

BIENNIAL REPORT
2002-2003

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Minnesota Department of Agriculture

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Minnesota Department of Agriculture

Biennial Report To the Legislature 2002 – 2003

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Minnesota Department of Agriculture

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Issues Facing the Agricultural Industry

Minnesota agriculture faces many challenges and opportunities, and the pace of change in the industry continues to accelerate. The following section presents a few of the most prominent issues of today.

Food Safety

Terrorism Threat – The threat of terrorism hangs over agriculture as much as the rest of America. Indeed, agriculture is particularly vulnerable to bioterrorism attacks involving animal and crop diseases. Perhaps the most worrisome scenario is the intentional introduction of Foot-and-Mouth Disease into the United States. Such an attack could bankrupt most if not all of American agriculture and bring the nation's entire economy to its knees. Given the threat at hand, the agricultural industry and its supporting organizations must continue to devote resources to prevent such an attack from succeeding.

The Minnesota Department of Agriculture (MDA) can help in this effort by seeking out ways to improve food safety and security, encouraging the agricultural community to implement safety measures when hauling, using or storing agricultural chemicals, educating farmers about potential agro-terrorism agents such as livestock and crop diseases. The MDA can also continue to play a prominent role in helping ensure that all levels of government are well prepared to respond effectively in the case of a terrorist attack against the state's farm sector.

Biotechnology - Biotechnology has produced new crop varieties that have saved farmers time and money. Recognizing these advantages, Minnesota farmers have planted more acres of biotech crops every year. However, questions remain about the industry's ability to keep biotech products segregated from non-biotech products. In addition, consumer resistance to biotech products in markets such as Europe and Asia pose difficult marketing challenges.

The MDA can help with this issue by educating farmers about the advantages and disadvantages of producing and marketing biotech varieties, and by aiding in the development of an identity-preserved system that can deliver certified non-biotech varieties to customers willing to pay a premium for such products.

Shifting Consumer Trends – As consumer preferences change, agriculture must look for new ways to provide customers what they want. One example of this is the growing interest among consumers in knowing how and where their food was produced. This preference creates new opportunities for identity preservation and quality assurance programs such as the MDA's MinnCERT program, but it also places more pressure on the industry to segregate products and prove to consumers that the food they are purchasing was produced in a manner consistent with their wishes.

Recognizing the old adage that "the customer is king," the MDA will continue to provide leadership in the development of direct-marketing options and identity-preserved marketing systems that enable the state's farm sector to deliver precisely what consumers desire.

Economic Stimulus

Globalization – The emergence of a global economy has had a tremendous impact on American agriculture. While globalization has created new export opportunities for farmers, it has also given rise to

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serious competitive challenges. Today, a Minnesota farmer isn't just competing with growers in the next county or in the next state. He or she is competing with growers on the other side of the world. And those competitors often have a built-in advantage thanks to the strong U.S. dollar, combined with cheaper labor and lower environmental standards abroad. As public officials formulate farm policies, they must consider how those policies will play out in the context of this highly competitive world marketplace.

The MDA can help farmers adapt by advocating for farmer-friendly agricultural policies in Washington, D.C., and St. Paul, consistently reminding lawmakers that economic, trade and environmental policies must take farmers into account. Also, the MDA can continue to encourage the development of educational programs that help farmers learn how to navigate the new marketplace.

Export Dependence – The impact of globalization is magnified in Minnesota by the heavy dependence of Minnesota farmers on export markets. Each year, Minnesota farmers produce much more than our citizens consume. As a result, Minnesota farmers export up to half of our corn crop, half of our soybean crop, and a third to half of our wheat crop. According to the U.S. Department of Agriculture (USDA), Minnesota is the seventh biggest agricultural exporter among all 50 states. The USDA also reports that Minnesota farm exports support more than 44,000 jobs. Without export markets, thousands of Minnesota farmers would be forced out of business. Our growing reliance on exports means our farm economy is heavily influenced by global economics.

The MDA will continue efforts to develop win-win trade relationships with business and government contacts in promising markets such as Mexico, China and Cuba.

Urbanization - As in many other states, Minnesota's population continues to become more urban. The trend is particularly evident in the corridor from St. Cloud to the Twin Cities to Rochester. This has several important impacts on agriculture. First, as urban areas expand into traditional agricultural areas, conflicts arise between the interests of production agriculture and the interests of non-farm homeowners. With development come higher property values and higher property taxes, which cut into farmers' thin profit margins. Also, transplanted non-farm residents sometimes find the day-to-day operations of agriculture to be disruptive of the quality of life they expected to find in the countryside. This sometimes results in complaints to local officials and pressure on farmers to change production practices or leave the area entirely. Also, as more of the state's population loses touch with the needs of farmers and the importance of the industry, there is potential at all levels of government for less attention and value to be placed on key issues in agriculture.

The MDA can encourage local governments to balance the needs of farmers and non-farm residents by educating them about the consequences of zoning decisions and development plans, and providing them with tools to develop a sound, long-term approach to land use policies. The MDA can also work with the state's farm community to remind urban and non-farm residents that agriculture is a cornerstone of the state economy.

Sluggish Farm-Level Prices - Although long-term commodity prices have stagnated, the costs of running a farm and supporting a family have risen dramatically. This has forced farmers to look for ways to increase profits. For some, the answer has been to expand their farm to gain economies of scale and increase cash flow. For others, it has meant adopting low-input techniques such as sustainable farming and rotational grazing. Others have decided to leave the industry altogether. This has resulted in a reduction in the number of farmers and an increase in the size of the average Minnesota farm.

Through its loan programs and development initiatives that include sustainable and organic agriculture programs, the MDA can help farmers upgrade or transform their operations as they see fit to improve their bottom lines. Innovative approaches to marketing, such as the highly successful state meat

Issues Facing the Agricultural Industry

inspection program, also help farmers develop new value-added markets close to home. The MDA can also provide farmers with risk-management education to help them learn how to use marketing tools such as dairy options contracts to smooth out price fluctuations and ensure themselves a reasonable price for their commodity.

Local Market Development - With U.S. food consumption stabilizing and agricultural production continuing to increase, there is a growing need for the state's agriculture industry to develop new markets for its farm commodities.

This can be done in several ways. For example, the industry can develop new uses for commodities (such as producing ethanol from corn, biodiesel or electricity from poultry manure). Also, as the world's economies continue to become more connected, there is growing need for Minnesota agriculture to expand existing export markets and develop new markets to ensure long-range vitality.

The Decline of Minnesota's Dairy Production and Processing – Minnesota is facing a steady decline of its dairy industry while other states are enjoying growth in this area. This decline is due to many factors, but one of the most important factors is that many dairy farmers find it more socially and economically feasible to invest in farms in western states such as South Dakota or even Idaho rather than in Minnesota. This decline has serious ramifications for the entire agricultural sector, as fewer cows means less demand for corn and soybeans. It also has ramifications off the farm, especially for towns and cities with processing plants, because as milk production declines it becomes difficult for these processors to remain in business.

The MDA and its partners can work to change the perception that Minnesota is not a dairy-friendly state. This can be achieved through sensible improvements in the state's permitting process to improve response time and uniformity while maintaining environmental protections. It can also be achieved by identifying and assisting communities and counties that welcome dairy development (such as the Livestock Friendly Counties program).

Consolidation – Like urbanization and globalization, the recent trend of business consolidation is affecting agriculture in profound ways. With businesses consolidating throughout the food chain in search of economies of scale, there is a decreased willingness among these larger entities to do business with smaller-scale, lower volume and relatively higher-cost farmers and cooperatives.

The MDA protects farmers through enforcement of relevant state laws designed to uphold farmers' bargaining rights and legal protections.

Aging Farm Population – While the average Minnesota citizen is 35 years old, the average Minnesota farmer is closer to 55 years old. This older farm population has a number of potentially significant consequences. For example, as more Minnesota farmers approach retirement age they may be less willing to invest significant money in their operation to upgrade it and boost efficiency to remain competitive with farmers in other states and countries. This unwillingness to invest and upgrade would make Minnesota agriculture less efficient relative to other states and countries. Also, as more farmers retire and fewer young people choose to enter production agriculture, Minnesota is losing farmers rapidly.

The MDA can help attract and retain young farmers through its beginning farmer loan program and by helping farmers find areas of the state that will welcome modern agriculture.

Declining Government Resources –Minnesota farmers continue to rely heavily on marketing, inspection, and certification services provided by state and local governments, but the mounting economic woes of government mean some valuable services may no longer be available. Services that will continue

Issues Facing the Agricultural Industry

to be provided may be less frequent or carry heavier user fees. In cases such as dairy inspection, grain certification and similar functions, farmers rely on these services to bring their products to market. Declines in service may mean added cost and time for farmers who can hardly afford any additional costs or delays.

The MDA can work with lawmakers and the farm community to identify vital programs, streamline service delivery and develop new cost-saving partnerships with federal, state and local partners and the private sector to leverage all available resources.

Ongoing Production Problems in Northwestern Minnesota - For the past decade, farmers in northwestern Minnesota have seen their crop production severely impacted by flooding, crop disease and poor growing conditions. This has forced thousands out of business, and continues to be a major problem for that part of the state. Federal and state assistance has helped some growers, but many others still face dire financial difficulty. The flooding in 2002 was among the most destructive to date, and raises new concerns about the future of agriculture in some areas of northwestern Minnesota.

The MDA will continue to work with local producer groups to ensure their involvement in developing strategies for decreasing the agricultural impact of future weather disasters. The MDA will also continue to work with producers to help them leverage available resources for recovery and prevention.

Environmental Protection

Invasive Exotic Pests – Another serious threat facing Minnesota agriculture is the introduction of invasive exotic pests. From fungi such as Karnal bunt (which causes a wheat disease) to insects such as gypsy moths and soybean aphids, these invasive exotics can and do cause serious economic and aesthetic damage to our crops and forests. It is much more cost-effective to prevent these organisms' introduction than it is to eradicate them after they arrive.

The MDA will continue to monitor the state for such pests in order to identify them and eradicate or control them as quickly as possible so as to prevent further spread and economic/environmental impact. The MDA can also find ways to educate farmers, gardeners, landscapers and others about simple steps they can take to help prevent accidental introduction of destructive invasive pests.

Balancing the Needs of Production Agriculture with the Need for Environmental Protection – The environmental regulations applying to Minnesota's livestock producers tend to be more demanding than those of many other states. This creates economic and social pressure on farmers. Since Minnesota producers must compete with producers in states and other countries with fewer and less costly environmental regulations, Minnesota producers find themselves at a competitive disadvantage in that they bear additional compliance costs. This competitive balance affects the long-term financial viability of small and large farmers alike, but it tends to impact smaller farmers more since their lower cash flows are less able to support added expenses. With interest groups continuing to push local and state lawmakers to tighten existing laws or add new ones, Minnesota's livestock industry must remind lawmakers at all levels to take into account the economic consequences of regulations. Also, there is increasing public focus on the impacts of agricultural chemicals on rivers, lakes and other bodies of water. It behooves the agricultural sector to address this issue proactively, as special interest groups may push to eliminate the use of certain agricultural chemicals without regard for the economic impact for farmers.

Issues Facing the Agricultural Industry

The MDA can work with lawmakers, the agricultural community and environmental interest groups to find common ground when possible, and to develop environmental policies that do not create undue economic hardship for farmers. Many farmers are interested in taking proactive measures to protect the state's air, soil and water, and the MDA can work with them to encourage and support efforts such as reduced tillage, installation of erosion control structures, and reduced use of agricultural chemicals. New technologies such as methane digesters show that win-win solutions are possible.

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Accomplishments 2002 – 2003

Food Safety

- Tightened security of food supply by providing recommendations to nearly 20,000 regulated entities about ways to increase security and protect the state's food supply against intentional attacks, and taking part in training events on bioterrorism, anthrax, nuclear power plant ingestion pathways exercises and other issues.
- Raised consumer awareness of food safety practices through the efforts of the Food Safety Task Force and by providing food safety messages on the MDA website and through on-site interactions with the general public at the Minnesota State Fair and other venues.
- Enhanced effectiveness of inspection processes through implementation of a science and risk-based food inspection system that focuses on control of foodborne risk factors. This included risk-based inspection frequencies, Hazard Analysis Critical Control Point (HACCP) audits for special processing, Risk Control Plans and other interventions.
- Enhanced the service provided to the state's dairy industry by providing practical advice, training and information about special issues including reduction of drug residues and somatic cell counts in milk, antibiotic resistance, milk protein concentrate, Johne's Disease and others.
- Helped food processors address the problem of undeclared food allergens by developing educational materials and training sessions for more than 200 food and dairy processors and state/local food inspectors based on the Food and Drug Administration (FDA)-Minnesota Department of Agriculture (MDA) allergen partnership results.
- Leveraged local community resources by delegating retail food store inspections to 13 eligible local health agencies, trained local inspectors to promote state-wide uniformity and developed an evaluation process in conjunction with the local agencies.
- Protected the supply of food and dairy products in the state by conducting 11,550 Grade A dairy farm inspections, 1,000 Grade B dairy farm inspections, 80 dairy plant and pasteurizer inspection, 8,920 wholesale processing and retail food store inspections and investigated 236 complaints, 59 recalls, 11 foodborne outbreaks and 12 pesticides in food crop misapplications.
- Through involvement with the State Meat Inspection Program, 65 meat and poultry plants implemented HACCP plans and sanitation plans. Continuous inspection increases food processor awareness.
- Conducted *Salmonella Enteritidis* training program for the egg industry.
- Implemented a pilot program with U.S. Department of Agriculture (USDA) and U.S. Food and Drug Administration (FDA) on egg safety with two egg packers in the state.
- Developed educational materials and conducted multiple presentations on Chronic Wasting Disease.
- Increased our ability to identify animal protein products in feeds by providing advanced microscopy training for analysts. This can help the state determine compliance with feed regulations designed to protect Minnesota from infectious diseases such as Bovine Spongiform Encephalopathy (BSE) and Variant Creutzfeldt-Jakob Disease (vCJD).
- Continued work on a long-term survey of the state's food products to determine compliance with the Nutritional Labeling Education Act. Numerous food products have been tested for fat, dietary fiber, sodium, calcium, and iron. Verifying that food products meet their label claims ensures that consumers can make informed choices about the foods they eat to meet their dietary needs.
- Successfully screened all regulatory soybeans during the last two years for the presence of the Roundup Ready trait. Compliance has improved steadily since this monitoring program began, and now nearly every seed lot tested was correctly labeled.
- Tested shrimp imported from China for the banned antibiotic Chloramphenicol and found two samples that contained trace amounts. Follow-up testing is in progress.
- Completed a follow-up study for heavy metals in fertilizer, which were identified as a potential contaminant in a previous study and could have a negative impact on human health and the environment. This new study showed improvement in label compliance.

Accomplishments 2002 – 2003

- Completed a Mycotoxin survey for the MDA Feed Program to determine the presence of Aflatoxin in cottonseed.
- Worked with Minnesota Department of Health (MDH) to develop legislation for bonding of new state laboratory facility. This laboratory will co-locate health and agriculture laboratory staff with 16 FDA personnel to create a unique national campus for food safety and health protection analysis, integrating state and federal officials.
- Implemented the Laboratory Information Management System (LIMS), which allows:
 - Better management of samples by minimizing the reliance on a paper trail.
 - Increased efficiency and productivity by allowing analysts to enter data at their workstations rather than having data entered by clerical staff.
 - Ability to directly load data into LIMS from instrumentation, thereby eliminating the need for an analyst to record data in a notebook or separate worksheet.
 - Ability to customize data reports for each client.
- Developed new methods to run analytes simultaneously using a new Flow Injection Analyzer. Feed samples can be analyzed for calcium and phosphorus and water samples can be tested for total nitrogen and total phosphorus.
- Provided leadership in the development of a bioterrorism lab response network in conjunction with FDA and MDH. Reached agreement with MDH to share their Bio Level III laboratory as needed. This successful collaboration allowed the MDA to be one of only two state agriculture laboratories chosen to participate in the Food Laboratory Emergency Response Network, which can greatly enhance our ability to prevent or respond to bioterrorism attacks.
- Selected by FDA to receive training for isolating Norwalk virus and Hepatitis A virus, thus expanding our ability to protect the state's food supply by quickly and effectively analyzing samples for these viruses.
- Implemented new genetic-based pathogen analysis for E. coli 0157:H7, providing vital information that can help the state respond faster and more decisively during outbreaks of foodborne illness.

Economic Stimulus

- Helped plan, execute and follow up on trade missions to promising export markets including China, Mexico and Cuba.
- Formed working agreement with the Jalisco Ag Council (Mexico), resulting to date in direct sale of three 75-car trains of soybeans to Mexico.
- Established the producer-oriented Minnesota Shippers' Association to assist with logistical issues associated with international trade shipments.
- Achieved all-time high in participation level for the Minnesota Grown program, with more than 715 producers licensed to use the logo and more than 530 marketers listed in the Minnesota Grown Directory.
- Helped producers form 11 new value-added cooperatives to retain more of the value-added dollar.
- Kicked off NORSOY, a collaborative direct-marketing program that adds value to northern soybeans by promoting a unique trait that makes them superior as poultry feed.
- Started feeding trials for Norgold (dried distillers' grains) with Mexican poultry and swine producers.
- Made first agricultural sales to Cuba in more than 40 years.
- Added new MinnCERT clientele: Apple Crisp Coop, J&B Meats, Lunds Foods, Minnesota Premium Buffalo, and five ethanol plants.
- Coordinated participation of 45 Minnesota companies in three trade shows.
- Completed economic impact study showing meat and poultry inspection program helps generate \$100 million in economic activities for the state.

Accomplishments 2002 – 2003

- Reached nearly 500 companies licensed to buy grain at more than 1,000 locations. These grain buyers reported buying more than \$4 billion worth of grain in 2001. Half of these companies are audited annually.
- Reached 125 companies licensed as wholesale produce dealers. These dealers purchase more than \$1 billion worth of Minnesota grown produce each year.
- Provided official weights for more than 4 million head of livestock annually. Minnesota's 130 licensed livestock dealers reported buying nearly \$1 billion worth of livestock.
- Registered and inspected honeybee colonies produced 12.2 million pounds of honey worth about \$7.3 million and pollinated such Minnesota crops as apples, pumpkins, squash, cucumbers, blueberries, raspberries, sunflowers, and canola.
- Developed odor estimation model to help livestock facilities determine the best locations to build.
- Demonstrated odor mitigation and low-cost and low-impact livestock systems.
- Provided real-time data on soybean aphid infestation to help farmers and researchers respond quickly.
- Partnered with local governments to pilot software showing public services costs of inadequately managed growth.
- Processed nearly 400 certification payments to organic growers and hundreds more provided with information and technical assistance.
- Distributed 3,000 Greenbooks reporting on 50 on-farm projects evaluating the environmental and economic sustainability of new or alternative crop and livestock production systems.
- Sponsored Ag Growth and Investment Conference for 130 agricultural leaders in 2001.
- Issued nearly 1,000 Certificates of Free Sale, allowing the export of more than \$600 million worth of Minnesota food and dairy products to foreign countries.
- Helped more than 275 Minnesota farmers purchase farms or make improvements to their existing farms.
- Loaned more than \$1 million of bonding money to Minnesota farmers since the inception of the Rural Finance Authority (RFA) program.
- Met the annual debt service on general obligation bonds used to capitalize the RFA loan programs.
- Maintained a loan loss reserve greater than 1 percent of the outstanding loan balances.
- Generated no loan losses to the State of Minnesota.
- Directed 82 percent of loans closed in the past biennium to entry-level farmers through the Basic, Seller-Assisted and Ag Improvement loan programs.
- Participated in a nationwide survey of seed potatoes to determine how far the Mop Top Potato Virus has spread. This disease causes reduction in yield and quality and is of great concern for the state's potato producers. The initial survey consisted of 3,000 potatoes collected from all of the state's potato growers. No Minnesota samples tested positive for the Mop Top Virus.
- Developed a new method for analyzing the active ingredients in Pursuit™ and Raptor™, (Imazapyr and Imazomox, respectively), in a contaminated fungicide and the sugar beet crop that was sprayed with the contaminated fungicide. Although other labs had failed to determine the cause of crop damage documented by the MDA, our new analytical technique allowed the agency to determine the cause of the damaged plants and help determine the extent of damage, allowing much of it to be harvested.
- Developed a new method for analysis of a new pesticide, Mesotrione, which had drifted from adjacent corn fields onto several pea fields. With harvest fast approaching, the rapid method development and analysis allowed the agency to determine which parts of the pea field could be harvested before the crop was too old.
- Performed numerous plant disease determinations such as *Pseudomonas*/Diaporthe testing, which is required as part of a phytosanitary report for international commerce. The Laboratory also cultured tree samples for diseases and other threats to help maintain the health of rural and urban forests of Minnesota.
- Issued approximately 3,200 export certification in 2002, enabling the export of Minnesota commodities and plant material to other countries.
- Administered the Agricultural Chemical Response and Reimbursement Account (ACRRA), which provided \$2.4 million in reimbursements for 67 applicants for agricultural spill site remediation.

Accomplishments 2002 – 2003

- Completed investigation and remediation of 43 sites enrolled in the Agricultural Voluntary Investigation and Cleanup Program since fiscal year 2002, which enables timely property transactions or redevelopment.

Environmental Protection

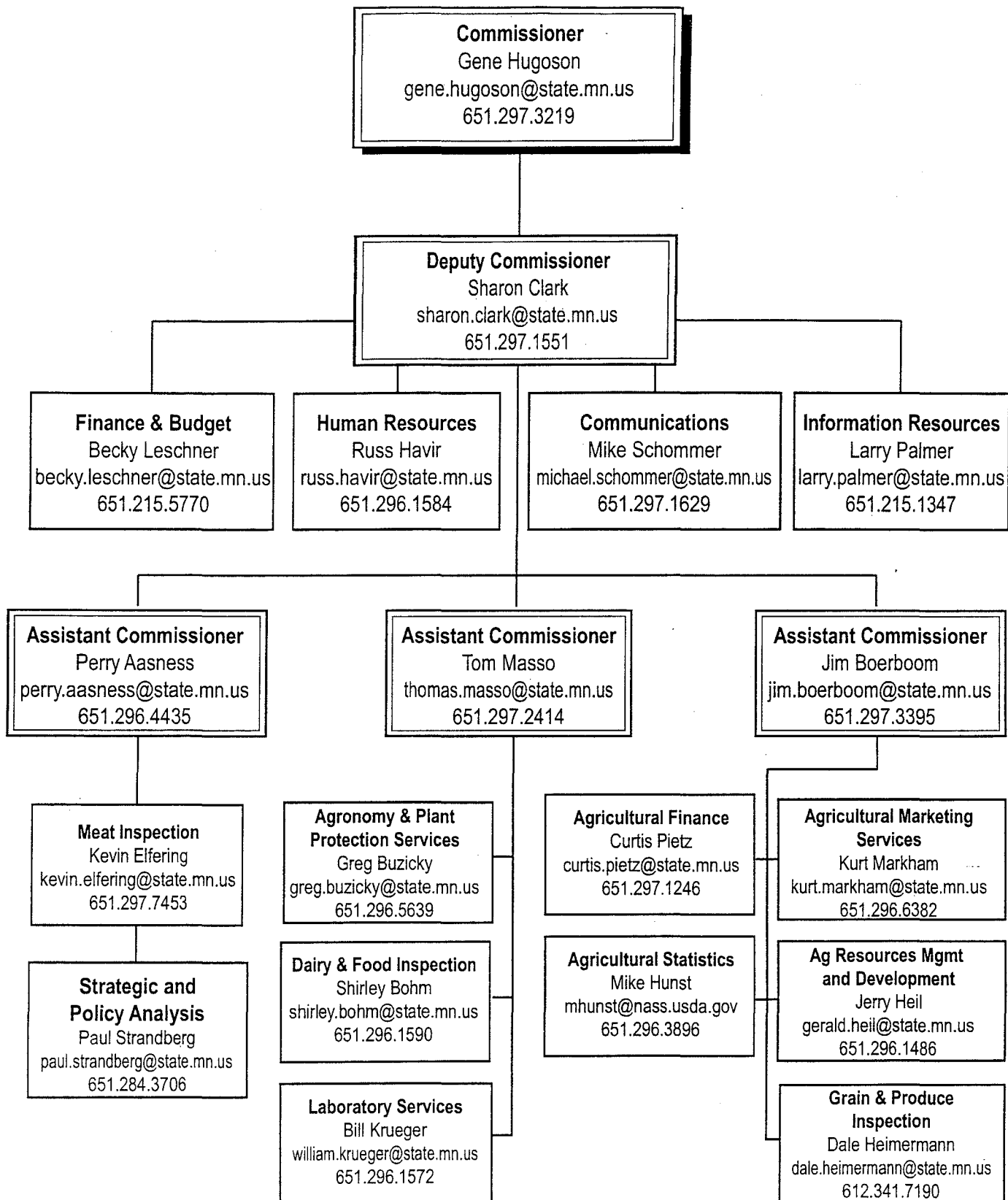
- Funded 1,089 new Ag BMP Loans, bringing total water quality practices supported to 4,717.
- Participated in drainage research identifying practices that improve water retention and decrease nutrient loading.
- Initiated a Manure Digester Loan program in 2002 as provided for by the 2002 Minnesota Legislature.
- Participated in Nicollet County Watershed Project, evaluating effectiveness and costs of agricultural water quality Best Management Practices (BMPs).
- Distributed 17,000 copies of the *Producers Guide to the Feedlot Rules* and the *Directory of Resources* and completed on-line interactive Decision Making Tool for producers.
- Sponsored Watershed Heroes Conference on solutions to agricultural non-point source pollution. More than 200 people attended in 2001.
- Partnered with University of Minnesota to conduct research and demonstrate interactions of rainfall with runoff, phosphorous movement, infiltration, and soil loss under different tillage and cropping systems.
- Saved hundreds of thousands of dollars annually in control costs while improving pasture productivity through Leafy Spurge biocontrol.
- Participated in working groups dealing with animal disposal issues relating to potential outbreaks of Foot-and-Mouth disease, Chronic Wasting Disease and other diseases.
- Closed 20 percent of the loans in the Ag Improvement program during the past biennium for environmentally related projects.
- Developed methods for the analysis of Acetochlor, Alachlor, Metolachlor, Dimethenamid Oxanilic acids and Ethane Sulfonic acids in water. The laboratory also analyzed ground water samples from known spill sites and from normal use monitoring wells for the presence of these compounds.
- Verified new methods for the Manure Certification Program. These methods are used to ensure sample's homogeneity because they are sent nationwide to certify labs for Nitrogen, Phosphorus, Potassium, Ammonia, and Dry Matter.
- Analyzing goose tissue for PCBs and Organochlorine pesticides as part of the Minnesota Department of Natural Resources' (DNR) project to reduce the urban goose population and donate meat to local food shelves. Additionally we analyzed metals in soil sediment, lead in goose tissue, and heavy metals in mayflies to look for possible mine drainage effects on behalf of the DNR.
- Verified a new method for the analysis of Total Kjeldahl Nitrogen in water using new instrumentation. These samples were previously being sent to Met Council for analysis and can now be analyzed in-house, which is more cost effective.
- Removed more than 1,100 pounds of hazardous mercury from the environment by completing our Mercury Manometer Recycling project, which replaced mercury vacuum gauges in dairy milking parlors with non-mercury units.
- Educated dairy producers about new feedlot regulations in areas with no county feedlot officials through a Feedlot Memo of Understanding with the Minnesota Pollution Control Agency.
- Detected and eradicated two major gypsy moth infestations covering 2,200 acres in Minneapolis, Golden Valley and St. Louis Park during the spring of 2002.
- Collected approximately 600 surface water samples from seven sites and approximately 200 ground water samples from 86 sites. The information was made available to the public on the MDA web site.
- Obtained a \$100,000 grant to launch a 12-month educational campaign on nutrient insurance in Minnesota, Iowa and Wisconsin.

Accomplishments 2002 – 2003

- Coordinated nitrate testing clinics in 27 counties and held more than 50 events in 2002.
- Partnered with the North American Proficiency Testing Program and the Soil Science Society of America to secure a \$352,000 grant from Environmental Protection Agency (EPA) to nationalize Minnesota's Manure Testing Laboratory Certification Program.
- Cooperated with local and federal authorities to collect and dispose of more than 230,000 pounds of waste pesticides from agricultural and metropolitan areas in 2002.

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Organizational Chart



Agronomy and Plant Protection

Mission Statement

To serve and protect the citizens of Minnesota and the agriculture industry, environment and economy through education, technical assistance, certification and regulation.

<i>Food Safety</i>	<i>Core Functions</i>	<i>Economic Stimulus</i>
Pesticide Regulation	<i>Environmental Protection</i>	ACRRA
Fertilizer Regulation	Pesticide Regulation	Nursery Regulation
Commercial Feed	ACRRA	Export Certification
	Waste Pesticide Collection	Commercial Feed
	Fertilizer Regulation	Incident Response
	Nutrient Management	
	Noxious Weed	
	Nursery Regulation	
	Invasive Species & Plant Health	
	Incident Response	

Description of Activities

Pesticide Regulation

This activity administers federal and state pesticide laws. This function provides for the regulated use of approximately 11,000 pesticide products used in agriculture, home, and garden, urban, indoor and public facilities. This complex regulatory activity strives to minimize risk to human health and the environment through information, education, compliance assistance and enforcement. This activity registers, licenses, permits, trains, monitors, investigates, responds to emergencies, enforces, and develops Best Management Practices (BMPs).

ACRRA Reimbursement/Administration

This activity provides reimbursement to responsible parties for investigation and remediation of agricultural chemical incidents. The activity is supported by surcharges on the distribution of pesticides and fertilizers in Minnesota and from licensed individuals and facilities.

Waste Pesticide Collection Program

This voluntary collection activity provides farmers, homeowners and other pesticide users opportunities to safely dispose of unusable and unwanted pesticides. The activity is administered by the MDA, and is conducted in cooperation with various industry and local units of government and supported by the fees collected on pesticides.

Fertilizer Regulation

This activity registers agricultural and specialty fertilizer to ensure uniform quality and a level field of competition, regulates storage of bulk fertilizer and anhydrous ammonia, advises on proper use of fertilizers, regulates improper use, promotes the use of Best Management Practices, responds to incidents and protects water resources.

Nutrient Management and Non Point Source

This activity assesses nutrient practices, provides technical support and promotes Best Management Practices to improve the management of manure and fertilizer nutrients and minimize adverse environmental impacts. This activity also certifies manure testing laboratories and administers the Commercial Animal Waste Technician certification program.

Seed Regulation

This activity is a statewide regulatory program for seeds intended for planting. MDA samples, inspects facilities, investigates complaints, and ensures proper and truthful labeling of agricultural and horticultural seed. The fees paid support the field and laboratories activities.

Agronomy and Plant Protection

Noxious Weed Regulation

This activity administers the State Noxious Weed Law by cooperative efforts with counties and municipalities. The MDA provides technical support, oversight and training for county agricultural inspectors.

Nursery Regulation

This activity conducts inspections of nurseries and nursery stock to ensure that viable, pest-free plant stock is available to the public. The MDA provides technical support as well as complaint response.

Export Certification

This program certifies that agricultural plant export material from Minnesota complies with the regulatory requirements of other states and countries. The MDA works in cooperation with federal authorities to ensure that exported plant materials meet the regulatory requirements of destination states and countries.

Invasive Species and Plant Health

This activity protects Minnesota's natural resources, industries, citizens and the environment from the establishment and spread of serious plant pest species. In addition to monitoring for specific pests, the MDA also manages and treats for selected exotic pests.

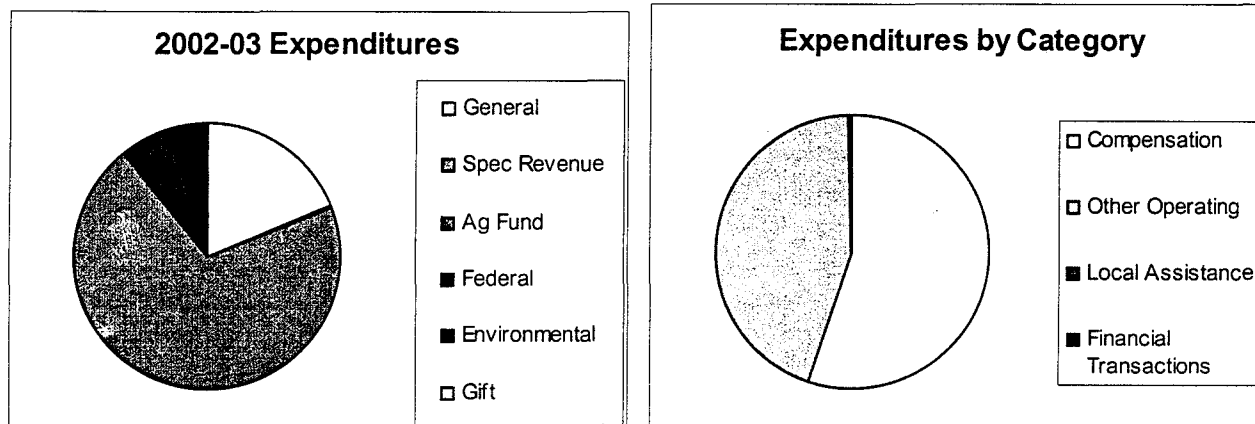
Commercial Feed Regulation

This activity regulates the manufacturing and distribution of commercial feed for pets and agricultural animals and label inspection. Inspection of commercial feed facilities and feed in the distribution channels ensures accurate labeling and good manufacturing practices.

Incident Response Program – Superfund (MERLA)

This activity provides project oversight for Superfund (MERLA) authority. It is composed of three activities: Administration of Superfund responsibilities relating to agricultural chemicals; expenditures for declared emergencies, orphan sites or use of state contractors; and the Agriculture Voluntary Investigation and Cleanup (AgVIC) program.

Budget Information:



Dairy and Food

Mission Statement

Work with the regulated industry and other stakeholders to ensure dairy and food product safety through effective and efficient regulatory programs, best use of information technology and partnerships and agreements that multiply our resources.

Food Safety

Dairy Services
Food Inspection
Food Handler Plan Review
Commercial Cannery Inspection
Beverage Inspection
FDA Inspections
Food Handler Reinspection

Core Functions

Environmental Protection

Dairy Services

Economic Stimulus

Dairy Services
Food Inspection
Food Handler Plan Review
Commercial Cannery Inspection
Beverage Inspection
FDA Inspections
Food Handler Reinspection

Description of Activities

Dairy Services

The Dairy Inspection activity enables Minnesota dairy products to move freely in both domestic and international markets and ensures safe and wholesome dairy foods. Dairy services include plant, farm and farmstead cheese inspections and reinspections, ratings of farms, inspection of farm bulk pick-up trucks, testing of haulers and plant fieldmen, routine sampling of milk and milk products, plan reviews, reviewing product labels and maintenance of records for BST-free herds, testing and sealing pasteurizers, issuing certificates of free sale for dairy exports, responding to emergencies and consulting on equipment and processing.

The Dairy Services Program provides information to dairy producers and processors to keep them current on the latest laws and issues including feedlot registration and reducing drug residues in milk. Staff carry out necessary enforcement for compliance, special investigations and recalls and review complaints of unfair dairy product pricing at the consumer level.

Food Inspection

Food inspections and follow-up enforcement are required for retail food and convenience stores, wholesale warehouses, wholesale food manufacturers, food processors and brokers and salvage operators to ensure safe and wholesome production and sale of food. A risk and science-based system including Hazard Analysis Critical Control Point (HACCP) principles is used to maximize resources and apply them where they are most likely to prevent foodborne illness. Enforcement protects the public from health hazards, fraudulent practices and improper or misleading labeling. Special sampling surveys, foodborne outbreak, recall and complaint investigations and disaster response are conducted. Certificates of Free Sale are issued for exporters. Training and standardization is provided to both state and local food inspectors. Oversight and performance evaluation of delegation agreements with eligible local health agencies maintains a uniform statewide inspection system.

The Food Inspection Program including the Compliance Section provide educational outreach to the general public, particularly to children to increase understanding of safe food-handling practices and to the food industry to increase understanding of food safety and security measures.

Food Handler Plan Review

Building and equipment plans and layout are reviewed for retail food facilities that are newly constructed or remodeled to ensure facilities and equipment meet specific construction and design requirements in the Minnesota Food Code. Menus and HACCP Plans are reviewed for special meat and poultry processes. Field inspectors

Dairy and Food

consult with establishments and conduct final inspections to verify that construction and installation was carried out according to plans.

Commercial Cannery Inspection

The Commercial Cannery Inspection activity conducts sanitation inspections, reviews process controls, collects samples, investigates complaints, and reviews records to verify processing methods at all commercial canning and frozen food plants within the state. It is essential that these diverse, high-risk and high-volume processes be monitored for each of the various food products that are packed throughout the growing season and in some cases, throughout the entire year.

Beverage Inspection

Beverage Inspections focus on safe and sanitary conditions and product inspections at all non-alcoholic beverage processing plants in the state. This includes bottled water, which has stringent sampling and record-keeping requirements under the federal Clean Water Act. It also includes apple cider and other juice processors where fresh juice HACCP requirements are intended to reduce the risk of E. coli 0157:H7 contamination.

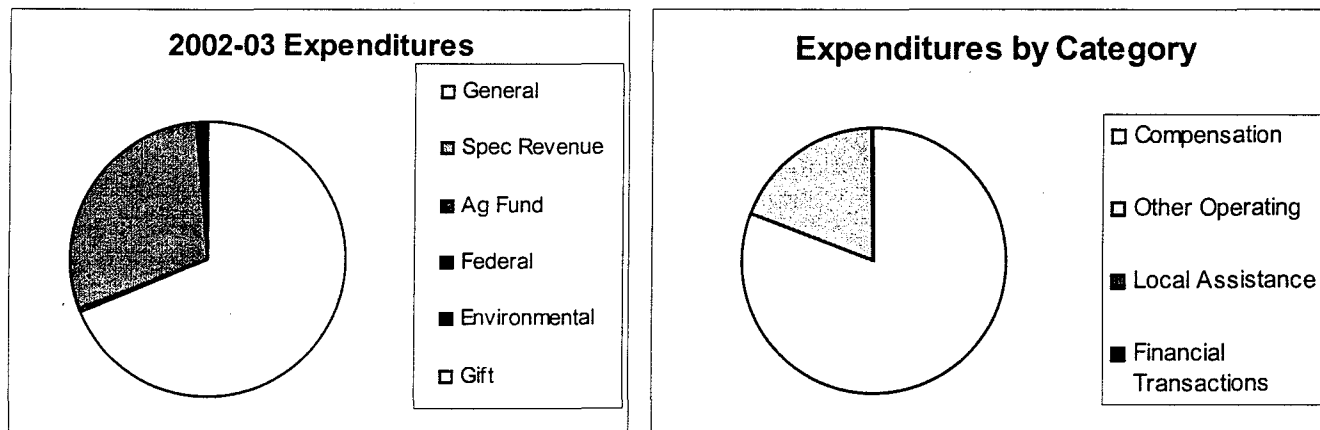
FDA Inspections

U.S. Food and Drug Administration (FDA) Food Processing Contract Inspections eliminate duplication between FDA and MDA and reimburse the Department for inspections of high-risk processing and manufacturing facilities. Science-based food safety inspections are used to identify hazards and correct violations.

Food Handler Reinspection

This activity provides for recovery of inspection and sampling expenses from licensed firms that have major violations, foodborne outbreaks, recalls, food safety emergencies not related to natural disasters, and sanitary notices.

Budget Information



Laboratory Services

Mission Statement

To provide prompt, objective and accurate analysis, information, and technical leadership in cooperation with department programs, applicable laws, and regulations, which protect the State of Minnesota's agriculture, environment and food chain.

Food Safety

Core Laboratory Capabilities
Risk Based Inspection Analyses
Agronomy Analyses
Dairy Product Analyses
Laboratory Contract Services

Core Functions

Environmental Protection
Core Laboratory Capabilities
Risk Based Inspection Analyses
Agronomy Analyses
Environmental Analyses
Laboratory Contract Services

Economic Stimulus

Core Laboratory Capabilities
Dairy Product Analyses
Dairy Lab Certification
Seed/Plant Pathology Analyses
Laboratory Contract Services

Description of Activities

There are multiple activities within the laboratory that encompass core functions with added monitoring and product integrity inspection that combat fraud and ensure economically sound and safe production and distribution within the marketplace.

Core Laboratory Capabilities for MDA Regulatory Mandates and Emergency Response

These activities provide essential monitoring and regulatory analyses in support of the Agronomy and Plant Protection and the Dairy and Food Inspection Divisions. Analyses include Food and Agricultural Industry Products for residues of pesticides, heavy metals and for established and emerging pathogenic bacteria in support of the Dairy and Food Inspection's Food Safety Program. This activity also provides analyses in support of the Department's State Meat Inspection Program. This activity ensures that legal and scientifically defensible data are available in a timely manner for Inspectors, Compliance Officers, and Program Managers to use in regulatory decision-making. As part of this activity, it is essential to develop and maintain necessary analytical expertise and new analytical capabilities for rapid response to emergencies, problems or questions that arise within the dairy, fertilizer, feed, food and agrochemical industry. This activity provide consultation on analytical issues to the Inspectors, Program Manager, private analytical laboratories and the business community during outbreaks or investigations related to food safety and environmental concerns.

Risk Based Inspection Analyses

These activities allocate diverse laboratory resources into performing cutting-edge analysis related to emerging health issues and trends in food safety. This activity often researches and validates new analytical technologies that provide forensic support to resolve concerns related to food safety and environmental protection.

Agronomy Analyses

These activities analyzes agricultural products such as feed, fertilizer, lime and manure for the Agronomy and Plant Protection Division and the Board of Animal Health. Typical tests include nutrients, trace metals, minerals, drugs and antibiotics, mycotoxins, vitamins, amino acids and toxicity investigations.

Dairy Lab Certification Program

This laboratory program exists to provide certification service to private dairy laboratories and the dairy industry for compliance to the Federal Pasteurized Milk Ordinance and to maintain consistent standards throughout the state.

Laboratory Services

Dairy Product Analyses

These activities provide legal and scientifically defensible analysis of Grade A and Grade B dairy samples for regulatory decision-making. Microbiology analysis are performed on samples of dairy products to test for compliance to bacterial standards and other product quality requirements. Products or plant environmental samples are further inspected to monitor for pathogens such as *Listeria*, *Salmonella* and *E.coli* that pose risks to public health. Dairy products are also checked for proper pasteurization and chemical composition.

Environmental (Agriculture Chemical) Analyses

These activities support three separate programs related to protecting the environment and public health from problems related to use of agriculture chemicals. The Food Pesticide Unit provides for analyses of pesticides and certain industrial chemical residues in produce and other foodstuffs. The Water Pesticide Unit analyzes ground and surface water and monitoring samples for the presence of pesticide residues. The Enforcement Unit analyzes soil and other non-water or food samples for pesticide contamination that results from the accidental release or misuse of pesticides. Under a federal grant from the Environmental Protection Agency (EPA), this unit also analyzes pesticide formulation samples to ensure compliance with label claims.

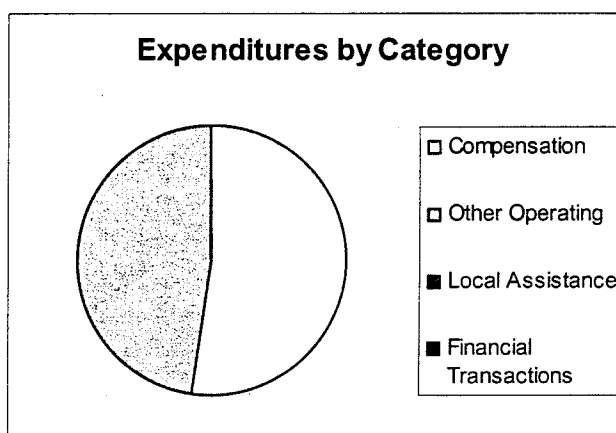
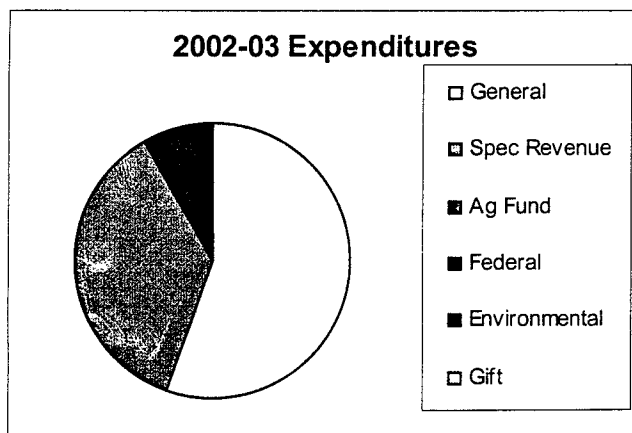
Seed and Plant Pathology Analyses

These activities provide various seed analyses, including purity, noxious and germination tests as well as tetrazolium determinations. The results of these tests are used by department regulatory officials to monitor and protect seed supplies for the public. The plant pathology area also provides informational and certificate analyses to the public and the department. Services include identification and quantification of diseases of trees, ornamental plants and seed stocks.

Laboratory Contract Services

These activities provide analyses to the Department of Natural Resources, USDA, EPA and various local and state agencies as well as industry for a fee. This is an innovative and cost-effective approach to providing analytical services that support state, federal or local laws and industry food safety needs where equivalent capability is not available. This activity also allows for additional resources to be available for emergency MDA response that are funded by other mechanisms for routine activities. This activity helps support Minnesota Agriculture's trade in international markets when government-based analysis is needed for certification or to overcome trade barriers.

Budget Information



Grain and Produce Inspection

Mission Statement

To provide official inspection and certification services determining the quality and quantity of grain and produce to trading parties, producers and processors thus ensuring that fair market conditions exist.

Core Functions

Food Safety

Fruit and Vegetable Inspection
Grain Inspection

Environmental Protection

Economic Stimulus

Fruit and Vegetable Inspection
Seed Potato inspection
Grain Inspection

Description of Activities

These activities are largely voluntary and promote fair and competitive trade. Grain and Produce activities are performed under agreements USDA. All services are performed under uniform, prescribed procedures with USDA-designated and maintained equipment and processes to ensure consistent results in all official agencies. Changes in technology, as well as a greater interest in discovering the presence or absence of viruses, toxins and modified organisms are changing all three programs. All three are expected to become more heavily involved in identity-preserved activities as well as steps to ensure the safety of our food supply. Half of the division employees work outside of the Metropolitan area.

Most of the division's work is voluntary and performed for customers who need an inspection and value the training, experience, accuracy and rapid response of our staff. In all three programs there is a strong cooperation with customers to accurately inspect the commodities to ensure appropriate pricing and end use for consumers.

Fruit and Vegetable Inspection

This activity fills the need for an unbiased, third-party opinion on the quality and quantity of produce, helping ensure that the quality and amount is fairly determined. This allows the shippers and receivers to operate in a fair marketing process with commodities, that ripen during the shipping process. Inspections occur at the wholesale and delivery level, at producer sites for shipping point, and at processing plants to determine market value and end use potential. All official services are performed under uniform, prescribed procedures with officially designated and maintained equipment to ensure consistent results in all official agencies.

Staff are federally licensed to inspect 85 different commodities and they inspected 426,997 hundredweights of produce in fiscal year 2002. Staff also inspected 6,027,327 hundredweights of potatoes at processing plants, along with 92,559 hundred weights of table stock potatoes. The activity occurs throughout the state with most wholesale and retail activity (terminal market) in the Twin Cities metropolitan area.

Seed Potato Inspection

The Certified Seed Potato activity has two functions: Control of potato diseases and the marketing of Minnesota Certified Seed Potatoes. The program staff inspects and tests seed potato lots to determine adherence to disease tolerances, freedom from certain diseases and varietal purity. This includes three field inspections during growth; a grow-out of seed stock during the winter prior to its sale for planting in the spring growing season, lab tests, and a final inspection at shipping point. It also strives to obtain recognition and increased market share by promoting the quality of the program and Minnesota Certified Seed Potatoes. This activity is mandatory for seed potato growers.

The program enrolled 9,330 acres with an estimated value of seed crops up to \$20,000,000. The program also certified 453,023 hundredweights of seed potatoes inspected at shipping point. Minnesota Certified Seed Potatoes are sold both domestically and internationally. The principal growing areas are the Red River Valley, central and southern Minnesota, along with the extreme north-central part of the state.

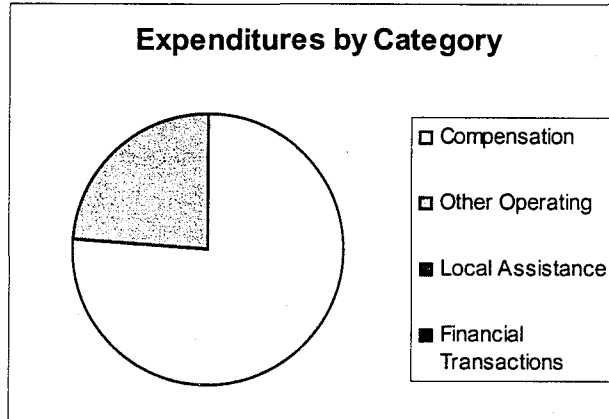
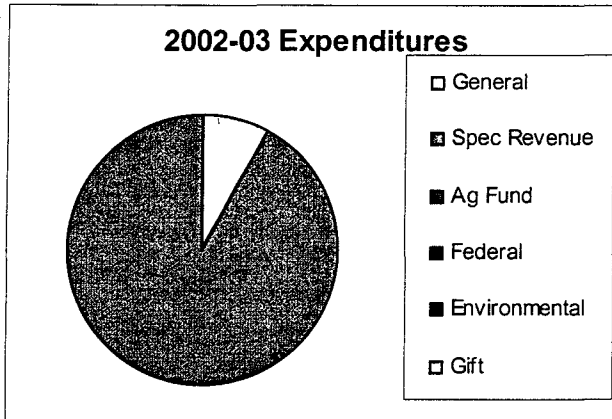
Grain and Produce Inspection

Grain Inspection

The purpose of this activity is to provide accurate, repeatable and rapid quantity and quality determinations on grain. This activity is one of the nation's official grain inspection agencies under the supervision of the USDA's Grain Inspection, Packers and Stockyard Administration. The inspection activity facilitates the marketing and storage of grain as well as promoting fair and competitive trade. The provision of these consistent professional weighing, sampling, testing, and grading services allows voluntary domestic and mandatory export customers the ability to trade with the certainty of grain quality and quantity. The weighing, sampling, testing, and inspection of grain is based on the U.S. Grain Standards Act to facilitate trade and ensure fair market conditions. This benefits everyone in the process from producers to the largest grain interests. All official services are performed under uniform, prescribed procedures with officially designated and maintained equipment to ensure consistent results in all official agencies nationwide. Domestic inspection services are voluntary while export services are mandatory.

In FY 2001, the division conducted more than 77,000 inspections of officially sampled and inspected grain representing 467,882,880 bushels. This does not include grain presented for submitted, commercial inspections, or other weighing and laboratory tests. By comparison, 1,172,630 bushels of corn, soybeans, wheat, and barley were grown in Minnesota in 2001. Virtually all employees are federally licensed to perform their work. Exports of corn to Canada, corn and bean exports by train to Mexico, an increase of corn and bean ship exports from Duluth rather than the traditional wheat exports, the need for more testing for toxins and genetically modified organisms, along with the trend of shipping with large unit trains (more than 100 cars), on very short turnarounds are recent changes. There are nine offices with additional work being performed at more than 20 elevators in the state.

Budget Information



Agricultural Marketing Services

Mission Statement

Assist in the orderly marketing of Minnesota's agricultural commodities and products; market and promote Minnesota agricultural products that permit Minnesota producers to compete in domestic and international markets; furnish information and economic analysis on marketing opportunities; provide promotional, informational and other marketing services for agricultural producers, processors, consumers and others involved in the marketing process; administer certification services from productions to processing including activities related to the licensing, bonding, and certification of agricultural products.

Food Safety

Meat Inspection

Core Functions

Environmental Protection

Economic Stimulus

Market & Business Development

Risk Management

MN Cert

Meat Inspection

International Marketing

Livestock Development Authority

Description of Activities

Market and Business Development

The purpose of this activity is to identify, develop, and expand markets for new and existing products of Minnesota agriculture and deliver business development and marketing education programs. This activity includes programs that enhance dairy and livestock development, renewable fuels production and use, assist processed food companies, assist in the development of farmers' markets, and awareness of Minnesota Grown labeled products.

Commodity Council Oversight

This activity ensures the fair and effective operation of the state's 12 commodity councils. (Barley, Beef, Canola, Corn, Dairy, Dry Edible Beans, Potato I, Potato II, Soybeans, Turkey, Wheat, and Wild Rice.)

Risk Management Program

This activity provides risk management education and services to Minnesota farmers to enable producers to develop and implement risk management plans so they are less susceptible to volatile markets and weather conditions. The program also participates with USDA on the Dairy Options Pilot Program, which is designed to encourage dairy producers to use options as risk management tools.

Minnesota Certification Program

The MDA is working cooperatively with the University of Minnesota in the development of certification programs that would provide Minnesota producers with an identity-preserved system for differentiating their products from commonly produced commodity products. These ISO certification mechanisms certify best management practices when producers agree on an external set of principles.

LDA – Livestock Development Authority

The LDA provides a link between various groups in Minnesota (business, government, and others) interested and working in livestock development. The linkage will help to identify the individual community needs and match the resources available through private and public resources that specialize in livestock business assistance. The LDA had defined livestock as "a systematic approach to enhance the economic vitality and viability of agriculture in Minnesota."

Agricultural Marketing Services

International Marketing Grant Program

This is a grant program that partners with USDA specialty crop funds that leverage federal and or private resources. It provides Minnesota groups an opportunity to expand their international marketing opportunities.

Minnesota Grown Program

Minnesota Grown is the umbrella program that unites the marketing efforts of several commodity/market groups. It promotes Minnesota products within the state and in other domestic markets. Efforts include developing promotional/advertising programs for producer groups, licensing users of the Minnesota Grown logo and introducing several new marketing tools.

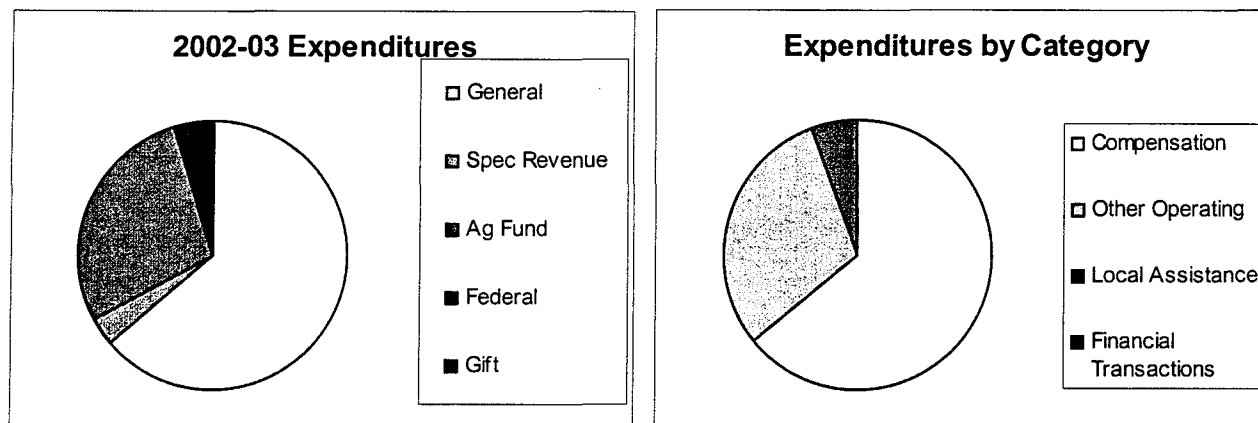
Licensing and Bonding Programs

The major function of these programs is to ensure that persons who buy or store grain, buy wholesale produce, or buy livestock in Minnesota are licensed and bonded. This function includes the auditing of grain storage elevators and the examination of the records of grain buyers and wholesale produce dealers. Division personnel weigh livestock at meat processing facilities. Division personnel inspect honeybee colonies to certify the good health of the colonies to allow them to move to other states for pollination and to keep diseases and pests in check.

State Meat Inspection Program

Provide on-site meat inspection services during meat processing to 65 small-to-medium sized processing facilities. The state inspection program is an attempt to boost food safety and give farmers a way to market pork, beef and poultry directly to consumers. The program provides inspection services to small-to-medium sized meat processors, while the USDA continues to focus on larger processors.

Budget Information



Agricultural Resources Management and Development

Mission Statement

We support the development of an agriculture that is profitable and environmentally sound by assisting producers with resource management and protection; conducting on-farm research; developing and transferring information and technology; and providing pest management and diversification options.

Food Safety

Core Functions

Environmental Protection
Agriculture Environment and NPS
Plant Pest Survey Program
Biological Control Program
Sustainable Agriculture and IPM

Economic Stimulus

Agricultural Resource Development
Agricultural Land Use Assistance
Grants and Financial Assistance

Description of Activities

Agricultural Resource Development

The function identifies issues and opportunities for growth and development within agriculture; consults with stakeholders and resource persons to develop strategies to address issues or capitalize on opportunities; and informs stakeholders through forums, conferences, publications and web sites. Partnerships are developed with agencies, producers, and higher education to implement strategies and projects. Examples include pilot projects on alternative energy, drainage technologies, livestock development, etc.

This activity also promotes and supports a constructive dialogue regarding animal agriculture and environmental protection, including efforts through the Feedlot and Manure Management Advisory Committee; participates in regulatory policy development for animal agriculture; provides information to livestock producers; and conducts related research and development.

Agricultural Land Use Technical Assistance

This activity helps local government officials address land-use issues relating to agriculture through direct technical assistance, development of analytical planning tools and provision of model policies. The issues include the preservation of agricultural land resources, minimizing conflicts between new rural residents and the farming community, helping farmers and local governments locate animal agriculture facilities, and identifying costs of rural sprawl to local governments. Examples include a model feedlot ordinance, and analytical models for assessing fiscal impacts of non-farm rural growth and an animal odor prediction model. Environmental documents on proposed public and private projects are also reviewed.

Sustainable Agriculture and Integrated Pest Management (IPM) Program

The program demonstrates and promotes practices that are environmentally sound, profitable and enhance the self-sufficiency of Minnesota farmers. The program provides information, educational opportunities, and financial and technical assistance to farmers in the areas of diversification, integrated pest management, sustainable and organic crop and livestock production techniques. Research and technology transfer are accomplished through on-farm research, field days and publication of demonstration grant results in the Greenbook.

The program also offers assistance to organic growers, businesses and consumers in the areas of organic certification cost share, educational materials, training, field days, and workshops on organic certification, transition, and production systems; on-farm research and demonstration; and technical assistance.

Grants and Financial Assistance

Grants are provided for both on-farm research and demonstration as well as organizing new, value-added producer cooperatives. Demonstration grants evaluate farming systems, such as managed grazing, new or specialty crops, cover crops and pestmanagement strategies, that increase energy efficiency, reduce agricultural chemical usage, and show

Agricultural Resources Management and Development

environmental and economic benefits. Value-added co-op grants help groups of producers evaluate business opportunities for new value-added enterprises such as livestock processing, organic grain processing, and specialty food products.

- ♦ **The Sustainable Agriculture Loan Program** provides low-interest loans for equipment and/or facilities to assist farmers transitioning to practices with lower environmental impact. Funding is also available to farmers and others to implement anaerobic manure digestion technology.
- ♦ **The Agriculture Best Management Practices (BMP) Loan Program** provides low interest loans through local units of government for BMPs that help producers implement local agricultural non-point source pollution priorities. These loan programs are administered with the Agricultural Finance Division.

Agriculture Environment and Non Point Source Pollution (NPS)

This function identifies and assesses agricultural NPS issues; helps producers provide input into state, local and federal NPS programs; assesses technology and information needs of producers and small agri-businesses; and develops partnerships with producers, agencies and higher education to develop coordinated approaches to link customer needs to resources. Staff also work actively with agencies and organizations to provide information to producers on federal and state conservation programs that help them with resource management and protection issues. Examples include small watershed scale NPS mitigation projects, etc.

Plant Pest Survey Program

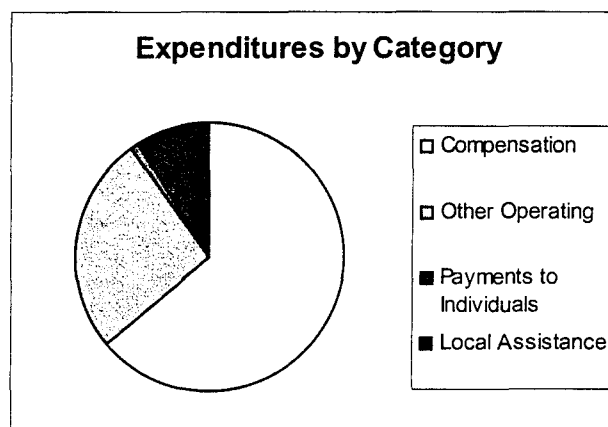
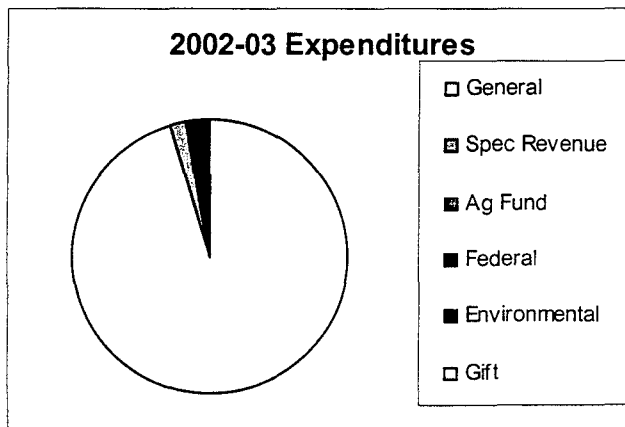
The activity conducts statewide surveys for insect, disease and weed pests of major field crops (corn, soybeans, small grains, alfalfa, sunflowers, etc.). Findings are reported in a timely fashion to Extension Educators, crop consultants and producers using the Minnesota Pest Report and Pest Survey website. In cooperation with the University of Minnesota, information is also made available to producers on pest-management options.

Biological Control Program

This activity conducts statewide surveys for beneficial organisms, and identifies potential biological control agents and evaluates their efficacy in controlling exotic (imported) pests. The control agents are evaluated for impacts on non-target species. To disseminate proven agents, partnerships are developed with regional and local agencies, producers or others to establish and monitor control projects. Information is disseminated on biological pest control in field crop pests, urban pests, noxious and nuisance weeds, and fruit and vegetable pests through electronic and printed means.

A greenhouse, designed for insect rearing and for use as a classroom for elementary students, produces beneficial insects for introduction in atriums, households, conservatories, and greenhouses as alternative pest control.

Budget Information



Ethanol Producer Payments

Mission Statement

The Minnesota Legislature established the goal to replace 10 percent of the 2.5 billion gallons of gasoline consumed in Minnesota with ethanol.

Food Safety

Core Functions
Environmental Protection

Economic Stimulus
Ethanol Producer Payments

Description of Activities

The 20-cent ethanol producer payment legislation initially provided the security required by lenders to invest in small farmer-owned ethanol facilities. In addition to opposition from the petroleum industry, bankers were concerned that these plants could not compete in the market with large agribusiness processors. At the time, most ethanol production occurred in large mills outside the state. Minnesota corn prices were among the lowest in the country, which was an advantage for local processing.

Although these ventures have been successful to date, margins have been squeezed by periods of record high corn prices and low ethanol prices. It is hoped that 10 years of payments will allow plants to retire debt, increase efficiency and develop new products and markets so they can survive the competition and price fluctuations in agricultural and petroleum markets. Unique aspects of the ethanol industry made these incentive payments necessary, but our ethanol industry is projected to contribute more than \$400 million in net annual benefit to the state.

Ethanol consumption in the state has increased over twelve-fold since 1988, to an estimated 260 million gallons per year in 2001 replacing over 10 percent of the 2.5 billion gallons of gasoline we use. About 97 percent of the state's gasoline is now blended with ethanol. In-state ethanol production capacity in the year 2002 exceeded 371 million gallons per year. Some of the 14 existing plants are considering further expansion. There are about 80 million bushels used in 12 dry mill corn-ethanol plants. About 55 million additional bushels are used in the state's single wet mill. While most of the wet mill product is starch and sweeteners, about 11 million bushels are converted to ethanol.

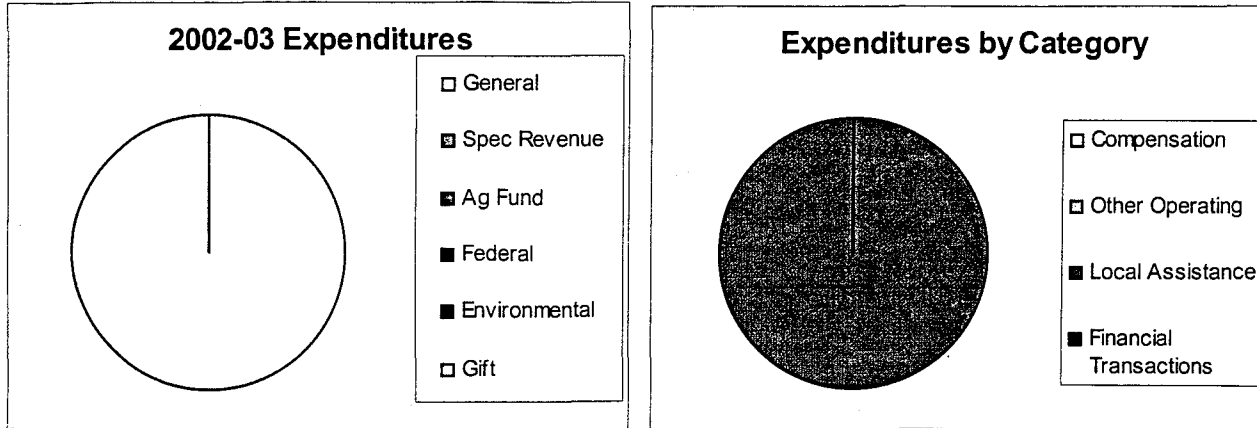
State Economic Parameters

The major benefits of 100 percent market penetration by ethanol blends, this study estimated the economic impact according to the categories below (figures vary between wet mills and dry mills):

- ◆ *Balance of Trade (Dollars saved on imported oil): \$100 million/year*
- ◆ *Value Added (Value of ethanol & by-products less value of corn): \$118 million - \$145 million/year*
- ◆ *Jobs Created (including construction & service jobs): 4,746-5,138*
- ◆ *Capital Investment (Plants, equipment, design, etc.): \$300 million - \$400 million*
- ◆ *Total Economic Impact: \$403 million - \$437 million*

Ethanol Producer Payments

Budget Information



Current Status of Minnesota Plants

Current information concerning Minnesota's ethanol production facilities is as follows:

Name	Location	Year	Capacity (gal.)	Payments to Date
<i>Agra Resources Coop.</i>	<i>Albert Lea</i>	<i>1999</i>	<i>40,000,000</i>	<i>\$9,730,000</i>
<i>Agri-Energy, LLC</i>	<i>Luverne</i>	<i>1998</i>	<i>20,000,000</i>	<i>\$11,400,000</i>
<i>Al-Corn Clean Fuel, LP</i>	<i>Claremont</i>	<i>1996</i>	<i>30,000,000</i>	<i>\$17,220,000</i>
<i>Central Minnesota Ethanol Coop.</i>	<i>Little Falls</i>	<i>1999</i>	<i>20,000,000</i>	<i>\$9,937,000</i>
<i>Chippewa Valley Ethanol Co., LLP</i>	<i>Benson</i>	<i>1996</i>	<i>20,000,000</i>	<i>\$18,439,000</i>
<i>Corn Plus, LP</i>	<i>Winnebago</i>	<i>1994</i>	<i>40,000,000</i>	<i>\$22,468,000</i>
<i>Diversified Energy Co., LLC ^{1/}</i>	<i>Morris</i>	<i>1991</i>	<i>20,000,000</i>	<i>\$7,047,000</i>
<i>Ethanol2000, LLP</i>	<i>Bingham Lake</i>	<i>1997</i>	<i>30,000,000</i>	<i>\$14,527,000</i>
<i>Gopher State Ethanol, LLC</i>	<i>Saint Paul</i>	<i>1999</i>	<i>15,000,000</i>	<i>\$4,613,000</i>
<i>Heartland Corn Products</i>	<i>Winthrop</i>	<i>1995</i>	<i>36,000,000</i>	<i>\$20,106,000</i>
<i>Melrose Dairy Proteins, LLC ^{2/}</i>	<i>Melrose</i>	<i>1986</i>	<i>3,000,000</i>	<i>\$4,479,000</i>
<i>Minnesota Corn Products ^{3/}</i>	<i>Marshall</i>	<i>1988</i>	<i>40,000,000</i>	<i>\$33,058,000</i>
<i>Minnesota Energy</i>	<i>Buffalo Lake</i>	<i>1997</i>	<i>17,400,000</i>	<i>\$11,141,000</i>
<i>Pro-Corn, LLC</i>	<i>Preston</i>	<i>1998</i>	<i>40,000,000</i>	<i>\$11,400,000</i>
<i>Other payments made ^{4/}</i>				<i>\$10,693,000</i>
Totals			371,400,000	\$206,258,000

Notes:

^{1/} Payments include those made to predecessor, Kraft, Inc.

^{2/} Payments include those made to predecessor, Morris Ag Energy, Inc.

^{3/} Plant no longer is receiving incentive payments

^{4/} Includes interest paid and payments to several small producers no longer operating.

Agricultural Finance

Mission Statement

The Agricultural Finance Division administers programs that enhance Minnesota's agricultural production and processing capacity, and protect the family farm as a basic economic unit. In an effort to develop the state's agricultural resources, the Rural Finance Authority (RFA) programs provide financial assistance to farmers and agricultural resource businesses by offering affordable financing to farmers and rural agribusinesses. The corporate farm law activity promotes compliance with Corporate and Alien Farm Laws.

Core Functions

Food Safety

Environmental Protection

Economic Stimulus

Manure Digester Loan Program
Ag Improvement Loan Program

Beginning Farmer Loan Program
Agriculture Improvement Loan
Restructure II Loan Program
Seller Assisted Loan Program
Livestock Expansion Loan
Value Added Stock Loan Program
Aggie Bond

Description of Activities

Production agriculture is a bedrock industry in Minnesota. Agriculture and its related activities account for one of every four jobs in the state.

The RFA helps Minnesota producers to enter the farming business or expand existing farm operations through increased credit availability. The RFA contributes to maintaining a base level of economic activity in rural Minnesota by allowing the transfer of farm assets from one generation to the next. More than 2,140 farmers have been assisted through the RFA with more than \$100 million in RFA real estate participations closed.

The RFA administers several loan programs that provide financial assistance to farmers and agricultural businesses. They include:

- ♦ **Basic Farm Loan** - The program is aimed at younger, lower-equity individuals who intend to have farming as their principal occupation. The purpose is to enable the beginning farmer to purchase farm real estate. The RFA participation is limited to 45 percent of the loan principal up to a maximum of \$125,000. A minimum 10 percent down payment is required. Loan amortization may be scheduled on a term of 15, 20, 25 or 30 years. Borrowers must have sufficient education, training or experience to succeed in the type of farming operation being pursued, have a total net worth not exceeding \$263,000 (indexed for inflation), agree to enroll in a farm-business management program and agree to carry credit life insurance for the amount of the loan. Since inception of this program in 1986, more than \$58 million has been loaned to approximately 1,200 borrowers.
- ♦ **Seller Assisted** - This program is very similar to the Basic Farm Loan program with one exception. The program is designed to permit sellers of a farm to fund a portion of the financing essential to the completion of the sale. The seller agrees to subordinate their financing to the lender/RFA. The lender and the RFA provide the balance of the funds with a first mortgage. Since inception, more than 40 borrowers have been loaned over \$1.8 million.
- ♦ **Agricultural Improvement** - This program provides for farm improvements that can include grain handling facilities, machine storage, erosion control, wells and manure systems. Net worth requirements and loan participation parameters are the same as the Basic Farm Loan program. The loan may not exceed 80 percent of the appraised value of the collateral. Since inception, more than \$8 million dollars has been loaned to more than 145 borrowers.

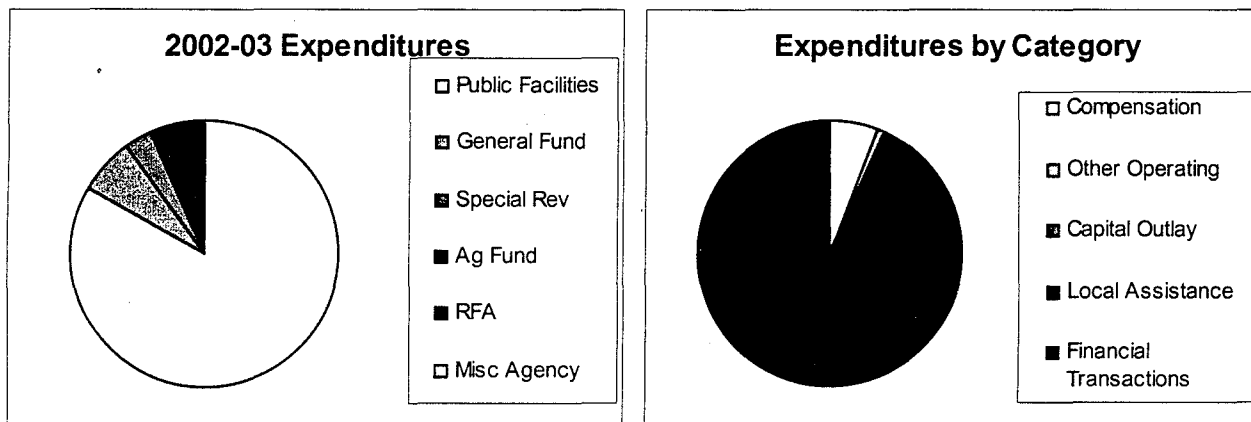
Agricultural Finance

- ♦ **Livestock Expansion** - This program creates affordable financing for new, state-of-the-art livestock facilities. The RFA may participate on a loan up to 45 percent of the loan principal up to \$250,000. The borrower's net worth cannot exceed \$429,000 (inflation indexed) and the loan is restricted to 80 percent of the appraised value of the collateral. The borrower must be engaged in livestock production.
- ♦ **Restructure II** - This loan program is for reorganization of a borrower's agricultural debt. Parameters are 45 percent of the loan principal up to \$150,000 maximum. Net worth limitation of \$429,000 (inflation indexed).
- ♦ **Aggie Bond** - The Agricultural Development Bond creates a federal tax exemption for banks and a federal and state tax exemption to an individual seller in exchange for offering below market interest rates to the buyer. Eligible purchases include agricultural land, agricultural improvements, breeding livestock and machinery. No state funds go into these loans. A \$5 million is reserved annually for this program.
- ♦ **Value-Added Stock Loan** - This is a revolving loan program that provides financing for farmers with limited capital who wish to buy stock in a proposed or existing cooperative or LLC agricultural product processing facility in Minnesota. This is a 45 percent participation up to a maximum of \$24,000. Interest rate is 4 percent on the RFA portion and the borrower net worth limitation is \$263,000 (inflation indexed).
- ♦ **Manure Digester Loan Program** - This is a new loan program that was passed during the 2002 legislative session. The purpose is to help finance the purchase of necessary equipment and the construction of a system that will use manure to produce electricity. Resources from two other activities were transferred to create a revolving fund to support the activity.

Corporate Farm Law

This activity promotes and facilitates compliance with Corporate and Alien Farm Laws. Its purpose is to protect the family farm as a basic economic unit and promote the stability and well being of rural society by ensuring that non-farm corporations and foreign entities do not own farm land or are engaged in production agriculture. Currently 3,073 legal entities have been certified under Corporate Farm Law guidelines.

Budget Information



Grants and Claims

Mission Statement

Provide possibilities and innovative opportunities through unique assistance programs to serve the needs, goals and objectives of our clients and to ensure opportunities for future generations of Minnesotans.

Food Safety

Core Functions Environmental Protection

Economic Stimulus Ag Assistance Dairy Profitability & Enhancement Duluth Seaway Port Authority Farmers Market & Nutrition Northern Crop Institute Farm Advocates

Description of Activities

Ag Assistance Grants

During the 2002 Special Session, the Legislature appropriated \$3 million to assist farm operators who suffered crop losses in 2002 as a result of floods. Farm operations that suffered at least 50 percent loss on at least 40 acres located in Becker, Beltrami, Clay, Clearwater, Goodhue, Hubbard, Itasca, Kittson, Koochiching, Lake of the Woods, Mahnomen, Marshall, McCloud, Norman, Pennington, Polk, Red Lake, Roseau, or Wright counties and meeting the criteria are eligible for payment of up to \$4 per acre up to a maximum of 1,400 acres.

Grants to County Agricultural Societies

This program reimburses local county fairs and specific agricultural societies for their efforts in promoting agricultural pursuits and activities by youth. County fairs are eligible to receive reimbursement for specific costs under M.S. 38.02. Over the last several years the reimbursement percentage has declined from 97.32 percent in 1991 to 76.10 percent in 2002.

Dairy Profitability & Enhancement Grants

The Dairy Profitability and Enhancement Team Grant project has been in existence since 1996. The program runs as mandated in Minnesota Laws 1997, Chapter 216, Section 7, Subdivision 2 which states: "...To expand the one-on-one educational delivery team system to provide appropriate technologies, including rotational grazing and other sustainable agriculture methods, applicable to small and medium sized dairy farms to enhance the financial success and long-term sustainability of dairy farms in the state."

Duluth Seaway Port Authority Grant

This annual grant is used by the Duluth Seaway Port Authority for promotional purposes. Situated at the westernmost end of the Great Lakes/St. Lawrence Seaway, the port of Duluth-Superior accesses a half-a-million square miles of resources and purchasing power. Accessible by rail and road from Denver, Omaha, Winnipeg, Bismarck, and Minneapolis-St. Paul, the port is two to three weeks' sailing time from western Europe, the Mediterranean, west Africa, and South America. While primarily a trans-shipment port serving producers and consumers located far from the harbor, several key portside facilities transform basic commodities into valuable products. Duluth-Superior also serves as a vital overland transportation hub for the United States and Canada.

Farmers Market Nutrition Program (FMNP)

This program promotes direct sales opportunities for farmers through farmers' markets and improves the diets of low-income, nutritionally-at-risk children, pregnant women and seniors. This program receives both federal (70 percent) and state funding (30 percent).

Grants and Claims

FMNP recipients receive checks that can only be used at local farmers markets. Nineteen farmers' markets with 271 authorized vendors provided almost 41,000 families with young children and 2,800 senior citizens with access to fresh, locally grown produce from farmers' markets through the FMNP.

Surveys from previous years indicate that only half of the check recipients have ever been to farmers' market before participating in FMNP, and of those who have, less than 20 percent are regular customers. Not only does the program bring new customers to markets, it teaches recipients about the benefits of fresh produce. Sixty-two percent of FMNP recipients think the quality of the produce at the market is better than the quality at the grocery store.

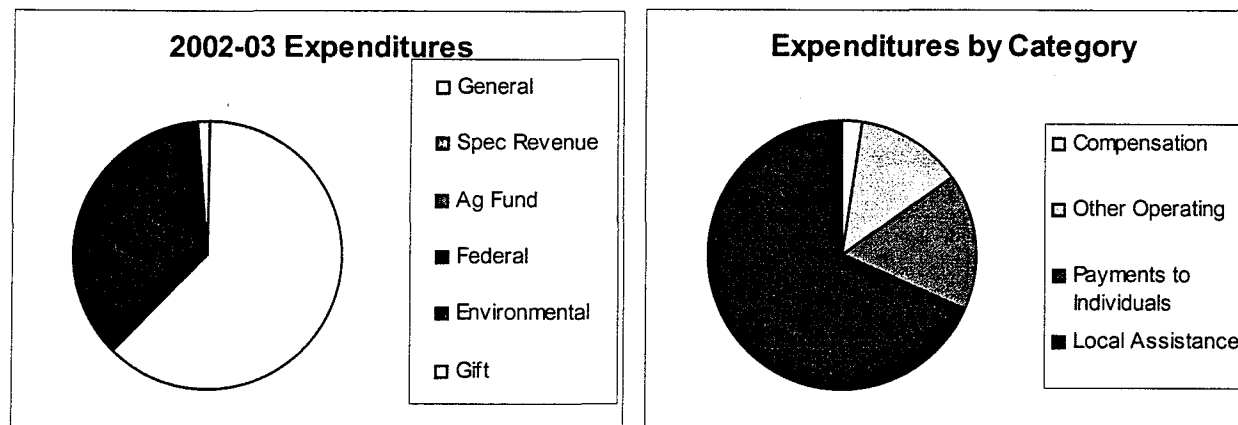
Northern Crop Institute Grant (NCI)

The Northern Crop Institute was established to provide technical and marketing assistance through specialized training courses and technical services that facilitate domestic and international market development and expanded sales of northern grown crops. NCI is a cooperative effort between North Dakota, Minnesota, Montana, and South Dakota.

Farm Advocates Program

Farm Advocates provide one-on-one assistance for Minnesota farmers who face crisis caused by either a natural disaster or financial problems. They are trained and experienced in agricultural lending practices, mediation, lender negotiation, farm programs, crisis counseling, disaster programs and to recognize the need for legal and/or social services. They help farm families find solutions by contracting for crisis assistance.

Budget Information



Administrative Services

Mission Statement

Ensure that the state Department of Agriculture can respond effectively to the new challenges and opportunities brought by the 21st century while efficiently and cost-effectively using available resources and technology.

Core Functions

Food Safety
Commissioner's Office

Environmental Protection
Commissioner's Office

Economic Stimulus
Commissioner's Office

Administrative Support
Commissioner's Office
Finance & Budget
Human Resources &
Diversity
Agricultural Statistics
Information Services

Description of Activities

Commissioner's Office

The Commissioner's Office provides leadership and support by developing management strategies to plan, prioritize, execute and guide department activities. It sets standards for internal review of program milestones and outcomes. It identifies and analyzes future program requirements and facilitates relevant responses to meet these changing needs.

The Commissioner's Office participates and provides leadership on several "hot button" agricultural issues at the state and federal level. Controversial issues such as feedlots, hypoxia, biotech enhanced products and food safety concerns continue to generate additional discussion and policy development in the future.

Finance & Budget

The Finance and Budget Division provides centralized services that provide oversight and economy of scale for services provided. These centralized services include accounting, budget preparation and coordination, financial analysis, receiving and copying, and rulemaking.

Federal Grants Coordination and Monitoring has created a standardized process for the agency to follow when applying for federal grants. It is also responsible for drawing federal cash, as the accounts require funding, and for coordination and providing information on federal grants to the Department of Finance.

Rulemaking provides reviews of agency's rules and coordination of divisions' efforts to create or modify departmental rules.

Human Resources & Diversity

The Human Resources Division provides staffing, classification, labor relations, training, affirmative action, facilities management and safety services to the agency's management, supervisors, employees and the public. It also represents the agency on statewide efforts and on resolution of statewide human resource and diversity issues.

Nuclear Response

MDA is responsible for preventing exposure resulting from ingesting contaminated food, milk, and water in the event of a radiological emergency at the Monticello or Prairie Island nuclear power plants. Training is conducted to ensure effectiveness in the case of an emergency.

Agricultural Statistics

The Agricultural Statistics Division provides statistical services and conducts surveys of farm operators and agribusinesses to provide accurate, timely, and relevant Minnesota statistics of crop acreages, yield, production, and

Administrative Services

stocks; livestock inventories; farm prices, expenses, and income; weekly crop and weather conditions; and agricultural chemical usage.

The Agricultural Statistics Division is a good example of state and federal cooperation. A cooperative agreement exists between the MDA and USDA's National Agricultural Statistics Service to consolidate and coordinate activities in collection, analysis, and publication of statistical data for the State of Minnesota. The division is made up of both MDA and USDA employees in a cooperative effort to promote economy and efficiency in collecting agricultural information, minimize respondent burden, and avoid duplication of effort.

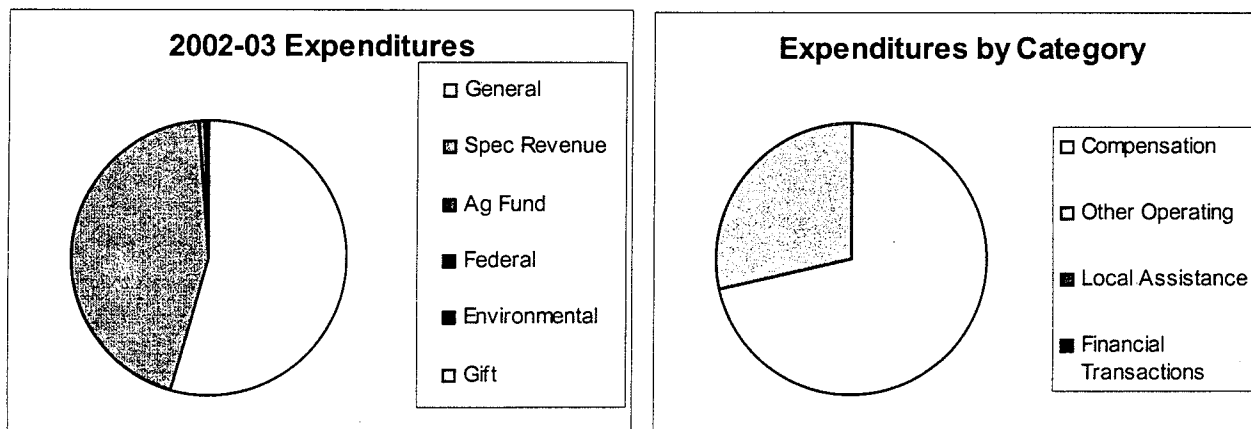
Information Services

Information Services provides computer systems analysis, technical support, programming, project management, web design, graphic arts, and centralized licensing services to all divisions. The Project Unity Initiative, whose goal is to redesign and update the department's electronic information management systems, is also administered within the division.

This activity provides department-wide desktop computer hardware and software support to St. Paul staff as well as staff in remote locations; sustains local and wide-area network and dial-up services; coordinates the production of all department licenses; oversees the data center; and maintains the department's website. Information Services provides leadership and support for day-to-day operations in the use of information technology to perform mission critical business functions. Information Services also provides enhancements, upgrades, and maintenance of the existing technology infrastructure for the department's computer network, network systems, and department-wide computer applications.

In addition, Information Services is leading the reengineering and modernization of the department's electronic data management systems (i.e. Project Unity) to integrate processes and data from multiple divisions greatly enhancing department-wide data capture, management, and resource sharing. The department has successfully completed two major systems project: Licensing Information System and Laboratory Information Management System. The Compliance Management System remains on-hold pending additional funding.

Budget Information



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Revenue and Expenditures

<u>Division</u>	<u>FTE's</u>		<u>Expense Budgets</u>		<u>Revenue Budgets</u>	
	<u>FY 2002</u>	<u>Percent</u>	<u>Total FY 02-03</u>	<u>Percent</u>	<u>Total FY 02-03</u>	<u>Percent</u>
			(000's)		(000's)	
Agronomy & Plant Protection.....	109.70	23.80%	\$ 26,512	13.50%	\$ 22,485	26.40%
Dairy & Food Inspection.....	85.15	18.50%	11,649	5.90%	8,833	10.40%
Laboratory Services.....	47.21	10.20%	10,414	5.30%	1,349	1.60%
Grain & Produce Inspection.....	83.29	18.10%	11,620	5.90%	10,589	12.40%
Agricultural Marketing Services.....	32.33	7.00%	9,408	4.80%	4,025	4.70%
Agricultural Development.....	26.17	5.70%	6,669	3.40%	474	0.60%
Agri-Resources Management.....	8.53	1.90%	495	0.30%	-	0.00%
Ethanol Producer Payments.....	-	0.00%	69,137	35.00%	-	0.00%
Grants & Claims.....	-	0.00%	9,996	5.10%	1,981	2.30%
Agricultural Finance.....	5.75	1.20%	29,673	15.10%	29,428	34.60%
Administrative Services:						
Commissioner's Office.....	15.78	3.40%	3,218	1.60%	911	1.10%
Finance & Budget.....	14.30	3.10%	2,376	1.20%	4,746	5.60%
Central Services.....	5.82	1.30%	566	0.30%	-	0.00%
Human Resources & Diversity.....	7.88	1.70%	1,219	0.60%	199	0.20%
Agricultural Statistics.....	2.97	0.60%	480	0.20%	57	0.10%
Information Services.....	16.04	3.50%	3,658	1.90%	-	0.00%
Total	<u>460.92</u>	<u>100.00%</u>	<u>\$ 197,090</u>	<u>100.10%</u>	<u>\$ 85,077</u>	<u>100.00%</u>

Note 1: The expenditures and revenues listed above were taken from reports in the Biennial Budget Information System (BIS) as of November 20, 2002. These consist of actual expenditures and revenues for fiscal year 2002, as of September 6, 2002, close, and estimated expense and revenue budgets for fiscal year 2003 as entered into BIS. All dollar amounts are expressed in thousands (000's) of dollars. Fiscal year 2002 equivalents (FTE's) were calculated from all full-time, part-time, and overtime hours paid during fiscal year 2002, divided by 2088.

Note 2: Included in the expenditures and revenues listed above are the following Legislative Commission on Minnesota Resources (LCMR) appropriations, ethanol producer payments, loans and other one-time appropriations that are not supported by fees:

LCMR Projects.....	\$ 1,569
Ethanol Producer Payments.....	69,137
Loans:	
Rural Finance Authority Loan Programs.....	17,926
Agricultural Best Management Practices (Ag BMP) Loan Program.....	9,113
Individual Septic Treatment System (ISTS) Loan Program.....	650
Other Loan Programs.....	833
Project Unity, Information Technology Project.....	-
Total	<u>\$ 99,228</u>

Note 3: Included in Agricultural Finance's revenues is \$24,174,000 in loan interest payments, loan principal payments, and short-term investments designed for debt service on general obligation bonds issued to make Rural Finance Authority loans

