



5 May 2014

Honourable Steve Thomson
Minister of Forests, Lands and Natural Resource Operations
Parliament Buildings
Victoria, BC, V8V 1X4

Re: ***Improving water management in British Columbia: Proposal for a new water commission***

Dear Minister Thomson,

In August of 2013 we provided a concept paper proposing the creation of a new water commission (service crown corporation) for water license holders in British Columbia that is intended to streamline water-use reporting and connect water license oversight with water management. The concept paper proposed the creation of a new commission to manage and support water rent collection and create the necessary linkage to water management. The concept paper identified the need for a business case for this new service delivery option. That business case is included in this correspondence as part of a Minister's briefing note. The new B.C. Water Sustainability Act (Bill 18) introduces a range of new water management service needs including: groundwater license management, sustainable water strategy development, watershed planning, source water protection, and enforcement. A new water-use reporting commission would help government support the delivery of these services.

Enclosed for your consideration are the following documents:

- Minister's Briefing outlining three proposed management options and supporting documents
 - Attachment A. Summary of Water Use Reporting Case Studies (North America)
 - Attachment B. Overview brochure of the BC Water Use Reporting Centre
 - Attachment C. Business case for creating a new BC water use reporting commission
- Water Use Reporting Case Studies (complete report)

In the business case, it is envisioned that the new commission would manage water resource rent collection and build on the made-in-Okanagan *BC Water Use Reporting Centre (WURC)*. BC-WURC is a simple to use and extensively tested water reporting system for surface and groundwater license holders, that specifically addresses agriculture water reporting needs, and would meet the *BC Oil and Gas Commission* rent collection needs. The software has been successfully operational in the Okanagan for the past three years and recently the District of Nanaimo has successfully adopted it. With this system water management in British Columbia **would have access to** critical water information management services including:

- Transparent water license rent collection
- Ongoing leadership, management and business planning
- Water-use Data collection, availability, and management
- Electronic (web) surface water-use reporting
- Electronic (web) ground water-use reporting
- Efficient multi-agency (including the Oil and Gas Commission) access to water-use data
- Return on investment for water utilities and license holders
- Flexible water rent collection policy & efficient water-use oversight



There are two important ideas that are intentionally connected in this concept of a new independent water commission; reporting of licensed water use (currently done ineffectively), and application of water-use data to improve water management at the basin scale. The proposed independent commission would address many of the new proposed services introduced in Bill 18 and would complement government managed services including the granting of water licenses.

The enclosed business case describes a new independent commission staffed by up to 10 people that would provide four core services: (1) water resource rent collection, (2) water pricing policy, (3) water use reporting, and (4) administration of a new *sustainable water management grant program*. The creation of a new commission, integrating BC WURC and resource rent collection, is projected to have a start-up cost of \$2.3M with ongoing operating costs estimated at \$1.75M. Maintaining an annual provincial government general revenue amount of approximately \$412M / year, this business case identifies the opportunity to modestly increase water resource rents to cover the operational costs of the commission, rapidly adopt BC WURC throughout the province, and introduce a new sustainable watershed management grant fund (approximately \$5M / year) that would support increased service in three important areas:

- water sustainability planning
- strategic water research / management including groundwater integration
- water licensing enforcement support

Although the business case focuses on the development of a new independent water commission, it also identifies a range of options including the government internalizing the commission services into the ministry of Forest, Lands and Natural Resource Operations, or maintaining the status quo. We note the inadequacy of the current management framework to meet the new needs required for the Water Sustainability Act.

The OBWB recommends the provincial government consider improving water management in BC through the implementation of a new independent water commission that would combine resource rent collection and the Okanagan developed and tested BC WURC software tool. The new Water Sustainability Act calls for a range of important new services that would be well managed through such an independent commission. Building on previous senior and local government investments to develop the BC WURC, we are in a unique situation to develop a new model that supports sustainable water management, economic development and provides a world-class system for British Columbia. For further information contact Nelson Jatel at (250) 569.6295 or nelson.jatel@obwb.ca.

Bill 18 is a landmark of innovative and forward thinking water policy in BC. Much has been accomplished, and much more is needed to do.

Sincerely,

Doug Findlater, Chair

MINISTERS' BRIEFING

**Honourable Steve Thompson, Minister of Forests, Lands and Natural Resource Operations
Honourable Mary Polak, Minister of Environment**

ISSUE: Enabling Water Use Monitoring under the new *Water Sustainability Act*

In October 2013 the Government of British Columbia released its proposal to modernize provincial water legislation, and to table this new legislation in the spring of 2014. The proposed *Water Sustainability Act* (Bill 18) was introduced to the legislature in March 2014. Bill 18 aims to make improvements in several key areas of water stewardship and management, including the measuring and reporting of water use in the province.

Before the introduction of Bill 18, there were no provisions in existing legislation requiring the measurement, recording and reporting of water use from all water license holders, and there currently is no single, user-friendly provincial repository for this information. BC Living Water Smart provided an important road map for improving water management and increased services to license holders.

Water licensing authority and oversight for collecting water use fees and data currently resides with the Ministry of Forests, Lands and Natural Resource Operations (FLNRO) and, for water use permits and license applications regarding oil and gas development, with the British Columbia Oil and Gas Commission (OGC).

To enable greater efficiency, transparency and consistency in the use and management of provincial water resources, and to optimize fiscal and policy decision-making in provincial water resource management, this document proposes development of an online provincial water use reporting system for ground and surface water use. It also proposes a new agency to manage the system and assume responsibility for all water license billing and water use monitoring in British Columbia, funded via water licensing fees.

OPTIONS:

Option 1: Status quo: Maintain current water licensing and paper-based water use reporting system

Option 2: Establish a new provincial Water Use Reporting Centre administered within FLNRO.

Option 3: Establish a new provincial Water Use Reporting Centre administered by a new BC Water Use Reporting commission.

BACKGROUND:

British Columbia's Current Water Monitoring and Reporting System:

Where are we today?

Currently, water licensing authority and oversight for collecting water use fees and data resides with FLNRO, and water licensing fees are collected through the Water Revenue Unit within FLNRO. With this system water management in British Columbia is **missing** critical water information management services including:

- Transparent water license rent collection
- Ongoing leadership, management and business planning
- Water-use Data collection, availability, and management
- Electronic (web) surface water-use reporting
- Electronic (web) ground water-use reporting
- Efficient multi-agency (including the Oil and Gas Commission) access to water-use data
- Return on investment for water utilities and license holders
- Flexible water rent collection policy
- Efficient water use oversight

While there is provision in existing laws (and supported in Bill 18) for water license holders to measure, record and report their water use, the requirement is largely discretionary, and there is no legal requirement for it to be applied consistently – or to be applied at all, depending on the circumstances. The reporting that does occur is generally paper-based, which limits how the information can be used in local and provincial resource management and planning activities.

What have we accomplished so far?

The BC Water Use Reporting Centre is a simple to use, successfully piloted (Okanagan and Nanaimo) electronic water reporting tool that supports groundwater, surface water and agriculture water reporting. Implementing BCWURC throughout the province will provide an efficient means to support improved water data collection services and support the new areas of water management identified in Bill 18 including groundwater licensing.

Water Monitoring and Reporting under the proposed Act (Bill 18):

The new Act requires all large-volume water users to record and report their water use and related information. Smaller-volume license holders could also be required to record and report water use in specific (e.g. area-based) circumstances to be established in regulation. Homeowners and small businesses connected to municipal water systems would not be directly affected by these requirements, but their local government or licensed water supplier would have a duty to measure and report water use. Both ground and surface water use have been included under the new Act.

Improvements to the current water use reporting system will need to meet these more extensive reporting requirements and enable better use of the information collected. Other provinces and states have recognized online water use reporting as an efficient and cost-effective method to collect and manage water use data, and such systems are currently utilized in neighboring jurisdictions (Alberta and Washington) and other jurisdictions across North America and around the world. A paper researching water use reporting case study that includes a table comparing some noteworthy provincial and state online water use reporting systems is attached as Attachment A.

In British Columbia, a pilot BC Water Use Reporting Centre (BCWURC) has been operating successfully in the Okanagan Valley for the past three years, and a second pilot was recently launched in Nanaimo. BCWURC consists of a database, data reporting software (including analytical tools), and an online interface. BCWURC allows license-holders to report water usage online on a monthly basis, and currently supports data gathering for water usage, reservoir/lake levels, snow depth and water return flows. BCWURC was developed with \$400,000 in senior and local government support. Further information on BCWURC is attached as Attachment B.

Enabling Water Licensing, Billing and Water Use Monitoring under the new Act

The current structure and staffing for collecting water licensing fees and water use data will be challenged to meet the increase in these obligations under the new Act, as well as public and stakeholder expectations for timely, consistent and accessible water use data and transparency in provincial water management decision making. The current administrative separation between water users in oil and gas development from other water users in the province also raises concerns of inconsistent or unfair application of water management principles and processes amongst water users.

The legislative proposal for the new Act states that “water is British Columbia’s most important resource”, yet no single agency or department within the provincial government has water management as its exclusive or primary focus. One means for Government to confirm the importance of water in British Columbia and meet the challenges and obligations presented by the new Act is to consolidate all water user fee and data collection activities with one provincial agency dedicated to collecting and reporting all provincial water use information.

Three governance options are presented in Table 1. including: status quo, expanding government, and creating an independent commission. A complete business case exploring the creation of an independent commission is attached as Attachment C. The creation of a new independent commission provides a compelling case for a cost effective means to improving water management and governance services to all British Columbians and signals the government’s strong commitment to sustainable water management.

Table 1. Comparison of different water rent collection service models.

	Option 1.	Option 2.	Option 3.
	Status quo:	Expand government:	Independent Commission ² :
Water management services (water licence holders)	Maintain current FLNRO water licensing & WUR ¹ .	Establish a new provincial centre within FLNRO. Hire new expert staff to accommodate increased service delivery	Establish a provincial centre administered by a new agency / corporation.
Improved management			
Electronic (web) water billing		?	✓
Apply new Sustainable Watershed Management Program ²		?	✓
Integration of BCWURC ³		?	✓
Monthly reporting - utilities		?	✓
Annual agriculture reporting		?	✓
Service multiple ministries, commissions & the public	?	?	✓
Connect water data with water management		✓	✓
Enable information & compliance audits		?	✓
Connect water data with water resource rents		?	✓
Enable Sustainable Water Plans – grant funding support (Bill 18)		?	✓
Improved governance			
Dedicated management Board			✓
Increased capacity		✓	✓
Independent			✓
Water rents collected separately from general revenue			✓
Improved enforcement (Bill 18)		?	✓

¹ WUR: Water Use Reporting

² Business case analysis for the creation of a new Service Crown Corporation developed by Grant Thornton LLP.

³ The BC Water Use Reporting Centre (BCWURC) is a simple to use, secure water-use tracking, and reporting solution designed to help water license holders regularly record water use. Once entered, the data is securely held until provincial reporting is required; then with a click of a button, reports can be submitted.

FISCAL MANAGEMENT CONSIDERATIONS:

Establishing and maintaining a new online provincial water use reporting system within FLNRO, or within a newly created provincial agency will require a provincial budget allocation for additional funding and staff. The necessary funding could be generated through a portion of current water license fees, or through an increase in water license fees.

The enclosed business case describes a new independent commission staffed by up to 10 people that would provide four core services: (1) water resource rent collection, (2) water pricing policy, (3) water use reporting, and (4) administration of a new *sustainable water management grant program*. The creation of a new commission, integrating BC WURC and resource rent collection projected to have a start-up cost of \$2.3M with ongoing operating costs estimated of \$1.75M. Maintaining an annual provincial government general revenue amount of approximately \$412M / year, this business case identifies the opportunity to modestly increase water resource rents to cover the operational costs of the commission, rapidly adopt BC WURC throughout the province, and introduce a new sustainable watershed management grant fund (approximately \$5M / year) that would support increased service in three important areas:

- water sustainability planning
- strategic water research / management including groundwater integration
- water licensing enforcement support

TABLE 1. OPTIONS:

Option 1 – Status Quo: Maintain Current Water Licencing and Water Use Reporting System

IMPLICATIONS

- No further expenditures required.
- Current structure and resources will be challenged to meet increased licensing and data collection/ management obligations under the new Act.
- May put into question Government's commitment to the importance of provincial water resources.
- May heighten public and stakeholder concern with lack of provincial water use information and water management.
- Groundwater is not addressed – new services are required to address the increased service delivery required by Bill 18.

Option 2 – Establish a new provincial Water Use Reporting Centre administered within FLNRO

IMPLICATIONS:

- Modest expenditures required (if BCWURC is utilized) to establish a province-wide system (for staffing and system expansion and administration).
- Demonstrates stronger Government commitment to the importance of provincial water resources.
- Helps ensure more comprehensive water use data collection and enables better water management decision making.
- Enables greater access to water use information, and better transparency and accountability in water management.

Option 3 – Establish a new provincial Water Use Reporting Centre administered by a new BC Water Use Reporting Agency/Corporation.

IMPLICATIONS:

- Modest expenditures required (if BCWURC is utilized) to establish a province-wide system (for staffing and system expansion and administration).
- Demonstrates stronger Government commitment to the importance of provincial water resources.
- Helps ensure more comprehensive water use data collection and enables better water management decision making.
- Enables greater access to water use information, and better transparency and accountability in water management.
- Additional time and resources required to create a separate Crown agency.

RECOMMENDED DECISION:

Option ____ [insert full text of recommended option]

SIGNATURE:

Honourable Steve Thompson
Minister of Forests, Lands and Natural Resource
Operations

Date

Honourable Mary Polak
Minister of Environment

Date

KEY CONTACTS:

ATTACHMENTS TO SUBMISSION:

- Attachment A: Case studies: Water use reporting
- Attachment B: BC Water Use Reporting Centre (BCWURC) overview
- Attachment C: Business Case for creating a new BC Water Use Reporting Agency/Corporation

Attachment A: Summary of water use-reporting case studies (Belzile 2014)

Case Study	Alberta	Ontario	Washington	Michigan	
				Agricultural	Non- Agricultural
System Name	Water Use Reporting System (WURS)	Water Taking Reporting System (WTRS)	Online Reporting System (ORS)	Michigan Online Water Use Reporting System (MOWURS)	
System Owner	Alberta Environment and Sustainable Resource Development	Ministry of Environment	Department of Ecology	Department of Agriculture & Rural Development	Department of Environmental Quality
Reporters	Water license holders	Permit to take water holders (i.e. ≥ 50,000 lpd)	Water rights holders who meet criteria	Agricultural users with pumping capacity ≥ 70 gpm	Property owners with capacity to pump 100,000 gpd; report at 1.5M g/year
Data Collected	Water diversion & use data	Volumes of water taken daily	Volume of water withdrawn or diverted from source	Water use data	Water withdrawal and discharge data
Frequency of Data Collection & Reporting	Depend on license conditions (daily, weekly, monthly or annually)	Report on daily water takings, on an annual basis	Depend on location and quantity being diverted (e.g. higher volume, higher frequency)	Monthly data reported annually	
Measurement Method(s)	Metering preferred, other methods specified in Water Measurement Guidebook	Flow or volumetric meter, or alternative methods can be specified in permits	Method specified in regulation - meters or weirs, unless petition is approved for alternate method	No specified method. Until 2009 water users reported capacities, as of 2009 all new systems have to use the Water Withdrawal Tool for permit approval, and have to report usage.	
Enforcement	Water audits and automatic compliance function to be enabled in future for high risk areas	–	1999 court ruling mandates that Ecology must achieve 80% metering compliance in 16 Fish Critical Basins	No enforcement, because no way to do it without metering.	
Mandatory/Voluntary Online Reporting	Mandatory	Voluntary	Voluntary, but encouraged	Mandatory	Voluntary
Data Uses	Licensing, monitoring, water management, planning & policy development	Water budgeting, reporting for Great Lakes Charter, policy & program development	Compliance only because water users reporting are a small proportion of total water users.	To fulfill Great Lakes Compact reporting obligations. Water Advisory Council is looking at potential for other uses	
Access to Data	License holders, internal, FOI	Internal, partners, FOI	Internal	Reporters can access own, internal	

Attachment B: Overview of the BC Water Use Reporting Centre (BCWURC)

The choice is ours: continue using existing, inefficient water management processes, or move to online reporting and analysis which will lead to stable and reliable water supplies for the entire valley. Join the Okanagan Basin Water Board in bringing water management and data collection into the 21st century.

Choose to use the BC Water Use Reporting Centre today.

It's free. It's simple. It works.

BCWaterUseReporting.ca

To learn more about, or participate in, the BC Water Use Reporting Centre contact:

Okanagan Basin Water Board
obwb.ca/BCWaterUseReporting
Nelson Jatel
nelson.jatel@obwb.ca
(250) 469-6295



BC
Water Use
Reporting Centre



Environment
Canada
Environnement
Canada



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A simple, free, secure water-use tracking and reporting solution.



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In the Okanagan, we must use the best available strategies to manage our water. As new technologies emerge, we can now report more quickly, with less effort, and more frequently than ever before.

Water use reporting is about more than meeting regulations. The more often we report, the more accurate our data is, and the more responsive we can be to shortages. The vision of the Okanagan Basin Water Board (OBWB) is to have a fully-integrated water system, meeting the needs of residents and agriculture while supporting wildlife and natural areas. The OBWB, in partnership with the Government of B.C. and Environment Canada, has launched an online water management and reporting system that will help you make smarter decisions today for a better, stronger tomorrow.

The **BC Water Use Reporting Centre** is a simple web-based system designed to help utilities and large water users regularly record water use. The data is securely held until reporting is required; then with a click of a button, the reports can be printed.

No more...

- Paper or spreadsheet based record keeping
- Guesswork on how your current water use compares to that of last year
- Wondering if you are meeting regulations
- Duplicate data requests from various ministries
- Questioning whether the Okanagan is on the right path to a healthy, stable, water future

What the BC Water Use Reporting Centre means for you:

- Record and report from anywhere you have cell phone access
- Access your data quickly and easily online
- Review last year's (or any time period's) data for benchmarking and analysis
- Review other utilities' data for comparison
- Predict tomorrow's usage and make better management decisions today
- Build lasting water supplies for your utility, the valley and beyond

"The BC Water Use Reporting Centre allows utilities to provide current water use data and access historic data for trending. And just as importantly, we are able to see what other water utilities in the valley are extracting, helping us work together and manage our common water resource."

– Bob Hrasko, Water Supply Association of B.C. Vice-Chair and Black Mountain Irrigation District (BMID) Administrator



BC
Water Use
Reporting Centre



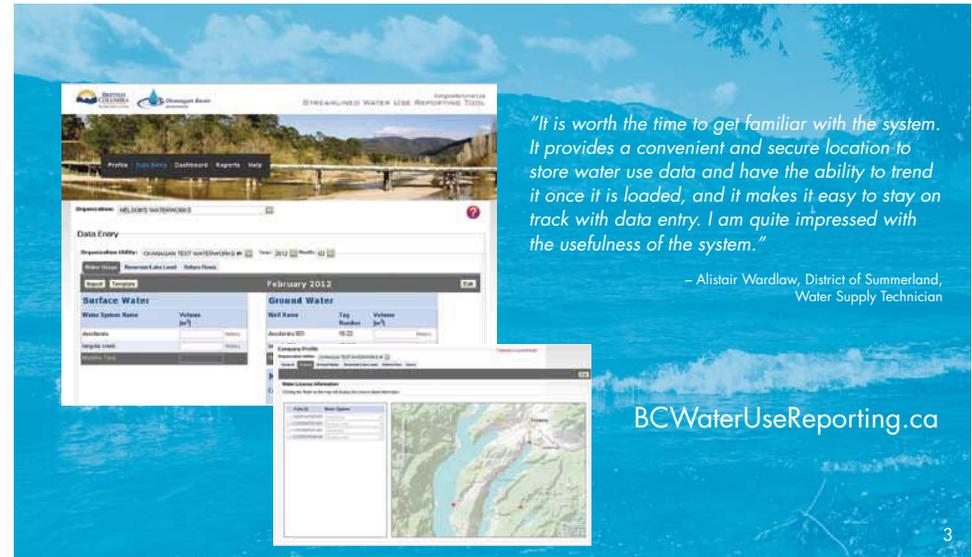
"Government will require all large water users to measure and report their water use."

Living Water Smart

- British Columbia's Water Plan

"Reporting water use makes sense. You can't manage what you don't measure."

- Conrad Pryce, Section Head, Water Allocation, B.C. Ministry of Forest, Lands and Natural Resource Operations



"It is worth the time to get familiar with the system. It provides a convenient and secure location to store water use data and have the ability to trend it once it is loaded, and it makes it easy to stay on track with data entry. I am quite impressed with the usefulness of the system."

– Alistair Wardlaw, District of Summerland, Water Supply Technician

BCWaterUseReporting.ca

Attachment C: Business Case for creating a new BC Water Use Reporting Agency/Corporation

April 9, 2014

via email: nelson.jatel@obwb.ca

Okanagan Basin Water Board
1450 KLO Road
Kelowna, BC V1W 3Z4

Attention: Nelson Jatel, Water Stewardship Director

Grant Thornton LLP
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333 Seymour Street
Vancouver, BC
V6B 0A4
T (604) 687-2711
F (604) 685-6569
www.GrantThornton.ca

Dear Nelson:

**Re: Business Case Analysis for the Proposed BC Water Use Reporting Commission
(The Proposed Service Crown Corporation)**

As per the terms of our agreement, we are pleased to provide this letter report that summarizes the business case analysis prepared by Grant Thornton LLP (“Grant Thornton”) on behalf of the Okanagan Basin Water Board (“OBWB”) for the Proposed BC Water Use Reporting Commission (“BCWURC”).

Grant Thornton’s Role

Grant Thornton’s role in the broader project was to conduct business case analysis to assist in the evaluation of the opportunity to establish a new Crown corporation service delivery model. The work program to complete this analysis included the following steps.

1. Reviewed the *Concept Paper – BC Water Use Reporting Centre*, prepared by the OBWB.
2. Reviewed the previous “water budget” that was prepared by OBWB, including data sources and assumptions.
3. Reviewed case study research on other jurisdictions that have implemented a similar process and technology. This case study research was conducted by the OBWB.
4. With the assistance of OBWB, reviewed the historical rent collection process and resulting revenue collected by the Province.
5. Conducted business case analysis for the proposed Crown Corporation, using information and assumptions provided by the Okanagan Basin Water Board and supplemental research conducted by Grant Thornton.
6. Prepared relevant financial schedules and a brief letter report summarizing the results of the business case analysis.

Documents and information relied upon

In completing this analysis, Grant Thornton relied upon the following documents.

- BC Water Use Reporting Crown Corporation – Concept Paper, Nelson Jatel, Water Stewardship Director, Okanagan Basin Water Board, Draft V 1.3, September 7, 2013.
- British Columbia *Water Sustainability Act* (Bill 18), March 11, 2014.
- Counting Every Drop, The case for Water Use Reporting in BC, Prepared by Ben Parfitt for the POLIS Project on Ecological Governance at the University of Victoria and the Canadian Centre for Policy Alternatives – BC Office, June 2013.
- Crown Agency Start-Up, A Good Practices Checklist, Crown Agencies Secretariat, Board Resourcing and Development Office, Province of British Columbia.
- Metro Vancouver Office Market Report, Colliers International, Fourth Quarter 2013.
- Pricing British Columbia’s Water, Province of British Columbia, March 2014.
- Water – Blue Gold, Environment and Energy Bulletin, Business Council of British Columbia, Volume 5, Issue 1, February 2013.
- Water Use Reporting Case Studies, Researched and Prepared by Jacqueline Belzile, Blue Currents Consulting, for the Okanagan Basin Water Board, February 2014.
- Victoria Office Market Report, Colliers International, Fourth Quarter 2013.

Background

British Columbia’s Current Water Monitoring and Reporting System

While there is provision in existing laws for water license holders to measure, record and report their water use, the requirement is largely discretionary, and there is no legal requirement for it to be applied consistently – or to be applied at all, depending on the circumstances. The reporting that does occur is generally paper-based, which limits how the information can be used in local and provincial resource management and planning activities.

Currently, water licensing authority and oversight for collecting water use fees and data resides with the Ministry of Forests, Lands and Natural Resource Operations (“FLNRO”), and water licensing fees are collected through the Water Revenue Unit within FLNRO. However, authority for water use permits, license applications and reporting for oil and gas development is held by the Oil and Gas Commission (“OGC”). No other category of water user (e.g. agriculture, industry, hydroelectricity) has a separate agency overseeing its water licensing and reporting requirements. The OGC reporting requirements for water use in the oil and gas sector are generally more rigorous than those for other water users in the province, particularly in recent years.

Water Monitoring and Reporting under the proposed Act:

The Province introduced the *Water Sustainability Act* (the “Act”) on March 11th, 2014. The new Act requires all large-volume water users to record and report their water use and related information. Smaller-volume license holders could also be required to record and report water use in specific (e.g. area-based) circumstances to be established in regulation. Homeowners and small businesses connected to municipal water systems would not be directly affected by these requirements, but their local government or licensed water supplier would have a duty to

measure and report water use. Both ground and surface water use would be included under the new *Act*.

Improvements to the current water use reporting system will be needed to meet these more extensive reporting requirements and enable better use of the information collected. Other provinces and states have recognized online water use reporting as an efficient and cost-effective method to collect and manage water use data, and such systems are currently utilized in neighboring jurisdictions (Alberta and Washington) and other jurisdictions across North America and around the world.

In British Columbia, a pilot BC Water Use Reporting Centre (“BCWURC”) has been operating successfully in the Okanagan Valley for the past three years, and a second pilot was recently launched in Nanaimo. BCWURC consists of a database, data reporting software (including analytical tools), and an online interface. BCWURC allows license-holders to report water usage online on a monthly basis, and currently supports data gathering for water usage, reservoir/lake levels, snow depth and water return flows. BCWURC was developed with \$400,000 in senior and local government support.

Optimizing Water Licensing, Billing and Water Use Monitoring under the new Act

The current structure and staffing for collecting water licensing fees and water use data will be challenged to meet the increase in these obligations under the new *Act*, as well as public and stakeholder expectations for timely, consistent and accessible water use data and transparency in provincial water management decision making. The current administrative separation between water users in oil and gas development from other water users in the province also raises concerns of inconsistent or unfair application of water management principles and processes amongst water users.

The legislative proposal for the new *Act* states that “water is British Columbia’s most important resource”, yet no single agency or department within the provincial government has water management as its exclusive or primary focus. One means for Government to confirm the importance of water in British Columbia and meet the challenges and obligations presented by the new *Act* is to consolidate all water user fee and data collection activities with one provincial agency dedicated to collecting and reporting all provincial water use information.

Business Case Analysis

The OBWB examined three options for the future collection and reporting of water rents in British Columbia.

- **Option 1** – Status Quo: Maintain Current Water Licensing and Water Use Reporting System
- **Option 2** – Establish a new Provincial Water Use Reporting Centre administered within FLNRO
- **Option 3** – Establish a new provincial Water Use Reporting Centre administered by a new BC Water Use Reporting Agency/Corporation

This Business Case Analysis focuses on Option 3 – Establish a new provincial Water Use Reporting Centre administered by a new BC Water Use Reporting Agency/Corporation. Considerations regarding the implementation and potential benefits of Option 3 are listed below.

Implementation

Establishing the new BCWURC as a Service Crown Corporation would require an investment of time and financial resources. This is further detailed in the financial projections (see Appendix A). At a high level, the investment would require:

- Financial resources to establish a province-wide system (for staffing and system expansion and administration), recognizing that the software and process has already been successfully implemented in the Okanagan and in the Nanaimo area; and,
- Additional time and resources to create a separate Service Crown Corporation.

Potential Benefits

Establishing a dedicated Service Crown Corporation to support more accurate water use reporting and rent collection, would:

- Establish new services to improve BC water management and governance;
- Demonstrate stronger government commitment to the importance of provincial water resources, and would support the new *Act*;
- Help ensure more comprehensive water use data collection;
- Help enable better water management decision making; and,
- Enable greater access to water use information, and better transparency and accountability in water management.

Financial Projections

The financial projections and supporting notes for the proposed BCWURC for the first three years of the Service Crown Corporation's operations are presented in Appendix A. A high-level summary of the financial projections is presented in the table on the next page, with key assumptions noted below.

- The BCWURC would be established as a Service Crown Corporation, with its physical location in a BC city centre.
- The BCWURC would be staffed by approximately ten full time equivalent (“FTE”) personnel. These positions and the salaries and benefit expenses are detailed in Note 1 of the Financial Projections.
- An Advisory Board would provide advice and direction to the BCWURC.
- The Business Case assumes that the BCWURC would take on the responsibility for:
 - Collecting all water use rents that FLNRO is currently responsible for collecting;
 - Remitting revenue back to the Province;
 - Managing the day-to-day operations of the BCWURC office;

- Managing the software and the system;
 - Managing the staged application of the software and process throughout the watersheds in British Columbia;
 - Administering the reporting function for water use, including reviewing the on-line reporting and collating this data for reporting back to the Province;
 - Providing technical support for users of the software; and,
 - Managing the Sustainable Watershed Management Program, including the granting of financial resources and the review and approval of deliverables.
- The financial projections assume that 2015 is the first year of operation for the BCWURC. Projections are provided for 2015, 2016 and 2017.
 - Water rent revenue collected by FLNRO in 2013 was approximately \$404 million. The financial projections show incremental revenue of \$7,247,000 for each of the three years; this incremental revenue would be generated through a rate increase. The percentage increase in water rental rates would vary depending on user type; however, the assumed average rate increase for the purposes of the financial projections is 1.76%. It should be noted that, in reality, the incremental revenue will likely fluctuate from year-to-year.
 - Operating expenses for the BCWURC, which are detailed in the financial projections, are projected to be \$2,318,000 in Year 1. Operating expenses are projected to decrease over the three-year start-up period, as investment in such items as professional fees, water rent management software and Advisory Board expenses are expected to be higher during the start-up period and are expected to stabilize around Year 3. Operating expenses for Year 3 are projected to be \$1,752,000.
 - The surplus from operations would include the incremental revenue minus the operating expenses. This is projected to be \$4,930,000 in Year 1, \$5,276,000 in Year 2 and \$5,496,000 in Year 3. This surplus is to be used to fund the Sustainable Watershed Management Program. This new program is intended to support the new *Act* by funding the following types of activities through a grant program that would be managed by the BCWURC:
 - Water sustainability plans, described in more detail in the *Act*;
 - Provincial Government strategic water research projects; and,
 - Water licensing enforcement support.
 - A summary of the BCWURC financial projections is provided below.

BCWURC Summary of Financial Projections (2015 – 2017)

	2015	2016	2017
Water rent revenues (incremental resulting from rate increases)	\$7,247,600	\$7,247,600	\$7,247,600
Operating expenses	2,317,500	1,971,500	1,751,700
Surplus from operations	4,930,100	5,276,100	5,495,900
Sustainable Watershed Management Program	4,930,100	5,276,100	5,495,900
Annual surplus/(deficit)	\$0	\$0	\$0

- Based on the projections, the Province would retain the baseline water rent revenue, which was \$403,880,000 in 2013. The new BCWURC Service Crown Corporation, including annual operations and the management of the Sustainable Watershed Management Program, would be funded through incremental water rent revenue generated through a small overall increase in water use rent in British Columbia.

Conclusion

In conclusion, based on the enclosed information and the assumptions that support the financial projections, the Business Case for the proposed BCWURC is positive.

We would be pleased to discuss this letter report with you at any time. Please contact me (604 443-2149) or Jennifer Nichol (604 443-2146) as needed.

Yours truly,



Per: Doug Bastin, CMC
Partner, Grant Thornton Consulting

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Yours truly,



Per: Doug Bastin, CMC
Partner, Grant Thornton Consulting



Grant Thornton

APPENDIX A

Financial Projection

(unaudited – See Notice to Reader)

BC Water Use Reporting Commission

(The proposed Service Crown Corporation)

Year 1 to 3 of operations



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Notice to Reader on the compilation of a financial projection

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We have compiled the financial projection of BC Water Use Reporting Commission (“BCWURC”) (the proposed Service Crown Corporation) consisting of the projected statements of financial position as at December 31, 2015, 2016 and 2017 and projected statements of operations for the years then ended using assumptions, including the hypothesis set out in Note 1, with an effective date of January 16, 2014, and other information provided by the Okanagan Basin Water Board (“OBWB” or the “Project Proponents”). Our engagement was performed in accordance with the applicable guidance on compilation of a financial projection set out in the CPA Handbook – Assurance.

A compilation is limited to presenting, in the form of financial projections, information provided by the Project Proponents and does not include evaluating support for the assumptions, including the hypothesis, or other information underlying the projection. Accordingly, we do not express an opinion or any other form of assurance on the financial projection or assumptions, including the hypothesis. Further, since this financial projection is based on assumptions regarding future events, actual results will vary from the information presented even if the hypothesis occurs, and the variations may be material. We have no responsibility to update this communication for events and circumstances occurring after the date of this communication.

Readers are cautioned that these statements may not be appropriate for their purposes.

Vancouver, BC

April 9, 2014

Chartered Accountants

BC Water Use Reporting Commission
(The proposed Service Crown Corporation)
Projected Statements of Operations
(unaudited – See Notice to Reader)

Year ended December 31	2015	2016	2017
Water rent revenues (Note 1)	\$ 7,247,600	\$ 7,247,600	\$ 7,247,600
Operating expenses (Note 1)			
Salaries	929,500	929,500	929,500
Professional fees	440,000	240,000	240,000
Water rent management software	400,000	300,000	200,000
Outreach and extension	240,000	240,000	140,000
Office rent	96,000	96,000	96,000
Interest	94,300	75,400	56,600
Advisory board	48,400	22,800	22,800
Travel and accommodation	35,000	35,000	35,000
Insurance	17,500	17,500	17,500
Amortization	9,300	7,800	6,800
Office supplies and sundry	7,500	7,500	7,500
	<u>2,317,500</u>	<u>1,971,500</u>	<u>1,751,700</u>
Surplus from operations	4,930,100	5,276,100	5,495,900
Sustainable Watershed Management Program (Note 6)			
Water sustainability plans	1,972,100	2,110,500	2,198,300
Strategic water projects	1,479,000	1,582,800	1,648,800
Enforcement support	1,479,000	1,582,800	1,648,800
	<u>4,930,100</u>	<u>5,276,100</u>	<u>5,495,900</u>
Annual surplus/(deficit)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Accumulated surplus, beginning of year	\$ -	\$ -	\$ -
Annual surplus/ (deficit)	-	-	-
Accumulated surplus, end of year	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

See accompanying notes to the financial projection.

BC Water Use Reporting Commission
(The proposed Service Crown Corporation)
Projected Statements of Financial Position
(unaudited – See Notice to Reader)

December 31	2015	2016	2017
Financial assets			
Cash	\$ 4,651,200	\$ 3,207,800	\$ 2,736,900
Funds held in trust (Note 3)	370,341,400	370,341,400	370,341,400
Water rents receivable (Note 2)	724,800	724,800	724,800
	<u>375,717,400</u>	<u>374,274,000</u>	<u>373,803,100</u>
Liabilities			
Program grants payable (Note 2)	2,465,100	1,582,800	1,648,800
Due to Provincial Government (Note 3)	370,341,400	370,341,400	370,341,400
Government loan payable (Note 4)	2,500,000	2,000,000	1,500,000
Accounts payable	461,600	392,700	349,000
	<u>375,768,100</u>	<u>374,316,900</u>	<u>373,839,200</u>
Net financial assets	<u>(50,700)</u>	<u>(42,900)</u>	<u>(36,100)</u>
Non-financial assets			
Prepaid expenses	20,000	20,000	20,000
Capital assets (Note 5)	30,700	22,900	16,100
	<u>50,700</u>	<u>42,900</u>	<u>36,100</u>
Accumulated surplus / (deficit)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

See accompanying notes to the financial projection.

BC Water Use Reporting Commission (The proposed Service Crown Corporation) Notes to the financial projection

(Unaudited – See Notice to Reader)

The accompanying financial projection has been prepared using assumptions that, to the best of the project proponent's knowledge and belief, reflect the proposed Service Crown Corporation's expected financial position, and results of operations for the projection period.

This financial projection reflects the project proponent's judgment, based on circumstances as at March 28, 2014, the date of the financial projection, that reflect the planned courses of action of the proposed Service Crown Corporation for the next three years together with the hypothesis that assume a set of economic conditions or courses of action which, in the judgment of the project proponent, are consistent with the proposed Service Crown Corporation's intended course of action and represent plausible circumstances but are not necessarily the most probable.

Some hypotheses and assumptions, although reasonable and plausible at the time, may not materialize and unanticipated events and circumstances may occur subsequent to the date of this financial projection and the variations may be material.

This financial projection has been prepared as part of an initial business plan prepared by the project proponent to provide to the Government of British Columbia (the "Provincial Government") in support of the Cabinet submission related to the formation of the BC Water Use Reporting Commission ("BCWURC"). Readers are cautioned that these financial projections may not be appropriate for other purposes.

1. Summary of significant assumptions

Water rent revenues

Water rent revenues are based on the revenues from a proposed incremental increase in the overall baseline water rent of \$411,490,400 received by the Ministry of Forest, Lands and Natural Resource Operations in 2013. The incremental revenue is based on an effective rate of 1.76% over the 2013 baseline water rent which is expected to remain consistent throughout the projection period.

Operating expenses

Operating expenses are based on management's best estimates and are in line with the costs incurred by similar sized Service Crown Corporations. Specific assumptions for the various operating expenses are as follows:

- a) Salaries are based on the salaries and benefits for ten (10) full-time employees composed of:

Position	Base Salary
Executive Director	\$160,000
Office Manager	75,000
Project Manager	55,000
Communications Manager	75,000
IT Support Staff	60,000
Accounting Staff (3)	170,000
Water Reporting Audit Staff (2)	<u>120,000</u>
	715,000
Benefits (30% of base salaries)	<u>214,500</u>
	\$929,500

BC Water Use Reporting Commission (The proposed Service Crown Corporation)

Notes to the financial projection

(Unaudited – See Notice to Reader)

1. Summary of significant assumptions (continued)

Operating expenses (continued)

- b) Professional fees for the first year include \$200,000 in professional water consulting fees and \$240,000 in legal and accounting fees. The accounting and legal fees are expected to be recurring costs while the water consulting fees are a one-time cost necessary in order to incorporate various water reporting functions and features into the water rent management software.
- c) Projected water rent management software costs relate to the expected cost to roll out the proprietary software developed by the Okanagan Basin Water Board to water license holders and other users. The projected cost is consistent with the Project Proponent's previous experience piloting the software to new users. Higher costs are expected during the first two years of operations due to the need to customize the software to incorporate water rent invoicing and collections, anticipated start-up software issues, and the costs to scale use of the software throughout British Columbia.
- d) Outreach and extension relate to the cost of rolling out the proposed Service Crown Corporation and the associated costs to educate water license holders and the public. Such costs would include the cost to conduct stakeholder meetings and consultations, website set-up, targeted advertising, and publication costs among others. Going forward, the Project Proponent anticipates the proposed Service Crown Corporation will also be involved in the promotion of water conservation education.
- e) Office rent is for the lease of office space in a BC city centre and is expected to be in the range of \$7,000 to \$9,000 per month based on a triple net lease.
- f) Interest costs are based on an estimated provincial borrowing rate of 3.77% calculated annually on the outstanding portion of the government loan payable.
- g) Advisory Board costs relate to meeting fees paid to the directors of the proposed Service Crown Corporation. The Project Proponents envision twelve (12) directors, two (2) of whom will act as co-chairs.

BCWURC is envisioned to be a Small Service Crown Corporation. Treasury Board guidelines state that meeting remuneration for such entities is \$350 per meeting for the Chair of the board and \$250 per meeting for Directors. The Project Proponents expect that the Board will need to meet monthly during the first year and quarterly in the subsequent years.

The Project Proponents also expect to reimburse BCWURC's directors \$10,000 in travel and accommodation expenses annually.

- h) Travel and accommodation relate to costs BCWURC expects to incur as it conducts water reporting audits throughout the province.

BC Water Use Reporting Commission

(The proposed Service Crown Corporation)

Notes to the financial projection

(Unaudited – See Notice to Reader)

1. Summary of significant assumptions (continued)

Operating expenses (continued)

- i) Property insurance and directors' liability insurance are projected to be \$7,500 and \$10,000 respectively each year.
- j) Amortization is calculated as per Note 2 to these projected financial statements.
- k) Office supplies and sundry are expected to be \$7,500 annually and include all other costs that can reasonably be expected to be incurred by the proposed Service Crown Corporation which are not separately identified in these projected financial statements.

Water rents receivable

Water rents receivable is expected to be 10% of the water rent revenues. This percentage is based on expected rent revenue collection timing issues. Collections from smaller water license holders and water utilities are assumed to be on 30 to 60 day terms.

Program grants payable

Program grants payable is expected to be 50% of the grants allocated and funded for the Sustainable Watershed Management Program during the first year and 30% each year thereafter. The Project Proponents anticipate that the timing of grant payments will be slower during the first year due to a rigorous grant approval and review process.

2. Summary of significant accounting policies

Basis of accounting

Section 23.1 of the Budget Transparency and Accountability Act of British Columbia requires the accounting policies and practices of government organizations to conform to generally accepted accounting principles for senior governments in Canada, as modified by any alternative standard or guideline that is made by the Treasury Board. The Canadian Public Sector Accounting Standards are the generally accepted accounting principles for senior governments in Canada.

These financial projections are prepared in accordance with Canadian Public Sector Accounting Standards for provincial reporting entities established by the Canadian Public Sector Accounting Board.

Financial instruments

BCWURC reports its financial instruments as follows: Cash is measured at amortized cost and all gains and losses are reported in the projected statements of operations in the year which they are realized. Amounts receivable and amounts due from others are measured at amortized costs. Amounts payable and amounts due to others are also measured at amortized cost.

BC Water Use Reporting Commission (The proposed Service Crown Corporation)

Notes to the financial projection

(Unaudited – See Notice to Reader)

2. Summary of significant accounting policies (continued)

Capital Assets

Capital assets are recorded at cost. Annual rates and bases of amortization applied to write-off the cost less the estimated salvable value of property and equipment over their estimated useful lives is as follows:

Office furniture	20% declining balance
Tenant improvement	over the lease term
Computer hardware	33% declining balance
Computer software	20% straight-line

Revenue recognition

Revenues are recognized in the period in which the transaction or events occurred that gave rise to the revenues. Such revenue occurs when water use has been reported by license holders and invoices issued. All revenues are recorded on an accrual basis.

Expenses

Expenses are reported on an accrual basis. The cost of all goods consumed and services received during the year is expenses. Program grants are recorded as expenses when the payment is authorized and eligibility criteria have been met by the intended recipient.

3. Funds held in trust and Due to Provincial Government

The Project Proponents expect that the proposed Service Crown Corporation will assume the water rent revenue collection responsibilities currently being undertaken by the Ministry of Forests, Lands and Natural Resource Operations. Baseline water rents will be held in trust by BCWURC and remitted to the Ministry of Finance.

The amounts shown as being held in trust on the Projected Statements of Financial Position correspond to 90% of the anticipated baseline water rents each year due to collection timing issues. A corresponding amount Due to the Provincial Government will be recorded in BCWURC's accounts to demonstrate the expected flow of baseline water rent revenues to the Provincial Government.

4. Government loan payable

The Project Proponents anticipate that the proposed Service Crown Corporation will require an additional start-up loan from the Provincial Government of \$2,500,000 which will cover the first year's operating expenses and other up-front costs required. This loan will be repaid in \$500,000 increments over five (5) years.

BC Water Use Reporting Commission
(The proposed Service Crown Corporation)
Notes to the financial projection
(Unaudited – See Notice to Reader)

5. Capital assets

Cost	January 1 <u>2015</u>	<u>Additions</u>	<u>Disposals</u>	December 31 <u>2015</u>
Furniture	\$ -	\$ 10,000	\$ -	\$ 10,000
Computer hardware	-	10,000	-	10,000
Computer software	-	10,000	-	10,000
Tenant improvements	-	10,000	-	10,000
	<u>\$ -</u>	<u>\$ 40,000</u>	<u>\$ -</u>	<u>\$ 40,000</u>
			Accumulated amortization	
Accumulated amortization	January 1 <u>2015</u>	<u>Amortization</u>	<u>on disposals</u>	December 31 <u>2015</u>
Furniture	\$ -	\$ 2,000	\$ -	\$ 2,000
Computer hardware	-	3,300	-	3,300
Computer software	-	2,000	-	2,000
Tenant improvements	-	2,000	-	2,000
	<u>\$ -</u>	<u>\$ 9,300</u>	<u>\$ -</u>	<u>\$ 9,300</u>
Net book value	January 1 <u>2015</u>			December 31 <u>2015</u>
Furniture	\$ -			\$ 8,000
Computer hardware	-			6,700
Computer software	-			8,000
Tenant improvements	-			8,000
	<u>\$ -</u>			<u>\$ 30,700</u>

BC Water Use Reporting Commission
(The proposed Service Crown Corporation)
Notes to the financial projection
(Unaudited – See Notice to Reader)

5. Capital assets (continued)

Cost	January 1 <u>2016</u>	<u>Additions</u>	<u>Disposals</u>	December 31 <u>2016</u>
Furniture	\$ 10,000	\$ -	\$ -	\$ 10,000
Computer hardware	10,000	-	-	10,000
Computer software	10,000	-	-	10,000
Tenant improvements	10,000	-	-	10,000
	<u>\$ 40,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 40,000</u>
			Accumulated amortization	
Accumulated amortization	January 1 <u>2016</u>	<u>Amortization</u>	<u>on disposals</u>	December 31 <u>2016</u>
Furniture	\$ 2,000	\$ 1,600	\$ -	\$ 3,600
Computer hardware	3,300	2,200	-	5,500
Computer software	2,000	2,000	-	4,000
Tenant improvements	2,000	2,000	-	4,000
	<u>\$ 9,300</u>	<u>\$ 7,800</u>	<u>\$ -</u>	<u>\$ 17,100</u>
Net book value	January 1 <u>2016</u>			December 31 <u>2016</u>
Furniture	\$ 8,000			\$ 6,400
Computer hardware	6,700			4,500
Computer software	8,000			6,000
Tenant improvements	8,000			6,000
	<u>\$ 30,700</u>			<u>\$ 22,900</u>

BC Water Use Reporting Commission
(The proposed Service Crown Corporation)
Notes to the financial projection
(Unaudited – See Notice to Reader)

5. Capital assets (continued)

Cost	January 1 <u>2017</u>	<u>Additions</u>	<u>Disposals</u>	December 31 <u>2017</u>
Furniture	\$ 10,000	\$ -	\$ -	\$ 10,000
Computer hardware	10,000	-	-	10,000
Computer software	10,000	-	-	10,000
Tenant improvements	10,000	-	-	10,000
	<u>40,000</u>	<u>-</u>	<u>-</u>	<u>40,000</u>
	\$ 40,000	\$ -	\$ -	\$ 40,000

Accumulated amortization	January 1 <u>2017</u>	<u>Amortization</u>	<u>Accumulated amortization on disposals</u>	December 31 <u>2017</u>
Furniture	\$ 3,600	\$ 1,300	\$ -	\$ 4,900
Computer hardware	5,500	1,500	-	7,000
Computer software	4,000	2,000	-	6,000
Tenant improvements	4,000	2,000	-	6,000
	<u>17,100</u>	<u>6,800</u>	<u>-</u>	<u>23,900</u>
	\$ 17,100	\$ 6,800	\$ -	\$ 23,900

Net book value	January 1 <u>2017</u>		December 31 <u>2017</u>
Furniture	\$ 6,400		\$ 5,100
Computer hardware	4,500		3,000
Computer software	6,000		4,000
Tenant improvements	6,000		4,000
	<u>22,900</u>		<u>16,100</u>
	\$ 22,900		\$ 16,100

BC Water Use Reporting Commission (The proposed Service Crown Corporation) Notes to the financial projection

(Unaudited – See Notice to Reader)

6. Sustainable Watershed Management Program

A significant aspect of BCWURC's mandate would be to spearhead a new Sustainable Watershed Management Program. This program would provide grants to support the following:

- Water sustainability plans (formerly known as watershed management plans) described in detail in the new BC Water Sustainability Act;
- Provincial Government strategic water research projects; and
- Water licensing enforcement support.

The Project Proponents expect that surplus earnings from operations will be allocated and utilized towards providing the above grants.

7. Related party transactions

BCWURC will be related to all Province of British Columbia ministries, agencies, and Crown corporations. Transactions with these entities, unless disclosed otherwise, are recorded on an accrual bases, are considered to be in the normal course of operations, and are recorded at the exchange amount which is the amount of consideration established and agreed to be the related parties.