



AECOM



Greater Vernon Water (GVW)

Technical Memorandum No. 8 GVW Financial Issues and Principles to Support the Master Water Plan

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Table of Contents

	page
1. Introduction	1
2. Progress Since 2002.....	2
2.1 Meeting the Needs of Domestic and Agricultural Customers	3
3. Regional Water Utility.....	4
3.1 Water Rate Planning.....	4
3.2 Domestic Water Rates.....	5
3.2.1 Domestic Water Rate Goals	7
3.2.2 Managing Risk of Revenue Loss as a Result of Conservation	9
3.2.3 Need for Accurate Water Use Data	9
3.3 Agricultural Water Rates.....	10
3.3.1 Agricultural Water Purchase Fee.....	10
3.3.2 Agricultural Water Rate Goals	11
3.3.3 Allocation Water Rate Improvements	12
3.3.4 Definition of Agricultural Water Customer	12
3.3.5 Potential for a New Non-potable Water Customer Classification	12
4. Allocating Costs Between Domestic and Agricultural Sectors	14
5. GVW Capital Planning	16
5.1 Funding Capital Works	16
5.1.1 Capital Works as a Result of System Improvement	16
5.1.2 Determining Future Capital Renewal Requirements and Reserves.....	17
5.1.3 Prioritize the Development of Watermain Renewal Plan and Strategy	19
5.1.4 Capital Works as a Result of Growth.....	19
6. GVW Reserve Funds.....	20
6.1 Operating Reserve.....	20
6.2 Statutory Reserve	20
6.3 Development Cost Charge Reserve.....	20
7. Framework for Preparing Financial Forecasts.....	21

Appendix A – GVW Revenue and Expenditures (2011 Actual & 2012 Budgeted)

Appendix B – GVW Inventory of Accounts (2012)

Appendix C1 – Cost Allocation between Agriculture and Domestic Sectors (2011 Actual)

Appendix C2 – Cost Allocation between Agriculture and Domestic Sectors (2012 Budgeted)

Appendix D - Classification of Land as a Farm Regulation (BC Reg 411/95)

Appendix E – Domestic Appeal for Agricultural Water Rate Application

1. Introduction

This Technical Memorandum reviews progress on the key management and financial strategies that were recommended in the 2002 Master Water Plan and provides updates on recommendations as GVW enters its second decade of operations. While many changes have occurred within the GVW water system over the past decade, the two most visible outcomes for GVW domestic customers are:

1. the quality of drinking water has increased (and is no longer at risk of seasonal variations); and
2. water rates have more than doubled since 2002.

Like all jurisdictions in British Columbia, GVW water quality guidelines are regulated by the local Health Region. BC Health recently issued a document titled Drinking Water Treatment Objectives (Microbiological) for Surface Water Supplies in British Columbia (November 2012). This document provides the expectations for water treatment within British Columbia and can be summarized as the “4-3-2-1-0 Dual Treatment Guidelines”. These guidelines indicate the following objectives:

- 4-log (99.99%) inactivation for enteric viruses;
- 3-log (99.9%) inactivation or removal for Giardia;
- 3-log (99.9%) inactivation or removal for Cryptosporidium;
- Dual stage treatment; two (dual) barriers to pathogens
- Less than 1.0 NTU turbidity in the treated water at all times; and
- Zero total and faecal coliforms.

This regulatory framework provides tangible performance targets for water suppliers to ensure the provision of microbiologically safe drinking water. This Master Water Plan is driven in part to provide an implementation plan so that GVW can meet these standards in a manner that is reliable and cost effective.

Meeting these targets will require further capital investment and as a result, water rates will continue to increase. Water rate increases will become increasingly sensitive to local rate payers and thus GVW customers need to be assured that the utility is incorporating best management practices. Customers also need to be assured that their water rates are fair and appropriate and that they reflect local municipal and regional policies and strategies.

Because of the importance of financial management within the Master Water Plan, this Technical Memorandum (TM) outlines relevant water utility financial planning and administrative best practices and presents a framework that will fulfill the regional requirements in advance of the technical engineering and optional analysis work within the remainder of the Master Water Plan. It is recognized that the GVW will undergo a review of governance options following the completion of this Master Water Plan, but it is anticipated that strategies recommended in this TM are applicable regardless of the selected governance option (though this presumption will be reviewed as alternative governance options are considered).

2. Progress Since 2002

Most of the financial and management recommendations made within the 2002 Master Water Plan have been implemented over the past 10 years. As recommended, assets including all regional water licenses (both domestic and agricultural) were transferred to the RDNO and remain in the service of the regional taxpayers (land and buildings have not yet been transferred as originally planned). GVW now operates as a stand-alone water utility that serves the entire Greater Vernon Region (including the City of Vernon, District of Coldstream, and portions of Spallumcheen and Electoral Areas B, C, and D). While GVW administers the entire water system, it contracts the operations and maintenance (O&M) services of the distribution systems to the City of Vernon and the District of Coldstream. GVW Staff operate and maintain the water treatment systems.

The RDNO (under the authority of the Greater Vernon Water Service Amendment Bylaw No. 1764, 2002) now owns and administers the entire water supply and distribution system within the service area. The creation of a single water utility (GVW) has allowed the region to simplify the responsibility of securing a long term water supply from both a quantity and quality perspective and also facilitate the ability to operate the system in the most economical means possible. Section 3 of Bylaw No. 1764 sets out a comprehensive scope for GVW services; this current scope includes:

- Acquisition and construction of water supply and water distribution infrastructure
- Operation, maintenance, repair and replacement of supply and distribution infrastructure
- Acquisition, improvement and maintenance of land, buildings, equipment, vehicles and other items needed to run the system
- Acquisition and holding of water licenses
- Planning for supply and distribution needs
- Provision of bulk water for sale to other jurisdictions
- Reclamation of water from waste treatment, agricultural, industrial and other facilities
- Carrying out of any other function that involves water supply or distribution

GVW, through the Regional District of North Okanagan, now has powers provided under the Local Government Act, including the ability to:

- Borrow money for the purpose of new capital investment
- Establish cash reserve funds for specified purposes
- Set and adjust water rates based on the established governance mechanisms

The implementation of GVW as the consolidated regional water utility has not been without its governance and organizational challenges. The history of these challenges is well described in the “Overview Paper” that was prepared by Nelson-Welch Consultants in May 2010 and is not discussed further in this Master Water Plan. Some of these issues manifested themselves shortly after the completion of the 2002 Master Water Plan, driving the need for a range of technical revisions. These revisions were documented in the 2004 Update to the Master Water Plan. The most significant technical revision was that the recommendation to completely separate the domestic and agricultural water distribution systems in a five year horizon was abandoned. This decision resulted in a change to the water treatment strategy where it was recognized that using treated water in some areas for agriculture was inevitable, at least for the medium term.

Regardless of alternative future governance options, GVW will continue to serve two distinct customer classifications under two different water pricing strategies: domestic water customers (household, commercial, institutional and industrial), and agricultural water customers (bona fide farming operations). Ten years ago and earlier, the implications of the two customer classifications were minor as all customers received unfiltered water that was treated at a low per unit cost. Over the past decade, the need for higher quality drinking water has required a major capital program that will expand in the future to ensure that all domestic water customers in the GVW service area have continual access to safe drinking water that meets the 4-3-2-1-0 standard. These improvements are reflected in the increased rates described in Section 3. Since agricultural water does not require treatment, the strategy over the past 10 years has been to ensure that bona fide agricultural customers receive agricultural water that is priced according to a formula that does not include the capital or O&M costs associated with water quality improvements. By ensuring that agricultural water rates do not include costs associated with water quality improvements, agricultural customers are able to operate commercially viable farms and agricultural businesses that have been part of the Greater Vernon area economy for decades.

2.1 Meeting the Needs of Domestic and Agricultural Customers

One of the most difficult engineering and administrative challenges within the GVW system is meeting the needs of two very different customer classifications. Domestic customers require a high quality water all of the time, while agriculture does not. Agricultural water demand is seasonal, but accounts for about 60% of the total water demand. Agriculture also drives the peak demand which sets the capacity requirement for design of the overall system. While this is becoming a more common approach to providing water in the Okanagan Valley, it is unusual in a North American setting which makes it difficult to look to documented technical standards and Best Practices for guidance (for example, AWWA and the Water Research Foundation). These unusual systems require unique solutions to meet the needs of all users in a manner that is fair and equitable when it comes to water rates.

The 2002 GVW Master Water Plan originally recommended that the domestic and agricultural distribution system be separated over a five year period. System separation would eliminate the need to use more expensive treated water as agricultural water. Once the systems were fully separated, it would also be possible to accurately determine the true cost of operating and maintaining each system individually. Future pricing in both networks were to be based only on their own costs. The 2002 Master Plan recommended that agricultural water pricing remain stable with only consumer price index adjustments to be made over time. Due in part to higher than anticipated capital costs and the lack of grant funding for separation projects, the separation program has been implemented at a much slower rate than originally anticipated and is now being re-evaluated as the preferred long term technical strategy. The agricultural water pricing strategy that is based on year-to-year rate stability (but adjusted to inflation) continues essentially unchanged today since 2002. This version of the Master Water Plan needs to identify a technical and administrative solution that will enable the GVW to provide the most economical system to all users in a manner that is transparent, fair, and equitable.

3. Regional Water Utility

GVW will continue to serve all water customers in the Greater Vernon Region, including domestic water users (household, commercial, and industrial customers) and agricultural users (bona fide farming operations). These two customer groups are defined in part by their different requirements for water. Domestic customers require water that is of high quality (that meets or exceeds all current and future regulatory requirements) throughout the year on a very reliable basis. Sufficient capacity must be available at all times for domestic and emergency purposes (such as firefighting). Agricultural water on the other hand, is used for the purpose of irrigation and does not require advanced treatment (only that it be safe for distribution and consumption by livestock). Capacity however, must be assured during the growing season. During winter months, the non-potable system can be closed, except where the stock watering and firefighting system is connected.

3.1 Water Rate Planning

Since 2002, GVW has derived almost all of its revenue from water rates. Table 3.1 below shows the breakdown of GVW revenue by source in 2011 and 2012. The only factor that could change the approximate percent contributions to different revenue sources in the coming few years will be the availability of infrastructure grants. Since it is not possible to predict with accuracy the availability of grants in future years, this Master Water Plan is being developed using a conservative approach to funding, (though it will be possible to examine alternative scenarios where grant funding does become available).

Table 3.1: GVW Revenue by Source

	2011 Actual	2012 Budgeted	% of Total (2012)
Revenues			
Revenues From Domestic Water Rates	\$ 11,522,396	\$ 15,042,723	69%
Revenues from Agricultural Water Rates	\$ 790,963	\$ 818,550	4%
Revenues From Other Fees/Services	\$ 663,256	\$ 879,824	4%
Total Revenue from Operations	\$ 12,976,615	\$ 16,741,097	
Federal/ Provincial Grants	\$ 3,342,316		
Transfer From Reserves		\$ 4,078,689	
DCC Funded	\$ 2,125,268	\$ 828,000	
Surplus From Previous Years			
Other	\$ 384,893	\$ 7,020	
Sub total	\$ 5,852,477	\$ 4,913,709	23%
Total	\$ 18,829,092	\$ 21,654,806	100%

* Domestic includes residential and ICI sectors.

As expected, the introduction of more advanced water treatment within the GVW service area caused utility costs to increase. The impacts of the 2002 Master Water Plan and the 2004 Update to the Master Water Plan required substantial new capital investment as well as an increase in annual operations and maintenance costs due to the more complicated technical demands of the enhanced water system. Table 3.2 shows the impact of increased costs on GVW customers.

Table 3.2: GVW Rate Increases: 2002 - 2012

GVW Customer	2002	2012	% Change
Average Domestic SFD Residence*	\$286	\$625	119%
Agricultural Allocation per Hectare	\$185	\$238	28.6%
Inflation (Canadian Consumer Price Index)	\$100	\$121.12	21%

*based on 350 m³ annual consumption (estimated average for GVW service area)

3.2 Domestic Water Rates

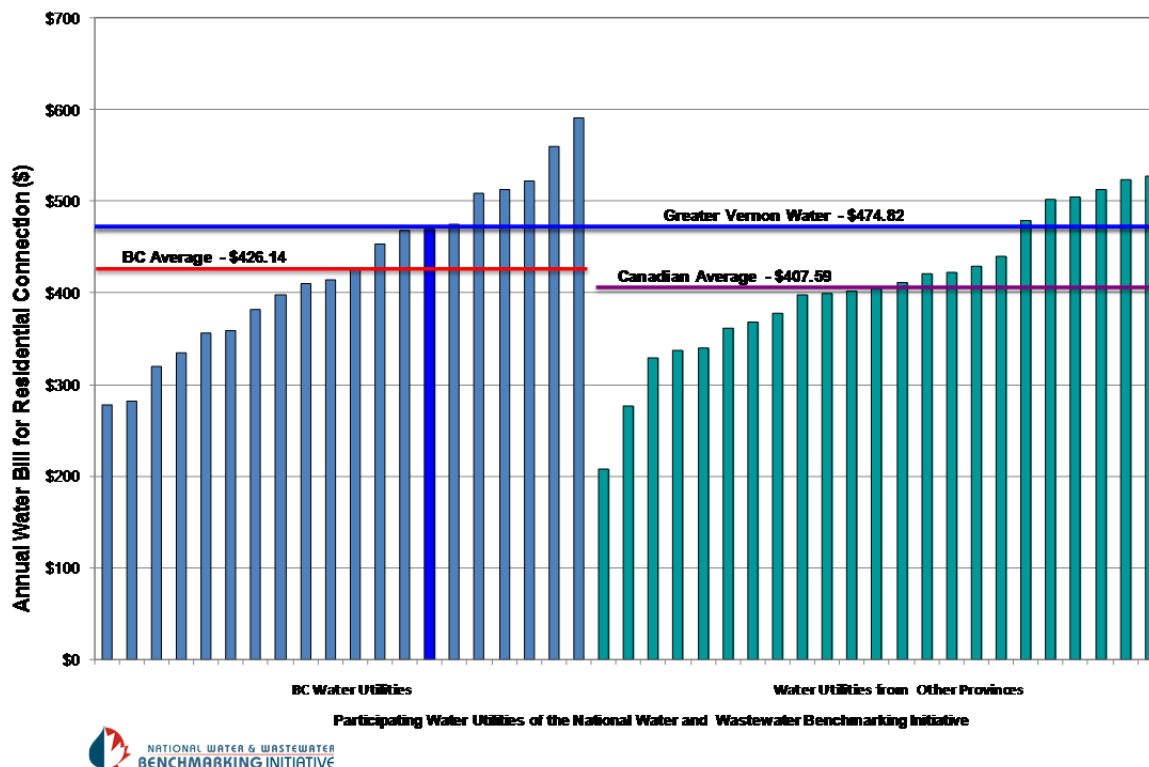
Over the past ten years, GVW has undertaken a significant capital program to ensure that drinking water conforms to regulations for acceptable drinking water throughout the year. Along with the investment in water treatment, GVW has made investments in separating the domestic and agricultural distribution systems to reduce the use of more expensive treated water for agriculture. As a result of these capital programs, domestic water rates have increased by approximately 120% since 2002.

GVW's recent experience in increasing water rates is very similar to most other communities in BC and Canada. In fact, BC water rates on average have increased more than other Canadian regions primarily due to the fact that water treatment is a recent development in many parts of BC (especially the Okanagan Valley), but has been commonplace in most other areas in Canada for decades. According to a recent survey conducted within the National Water and Wastewater Benchmarking Initiative partnership¹, all surveyed water utilities fully expect water rates to continue to rise well beyond inflation over the next five year horizon to fund water quality improvements, and to respond to a range of local requirements.

¹ GVW participated in the National Water and Wastewater Benchmarking Initiative in 2011 and 2012. This enabled the GVW to conduct a wide range of organizational and level of service comparisons amongst 40 leading urban water utilities in Canada. In 2012, the National Water and Wastewater Benchmarking Initiative was recognized with the "Water Next" award for industry leadership from Water Canada

Figure 3.1 below compares the approximate water bill of a standard single family detached dwelling within GVW with other jurisdictions in British Columbia and Canada. This comparison is based on an annual water consumption of 250 cubic meters of water. It is important to note that while the current level of water consumption is higher than this in Greater Vernon and the Okanagan Valley, 250 cubic meters is the approximate national average within the National Water and Wastewater Benchmarking Initiative. British Columbia lags behind other regions of Canada in terms of water conservation efforts, but it is reasonable to expect that over the next decade, BC water consumption patterns will be more closely aligned with Best Practices and national averages.

Figure 3.1: 2012 Annual Water Bill for Detached Residential Connection (using 250 m³/year)



Since GVW is required to respond to the BC Drinking Water Protection Act and Regulations, a continued capital program to enhance water quality is required. To fund this program, domestic water rates will continue to increase at a rate that is higher than inflation until the capital program is complete. It is therefore recommended that GVW adhere to well documented Best Practices in developing water rates that respond to community needs and priorities.

Best Practices for developing water rates and fees is well documented by AWWA². This general Best Practice approach is also summarized and condensed within the National Guide to Sustainable Municipal Infrastructure (InfraGuide)³. Best Practices recommend that water rates must be developed in association with the principles and objectives of the local community in mind. Well-designed water rates have the potential to help in implementing an important range of community and utility objectives. For example, the communities that make up the GVW service area have made an important commitment to improve water conservation and are using inclining block water rates as a proven strategy to provide a financial incentive

² AWWA M1 Manual, Principles of Water Rates, Fees, and Charges.

³ Water and Sewer Rates: Full Cost Recovery; National Guide to Sustainable Municipal Infrastructure (InfraGuide), 2006

for customers to play a part in water conservation. GVW also maintains a rigorous drought management policy that rations water in an equitable manner during years when drought conditions apply.

The InfraGuide Best Practice defines the first step in designing an overall water rate strategy to set the goals that future rates must achieve. Since this Master Water Plan will set the stage for future water rate strategies, it is important that a complete suite of water rate goals be agreed upon and documented. Furthermore, since GVW sells water under different pricing schedules to domestic and agricultural water accounts, it is important that the goals be reviewed and confirmed for both account classifications.

According to InfraGuide and AWWA, goals for Best Practice-based water rate setting are presented below:

- **Full Cost Recovery** – Recover the full cost of operating and maintaining the utility, and ensure that the utility has adequate cash flow through the year to enable it to meet its financial obligations. According to InfraGuide Best Practices and recent policy objectives of the British Columbia Ministry of Community Development, “full cost” should be based on life cycle asset management principles whereby provisions are made to plan and pay for infrastructure renewal.
- **Level of Service** – Consultation with customers on the range of services and service levels that can be achieved and the associated costs is an important step to include in a rate setting exercise. Customer service levels should be defined for such items as minimum water quality, water pressure levels, fire protection, outage frequency (main breaks), etc. In most cases, regulations dictate the water quality standards.
- **Fairness and Equity** – Rates should be fair and equitable to all utility customers and customer types. Equity is usually interpreted in terms of the user pay principle and requires customer charges to be proportionate to the cost burden associated with servicing each customer. Equity or fairness is an objective that is very important when customers are being asked to pay. It is strategically easier to defend increased charges if the costs are allocated based on equity.
- **Transparency** – Rates should be transparent and understandable to all customers. Customers should understand the basis of their charges, and the utility should be able to defend the appropriateness of the charge.
- **Promote Water Conservation** – Rates can be used to ensure that the community’s environmental stewardship and water conservation objectives are taken to account. For example; what are the specific water conservation goals that will require water consumers to take steps to reduce water usage according to industry accepted best practices. Inclining block rates are a proven strategy to help promote water conservation by offering a financial incentive to reduce consumption, especially at peak times.
- **Revenue Stability** - Ensure that water revenue is stable from year to year, and that variations in annual demand due to climatic variations do not result in revenue shortfalls (or extraordinary surpluses).

3.2.1 Domestic Water Rate Goals

Now that all domestic water connections are fully metered, GVW is able to implement water rates that are in keeping with AWWA Best Practices. Over time, rates can be adjusted to focus on individual goals as the needs or conditions arise. For example, consumer reactions and responses to significant drought events can be accurately monitored and subsequently anticipated so that better drought management strategies can be planned in advance. It is important to note that some of the goals noted above can potentially conflict with one another. For example, a strong emphasis on inclining block water rates to promote conservation is actually unfair from a cost perspective; since in most cases the actual cost to provide occasional high volumes of water to some consumers does not equate to the top block volumetric

water price. In this case, local policy should be used to determine the priorities amongst competing goals that the rate water is designed to achieve.

GVW water rates are composed of two components: an annual flat rate portion that reflects and pays for the right of the customer to draw on the system's capacity (known as a capacity charge); and a per unit consumption charge (known as a consumption charge) based upon actual water consumption. The total bill is a combination of both components. Table 3.3 below reviews the RDNO Water Rate Bylaw No. 2527, 2012 in relation to the Best Practice Goals presented in Section 3.2.

Table 3.3: Review of GVW Domestic Water Rates against AWWA Best Practices

	AWWA Water Rate Goal	Compliant?	RDNO Bylaw 2527
1	Full Cost Recovery	Yes	The 2012 water rates were designed to recover all of the 2012 budgeted costs. This includes contributions to reserves to begin addressing future infrastructure renewal requirements and to pay for 2012 capital costs. The rates should result in a balanced budget at year end.
2	Level of Service	Generally	Water quality levels of service are regulated, and the water rates are based on the cost to treat water to the regulated standard. Other levels of service (e.g., outages, fire flow, water pressure, etc.) are not published, but GVW meets levels of service that are considered normal for the industry according to recent benchmarking analysis.
3	Fairness and Equity	Yes	Customers are charged for the water they use based on quarterly meter reads and published pricing. Water customers that consume high volumes of water will pay more than customers who use less water based on an inclining block rate.
4	Transparency	Yes	Customers are able to forecast their water bill and they have the ability to impact overall charges to some degree. Since the rates are designed to recover annual budgeted costs, customers are able to request budget details if they are interested in seeing exactly what is included in the rates. Bylaw changes are subject to customer input and questioning prior to formal ratification.
5	Promote Water Conservation	Yes	GVW specifically targeted this goal by implementing inclining block rates that were designed to encourage water conservation during the high demand summer season. It is reasonable to expect that water conservation strategies will be successful over time and that individual households could see annual water consumption decrease by up to 10%.
6	Revenue Stability	Yes	The 2012 Bylaw saw a return to a larger portion of revenue based on the capacity charge to reduce the risk of revenue instability. The water rates were designed to ensure that the utility could withstand wet summer seasons (where customers use less water) based on historical data. GVW also maintains an Operating Reserve which can be used to bridge the occasional years where revenues are below annual costs.

GVW domestic water rates and the rate planning process generally conform to AWWA Best Practices, recognizing that local policy has placed a strong emphasis on using water rates to promote water conservation. The use of a high volume rate for the top water block does not reflect the true cost of providing that water, but does provide a strong incentive to keep consumption below that top block level. It is a balancing act to set water rates to meet water conservation efforts and still be fair and equitable.

3.2.2 Managing Risk of Revenue Loss as a Result of Conservation

GVW domestic water rates feature an inclining block with four pricing levels that are escalated by volumetric water consumption. The steep inclining block rate was implemented to provide a strong financial incentive to encourage water conservation. Using a variable rate to fund a system that is largely fixed cost has risk. If water consumption does not align with projections, actual revenue will also not align with targets. The risks of an inclining block rate structure is that as water consumers change their water consumption habits, the utility becomes at risk of repeating and increasing revenue shortages as revenue from the top block diminishes. In other words, an inclining block water rate can be a victim of its own success. This is a situation that many water utilities in Canada are encountering as domestic water consumption continues to drop. Due to a wet summer season in 2011, water utilities in the Okanagan Valley using inclining block rates reported revenue shortages (including the GVW)⁴. This may be a result of a single wet year, but there is a risk that it might be a trend of diminishing water demand.

Recognizing that GVW was vulnerable to revenue shortfalls, the rate setting exercise that resulted in the 2012 Bylaw shifted a greater portion of water revenue to be collected from the flat base fee as opposed to the consumption-based volumetric charge. The rate planning process that resulted in the 2012 Bylaw set a planning objective that approximately 50% of domestic account revenue be collected from the base fees and that the remaining 50% is collected from the volumetric portion of the rate. This adjustment was made to better reflect the fact that the water system is primarily a fixed cost system where only a small portion of the utility costs are variable. It is recommended that GVW monitor annual domestic water consumption patterns carefully in the coming few years so that advanced stakeholder consultation can take place to find acceptable alternatives to ensure the utility does not become financially challenged.

3.2.3 Need for Accurate Water Use Data

The analysis conducted for this TM noted that GVW has not used current and historic meter data as effectively as it could to support water usage planning and analysis. Meter read data is presently stored and managed differently by the jurisdictions that prepare the water bills (Vernon, Coldstream and RDNO) mainly due to variables in financing software requirements. This data is not easily accessible to support applications other than direct water billing. It was challenging to gather and process utility-wide meter data for the purpose of examining water consumption trends and water usage patterns. The raw data files are subject to errors and omissions. This data has an enormous potential to assist a wide range of utility management functions including rate planning, water loss management and leak detection – to name only a few. It is recommended that the GVW undertake a data management initiative that would make the consolidated water consumption data available to support a wide analysis of water usage, consumption and demand. This initiative should be directed to:

- Identify general business requirements that water meter read data could/should support
- Determine the best method to ensure that individual privacy matters and data security matters are taken into account
- Recommend a common meter data storage process (consolidating all meter reads from all jurisdictions)
- Recommend a common data quality assurance process so that the data is not at risk of errors and can be used to confidently support a range of regional water use patterns and trends

⁴ City of Kelowna and the Westbank Irrigation District reported 2011 revenue shortages to AECOM staff

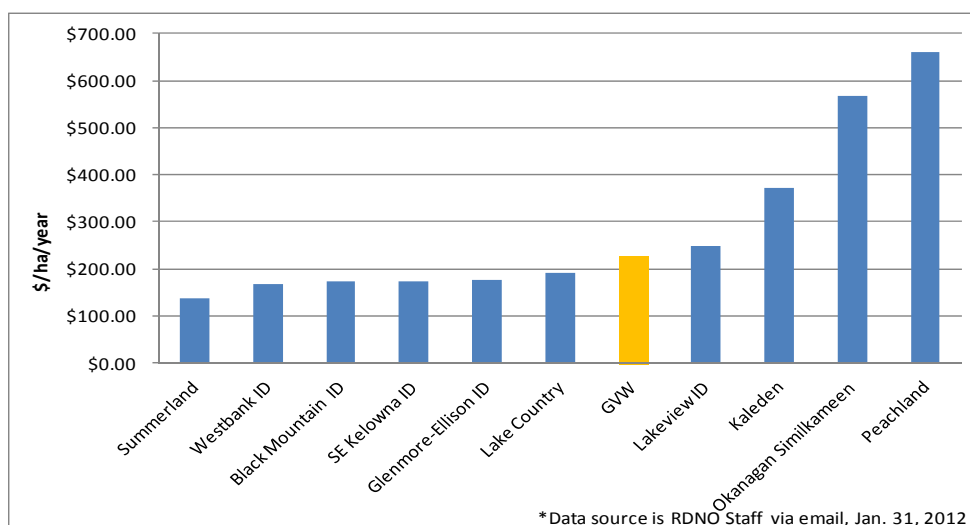
3.3 Agricultural Water Rates

In GVW, an “allocation” is a proviso to obtain water, subject to availability, from the system and is tied to the property. Currently, the agricultural allocation is 550mm/year per hectare. The allocation fee is \$238.00/year per hectare (\$59.50 per hectare per quarter) (2012), and is charged whether water is consumed or not. This is considered to be a flat rate revenue system, but the 2012 Water Rate Bylaw included an important enhancement to the agricultural water rate strategy. For the first time, the Bylaw included a provision to bill a surcharge on the allocation rate for excess water consumption. This important provision is possible now that all agricultural connections are fully metered. While the strategy for setting agricultural water rates has not formally changed in principle since the 2002 NOWA Master Water Plan⁵, Bylaw 2527 introduces the important element of fairness and it promotes an introductory financial incentive for water conservation. Bylaw 2527 introduces an inclining rate block structure for water consumption that exceeds the allocation. In general however, since 2002 agriculture rates have received approximately inflationary level increases from year to year. The present guiding principles of the GVW agricultural water rate are threefold:

1. Be competitive with agricultural water rates within the Okanagan Valley.
2. Remain stable from year to year.
3. Encourage efficient use of water to ensure equitable distribution.

Goals one and two have been successfully achieved and goal three is in progress. Figure 3.2 below shows a comparison of a selection of Okanagan area agricultural water rates in 2011.

Figure 3.2: 2011 Irrigation Water Rates for Bona Fide Agricultural Water Customers



3.3.1 Agricultural Water Purchase Fee

In addition to annual allocation charges, GVW applies a charge when new allocations are sold to irrigate new agricultural land (Agricultural Water Purchase Fee). This is a legacy fee from the former Vernon Irrigation District (VID) and was historically known as a Regrade Charge. It was used to fund expansion of

⁵ 2002 NOWA Master Water Plan stated that “GVW should maintain the flat allocation-based water rate structure for irrigation customers and the rate remains stable until such time that a detailed costs analysis can be performed (following system separation)”.

the capacity of the agricultural water system (under the former Regrade Charge Bylaw #631) as new users joined the system. Since the termination of VID as an operating entity, the Agricultural Water Purchase fee now is collected as general water revenue.

3.3.2 Agricultural Water Rate Goals

While none of the current agricultural water rate goals have a connection to actual system costs, the 2012 Water Rate Bylaw is beginning to move towards the Best Practice goals. Table 3.4 reviews the recently approved 2012 GVW agricultural water rates in relation to the AWWA-based Best Practice goals. While the AWWA-based Best Practice goals were documented primarily with drinking water utilities in mind, irrigation users are not precluded from recommended Best Practices under the premise that good water stewardship and management outcomes are desirable for all water utilities⁶. The AWWA Manual M-1 was intended for use on all water utilities.

Table 3.4: Review of GVW Agricultural Water Rates against AWWA Best Practices

	AWWA Water Rate Goal	Compliant?	Allocation-based Rates
1	Full Cost Recovery	Unsure	Allocation fees are not set according to the revenue requirements of any specifically developed water utility budget because the domestic and agricultural systems are combined into one. The rate is determined annually based on the three guiding principles noted above.
2	Level of Service	Yes	Since agricultural water quality does not need to be at the same level as drinking water, levels of service are limited to water outages and availability. GVW is responsive to issues that result in loss of service.
3	Fairness and Equity	Beginning	A flat rate is charged, up to the allowable water allocation, regardless of the actual amount of water consumed, but for the first time, GVW made a surcharge (2012) for water consumption in excess of the allowable allocation. The surcharge increases in stepped blocks to promote water conservation.
4	Transparency	Yes	Customers understand the nature of the charge mostly due to its simplicity.
5	Promote Water Conservation	Partially	Bylaw 2527 introduced a surcharge for water consumption which is in excess of allowed allocation. The allocation is based on minimum requirements for crop production thus; there are no rate-based financial incentives to encourage water conservation within the allowed allocation. GVW also participates in the Okanagan Irrigation Management (OKIM) program which improves water demand-side management for irrigation customers by comparing actual consumption obtained from meter readings to the water demand calculated by the Agricultural Water Demand Model (AWDM) based on current climate records, crop type, irrigation system, and soils.
6	Revenue Stability	Yes	The mostly flat rate system ensures that revenue stability is assured.

Best Practice-based water rate goals are gradually being implemented within the agricultural water rates.

⁶ AWWA Manual M-1 "Principles of Water Rates, Fees, and Charges" discusses irrigation user charges in Chapter 2: Sources of Revenue

3.3.3 Allocation Water Rate Improvements

Until it is possible to better allocate costs to the domestic and agricultural water systems, it is recommended that the current allocation-based rate structure that is presently used within GVW be generally maintained to fund O&M and administration costs (since current estimating techniques show that current revenue is approximately covering current costs). Since the allocation rate does not have adequate revenue to fund any capital contributions, GVW is recommended to begin applying a capital charge to the allocation rate that is based on projected capital requirements (developed through the long range capital plan). In the near term, very few of the proposed capital projects have a benefit or should be allocated to the agricultural system due to the fact that:

1. Water quality improvements are not applicable to the agricultural system; and
2. Agricultural water demand is not expected to increase and thus there is no requirement to expand the current agricultural infrastructure.

In the longer term, as the agricultural water system ages and becomes in need of renewal, it will be appropriate for agricultural customers to share in the cost of system renewal. The current allocation rates do not have any allowance to contribute to capital. This charge can be applied from year to year as the need requires, or alternatively, GVW can begin building an agricultural reserve so that rates can be smoothed over a period of years.

This Master Water Plan also makes recommendations regarding the beneficial reuse of wastewater effluent, which should be considered as part of the agricultural water supply. Depending on the allocation policy GVW adopts, a portion of these costs may appropriately be allocated to the agricultural customer base.

3.3.4 Definition of Agricultural Water Customer

GVW utilizes the BC Assessment Authority process that provides bona fide properties with a “farm classification” for taxation purposes through a procedure established under the Assessment Act – Standards for the Classification of Land as a Farm Regulation (See Appendix D).

The concern associated with the supply of agricultural water to properties that are not deemed as farm classification by BC Assessment has been an ongoing issue within the GVW service area. To address the requests of users that want access to low cost agricultural water, an appeal process has been developed. The appeal process consists of the customer completing the Domestic Appeal for Agricultural Water Rate Application (See Appendix E). The current process is used by roughly 50 customers. There is considerable staff time spent dealing with enquires, complaints, and in processing applications surrounding agricultural water and water use⁷

3.3.5 Potential for a New Non-potable Water Customer Classification

Agricultural water for irrigation has been an essential resource to ensure that a vibrant and prosperous agricultural industry can exist in the Greater Vernon Region. Greater Vernon farming and agriculture provide significant economic opportunities through the entire Okanagan region. While it is proposed that agricultural water allocations continue for all bona fide agricultural customers, there are a large number of acreages that are not farming commercially, but may benefit from having access to a source of non-potable water. Provided that GVW has adequate capacity, there may be an opportunity to sell a new non-potable quality of water that is priced between the current agricultural water and domestic water rates. This could result in a

⁷ Jan 31, 2012 Minutes of Treasurers' Meeting with AECOM staff

new source of revenue within the agricultural side of the utility. While such a new water product would be attractive to some customers, there are many technical issues regarding access to non-potable service, and the required distribution network needs to be investigated before the feasibility of this product can be determined. This water rate could only be made available where watermains and services are separated.

This opportunity has been included in this document for discussion purposes only. No engineering or market analysis of this option has been conducted within the scope of this study and this new water classification is not recommended for consideration within this Master Plan. Should GVW Staff see merit in this potential, further analysis can be undertaken as directed by the Board of Directors.

4. Allocating Costs Between Domestic and Agricultural Sectors

The purpose of this section is to provide an estimate of the operation and maintenance costs split for current domestic and agriculture consumption. The split of cost between domestic and agriculture is very difficult to quantify given the current accounting and sharing of facilities; however, we have prepared an estimate of the split of domestic versus agricultural O&M costs for the combined system. Given the systems are combined, this does not mean you can remove one component as a standalone system and expect the O&M cost to remain the same or even go down.

The results of the cost allocation process below has been advanced specifically and solely to provide some insights in conducting O&M estimates used in TM 9 for analysis of the various options. The information garnered will provide some assistance in estimating the O&M costs under various scenarios.

Over the past few decades, the GVW system has operated as a combined water system to meet the needs of two very different customer classifications. Domestic customers require high quality water all of the time, while agriculture does not. Agricultural water demand is seasonal but accounts for about 60% of the total water demand. Agriculture drives the peak demand which sets the capacity requirement for design of the overall system while domestic water quality objectives require the significant investment of new capital and O&M needs which impacts system costs.

Currently, water rates collected from both customer classifications are deposited as revenue from user rates. This revenue is spent through the year according to the approved budget, and there is currently no accounting process for allocating costs between domestic and agricultural customers. While it is not possible using data that is currently available to determine a precise allocation of costs between the domestic and agricultural user groups, it is important to prepare an estimated percent split of annual administration, operations and maintenance costs between the domestic and agricultural customer groups to enable an reasonable cost benefit analysis of the various technical alternatives detailed in TM 9. This will be especially important when comparing alternatives that feature varying levels of system separation up to and including full separation. Without a consistent basis to apply future O&M cost estimates, the resulting life cycle analysis computation could result in misleading conclusions.

A number of alternative approaches to allocate costs were tested in this analysis, and in the absence of supporting data each were dependant on a range of possibly conflicting assumptions. Ultimately, a collaborative exercise was conducted whereby consistent assumptions were applied to all of the Administrative and O&M General Ledger (GL) accounts in both the 2011 Actual and the 2012 GVW Budget costs. Each GL account was reviewed under the following criteria:

- Items that could be easily allocated to either the agricultural or domestic systems were identified. These were items such as *Irrigation ON/OFF*, *Service Backflow Prevention*, and the *Water Treatment Plants*.
- Items such as *Water Licenses* and *Intake Maintenance* were agreed to be split based on straight flow volumes. Flow volumes from TM1 of 57% agricultural and 43% domestic were applied to these costs.
- The *Utilities* account is a lump sum cost for electricity and natural gas used in all pump stations, PRVs and air valves. A significant amount of this cost can be attributed to the Kalamalka Lake Pump Station electricity costs. This known amount was removed from the *Utilities* Item and relocated to the Mission Hill WTP Item. The remaining *Utilities* costs were allocated based on pump

station horsepower and their use as agricultural or domestic stations (this was completed independently by the RDNO, Vernon and Coldstream members of the group and sent to AECOM via email on January 29, 2013); the results of the pump station allocation were 60% domestic and 40% agricultural and were applied accordingly.

- For most other O&M items, the group was able to agree on a percent split of domestic and agricultural based on field knowledge and previous experience. Notes from this discussion are included in the last column of the table in Appendix C.
- Once the O&M tasks were allocated, the remaining unallocated items consisted of administrative and overhead costs (IT, "General Operations", etc.) It was agreed that the best way to allocate these costs was to sum the previously allocated O&M tasks, calculate a percent agricultural and percent domestic of the total cost, and then allocate the remaining administrative and overhead time based on the assumption that a corresponding percentage of administrative and overhead time would be required to complete these O&M tasks.
- The O&M percentages were applied to the remaining tasks and a total resulting percentage and cost for both the agricultural and domestic systems were calculated.

Based upon the cost review and given the number and subjectivity of assumptions utilized, the following range in operation & maintenance allocation was computed. Supporting details and computations are provided in Appendix C.

Table 4.1: Allocation of GVW O&M and Administrative Costs: 2011 Actual & 2012 Budgeted Costs

	Agricultural	Domestic	Total
2011 Actual Cost	\$1,760,000	\$8,170,000	\$9,930,000
Percent of Total Cost	18%	82%	100%
2012 Budget Cost	\$1,400,000	\$8,580,000	\$9,980,000
Percent of Total Cost	14%	86%	100%
Average of Percentage	16%	84%	100%

This exercise has attempted to distribute a fair share of costs upon the existing GVW combined agricultural and domestic water system using one year of actual data (2011) and one year of budgeted data (2012). As expected, the result will be different from year to year depending on what activities were conducted and where O&M resources were required. As additional years of data become available for review, it will be possible to refine the estimate in Table 4.1. To compensate for the low level of confidence in defining a single point, even as an average over two years, sensitivity analysis on the impact of O&M costs on the life cycle cost analysis of each technical option in TM 9 will be conducted using the follow range of O&M percentage allocations:

Table 4.2: Range of O&M Allocations to be Testing in Option Life Cycle Assessment

	Agricultural	Domestic	Total
High Range Estimate (+25%)	20%	80%	100%
Midrange Estimate (Average of 2011 and 2012)	16%	84%	100%
Low Range Estimate (-25%)	12%	88%	100%

Finally, it is important to note that the above exercise has attempted to allocate actual costs on the existing GVW system. This exercise is differentiated from an attempt to estimate expected O&M costs on a system that is dedicated only to agricultural users and domestic users (in other words, two fully separated systems).

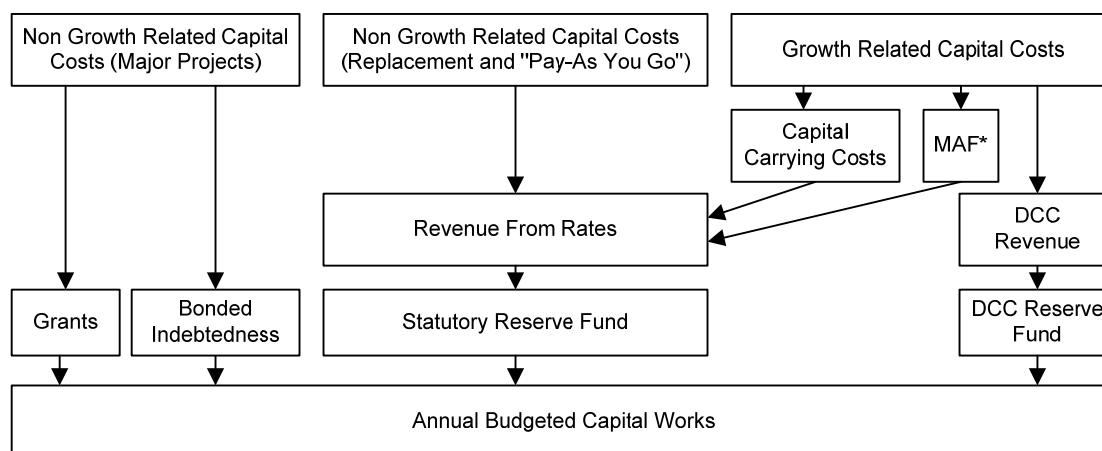
5. GVW Capital Planning

Regardless of the alternative future governance options, it is recommended that GVW continues to be responsible for establishing the long-range capital plan for the regional water supply, treatment and transmission functions of the utility. This plan will be used in the planning of water rates, service levels, and capital works projects designed to meet water quality requirements, system efficiency/improvement, overall water demand and finally infrastructure renewal. The ongoing task of managing and updating the capital plan should be the responsibility of GVW, since GVW will be solely responsible to insure that upgrades and expansions according to the plan are delivered on time and within budget.

5.1 Funding Capital Works

Future capital works will fall into one of two categories: 1) capital works as a result of system improvement, or 2) capital works as a result of growth. Figure 5.1 shows at a high level the means by which capital projects would be funded.

Figure 5.1 Funding Capital Works



*MAF: Municipal Assist Factor

5.1.1 Capital Works as a Result of System Improvement

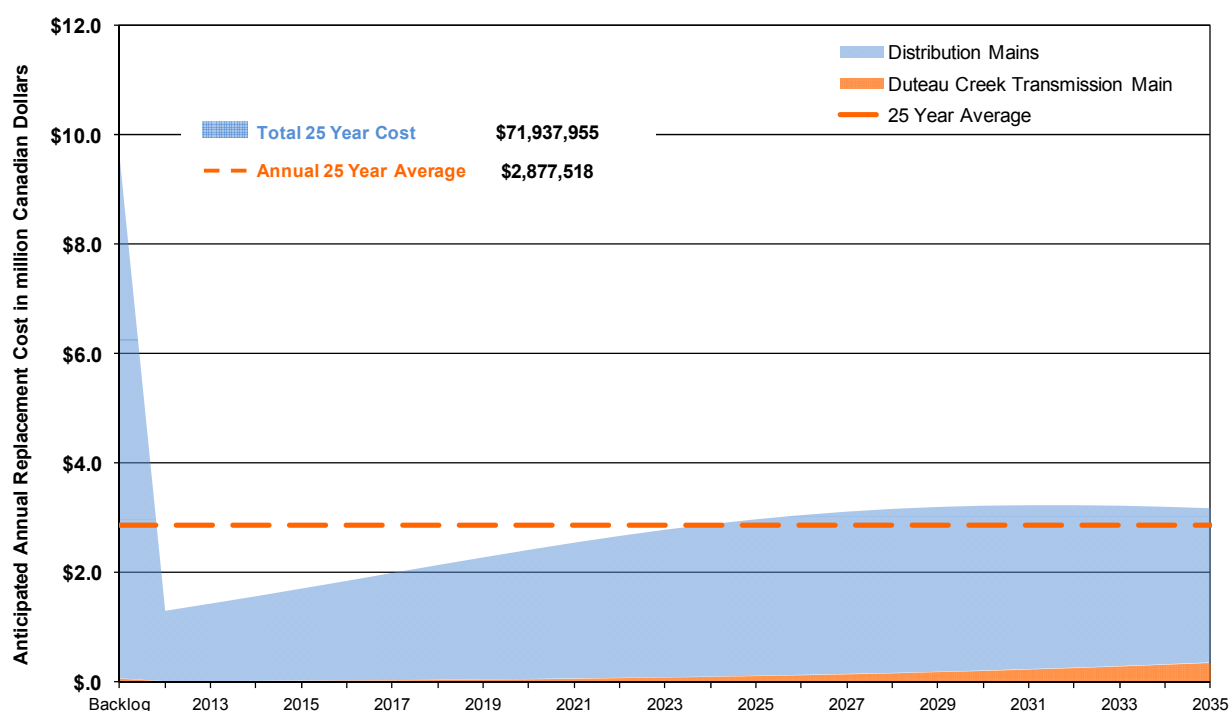
Capital works as a result of system improvement, re-investment and replacement will be paid through rates. Major capital works that will result in an increase in the level of service to customers (such as enhancement of water treatment systems) will be funded largely through debt though this would be confirmed on a project specific basis. The cost of servicing existing and future debt and the new costs associated with operating and maintaining new works will be paid through domestic water rates. Grants, such as Federal/Provincial Infrastructure Programs, will be applied for and accessed as much as possible. Smaller capital projects such as system upgrades, infrastructure renewal programs and some separation projects may be paid through rates on a “pay as you go” approach. GVW has provided for and funded reserves for this purpose. The decision to fund capital projects through pay-as-you go or through debt will remain with GVW administration and be ratified through the annual budget setting process.

5.1.2 Determining Future Capital Renewal Requirements and Reserves

Over the last several years GVW has been planning for future infrastructure renewal. At this point, GVW has not conducted a detailed infrastructure renewal plan to enable the utility to begin estimating specific future renewal requirements. While some GVW assets are almost 100 years old, the overall system can be described as “middle age”, where the bulk of the system was installed decades ago and is still providing good service. The vast majority of GVW’s asset value lies in underground pipes that require little maintenance, but at some point will require renewal or replacement.

Using data from GVW’s GIS system that includes asset quantities, size and age, Figure 5.2 presents a forecast of estimated renewal requirements for the GVW water main inventory over the next 25 year horizon (and does not include pump stations, reservoirs and the water treatment plants). This forecast is based on a simplified assumption that once a water main reaches its expected lifespan, it will need to be replaced and is presented in current dollars (and has not been adjusted for inflation).

Figure 5.2 GVW Water Main Anticipated Replacement Cost



Water main expected life spans can be difficult to estimate accurately without conducting actual condition assessment. Factors such as pipe material, soil condition, quality of original construction and local disturbances from other construction can affect each main’s service life.

The forecast in Figure 5.2 is based on modern watermain materials (PVC, concrete, ductile iron) lasting 80 years, and obsolete water main materials such as asbestos cement (AC) and cast iron (CI) lasting 70 years. Changes to these assumptions will result in a different renewal curve. Of particular concern in the GVW service area is the large inventory of AC and CI water main that was installed between 1950 and 1970. Since this infrastructure is nearing the end of its forecasted service life, there may be a substantial renewal backlog beginning to accumulate (this is expressed in Figure 5.2 as the approximate \$9 million backlog).

While more precise replacement costs cannot be accurately established without better GVW asset and asset condition data, the information presented in Figure 5.2 enables the following observations to be made:

- Like all Canadian water utilities, renewal requirements are beginning to be understood. Some of GVW's oldest assets are probably in need of replacement now. (This is shown in Figure 5.2 as the replacement backlog).
- GVW has a large volume of asbestos concrete (AC) water distribution mains within the older sections of the utility service area. The AC pipe accounts for about 1/3 of the total inventory (by length). These inventories go back to the 1950s and earlier. This inventory of pipes could present significant renewal demands to the GVW in the near to medium term.
- Since 2010, the cast iron (CI) pipe on the Duteau system has experienced internal corrosion due to the low pH and low alkalinity of the potable water source. This pipe inventory will likely present the most imminent renewal demands unless the water treatment process corrects the pH and alkalinity levels whereby this internal corrosion is controlled to acceptable levels.
- Unlike water quality improvement programs, an asset renewal program does not provide an increase to the level of service. Customers are simply able to continue to receive the service they are accustomed to. Customer education is required to explain why rates have to increase in order to receive the same level of service. It is recommended that GVW develop a customer education strategy long before the need for renewal capital is required. There are many Canadian Best Practice examples of successful customer education programs that can be examined.
- Even though asset renewal will be expensive, the most cost effective method for paying for the renewal program is "pay as you go". Taking on debt to finance asset renewals only adds to the overall cost. Building a capital reserve now can help, but the reserve will be quickly depleted. At present, senior level government infrastructure grants are not available to fund infrastructure renewal and this situation is not expected to change in the short term. This situation can change quickly due to senior levels of government policy changes so it is therefore recommended that GVW Staff maintains contact with provincial and federal infrastructure departments as capital plans are evaluated and formalized. Historically, grants cannot usually be applied for retroactively.

5.1.3 Prioritize the Development of Watermain Renewal Plan and Strategy

The forecast presented in Figure 5.2 is based on estimates and theoretical asset service lives. It does not include assets other than underground water mains. So that GVW can be guided by better quality asset management information that will enable the utility to begin prioritizing specific asset management actions, GVW is recommended to prepare a Network Renewal Plan using the InfraGuide Best Practice as a methodology⁸. This document is available online and is free of charge.

The forecast presented in Figure 5.2 can be considered a reactive result if GVW does not take proactive planning towards Best Practice-based asset management. A good asset management plan should be able to assist the utility in optimizing its renewal program through some of the following actions:

- Ensure that asset replacements are prioritized using true condition or criticality assessment data and not theoretical service life estimates.
- Examine the use of renewal strategies and technologies other than full replacement. Water main relining and other trenchless approaches (where feasible) can reduce costs as compared to full replacement.
- Ensure that renewal works are conducted in association with renewal planning forecasts in sewer, roads and drainage infrastructure. Harmonizing infrastructure replacements offer significant savings.

5.1.4 Capital Works as a Result of Growth

Any capital costs associated with expanding the supply of water, or the capacity of the utility's transmission system should be paid through Development Cost Charges (net of the Municipal Assist Factor). Since the agricultural water demands are not expected to increase over the planning horizon, no capacity related projects are anticipated for the agricultural system (or its users). GVW presently funds a DCC Reserve for the domestic system. Once all new capital works are in place, all associated O&M expenses should be covered by the water rates. Planned expenditures from the DCC Reserve will be made through the GVW annual budgeting process for the year the capital projects are being undertaken.

GVW applies a charge when new allocations are sold to new agricultural land (Agricultural Water Purchase Fee). This is a legacy fee from the former Vernon Irrigation District (VID) and was historically known as a Regrade Charge. It was used to fund expansion of the capacity of the agricultural water system (under the former Regrade Charge Bylaw #631) as new users joined the system. Since the termination of VID as an operating entity, the Agricultural Water Purchase fee now is collected as general water revenue.

⁸ *Developing a Water Distribution System Renewal Plan, InfraGuide Best Practice, 2004, National Research Council/FCM*

6. GVW Reserve Funds

GVW presently maintains three distinct reserve funds: an Operating Reserve; a Statutory Reserve Fund; and a Developer Cost Charge (DCC) Reserve. Each of these is described below.

6.1 Operating Reserve

In the simplest terms, operating reserves are savings accounts—and organizations should have reserves to serve as a cushion against unexpected but necessary expenses, fluctuations of income from quarter to quarter, and to build up cash for long-term goals and budgeted future plans. An operating reserve is a critical financial tool especially for water utilities that rely on a volumetric water rate formula. The vast majority of GVW costs tend to be fixed from year to year, while revenue from domestic water will vary according to consumption. One example is if water rates are based on average annual consumption, it can be expected that revenue shortfalls will occur during wet years (when demand is typically lower), and revenue will exceed utility costs during dry years. The Operating Reserve is used to provide stability to the utility through wet and dry years so that water rates do not have to fluctuate as a result of unusual consumption patterns. This is not the case with the mostly flat-rate based agricultural system, where revenue will not vary significantly with changes in water demand (except in cases where customers exceed their set allocation and are charged the new over-consumption surcharge that exists in the 2012 Water Rate Bylaw).

While the GVW Operating Reserve serves the purpose of a traditional operating reserve fund it is also used as a general purpose or non-specified reserve fund. The reserve is used to fund a wide range of project and operational expenditures. Transfers to and from the operating reserves are normally made through an “end of year” adjustment based upon the past year’s accumulated surplus.

6.2 Statutory Reserve

GVW maintains a Statutory Reserve fund that is in fact made up of a legacy Fleet Reserve and Capital Reserve. The distinction between the legacy reserve funds is not presently maintained, and all contributions to the statutory fund are now consolidated. The Statutory Reserve (serving the general purpose of a capital reserve) is a valuable financial tool to help GVW fund a wide range of capital projects through pay-as-you-go and to avoid additional debt charges. The Statutory Reserve is recommended for the purpose of funding asset renewal programs.

6.3 Development Cost Charge Reserve

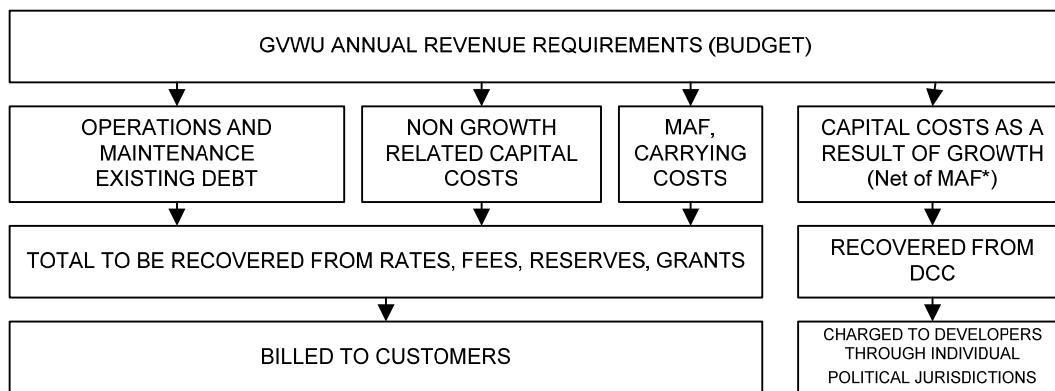
GVW maintains a Development Cost Charge (DCC) Reserve fund to offset eligible increase in capacity related charges. Any capital costs associated with expanding the supply of water, or the capacity of the utility’s transmission system can be paid from the DCC Reserve (net of the Municipal Assist Factor) provided the projects are identified in the DCC Bylaw. The DCC Reserve fund is administered by GVW. Planned expenditures from the DCC Reserve Fund are made through the GVW annual budgeting process for the year the capital projects are being undertaken. An assessment of DCC eligibility for all capital projects recommended in this Master Water Plan will be completed.

7. Framework for Preparing Financial Forecasts

GVW will continue to rely on water rates as the principle revenue source to fund operations and maintenance of all facilities, and debt requirements on capital expenditures required for the purpose of meeting future water quality improvements. Grant opportunities will be investigated and applied for wherever possible which will be used to reduce borrowing. It is also recommended that the current practice of using Development Cost Charges as the primary revenue source used to fund the cost of increasing capacity as a result of growth.

Figure 7.1 presents a flowchart of GVW revenue requirements and proposed revenue sources to be used as a guide in developing the financial forecast once the Master Water Plan technical recommendations have been made.

Figure 7.1: Revenue Flowchart to Fund GVW Requirements



*MAF: Municipal Assist Factor

Appendix A: GVW Revenue and Expenditures (2011 Actual & 2012 Budgeted)**GVWU Revenue and Expenditures for 2011 and Budgeted 2012**

	2011 Actual	2012 Budgeted	% of Total (2012)
Revenues			
Revenues From Domestic Water Rates	\$ 11,522,396	\$ 15,042,723	69%
Revenues from Agricultural Water Rates	\$ 790,963	\$ 818,550	4%
Revenues From Other Fees/Services	\$ 663,256	\$ 879,824	4%
Total Revenue from Operations	\$ 12,976,615	\$ 16,741,097	
Federal/ Provincial Grants	\$ 3,342,316		
Transfer From Reserves		\$ 4,078,689	
DCC Funded	\$ 2,125,268	\$ 828,000	
Surplus From Previous Years			
Other	\$ 384,893	\$ 7,020	
Sub total	\$ 5,852,477	\$ 4,913,709	23%
Total	\$ 18,829,092	\$ 21,654,806	100%
Expenditures			
Administration	\$ 2,600,647	\$ 2,804,353	13%
Operations and Maintenance	\$ 7,551,675	\$ 7,713,906	36%
O&M Sub Total	\$ 10,152,322	\$ 10,518,259	
Interest	\$ 1,499,371	\$ 1,416,333	7%
Principle Repayment	\$ 1,452,174	\$ 1,312,909	6%
Total Debt Servicing	\$ 2,951,545	\$ 2,729,242	
New Capital	\$ 3,672,918	\$ 8,387,305	39%
Transfers to Reserves	\$ 2,052,307		
Total	\$ 18,829,092	\$ 21,634,806	100%
Surplus/Deficit	\$ -	\$ 20,000	

Appendix B: GVW Inventory of Accounts (2012)

Jurisdiction	Account Type	Total Accounts in Jurisdictions	% within Account Type
Vernon			
	Residential	15,563	73.8%
	ICI*	798	88.8%
	Irrigation	46	7.2%
	Other (Bulk Water)	34	11.5%
Coldstream			
	Residential	3,678	17.4%
	ICI	32	3.6%
	Irrigation	311	48.4%
	Other (Bulk Water)	65	22.0%
Area B			
	Residential	936	4.4%
	ICI	50	5.6%
	Irrigation	133	20.7%
	Other (Bulk Water)	73	24.7%
Area C			
	Residential	809	3.8%
	ICI	9	1.0%
	Irrigation	121	18.8%
	Other (Bulk Water)	103	34.8%
Other			
(Spal. And Area D)			
	Residential	102	0.5%
	ICI	10	1.1%
	Irrigation	32	5.0%
	Other (Bulk Water)	21	7.1%
Total GVWU			
	Residential	21,088	92.0%
	ICI	899	3.9%
	Irrigation	643	2.8%
	Other (Bulk Water)	296	1.3%

Notes:

"Accounts" are not necessarily the same as "Connections" (There may be more than one account on a connection)

Account totals supplied by GVWU Finance Department

* ICI: Industrial, Commercial and Institutional

Appendix C1: Cost Allocation between Agriculture and Domestic Sectors – 2011 Actual (page 1)

Regional District of North Okanagan							
Budget Report by Cost Center - 2011 Actual YTD							
Fund Name	Operating Fund						
Cost Center	375 - Greater Vernon Water Utility						
Account #	Account Name	2011 Actual YTD	Percent Split (%)*		Cost Share (\$)		Notes
			Agriculture	Domestic	Agriculture	Domestic	
ADMINISTRATION							
12700500	SALARIES & WAGES	414,000.00	18.4%	81.6%	\$76,200	\$338,000	Meter reading and billing; domestic quarterly; Ag twice per year (summer reads); 2.8% of accounts are Ag
12700510	EMPLOYEE BENEFITS	86,700.00	18.4%	81.6%	\$16,000	\$70,700	
12700512	IS OVERHEAD	90,000.00	18.4%	81.6%	\$16,600	\$73,400	
12700513	GIS OVERHEAD	68,600.00	18.4%	81.6%	\$12,600	\$56,000	
12700514	EMPLOYEE COST ALLOCATION	-	18.4%	81.6%	\$0	\$0	
12700515	EMPLOYEE COST RECOVERY	(1,300.00)	18.4%	81.6%	-\$240	-\$1,100	
12700517	COMMUNITY INFRA. OVERHEAD	87,900.00	18.4%	81.6%	\$16,200	\$71,700	
12700518	FINANCE OVERHEAD	232,000.00	2.0%	98.0%	\$4,640	\$227,000	
12700519	CORP. ADMIN. OVERHEAD	59,300.00	18.4%	81.6%	\$10,900	\$48,400	
12700550	COMMITTEE REMUNERATION	19,500.00	18.4%	81.6%	\$3,590	\$15,900	
12700560	VEHICLE & TRAVEL	6,370.00	18.4%	81.6%	\$1,170	\$5,200	
12700562	TRAINING & SEMINARS	5,590.00	18.4%	81.6%	\$1,030	\$4,560	
12700567	RECRUITING	301.00	18.4%	81.6%	\$55	\$246	
12700568	ADVERTISING & PROMOTION	9,650.00	18.4%	81.6%	\$1,780	\$7,870	
12700569	PUBLIC INFORMATION	30,800.00	18.4%	81.6%	\$5,670	\$25,100	
12700570	SUNDRY	4,040.00	18.4%	81.6%	\$743	\$3,300	
12700572	PUBLICATIONS & MEMBERSHIPS	10,300.00	18.4%	81.6%	\$1,900	\$8,400	
12700573	MATERIALS & SUPPLIES	4,650.00	18.4%	81.6%	\$856	\$3,790	
12700586	INTEREST EXPENSE	-	18.4%	81.6%	\$0	\$0	
12700590	AUDIT & LEGAL	17,700.00	18.4%	81.6%	\$3,260	\$14,400	
12700593	EQUIPMENT & LEASES	-	18.4%	81.6%	\$0	\$0	
12700594	INSURANCE	38,100.00	18.4%	81.6%	\$7,010	\$31,100	
12700595	POSTAGE	-	18.4%	81.6%	\$0	\$0	
12700596	BUILDING OVERHEAD	39,200.00	18.4%	81.6%	\$7,210	\$32,000	
12700597	STATIONERY & OFFICE EXPENSE	68.00	18.4%	81.6%	\$13	\$56	
12700598	TELEPHONE	7,840.00	18.4%	81.6%	\$1,440	\$6,400	
12700621	CONSULTANTS	45,200.00	18.4%	81.6%	\$8,320	\$36,900	
12700679	SERVICE REVIEW	14,200.00	18.4%	81.6%	\$2,610	\$11,600	
12700700	CWF: TIER 1 PROJECTS <\$8000	1,020.00	18.4%	81.6%	\$188	\$832	
12700701	CWF: TIER 2 PROJECTS >\$8000	3,410.00	18.4%	81.6%	\$628	\$2,780	
12701528	OVERHEAD CHARGES - CITY OF VERNON	889,000.00	18.4%	81.6%	\$164,000	\$725,000	
12701529	OVERHEAD CHARGES - COLDSTREAM	196,000.00	18.4%	81.6%	\$36,100	\$160,000	
12701594	INSURANCE - CITY OF VERNON	-	18.4%	81.6%	\$0	\$0	
12701694	INSURANCE - COLDSTREAM	-	18.4%	81.6%	\$0	\$0	
INFORMATION SYSTEMS							
12702593	EQUIPMENT & LEASES	49.00	18.4%	81.6%	\$9	\$40	
12702600	CONTRACT WAGES	333.00	18.4%	81.6%	\$61	\$272	
12702622	GVWU IS: SPECIAL PROJECTS	6,140.00	18.4%	81.6%	\$1,130	\$5,010	
GENERAL OPERATIONS							
12706568	GEN OPS: ADVERTISING & PROMOTION	442.00	18.4%	81.6%	\$81	\$361	
12706570	GEN OPS: SUNDRY	739.00	18.4%	81.6%	\$136	\$603	
12706572	GEN OPS: PUBLICATIONS & MEMBERSHIPS	1,300.00	18.4%	81.6%	\$239	\$1,060	
12706573	GEN OPS: MATERIALS	21,800.00	18.4%	81.6%	\$4,010	\$17,800	
12706593	GEN OPS: EQUIPMENT & LEASES	3,120.00	18.4%	81.6%	\$574	\$2,550	
12706594	GEN OPS: INSURANCE	17,800.00	18.4%	81.6%	\$3,280	\$14,500	
12706597	GEN OPS: STATIONERY & OFFICE EXPENSE	6,080.00	18.4%	81.6%	\$1,120	\$4,960	
12706598	GEN OPS: TELEPHONE	22,700.00	18.4%	81.6%	\$4,180	\$18,500	
12706599	GEN OPS: UTILITIES	459.00	18.4%	81.6%	\$85	\$375	
12706600	GEN OPS: CONTRACT WAGES	263,000.00	18.4%	81.6%	\$48,400	\$215,000	
12706618	GEN OPS: SCADA ALARM MONITORING	4,550.00	18.4%	81.6%	\$837	\$3,710	
12706620	GEN OPS: STANDBY TIME	37,800.00	18.4%	81.6%	\$6,960	\$30,800	
12706621	GEN OPS: CONSULTANTS	3,080.00	18.4%	81.6%	\$567	\$2,510	
12706718	GEN OPS: WATER EMERGENCY CHARGES	322,000.00	18.4%	81.6%	\$59,300	\$263,000	
12706719	GEN OPS: INTERNAL CHARGES	-	18.4%	81.6%	\$0	\$0	
SAFETY TRAINING							
12708573	SAFETY TRAINING: MATERIALS	9,120.00	50.0%	50.0%	\$4,560	\$4,560	
12708593	SAFETY TRAINING: EQUIPMENT & LEASES	748.00	50.0%	50.0%	\$374	\$374	
12708600	SAFETY TRAINING: CONTRACT WAGES	15,800.00	50.0%	50.0%	\$7,900	\$7,900	
12708618	SAFETY TRAINING: CONTRACT OTHER	-			\$0	\$0	
SERVICE METER REPAIRS - RESIDENTIAL							
12710573	SMRR: MATERIALS	97,000.00	0.0%	100.0%	\$0	\$97,000	
12710593	SMRR: EQUIPMENT & LEASES	2,230.00	0.0%	100.0%	\$0	\$2,230	
12710600	SMRR: CONTRACT WAGES	93,500.00	0.0%	100.0%	\$0	\$93,500	
12710618	SMRR: CONTRACT OTHER	188.00	0.0%	100.0%	\$0	\$188	
SERVICE METER REPAIRS - COMMERCIAL							
12711573	SMRC: MATERIALS	42.00	0.0%	100.0%	\$0	\$42	
12711593	SMRC: EQUIPMENT & LEASES	518.00	0.0%	100.0%	\$0	\$518	
12711600	SMRC: CONTRACT WAGES	3,110.00	0.0%	100.0%	\$0	\$3,110	
12711618	SMRC: CONTRACT OTHER	-	0.0%	100.0%	\$0	\$0	
SERVICE BACKFLOW PREVENTION - RESIDENTIAL							
12712573	SBFPR: MATERIALS	1,370.00	0.0%	100.0%	\$0	\$1,370	
12712593	SBFPR: EQUIPMENT & LEASES	14.00	0.0%	100.0%	\$0	\$14	
12712600	SBFPR: CONTRACT WAGES	27,600.00	0.0%	100.0%	\$0	\$27,600	
12712621	SBFPR: CONSULTANTS	-	0.0%	100.0%	\$0	\$0	
SERVICE BACKFLOW PREVENTION - COMMERCIAL							
12713573	SBFPC: MATERIALS	(640.00)	0.0%	100.0%	\$0	-\$640	
12713593	SBFPC: EQUIPMENT & LEASES	74.00	0.0%	100.0%	\$0	\$74	
12713600	SBFPC: CONTRACT WAGES	545.00	0.0%	100.0%	\$0	\$545	
12713618	SBFPC: CONTRACT OTHER	484.00	0.0%	100.0%	\$0	\$484	

Appendix C1: Cost Allocation between Agriculture and Domestic Sectors – 2011 Actual (page 2)

	TRAINING						50% Agricultural / 50% Domestic		
12714573	TRAINING: MATERIALS	8,560.00	50.0%	50.0%	\$4,280	\$4,280			
12714593	TRAINING: EQUIPMENT & LEASES	588.00	50.0%	50.0%	\$294	\$294			
12714600	TRAINING: CONTRACT WAGES	24,900.00	50.0%	50.0%	\$12,500	\$12,500			
12714618	TRAINING: CONTRACT OTHER	4,270.00	50.0%	50.0%	\$2,140	\$2,140			
12714621	TRAINING: CONSULTANTS	804.00	50.0%	50.0%	\$402	\$402			
	UTILITY LOCATES						same as trans main repairs		
12715573	UL: MATERIALS	2,740.00	22.5%	77.5%	\$617	\$2,120			
12715593	UL: EQUIPMENT & LEASES	1,500.00	22.5%	77.5%	\$338	\$1,160			
12715600	UL: CONTRACT WAGES	39,200.00	22.5%	77.5%	\$8,820	\$30,400			
12715618	UL: CONTRACT OTHER	1,930.00	22.5%	77.5%	\$434	\$1,500			
12715621	UL: CONSULTANTS	-	22.5%	77.5%	\$0	\$0			
	CROSS CONNECTION CONTROL						100% Domestic		
12716500	CCC: SALARIES & WAGES	1,300.00	0.0%	100.0%	\$0	\$1,300	all ICI		
12716510	CCC: EMPLOYEE BENEFITS	117.00	0.0%	100.0%	\$0	\$117			
12716514	EMPLOYEE COST ALLOCATION	-	0.0%	100.0%	\$0	\$0			
12716560	CCC: VEHICLE & TRAVEL	-	0.0%	100.0%	\$0	\$0			
12716573	CCC: MATERIALS	-	0.0%	100.0%	\$0	\$0			
12716578	CCC: TRAINING	473.00	0.0%	100.0%	\$0	\$473			
12716593	CCC: EQUIPMENT & LEASES	-	0.0%	100.0%	\$0	\$0			
12716600	CCC: CONTRACT WAGES	1,320.00	0.0%	100.0%	\$0	\$1,320			
12716621	CCC: CONSULTANTS	20,600.00	0.0%	100.0%	\$0	\$20,600			
	UTILITIES						Kal Lake pumping costs are removed from here (\$175,000) and put in Mission Hill TP Item		
12717599	UTILITIES	390,000.00	40.0%	60.0%	\$156,000	\$234,000			
	SMALL TOOLS								
12718573	ST: MATERIALS	17,300.00	50.0%	50.0%	\$8,650	\$8,650			
12718593	ST: EQUIPMENT & LEASES	378.00	50.0%	50.0%	\$189	\$189			
12718600	ST: CONTRACT WAGES	3,090.00	50.0%	50.0%	\$1,550	\$1,550			
12718618	ST: CONTRACT OTHER	-	50.0%	50.0%	\$0	\$0			
	INSTRUMENTATION								
12719573	INSTRUMENTATION: MATERIALS	26,900.00	45.0%	55.0%	\$12,100	\$14,800			
12719593	INSTRUMENTATION: EQUIPMENT & LEASES	10,800.00	45.0%	55.0%	\$4,860	\$5,940			
12719600	INSTRUMENTATION: CONTRACT WAGES	86,500.00	45.0%	55.0%	\$38,900	\$47,600			
12719618	INSTRUMENTATION: CONTRACT OTHER	1,540.00	45.0%	55.0%	\$693	\$847			
	INTAKE MAINTENANCE						Split based on flow; actual volume		
12722573	IM: MATERIALS	12,000.00	56.6%	43.4%	\$6,790	\$5,210			
12722593	IM: EQUIPMENT & LEASES	-	56.6%	43.4%	\$0	\$0			
12722600	IM: CONTRACT WAGES	26,900.00	56.6%	43.4%	\$15,200	\$11,700			
12722618	IM: CONTRACT OTHER	48,000.00	56.6%	43.4%	\$27,200	\$20,800			
	FLUSHING AND CLEANING						Ag system flushes lines		
12723573	FC: MATERIALS	11,200.00	7.5%	92.5%	\$840	\$10,400			
12723593	FC: EQUIPMENT & LEASES	3,480.00	7.5%	92.5%	\$261	\$3,220			
12723600	FC: CONTRACT WAGES	158,000.00	7.5%	92.5%	\$11,900	\$146,000			
12723618	FC: CONTRACT OTHER	7,110.00	7.5%	92.5%	\$533	\$6,580			
	TREATMENT MAINTENANCE						100% Domestic		
12724500	TM: SALARIES & WAGES	-	0.0%	100.0%	\$0	\$0			
12724510	TM: EMPLOYEE BENEFITS	-	0.0%	100.0%	\$0	\$0			
12724573	TM: MATERIALS	109,000.00	0.0%	100.0%	\$0	\$109,000			
12724593	TM: EQUIPMENT & LEASES	31,400.00	0.0%	100.0%	\$0	\$31,400			
12724600	TM: CONTRACT WAGES	192,000.00	0.0%	100.0%	\$0	\$192,000			
12724618	TM: CONTRACT OTHER	7,980.00	0.0%	100.0%	\$0	\$7,980			
12724621	TM: CONSULTANTS	-	0.0%	100.0%	\$0	\$0			
	WATER QUALITY MONITORING						10% Agricultural / 90% Domestic		
12725500	SALARIES & WAGES	165,000.00	10.0%	90.0%	\$16,500	\$149,000	Testing would not be required with only Ag system; would still have testing if only Ag system		
12725510	EMPLOYEE BENEFITS	31,600.00	10.0%	90.0%	\$3,160	\$28,400			
12725560	VEHICLE & TRAVEL	-	10.0%	90.0%	\$0	\$0			
12725568	WQM: ADVERTISING & PROMOTION	29,800.00	10.0%	90.0%	\$2,980	\$26,800			
12725572	WQM: PUBLICATIONS & MEMBERSHIPS	-	10.0%	90.0%	\$0	\$0			
12725573	WQM: MATERIALS	26,900.00	10.0%	90.0%	\$2,690	\$24,200			
12725578	WQM: TRAINING	105.00	10.0%	90.0%	\$11	\$95			
12725593	WQM: EQUIPMENT & LEASES	13,400.00	10.0%	90.0%	\$1,340	\$12,100			
12725595	POSTAGE	2,630.00	10.0%	90.0%	\$263	\$2,370			
12725598	WQM: TELEPHONE	1,850.00	10.0%	90.0%	\$185	\$1,670			
12725600	WQM: CONTRACT WAGES	59,100.00	10.0%	90.0%	\$5,910	\$53,200			
12725618	WQM: CONTRACT OTHER	24,000.00	10.0%	90.0%	\$2,400	\$21,600			
12725621	WQM: CONSULTANTS	71,500.00	10.0%	90.0%	\$7,150	\$64,400			
12725626	WQM: KAL LAKE BACTERIAL S.T.	10,400.00	10.0%	90.0%	\$1,040	\$9,360			
12725650	WQM: COV MATERIALS	-	10.0%	90.0%	\$0	\$0			
12725651	WQM: COV EQUIPMENT	6,840.00	10.0%	90.0%	\$684	\$6,160			
12725652	WQM: COV CONTRACT WAGES	-	10.0%	90.0%	\$0	\$0			
12725653	WQM: COV CONTRACT OTHER	-	10.0%	90.0%	\$0	\$0			
	WATER TREATMENT PLANT - ADMINISTRATION						100% Domestic		
12727500	SALARIES & WAGES	91,700.00	0.0%	100.0%	\$0	\$91,700			
12727510	EMPLOYEE BENEFITS	17,600.00	0.0%	100.0%	\$0	\$17,600			
12727521	PERMITS AND FEES	348.00	0.0%	100.0%	\$0	\$348			
12727560	VEHICLE & TRAVEL	6,710.00	0.0%	100.0%	\$0	\$6,710			
12727570	SUNDRY	3,780.00	0.0%	100.0%	\$0	\$3,780			
12727572	PUBLICATIONS & MEMBERSHIPS	1,060.00	0.0%	100.0%	\$0	\$1,060			
12727578	TRAINING	371.00	0.0%	100.0%	\$0	\$371			
12727594	INSURANCE	12,100.00	0.0%	100.0%	\$0	\$12,100			
12727597	STATIONERY & OFFICE EXPENSE	1,270.00	0.0%	100.0%	\$0	\$1,270			
12727598	TELEPHONE	2,670.00	0.0%	100.0%	\$0	\$2,670			
12727599	UTILITIES	1,580.00	0.0%	100.0%	\$0	\$1,580			

Appendix C1: Cost Allocation between Agriculture and Domestic Sectors – 2011 Actual (page 3)

MISSION HILL WTP							100% Domestic		
12728573	MHWTP: MATERIALS	17,000.00	0.0%	100.0%	\$0	\$17,000			
12728593	MHWTP: EQUIPMENT & LEASES	-	0.0%	100.0%	\$0	\$0			
12728599	MHWTP: UTILITIES	69,200.00	0.0%	100.0%	\$0	\$69,200			
	<i>Kal Lake PS Energy Cost</i>	175,000.00	0.0%	100.0%	\$0	\$175,000	removed from Utilities Line item and relocated here		
12728600	MHWTP: CONTRACT WAGES	38,600.00	0.0%	100.0%	\$0	\$38,600			
12728618	MHWTP: CONTRACT OTHER	-	0.0%	100.0%	\$0	\$0			
DUTEAU WTP							100% Domestic		
12729571	DUTEAU WTP: WATER TREATMENT CHEMICALS	856,000.00	0.0%	100.0%	\$0	\$856,000	If system was only Ag, TP would not be required; Irr stub from plant services small area; all other irr flow is treated Group acknowledges that some current O&M costs are for Ag flows		
12729573	DUTEAU WTP: MATERIALS	69,100.00	0.0%	100.0%	\$0	\$69,100			
12729576	DUTEAU WTP: SLUDGE DISPOSAL	30,100.00	0.0%	100.0%	\$0	\$30,100			
12729593	DUTEAU WTP: EQUIPMENT & LEASES	8,390.00	0.0%	100.0%	\$0	\$8,390			
12729599	DUTEAU WTP: UTILITIES	144,000.00	0.0%	100.0%	\$0	\$144,000			
12729600	DUTEAU WTP: CONTRACT WAGES	393,000.00	0.0%	100.0%	\$0	\$393,000			
12729618	DUTEAU WTP: CONTRACT OTHER	54,900.00	0.0%	100.0%	\$0	\$54,900			
OUTBACK WTP							100% Domestic		
12730573	OUTBACK WTP: MATERIALS	3,900.00	0.0%	100.0%	\$0	\$3,900			
12730593	OUTBACK WTP: EQUIPMENT & LEASES	-	0.0%	100.0%	\$0	\$0			
12730599	OUTBACK WTP: UTILITIES	4,340.00	0.0%	100.0%	\$0	\$4,340			
12730600	OUTBACK WTP: CONTRACT WAGES	4,770.00	0.0%	100.0%	\$0	\$4,770			
12730618	OUTBACK WTP: CONTRACT OTHER	-	0.0%	100.0%	\$0	\$0			
PUMP STATION MAINTENANCE							same concept as PRVs...		
12734573	PSM: MATERIALS	61,400.00	37.5%	62.5%	\$23,000	\$38,400	coldstream PS are domestic, PRV feeds ag system		
12734593	PSM: EQUIPMENT & LEASES	8,330.00	37.5%	62.5%	\$3,120	\$5,210			
12734600	PSM: CONTRACT WAGES	348,000.00	37.5%	62.5%	\$131,000	\$218,000			
12734618	PSM: CONTRACT OTHER	70,500.00	37.5%	62.5%	\$26,400	\$44,100			
12734621	PSM: CONSULTANTS	1,580.00	37.5%	62.5%	\$593	\$988			
HYDRANT MAINTENANCE							100% Domestic		
12735573	HM: MATERIALS	17,800.00	0.0%	100.0%	\$0	\$17,800	hydrants are not		
12735593	HM: EQUIPMENT & LEASES	2,390.00	0.0%	100.0%	\$0	\$2,390			
12735600	HM: CONTRACT WAGES	148,000.00	0.0%	100.0%	\$0	\$148,000			
12735618	HM: CONTRACT OTHER	2,640.00	0.0%	100.0%	\$0	\$2,640			
METER/LARGE VALVE REPLACEMENT							50% Agricultural / 50% Domestic		
12736573	MLVR: MATERIALS	617.00	50.0%	50.0%	\$309	\$309	>300 diameter		
12736593	MLVR: EQUIPMENT & LEASES	104.00	50.0%	50.0%	\$52	\$52			
12736600	MLVR: CONTRACT WAGES	1,340.00	50.0%	50.0%	\$670	\$670			
12736618	MLVR: CONTRACT OTHER	4,180.00	50.0%	50.0%	\$2,090	\$2,090			
VALVE MAINTENANCE									
12737573	VM: MATERIALS	20,600.00	12.5%	87.5%	\$2,580	\$18,000			
12737593	VM: EQUIPMENT & LEASES	11,800.00	12.5%	87.5%	\$1,480	\$10,300			
12737600	VM: CONTRACT WAGES	155,000.00	12.5%	87.5%	\$19,400	\$136,000			
12737618	VM: CONTRACT OTHER	12,400.00	12.5%	87.5%	\$1,550	\$10,900			
DAMS & RESERVOIRS							50% Agricultural / 50% Domestic		
12740573	D&R: MATERIALS	15,700.00	50.0%	50.0%	\$7,850	\$7,850	reservoirs are potable; dams are shared by volume		
12740593	D&R: EQUIPMENT & LEASES	13,000.00	50.0%	50.0%	\$6,500	\$6,500	KE and Goose Dams are irr only		
12740600	D&R: CONTRACT WAGES	103,000.00	50.0%	50.0%	\$51,500	\$51,500	All Reservoirs		
12740618	D&R: CONTRACT OTHER	44,400.00	50.0%	50.0%	\$22,200	\$22,200	All Dams (contracted by RDNO)		
12740621	D&R: CONSULTANTS	76,100.00	50.0%	50.0%	\$38,100	\$38,100			
WELL REPAIRS							75% Agricultural / 25% Domestic		
12741573	WELLS: MATERIALS	4,800.00	75.0%	25.0%	\$3,600	\$1,200			
12741593	WELLS: EQUIPMENT & LEASES	9,830.00	75.0%	25.0%	\$7,370	\$2,460			
12741600	WELLS: CONTRACT WAGES	8,710.00	75.0%	25.0%	\$6,530	\$2,180			
12741618	WELLS: CONTRACT OTHER	1,310.00	75.0%	25.0%	\$983	\$328			
12741621	WELLS: CONSULTANTS	6,210.00	75.0%	25.0%	\$4,660	\$1,550			
PRV MAINTENANCE							50% Agricultural / 50% Domestic	132 PRVs	
12742573	PRV: MATERIALS	18,500.00	50.0%	50.0%	\$9,250	\$9,250	Increased maintenance frequency in summer due to higher ag flows		
12742593	PRV: EQUIPMENT & LEASES	7,620.00	50.0%	50.0%	\$3,810	\$3,810	Even ag prvs require servicing in the winter (check for leaks weekly)		
12742600	PRV: CONTRACT WAGES	116,000.00	50.0%	50.0%	\$58,000	\$58,000	poor water quality, high flow variation and age of infr. Is main reason for		
12742618	PRV: CONTRACT OTHER	30,200.00	50.0%	50.0%	\$15,100	\$15,100	Ag prv reactive maintenance; cost of large PRVs is exponential		
SERVICE CONNECTIONS							Time and cost for Ag		
12748573	SC: MATERIALS	85,100.00	22.5%	77.5%	\$19,100	\$66,000			
12748593	SC: EQUIPMENT & LEASES	22,300.00	22.5%	77.5%	\$5,020	\$17,300			
12748600	SC: CONTRACT WAGES	305,000.00	22.5%	77.5%	\$68,600	\$236,000			
12748618	SC: CONTRACT OTHER	107,000.00	22.5%	77.5%	\$24,100	\$82,900			
METER READING							Same as Finance Overhead item above		
12751573	METER READING: MATERIALS	5,190.00	2.0%	98.0%	\$104	\$5,090			
12751593	METER READING: EQUIPMENT	6,050.00	2.0%	98.0%	\$121	\$5,930			
12751600	METER READING: CONTRACT WAGES	45,800.00	2.0%	98.0%	\$916	\$44,900			
12751618	METER READING: CONTRACT OTHER	80,600.00	2.0%	98.0%	\$1,610	\$79,000			
TRANSMISSION MAINS REPAIRS									
12756573	TMR: MATERIALS	100,000.00	22.5%	77.5%	\$22,500	\$77,500			
12756593	TMR: EQUIPMENT & LEASES	15,700.00	22.5%	77.5%	\$3,530	\$12,200			
12756600	TMR: CONTRACT WAGES	298,000.00	22.5%	77.5%	\$67,100	\$231,000			
12756618	TMR: CONTRACT OTHER	190,000.00	22.5%	77.5%	\$42,800	\$147,000			
12756621	TMR: CONSULTANTS	-	22.5%	77.5%	\$0	\$0			

Appendix C1: Cost Allocation between Agriculture and Domestic Sectors – 2011 Actual (page 4)

REGIONAL WATERSHED MANAGEMENT							20% Agricultural / 80% Domestic	
12757500	RWM: SALARIES & WAGES	-	20.0%	80.0%	\$0	\$0		
12757510	RWM: EMPLOYEE BENEFITS	-	20.0%	80.0%	\$0	\$0		
12757551	RWM: COMMITTEE EXPENSES	304.00	20.0%	80.0%	\$61	\$243		
12757560	RWM: VEHICLE & TRAVEL	5.00	20.0%	80.0%	\$1	\$4		
12757568	RWM: ADVERTISING & PROMOTION	259.00	20.0%	80.0%	\$52	\$207		
12757573	RWM: MATERIALS	878.00	20.0%	80.0%	\$176	\$702		
12757593	RWM: EQUIPMENT & LEASES	-	20.0%	80.0%	\$0	\$0		
12757621	RWM: CONSULTANTS	8,630.00	20.0%	80.0%	\$1,730	\$6,900		
WATER STEWARDSHIP							10% Agricultural / 90% Domestic	
12758500	WS: SALARIES & WAGES	61,200.00	10.0%	90.0%	\$6,120	\$55,100	Conservation program	
12758510	WS: EMPLOYEE BENEFITS	9,670.00	10.0%	90.0%	\$967	\$8,700		
12758560	WS: VEHICLE & TRAVEL	475.00	10.0%	90.0%	\$48	\$428		
12758562	WS: EDUCATION	2,800.00	10.0%	90.0%	\$280	\$2,520		
12758568	WS: ADVERTISING & PROMOTION	-	10.0%	90.0%	\$0	\$0		
12758573	WS: MATERIALS	-	10.0%	90.0%	\$0	\$0		
12758578	WS: TRAINING	-	10.0%	90.0%	\$0	\$0		
12758593	WS: EQUIPMENT & LEASES	2,270.00	10.0%	90.0%	\$227	\$2,040		
12758621	WS: CONSULTANTS	-	10.0%	90.0%	\$0	\$0		
OTHER MAINTENANCE							Use Admin % breakdown	
12761573	OM: MATERIALS	850.00	18.4%	81.6%	\$156	\$694	all Vernon/Coldstream	
12761593	OM: EQUIPMENT & LEASES	1,090.00	18.4%	81.6%	\$201	\$889		
12761600	OM: CONTRACT WAGES	30,700.00	18.4%	81.6%	\$5,650	\$25,100		
12761618	OM: CONTRACT OTHER	14,300.00	18.4%	81.6%	\$2,630	\$11,700		
IRRIGATION TURN ON/OFF							100% Agricultural	
12762573	ITO: MATERIALS	559.00	100.0%	0.0%	\$559	\$0		
12762593	ITO: EQUIPMENT & LEASES	3,220.00	100.0%	0.0%	\$3,220	\$0		
12762600	ITO: CONTRACT WAGES	87,200.00	100.0%	0.0%	\$87,200	\$0		
12762618	ITO: CONTRACT OTHER	847.00	100.0%	0.0%	\$847	\$0		
SOUTH VERNON IRR DISTRICT - EAST							100% Agricultural	
12781573	SVID EAST: MATERIALS	62.00	100.0%	0.0%	\$62	\$0		
12781593	SVID EAST: EQUIPMENT & LEASES	-	100.0%	0.0%	\$0	\$0		
12781600	SVID EAST: CONTRACT WAGES	4,530.00	100.0%	0.0%	\$4,530	\$0		
12781618	SVID EAST: CONTRACT OTHER	3,350.00	100.0%	0.0%	\$3,350	\$0		
SOUTH VERNON IRR DISTRICT - WEST							100% Agricultural	
12783600	SVID WEST: CONTRACT WAGES	12,900.00	100.0%	0.0%	\$12,900	\$0		
12783618	SVID WEST: CONTRACT OTHER	-	100.0%	0.0%	\$0	\$0		
DELCLIFFE WATER							100% Domestic	
12785573	DELCLIFFE WATER: MATERIALS	554.00	0.0%	100.0%	\$0	\$554		
12785593	DELCLIFFE WATER: EQUIPMENT & LEASES	-	0.0%	100.0%	\$0	\$0		
12785600	DELCLIFFE WATER: CONTRACT WAGES	3,660.00	0.0%	100.0%	\$0	\$3,660		
12785618	DELCLIFFE WATER: CONTRACT OTHER	9,340.00	0.0%	100.0%	\$0	\$9,340		
WATER LICENSES							Split based on flow; actual volume	
12792530	BULK SUPPLY PURCHASE	48,600.00	56.6%	43.4%	\$27,500	\$21,100		
					Subtotals	\$1,770,000	\$8,170,000	
					Total Cost	% Agricultural	% Domestic	
					\$9,940,000	17.8%	82.2%	

Appendix C2: Cost Allocation between Agriculture and Domestic Sectors – 2012 Budgeted (page 1)

Regional District of North Okanagan									
Budget Report by Cost Center - 2012 Budget									
Fund Name	Operating Fund								
Cost Center	372 - Greater Vernon Water Utility								
Account #	Account Name	2012 Annual Budget	Percent Split (%)*		Cost Share (\$)		Notes		
			Agriculture	Domestic	Agriculture	Domestic			
ADMINISTRATION									
12700500	SALARIES & WAGES	504,000.00	14.0%	86.0%	\$70,800	\$433,000			
12700510	EMPLOYEE BENEFITS	126,000.00	14.0%	86.0%	\$17,700	\$108,000			
12700512	IS OVERHEAD	164,000.00	14.0%	86.0%	\$23,000	\$141,000			
12700513	GIS OVERHEAD	74,400.00	14.0%	86.0%	\$10,400	\$64,000			
12700514	EMPLOYEE COST ALLOCATION	20,600.00	14.0%	86.0%	\$2,890	\$17,700			
12700515	EMPLOYEE COST RECOVERY	(120,000.00)	14.0%	86.0%	-\$17,000	-\$100,000			
12700517	COMMUNITY INFRA. OVERHEAD	106,000.00	14.0%	86.0%	\$14,900	\$91,100			
12700518	FINANCE OVERHEAD	267,000.00	2.0%	98.0%	\$5,340	\$262,000	Meter reading and billing; domestic quarterly; Ag twice per year (summer reads); 2.8% of accounts are Ag		
12700519	CORP. ADMIN. OVERHEAD	80,500.00	14.0%	86.0%	\$11,300	\$69,200			
12700550	COMMITTEE REMUNERATION	17,400.00	14.0%	86.0%	\$2,440	\$15,000			
12700560	VEHICLE & TRAVEL	15,000.00	14.0%	86.0%	\$2,110	\$12,900			
12700562	TRAINING & SEMINARS	10,000.00	14.0%	86.0%	\$1,400	\$8,600			
12700567	RECRUITING	3,000.00	14.0%	86.0%	\$421	\$2,580			
12700568	ADVERTISING & PROMOTION	-	14.0%	86.0%	\$0	\$0			
12700569	PUBLIC INFORMATION	40,500.00	14.0%	86.0%	\$5,690	\$34,800			
12700570	SUNDRY	3,000.00	14.0%	86.0%	\$421	\$2,580			
12700572	PUBLICATIONS & MEMBERSHIPS	11,000.00	14.0%	86.0%	\$1,540	\$9,460			
12700573	MATERIALS & SUPPLIES	7,000.00	14.0%	86.0%	\$983	\$6,020			
12700586	INTEREST EXPENSE	560.00	14.0%	86.0%	\$79	\$481			
12700590	AUDIT & LEGAL	19,800.00	14.0%	86.0%	\$2,780	\$17,000			
12700593	EQUIPMENT & LEASES	3,400.00	14.0%	86.0%	\$478	\$2,920			
12700594	INSURANCE	59,300.00	14.0%	86.0%	\$8,330	\$51,000			
12700595	POSTAGE	1,640.00	14.0%	86.0%	\$230	\$1,410			
12700596	BUILDING OVERHEAD	39,100.00	14.0%	86.0%	\$5,490	\$33,600			
12700597	STATIONERY & OFFICE EXPENSE	1,500.00	14.0%	86.0%	\$211	\$1,290			
12700598	TELEPHONE	9,900.00	14.0%	86.0%	\$1,390	\$8,510			
12700621	CONSULTANTS	34,000.00	14.0%	86.0%	\$4,780	\$29,200			
12700679	SERVICE REVIEW	42,000.00	14.0%	86.0%	\$5,900	\$36,100			
12700700	CWF: TIER 1 PROJECTS <\$8000	-	14.0%	86.0%	\$0	\$0			
12700701	CWF: TIER 2 PROJECTS >\$8000	-	14.0%	86.0%	\$0	\$0			
12701528	OVERHEAD CHARGES - CITY OF VERNON	485,000.00	14.0%	86.0%	\$68,100	\$417,000			
12701529	OVERHEAD CHARGES - COLDSTREAM	134,000.00	14.0%	86.0%	\$18,800	\$115,000			
12701594	INSURANCE - CITY OF VERNON	-	14.0%	86.0%	\$0	\$0			
12701694	INSURANCE - COLDSTREAM	-	14.0%	86.0%	\$0	\$0			
INFORMATION SYSTEMS									
12702593	EQUIPMENT & LEASES	-	14.0%	86.0%	\$0	\$0			
12702600	CONTRACT WAGES	-	14.0%	86.0%	\$0	\$0			
12702622	GVWU IS: SPECIAL PROJECTS	22,000.00	14.0%	86.0%	\$3,090	\$18,900			
GENERAL OPERATIONS									
12706568	GEN OPS: ADVERTISING & PROMOTION	-	14.0%	86.0%	\$0	\$0			
12706570	GEN OPS: SUNDRY	1,000.00	14.0%	86.0%	\$140	\$860			
12706572	GEN OPS: PUBLICATIONS & MEMBERSHIPS	7,000.00	14.0%	86.0%	\$983	\$6,020			
12706573	GEN OPS: MATERIALS	25,000.00	14.0%	86.0%	\$3,510	\$21,500			
12706593	GEN OPS: EQUIPMENT & LEASES	14,800.00	14.0%	86.0%	\$2,080	\$12,700			
12706594	GEN OPS: INSURANCE	18,000.00	14.0%	86.0%	\$2,530	\$15,500			
12706597	GEN OPS: STATIONERY & OFFICE EXPENSE	26,000.00	14.0%	86.0%	\$3,650	\$22,300			
12706598	GEN OPS: TELEPHONE	20,000.00	14.0%	86.0%	\$2,810	\$17,200			
12706599	GEN OPS: UTILITIES	7,000.00	14.0%	86.0%	\$983	\$6,020			
12706600	GEN OPS: CONTRACT WAGES	279,000.00	14.0%	86.0%	\$39,200	\$240,000			
12706618	GEN OPS: SCADA ALARM MONITORING	-	14.0%	86.0%	\$0	\$0			
12706620	GEN OPS: STANDBY TIME	44,700.00	14.0%	86.0%	\$6,280	\$38,400			
12706621	GEN OPS: CONSULTANTS	3,000.00	14.0%	86.0%	\$421	\$2,580			
12706718	GEN OPS: WATER EMERGENCY CHARGES	-	14.0%	86.0%	\$0	\$0			
12706719	GEN OPS: INTERNAL CHARGES	-	14.0%	86.0%	\$0	\$0			
SAFETY TRAINING							50% Agricultural / 50% Domestic		
12708573	SAFETY TRAINING: MATERIALS	9,000.00	50.0%	50.0%	\$4,500	\$4,500			
12708593	SAFETY TRAINING: EQUIPMENT & LEASES	800.00	50.0%	50.0%	\$400	\$400			
12708600	SAFETY TRAINING: CONTRACT WAGES	16,600.00	50.0%	50.0%	\$8,300	\$8,300			
12708618	SAFETY TRAINING: CONTRACT OTHER	-			\$0	\$0			
SERVICE METER REPAIRS - RESIDENTIAL							100% Domestic		
12710573	SMRR: MATERIALS	85,000.00	0.0%	100.0%	\$0	\$85,000			
12710593	SMRR: EQUIPMENT & LEASES	12,800.00	0.0%	100.0%	\$0	\$12,800			
12710600	SMRR: CONTRACT WAGES	80,800.00	0.0%	100.0%	\$0	\$80,800			
12710618	SMRR: CONTRACT OTHER	-	0.0%	100.0%	\$0	\$0			
SERVICE METER REPAIRS - COMMERCIAL							100% Domestic		
12711573	SMRC: MATERIALS	-	0.0%	100.0%	\$0	\$0			
12711593	SMRC: EQUIPMENT & LEASES	-	0.0%	100.0%	\$0	\$0			
12711600	SMRC: CONTRACT WAGES	-	0.0%	100.0%	\$0	\$0			
12711618	SMRC: CONTRACT OTHER	-	0.0%	100.0%	\$0	\$0			
SERVICE BACKFLOW PREVENTION - RESIDENTIAL									
12712573	SBFPR: MATERIALS	500.00	0.0%	100.0%	\$0	\$500	100% Domestic		
12712593	SBFPR: EQUIPMENT & LEASES	2,000.00	0.0%	100.0%	\$0	\$2,000			
12712600	SBFPR: CONTRACT WAGES	16,600.00	0.0%	100.0%	\$0	\$16,600			
12712621	SBFPR: CONSULTANTS	-	0.0%	100.0%	\$0	\$0			
SERVICE BACKFLOW PREVENTION - COMMERCIAL							100% Domestic		
12713573	SBFPC: MATERIALS	-	0.0%	100.0%	\$0	\$0	100% Domestic		
12713593	SBFPC: EQUIPMENT & LEASES	-	0.0%	100.0%	\$0	\$0			
12713600	SBFPC: CONTRACT WAGES	-	0.0%	100.0%	\$0	\$0			
12713618	SBFPC: CONTRACT OTHER	-	0.0%	100.0%	\$0	\$0			

Appendix C2: Cost Allocation between Agriculture and Domestic Sectors – 2012 Budgeted (page 2)

	TRAINING						50% Agricultural / 50% Domestic		
12714573	TRAINING: MATERIALS	1,000.00	50.0%	50.0%	\$500	\$500			
12714593	TRAINING: EQUIPMENT & LEASES	400.00	50.0%	50.0%	\$200	\$200			
12714600	TRAINING: CONTRACT WAGES	24,400.00	50.0%	50.0%	\$12,200	\$12,200			
12714618	TRAINING: CONTRACT OTHER	-	50.0%	50.0%	\$0	\$0			
12714621	TRAINING: CONSULTANTS	2,500.00	50.0%	50.0%	\$1,250	\$1,250			
	UTILITY LOCATES						same as trans main repairs		
12715573	UL: MATERIALS	500.00	22.5%	77.5%	\$113	\$388			
12715593	UL: EQUIPMENT & LEASES	5,240.00	22.5%	77.5%	\$1,180	\$4,060			
12715600	UL: CONTRACT WAGES	33,600.00	22.5%	77.5%	\$7,560	\$26,000			
12715618	UL: CONTRACT OTHER	-	22.5%	77.5%	\$0	\$0			
12715621	UL: CONSULTANTS	500.00	22.5%	77.5%	\$113	\$388			
	CROSS CONNECTION CONTROL						100% Domestic		
12716500	CCC: SALARIES & WAGES	-	0.0%	100.0%	\$0	\$0	all ICI		
12716510	CCC: EMPLOYEE BENEFITS	-	0.0%	100.0%	\$0	\$0			
12716514	EMPLOYEE COST ALLOCATION	48,800.00	0.0%	100.0%	\$0	\$48,800			
12716560	CCC: VEHICLE & TRAVEL	-	0.0%	100.0%	\$0	\$0			
12716573	CCC: MATERIALS	1,000.00	0.0%	100.0%	\$0	\$1,000			
12716578	CCC: TRAINING	-	0.0%	100.0%	\$0	\$0			
12716593	CCC: EQUIPMENT & LEASES	2,130.00	0.0%	100.0%	\$0	\$2,130			
12716600	CCC: CONTRACT WAGES	5,150.00	0.0%	100.0%	\$0	\$5,150			
12716621	CCC: CONSULTANTS	19,000.00	0.0%	100.0%	\$0	\$19,000			
	UTILITIES						Kal Lake pumping costs are removed from here (\$175,000) and put in Mission Hill TP Item		
12717599	UTILITIES	675,000.00	40.0%	60.0%	\$270,000	\$405,000			
	SMALL TOOLS								
12718573	ST: MATERIALS	20,500.00	50.0%	50.0%	\$10,300	\$10,300			
12718593	ST: EQUIPMENT & LEASES	80.00	50.0%	50.0%	\$40	\$40			
12718600	ST: CONTRACT WAGES	2,280.00	50.0%	50.0%	\$1,140	\$1,140			
12718618	ST: CONTRACT OTHER	500.00	50.0%	50.0%	\$250	\$250			
	INSTRUMENTATION								
12719573	INSTRUMENTATION: MATERIALS	18,000.00	45.0%	55.0%	\$8,100	\$9,900			
12719593	INSTRUMENTATION: EQUIPMENT & LEASES	14,000.00	45.0%	55.0%	\$6,300	\$7,700			
12719600	INSTRUMENTATION: CONTRACT WAGES	81,600.00	45.0%	55.0%	\$36,700	\$44,900			
12719618	INSTRUMENTATION: CONTRACT OTHER	1,200.00	45.0%	55.0%	\$540	\$660			
	INTAKE MAINTENANCE						Split based on flow; actual volume		
12722573	IM: MATERIALS	10,000.00	56.6%	43.4%	\$5,660	\$4,340			
12722593	IM: EQUIPMENT & LEASES	3,600.00	56.6%	43.4%	\$2,040	\$1,560			
12722600	IM: CONTRACT WAGES	31,300.00	56.6%	43.4%	\$17,700	\$13,600			
12722618	IM: CONTRACT OTHER	5,000.00	56.6%	43.4%	\$2,830	\$2,170			
	FLUSHING AND CLEANING						Ag system flushes lines inherently		
12723573	FC: MATERIALS	15,000.00	7.5%	92.5%	\$1,130	\$13,900			
12723593	FC: EQUIPMENT & LEASES	28,800.00	7.5%	92.5%	\$2,160	\$26,600			
12723600	FC: CONTRACT WAGES	300,000.00	7.5%	92.5%	\$22,500	\$278,000			
12723618	FC: CONTRACT OTHER	-	7.5%	92.5%	\$0	\$0			
	TREATMENT MAINTENANCE						100% Domestic		
12724500	TM: SALARIES & WAGES	95,800.00	0.0%	100.0%	\$0	\$95,800			
12724510	TM: EMPLOYEE BENEFITS	23,900.00	0.0%	100.0%	\$0	\$23,900			
12724573	TM: MATERIALS	120,000.00	0.0%	100.0%	\$0	\$120,000			
12724593	TM: EQUIPMENT & LEASES	30,000.00	0.0%	100.0%	\$0	\$30,000			
12724600	TM: CONTRACT WAGES	147,000.00	0.0%	100.0%	\$0	\$147,000			
12724618	TM: CONTRACT OTHER	-	0.0%	100.0%	\$0	\$0			
12724621	TM: CONSULTANTS	2,000.00	0.0%	100.0%	\$0	\$2,000			
	WATER QUALITY MONITORING						10% Agricultural / 90% Domestic		
12725500	SALARIES & WAGES	140,000.00	10.0%	90.0%	\$14,000	\$126,000	Testing would not be required with only Ag system; would still have testing if only Ag system		
12725510	EMPLOYEE BENEFITS	35,100.00	10.0%	90.0%	\$3,510	\$31,600			
12725560	VEHICLE & TRAVEL	-	10.0%	90.0%	\$0	\$0			
12725568	WQM: ADVERTISING & PROMOTION	25,000.00	10.0%	90.0%	\$2,500	\$22,500			
12725572	WQM: PUBLICATIONS & MEMBERSHIPS	5,500.00	10.0%	90.0%	\$550	\$4,950			
12725573	WQM: MATERIALS	33,600.00	10.0%	90.0%	\$3,360	\$30,200			
12725578	WQM: TRAINING	4,000.00	10.0%	90.0%	\$400	\$3,600			
12725593	WQM: EQUIPMENT & LEASES	15,100.00	10.0%	90.0%	\$1,510	\$13,600			
12725595	POSTAGE	15,000.00	10.0%	90.0%	\$1,500	\$13,500			
12725598	WQM: TELEPHONE	1,650.00	10.0%	90.0%	\$165	\$1,490			
12725600	WQM: CONTRACT WAGES	-	10.0%	90.0%	\$0	\$0			
12725618	WQM: CONTRACT OTHER	8,120.00	10.0%	90.0%	\$812	\$7,310			
12725621	WQM: CONSULTANTS	86,100.00	10.0%	90.0%	\$8,610	\$77,500			
12725626	WQM: KAL LAKE BACTERIAL S.T.	9,000.00	10.0%	90.0%	\$900	\$8,100			
12725650	WQM: COV MATERIALS	-	10.0%	90.0%	\$0	\$0			
12725651	WQM: COV EQUIPMENT	-	10.0%	90.0%	\$0	\$0			
12725652	WQM: COV CONTRACT WAGES	-	10.0%	90.0%	\$0	\$0			
12725653	WQM: COV CONTRACT OTHER	-	10.0%	90.0%	\$0	\$0			
	WATER TREATMENT PLANT - ADMINISTRATION						100% Domestic		
12727500	SALARIES & WAGES	-	0.0%	100.0%	\$0	\$0			
12727510	EMPLOYEE BENEFITS	-	0.0%	100.0%	\$0	\$0			
12727521	PERMITS AND FEES	509.00	0.0%	100.0%	\$0	\$509			
12727560	VEHICLE & TRAVEL	25,400.00	0.0%	100.0%	\$0	\$25,400			
12727570	SUNDRY	2,030.00	0.0%	100.0%	\$0	\$2,030			
12727572	PUBLICATIONS & MEMBERSHIPS	1,020.00	0.0%	100.0%	\$0	\$1,020			
12727578	TRAINING	5,090.00	0.0%	100.0%	\$0	\$5,090			
12727594	INSURANCE	30,500.00	0.0%	100.0%	\$0	\$30,500			
12727597	STATIONERY & OFFICE EXPENSE	7,120.00	0.0%	100.0%	\$0	\$7,120			
12727598	TELEPHONE	5,590.00	0.0%	100.0%	\$0	\$5,590			
12727599	UTILITIES	1,320.00	0.0%	100.0%	\$0	\$1,320			

Appendix C2: Cost Allocation between Agriculture and Domestic Sectors – 2012 Budgeted (page 3)

MISSION HILL WTP							100% Domestic		
12728573	MHWTP: MATERIALS	210,000.00	0.0%	100.0%	\$0	\$210,000			
12728593	MHWTP: EQUIPMENT & LEASES	5,090.00	0.0%	100.0%	\$0	\$5,090			
12728599	MHWTP: UTILITIES	76,800.00	0.0%	100.0%	\$0	\$76,800			
	<i>Kal Lake PS Energy Cost</i>	175,000.00	0.0%	100.0%	\$0	\$175,000	removed from Utilities Line item and relocated here		
12728600	MHWTP: CONTRACT WAGES	170,000.00	0.0%	100.0%	\$0	\$170,000			
12728618	MHWTP: CONTRACT OTHER	6,120.00	0.0%	100.0%	\$0	\$6,120			
DUTEAU WTP							100% Domestic		
12729571	DUTEAU WTP: WATER TREATMENT CHEMICALS	1,060,000.00	0.0%	100.0%	\$0	\$1,060,000	If system was only Ag, TP would not be required;		
12729573	DUTEAU WTP: MATERIALS	275,000.00	0.0%	100.0%	\$0	\$275,000	Irr stub from plant services small area; all other Irr flow is treated		
12729576	DUTEAU WTP: SLUDGE DISPOSAL	32,000.00	0.0%	100.0%	\$0	\$32,000	Group acknowledges that some current O&M costs are for Ag flows		
12729593	DUTEAU WTP: EQUIPMENT & LEASES	15,300.00	0.0%	100.0%	\$0	\$15,300			
12729599	DUTEAU WTP: UTILITIES	168,000.00	0.0%	100.0%	\$0	\$168,000			
12729600	DUTEAU WTP: CONTRACT WAGES	622,000.00	0.0%	100.0%	\$0	\$622,000			
12729618	DUTEAU WTP: CONTRACT OTHER	30,000.00	0.0%	100.0%	\$0	\$30,000			
OUTBACK WTP							100% Domestic		
12730573	OUTBACK WTP: MATERIALS	17,300.00	0.0%	100.0%	\$0	\$17,300			
12730593	OUTBACK WTP: EQUIPMENT & LEASES	4,070.00	0.0%	100.0%	\$0	\$4,070			
12730599	OUTBACK WTP: UTILITIES	6,100.00	0.0%	100.0%	\$0	\$6,100			
12730600	OUTBACK WTP: CONTRACT WAGES	38,600.00	0.0%	100.0%	\$0	\$38,600			
12730618	OUTBACK WTP: CONTRACT OTHER	447.00	0.0%	100.0%	\$0	\$447			
PUMP STATION MAINTENANCE							same concept as PRVs...		
12734573	PSM: MATERIALS	75,000.00	37.5%	62.5%	\$28,100	\$46,900	coldstream PS are domestic, PRV feeds ag system		
12734593	PSM: EQUIPMENT & LEASES	36,000.00	37.5%	62.5%	\$13,500	\$22,500			
12734600	PSM: CONTRACT WAGES	295,000.00	37.5%	62.5%	\$111,000	\$184,000			
12734618	PSM: CONTRACT OTHER	-	37.5%	62.5%	\$0	\$0			
12734621	PSM: CONSULTANTS	20,000.00	37.5%	62.5%	\$7,500	\$12,500			
HYDRANT MAINTENANCE							100% Domestic		
12735573	HM: MATERIALS	10,000.00	0.0%	100.0%	\$0	\$10,000	hydrants are not required on ag pipes; even if they are, they are for domestic FF requirements		
12735593	HM: EQUIPMENT & LEASES	8,400.00	0.0%	100.0%	\$0	\$8,400			
12735600	HM: CONTRACT WAGES	70,900.00	0.0%	100.0%	\$0	\$70,900			
12735618	HM: CONTRACT OTHER	-	0.0%	100.0%	\$0	\$0			
METER/LARGE VALVE REPLACEMENT							50% Agricultural / 50% Domestic		
12736573	MLVR: MATERIALS	10,000.00	50.0%	50.0%	\$5,000	\$5,000	>300 diameter		
12736593	MLVR: EQUIPMENT & LEASES	2,400.00	50.0%	50.0%	\$1,200	\$1,200			
12736600	MLVR: CONTRACT WAGES	5,610.00	50.0%	50.0%	\$2,810	\$2,810			
12736618	MLVR: CONTRACT OTHER	-	50.0%	50.0%	\$0	\$0			
VALVE MAINTENANCE									
12737573	VM: MATERIALS	20,000.00	12.5%	87.5%	\$2,500	\$17,500			
12737593	VM: EQUIPMENT & LEASES	16,000.00	12.5%	87.5%	\$2,000	\$14,000			
12737600	VM: CONTRACT WAGES	117,000.00	12.5%	87.5%	\$14,600	\$102,000			
12737618	VM: CONTRACT OTHER	10,000.00	12.5%	87.5%	\$1,250	\$8,750			
DAMS & RESERVOIRS							50% Agricultural / 50% Domestic		
12740573	D&R: MATERIALS	8,000.00	50.0%	50.0%	\$4,000	\$4,000	reservoirs are potable; dams are shared by volume		
12740593	D&R: EQUIPMENT & LEASES	12,800.00	50.0%	50.0%	\$6,400	\$6,400	KE and Goose Dams are Irr only		
12740600	D&R: CONTRACT WAGES	47,000.00	50.0%	50.0%	\$23,500	\$23,500	All Reservoirs		
12740618	D&R: CONTRACT OTHER	105,000.00	50.0%	50.0%	\$52,500	\$52,500	All Dams (contracted by RDNO)		
12740621	D&R: CONSULTANTS	3,000.00	50.0%	50.0%	\$1,500	\$1,500			
WELL REPAIRS							75% Agricultural / 25% Domestic		
12741573	WELLS: MATERIALS	20,000.00	75.0%	25.0%	\$15,000	\$5,000			
12741593	WELLS: EQUIPMENT & LEASES	2,000.00	75.0%	25.0%	\$1,500	\$500			
12741600	WELLS: CONTRACT WAGES	15,200.00	75.0%	25.0%	\$11,400	\$3,800			
12741618	WELLS: CONTRACT OTHER	-	75.0%	25.0%	\$0	\$0			
12741621	WELLS: CONSULTANTS	3,000.00	75.0%	25.0%	\$2,250	\$750			
PRV MAINTENANCE							50% Agricultural / 50% Domestic	132 PRVs	
12742573	PRV: MATERIALS	10,000.00	50.0%	50.0%	\$5,000	\$5,000	Increased maintenance frequency in summer due to higher ag flows		
12742593	PRV: EQUIPMENT & LEASES	8,800.00	50.0%	50.0%	\$4,400	\$4,400	Even ag prvs require servicing in the winter (check for leaks weekly)		
12742600	PRV: CONTRACT WAGES	62,700.00	50.0%	50.0%	\$31,400	\$31,400	poor water quality, high flow variation and age of infr. Is main reason for Ag prv reactive maintenance; cost of large PRVs is exponential		
12742618	PRV: CONTRACT OTHER	500.00	50.0%	50.0%	\$250	\$250			
SERVICE CONNECTIONS							Time and cost for Ag service connections (scs) is significantly higher than domestic scs even though there are more domestic sc repairs		
12748573	SC: MATERIALS	30,000.00	22.5%	77.5%	\$6,750	\$23,300			
12748593	SC: EQUIPMENT & LEASES	64,000.00	22.5%	77.5%	\$14,400	\$49,600			
12748600	SC: CONTRACT WAGES	160,000.00	22.5%	77.5%	\$36,000	\$124,000			
12748618	SC: CONTRACT OTHER	25,000.00	22.5%	77.5%	\$5,630	\$19,400			
METER READING							Same as Finance Overhead item above		
12751573	METER READING: MATERIALS	200.00	2.0%	98.0%	\$4	\$196			
12751593	METER READING: EQUIPMENT	2,000.00	2.0%	98.0%	\$40	\$1,960			
12751600	METER READING: CONTRACT WAGES	17,600.00	2.0%	98.0%	\$352	\$17,200			
12751618	METER READING: CONTRACT OTHER	64,000.00	2.0%	98.0%	\$1,280	\$62,700			
TRANSMISSION MAINS REPAIRS									
12756573	TMR: MATERIALS	55,000.00	22.5%	77.5%	\$12,400	\$42,600			
12756593	TMR: EQUIPMENT & LEASES	68,000.00	22.5%	77.5%	\$15,300	\$52,700			
12756600	TMR: CONTRACT WAGES	170,000.00	22.5%	77.5%	\$38,300	\$132,000			
12756618	TMR: CONTRACT OTHER	-	22.5%	77.5%	\$0	\$0			
12756621	TMR: CONSULTANTS	60,000.00	22.5%	77.5%	\$13,500	\$46,500			

Appendix C2: Cost Allocation between Agriculture and Domestic Sectors – 2012 Budgeted (page 4)

REGIONAL WATERSHED MANAGEMENT							20% Agricultural / 80 % Domestic		
12757500	RWM: SALARIES & WAGES	6,440.00	20.0%	80.0%	\$1,290	\$5,150			
12757510	RWM: EMPLOYEE BENEFITS	1,610.00	20.0%	80.0%	\$322	\$1,290			
12757551	RWM: COMMITTEE EXPENSES	2,000.00	20.0%	80.0%	\$400	\$1,600			
12757560	RWM: VEHICLE & TRAVEL	4,000.00	20.0%	80.0%	\$800	\$3,200			
12757568	RWM: ADVERTISING & PROMOTION	8,150.00	20.0%	80.0%	\$1,630	\$6,520			
12757573	RWM: MATERIALS	7,000.00	20.0%	80.0%	\$1,400	\$5,600			
12757593	RWM: EQUIPMENT & LEASES	3,190.00	20.0%	80.0%	\$638	\$2,550			
12757621	RWM: CONSULTANTS	20,300.00	20.0%	80.0%	\$4,060	\$16,200			
WATER STEWARDSHIP							10% Agricultural / 90 % Domestic		
12758500	WS: SALARIES & WAGES	62,500.00	10.0%	90.0%	\$6,250	\$56,300	Conservation program		
12758510	WS: EMPLOYEE BENEFITS	15,600.00	10.0%	90.0%	\$1,560	\$14,000			
12758560	WS: VEHICLE & TRAVEL	-	10.0%	90.0%	\$0	\$0			
12758562	WS: EDUCATION	5,000.00	10.0%	90.0%	\$500	\$4,500			
12758568	WS: ADVERTISING & PROMOTION	15,000.00	10.0%	90.0%	\$1,500	\$13,500			
12758573	WS: MATERIALS	5,000.00	10.0%	90.0%	\$500	\$4,500			
12758578	WS: TRAINING	1,000.00	10.0%	90.0%	\$100	\$900			
12758593	WS: EQUIPMENT & LEASES	2,000.00	10.0%	90.0%	\$200	\$1,800			
12758621	WS: CONSULTANTS	3,000.00	10.0%	90.0%	\$300	\$2,700			
OTHER MAINTENANCE							Use Admin % breakdown		
12761573	OM: MATERIALS	-	14.0%	86.0%	\$0	\$0			
12761593	OM: EQUIPMENT & LEASES	2,400.00	14.0%	86.0%	\$337	\$2,060			
12761600	OM: CONTRACT WAGES	20,600.00	14.0%	86.0%	\$2,890	\$17,700	all Vernon/Coldstream		
12761618	OM: CONTRACT OTHER	-	14.0%	86.0%	\$0	\$0			
IRRIGATION TURN ON/OFF							100% Agricultural		
12762573	ITO: MATERIALS	1,000.00	100.0%	0.0%	\$1,000	\$0			
12762593	ITO: EQUIPMENT & LEASES	8,800.00	100.0%	0.0%	\$8,800	\$0			
12762600	ITO: CONTRACT WAGES	50,300.00	100.0%	0.0%	\$50,300	\$0			
12762618	ITO: CONTRACT OTHER	2,000.00	100.0%	0.0%	\$2,000	\$0			
SOUTH VERNON IRR DISTRICT - EAST							100% Agricultural		
12781573	SVID EAST: MATERIALS	-	100.0%	0.0%	\$0	\$0			
12781593	SVID EAST: EQUIPMENT & LEASES	-	100.0%	0.0%	\$0	\$0			
12781600	SVID EAST: CONTRACT WAGES	-	100.0%	0.0%	\$0	\$0			
12781618	SVID EAST: CONTRACT OTHER	-	100.0%	0.0%	\$0	\$0			
SOUTH VERNON IRR DISTRICT - WEST							100% Agricultural		
12783600	SVID WEST: CONTRACT WAGES	-	100.0%	0.0%	\$0	\$0			
12783618	SVID WEST: CONTRACT OTHER	-	100.0%	0.0%	\$0	\$0			
DELCLIFFE WATER							100% Domestic		
12785573	DELCLIFFE WATER: MATERIALS	-	0.0%	100.0%	\$0	\$0			
12785593	DELCLIFFE WATER: EQUIPMENT & LEASES	-	0.0%	100.0%	\$0	\$0			
12785600	DELCLIFFE WATER: CONTRACT WAGES	-	0.0%	100.0%	\$0	\$0			
12785618	DELCLIFFE WATER: CONTRACT OTHER	-	0.0%	100.0%	\$0	\$0			
WATER LICENSES									
12792530	BULK SUPPLY PURCHASE	45,000.00	56.6%	43.4%	\$25,500	\$19,500	Split based on flow; actual volume		
					Subtotals	\$1,400,000	\$8,590,000		
					Total Cost	% Agricultural	% Domestic		
					\$9,990,000	14.0%	86.0%		

Appendix D: Classification of Land as a Farm Regulation (BC Reg 411/95)

[This Regulation is Current to June 26, 2012 - "This is not a government verified version"]

Assessment Act

**CLASSIFICATION OF LAND
AS A FARM REGULATION**

[includes amendments up to B.C. Reg. 138/2012, September 1, 2012]

Contents

PART 1 – INTERPRETATION

1. [Definitions](#)

PART 2 – CLASSIFICATION OF LAND AS A FARM

2. [\[Repealed\]](#)
3. [Application for classification of land as a farm](#)
4. [Classification of land as a farm](#)
5. [Gross annual value requirements](#)
6. [Exception to requirement for sale of qualifying agricultural products](#)
- 6.1 [Exceptional circumstances](#)
7. [Classification of leased land](#)
8. [Classification of land under development as a farm](#)
9. [Ancillary operations](#)
10. [Reporting requirements](#)
11. [\[Repealed\]](#)

PART 3 – RETIRED FARMERS – LAND USED FOR A DWELLING

12. [Regulations under section 23 \(3.2\) of the Act](#)
13. [Application for the 2013 taxation year](#)

[Schedule](#)

PART 1 – INTERPRETATION

Definitions

- 1 (1) In this regulation:
"Act" means the *Assessment Act*;

"breeding product" means semen, an ovum or an embryo that is produced as part of livestock raising for sale for use in breeding livestock, other than poultry;

"December 31" means December 31 of the year preceding the taxation year for which the assessment roll is completed;

"earlier reporting period", in respect of a person, for a taxation year, means the person's income tax year ending in the calendar year that is 3 years before the taxation year;

"farm gate amount" means the total of the following amounts received by a producer:

- (a) the amount from a sale of a qualifying agricultural product
 - (i) in the case of a qualifying agricultural product other than a product referred to in subparagraphs (ii) to (iv), supported by
 - (A) written evidence of the sale price, or
 - (B) in the absence of written evidence, the sale prices of comparable products sold locally,
 - (ii) in the case of livestock that has been raised, supported by written evidence of any of the following, as applicable:
 - (A) the live weight price of the livestock, not including the slaughter and cut and wrap costs;
 - (B) the live weight price applied to the weight gained by the livestock while being raised on the producer's farm operation;
 - (C) the difference between the purchase and sale prices of the livestock,
 - (iii) in the case of a horticultural crop that is purchased and transplanted or moved to the producer's farm operation for further growth, and is subsequently sold, supported by written evidence of the difference between the purchase and sale prices of the crop, or
 - (iv) in the case of a breeding product, supported by written evidence of the sale price;
- (b) in the case of a qualifying agricultural product, other than a breeding product, that, because of loss or damage to the product, is not sold, the amount of any indemnity payment, supported by written evidence of the payment;
- (c) the amount of the fee for a horse stud service provided, supported by written evidence of the fee paid;

"farm operation" means land that comprises a farm operation under section 4 (4);

"farmer's dwelling" means a dwelling that is

- (a) located on or adjacent to the farm, and
- (b) occupied by a person who is actively involved in the day-to-day activities of that farm;

"horse rearing" means breeding or raising horses for sale;

"horse stud service" means a stud service provided for a fee by a producer as part of horse rearing;

"income tax year" has the same meaning as "taxation year" in the *Income Tax Act*;

"later reporting period", in respect of a person, for a taxation year, means the person's income tax year ending in the calendar year that is 2 years before the taxation year;

"lease" means a written agreement for the rental of all or part of one or more parcels of land;

"lessee", if the person renting land under a lease is a partnership, means the partnership;

"livestock" includes poultry;

"livestock raising" means

- (a) breeding or raising domesticated animals
 - (i) for the production of food for human or animal consumption, including, without limitation, eggs or products of dairying,
 - (ii) for wool, hide, feather or fur production,
 - (iii) for use as breeding stock for the purposes listed in subparagraph (i) or (ii), or
 - (iv) for sale for any of the uses described in subparagraph (i), (ii) or (iii), or
- (b) horse rearing;

"medicinal plant culture" means the cultivation or management of plant species, containing naturally occurring substances, that are used to restore, maintain or improve health;

"October 31" means October 31 in the year preceding the taxation year for which the assessment roll is prepared;

"packing house" means a facility used for the cleaning, sorting, grading, packing or storage of qualifying agricultural products;

"producer" means a person who

- (a) is the owner or lessee of land, and
- (b) uses the land for a qualifying agricultural use;

"qualifying agricultural product" means a product, including, without limitation, a breeding product, that is a product of a qualifying agricultural use;

"qualifying agricultural use" means a use of land for agricultural purposes as approved by the assessment authority, following consultation with the minister responsible for the administration of the *Ministry of Agriculture and Food Act*, and that

- (a) is an agricultural use set out in section 1 of the Schedule to this regulation, and
- (b) is not an excluded use set out in section 2 of the Schedule to this regulation;

"reporting period", in respect of a person, for a taxation year, means the earlier reporting period or the later reporting period of the person for the taxation year.

- (2) Despite the definition of **"earlier reporting period"** in subsection (1), the earlier reporting period, in respect of a person, for the 2013 taxation year is the 12-month period ending October 31, 2010.

- (3) Despite the definition of "**later reporting period**" in subsection (1), the later reporting period, in respect of a person, for the 2013 taxation year is,
- (a) if the person is an individual, the 14-month period ending December 31, 2011, and
 - (b) if the person is a corporation or a partnership, the person's income tax year ending in 2011.

[en.. B.C. Reg. 138/2012, s. 2,3.]

PART 2 – CLASSIFICATION OF LAND AS A FARM

Application of this regulation

- 2** [Repealed, effective June 25, 2012 (B.C. Reg. 138/2012, s. 5)]

Application for classification of land as a farm

- 3**
- (1) An application under section 23 (1) of the Act for classification of land as a farm must be delivered to the assessor on or before October 31 in the form prescribed by the assessment authority.
 - (2) When ownership changes, the assessor may require the new owner to submit an application.

[am. B.C. Reg. 292/2007, s. 7; 138/2012, s. 6.]

Classification of land as a farm

- 4**
- (1) Unless this Part provides otherwise, the assessor must classify as farm all or part of a parcel of land used for
 - (a) a qualifying agricultural use,
 - (b) a farmer's dwelling, or
 - (c) the training and boarding of horses when operated in conjunction with horse rearing.
 - (2) Land will only be classified as a farm where part of a parcel or parcels of land are
 - (a) necessary to the farm, and
 - (b) predominantly used for a qualifying agricultural use.
 - (2.1) Despite subsections (1) and (2), the assessor must classify land as a farm if the land is used for purposes that contribute to a qualifying agricultural use, including, without limitation, the following purposes:
 - (a) drainage;
 - (b) irrigation;
 - (c) a riparian area;
 - (d) a buffer;
 - (e) a headland;
 - (f) a windbreak;
 - (g) seasonal feeding or calving grounds;
 - (h) shelter for livestock;
 - (i) farm outbuildings;

- (j) access to farm outbuildings or other land that is part of the farm operation.
- (3) Despite subsections (1) and (2), the assessor must classify land as a farm if
 - (a) the land is in an agricultural land reserve,
 - (b) the land is part of a parcel, a portion of which is used for a qualifying agricultural use,
 - (c) the portion of the parcel being used for a qualifying agricultural use makes a reasonable contribution to a farm operation and meets the other requirements of this Part, and
 - (d) the land
 - (i) is used only for purposes ancillary to a farmer's dwelling, or
 - (ii) has no present use and is neither specifically zoned nor held for business, commercial or industrial purposes.
- (3.1) Despite subsections (1) and (2), the assessor must classify land as a farm if the land is not in an agricultural land reserve and
 - (a) the land
 - (i) is used only for purposes ancillary to a farmer's dwelling, and
 - (ii) is part of a parcel, a portion of which is used for a qualifying agricultural use, and the portion used for a qualifying agricultural use makes a reasonable contribution to a farm operation and meets the other requirements of this regulation, or
 - (b) the land has no present use, is neither specifically zoned nor held for business, commercial or industrial purposes and meets one of the following standards:
 - (i) the land
 - (A) has a highest and best use that is a use not better than that of a farm, and
 - (B) is part of a parcel, a portion of which is used for a qualifying agricultural use, and the portion used for a qualifying agricultural use makes a reasonable contribution to a farm operation and meets the other requirements of this Part;
 - (ii) the land is part of a parcel, a portion of which, comprising 50% or more of the total area of the parcel that is outside the agricultural land reserve, is used for a qualifying agricultural use or is used for purposes that contribute to a qualifying agricultural use within the meaning of subsection (2.1), and that portion is farmed by the owner and meets the other requirements of this Part;
 - (iii) the land is part of a parcel, a portion of which, comprising 25% or more of the total area of the parcel that is outside the agricultural land reserve, is used for a qualifying agricultural use, and that portion is farmed by the owner and meets the other requirements of this Part.

- (4) A farm operation comprises all or part of a parcel or group of parcels of land
 - (a) contiguous or not,
 - (b) owned, or leased in accordance with section 7, and
 - (c) operated as an integrated unit.
- (5) A farm operation comprised of parcels of land within different assessment areas will only be classified as farm where the assessor is satisfied that each parcel is
 - (a) necessary to the farm, and
 - (b) predominantly used for a qualifying agricultural use.

[am. B.C. Reg. 343/96, s. 2; 438/97, s. 3; 561/2004, s. 2; 275/2009, s. 2; 138/2012, s. 7.]

Gross annual value requirements

- 5** (1) For the purposes of this section, the gross annual value for a person's reporting period in respect of a farm operation is the sum of the following amounts, as applicable:
 - (a) the farm gate amounts of the qualifying agricultural products produced on the farm operation during that reporting period;
 - (b) the farm gate amounts of the horse stud services provided by means of horses raised on the farm operation during that reporting period;
 - (c) if the reporting period is the later reporting period of the person for a taxation year, the total of the unrealized values for that reporting period under subsection (2) in respect of the qualifying agricultural products to which that subsection relates.
- (2) The unrealized value referred to in subsection (1) (c)
 - (a) for qualifying agricultural products, other than those produced from livestock raising and breeding products, if the qualifying agricultural products
 - (i) are produced on the farm operation during the later reporting period of the person, and
 - (ii) are not sold during that reporting period, but are available and offered for sale or held for sale during the 12-month period following that reporting period,
 is the monetary worth of the qualifying agricultural products, as supported by the sale prices of comparable products sold locally, and
 - (b) in relation to livestock that
 - (i) is raised on the farm operation, during the later reporting period of the person, for food for human or animal consumption, and
 - (ii) is not sold during that reporting period, but is available and offered for sale or held for sale as food during the 12-month period following that reporting period,
 is determined by one of the following methods:
 - (iii) the increase in value attributable to weight gain of livestock raised for sale;

- (iv) the estimated value of livestock born and raised for sale based on the current farm gate amount.
- (3) The assessor must not classify any part or parcel of land of a farm operation as a farm for a taxation year unless all of the applicable requirements of subsections (4) to (8) are met with respect to the farm operation.
- (4) To be classified as a farm for a taxation year, the gross annual value in respect of the farm operation for at least one of the person's reporting periods for the taxation year must be at least
 - (a) \$2 500, if the total area of the farm operation is between 0.8 ha and 4 ha,
 - (b) \$2 500 plus 5% of the actual value of the farm operation for farm purposes in excess of 4 ha, if the total area of the farm operation is greater than 4 ha,
 - (c) \$10 000, if the total area of the farm operation is less than 0.8 ha, and
 - (d) despite paragraph (c), \$2 500, if the total area of the farm operation has been reduced to less than 0.8 ha as a result of expropriation, but only if the farm operation remains in the same ownership.
- (5) Despite subsection (4) (c), if land was classified as a farm in 1995, the applicable requirement in respect of the farm operation under subsection (4) is deemed to be met in respect of the farm operation for a reporting period of the owner for a taxation year if
 - (a) the total area of the farm operation is less than 0.8 ha,
 - (b) the farm operation remains in the same ownership,
 - (c) the assessor is satisfied that the owner earns the greater part of its livelihood for the reporting period from either or both of the following:
 - (i) the sale of qualifying agricultural products produced on the farm operation;
 - (ii) fees for horse stud services provided by the owner, by means of horses raised on the farm operation, and
 - (d) the farm operation meets the other requirements of this Part.
- (6) Despite subsections (4) and (5) of this section, for land to be classified as a farm under section 4 (3.1) (b) (iii), the gross annual value in respect of the farm operation for at least one of the owner's reporting periods for the taxation year must be at least \$10 000.
- (7) For the purposes of subsections (5) and (6), a farm operation does not include parcels and parts of parcels of land that are leased.
- (8) Despite subsections (4) and (10) of this section, the assessor must classify all or part of a parcel of land of a farm operation as a farm for a taxation year in respect of which an application is submitted by
 - (a) a person under section 3 (1) in respect of land not classified as a farm in the year in which the application is made, or
 - (b) a new owner under section 3 (2) in respect of the farm operation, if, in the taxation year in which the application is submitted,

- (c) the gross annual value in respect of the farm operation is at least the applicable amount set out in subsection (4) (a), (b) or (c) of this section, and
 - (d) production of qualifying agricultural products from the farm operation occurs and a sale of qualifying agricultural products from the farm operation is made.
- (9) For the purposes of subsection (8), the gross annual value is determined on the basis of a taxation year and not on the basis of the person's reporting period.
- (10) For a farm operation to be classified as a farm for a taxation year, the following requirements must be met:
 - (a) subject to section 6, qualifying agricultural products from the farm operation must be sold during both of the person's reporting periods for the taxation year;
 - (b) if the farm operation is used for horse rearing, a horse reared on the farm operation must be sold in at least one of the person's reporting periods for the taxation year.
- (11) This section applies despite section 4, but is subject to section 8.

[en. B.C. Reg. 138/2012, s. 8.]

Exception to requirement for sale of qualifying agricultural products

- 6 The requirement in section 5 (10) (a) is met in respect of a reporting period of a person for the taxation year referred to in that provision if the qualifying agricultural products produced from the farm operation referred to in that provision
 - (a) are not sold during that reporting period, but are produced in sufficient quantities that the applicable requirements of section 5 for that taxation year would have been met if the qualifying agricultural products had been sold during that reporting period, and
 - (b) are either
 - (i) grains, oilseeds, forage seeds, turf seeds or pulse seeds, and the assessor is satisfied that the grains or seeds will be available for sale within the 12-month period immediately following the end of that reporting period, or
 - (ii) any other qualifying agricultural product that is grown and harvested for processing for sale or to be used in the preparation of manufactured derivatives to be made available for sale within the 12-month period immediately following that reporting period.

[en. B.C. Reg. 138/2012, s. 8.]

Exceptional circumstances

- 6.1** (1) In exceptional circumstances, the Lieutenant Governor in Council may waive, by order, any of the sales or production requirements of this Part for the period and on any terms and conditions specified in the order.
- (2) In this section, "**exceptional circumstances**" includes natural disasters and any other circumstances the Lieutenant Governor in Council is satisfied are of such a severity as to prevent or make impracticable compliance with certain sales or production requirements of this Part.
- [en. B.C. Reg. 561/2004, s. 4; am. B.C. Reg. 138/2012, s. 9.]

Classification of leased land

- 7** (1) In the case of leased land, a copy of the lease document must be submitted to the assessor on or before October 31 in order for the land to be classified as a farm.
- (2) The lease document must contain the names and signatures of the lessee and lessor, the legal or other well defined description of the land being leased, the commencement date, the signing date, the duration of the lease, the lease area, the intended use of the leased land and the consideration for the lease.
- (3) To be classified as a farm the leased land must
- (a) make a reasonable contribution to the farm operation, and
 - (b) be 0.8 ha or greater except if
 - (i) the land is in an agricultural land reserve, and
 - (ii) despite section 4 (3), the land is used for a qualifying agricultural use.
- (4) Despite section 5 and subsection (1) of this section, in the case of leases of Crown land issued after October 31, the assessor must classify all or part of the land as a farm if
- (a) the application form referred to in section 3 is delivered to the assessor on or before December 31, and
 - (b) the assessor is satisfied that the farm meets the other requirements of this Part.

[am. B.C. Reg. 561/2004, s. 5; 275/2009, s. 4; 138/2012, ss. 9,10,11.]

Classification of land under development as a farm

- 8** (1) The assessor must, for a taxation year, classify all or part of a parcel of land of a farm operation as a farm if the assessor is satisfied that, on or before October 31,
- (a) the land is being developed for a qualifying agricultural use,
 - (b) the land does not meet the applicable requirements of section 5, and
 - (c) the requirements in subsections (2) to (7) of this section that relate to the applicable qualifying agricultural products are met.
- (2) The requirement for qualifying agricultural products that require less than one year after planting before harvesting occurs is that there is a sufficient area prepared and planted to meet the requirements of this Part on or before October 31 of the following year.

- (3) The requirement for qualifying agricultural products that require one to 6 years after planting before harvesting occurs is that there is a sufficient area prepared and planted to meet the requirements of this Part when harvesting occurs.
- (4) The requirements for qualifying agricultural products that require 7 to 12 years after planting before harvesting occurs are as follows:
 - (a) there is a sufficient area prepared and planted to meet the requirements of this Part when harvesting occurs;
 - (b) there is a reasonable expectation of profit from farming.
- (5) The requirements for livestock, greenhouse or mushroom operations that require one year to establish before sales occur are as follows:
 - (a) the buildings, structures and fencing are completed as required to meet the applicable requirements of section 5 for the farm operation;
 - (b) the required livestock are purchased and present;
 - (c) the farm operation will meet the requirements of this Part on or before October 31 of the following year.
- (6) The requirements for aquaculture operations that require 2 to 5 years to establish before harvesting occurs are as follows:
 - (a) the buildings and structures are completed as required to meet the applicable requirements of section 5 for the farm operation;
 - (b) the land is seeded, planted or stocked as required to meet the applicable requirements of section 5 when harvesting occurs;
 - (c) the farm operation will meet the requirements of this Part when harvesting occurs.
- (7) It is an additional requirement for qualifying agricultural products described in subsections (2), (3) and (4) of this section that the assessor has approved a development plan and site diagram that
 - (a) is submitted with the application under section 3 by the owner or lessee of the land, and
 - (b) includes location and details of the crop to be planted, area, date of planting, expected yield, selling price and date of harvest.
- (8) Despite subsections (2), (3) and (4), the requirement in subsection (2), (3) or (4) (a), as applicable, that a sufficient area of land must be planted on or before October 31 is deemed to be met in respect of the taxation year referred to in subsection (1) if
 - (a) the applicable area of land is prepared for planting on or before October 31,
 - (b) the development plan approved under subsection (7) shows that the crop will be planted by June 21 of that taxation year, and
 - (c) the assessor is satisfied that a viable farm will be established in accordance with the requirements for that crop based on sound agricultural practices.
- (9) Despite section 5, the assessor must classify all or part of a parcel of land as a farm,

- (a) for a taxation year immediately following the taxation year in which the production of a qualifying agricultural product first occurs and a sale of a qualifying agricultural product is made, if
 - (i) the land was classified as a farm under subsection (1) of this section for the immediately preceding taxation year, and
 - (ii) the requirements in section 5 (4) and (10) are met in the taxation year in which production first occurs, and
 - (b) for the immediately following taxation year, if
 - (i) the land was classified as a farm under paragraph (a) for the immediately preceding taxation year, and
 - (ii) the requirements in section 5 (4) and (10) are met in the taxation year immediately following the taxation year in which production first occurs.
- (10) For the purposes of subsection (9), the gross annual value is determined on the basis of a taxation year and not on the basis of the person's reporting period.

[en. B.C. Reg. 138/2012, s. 12.]

Ancillary operations

- 9
 - (1) This section applies despite other provisions of this Part.
 - (2) Land, but not improvements, used for a packing house as part of a farm operation will be classified as a farm if
 - (a) any authority having jurisdiction over the use of that land has regulated the use of that land to permit the growing and raising of crops, and
 - (b) more than 50% of the qualifying agricultural products that are cleaned, sorted, graded, packed or stored in the packing house are grown or raised on that farm operation.
 - (3) *Repealed* B.C. Reg. 411/95, s. 9 (4).]
 - (4) *Spent.*

[en. B.C. Reg. 438/97, s. 4; am. 1999-39-78; B.C. Reg. 411/95, s. 9(4); 138/2012, ss. 10,13,14.]

Reporting requirements

- 10
 - (1) Before or after the completion of any assessment roll the assessor may require the following information:
 - (a) reporting from the owner or lessee to ensure that the farm continues to meet the requirements of this Part;
 - (b) additional information from the owner or lessee, including receipts or copies of lease documentation, in support of farm classification.
 - (2) Notice to provide information must be sent by mail or served personally by the assessor.
 - (3) The owner or lessee must provide the information to the assessor within 21 days from the receipt of the notice or a longer period as specified in the notice.

[am. B.C. Reg. 138/2012, s. 13.]

Declassification

- 11** [Repealed, effective October 18, 2007 (B.C. Reg. 310/2007, s. 2)].

PART 3 – RETIRED FARMERS – LAND USED FOR A DWELLING

Regulations under section 23 (3.2) of the Act

- 12**
- (1) For the purposes of paragraph (a) of the definition of "retired farmer" in section 23 (0.1) of the Act, the prescribed period or periods of time are a period or periods, whether or not consecutive, that total at least 20 years.
 - (2) For the purposes of section 23 (3.1) (a) (ii) of the Act, the prescribed age is 65 years.
 - (3) For the purposes of section 23 (3.1) (b) of the Act, it is a requirement that the owner was the spouse of the retired farmer when the retired farmer retired.
 - (4) For the purposes of section 23 (3.1) (d) (iv) of the Act, it is a requirement that, when the retired farmer retired, the retired farmer was actively involved in the day-to-day activities on land
 - (a) that was classified under section 23 (2) of the Act as a farm for the taxation year in which the retired farmer retired, and
 - (b) that is all or part of
 - (i) the parcel that includes the land to which the owner's application relates, or
 - (ii) a parcel that is adjacent to the parcel that includes the land to which the owner's application relates.
 - (5) For the purposes of section 23 (3.1) (h) of the Act, it is a requirement that an application has not been made by the spouse of the owner under section 23 (3.1) of the Act for the same taxation year in respect of land other than the land to which the owner's application relates.

[en. B.C. Reg. 138/2012, s. 15.]

Application for the 2013 taxation year

- 13**
- (1) The time for submitting the application to the assessor under section 23 (3.1) (g) of the Act for the 2013 taxation year is extended to March 15, 2013.
 - (2) This section is repealed on April 1, 2013.

[en. B.C. Reg. 138/2012, s. 15.]

SCHEDULE

(section 1(1))

[en. B.C. Reg. 138/2012, s. 16.]

QUALIFYING AGRICULTURAL USES

Agricultural uses

- 1** The following are agricultural uses for the purposes of paragraph (a) of the definition of "qualifying agricultural use" in section 1 (1):
- (a) apiculture;
 - (b) aquaculture;
 - (c) Christmas tree culture (plantation and cultured native stand);
 - (d) management of the following trees, for the production of sap or syrup:
 - (i) trees botanically known as *Betula* species and commonly known as birch, or
 - (ii) trees botanically known as *Acer* species and commonly known as maple;
 - (e) floriculture;
 - (f) forage production;
 - (g) forest seedling and seed production;
 - (h) fruit and vegetable production;
 - (i) grain and oilseed production;
 - (j) herb production;
 - (k) horticulture;
 - (l) intense cultivation of plantations of
 - (i) trees botanically known as *Populus* species and commonly known as poplar, or
 - (ii) trees botanically known as *Salix* species and commonly known as willow;
 - (m) livestock raising;
 - (n) medicinal plant culture;
 - (o) raising insects for biological pest control;
 - (p) raising crops for food for human or animal consumption;
 - (q) seed production;
 - (r) turf production.

Excluded uses


- 2** The following are excluded uses for the purposes of paragraph (b) of the definition of "qualifying agricultural use" in section 1 (1):
- (a) the production of manufactured derivatives from agricultural raw materials;
 - (b) the production of qualifying agricultural products for domestic consumption on the farm;

- (c) the production of agricultural by-products other than breeding products;
- (d) agricultural services other than horse stud services;
- (e) the breeding and raising of pets other than horses.

[Provisions of the *Assessment Act*, RSBC 1996, c. 20, relevant to the enactment of this regulation: section 23]

NOTE: *This regulation replaces B.C. Reg. 298/85.*

Appendix E: Domestic Appeal for Agricultural Water Rate Application (page 1)

		DOMESTIC APPEAL FOR AGRICULTURAL WATER RATE APPLICATION Greater Vernon Water	
NAME of Property Owner(s):		Phone #1:	
		Phone #2:	
ADDRESS OF PROPERTY APPLIED FOR:			
MAILING ADDRESS (if different from above):			
TOTAL PROPERTY SIZE: <input type="checkbox"/> ACRES		EXISTING WATER ALLOCATION: <input type="checkbox"/> HECTARES	
TYPE OF IRRIGATION SYSTEM (eg. drip, hand set, overhead sprinkler, etc.):		ESTIMATE OF INCOME FROM FARMING:	
		PLEASE NOTE: Applications <u>will not</u> be accepted without proof of income.	
IS LAND LEASED: <input type="checkbox"/> Yes <input type="checkbox"/> No		IF YES, NAME OF RENTER:	
(the owner or renter can provide the proof of income)			
DO YOU HAVE A WATER METER: <input type="checkbox"/> Yes <input type="checkbox"/> No		PLEASE NOTE: water meters <u>must be</u> installed before turn on.	
DO YOU HAVE A BACKFLOW PREVENTOR? <input type="checkbox"/> Yes <input type="checkbox"/> No		COMPLIANT? <input type="checkbox"/> Yes <input type="checkbox"/> No	
PREVIOUS DOMESTIC APPEAL APPLICATION? <input type="checkbox"/> Yes <input type="checkbox"/> No			
TYPES OF CROP AND / OR LIVESTOCK:			

PLEASE SEE REVERSE SIDE FOR ADDITIONAL INFORMATION

THE APPLICANT ACCEPTS THE FOLLOWING TERMS: 1. All agricultural water used must be metered prior to approval of application; 2. All domestic water used must be metered prior to approval of application; 3. Only one appeal per property may be filed per calendar year; 4. \$25 NON REFUNDABLE application fee made payable to the 'Regional District of North Okanagan'; 5. Applications received after February 15 th will be subject to a \$50 non refundable late fee; 6. Meet Cross Connection Control Standards; 7. The applicant will notify Regional District of North Okanagan - Greater Vernon Water (RDNO-GVW) if farming activity ceases; 8. RDNO-GVW will conduct random audits, including site inspections, to confirm eligibility; 9. Eligibility for agricultural water may be withdrawn at the discretion of RDNO-GVW if land use ceases to meet the criteria for agricultural use or if access for site inspections is denied; and 10. Current water restrictions must be taken into consideration at all times. In the event of a successful appeal, the applicant will install (a) separate water meter(s) at their sole expense to measure all water used on the property. The meter(s) must be installed and inspected before the agricultural water rate comes into effect.	
SIGNATURE OF PROPERTY OWNER(S):	DATE:

FOR OFFICE USE ONLY

PID FILE No.:		CCC File #:	
		Compliant: <input type="checkbox"/> Yes <input type="checkbox"/> No	
LEGAL DESCRIPTION: LOT:	PLAN:	SEC:	TWP:
<input type="checkbox"/> APPROVED	VALID UNTIL: _____	REF. No.: _____	
<input type="checkbox"/> DENIED			
NAME OF AUTHORIZED OFFICIAL (PRINT)	SIGNATURE	DATE	
COMMENTS:			
<input type="checkbox"/> \$25 NON-REFUNDABLE APPLICATION FEE <input type="checkbox"/> \$50 NON-REFUNDABLE LATE FEE IN ADDITION TO THE \$25 APPLICATION FEE AFTER FEBRUARY 15 TH .		<input type="checkbox"/> CASH	<input type="checkbox"/> CHEQUE <input type="checkbox"/> DEBIT
		RECEIPT #: _____	

REGIONAL DISTRICT OF NORTH OKANAGAN
 GREATER VERNON WATER
 9848 Aberdeen Road
 Coldstream, BC V1B 2K9
 Phone: 250-550-3700 Fax: 250-550-3701 www.rdno.ca

Appendix E: Domestic Appeal for Agricultural Water Rate Application (page 2)

CRITERIA FOR AGRICULTURAL WATER USE

The following criteria must be met in order for landowners to receive irrigation water at the agricultural rate:

1. The property has current BC Assessment Farm Classification. *If your property has farm classification, you are automatically eligible for the agricultural water rate and do not need to submit an appeal.*
2. Properties without BC Assessment Farm Classification with an existing irrigation allocation greater than 0.41 ha (1 acre) will have an annual opportunity to appeal for the agricultural water use rate. Properties with an existing irrigation allocation less than or equal to 0.41 ha (1 acre) will not be permitted to appeal.
3. Properties without BC Assessment Farm Classification or without a successful agricultural water use rate appeal will be considered domestic. Domestic water use is required to be metered and is charged at the domestic water rate.
4. A successful appeal must meet the following conditions:
 - a. Agricultural use of the property is permitted pursuant to the appropriate zoning regulations;
 - b. The property is used for agricultural purposes, comprising:

- Apiculture;	- Herb production;	- Poultry and egg production;
- Aquaculture;	- Horse rearing;	- Seed production;
- Christmas tree culture;	- Horse Boarding;	- Turf production;
- Dairying;	- Horticulture;	- Wool, hide, feather or fur production; and
- Floriculture;	- Populous species and salix species intensively cultivated in plantations;	- The raising of crops or animals for human consumption
- Forage production;	- Insects raised for biological pest control;	
- Forest seedling and seed production;	- Livestock raising;	
- Fruit and vegetable production;	- Medicinal plant culture;	

The following activities are **NOT** considered agricultural for the purposes of water billing:

- Production of manufactured derivatives from agricultural raw materials;
- Production for the occupants' own domestic consumption;
- Agricultural services; and
- Breeding and rearing of pets, except horses.

5. The property owner must install a second water meter inside the property line to capture all water use. The cost to purchase and install the meter, pit and appurtenances will be borne by the property owner. The meter must be installed and inspected by RDNO-GVW before eligibility for the agricultural water rate is instated.
6. Landowners with water allocations less than or equal to 0.82 hectares (2 acres) will be required to meet the income threshold of \$1,000 per year. Landowners with water allocations greater than 0.82 hectares will be required to meet the income threshold of \$2,500 per year. Proof of income is required with **ALL** appeal applications made.

ADDITIONAL INFORMATION

1. All domestic use is required to be metered, and to pay the domestic rate, even if the property sustains an agricultural activity.
2. A **NON-REFUNDABLE** fee of \$25 made payable to the 'Regional District of North Okanagan' is required at the time of appeal submission.
3. ***NEW*** Applications submitted after February 15th will be subject to a \$50 non-refundable late fee.
4. All properties must be assessed for backflow prevention and meet Cross Connection Control Standards including installation of required backflow prevention devices and / or assemblies if required.
5. Appeals are assessed by RDNO-GVW staff based on the information provided. Extraordinary cases will be referred to the Regional District of North Okanagan Board.
6. RDNO-GVW reserves the right to perform random audits and site inspections to verify conformance. Eligibility for the agricultural water rate will be withdrawn if, at the discretion of RDNO-GVW, land use fails to meet the above criteria.
7. Successful appeals are valid for one calendar year. One appeal per property may be submitted per calendar year.
8. Properties with allocation over 0.41 hectares will have until February 15th of the current year to appeal. Properties with allocation less than or equal to 0.41 hectares without BC Assessment Farm Status will be considered domestic and will be invoiced at the domestic rate.
9. Notification regarding approved or rejected appeals will be mailed to the address provided. Rejected appeals will be informed of the reasons.
10. Current water restrictions must be taken into consideration at all times.

Greater Vernon Water is a function of the Regional District of the North Okanagan, responsible for water supply, treatment and distribution. Please feel free to contact RDNO-GVW for additional information at:

REGIONAL DISTRICT OF NORTH OKANAGAN
 GREATER VERNON WATER
 9848 Aberdeen Road
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 Phone: 250-550-3700 Fax: 250-550-3701 www.rdno.ca