

Utilizing Farm Data for Management Zone Creation

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Objective: Project objectives are to 1) assist growers in identifying available data that can be used to create production management zones and 2) provide resources on how to generate management zones using agricultural GIS software.

Justification and Procedures:

Management zones are created within a field to group similar soil and yield properties and minimize variability. Once established, they are managed according to their unique properties and inputs are optimized to meet production potential. Management zones can be utilized for variable-rate applications including fertilizer, lime, pesticides and seed. A Geographic Information System (GIS) which records, processes and analyzes the data is used to develop zones. Agriculture GIS packages are available which target crop production information and analyses. There are many data sources (yield maps, soils data, farmer knowledge, etc.) and GIS packages available for zone development which can make the process time consuming and even complicated.

The proposed project would 1) allow appropriate Extension publications to be produced for Alabama growers on how to identify and utilize farm data resources for the creation of management zones and 2) provide hands-on AgGIS training for Alabama farmers and consultants interested in zone creation. Hands-on training would be delivered in the form of workshops and one-on-one farm visits targeting commonly used AgGIS software packages.

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