AG 101 Training

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Agriculture in Maryland

Ag Land: 2.1 million AC

Productive AC:	1.4 million AC
Cropland:	800,000 AC
Vegetables:	70,000 AC
Pasture Hay:	400,000 AC
Forest:	700,000 AC

Animals

Poultry:	272 million
Horses:	93,000
Beef:	50,000
Dairy:	64,000
Hogs:	64,000

Trends in Agriculture

Loss of Farmland – 90 – 2000 – 45,000 AC yr
– 2000 – 2006 – 15,000 AC yr

Number of Farms – 90 – 2000 – 3,000 farms

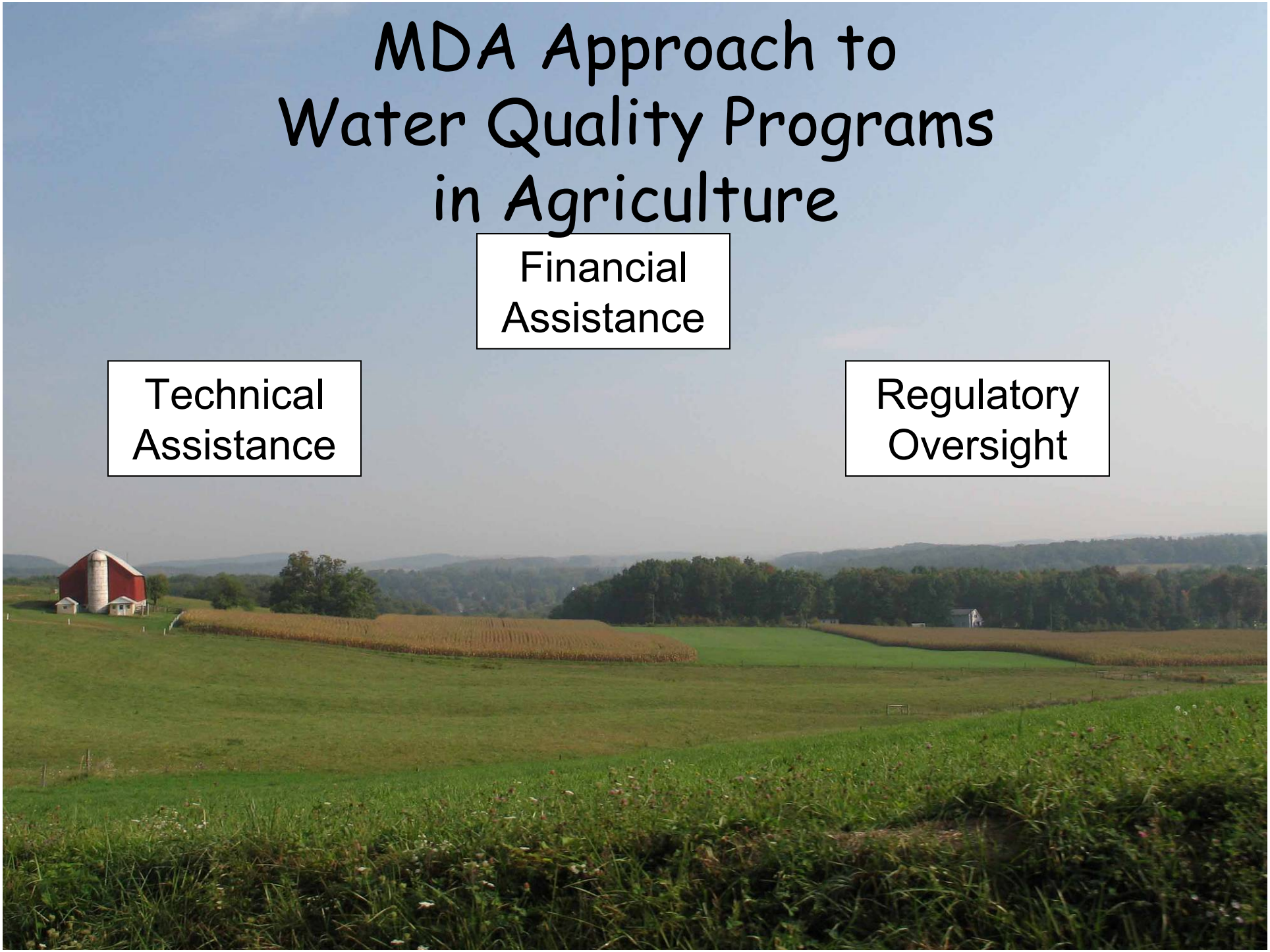
Dairy Farms – 90 – 2000 – 33%
– 2000 – 2006 – 66%

MDA Approach to Water Quality Programs in Agriculture

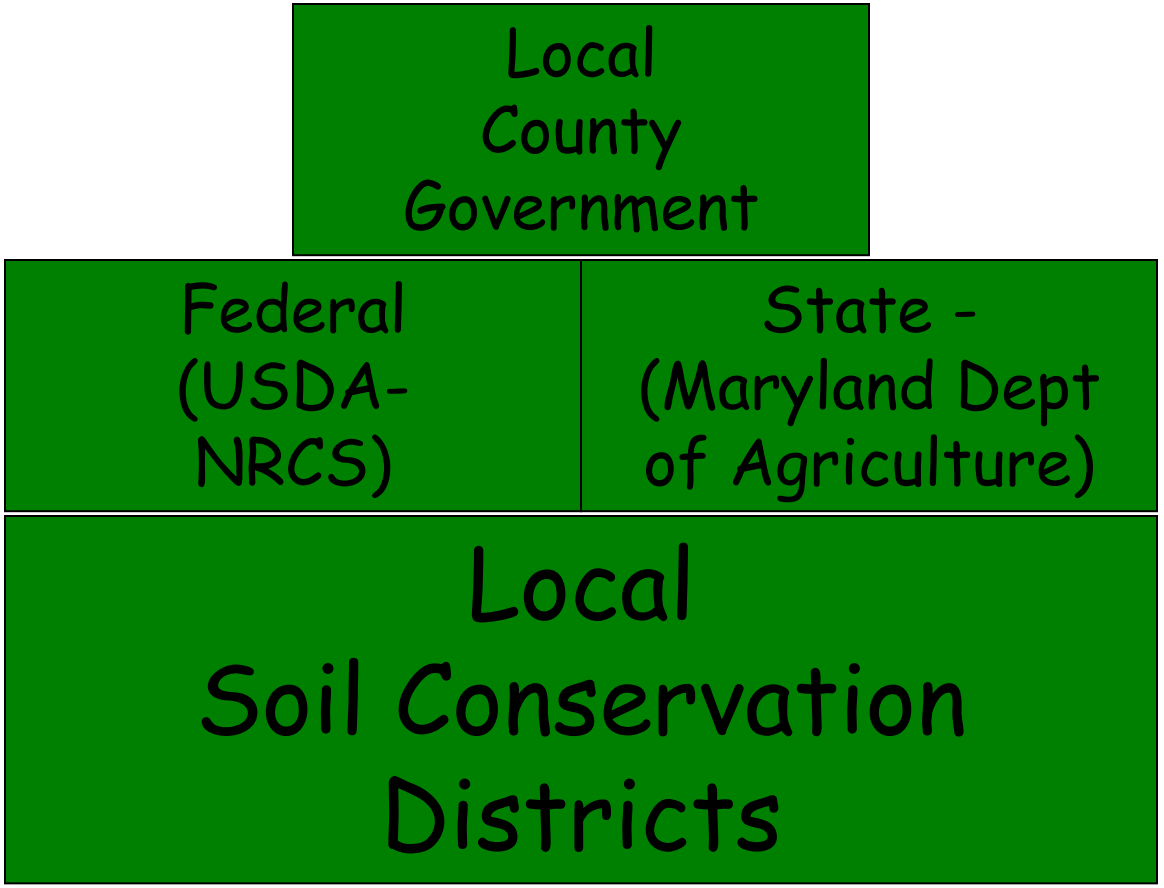
Financial Assistance

Technical Assistance

Regulatory Oversight



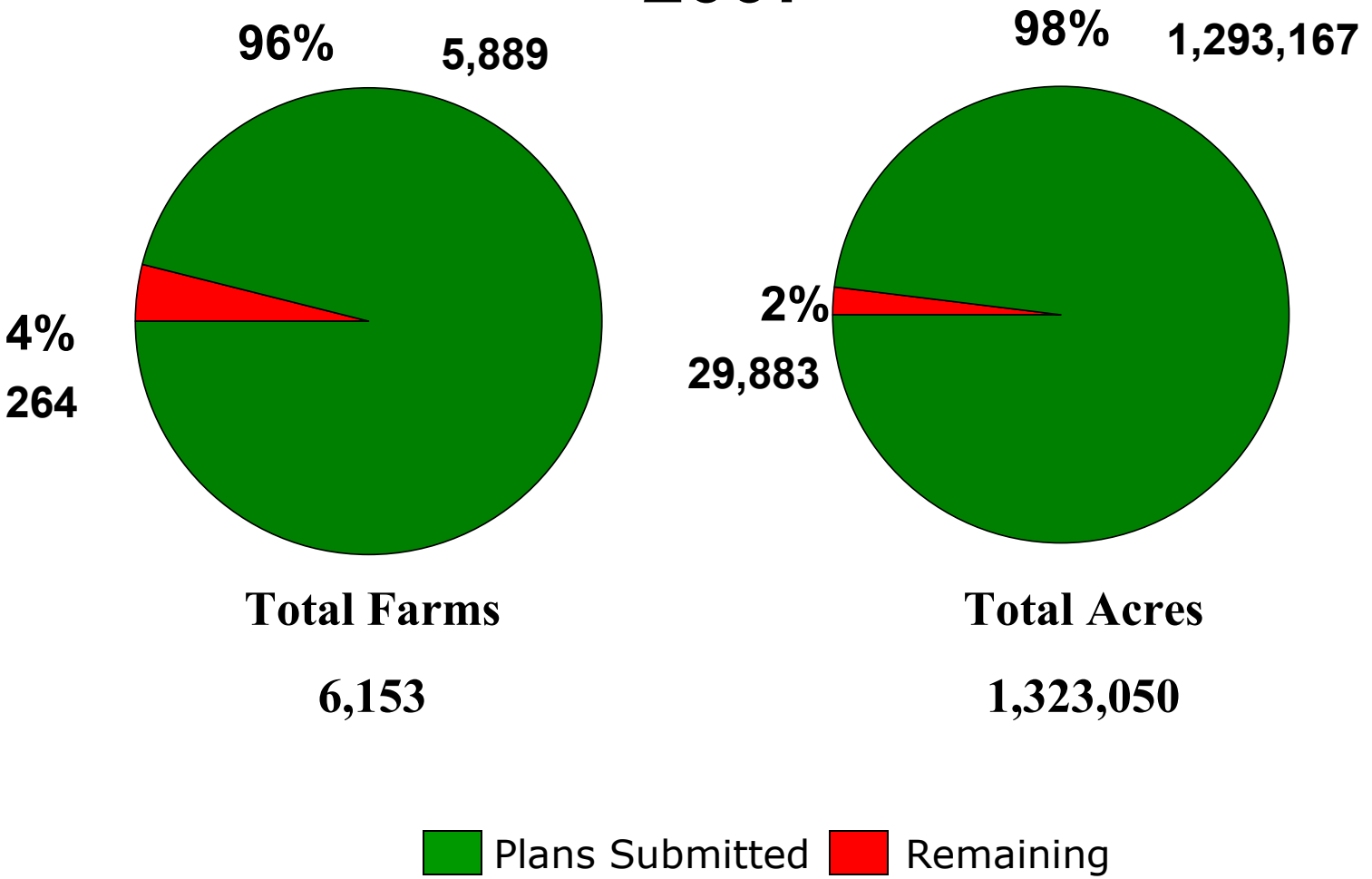
Building a Delivery System



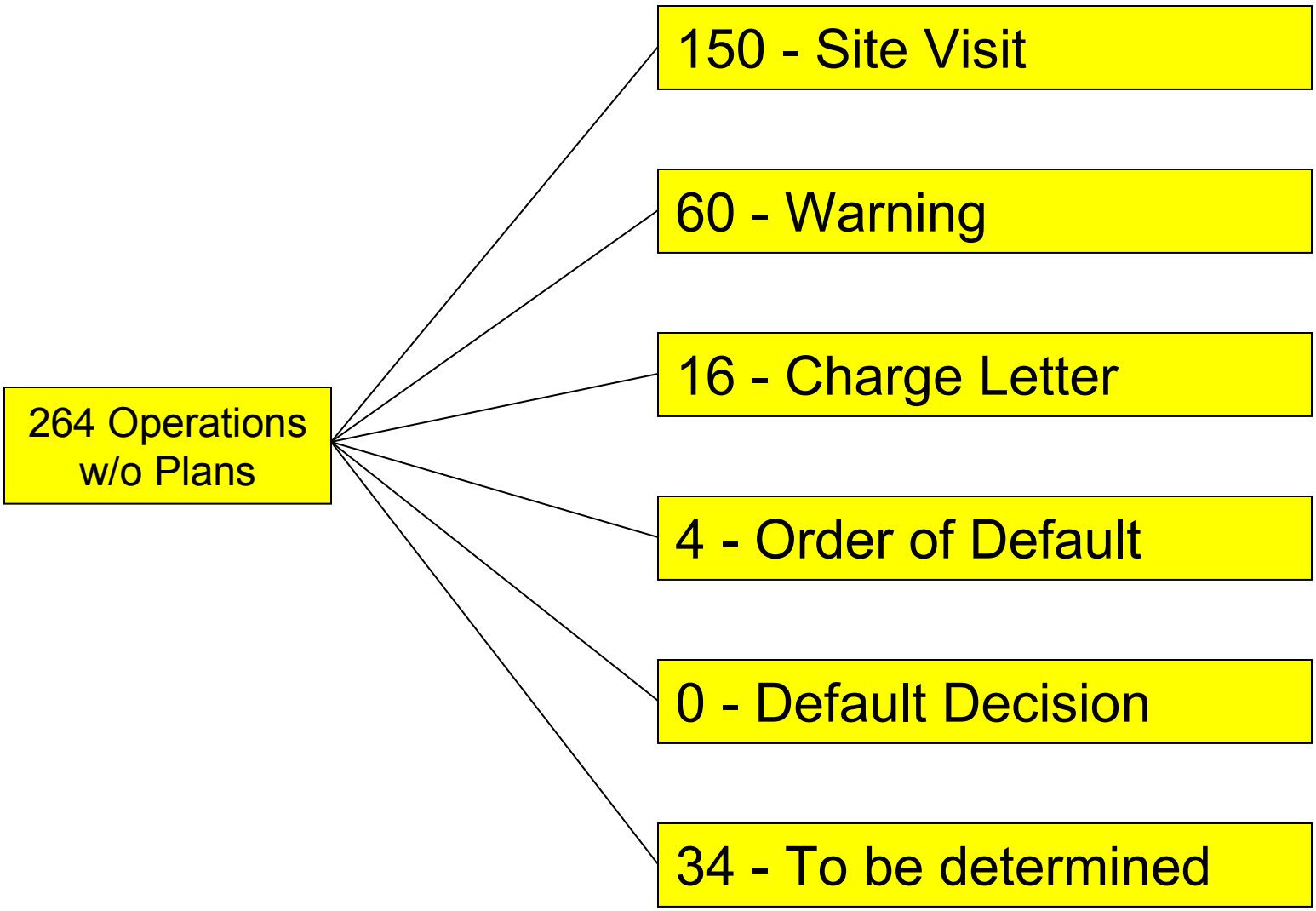
Water Quality Complaints

	FY08	FY07	FY06	FY05	FY04
Agricultural Complaints					
Inspections					
Status					
Closed	96	76	82	94	77
Pending/Ongoing	6				
Enforcement Actions	4	2	0	3	0
Complaint Type					
Agronomic	52	29	28	26	21
Livestock	13	5	7	11	8
Manure	36	35	38	47	38
Odor	5	9	9	10	10

Nutrient Management Planning Progress Report as of September 30, 2007



Nutrient Management Compliance Status



Incentives to Promote Implementation

- Maryland Agricultural Water Quality Cost Share
  - $6.0 Million annually – Capital Projects
  - 87½ - Cost Share
- Cover Crop Cost Share Program
  - Provides up to $85 per acre
  - Traditional & Commodity Cover Crop
  - 18 million annually – 300+ acres
- Nutrient Management Planning Cost Share
  - Supports plan development
- Manure Transport Program
  - Provides up to $18 per ton
  - Poultry companies pay 50% for poultry litter transported

Controlling Soil Erosion

Grassed Waterways

Planting grass in a natural drainage way helps slow down rainwater runoff and reduces soil erosion.

Contour Farming

Planting crops across a hillside—instead of up and down—helps reduce soil erosion.

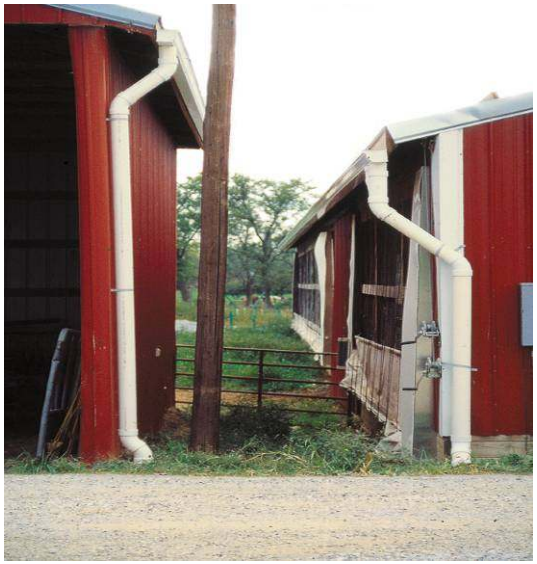
Diversions

Diversions are often built at the base of a slope to divert runoff away from bottom lands or feedlots.

Managing Animal Waste

Livestock Manure Storage

Animal waste is stored in concrete structures to protect it from rainwater runoff until it can be safely applied to fields as a fertilizer



Roof Runoff Structure

Gutters and downspouts placed on farm buildings help prevent rainwater from causing severe erosion problems or mixing with animal wastes.

Poultry Litter Storage Structure

These structures protect poultry waste from rainwater runoff so that it can be used as a crop fertilizer when conditions are right.

Protecting Water Quality

Streamside Buffer

Streamside buffers of trees, grasses or shrubs filter nutrients and other pollutants coming off the land. They also control flooding and erosion, stabilize streambanks, and slow rainwater runoff while providing needed wildlife habitat.

Stream Crossing

These crossings help keep animals out of waterways where they can cause erosion and streambank damage.

Watering Facility

Watering facilities provide a clean, reliable water supply for animals away from streams. They also help prevent streambank erosion caused by animal traffic.

New Customers : Equine

Equine Manure Storage

Manure storage structure with Jersey walls and concrete floor protects water quality.

Watering Troughs

Provide a clean, reliable water supply for animals away from streams.

Pasture Management

Periodic dragging can break up manure and minimize spotty growth.

New Technologies

Heavy Use Area Protection

Prevents animal waste, sediment and nutrients from entering waterways in high traffic areas such as feedlots and gate areas.

Water Control Structure

Managing the flow of water in drainage systems to reduce nitrogen losses.

Poultry House Pad

These pads help reduce runoff and protect water quality.

New Technologies

Manure Spreader

New Technologies

Diet and Feed Modification