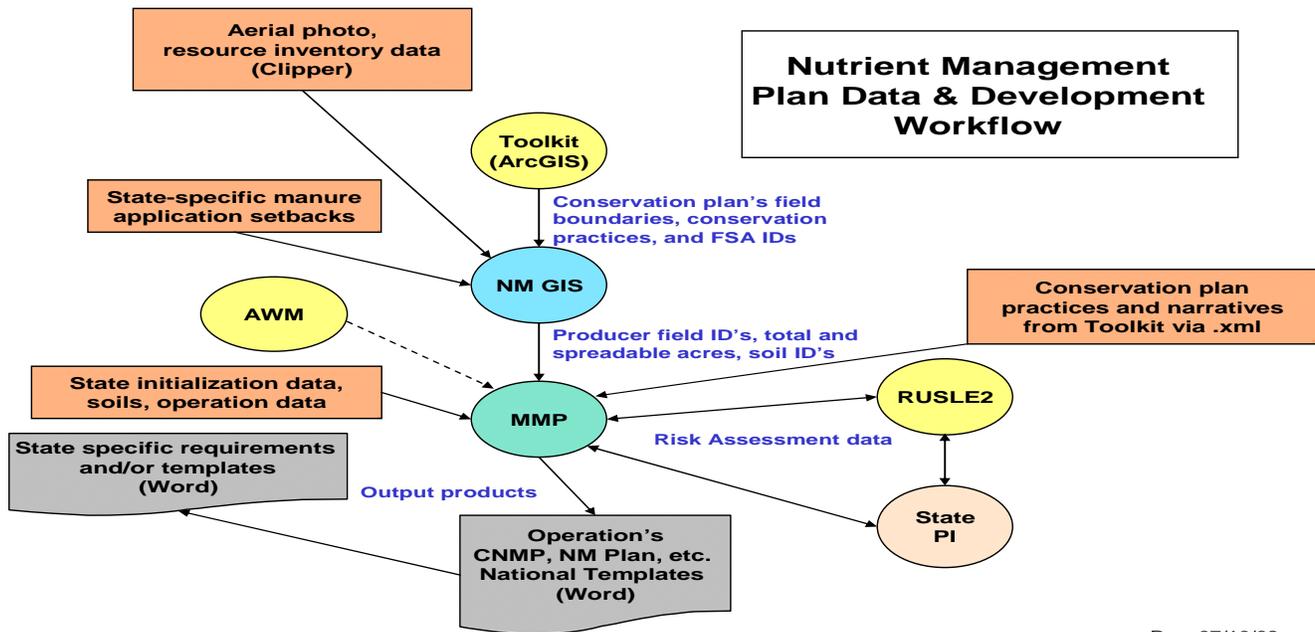


# Manure Management Planner

## National Software for CNMP Development and Recordkeeping

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## Overview

Nutrient management planning involves multiple software programs and data sources. This flowchart shows the typical nutrient management planning process workflow.

**Manure Management Planner (MMP)** serves as the clearinghouse for data during nutrient management planning, utilizing data from numerous sources and distributing data and calculated results to multiple outputs/programs.

MMP's flexible design allows the planner options on selection of software. The planner can use the University of Missouri's nationally supported Clipper Application and download multiple layers of resource inventory data to any front-end nutrient management GIS software, or import data from any GIS directly into MMP. MMP also interacts with NRCS RUSLE2 and State Phosphorus Index (PI) data to determine nutrient application amounts. Utilizing data from the National Setbacks database, MMP can determine "spreadable acreage" for manure application. Streamlined NM Plan and CNMP output document templates are available to produce CNMP and producer activity documents.

Field ID	Subfield ID	Total Size (Acres)	Spreadable Size (Acres)	Storage Distance (Miles)	Predominant Soil Type (Name, Texture, Map Symbol, Slope Range)	Slope % (If Not Ave.)	Irrigated With Water	Is Over
Field 1		35.9	33.4	0.7	Crosby SIL (CtA 0-2%)			
Field 2		40	34.8	1.1	Crosby SIL (CtA 0-2%)			
Field 3		35.8	34.4	0.6	Crosby SIL (CwB2 2-6%)			
Field 4		32.6	31.3	1	Crosby SIL (FcB 1-3%)			
Field 5		19.5	18.5	0.2	Desker GR-SL (DmC2 6-12%)			
Field 6		18.5	18.5	0.3	Desker SL (DoC2 6-12%)			
Field 7		16.4	16.4	0.4	Desker SL (DpD2 12-18%)			
Field 8		17	17	0.5	Drummer SIL (Du 0-2%)			
Field 9		24.6	22.4	0.8	Du Page L (Dy 0-2%)			
Field 10		32	28.1	0.7	Elston SL (EkA 0-2%)			
Field 11		22.4	20.2	0.2	Elston L (EmA 0-2%)			
Field 12		18.3	17.6	0.3	Elston SL (FcB 1-3%)			
Field 13		16	14.6	0.4	Elston SL (SwA 0-2%)			

## Features

- Enter operation's data in a simple, intuitive row-by-column interface.
- Total and spreadable acres transfers from GIS.
- Soil pick list allows manual selection of soils. In counties where a digitized soil survey is available, soil identification is automatically transferred from SNMP.
- Automatically calculates crop nutrient needs according to state Extension fertilizer recommendations.
- Calculates proper manure application rates based on the nutrient that the planner selects.
- Automatically estimates each manure application's available nitrogen using state-specific N loss guidelines.

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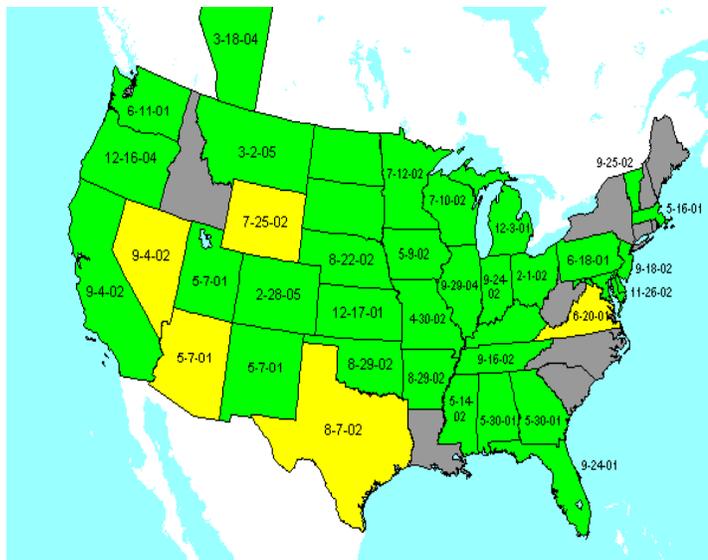
## Planning Tools

- Nutrient budget and nutrient balance reports.
- Charts of monthly amount of manure hauled, distance traveled to/from field, and distance traveled in field for planned manure applications.
- Manure application planning calendar to help determine the best fields for manure applications throughout the planning period.
- Automatically generate national NRCS CNMP template based documents or state-specific templates.

## Recordkeeping Tools

- Record and report actual manure and fertilizer applications made to fields with MMP's recordkeeping tools, MART and WinMax.
- Charts of applied manure and fertilizer nutrients versus planned applications of manure and fertilizer nutrients.
- Calculates each manure application's nitrogen and phosphorus availability according to state-specific guidelines.

## Status



### Status of MMP development (as of August 2006)

- State or province supported by MMP (calculates fert recs, manure N availability, etc.)
- State under development - collection of required state-specific data is underway

Note: Date of most recent meeting between MMP developers and state NRCS/Extension staff is indicated on map.

## Availability

MMP: [www.agry.purdue.edu/mmp](http://www.agry.purdue.edu/mmp)

CNMP: [www.nrcs.usda.gov/technical/afo/](http://www.nrcs.usda.gov/technical/afo/)

Clipper: <http://projects.cares.missouri.edu/snpm/nrcsdata/aolist.asp>

Setbacks: <http://nmplanner.missouri.edu/software/setbacks.asp>

## Contacts

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## Top 10 Things to Remember about MMP

1. MMP is **free software** that is **nationally supported** by both USDA-NRCS and USEPA for nutrient management planning and CNMP development.
2. MMP calculates **Land Grant University (LGU) fertilizer recommendations** and **manure nutrient availability** automatically and in accordance with state NRCS 590.
3. MMP includes an **extensive set of reports, planning calendars, and charts**, both built-in and custom. Plus you can **develop custom tools yourself** with Access, Excel, Word or PowerPoint and add them in to MMP.\*
4. MMP allows you to **develop output products using streamlined NRCS approved templates** (MS Word) that contain boilerplate text for creating tables of data (from MMP or other data sources). Consultants and planners can use these templates with MMP's **document generator** to create CNMPs and other complex documents automatically.\*
5. MMP **automatically imports field data** via the "Missouri Clipper" or from an adapted version of MapWindow GIS. MMP permits the import of data from most currently available GIS products. NRCS employees can interact with Customer Service Toolkit (CST).
6. MMP includes a **Manure Application Recordkeeping Tool** (MART) and **WinMax** ([www.agry.purdue.edu/max](http://www.agry.purdue.edu/max)) to conduct more comprehensive crop production and nutrient management recordkeeping.
7. MMP's illustrated **Getting Started** guide gets you started with MMP and SNMP. MMP includes comprehensive **program help** and numerous **sample plans**.
8. A **webcast video presentation** demonstrating MMP capabilities is available.
9. MMP connects available software to save time by reducing duplicative data entry therefore minimizing human error. MMP is fully connected to RUSLE2 and PI to enable instantaneous calculation of manure allocation rates for each field.
10. MMP includes **Crop Fertilizer Recommendation** and **Manure Nutrient Availability** calculators.

\* Visit [www.agry.purdue.edu/mmp/MmpDocs.htm](http://www.agry.purdue.edu/mmp/MmpDocs.htm).