

Environmental Management Systems for Wisconsin Agriculture



Presented by Karl Hakanson

Farm & Home Environmental Management Programs

UW–Madison, 303 Hiram Smith Hall

1545 Observatory Dr., Madison, WI 53706

(608) 265 - 3473 / kihakanson@wisc.edu

What's an Environmental Management System?

**An AgEMS is a powerful,
performance-based, decision
making process that covers all
levels of farm management,
from daily operations
to long range planning.**

environmental

Of or pertaining to the environment.

Not harmful to the environment.

management

The process of planning, organizing, executing, coordinating, monitoring, forecasting and exercising control to achieve specific objectives.

system

An organized and coordinated method.



Plan



Do



Check



Act

Environmental Management System

- ✓ Farmer-directed; voluntary
- ✓ Focuses on business excellence
- ✓ Builds on what is already in place
- ✓ Disciplined analysis of environmental impact
- ✓ Emphasizes corrective & preventive practice
- ✓ Involves family, staff, consultants, community

A proven system for businesses to benefit from and get credit for ***superior environmental performance***.



- A network of national standards institutes from 148 countries
- ISO writes standards to facilitate international trade
- The US member organization is the American National Standards Institute (ANSI)
- ISO 9000 & 14001: “generic management systems standards”

For information on ISO and 14000 EMS Standard
<http://www.iso.org>

An EMS is not...

... adoption of best management practices

... BMP records stapled together

... an assessment

... a government program





Potential Benefits of an EMS

An EMS can...

- ✓ Facilitate regulatory compliance
- ✓ Enhance business management & efficiency
- ✓ Capitalize on environmental programs
- ✓ Document stewardship efforts
- ✓ Improve neighbor/community relations
- ✓ Maintain / improve access to markets
- ✓ Protect health of family & employees
- ✓ Lower insurance premiums

Anything else...?

Protect the Environment!



**fresh air
pure water
abundant wildlife
swimming n' fishing
a beautiful Wisconsin**

Why bother?

Today's realities profoundly affect farmers' "environment"

- **Low farm profit is real**
- **Regulations are real**
- **Environmental problems are real**
- **Public perceptions & actions are real**
- **Waste is real expensive**

**“good enough”
won’t be
ten years from now**

A key principle of the EMS process:
continual improvement

Not starting from scratch.



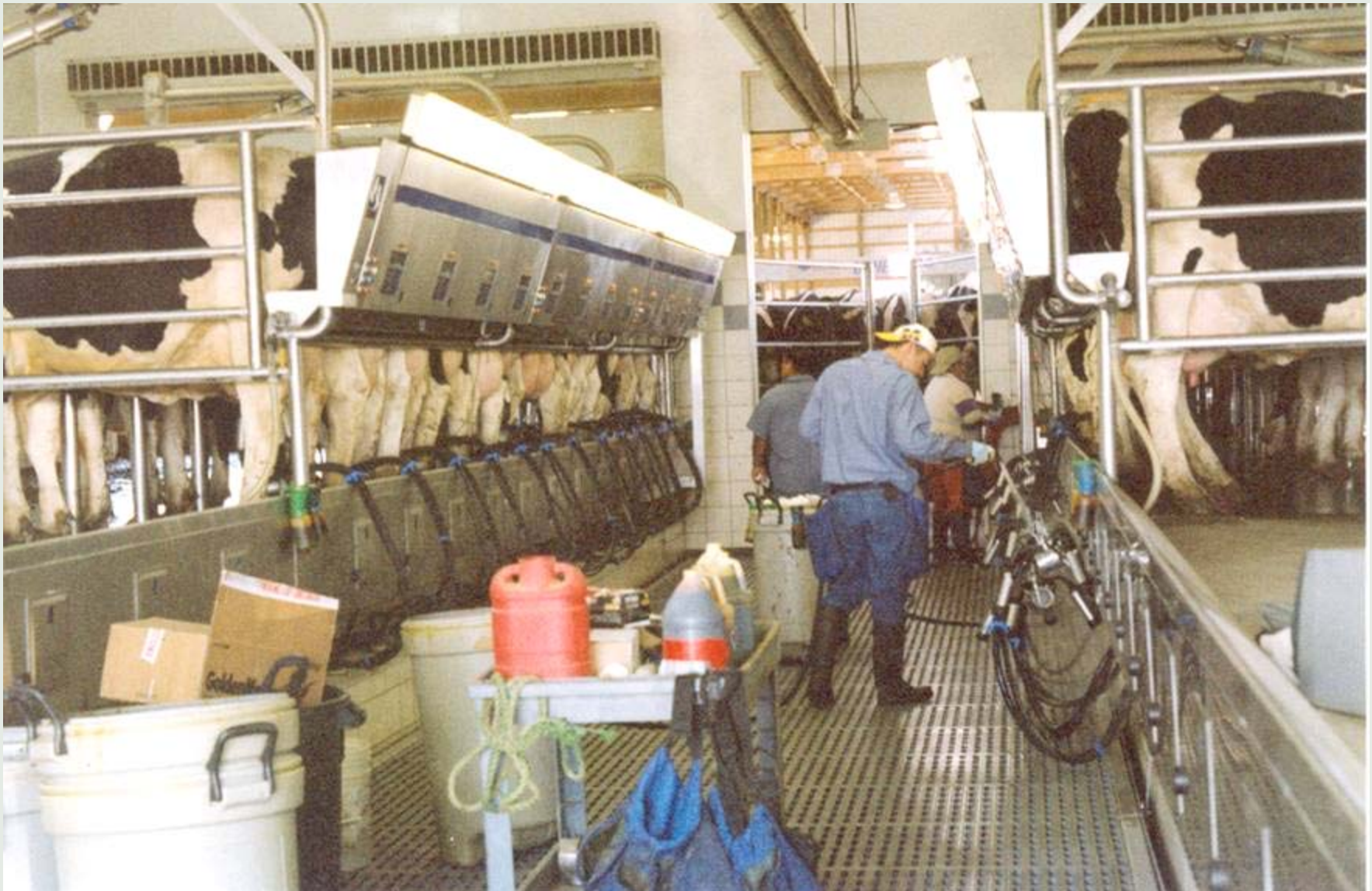
Builds on what is currently done well.
Farmers *are* land managers.



Management systems?



Milk production management system



A milk production *management system*

Goal: more/cheaper/better milk

Assess: what's limiting production/profit/quality

Plan: what should we do about it

Implement: who will do what, when

Review: DHI, bulk tank, SCC, financial records,
feed analysis, etc.

MANAGEMENT --The weak links?

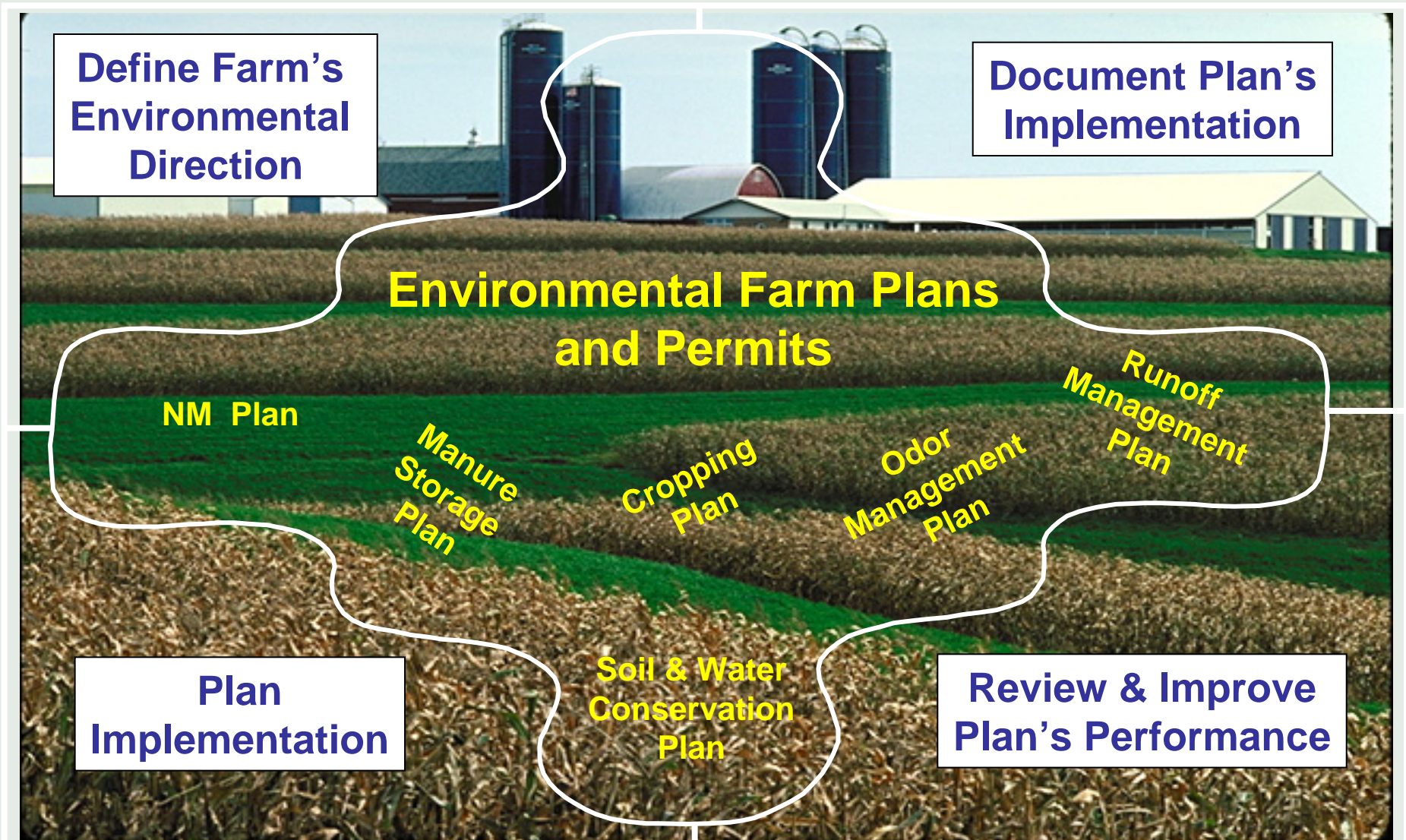
**Goals
Planning
Communications
Information
Analysis
Objectives
Review
Document**



Many farmers have existing technical plans & permits...



...but may lack management processes to implement plan.



Identify Environmental “Aspects”

Develop Environmental Policy

Assess Environmental Aspects

Develop Plan, Set Goals

Implement Plan

Monitor Results

Review EMS

Independent Audit

documented & communicated

Lessons Learned

EMS Delivery

- Farmer time is key limitation to EMS
- No clear cost/benefit to evaluate at outset
- Ownership of existing plans lacking
- Do-it-yourself AgEMSs did not work
- Education is essential first step
 - Developing EMSs on individual farms will require “coaches”, technical expertise and resources
 - Opportunity for public/private partnerships

Lessons Learned

On-farm EMS Implementation

- **Fit between the EMS & other planning processes causes confusion**
- **External incentives are very limited**
- **Regulatory compliance is not the end game**
- **Tools need to bridge gap between ISO 14001 and farmer's world**
 - **“functional equivalent”**

An Opportunity

If voluntary, verifiable environmental management and marketing programs like Green Tier become popular there will be a need for consultants versed in:

Management systems

Environmental assessment and sustainability

Recommending improvements

AgEMS Summary

- An EMS is a thoughtful, deliberate *system*, not a static final product.
- Owners/management must lead the EMS.
- Combining environmental stewardship into routine business management is the key.
- Superior business performance is the goal
- More people involved, working together
- A different way to run a farm; Not for everyone

A management system where you continually
assess, plan, implement, review,...improve

The two “C’s” of a successful EMS...

Commitment

to environmental stewardship
and business excellence

Communications

With those directly involved with the farm
With those not directly involved who have influence



*AgEMSs can re-define
farmer leadership
in agriculture.*

Regulatory approach says:

"no you can't"

EMS says:

"here's what we can do"



The most important farm "Technology"

Environmental Management Systems **Guidebook** For Wisconsin Livestock Farms



A self-directed process of continual improvement through
commitment to environmental stewardship & business
efficiency.

**The Wisconsin Dairy EMS
Livestock Project has
worked with farmers and
farm managers researching
and testing AgEMS
educational approaches and
delivery methods.**

www.uwex.edu/AgEMS/livestock

AgEMS Guidebook

- Functional approach
- Performance-based
- User-friendly
- Worksheets & templates
- Environmental Assessment
Resources

AGRICULTURAL ENVIRONMENTAL MANAGEMENT SYSTEMS

Farm & Home

Livestock EMS

Contact Us

home

about ems

resources

newsletter

subscribe

links

ag ems forum



EMS: An Environmental Management System is a flexible and voluntary management tool for your farm's environmental performance. It's a continual process of planning, implementing, checking and improving.

UW
Extension

www.uwex.edu/AgEMS