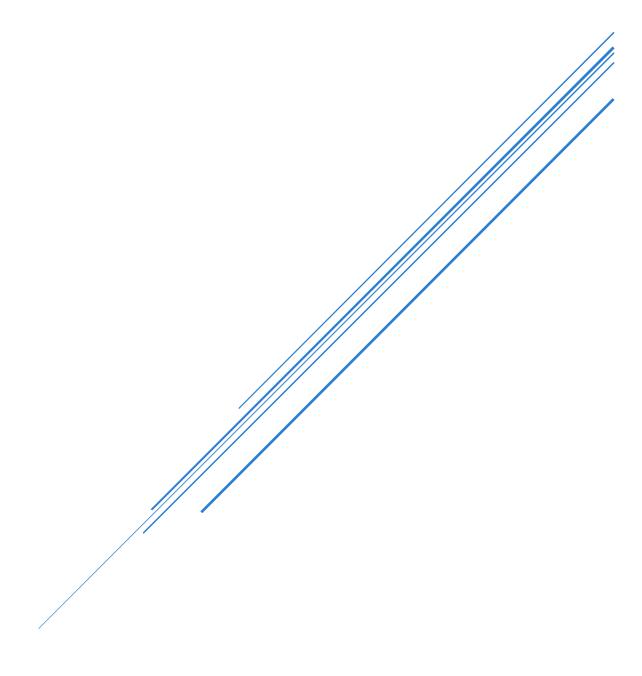
# FAST FOOD PORTFOLIO - WENDY'S CASE STUDY:

## **COMPREHENSIVE ANALYSIS**



## **Case Study Introduction**

## Evaluating Water Efficiency, Cost Reduction, and Long-Term Operational Benefits

This case study provides an in-depth evaluation of the H2minusO Flow Management Device's impact on water consumption, billing accuracy, and financial savings across three Wendy's locations in the Greater Atlanta area, Georgia. To ensure unbiased analysis, all findings have been independently reviewed and validated by *THG Energy Solutions*, a third-party expert in utility management and efficiency evaluation.

The study explores how turbulence reduction and optimized water flow translate into measurable savings in utility expenses, improved system reliability, and potential long-term financial benefits. Additionally, this report examines operational efficiency, sustainability impact, and potential property value enhancements stemming from the adoption of H2minusO technology.

#### **Table Of Contents**

CASE STUDY INTRODUCTION	1
TABLE OF CONTENTS	1
H2MINUSO TECHNOLOGY OVERVIEW	2
KEY FINDINGS ACROSS WENDY'S LOCATIONS	3
OPERATIONAL IMPACT	4
INDUSTRY VALIDATION	4
PROFITABILITY & ASSET INFLUENCE	5
COMPETITIVE ADVANTAGES & SUSTAINABILITY	6
FINAL SUMMARY & TAKEAWAYS	6

#### FAST FOOD PORTFOLIO - WENDY'S CASE STUDY

This case study examines the impact of the H2minusO Flow Management Device on water consumption, billing accuracy, and financial savings across three Wendy's locations in the Greater Atlanta area. Through a detailed analysis of real-world installation results, the findings highlight how turbulence reduction and optimized water flow lead to measurable reductions in utility expenses, improved system reliability, and potential long-term value benefits



"Think of a river—when it's calm, water flows smoothly. But when rocks and sudden drops appear, turbulence creates foam and bubbles. In pipes, this same effect causes air to mix with water, artificially inflating meter readings."

## **H2minusO Technology Overview**

Fast-food operations like Wendy's rely on high-demand water systems to support cooking, cleaning, and customer service. However, many restaurants unknowingly overpay for water due to turbulence in pipelines, which introduces air pockets into the flow. This excess air inflates meter readings, causing higher utility bills even though the business hasn't consumed that volume of water.

#### Common Causes of Water Turbulence:

- Pump activations that disrupt water flow.
- Pipe size transitions that create unstable pressure shifts.
- Infrastructure inconsistencies that introduce excess air into the system.

The H2minusO Flow Management Device directly addresses these challenges by stabilizing water flow, minimizing turbulence, and ensuring restaurant owners are billed for actual water usage—not trapped air. This technology provides a passive, cost-effective solution for reducing excess expenses while maintaining seamless operational efficiency.



## **Key Findings Across Wendy's Locations**

#### Water Consumption Reduction

Third-party data validation confirmed that the three Wendy's locations achieved an average water savings of 22.8%, with individual sites recording:

- 40.2% savings at the Fairburn location
- 13% savings at the Cobb location
- 24% savings at the Cascade location

#### Financial Impact & ROI

#### Payback Period

- The weighted average payback period across all Wendy's locations is 0.65 years (~8 months).
- After this period, all savings contribute directly to long-term financial ROI.

#### Projected Financial Savings Beyond Payback Period (Remaining 9 Years & 2 Months)

- Cascade location: Approximately \$41,000 in savings.
- Cobb location: Approximately \$31,000 in savings.
- Fairburn location: Approximately \$42,000 in savings.
- Total savings across all three locations: Approximately \$114,000 over the remaining warranty period.

#### Comprehensive Cost Savings—Including Water & Sewer Expenses

- Water and sewer costs are billed from the same meter, meaning savings impact both water consumption and wastewater fees.
- The H2minusO Flow Management Device prevents turbulence, reducing artificially inflated utility bills.

#### **Extended ROI Benefit**

- The device consistently delivers financial savings well beyond the initial investment.
- As water and sewer costs increase, the technology helps offset inflated rates, ensuring stable cost reduction.



## **Operational Impact**

- Seamless Installation: Setup required 2 to 4.5 hours per location, with immediate savings realized post-installation.
- Zero disruptions to restaurant workflows or customer service operations.
- Optimized water flow minimizes air volume, preventing inflated meter readings and unnecessary utility expenses.

### **Industry Validation**

Beyond the 22.8% average savings achieved across Wendy's locations, additional third-party case studies reinforce the scalability of the H2minusO Flow Management Device.

#### Houston's Restaurant (Atlanta-based):

- 18% reduction in water consumption, equating to 527,713 gallons saved annually.
- Annual financial savings of \$15,220, with a payback period under 3 months.

These results highlight the consistent effectiveness of the technology across fast-food and casual dining industries.

## **Profitability & Asset Influence**



#### **How Water Savings Improve Profitability:**

- Beverage Production: Lower water costs reduce per-unit production expenses for soft drinks, coffee, and other water-based beverages.
- Food Preparation: Optimized water efficiency lowers ingredient costs for soups, sauces, and steam-cooked items.
- Cleaning & Sanitation: Water consumption reductions decrease costs for dishwashing, floor cleaning, and equipment sanitation, improving profitability.

#### Potential for Increased Property Valuation

Adopting cost-saving water efficiency technology can contribute to commercial asset appreciation by improving net operating income (NOI), a key real estate valuation factor.

## Competitive Advantages & Sustainability

#### **Environmental & Financial Benefits**

- Lower operational costs: Water waste reduction leads to lower utility bills, strengthening profit margins.
- Eco-conscious appeal: Supports corporate sustainability initiatives while reducing excess consumption.
- Improved system reliability: Stabilized water flow prevents disruptions, ensuring operational efficiency.

#### Technological Advantages

- Minimized air volume in meters, preventing inflated water bills.
- Optimized flow management, adjusting to demand fluctuations in real time.
- Improved billing accuracy, ensuring restaurant owners pay only for actual water used.



## Final Summary & Takeaways

This case study validates the measurable impact of the H2minusO Flow Management Device, proving it can:

- Reduce water consumption by up to 40.2%, with an average of 22.8% across multiple sites.
- Deliver financial savings totaling \$114,000 over 10 years (beyond the payback period).
- Improve profitability by lowering costs for beverages, food production, and sanitation services.
- Contribute to potential asset value growth through lower operating expenses and improved NOI.

With a rapid payback period of 0.65 years, this technology provides cost efficiency, sustainability, and operational excellence, making it a game-changing solution for fast-food chains and high-demand water systems.





Date: 7/28/15

Client Name: Wendy's

Location: 3675 Cascade Rd SW, Atlanta, GA

Date of Installation: 5/7/15

Meter Number: NE031836840

Unified Energy, in conjunction with THG Energy Solutions, collects 12-24 months of billing history through utility online management systems or through use of a Letter of Authorization (LOA). To obtain data consumption and billing history, THG acquires a signed Letter of Authorization from the customer. This form grants THG the ability to collect the consumption data.

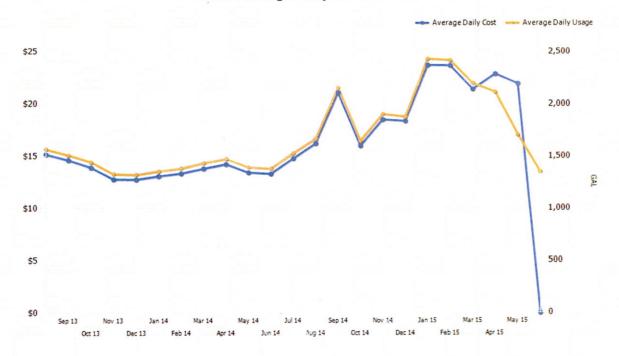
THG acquires the invoices and enters the data into the proprietary Unified Data Management System (UDMS). Once loaded, two separate divisions review the data to ensure data accuracy. The Senior Account representative reviews the data once more before preparing the final report.

The UDMS system calculates the usage per day on each invoice and then applies that amount to the month which the usage falls. For example, a billing period of March 4<sup>th</sup> to April 5<sup>th</sup> will have 4 days from April that are included in the April calculations. The next invoice most likely will round off the remaining days in April, with some daily usage being applied to May.

The charts used in this report are generated based on the calculation methods mentioned above. No other information is added to the reports.

For meter # NE031836840 located in Atlanta, Georgia, THG was able to collect 24 months of historical data from a consumption report provided by the City of Atlanta. The last invoice details received for this meter had a service end date of June 24<sup>th</sup>. Due to our calculation methods, the most recent month of the following reports are not including 6 days of usage (the remaining days in June) unless otherwise noted.

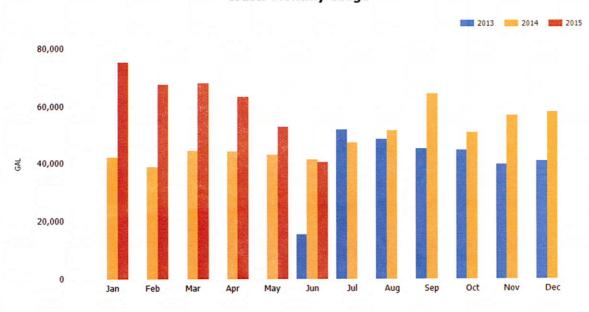
#### Water Average Daily Cost and Use



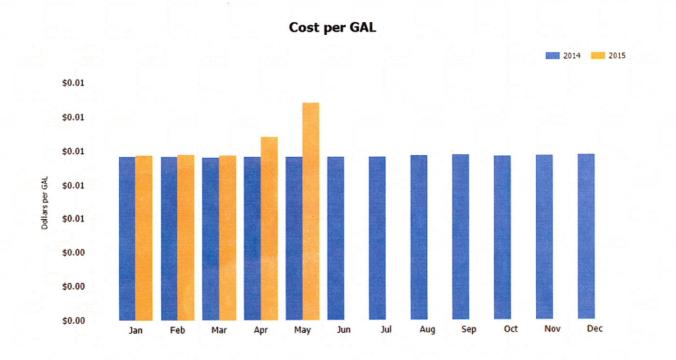
Month	Avg Usage	Avg Cost
Aug 2013	1,569	\$15.19
Sep 2013	1,513	\$14.63
Oct 2013	1,446	\$13.93
Nov 2013	1,331	\$12.81
Dec 2013	1,325	\$12.78
Jan 2014	1,359	\$13.10
Feb 2014	1,386	\$13.36
Mar 2014	1,437	\$13.82
Apr 2014	1,476	\$14.25
May 2014	1,395	\$13.45
Jun 2014	1,383	\$13.33
Jul 2014	1,532	\$14.80
Aug 2014	1,670	\$16.24
Sep 2014	2,158	\$21.09
Oct 2014	1,651	\$16.02
Nov 2014	1,904	\$18.52
Dec 2014	1,880	\$18.37
Jan 2015	2,432	\$23.72
Feb 2015	2,419	\$23.68
Mar 2015	2,199	\$21.43

Apr 2015	2,117	\$22.89
May 2015	1,710	\$21.97
Jun 2015	1,352	\$0.00

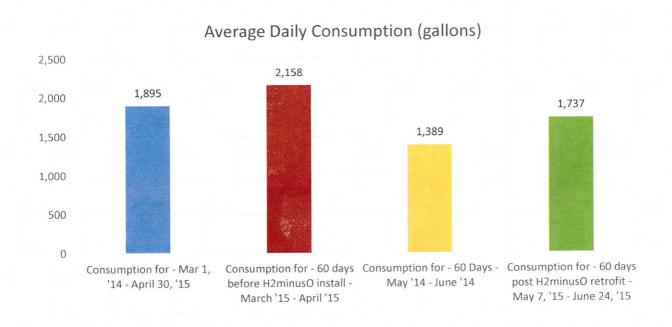
#### Water Monthly Usage



Month	2013	2014	2015
Jan		42,139	75,401
Feb		38,799	67,744
Mar		44,533	68,175
Apr		44,282	63,512
May		43,258	53,016
Jun	15,484	41,491	40,552
Jul	52,054	47,498	
Aug	48,637	51,776	
Sep	45,394	64,749	
Oct	44,828	51,182	
Nov	39,945	57,118	
Dec	41,084	58,283	



The next chart is the Average Daily Consumption chart. The green bar represents the consumption since H2minusO was installed and excludes the 6 days of June not metered at the time of the data collection.



Overall, the usage has shown a decrease since the install date of May 7, 2015. Compared to the year of consumption leading up to May 7<sup>th</sup>, usage has decreased by 7%. When comparing the new consumption history to the 60 days before the installation, the average consumption showed a decrease of 24%. The

price per gallon has been higher this year compared to same time last year, causing for an increase in price compared to the same month last year.

The usage after the installation showed a 20% increase in consumption from the same timeframe during the previous year. Any variances could be attributable to seasonal variation.

Compared to the yearly average usage leading up to the install, Wendy's consumed 7% less on average after the installation of H2minusO. The 60 days of usage data retrieved after the install dropped 24% when compared to the 60 days leading up to the install.

Signature

Date





Date: 7/28/15

Client Name: Wendy's

Location: 2380 South Cobb Dr, Smyrna, GA

Date of Installation: 4/1/15

Meter Number: 4804000

Unified Energy, in conjunction with THG Energy Solutions, collects 12-24 months of billing history through utility online management systems or through use of a Letter of Authorization (LOA). To obtain data consumption and billing history, THG acquires a signed Letter of Authorization from the customer. This form grants THG the ability to collect the consumption data.

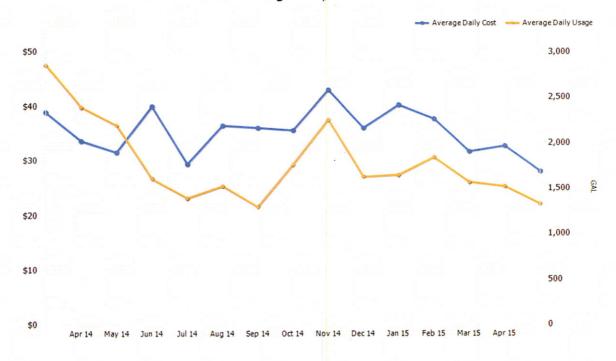
THG acquires the invoices and enters the data into the proprietary Unified Data Management System (UDMS). Once loaded, two separate divisions review the data to ensure data accuracy. The Senior Account representative reviews the data once more before preparing the final report.

The UDMS system calculates the usage per day on each invoice and then applies that amount to the month which the usage falls. For example, a billing period of March 4<sup>th</sup> to April 5<sup>th</sup> will have 4 days from April that are included in the April calculations. The next invoice most likely will round off the remaining days in April, with some daily usage being applied to May.

The charts used in this report are generated based on the calculation methods mentioned above. No other information is added to the reports.

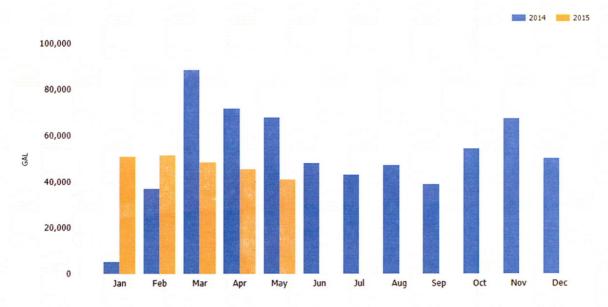
For meter # 4804000 located in Smyrna, Georgia, THG was able to collect 16 months of historical data from a consumption report provided by the City of Smyrna. The last invoice details received for this meter had a service end date of May 27<sup>th</sup>. Due to our calculation methods, the most recent month of the following reports are not including 4 days of usage (the remaining days in June) unless otherwise noted.

#### Water Average Daily Cost and Use

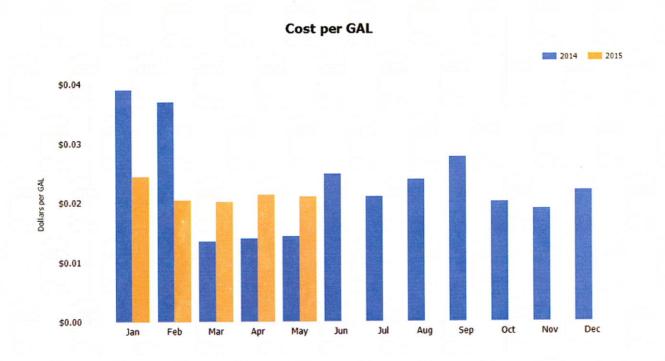


Month	Avg Usage	Avg Cost
Mar 2014	2,856	\$38.94
Apr 2014	2,394	\$33.67
May 2014	2,193	\$31.57
Jun 2014	1,605	\$40.04
Jul 2014	1,392	\$29.43
Aug 2014	1,526	\$36.54
Sep 2014	1,297	\$36.12
Oct 2014	1,763	\$35.67
Nov 2014	2,259	\$43.08
Dec 2014	1,629	\$36.15
Jan 2015	1,650	\$40.36
Feb 2015	1,840	\$37.83
Mar 2015	1,572	\$31.78
Apr 2015	1,524	\$32.82
May 2015	1,330	\$28.16

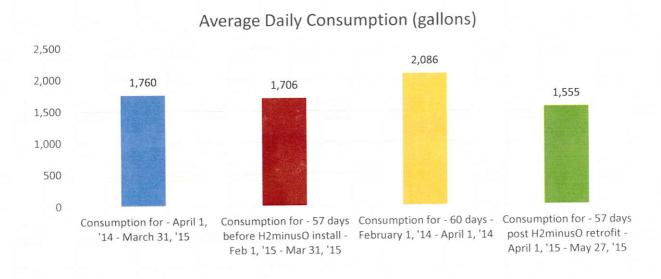
#### Water Monthly Usage



Month	2014	2015
Jan	5,032	51,136
Feb	36,839	51,534
Mar	88,529	48,731
Apr	71,833	45,724
May	67,992	41,241
Jun	48,161	
Jul	43,165	
Aug	47,292	
Sep	38,898	
Oct	54,643	
Nov	67,758	
Dec	50,490	



The next chart is the Average Daily Consumption chart. The green bar represents the consumption since H2minusO was installed and excludes the 4 days of May not metered at the time of the data collection.



Overall, the usage has shown a decrease since the install date of April 1, 2015. Compared to the year of consumption leading up to April 1, usage has decreased by 13%. When comparing the new consumption history to the 60 days before the installation, the average consumption showed a decrease of 10%.

The price per gallon has been higher this year compared to same time last year. Despite the increase in the average price per gallon, Wendy's saved around \$20 in April and May this year compared to last

Prepared by Philip Schroedter - 512.583.1974

year. Had the cost per gallon been the same as the previous year, this meter would have saved \$684.52 in 2 months. Annual savings based on these figures could reach \$4107.

Lastly, the usage after the installation showed a 34% decrease in consumption from the same timeframe during the previous year. Any variances could be attributable to seasonal variation.

Signature

Date

30/15





Date: 7/28/15

Client Name: Wendy's

Location: 6131 Fairburn Road, Douglasville, GA

Date of Installation: 4/1/15

Meter Number: 47765297

Unified Energy, in conjunction with THG Energy Solutions, collects 12-24 months of billing history through utility online management systems or through use of a Letter of Authorization (LOA). To obtain data consumption and billing history, THG acquires a signed Letter of Authorization from the customer. This form grants THG the ability to collect the consumption data.

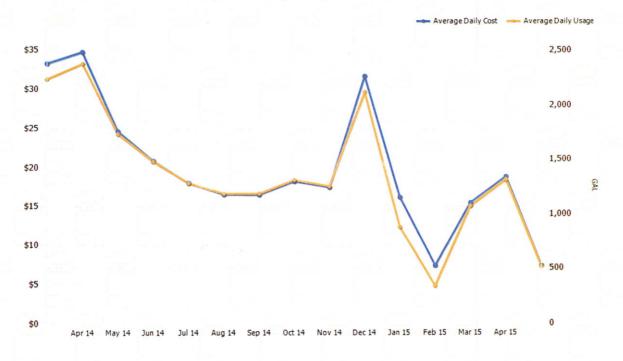
THG acquires the invoices and enters the data into the proprietary Unified Data Management System (UDMS). Once loaded, two separate divisions review the data to ensure data accuracy. The Senior Account representative reviews the data once more before preparing the final report.

The UDMS system calculates the usage per day on each invoice and then applies that amount to the month which the usage falls. For example, a billing period of March 4<sup>th</sup> to April 5<sup>th</sup> will have 4 days from April that are included in the April calculations. The next invoice most likely will round off the remaining days in April, with some daily usage being applied to May.

The charts used in this report are generated based on the calculation methods mentioned above. No other information is added to the reports.

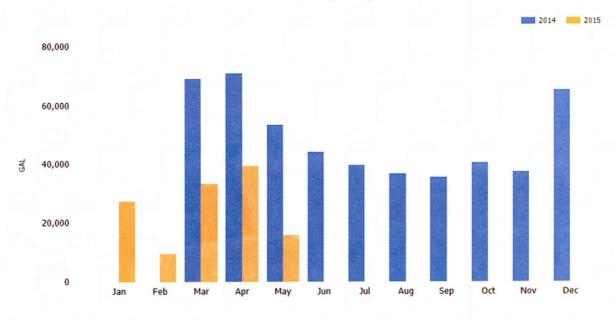
For meter # 47765297 located in Douglasville, Georgia, THG was able to collect 14 months of historical data from a consumption report provided by the City of Smyrna. The last invoice details received for this meter had a service end date of May 14<sup>th</sup>. Due to our calculation methods, the most recent month of the following reports are not including 16 days of usage (the remaining days in May) unless otherwise noted.

#### Water Average Daily Cost and Use



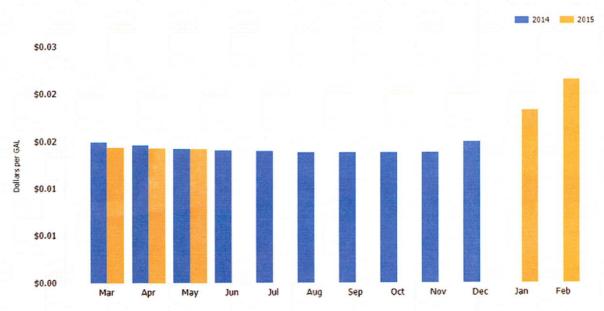
Month	Avg Usage	Avg Cost
Mar 2014	2,235	\$33.28
Apr 2014	2,375	\$34.74
May 2014	1,731	\$24.61
Jun 2014	1,481	\$20.83
Jul 2014	1,286	\$18.03
Aug 2014	1,192	\$16.54
Sep 2014	1,191	\$16.52
Oct 2014	1,317	\$18.25
Nov 2014	1,259	\$17.48
Dec 2014	2,118	\$31.69
Jan 2015	881	\$16.18
Feb 2015	342	\$7.38
Mar 2015	1,074	\$15.47
Apr 2015	1,319	\$18.86
May 2015	517	\$7.36

#### **Water Monthly Usage**

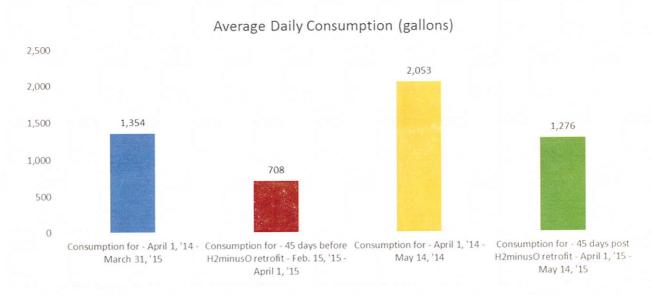


Month	2014	2015
Jan		27,325
Feb		9,568
Mar	69,300	33,296
Apr	71,250	39,557
May	53,667	16,033
Jun	44,439	
Jul	39,858	
Aug	36,942	
Sep	35,724	
Oct	40,824	
Nov	37,763	
Dec	65,654	





The next chart is the Average Daily Consumption chart. The green bar represents the consumption since H2minusO was installed and excludes the 17 days of May not metered at the time of the data collection.



Overall, the usage has shown a decrease since the install date of April 1, 2015. Compared to the year of consumption leading up to April 1, usage has decreased by 6%. When comparing the new consumption history to the 45 days before the installation, the average consumption showed an increase of 44%. This increase, however, is not directly reflective of the actual consumption. On the bill from 1/14 - 2/16, Douglas Count Water and Sewer Authority's invoice shows the consumption of -11,100 gallons. It is impossible to have a negative consumption of 11,100 gallons. This is likely due to an estimated reading

over time that was overestimated. This invoice makes up for the estimation errors. Another reason that could create the negative consumption would be to pay the end customer back for over charging on previous invoices. In this case, the billing program was unable to handle the manual credits, so the team had to adjust by charging for negative consumption. In any case, the red bar in the previous chart is skewed.

The price per gallon has been fairly consistent this year compared to same time last year. Last year during the invoice period of 4/11/14 - 5/13/14, Wendy's consumed 61,200 gallons at a cost of \$881.24. This year during the invoice period of 4/14/15 - 5/14/15, Wendy's consumed only 37,000 at a cost of \$526.77. Wendy's saved just over \$300 during this one billing period. Estimated annual savings could reach up to \$3600 since the installation of H2minusO.

Lastly, the usage after the installation showed a 61% decrease in consumption from the same timeframe during the previous year. Any variances could be attributable to seasonal variation.

Signature

Date