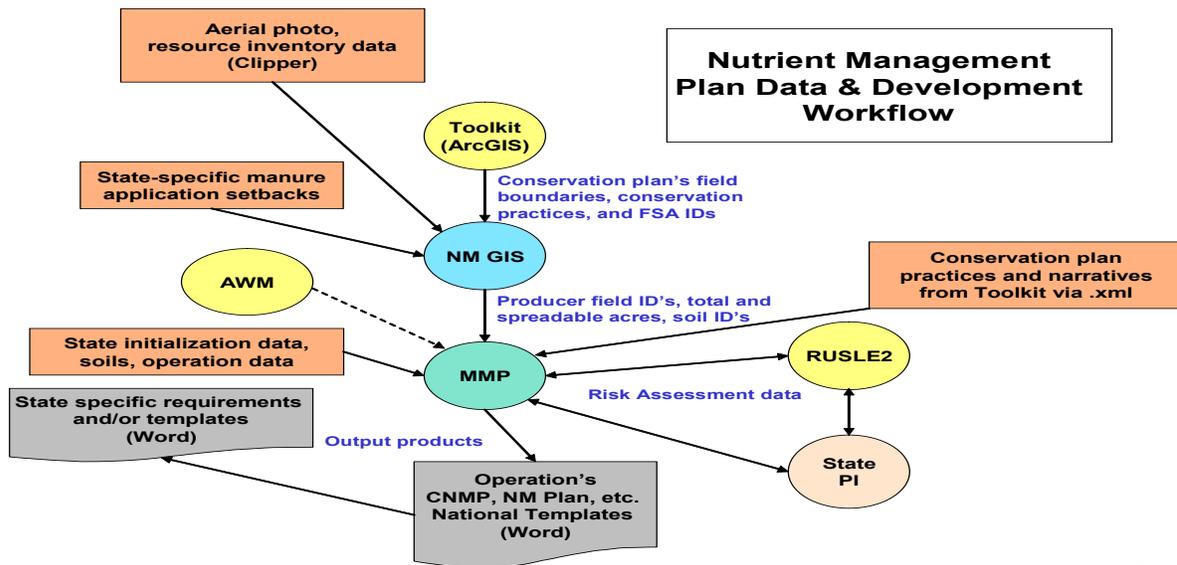




Manure Management Planner (MMP)



Rev. 07/10/09

Background

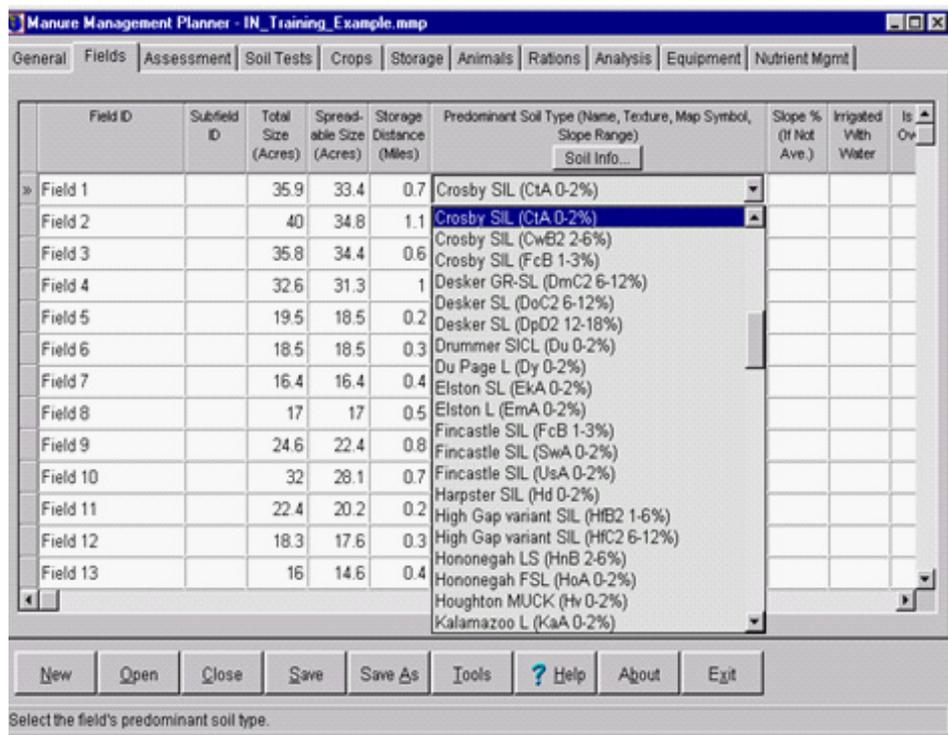
Nutrient management planning involves multiple software programs and data sources. This flowchart shows the typical nutrient management planning process workflow to develop a nutrient management plan or a comprehensive nutrient management plan. This streamlined process is followed by NRCS employees and Technical Service Providers (TSPs). MMP is the National Software for CNMP Development and Recordkeeping.

What is Manure Management Planner (MMP)?

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.

How Does MMP Work?

- Enter operation's data in a simple, intuitive row-by-column interface.
- Total and spreadable acres transfer from GIS.
- Soil drop down allows manual selection of soils. In counties with a digitized soil survey, soil identification is automatically transferred from the GIS.
- Calculate RUSLE2 and State Phosphorous Index (PI).
- Automatically calculates crop nutrient needs according to state Land Grant University fertilizer recommendations.
- Calculates proper manure application rates based on the nutrient that the planner selects, or a custom rate of application.
- Automatically estimates each manure application's available nitrogen using state-specific N loss guidelines.



Output Products

- 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 streamlined national NRCS CNMP template based output documents or state-specific templates.

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 several front-end nutrient management GIS tools. 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 Win-Max (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 GIS. 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.

Record Keeping

- Record and report actual manure and fertilizer applications made to fields with MMP's recordkeeping tools.
- 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.
- Allows for recordation of EPA CAFO rule required recordkeeping items.

Program Availability

MMP: www.agry.purdue.edu/mmp

CNMP: www.nrcs.usda.gov/technical/afo/

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

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

For More Information

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