

# Sustainable Poultry Farming Group

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## Newsletter

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## A Decade of Progress —SPFG Receives Environmental Award

It may be hard to believe but the SPFG is now in its tenth year of operation. Over the years, the SPFG and the poultry industry

*After 18 years, this is the first time the environmental award was given to agriculture*

have worked to make the Fraser Valley poultry industry environmentally sustainable. Many obstacles have been overcome

*Kevin Chipperfield and Daryl Arnold Accepting Environmental Award*

## SPFG Program Partners

- |  |   |
|--|---|
| ⇒ B.C. Investment Agriculture Foundation     | ⇒ Environment Canada                    |
| ⇒ B.C. Chicken Growers' Assn.                | ⇒ Agriculture and Agri-Food Canada      |
| ⇒ F.V. Egg Producers' Assn.                  | ⇒ B.C. Ministry of Agriculture and Food |
| ⇒ B.C. Broiler Hatching Egg Producers' Assn. | ⇒ Abbotsford Aquifer Stakeholder Group  |
| ⇒ B.C. Turkey Assn.                          |   |

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## Director's Corner .....

### Ralph Volkmann, B.C. Turkey Association Director Gives Views on SPFG Progress

Involvement with the B.C. Turkey Assn., the SPFG, and the Nutrient Management Action Plan for the last few years certainly has enhanced my awareness of the environmental challenges faced by the poultry producer and the agricultural community in general. I have come to see that the poultry industry is well aware of the need for good stewardship and environmental sustainability. The SPFG stands at the forefront of our united effort.

We are all aware of increasing environmental pressures. The situations we have encountered

this winter—whether this situation involves manure storage, finding a home for manure, or increasing costs — remind us that pro-active efforts must be continued as challenges come our way. We look forward to new opportunities this spring. The success of SPFG initiatives over the years, shows that progress can be made.

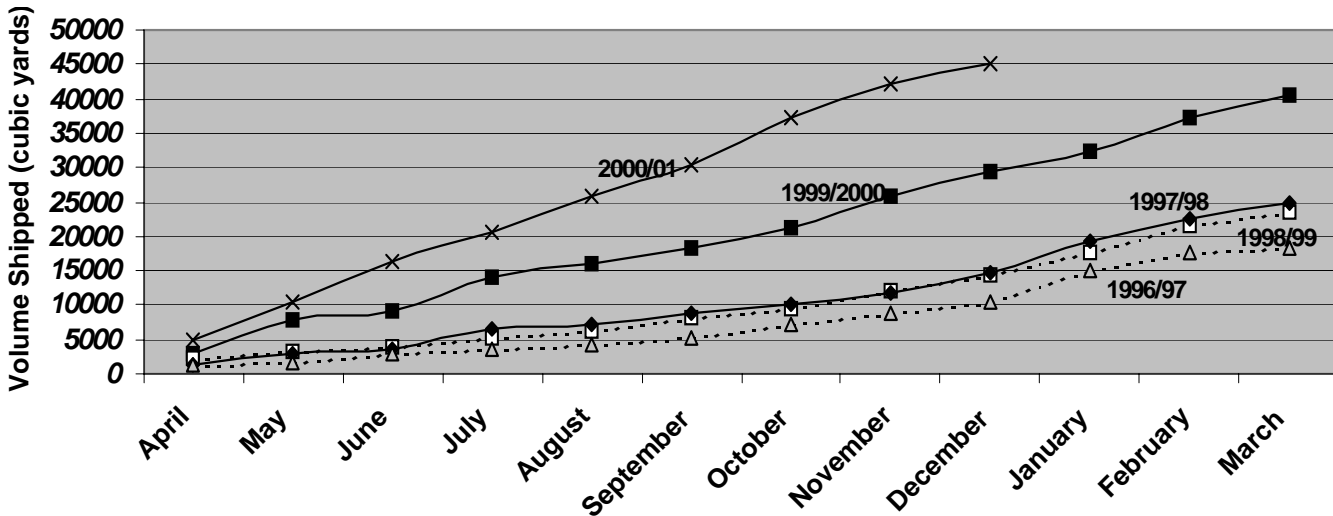
The SPFG has achieved an exemplary position in B.C. agriculture. Greater things will be accomplished with wholehearted support and encouragement from the poultry industry.

Best wishes to all,  
Ralph Volkmann

## SPFG - A Decade of Progress Cont'd ...

and success achieved. We take particular pride in the Groundwater Protection Program (GPP) which has now been running for almost six years. The SPFG and poultry producers have seen this program expand from using one conveyor to our present three, and from shipments to distant markets of about 8,000 to as much as 50,000 cubic yards this year .

**A Comparison of Poultry Manure Shipments  
to Distant Markets  
- Years 1996/97 to 2000/01 -**



## ***SPFG Receives Award from B.C. Environment Minister Joan Sawicki***

During June 2000, the SPFG was distinguished by the Honourable Joan Sawicki, B.C. Minister of Environment, Lands, and Parks as a recipient of the “2000 Minister’s Environmental Award”. This award has been given annually for the past eighteen years to recognize outstanding contributions to the environment of British Columbia. Year number nineteen marks the first year that this award has been given to agriculture, in this case in the business category. The SPFG received this award because of its proactive and positive manner in dealing with environmental issues. Over the years, the SPFG has led the poultry industry in a pro-active way to find, develop, and enact solutions that work for the poultry industry. The Groundwater Protection Program was one such solution that is now in place and works! On behalf of the SPFG, Daryl Arnold, SPFG Chair and Kevin Chipperfield, SPFG Manager accepted the award. Congratulations to all the poultry producers and government supporting agencies that cooperated to make receiving this award possible! Some of the producers and directors who have made a major contribution to the SPFG’s success are recognized below:

*Current Directors:*

Daryl Arnold Art Penner Ralph Volkmann Stewart Paulson Reimar Goetzke Brad Reid Dave Sands  
 Dave Siemens Rob Schreurs Rick Van Kleeck Harry Froese Harvey Janzen Ray Nickel

*Past Directors:*

As well, the SPFG would like to recognize some of the leading poultry producers which have been instrumental in the initial and continued success of the Groundwater Protection Program. These farmers (or farm names) are: Dave and Dan Kampen, Ben Gotzke, Starbird Turkey Farm, Dave, Mike, Shawn, and Dave Heppell, Henry Klassen, Fred and Hans Krahn, Ray and Norm Nickel, Alan Radnai, Vic Regier, John Janzen, Vic Redekop, Dan and Dion Wiebe, Rick Dyck and all the rest of the over 90 producers from all feather groups that have been involved with the GPP and its hauling services.

### ***GPP - Conveyor Use and/or Hauling Rates beginning March 1, 2001 - Three Hauling Options for Fraser Valley Poultry Producers***

The GPP continues to offer poultry manure hauling services to ‘distant markets’ for ‘dry’ manure, and as the occasion presents, ‘wet solid’ manure. Two factors allow the SPFG to deliver to distant markets: use of large volume trucks and the ability to load these trucks through the use of producer owned conveyors. To make this service convenient, the GPP offers the following three conveyor usage fee options:

⇒ **Please note** that these fees come into effect March 1, 2001. For all options, there will be an additional fee for conveyor delivery, depending on the farm’s proximity to Abbotsford.

☛ **Option #1 Winter Rate** is designed for poultry producers who need to ship manure from. **October 1 to February 28**. Payment of fee in this scenario is on a straight user fee basis (**\$2.25 per cubic yard**).

☛ **Option #2 Summer Rate** is designed for producers who ship manure from **March 1 to September 30**. The SPFG feels use of a manure storage facility will increase flexibility for manure loading and pickup arrangements and expand manure hauling in the slower mid-summer to early fall period. Payment of fee in this scenario is on a straight user fee basis (**\$1.25 per cubic yard**).

**Discount of \$0.50 per cubic yard** is now possible for producers with a roofed manure storage facility. This discount is available to provide an incentive to producers with a covered manure storage facility large enough to store manure over a substantial period. The discount may be available during the winter or summer rate period at the discretion of the SPFG depending on market demand. However, since it is not likely that there will be a significant demand for manure during the late fall and winter period, manure will likely be scheduled for pick up during the Summer Rate period.

☛ **Option #3** is conveyor rental only. The charge for conveyor rental is \$0.90 per cubic yard conveyed. The poultry producer is responsible for all arrangements involving manure transportation and marketing.

## Fraser Valley Nutrient Management Action Plan Update (NMAP)

Poultry Associations and the SPFG, in concert with the dairy, hog, and horticulture industries, and various levels of federal and provincial government have been working over the last one and a half years toward finding common ground on the issues of nutrient (manure *and* inorganic) management and environmental sustainability. The goal is to produce a Nutrient Management Action Plan (NMAP) for the Fraser Valley, in which concerns of all parties are addressed. In last year’s SPFG newsletter, the NMAP process was identified and summarized along with solutions to nutrient management issues brought forward by the NMAP working group.

After a lengthy period, the working group, with the aid of the Fraser Basin Council, has produced a draft NMAP document. After the working group has a chance to review the document, it will be distributed to the Partnership Committee on Agriculture and the Environment.

The NMAP will be an environmental action plan whereby the agricultural industry and various levels of government initiate a solution oriented process. Typically, environmental issues and their solutions are extremely complicated issues with many views from all sides of the issues. Increasingly, environmental action plans, or NMAPs are seen as the ideal way to address these complex environmental problems.

### *Fraser Valley Poultry Production – Environmental Issues Examined in NMAP*

Environmental issues can best be assessed by looking at them in terms of their short to long-term consequences. These consequences will be influenced by many factors such as land use change, cropping patterns, and intensity of livestock and poultry production within a given area. Together, these factors create a complex, dynamic situation which makes the nutrient planning process challenging. Close examination of the Fraser Valley nutrient balance situation has revealed areas where estimated nutrient budgets far exceed the capacity of the land or crop. With a NMAP, action can be taken to avoid future imbalances in nutrient application.

#### Benefits in developing the Nutrient Management Action Plan

While the primary goal in developing a Nutrient Management Action Plan is to protect soils and water, there are many benefits such as:

- ⇒ *Long term economic viability* – A well considered strategy for the Fraser Valley provides an opportunity for creating a competitive advantage for our producers by improving environmental sustainability.
- ⇒ *Public/Consumer perception* – Today’s modern and often intensive agriculture industry can raise concerns within communities. Whether real or perceived, these concerns are being taken seriously by government. Nutrient management planning can help strengthen agriculture’s relationship with the public.
- ⇒ *Stronger relationships* - Developing a Nutrient Management Action Plan provides an opportunity to redefine the relationships between government agencies and farmers.
- ⇒ *Window of opportunity* -Most of the environmental challenges can still be reversed and there is an opportunity to achieve improvements in environmental quality as a result of improved nutrient management.
- ⇒ *Protection of resources* – Improved nutrient management will help maintain the natural “infrastructure” that supports agricultural and non-agricultural

## Recommendations to Identified Nutrient Management Issues

Through dialogue among Working Group members and their respective agencies and associations, a number of nutrient management options have been identified. In the NMAP, specific nutrient management options are presented and categorized under one of seven general themes which are:

- |                            |                   |   |                    |
|----------------------------|-------------------|---|--------------------|
| Education and Awareness    | Land Use Planning | Research  | Long-term Planning |
| Infrastructure Development | On-farm Plans     | Monitoring (Environmental quality and producer practices) |                    |

*From these options, NMAP participants have identified the following eight DRAFT recommendations. These were selected on the basis of their usefulness to address the environmental issues under consideration by working group participants.*

## **The Eight NMAP Recommendations from the Draft Final Report**

### **Recommendation #1—NMAP Implementation**

An implementation committee should be established to oversee implementation of the NMAP. The committee should consist of one member from each of B.C. Ministry of Environment, B.C. Ministry of Agriculture, Fisheries, and Food, B.C. Agricultural Council, Environment Canada, and the federal Department of Fisheries, and Oceans. This committee would report to the Environment Partnership Committee with responsibilities suggested as follows:

- ⇒ Identify and coordinate NMAP implementation teams to ensure that action is taken on specific high priority options
- ⇒ Review and report on an annual basis the status of NMAP implementation
- ⇒ Review, every three years, progress towards the actions written in the NMAP with the publication of a NMAP Progress Report
- ⇒ As necessary, develop recommendations for revisions to the NMAP based on annual implementation reports and three year progress reports.

### **Recommendation #2—Implementation Team**

The NMAP Implementation Committee appoint and coordinate the work of four implementation teams which will be responsible for implementing the following components of the NMAP as follows.

1. **Research Team**  
The Research Team will lead implementation of high priority NMAP Research Options towards addressing key information needs to support improved nutrient management practices.
2. **Monitoring Team**  
The Monitoring Team will lead implementation of high priority NMAP Options towards development of a nutrient management monitoring program to assist in assessing effectiveness of NMAP implementation.
3. **On-Farm Plan Team**  
The On-Farm Plan Team will explore the structure and function of On-Farm Plans (OFPs) in order to define how OFPs should be used to assist in improving nutrient management practices.
4. **Long Term Planning Team**  
The Long Term Planning Team will lead implementation of high priority NMAP Options in order to avoid future nutrient imbalances in the Fraser Valley.

#### **Nitrogen Loadings**

When nitrogen is over-applied to crops, the unused portion is available to move into surface water. In the case of lighter, more permeable soils, nitrogen may move downwards into the groundwater. Movement of unused nitrogen (as nitrate) is well documented in the case of the Abbotsford Aquifer. In heavier soils, when manure is applied to 'wet' fields, nitrogen runoff may occur. With manure applications, the form of nitrogen will likely be ammonium which is highly toxic to fish.

In the short to medium-term, poultry producers are working to do their part to alleviate this issue by shipping manure to distant markets through the Sustainable Poultry Farming Group. The result from this action will be lowered nitrate leaching to groundwater from excess nitrogen when poultry manure is over-applied. Other nitrogen sources exist which

### **Recommendation #3—Strengthening Nutrient Management Capacity in Agriculture**

The Agriculture and Environment Partnership Committee examine potential funding sources, including the Agriculture Green Fund, to support the development of infrastructure within the agricultural sector, to implement nutrient management initiatives in the Fraser Valley. A well recognized means in which to enhance agriculture's environmental infrastructure involves increasing the ability of a farm's physical ability to manage nutrients in a sustainable manner. Ideas which would enhance the relationship between Fraser Valley farming practice and the environment include:

- ⇒ expanding and/or upgrading manure storage capacity for both livestock and crop producers,
- ⇒ facilitating transport of nutrients from environmentally sensitive areas,
- ⇒ processing of manure to a more crop user and environmentally friendly form

### **Recommendation #4 - Funding for Education and Awareness Activities and Infrastructure**

## Options

The Agriculture and Environment Partnership Committee examine potential funding sources, including the proposed Agriculture Green Fund, to support producer conservation organizations (such as the SPFG), environmental promotion activities which among other ideas would promote increased substitution of manure nutrients for chemical fertilizer, as well as better technology for applying and managing nutrients. Further suggestions include: promoting use of Manure Management Guidelines, maintaining and strengthening the Agricultural Peer Advisor Service, and promoting the use of alternative feeding programs to reduce nitrogen and phosphorus content in feed ingredients.

### **Recommendation #5 Legislative/Regulatory Options**

Legislative and Regulatory Options identified in Draft NMAP be forwarded to the Agriculture and Environment Partnership Committee for consideration and discussion. Options under consideration are:

**Enact groundwater legislation**—B.C. is the only province without some form of groundwater legislation. Such legislation would be a significant undertaking for both government and industry. The public, in general, has been pushing for some form of groundwater legislation for at least five years.

**Review and possibly alter the existing Agricultural Waste Management Regulation and Code**— The focus of this activity could include certain aspects of the Code relating to use of manure as a fertilizer or “soil conditioner” or adding sections that would incorporate published Manure Management Guidelines as part of regulation. Further controversial proposals to amend the Regulation and Code include: increased responsibility on behalf of producers to demonstrate that their farm management practices are not causing pollution. As well, it has been suggested that the automatic permit exemption be removed from the Code—this would mean that EVERY FARM WOULD BE REQUIRED TO APPLY FOR A PERMIT EXEMPTION to the B.C. Ministry of Environment.

### **Recommendation #6—NMAP Annual Implementation Report**

NMAP Implementation Committee report annually, to the Agriculture and Environment Partnership Committee on the implementation of NMAP.

### **Recommendation #7—NMAP Three Year Review**

NMAP Implementation Committee undertake a review of NMAP implementation every three years. The review would consider implementation of NMAP options, assessment of progress towards measurable targets, maintenance of funding for implementation and provide recommendations for updating the Plan.. Legislative and regulatory options would be forwarded to the Agriculture and Environment Partnership Committee for consideration and discussion at the time of the three year review.

#### **Phosphorus and Potassium Loadings**

When applying poultry manure at the correct rate to supply adequate amounts of nitrogen, an imbalance often results in the levels of other nutrients. In the Fraser Valley, phosphorus applications will typically exceed the capacity of land or crops by 2 – 7 times. This relates to the fact that manure contains a fixed ratio of nitrogen to phosphorus and potassium.

The only way to fully balance field nutrient application from year to year is to apply manure every second or third year, or add part of the nitrogen in the form of chemical fertilizer. While nutrient ratios can be overlooked in the short term, depending on the crop grown, excess nutrients will eventually build up in soils. **Phosphorous**, for example, can runoff into streams and watercourses causing eutrophication (lack of oxygen in water for fish) and potentially, fish mortality events. For **potassium**, there is no known environmental issue resulting from excessive soil levels, but there is an economic one. Recently, some Fraser Valley dairy farms have been noting excessive forage grass potassium levels which have been estimated to be costing them \$2 million per year (Rick Van Kleeck, B.C. Ministry of Agriculture and Food). Since use as a forage fertilizer is an important market for poultry manure, in the long-term poultry producers should be aware of this issue.

As the poultry industry expands, the Sustainable Poultry Farming Group will endeavor to expand manure marketing options to poultry producers. The Groundwater Protection Program (manure hauling program) continues to increase manure management options for poultry producers, but producers with ‘wet’ poultry manure often rely on local dairy farmers to spread their manure. The question which needs to be addressed is: Will land application of poultry manure to