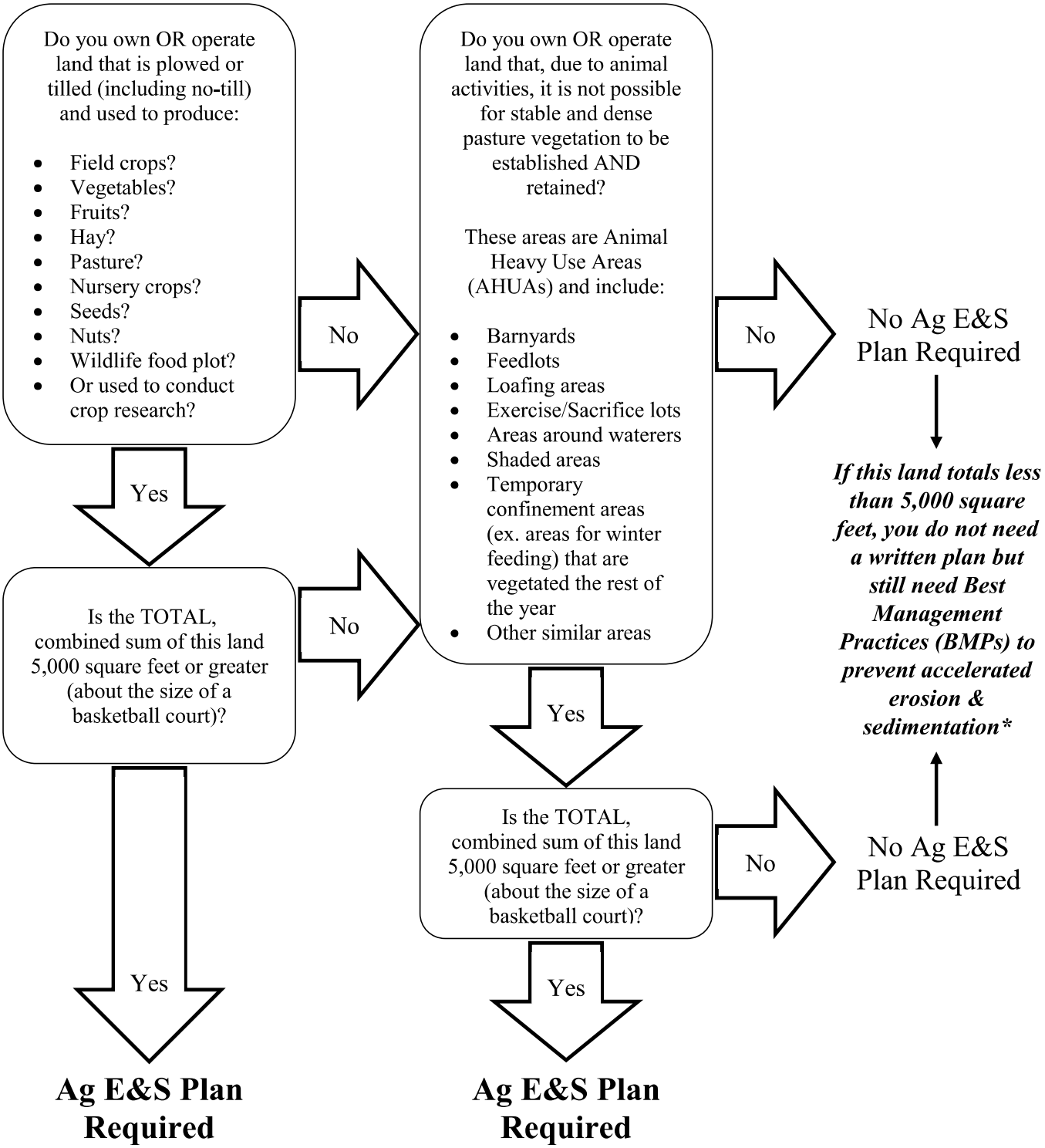
PART 1 – MANUAL FOR OPERATORS AND LANDOWNERS
STEP 1 – GETTING STARTED

DO I NEED AN AGRICULTURAL EROSION AND SEDIMENT CONTROL PLAN (AG E&S PLAN)?



* Pages 14 – 16 contain some common BMPs that you may want to consider for your operation.

WHY ARE ALL AGRICULTURAL OPERATIONS REQUIRED TO HAVE BMPs?

As stated on the previous page, BMPs are needed to prevent accelerated erosion and sedimentation on all agricultural operations, regardless of the size, to comply with regulations.

***BMPs also provide great benefits to your operation**, including*:

- **Fields retain valuable topsoil**
- **Reduced costs associated with: fertilizer, fuel, equipment (including maintenance costs), and labor**
- **Improved safety and health of livestock by reducing risk of injuries and diseases, providing cleaner drinking water, and providing a higher quality and quantity of forage**
- **Increased soil fertility, crop growth, and productivity**
- **Improved soil capacity to withstand heavy farm equipment, resulting in less compaction**
- **Help control weeds and pests**
- **Prevent erosion issues such as gullies, which can be costly and time-consuming to repair and may damage equipment**
- **Prevent flood damage**
- **Increased water infiltration and retention**
- **Maintain soil health and productivity for future generations**

WHAT IF I ALREADY HAVE AN AG E&S PLAN OR CONSERVATION PLAN?

Ag E&S Plans and Conservation Plans need to be revised if any of the following occur:

- **There is a new operator or landowner**
- **Land is added to the operation**
- **There is planned construction of additional buildings, a homestead, a subdivision, or animal housing, including buildings that are being constructed as a replacement for existing structures in the same footprint and the site conditions (such as the grade and contour of the site) have changed**

  A Construction E&S Plan is also required; please refer to Appendix C
- **More aggressive tillage practices than those listed in the plan are used**
- **New crop rotations are planned, or existing rotations are changed**
- **New BMPs are planned**
- **New AHUAs are planned or have formed on the operation**
- **BMP implementation schedule has changed**
- **Rill erosion and/or gully erosion develops**
- **The Ag E&S Plan contains information that is not consistent with the operation's Manure Management Plan (MMP) or Nutrient Management Plan (NMP)**
- **The soil information is outdated, the soil loss tolerance (T) values have decreased or the plan is missing proof (i.e., soil loss calculations) that the predicted average annual soil loss (A) values are less than or equal to T**
- **Any changes not listed above that will alter the agricultural operation, plowing/tilling activities or AHUAs, etc.**

Note: If your Ag E&S Plan needs to be revised for any of these reasons, you need to review the most current soil information for your operation. If it has been updated since the date of your last plan development or update, you will need to revise the soil information (including maps), T values, A values, and develop/implement BMPs to meet T, as necessary.

This is not an all-inclusive list. Every operation has site-specific conditions to consider.

COULD I WRITE MY OWN PLAN?

*If you answer **"NO"** or **"I DON'T KNOW/I'M UNSURE"** to any of the following questions, please **STOP** and contact your local county conservation district and/or a commercial planner to write a plan for you. You may also contact the Natural Resources Conservation Service (NRCS) if you would like to have all resource concerns on your operation evaluated and are willing to use conservation practices to address those concerns.*

1. **Are you able to describe rill and gully erosion and visually identify rills and gullies?**
2. **Is every one of your fields free of rills and gullies all year?**
3. **Are you aware that you may be losing topsoil even if you do not notice rills and/or gullies in any of your fields?**
4. **Do you know how to measure the slopes of your fields?**
5. **Do all your fields have slopes that are 8% or less?**
6. **Are you able to understand the information contained in soil and topographic maps?**
7. **Are you familiar with common practices used to prevent accelerated erosion and sedimentation?**
8. **Are you aware that animal traffic/animal congregation can cause erosion?**
9. **Are you aware that accelerated erosion and sedimentation on your operation can harm water quality and is against Pennsylvania law?**

STEP 2 – EVALUATE YOUR OPERATION

SELF-ASSESSMENT: COMMON ISSUES

*If you answer **"YES"** to any of these questions, **you will need to address those items** in your Ag E&S Plan and **you may need to make changes** on your operation. It is recommended that you contact your local county conservation district and/or a commercial planner for help if you answer **"YES"** to any of the following questions or for help in answering these questions.*

You should physically walk your fields and operation when performing the evaluation.

Note: *This is not an all-inclusive list. Every operation has site-specific conditions to consider.*

1. **Are any fields within 100 feet of a river or stream?**

2. **Are there signs that sediment may be leaving crop fields and/or bare ground areas?**

3. **Are there signs that sediment is leaving crop fields and/or bare ground areas and reaching surface water (stream, waterway, lake, pond, or open sinkhole)?**

4. **Do you perform medium to heavy tillage at any point in the crop rotation?**

5. **If you use crop rotations, do any rotations consist only of erosion-susceptible crops such as corn or soybeans?**

6. **Are there areas of bare soil due to heavy livestock use that result in the removal of vegetation or streambank damage?**

7. **Does rainwater, roof runoff water, and other clean stormwater flow through the barnyard, farmstead, AHUAs, etc., and may be washing away sediment?**

8. **Are there any field lanes or animal pathways on the operation where stormwater runoff may be washing away sediment?**

9. **Are there any areas on the operation where erosion is causing the formation of rills and/or gullies?**

10. **Are any BMPs becoming less effective than when they were installed? If you received funds for installing a BMP, are you maintaining it as you agreed?**

If you need help evaluating all resource concerns on your operation, including soil erosion, and are willing to use one or more conservation practices to address those concerns, you may want to contact NRCS.