



**SUSTAINABLE  
WINEGROWING**  
BRITISH COLUMBIA

## NUTRIENT MANAGEMENT PLAN

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**Name & Address of Property**

**Compiled by: Name, Phone, Email**

**The plan includes maps identifying:**

Total property area

Vineyard area

Natural habitat area

Protected area

Sources of water/soil contamination

## Site History

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Irrigation System Description

Native Vegetation on Site

Has soil been removed/greatly disturbed?

Soil test results and recommendations

## Summary of farm features

### Objectives of Nutrient Management Planning:

The nutrient management reference guide, as provided by the Canada - B.C. Environmental Farm Plan program describes the core objectives of a nutrient management plan as:

A plan to supply crops with nutrients at the appropriate rate, timing, and with the appropriate method to produce an economically optimal crop in terms of yield and quality, and to minimize the risk of pollution by loss of nutrients via runoff, leaching, and emissions to the air or other loss mechanisms.

### Nutrient Management Planning Process (Describe):

#### 1. Data collection including the following:

Field information - for each field or block receiving nutrient applications of any type, field size and field history is required

Soil, crop and nutrient application details: information: the nutrient balancing process requires information on soil nutrient reserves, anticipated crop nutrient uptake (directly related to crop type, and yield) and potential nutrient supply from all sources. Soils information can be obtained through laboratory analyses of representative soil samples from all fields receiving nutrient applications. Similarly nutrient information is obtained from laboratory analyses of the manures, & composts.

#### Soil nutrient analysis components:

Available phosphorus

Available potassium

Nitrate-nitrogen

Organic matter %

Manure nutrient analysis components

Total nitrogen

Ammonium nitrogen

Total phosphorus

Total potassium

## **2. Nutrient Optimization**

The prime goal of a successful nutrient management plan is to match crop requirements for essential plant nutrients from all sources (soil, manures, & fertilizers). The 3 key plant nutrients are nitrogen, phosphorus and potassium. The ratio of nitrogen to phosphorus to potassium in manure is not the same as the ratio of these 3 nutrients required by most crops, therefore producers must adjust manure application rates and complement with appropriately formulated commercial fertilizers to achieve the optimal nutrient application balance.

## **3. Conclusions and Recommendations:**

Through the nutrient management planning process, areas can be identified where practices can be improved to increase nutrient use efficiency and/or reduce risk to the environment. If calculations indicate that a farm is generating more nutrients than can be utilized sustainably, then the plan can provide a strategy for dealing with surplus nutrients.

## **4. Soil, Compost, Analyses**

## **5. Observations on soil analysis and nutrient levels**

## **6. Fertilizer History & Type Including Organic Sources**

## **7. Rates & Timing of Nutrient Applications**

## **8. Methods of Nutrient application**

## **9. Water Sampling & Analysis**

## **10. Cover Crops used & reasons for use**

## **11. Description of Areas of Concern**

## **12. Nutrient Management Strategy**

## **13. Nutrient Application Recommendations**

## **14. Environmental Concerns**

**15. Conclusion:** This initial NMP should be considered as a first step in a longer term nutrient management strategy which can be updated and amended on a yearly basis as new information becomes available. Nutrient management planning is an important tool for producers to plan nutrient application make up & application rate and to maximize the nutrient value of soil amendments used on the farm and to use them in an environmentally sustainable manner.