Progressive Planning for the MAEAP Livestock System: Livestock*A*Syst

MAEAP’s special initiative to work with small- and medium-sized livestock operations, Progressive Planning, has introduced Livestock*A*Syst to help dairy producers and others more consistently and precisely evaluate environmental risks in their farms, develop a plan to address them, and move along the path toward environmental assurance. Many participating producers have voluntarily made changes in their operations and have reported their implemented practices.

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The Michigan Agriculture Environmental Assurance Program (MAEAP) provides an excellent opportunity for Michigan farmers to proactively and voluntarily manage their farms for the protection and enhancement of soil and water resources. For livestock producers, the ultimate accomplishment in MAEAP is Livestock System Verification. Verification is awarded after an independent farm inspection following the producer’s implementation of a Comprehensive Nutrient Management Plan (CNMP) which incorporates MAEAP approved components. Some MAEAP producers may elect to immediately pursue completion of a CNMP and verification; however, many producers find that smaller, more progressive steps in environmental improvement are more economical and practical for their circumstances.

A Progressive Approach

The MAEAP Livestock*A*Syst (Progressive Planning) approach to environmental assurance is designed to meet the needs of those producers who are not yet ready, able, or interested in implementing a CNMP and receiving MAEAP Livestock System Verification.

The Livestock*A*Syst is a series of risk questions and answers about livestock management practices reflecting components of a CNMP and including all the elements of the Right to Farm (RTF) Manure Generally Accepted Agricultural and Management Practices (GAAMPs) Manure Management System Plan. Producers can work one-on-one with a non-regulatory MAEAP partner to identify potential environmental risks and to develop a confidential Livestock Action Plan to reduce those risks. The action plan is the producer’s plan and can be completed at his or her own pace. There is no deadline.

As progress is made, MAEAP provides recognition of the producer’s efforts to be an environmental steward through program promotion and local contacts. Complete implemen-
tation of the Livestock Action Plan prepares the producer for the development of a CNMP and for MAEAP Livestock System Verification, if those are the producer’s goals. Progressive Planning allows participating owners of small- and medium-sized farms to enjoy the piece of mind of knowing that their practices are in conformance with the RTF Siting and Manure GAAMPs and that they are working to comply with environmental laws.

How does Livestock*A*Syst Work?

The environmental risk questions in Livestock*A*Syst are grouped into seven different sections. Producers select all sections relevant to their farm. Not all risk questions will apply to all livestock farms. These risk areas are in both the original Progressive Planning Program and the revised Progressive Planning Program. In the revised version, the narrative guidance is transformed into concise risk questions with low, medium and high risk practices identified. The risk areas are:

1. Whole Farm Nutrient Balance
2. Farm Site Review
3. Manure Spreading Plan
4. Conservation Practices on fields used for manure application
5. Emergency Plan and Employee Training
6. Mortality Management and Veterinary Waste Disposal
7. Odor Management

Producers answer each risk question by selecting the statement that best describes conditions on their farm for that area. Risk levels are ranked as High, Medium, and Low Risk. Some questions are coded to indicate conformance with a RTF GAAMP practice or violation of state law. Figure 1 is a sample question that shows: 1) a violation of state law, 2) a GAAMP level of operations, and, 3) a MAEAP level of operations, as identified in the program.

This sample question has only a low and high risk option from which the producer is to select. The italics in the low risk answer reflect a RTF GAAMP. The Livestock*A*Syst includes footnotes when a high risk is also a violation of state law. For each area, the producer enters the number representing their risk in the column titled “Your Risk”. The far right column indicates particular records or evidence required for MAEAP Progressive Planning Verification.

After completing each section, producers list, in the Livestock Action Plan, the practices that present a high risk of contaminating water resources. The plan is printed inside the front cover of the bulletin. Medium risks that do not meet MAEAP Progressive Planning verification requirements are also included.

Finally, in the Livestock Action Plan, producers list alternative practices, structures or equipment that are planned and which will reduce risks. A target date (selected by the producers) for accomplishing the planned changes is included.

Confidential Assistance

Participating farmers are offered confidential, one-on-one guidance through the Progressive Planning process via “Local Coordinators” who are members of MAEAP’s non-regulatory partner organizations including Michigan Farm Bureau, Local Conservation Districts, Michigan State University Extension, and Michigan Milk Producers Association (MMPA).

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**Figure 1. Sample question taken from the “Direct Discharge to Surface Water or Groundwater” Section of the Livestock*A*Syst.**

<table>
<thead>
<tr>
<th>Risk Question</th>
<th>Low Risk - 3 (recommended)</th>
<th>Medium Risk - 2 (potential hazard)</th>
<th>High Risk - 1 (significant hazard)</th>
<th>Your Risk</th>
<th>Records or evidence for MAEAP verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.12) Is wastewater directly discharged to a lake, drainage ditch, or stream.</td>
<td>No. <em>Milking parlor and milk-house wastewater is managed in a manner to prevent discharge into surface water.</em></td>
<td>Yes.⁴</td>
<td></td>
<td>No discharge present.</td>
<td></td>
</tr>
</tbody>
</table>

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⁴ Natural Resources and Environmental Protection Act 451 of 1994, Part 31: Water Resources Protection.
ers may select the organization with which he or she would prefer to work.

Local Coordinators are available to assist producers in a variety of ways including:

- Providing guidance through the Livestock*A*Syst.
- Understanding MAEAP and other environmental expectations.
- Identifying farm specific areas of concern and opportunity related to environmental stewardship.
- Setting farm-specific goals, timelines, and plans for improving and sustaining good environmental stewardship.
- Identifying the appropriate resource persons for assisting in the completion of specific steps in the Progressive Planning process.

After developing and implementing a plan to address the risks indicated by the Livestock*A*Syst, producers can contact MDA to request a farm visit by calling 517-373-9797. An MDA inspector will schedule a visit at the farmer’s convenience. When the Progressive Planning risk reduction objectives are verified as having been met, the producer will receive a letter and certificate from MDA and MAEAP. Owners of small- and medium-sized livestock farms may choose to continue with CNMP development and verification in the MAEAP Livestock System.

Sign Up

Producers can sign up for MAEAP Progressive Planning at any time by submitting a sign up form to the MDA. Forms are available from MAEAP partnering organizations or the MAEAP web site <http://www.maeap.org>. The Livestock*A*Syst booklet is available electronically at <http://www.maeap.org>, from conservation district offices, MMPA field staff, and as a MSU Extension bulletin. The booklet was produced with assistance from MAEAP partners including MMPA, the Corn Marketing Program and the Michigan Groundwater Stewardship Program.

No Obligation

Signing up does not obligate the farmer to specific changes. Farmers can progress as far as they feel comfortable or to meet individual farm goals. However, some circumstances such as CAFO designations, some EQIP requirements, and Michigan Department of Environmental Quality enforcement actions require farms to implement a CNMP and/or other farm practice changes in a more prompt manner than Progressive Planning was intended to facilitate.

Results

The results achieved to date via the Progressive Planning approach are summarized in the list below. The reporting reveals an impressive number of farmers, acres involved and discharge risks eliminated. Still, while many are involved, the number of participating farms remains small relative to possible participants. For example, over 2400 dairy farms in Michigan are eligible for Progressive Planning. Many would benefit from involvement. MAEAP’s objective is to increase livestock producer participation and to reduce negative environmental risks and impacts of Michigan livestock production.

The Environmental Practice Changes within MAEAP Progressive Planning system for 2007 are summarized below.
288 small- and medium-sized farms submitted surveys which examined their progress in MAEAP Progressive Planning.

Almost 150,000 acres were involved in MAEAP Progressive Planning.

Dairy farms represented the largest participation with 242 farms, 84% of the total.

25% of the small- and medium-sized farms involved eliminated a direct discharge. A total of 97 direct discharges were eliminated on 66 farms.

A total of 82 high risks of a discharge were eliminated.

Almost 270 changes were made to achieve nutrient sustainability, including adding additional acres, reducing animal numbers, moving to higher yield crops, changing crop rotations and reducing phosphorus in the feed rations.

65% of involved farms adopted or modified their soil testing regimen.

Almost two-thirds of involved farms reduced commercial fertilizer applications and developed record keeping systems. Over 50% adopted the Right to Farm phosphorus guidance.

Almost 500 conservation practices were implemented including site specific field evaluations, mapping sensitive areas, planting cover crops, changing tillage practices, installing buffers and evaluating fields for the appropriateness of winter manure application.

Almost 70% of all participants modified their mortality management practices to include timely disposal.

Almost 60% developed a plan to enhance relations with neighbors related to manure application and odor management.

At least one-fourth of the farms have implemented an Emergency Action Plan.

For More Information
Specific information related to the Livestock*A*Syst and the MAEAP Livestock System can be found at <http://www.maeap.org> or by calling the MAEAP office at 517-373-9797.