

Boynton Beach City Commission
City of Boynton Beach
100 East Ocean Avenue
Boynton Beach, FL 33435
Via Email: cityclerk@bbfl.us

September 7, 2026

Re: Public Comment for City Commission Meeting of September 8, 2025 –
Regarding Proposed Resolution No. R26-153- Authorizing the City Commission to set rates, fees, and charges for Water, Wastewater, Stormwater, and Reuse Water, for the upcoming Fiscal Year 2026-27

Dear City Commissioners,

I am well aware of the need to fund our water infrastructure and would like to update you with my review of the recent deployments of the Sensus I-PERL as AMI costs are, have been and I believe will continue to be of significant impact. In addition to, and in emphasis of, the recommendations of my Public Comments Letter for the Meeting of July 7, 2026, my recommendations for fair and sufficient water billing rates are:

- In-depth review of the 2001, 2012, and recent 2024 smart meter initiatives for cost/benefit.
- Track and publish monthly Water Loss Reports for trends subsequent to the recent water meter deployments.
- Develop and implement alternative opt-out self-read and mechanical smart meter alternatives.
- Customer bills should be noted when the bill is being estimated.
- Establish i-PERL compliance with FCC regulations and Rule 15.

The City announced the AMR to AMI conversion of the residential water meter system endpoints complete in 2014. It appears that the cost of maintaining the system were underestimated and that millions of dollars have had to be spent to again bring the read rates and water loss accounting up to standards. Approximately 26,000 metering system endpoints were recently deployed into the approximately 37,000 service connections. Supposedly this provided for AMI real-time monitoring. So what was it that was done in 2014? Resolution 12-038 states that the water losses were approximately 10% but that read rates of the AMR system had fallen to 80% and the proposal for AMI conversion was made. Was the 80% read rate a failure of the AMR technology, or was this also an underestimate of maintenance needs?

Now going forward with the Sensus i-PERL Metering system, I am requesting an in-depth review of the AMR and AMI technologies, their true costs including the required maintenance, and the health, safety and environmental impacts. 37,000 metering systems at 2 watts per radio unit need to be considered as a macro cell tower of 74,000 watts of effective radiated power. To dismiss them as low powered or low utilization devices is not valid as they are also accessed by

the utilities mesh network which would involve power outputs of similar magnitude. While I have access to some information on the base stations and use of Flexnet, there are also cell tower usages. What are all these costs and impacts to the community?

We are not the only community facing the smart water meter maintenance problems and these have become common knowledge. The application is inherently conflicted as water is conductive and incompatible with electricity. We must innovate and not allow customers to be exploited.

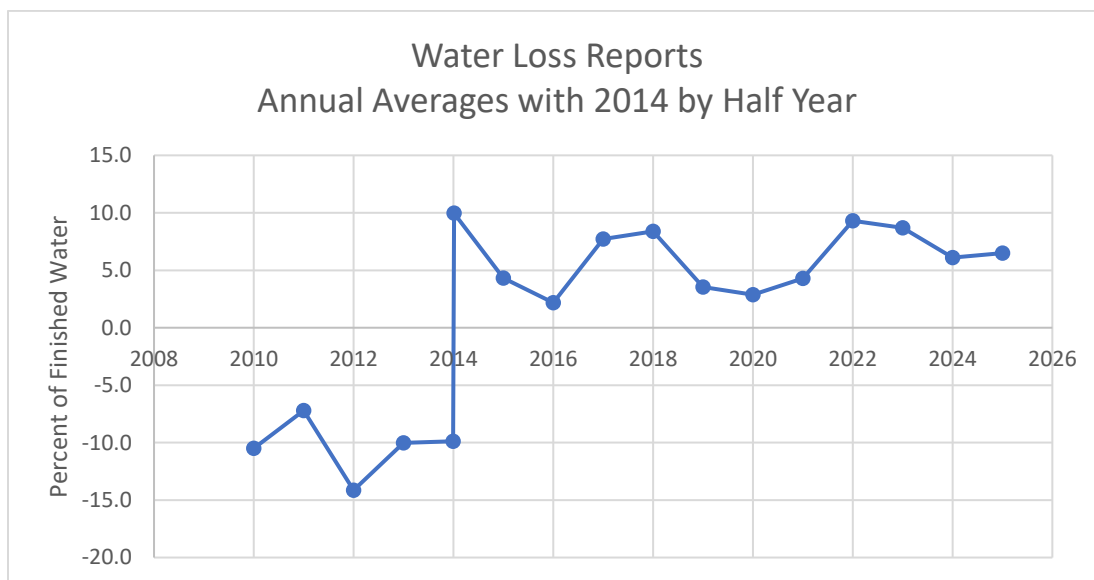
As you may recall I have opted-out of my smart meter system. I am requesting a self-read option to the proposed meter reread fee. Going forward, that could be done entirely or in part, alternating monthly readings, relieving the City of cost burden. Prior to my opt-out, I had a Sensus SR II smart meter that I believe is still being manufactured by Sensus, with an AMI register. This should also be considered an option where the i-PERL is a problem.

As I understand it, the Sensus SR II is a mechanical meter with a digital register versus the i-PERL that is an electromagnetic meter which induces electrical current into the water to measure the flow. While that would not be expected to be over 6 millivolts at residential flowrates, it is noted on the bottom of the i-PERL meter that it must accept interference that causes undesirable operation. This then becomes a basic human rights abuse and I must raise the alarm on the normalization of the electrocution of the human body, under the pretext that it is just a little bit of electrocution. Indeed, the Human Body Communication band that was established a decade ago by the FCC and IEEE, is an electrical band now being used for wearables and is an essential component of the digital ID. Microwave systems are used to access this band, creating a system which is much more harmful than people are aware and it is used without informed consent. It is important to incorporate the Sensus SR II smart meter back into its plans and offer it to customers, particularly those where installations may be subject to interference. The i-PERL is not repairable so as it fails a replacement would be required.

The City Water Loss Reports for 2024 and 2025 report an average 6%, which is very good. However, the last quarter of 2025 shows an average of 10%. I would recommend the tracking the monthly trend and not waiting for the annual report at the end of the year to see any impact from the full deployment of the i-PERL smart meters. Should these meters be subject to interference, the meters would generally read low. I cannot know about all of Boynton Beach, but Sensus alarms do not detect the type of spiking that I have seen on the electromagnetic field of my neighborhood, which consists of homes with copper plumbing where the installations are questionable.

I have reviewed the City's Water Loss Reports from 2010 through 2025 and it appears that the biggest change in water loss took place between June and July of 2014, showing a step change of 19.9 percentage points between the averages of the first and second half of the year. The change was in the "Billed Authorized Consumption (total volume of water billed including Exports-if applicable)". This brought water losses from a surplus billing of 10% to a deficit of

10%. However, it is noted that Resolution R12-038 had an attachment, “Advanced Meter Infrastructure Project Basis Migration from AMR to AMI” that cites a “water loss is approximately 10% of system production” instead of a 10% surplus in the billed volume. If there is a source of water loss data from that time, other than what is available to the public, I would appreciate knowing how to make a records request for it without incurring exorbitant fees. Otherwise, City Water Loss Reports the period of 2010 through mid 2014 as compared to mid 2014 through 2025, shows an average difference of 16.5 percentage points to compare to the 2014 change of 19.9 would suggest that the reduction in water losses could be as much as 3.4 percentage points. However, within the accuracy of the calculations, the change could all be attributed to the change in billing. The 2014 Water Loss Report is attached, with others available upon request.



Customers billings do not currently show when the bill is being estimated and public utilities are generally not supposed to estimate them for over three months. My SR II smart meter went out of service in January of 2024 and I was unaware of this until I called in about the Meter Replacement Notice of October 2024. More recently I have seen another resident’s billings where their meter was out of service from October 2018 until March 2020 and replaced with an i-PERL without their knowledge. How can such billings be accurate?

There is an FCC compliance problem with the i-PERL smart water meter. I have been in contact with the FCC over their Rule 15 note which is required to be conspicuously labeled on the i-PERL. Alternate labeling in the User’s Manual or on the packaging is acceptable if there is no way to conspicuously label the device. However, Sensus has done none of these things, but placed the note inconspicuously on the bottom of the meter in raised black plastic. The Data Sheet has a Conformance to Standards section that is notably missing FCC Rule 15. My records request R058305-070926 to the City Utility Department for the documents the manufacturer is required to have to show eligibility for Rule 15, has come back with no records. I have requested them several times from Sensus through their online system and they are non-responsive and do not

plan to have any further contact with them. I have provided the above information to the FCC, am not expecting any further information from them and their last reply to me is as follows:

FCC response on 09/04/2026

We are in receipt of your 08/26/2026-submission, and this represents our final response to the information you have provided regarding device labeling and the allegation of rules noncompliance. The FCC is not able to comment on or provide updates regarding the status of any investigation that may relate to this, or any other individual complaint submitted to the FCC. We cannot comment or address closed, ongoing, or future investigations. In the event that further information would be useful, we will contact you. Furthermore, we reiterate that the Commission's equipment authorization procedures are narrow in scope in that they look to compliance with the Commission's technical standards. Issues that you have raised that pertain to the suitability and usability of the device, and any installation-related hazards that do not affect the device's ability to operate under the technical parameters as an intentional radiator, are outside the scope of this KDB inquiry. Such matters are best raised with appropriate federal, state, or local entities (such as the Consumer Product Safety Commission (CPSC) for non-radiofrequency related mechanical and general consumer safety complaints).

My recommendation to the City is to obtain the needed information from Sensus, to assure the i-PERL is in compliance with FCC Rule 15.

Contracts for wireless technology can also be challenged due to the legal status of the Federal Communication Commission (FCC) Human Exposure Guidelines for Radio-Frequency/Microwave (RF/MW) Radiation per the ruling in Case 20-1025 EHT/CHD v FCC re: FCC Order 19-126 re: the FCC's Insufficient Analysis of the Adequacy of the RF/MW Radiation Exposure Guideline. The technology has never delivered on performance and the health, safety, security and environmental impacts become ever more harmful with each failed delivery.

On or about August 26, 2026 the Court gave FCC 30 days to explain why it hasn't complied with a 2021 court order requiring the agency to reveal how it determined that current radio frequency radiation exposure limits to adequately protect people and the environment, in response to the Environmental Health Trust and the Children's Health Defense's Writ of Mandamus to bring the FCC and the FDA into compliance Court's order to provide adequate Human Exposure Guidelines for RF/MW Radiation.

We are dependent on our City Commission to take measures to assure Public Safety and bring order to the Telecommunication Wild West. While there is substantial evidence that human judgment is impaired at levels of microwave radiation level over 2,500 micro watts per meter squared (MWMS), we must drive past red light cameras on intersections where levels are in excess of 10,000 MWMS and pay tickets for poor judgements. Our Utility Mesh Network, must be reviewed for minimal use of power. Our telecommunications ordinances are in need of review and update.

In review of Resolution R26-033 that raises the Annual Expense Limit for Sensus to \$4 million per year, I would ask for accountability. Not only are they deficient in FCC compliance, but my Records Request R058526-071926 for their insurance has gone unanswered. It is noted that the meters will be read six times a day, as compared to the Ride-and-Read that would be once a month. What is the impact of that on the life of the meter and radio unit battery and the maintenance costs? Sensus should be able to tell us that and meter replacement schedules and costs projected accordingly. Would we be better off with minimal monitoring? Is it possible to have a customer interface that sets the monitoring level optionally? Make the future a possibility instead of a misery and consider what could be.

Gratefully,

A handwritten signature in cursive script that reads "Luanne Moore". The signature is written in dark ink and is positioned below the word "Gratefully,".

Luanne Moore, P.E.
133 Buffet Key
Boynton Beach, FL 33426

Annual Water Balance Summary

line #	Utility Name:	City of Boynton Beach												
	Permit Name:	Water Loss Report												
	Reporting Period:	January 1, 2014 thru December 31, 2014												
	Water Use Permit #:	50-00499 - W												
	Name of Person Completing Form:	Phill Taylor, Jr.												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1.0	Total Raw Water Withdrawn (should match pumpage reports submitted to SFWMD)	447	374	374	375	284	388	406	431	414	421	470	423	4,808
2.0	Volume of Finished Water Produced	410	321	398	404	296	369	369	385	373	418	423	407	4,572
3.0	Treatment Losses (subtract line 2 from line 1)	38	53	-24	-29	-12	19	36	47	41	3	47	16	236
4.0	% Treatment Loss (divide line 3 by line 1)	8.40%	14.07%	-6.34%	-7.84%	-4.16%	4.91%	8.99%	10.87%	9.92%	0.80%	10.10%	3.86%	4.91%
5.0	Total Volume of Water Imported (if applicable)	0	26	10	11	99	0	0	0	0	0	0	13	159
6.0	System Input (Finished Water Produced plus Total Water Imported) (line 2 plus line 5)	410	347	408	415	395	369	369	385	373	418	423	420	4,731
7.0	Billed Authorized Consumption (total volume of water billed including Exports-if applicable)	419	427	356	481	428	437	357	355	339	335	365	366	4,665
8.0	Unbilled Authorized Consumption (include estimates of fire protection, line flushing, and other utility-authorized non-billed uses). An estimate of 1.25% of the System Input can be used if no other data is available.	6	5	5	5	4	5	5	5	5	5	6	5	60
9.0	Total Authorized Consumption (Billed Authorized Consumption plus Unbilled Authorized Consumption) (line 7 plus line 8)	425	431	360	486	432	442	362	360	344	341	371	371	4,725
10.0	Total Water Losses (Line 6 minus line 9)	-15	-84	47	-71	-37	-73	7	24	29	77	51	49	6

11.0	% Water Loss (line 10 divided by line 6)	-3.72%	-24.13%	11.62%	-17.04%	-9.28%	-19.75%	1.91%	6.27%	7.84%	18.45%	12.16%	11.65%	0.12%
-----What are Total Water Losses From Line 10 Made Up Of?-----'														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
12.0	Total Real Water Losses (the amount of water losses associated with leakage from distribution mains, storage tanks, service connections, etc.)													0
13.0	Apparent Water Losses / Gains:													
	a) Billing Errors													0
	b) Meter inaccuracies													0
	c) Illegal water consumption/theft													0
	d) Other (describe):													0
14.0	Total Apparent Water Losses (line a through d)	0	0	0	0	0	0	0	0	0	0	0	0	0
15.0	Total Real and Apparent Water Losses (l. 12 plus l. 14) <i>should equal l. 10</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
16.0	Real Water Losses as a percentage of System Input (based on System Input calculated above) (line 12 divided by line 6)	0.00%	0.000%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
17.0	Apparent Losses as a percentage of System Input (based on System Input calculated above)(line 14 divided by line 6)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

To assist the SFWMD reviewer, please provide comments below for clarification on any of the information above:

*Note: Copy the following URL for a list of components and definitions of the IWA/AWWA Water Balance which the above table utilizes:

<http://www.awwa.org/Portals/0/files/resources/water%20knowledge/water%20loss%20control/apparent-real-losses-awwa.pdf>