable income?

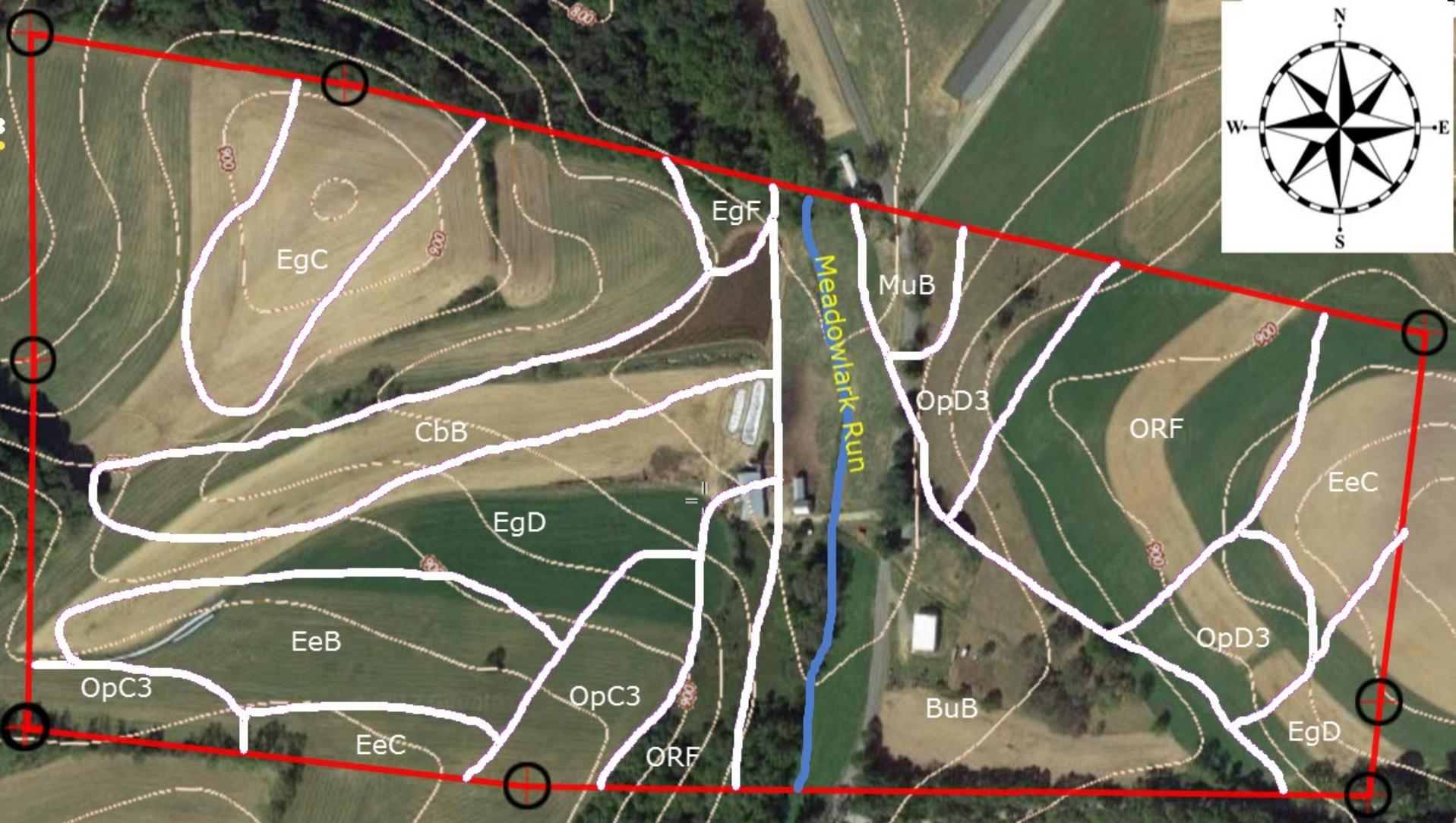
**II. Task 2 -** Improve Water Quality - What BMPs could the couple utilize to correct the current pollution issues coming from the barnyard, improve stream health, and reduce potential future pollution to the stream?

**III. Task 3 –** Identify Resources and Programs –What programs, both State and Federal, would you suggest to this couple to assist them with their farm improvement goals? What planning resources could the couple utilize to assist with land management goals?

**IV. Economic and Community Impact** – Describe ways the farm can become economically viable. The young couple has asked you to provide suggestions for raising and marketing some specialty farm products. How will the management choices the young couple make for their farm affect the farm's economics? In what ways will the farm's new ownership and the new style of management impact the nearby community of Everyton, Pennsylvania?



Meadowlark Run

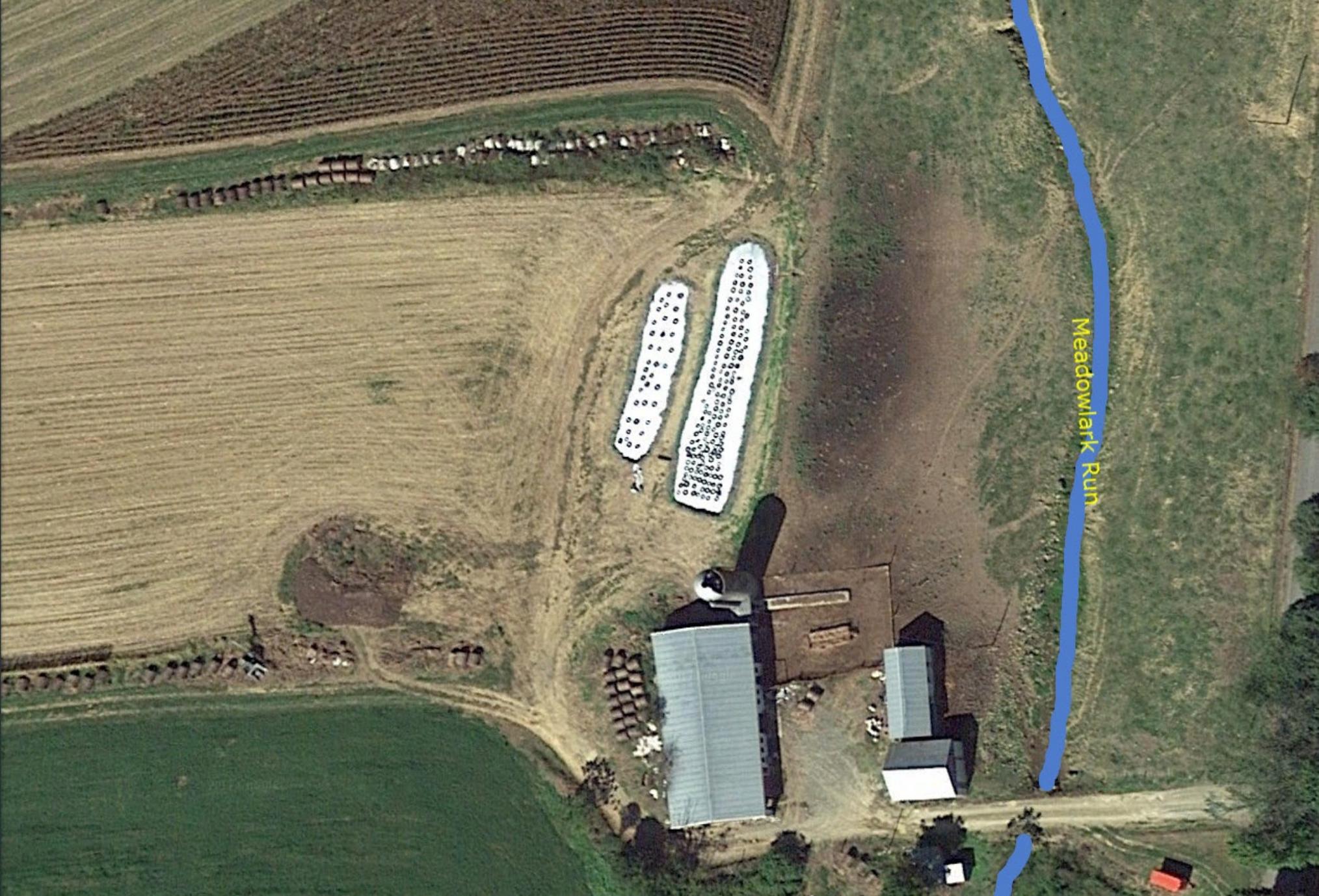


Field Boundary

Stream

Soil Boundaries

Contour Lines



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