INTERNATIONAL WASTEWATER SYSTEMS INC. MANAGEMENT'S DISCUSSION AND ANALYSIS – QUARTERLY HIGHLIGHTS FOR THE THREE AND SIX MONTHS ENDED JUNE 30, 2016

Introduction

The following management's discussion and analysis ("MD&A") of International Wastewater Systems Inc. (the "Company" or "IWS") for the three and six months ended June 30, 2016 has been prepared to provide material updates to the business operations, liquidity and capital resources of the Company since its last annual management discussion & analysis, being the Management Discussion & Analysis ("Annual MD&A") for the years ended December 31, 2014 and 2015. This Interim MD&A does not provide a general update to the Annual MD&A, or reflect any non-material events since the date of the Annual MD&A.

This MD&A has been prepared in compliance with the requirements of section 2.2.1 of Form 51-102F1, in accordance with National Instrument 51- 102 – Continuous Disclosure Obligations. This discussion should be read in conjunction with Annual MD&A, the audited annual consolidated financial statements of the Company for the years ended December 31, 2015 and 2014 and the unaudited condensed consolidated interim financial statements for the three and six months ended June 30, 2016, together with the notes thereto. Results are reported in Canadian dollars, unless otherwise noted. In the opinion of management, all adjustments (which consist only of normal recurring adjustments) considered necessary for a fair presentation have been included. The results for the three and six months ended June 30, 2016 are not necessarily indicative of the results that may be expected for any future period. Information contained herein is presented as at August 29, 2016 unless otherwise indicated.

The unaudited condensed consolidated interim financial statements for the three and six months ended June 30, 2016, have been prepared using accounting policies consistent with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and interpretations issued by the International Financial Reporting Interpretations Committee ("IFRIC"). The unaudited condensed consolidated interim financial statements have been prepared in accordance with International Standard 34, Interim Financial Reporting.

For the purposes of preparing this MD&A, management, in conjunction with the Board of Directors, considers the materiality of information. Information is considered material if: (i) such information results in, or would reasonably be expected to result in, a significant change in the market price or value of IWS's common shares; or (ii) there is a substantial likelihood that a reasonable investor would consider it important in making an investment decision; or (iii) it would significantly alter the total mix of information available to investors. Management, in conjunction with the Board of Directors, evaluates materiality with reference to all relevant circumstances, including potential market sensitivity.

Further information about the Company and its operations is available on SEDAR at <u>www.sedar.com</u>.

Caution Regarding Forward-Looking Statements

This MD&A contains certain forward-looking information and forward-looking statements, as defined in applicable securities laws (collectively referred to herein as "forward-looking statements"). These statements relate to future events or the Company's future performance. All statements other than statements of historical fact are forward-looking statements. Often, but not always, forward-looking statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "continues", "forecasts", "projects", "predicts", "intends", "anticipates" or

"believes", or variations of, or the negatives of, such words and phrases, or state that certain actions, events or results "may", "could", "would", "should", "might" or "will" be taken, occur or be achieved. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those anticipated in such forward-looking statements. The forward-looking statements in this MD&A speak only as of the date of this MD&A or as of the date specified in such statement.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause IWS's actual results, performance or achievements to be materially different from any of its future results, performance or achievements expressed or implied by forward-looking statements. All forward-looking statements herein are qualified by this cautionary statement. Accordingly, readers should not place undue reliance on forward-looking statements. The Company undertakes no obligation to update publicly or otherwise revise any forward-looking statements, whether as a result of new information or future events or otherwise, except as may be required by law. If the Company does update one or more forward-looking statements, unless required by law.

Description of Business

The Company was incorporated under the Business Corporations Act (British Columbia) on February 4, 2011. The Company's shares are listed on the Canadian Securities Exchange (the "CSE") under the trading symbol "IWS". The Company provides wastewater heat exchange products and services. The registered office of the Company is located at 1443 Spitfire Place, Port Coquitlam, British Columbia, V3C 6L4.

International Wastewater Heat Exchange Systems Inc. ("IWHES") was incorporated under the Business Corporations Act (British Columbia) on May 30, 2011. On October 27, 2015, the Company completed the acquisition (the "Acquisition") of IWHES pursuant to a share exchange agreement dated September 4, 2015 (the "Agreement"). The Acquisition constituted a reverse takeover ("RTO").

During the year ended December 31, 2014 the Company acquired 51% of IWWS (UK) Ltd. ("IWWS"), in July 2015 the Company acquired an additional 9% and concurrent with the Acquisition the Company acquired the remaining 40% interest.

Highlights

The Company received the 2016 AHR Expo® Innovation Award for Green Building Innovation. The AHR Expo® is the world's largest HVACR (Heating, Ventilating, Air Conditioning and Refrigeration) convention. The annual AHR Expo® Innovation Awards competition honors the most inventive and original products, systems and technologies showcased at each years show in the categories of: building automation; cooling; green building; heating; indoor air quality; plumbing; refrigeration; software; tools & instruments; and ventilation. IWS was chosen by a panel of third-party judges from ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) who evaluated all award entries based on innovative design, creativity, application value and market impact.

- The Company launched its inaugural European project, a SHARC installation at Borders College, located in the south east of Scotland and with 5,500 students. The SHARC heat recovery system at Borders College intercepts waste water from a sewer close to the local treatment works operated by Scottish Water. The system uses a heat pump to amplify the natural warmth of waste water and the heat produced is being sold to Borders College under a 20-year purchase agreement, producing savings in energy, costs and carbon emissions.
- In March 2016, the Company announced its inaugural project in Australasia, a SHARC wastewater heat recovery system to be installed at a facility operated by the Australian Wool Testing Authority in Melbourne.
- In May 2016, the Company announced collaboration with the city of Fier, Albania ("Fier"). IWS and Fier have agreed to collaborate on a strategic plan to develop District Energy Networks utilizing IWS's SHARC wastewater heat exchange system along with the integration of sewage treatment capabilities. IWS intends to install District Energy Networks around the city that include treatment plants capable of treating 30 million litres of sewage per day. IWS technology will recycle the waste heat to provide a green, low cost heating and cooling supply for the city of Fier.
- In June 2016, the Company announced it completed the in-house design of the newest and largest SHARC wastewater heat exchange system, the model 880 ("SHARC 880"). The SHARC 880 offers the highest capacity of any SHARC system designed and built by IWS to date. The SHARC 880 handles a flow rate of up to 1500 gallons per minute ("GPM"), a capacity increase of three-times when compared to existing SHARC models with flow rates of 100 GPM to 500 GPM. In-house testing is now underway and will be completed in the next 90 days. Following completion of the design and test phase, production will be completed at IWS headquarters near Vancouver. The unit is scheduled to be installed and tested at a wastewater heat exchange project within a District Heating Network ("DHN") in Vancouver. The DHN currently serves 4.3 million square feet (approximately 400,000 square meters) of residential, commercial, and institutional space with plans for future expansion.
- In August 2016, the Company announced a series of wastewater heat recovery projects to be installed in Vancouver in partnership with the public and private sectors.

Metro Vancouver ("Metro Vancouver"), a partnership of 21 municipalities, one Electoral Area and one Treaty First Nation, has identified its inaugural wastewater heat recovery project with IWS at The South East False Creek Neighborhood Energy Utility ("NEU"), a large wastewater heat recovery project supplying a District Heating Network. The NEU began operations in 2010 and currently provides space heating and hot water for 4,300,000 square feet (395,000 m2) of residential, commercial, and institutional space. Expansion plans are in place to serve new developments in the neighborhood including the Great Northern Way campus lands, a university campus jointly owned by the University of British Columbia, Simon Fraser University, British Columbia Institute of Technology and Emily Carr University. The project at the NEU will mark the first installation of the SHARC 880. The NEU installation will include two SHARC 880 systems working in tandem, a deployment that is indicative of IWS's growing market for large and utility-scale wastewater heat recovery projects.

IWS also announces a project with The British Columbia Housing Management Commission ("BC Housing") a crown corporation in the province of British Columbia. BC Housing works in partnership

with approximately 800 housing providers – mostly non-profit and housing co-operatives – over 98,000 households in 200 communities across the province. Following a comprehensive review of BC Housing's property management portfolio, IWS and BC Housing jointly selected the initial buildings to be retrofitted with IWS's PIRANHA technology.

- On August 22, 2016, the Company announced the completion of a non-brokered private placement pursuant to which the Company issued 4,800,000 common shares at a price of \$0.20 per share for aggregate gross proceeds of \$960,000. In connection with the placement, the Company paid finder's fees and expenses of \$77,100 and issued 384,000 warrants, each warrant exercisable at a price of \$0.20 for a period of two years from the date of issue. All securities distributed pursuant to the placement will be subject to a statutory hold period of four months and a day from the date of issuance.
- On August 25, 2016, the Company announced a joint venture with RENEW Energy Partners LLC ("RENEW"). The Joint Venture will initially build projects in California for which RENEW is committing funding of US\$60 million over five years, for the purpose of funding capital expenditures for one thousand PIRANHA thermal heat recovery systems ("PIRANHA") to be built, installed and operated exclusively by the Company.

RENEW is engaged in developing and funding energy and water efficiency retrofits and on-site clean energy projects through the use of innovative structures such as an Energy Services Agreement (ESA) or Power Purchase Agreement (PPA). Combining RENEW's project finance expertise with IWS's capabilities in the manufacturing, installation and servicing of thermal heat recovery equipment, enables the Joint Venture to offer a full suite of services for energy and water conservation projects and on-site clean energy projects. The Joint Venture aims to expand the implementation of energy efficiency and on-site clean energy projects throughout the United States.

The purpose of the program is to provide capital to fund turnkey installation and on-going operations and maintenance of PIRANHA systems for qualified residential and commercial buildings under a standardized Thermal Energy Purchase Agreement ("TEPA") developed by RENEW. Under the terms of the TEPA, customers will enter into long-term supply agreements with no capital investment.

The proposed schedule for the deployment of 1,000 PIRANHA systems in California in the next 5 years is estimated as follows:

- o Approximately 50 PIRANHA Systems in the first 12 months of the PROGRAM;
- Approximately 120 PIRANHA Systems in the second 12 months of the PROGRAM;
- Approximately 240 PIRANHA Systems in the third 12 months of the PROGRAM;
- Approximately 300 PIRANHA Systems per year thereafter.

IWS and RENEW will establish a special purpose vehicle ("SPV") to own the individual PIRANHA projects financed by the program. The SPV will sign a master agreement with IWS for the exclusive design, build and commissioning of PIRANHA systems and for the operation and maintenance services throughout the life of the systems.

The SPV will be the investing and operating entity for the Joint Venture. RENEW and IWS will jointly participate in the project returns from energy sales through cash flow distributions from the SPV, with the related terms of distribution to be included in a definitive agreement between IWS and RENEW.

Overall Performance

The unaudited condensed consolidated interim statements of financial position as of June 30, 2016, indicate a cash position of \$255,514 (December 31, 2015 - \$367,812) and total current assets of \$994,438 (December 31, 2015 - \$1,543,110). Current liabilities at June 30, 2016, total \$1,473,790 (December 31, 2015 - \$972,480).

Working capital deficiency, which is current assets less current liabilities, is \$479,352 (December 31, 2015 – working capital of \$570,630).

During the three and six months ended June 30, 2016, the Company reported net income (loss) of \$299,023 and \$(1,078,248) (\$0.00 and \$(0.01) basic and diluted income (loss) per share) on revenue of \$924,773 and 950,251 and a gross margin of \$255,561 and \$102,427. This compared to a net loss of \$314,949 and 574,136 (\$0.01 and \$0.02 basic and diluted loss per share) for the three and six months ended June 30, 2015 on revenue of \$172,388 and \$177,079 and a negative gross margin of \$35,669 and \$31,034.

Discussion of Operations

Three months ended June 30, 2016 compared with three months ended June 30, 2015

IWS's net income totaled \$299,028 for the three months ended June 30, 2016, with basic and diluted income per share of \$0.00. This compares with a net loss of \$318,303 with basic and diluted loss per share of \$0.01 for the three months ended June 30, 2015. The change of \$613,977 from a net loss to net income was principally because:

- For the three months ended June 30, 2016, revenue increased by \$752,385, cost of sales increased \$461,155 and gross margin went from a negative gross margin of \$35,669 to a gross margin of \$255,561. The increase in sales was due to the completion of 2 contracts of IWHES in the three months ended June 30, 2016.
- For the three months ended June 30, 2016, consulting expenses increased by \$76,620. The increase is attributable to the increased activity of the Company's consultants and the increased capital markets activities of the Company.
- For the three months ended June 30, 2016, wages and benefits increased by \$108,389. The increase is attributable to the inclusion of 100% of the expenses of IWWS subsequent to the acquiring the remaining 49% as well as increased wages and benefits in IWWS due to the increased activity.
- For the three months ended June 30, 2016, the Company had a recovery of \$726,577 in sharebased payments. The share-based payments was the result of the cancellation of the 5,700,000 stock options issued in the year ended December 31, 2015 to certain directors, officers, employees and consultants.

- For the three months ended June 30, 2016, government grant increased by \$103,675. The increase is attributable to the receipt of a government grant in the current period by IWWS.
- For the three months ended June 30, 2016, interest expense increased by \$132,405. The increase is attributable the interest and accretion recorded on loans payable in the current period.

Liquidity and Financial Position

As at June 30, 2016, the Company's cash balance was \$255,514 (December 31, 2015 - \$367,812) and the Company had a working capital deficiency of \$479,352 (December 31, 2015 – working capital of \$570,630).

As of June 30, 2016 the Company had 80,995,000 common shares issued and outstanding, 1,700,000 warrants outstanding that would raise \$308,000 if exercised in full and 625,000 options outstanding that would raise \$228,750 if exercised in full. The Company does not know when or if the warrants or options will be exercised.

Cash used in operating activities was \$832,039 for the three months ended June 30, 2016. Operating activities were affected by the net loss of \$1,078,248 partially offset by a positive change in non-cash working capital balances of \$234,970 largely because of an increase in inventory and accounts payable and accrued liabilities offset by a decrease in deferred revenue.

Related Party Transactions

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Company, directly or indirectly. Key management personnel include officers and directors.

During the three and six months ended June 30, 2016 (three and six months ended June 30, 2015), the Company incurred the following charges with key management personnel:

(i) Consulting fees of \$30,000 and \$60,000 and \$14,713 and \$31,005, respectively (\$nil) to companies controlled by directors and officers (Yaron Conforti and Russ Burton) of the Company.

(ii) Wages and benefits of \$39,000 and \$78,000, \$22,500 and \$45,000 and \$17,058 and \$37,608, respectively (\$39,647 and \$79,378, \$3,750 and \$7,000 and \$nil, respectively) to the CEO, director and a director of IWHES (Lynn Mueller, Daryle Anderson and Russ Burton) of the Company.

(iii) Accounting fees of \$nil and \$4,000 (\$6,000 and \$12,000) to a company controlled by a director (Daryle Anderson) of IWHES.

(iv) Share-based payments of \$450,568 (\$nil) was recognized in connection with the vesting of 5,700,000 options granted to directors and officers of the Company and directors of the subsidiaries as follows:

	Three months ended June 30, 2016 (\$)	Three months ended June 30, 2015 (\$)	Six months ended June 30, 2016 (\$)	Six months ended June 30, 2015 (\$)
Lynn Mueller	(446,144)	-	(110,614)	-
Daryle Anderson	(25,494)	-	(6,321)	-
Yaron Conforti	(25,494)	-	(6,321)	-
Paul Lee	(25,494)	-	(6,321)	-
Mark McCooey	(25,494)	-	(6,321)	-
Russ Burton	(25,494)	-	(6,321)	-
lan Craft	(25,494)	-	(6,321)	-
Total	(599,108)	-	(148,540)	-

Other transactions with related parties included:

Rent of \$2,700 and \$5,498, included in cost of sales (\$nil) and additional cost of sales of \$nil and \$1,017 (\$nil) due to a company controlled by a director of IWWS (Ian Craft) of the Company.

Included in accounts payable is \$100,070 (December 31, 2015 - \$54,979) due to related parties as follows:

	June 30, 2016 (\$)	December 31, 2015 (\$)
Lynn Mueller	26,000	629
Company controlled by Daryle Anderson	13,994	-
Daryle Anderson	15,000	-
Yaron Conforti	25,788	4,890
Company controlled by Ian Craft	19,289	49,460
Total	146,970	54,979

Included in Ioans payable is \$70,000 (December 31, 2015 - \$nil) due to a company controlled by a director (Daryle Anderson) of IWHES and \$10,335 (£6,000) due to a company controlled by a director of IWWS (Russ Burton).

At June 30, 2016, included in receivables is \$nil (December 31, 2015 - \$288,963) due from Sharc Caledonia Limited.

Loans receivable

During the year ended December 31, 2015 the Company advanced \$80,000 to the CEO of the Company. During the six months ended June 30, 2016, \$40,000 was repaid. The advance bears interest at a rate of 3% per annum and is due on demand. In addition there is an advance of \$24,702 (December 31, 2015 - \$24,702) to the CEO which is non-interest bearing and is due on demand.

Subsequent Events

(i) On July 12, 2016, the Company granted 5,460,000 incentive stock options to certain directors, officers, employees and consultants with each option exercisable into one common share of the Company at an exercise price of \$0.30 per share for a period of five years. The options vest 20% each six months of service. The options and any common shares issued upon exercise will be subject to a four-month resale restriction from the date of grant.

(ii) Subsequent to June 30, 2016, 46,000 warrants with an exercise price of \$0.14 and an expiry date of June 30, 2017 were exercised for total proceeds of \$6,440.

Risks and Uncertainties

An investment in the securities of the Company is highly speculative and involves numerous and significant risks. Such investment should be undertaken only by investors whose financial resources are sufficient to enable them to assume these risks and who have no need for immediate liquidity in their investment. Prospective investors should carefully consider the risk factors that have affected, and which in the future are reasonably expected to affect, the Company and its financial position. Please refer to the section entitled "Risk Factors" in the Company's Annual MD&A for the fiscal year ended December 31, 2015, available on SEDAR at <u>www.sedar.com</u>.

Disclosure of Internal Controls

Management has established processes to provide them sufficient knowledge to support representations that they have exercised reasonable diligence that (i) the unaudited condensed consolidated interim financial statements do not contain any untrue statement of material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it is made, as of the date of and for the periods presented by the unaudited condensed consolidated interim financial statements fairly present in all material respects the financial condition, results of operations and cash flows of the Company, as of the date of and for the periods presented.

In contrast to the certificate required for non-venture issuers under National Instrument 52-109 Certification of Disclosure in Issuers' Annual and Interim Filings ("NI 52-109"), this Venture Issuer Basic Certificate does not include representations relating to the establishment and maintenance of disclosure controls and procedures ("DC&P") and internal control over financial reporting ("ICFR"), as defined in NI

52-109. In particular, the certifying officers filing this certificate are not making any representations relating to the establishment and maintenance of:

- controls and other procedures designed to provide reasonable assurance that information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and
- ii) a process to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer's GAAP (IFRS).

The issuer's certifying officers are responsible for ensuring that processes are in place to provide them with sufficient knowledge to support the representations they are making in this certificate. Investors should be aware that inherent limitations on the ability of certifying officers of a venture issuer to design and implement on a cost effective basis DC&P and ICFR as defined in NI 52-109 may result in additional risks to the quality, reliability, transparency and timeliness of interim and annual filings and other reports provided under securities legislation.