

A large green silhouette of the state of Missouri, serving as a background for the text.

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2000

"GET UR DONE"

Short Term Objectives

PHASE ONE

To refresh statewide
spatial and attribute data
with known information

**Develop work plans to
address long term
objectives**

Phase One

(Short Term , 2 Years)

- Evaluate the initial product
- Edit existing SSURGO data to better fit digital ortho and topo base
- Flag questionable areas where further investigation is needed
- Convert symbols to statewide legend
- Join surrounding counties
- Bring database up to a uniform standard
- DO NO HARM



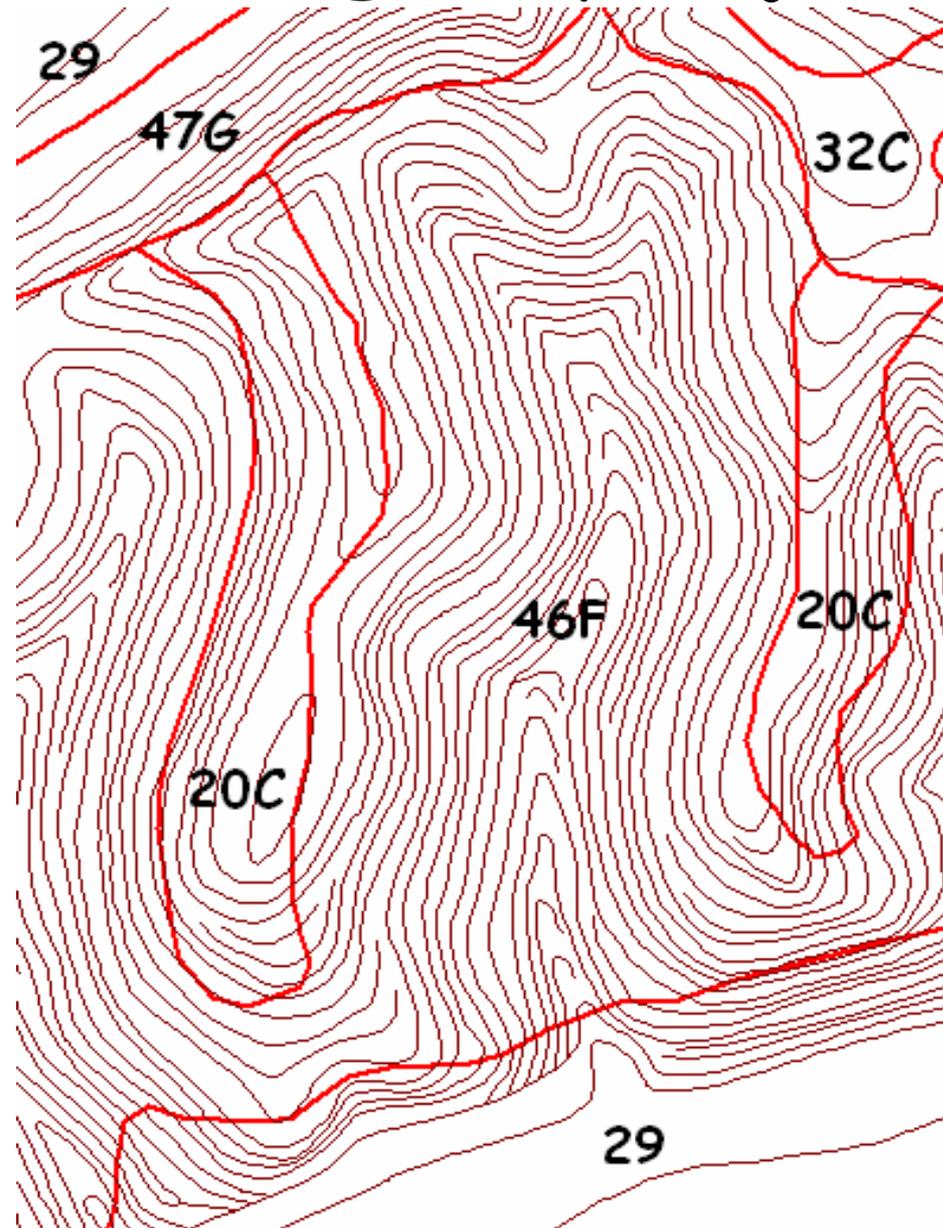
Survey Evaluations

- 1) Known Deficiencies
- 2) Laboratory Data
- 3) Map Unit Composition
- 4) GIS Evaluation of Line Placement
- 5) Field Verification
- 6) Regional Consistency
- 7) The Soil-Landscape Model

Before lines were digitally adjusted

Example: Existing lines

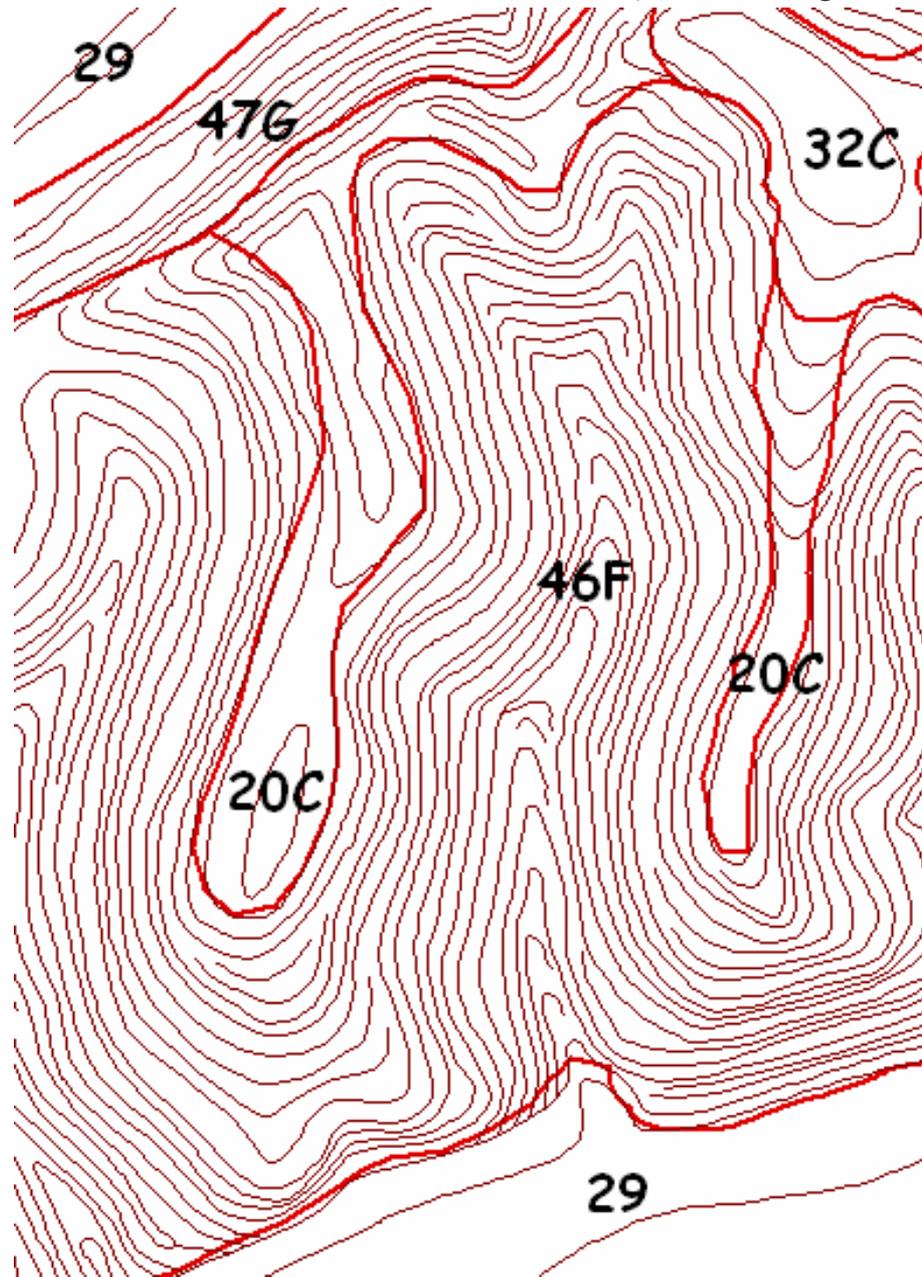
- Ridges shifted onto backslopes
- Floodplain running up onto backslope (and vice versa)





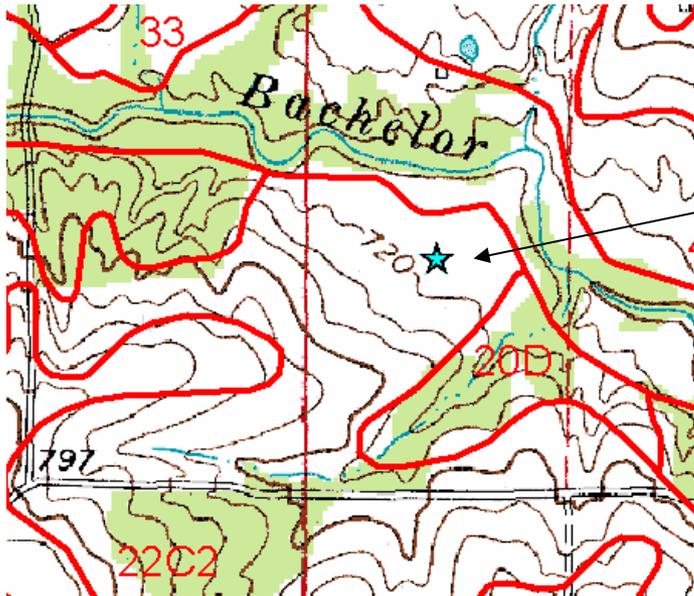
After lines were digitally adjusted

Example: Improved line placement



Digital Flag Point Layer

- Points mark questionable map units needing further investigation



The 22C2 unit seems to cross slope classes and go down onto a footslope or terrace position.

Digital Flag Point Layer

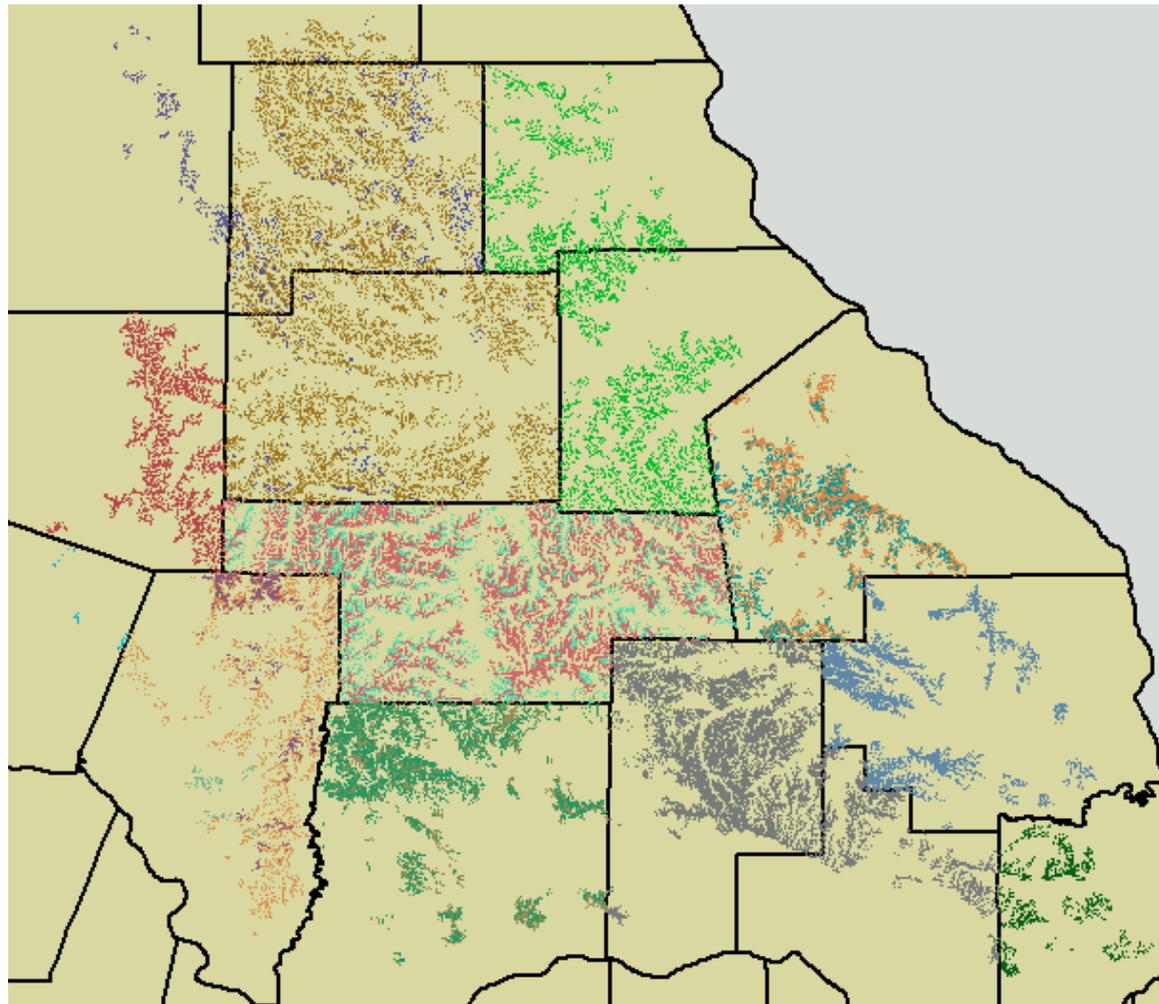
- Statewide legend for labeling flags was developed for consistency

Code	Code Description	Code Defined
CLF	Crosses Landform	The same map unit is found on multiple landforms.
CSC	Crosses Slope Class	Map unit crosses multiple slope classes not defined in legend.
FFP	Flooding Frequency Problem	Designated flood frequency may be wrong.
JP	Join Problem	A map unit was added to complete a perfect join for Phase I.
KU	Karst Unit	Karst features identified in a non-karst map unit. May need separate map unit.
LNCO	Landform Not Cut Out	A landform such as a ridge, stream terrace, or footslope has not been delineated.
MSS	Missing Spot Symbol	Spot symbols such as: wet area, sink, rock outcrop, etc., is missing and could be added.
MUB	Map Unit Break	Map unit break. For example, areas of shallow soils in a deeper unit.
OT	Other	For general questions and concerns-Comment column must further define question or concern.
SOOP	Series Out Of Place	Differs from current concept of soil series. Examples: landform, catena, parent material, etc.
WSC	Wrong Slope Class	The assigned slope class seems to be wrong such as a "D" side slope looks steeper or flatter ("E" or "C").

Legend Improvement Consolidation & Consistency

Spatial example:

Distribution of Mexico soil map units. Many have the same name but have different symbols and data.





**UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE**

10000 MLRA 107

Subset B

10000 - 12499 upland
12500 - 13499 terrace
13500 - 14999 flood plain

Subset C

15000 - 17499 upland
17500 - 18499 terrace
18500 - 19999 flood plain

20000 MLRA 108

20000 - 23999 upland
24000 - 25999 terrace
26000 - 29999 flood plain

30000 MLRA 109

30000 - 33999 upland
34000 - 35999 terrace
36000 - 39999 flood plain

40000 MLRA 112

40000 - 43999 upland
44000 - 45999 terrace
46000 - 49999 flood plain

50000 MLRA 113

50000 - 53999 upland
54000 - 55999 terrace
56000 - 59999 flood plain

60000 MLRA 115

60000 - 63999 upland
64000 - 65999 terrace
66000 - 69999 flood plain



70000 MLRA 116

Subset A - Springfield Plateau

70000 - 71249 upland
71250 - 71749 terrace
71750 - 72999 flood plain

Subset B - Salem Plateau

73000 - 74624 upland
74625 - 75374 terrace
75375 - 76999 flood plain

Subset C - St. Francois Mountains

77000 - 78249 upland
78250 - 78749 terrace
78750 - 79999 flood plain

80000 MLRA 131

80000 - 81999 upland
82000 - 85999 terrace
86000 - 89999 flood plain

90000 MLRA 134

90000 - 93999 upland
94000 - 95999 terrace
96000 - 98999 flood plain

MISC. AREAS

99000 - 99999 all

70000 MLRA 116

Subset A - Springfield Plateau

70000 - 71249 upland
71250 - 71749 terrace
71750 - 72999 flood plain

Subset B - Salem Plateau

73000 - 74624 upland
74625 - 75374 terrace
75375 - 76999 flood plain

Subset C - St. Francois Mountains

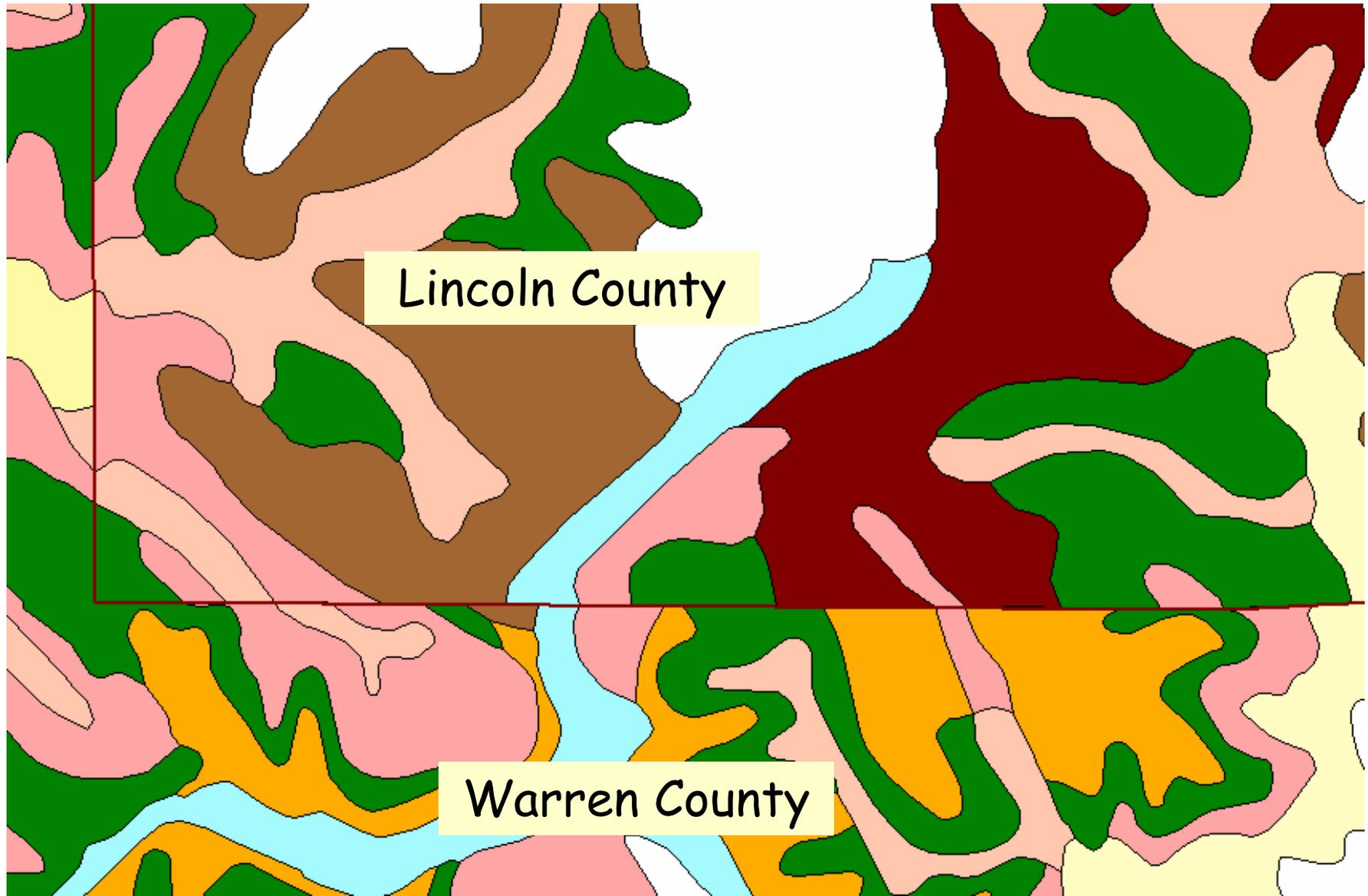
77000 - 78249 upland
78250 - 78749 terrace
78750 - 79999 flood plain





Improve County Joins

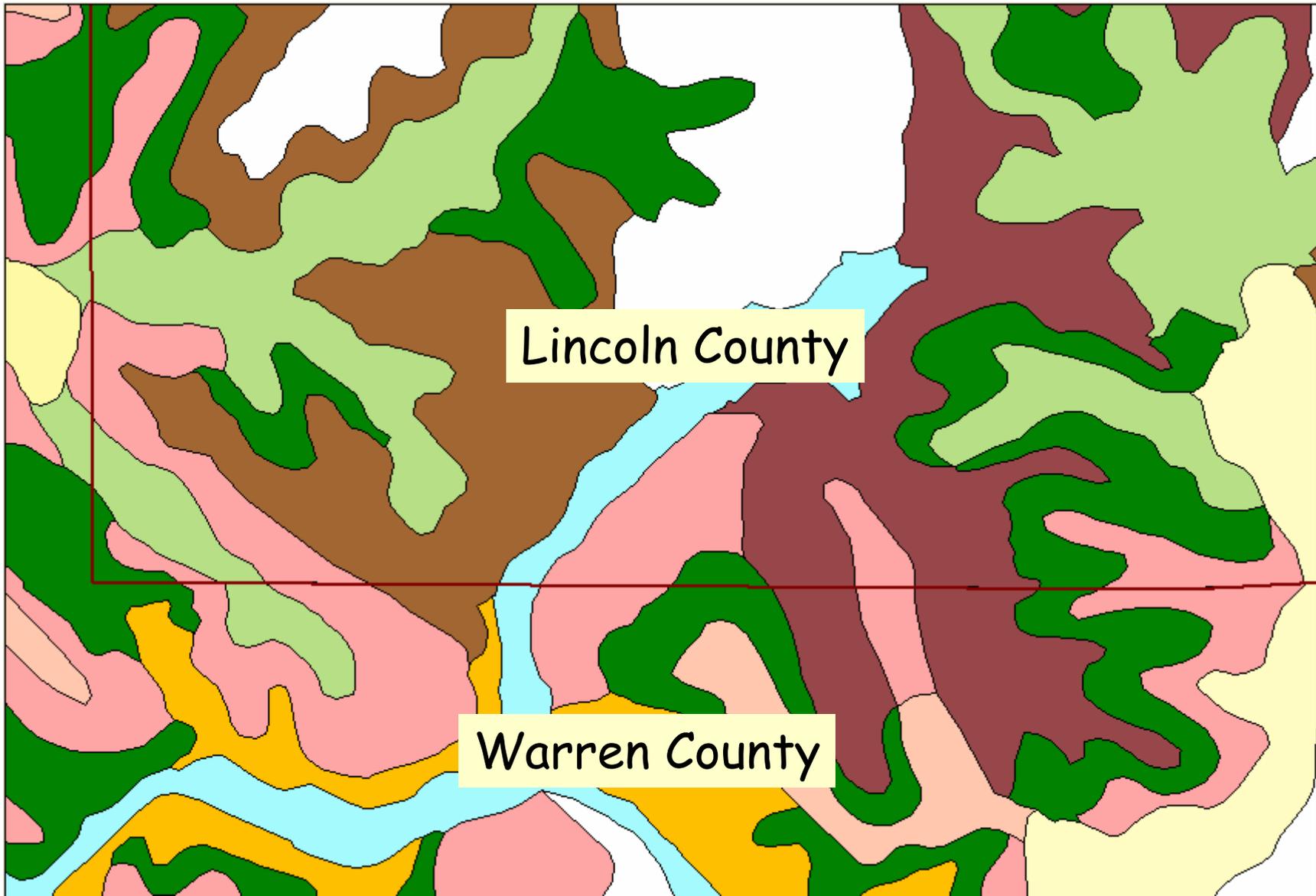
Example: original joins at county line





Improve County Joins

Example: after digital adjustments



Phase I Results

- Refreshed Spatial Database
- Refreshed Attribute Database
- Consistent Legend
- Joined Initial Surveys
- Extensive Evaluation of Entire State
- Recognition of Areas Needing Attention
- (Phase I Data Delivered to the Data Mart and to Field Offices Jan. 2006)

WHAT HAVE WE LEARNED?

(For what it's worth)

- It is essential to have a transitional phase between the Initial Soil Survey and the New/Update Soil Survey.
- Input from partners and the field level is also essential to assure buy-in and to utilize your entire brain trust.
- We thought it necessary to deliver products in regular intervals. (Shiny Beads.)
- Communicate, Communicate, Communicate!!!

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Long Term Objective

The New Soil Survey

Maintain / Update the maps and other data by conducting needed data collection activities, to upgrade the entire state database to a common high standard.

A photograph showing a person's legs in blue jeans and brown shoes standing on a grassy field. In the foreground, a soil profile is visible, showing dark brown soil with roots extending downwards. The background consists of a green field and trees under a clear sky.

Projects

A work model for Missouri's
"New" Soil Survey

What is the "New" soil survey in Missouri?

- A continuous refinement of soils data and interpretations, based on specific **Needs**.
- "Maintain/update spatial and attribute data by conducting needed data collection activities, to upgrade the entire state database to a common high standard."
 - Missouri Soil Survey Workgroup, Jan. 7, 2003.

THE QUESTIONS WE WILL CONTINUALLY ASK, ARE:

- SO WHAT?

AND

- WHO CARES?



Planning Process

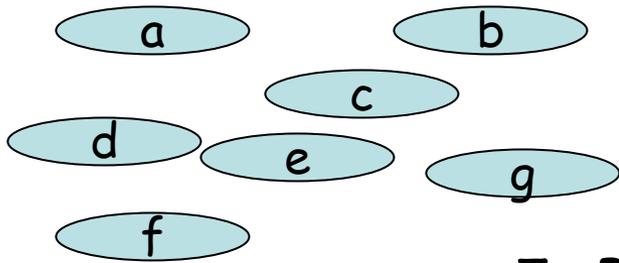
- Identify needs.
- Develop Project Proposals
- Rank Proposals by Merit
- Develop Work Plans for Priority Proposals
- Develop Plan of Operations which incorporates and integrates Work Plans

The Project Proposal Template

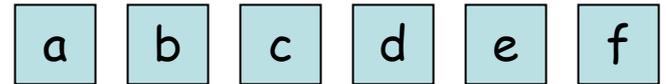
- Name of Project
- Contact person
- Objective
- Background information and justification
- Acreage, extent, and map of areas affected
- Target areas affected, if any (CSA watersheds, etc.)
- Benchmark soils affected
- Key soil properties and/or interpretations affected
- Methodology
- Personnel and duties
- Time (person-days) estimate
- Equipment required (other than standard equipment)
- Products

Soil Survey Projects

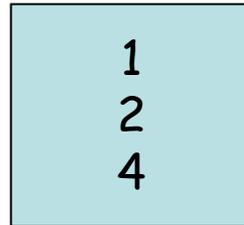
1. Identify Needs



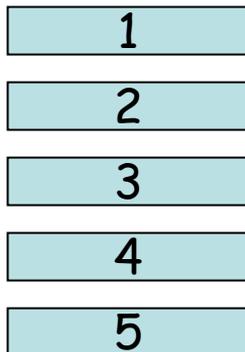
2. Develop and submit Project Proposals



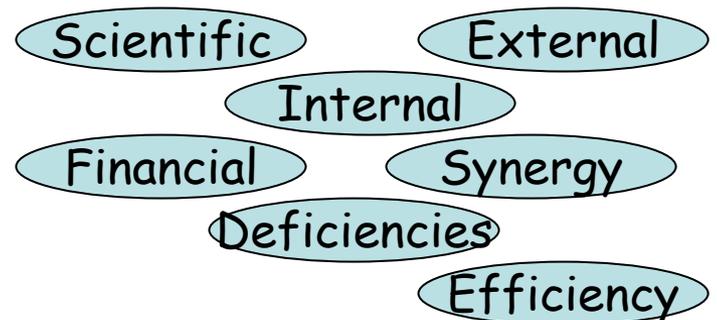
5. Plan of Operations incorporates/integrates Work Plans



4. Develop a Work Plan for each priority Project



3. Projects are ranked based on Merit



1st Round Project Proposals

- 96 Projects Proposed
- 28 Projects were approved in first round
- Project work plans were developed for all 28 approved projects.

FY 06 Tentatively Approved Projects Missouri Resource Soil Inventory

