

# Wisconsin's Manure Management Advisory System

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Sara Walling  
DATCP  
608-224-4524  
[sara.walling@wisconsin.gov](mailto:sara.walling@wisconsin.gov)

# MMAS

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“to establish an online manure management advisory system to assist farmers and manure applicators in identifying the least risky fields and times to apply manure.”

# The Tools

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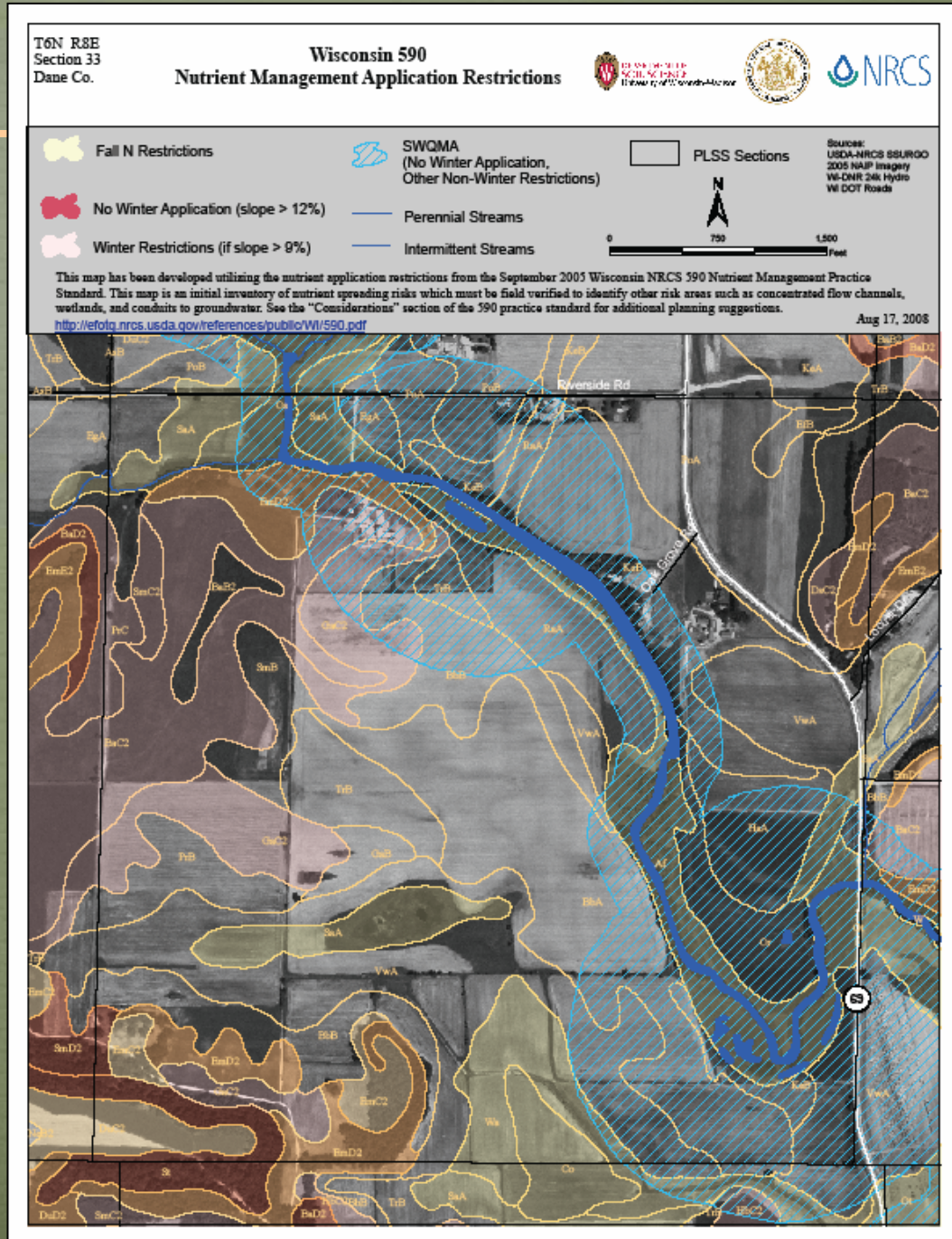
Tool 1: Accessing WI "590" Nutrient and Manure Application Restriction Maps on the Web

Tool 2: Online Runoff Risk Assessment and Advisory Model



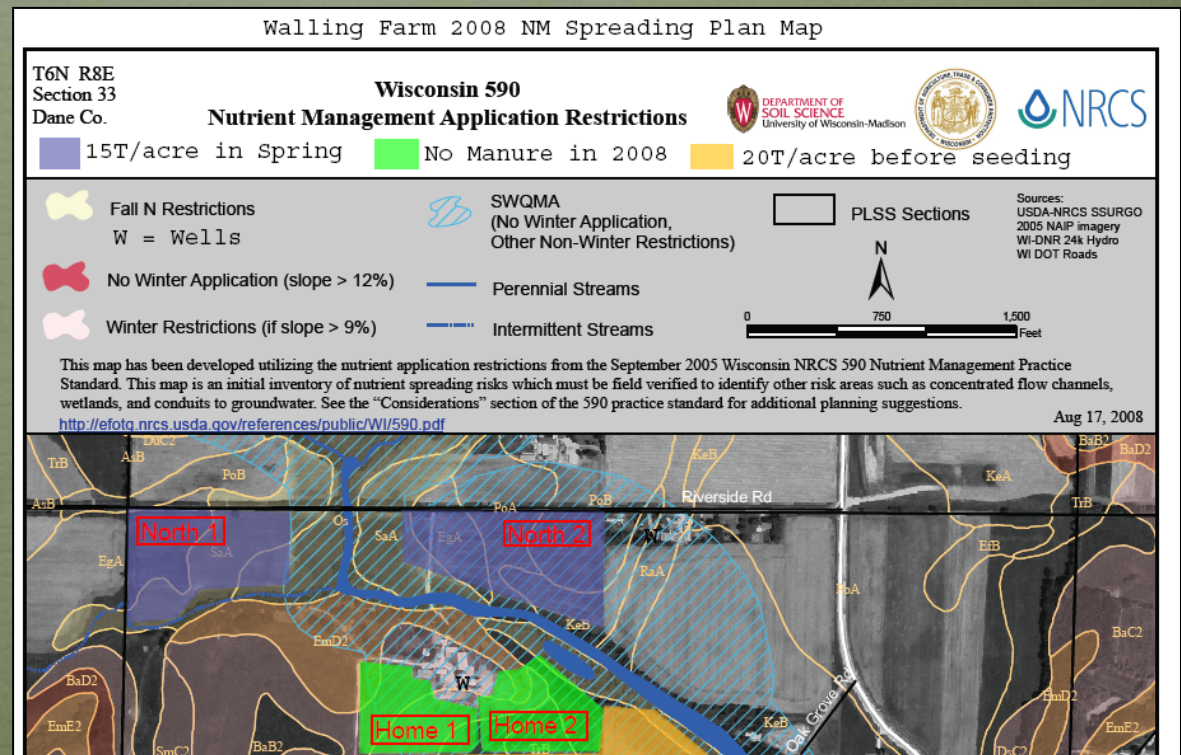
# Tool 1

- NRCS “590” Spreading Restriction Maps Online
- Statewide, section level
- 590 restrictions and setbacks
- Editable
- GIS-like layers
- Consistent product



# How the maps can help

- Provide spreading restriction information that is required for NMPs
- Customized maps can identify fields, crops, rates of nutrient applications, etc



# How to Get the Maps

<http://www.datcp.state.wi.us/arm/agriculture/land-water/conservation/manure-mngmt/index.jsp>

The screenshot shows the website for the Wisconsin Department of Agriculture, Trade and Consumer Protection. The header includes the department name and navigation links: Home, About Us, Contacts, SiteMap, and Index. A search bar is also present. Below the header is a menu with categories: Animal Welfare & Disease, Consumer Protection, Environmental Protection, Farming & Agriculture, Food Safety & Processing, Insects & Pesticides, Marketing Agriculture, and Trade Practices. The main content area is titled "Manure Management Advisory System (MMAS)" and includes a sub-header "Developed by DATCP, NRCS, USGS, NOAA/NWS and UW-Madison". It lists two new tools for farmers to protect water resources when land spreading manure: 1. Nutrient and Manure Application Restriction Mapping, and 2. Runoff Risk Assessment and Advisory Model. A section titled "Tool 1: Accessing WI '590' Nutrient and Manure Application Restriction Maps on the Web" provides information on how to use these maps. On the right side, there is a "Quick Links" section with various links such as Press Room, Wisconsin No Call List, Employment Opportunities, Hotlines, Licenses, Permits, Certification, Meeting Notices, Rules & Statutes, Market News, Wisconsin Agricultural Statistics Service, Publications, and DATCP en español / Hmong. Below this is an "Online Services" section with links for File Consumer Complaint, Farmer's Resource Guide, Animal Movement Online Permit Request, Bulk Milk Tanker and BMWS Inspection Dates, and Buy Vet Supplies Online.

Wisconsin Department of  
**Agriculture, Trade and Consumer Protection**

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## Manure Management Advisory System (MMAS)

Developed by DATCP, NRCS, USGS, NOAA/NWS and UW-Madison

Two New Tools to help farmers protect water resources when land spreading manure:

1. [Nutrient and Manure Application Restriction Mapping](#) – providing consistent, online accessible, statewide restriction maps for use by planners, producers, and manure applicators.
2. [Runoff Risk Assessment and Advisory Model](#) – a website to help farmers assess the likelihood of runoff events occurring on a given day.

### Tool 1: Accessing WI "590" Nutrient and Manure Application Restriction Maps on the Web

On-farm nutrient management begins with a good understanding of field-specific soils and their ability to accept nutrients and manure for optimal crop production while protecting water quality. Nutrient and Manure Application Restriction Maps show where, when, and how much manure can be applied within Wisconsin state rules (2005 Wisconsin NRCS 590 Nutrient Management Practice Standard). Providing an easily accessible map that depicts areas best suited to receive nutrients will benefit both farmers and the environment.

**Quick Links**

- [Press Room](#)
- [Wisconsin No Call List](#)
- [Employment Opportunities](#)
- [Hotlines](#)
- [Licenses, Permits, Certification](#)
- [Meeting Notices](#)
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# Tool 2 - Runoff Risk Assessment and Advisory Model

- Use existing NWS predictive weather, snow, and soil moisture models to assess the likelihood of runoff occurring on a given day in a given watershed



# Goals of the Risk Assessment Tool

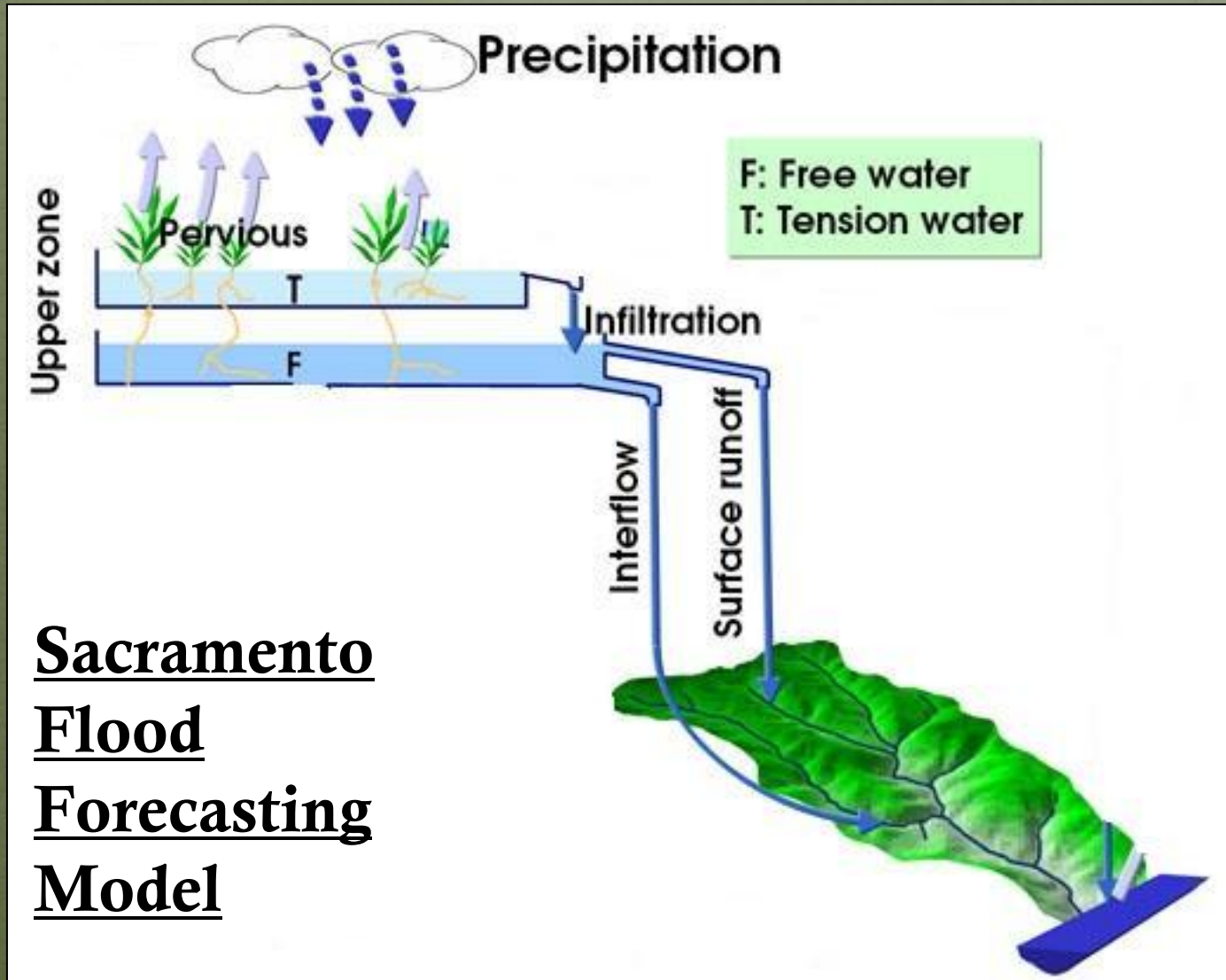
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- Identify and alert counties, producers of days in which the risk of runoff is high
- Increase information available to producers to make decisions about when and where to spread on a given day
- Use existing weather/rainfall/snowfall models from NOAA to determine level of risk
- Use actual on-farm/research data to calibrate model data





# Tool 2



## Sacramento Flood Forecasting Model

NWS is focusing on the fast responding runoff components for this project

# Methodology and Timetable

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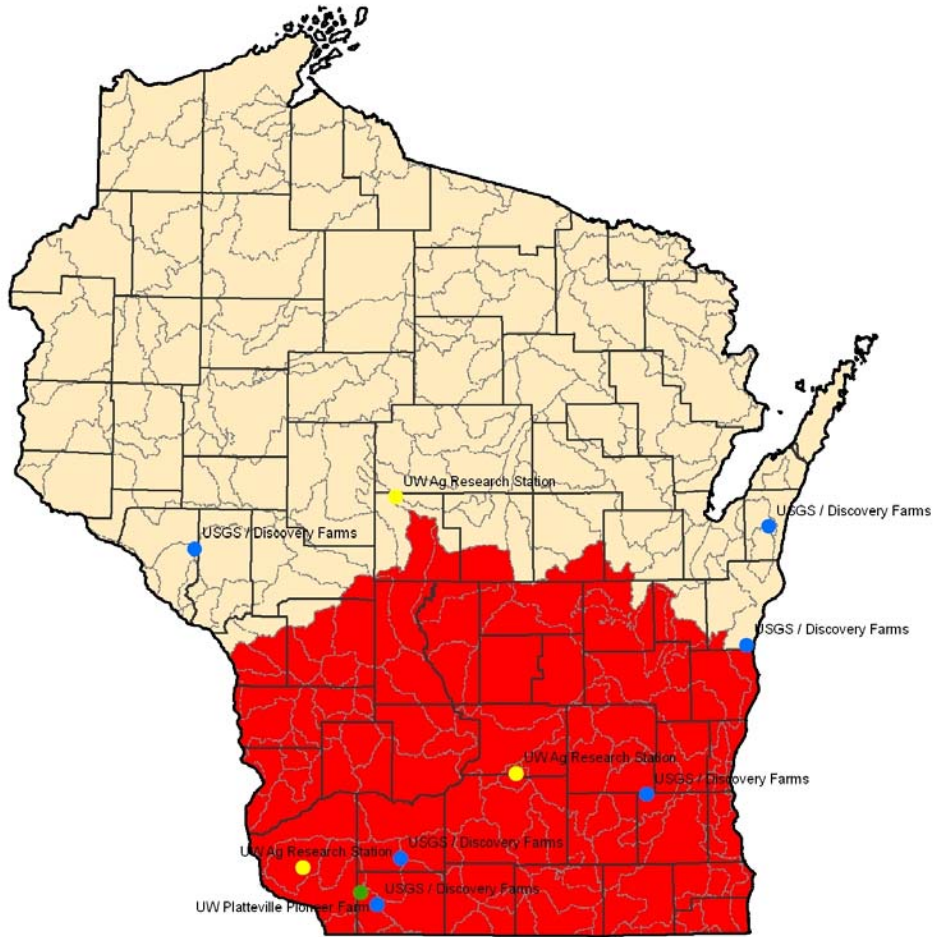
1. Compare historic **basin** runoff predictions and observed runoff data from **field** sites in WI (Ongoing; March 2009)
2. Develop software to process NWS models (June 2009)
3. Determine runoff risk thresholds – high, medium, low (June 2009)
4. Develop a webpage to disseminate the information (September 2009)

# Example - Risk Assessment Webpage

## Wisconsin Spreading Risk Map For January 1, 2009

### Legend

- County Boundries
- Agricultural Research Farms**
  - Farm Type
    - USGS / Discovery Farms
    - UW Ag Research Station
    - UW Platteville Pioneer Farm
- NOAA Watersheds**
  - Risk of Runoff
    - Low Risk
    - High Risk



Questions?

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Comments?