

# UNITED STATES ENVIRONMENTAL PROTECTION AGENICY

GREAT LAKES NATIONAL PROGRAM OFFICE 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

AUG 0 5 2019

Donald Zelazny Great Lakes Programs Coordinator 270 Michigan Avenue Buffalo, NY 14203-2915

Dear Mr. Zelazny:

Thank you for your July 16, 2019 request to remove the "Beach Closings" Beneficial Use Impairment (BUI) at the Rochester Embayment Area of Concern (AOC) located in Monroe County, NY. As you know, we share your desire to restore all the Great Lakes AOCs and to formally delist them.

Based upon a review of your submittal and the supporting data, the U.S. Environmental Protection Agency (EPA) approves your request to remove this BUI from the Rochester Embayment AOC. EPA will notify the International Joint Commission (IJC) of this significant positive environmental change at this AOC.

We congratulate you and your staff and the Monroe County Department of Public Health (MCDPH) as well as the many other federal, state and local partners who have been instrumental in achieving this environmental improvement. Removal of this BUI will benefit not only the people who live and work in the Rochester Embayment AOC, but all the residents of New York and the Great Lakes Basin as well.

We look forward to the continuation of this important and productive relationship with your agency and the Rochester Embayment Remedial Advisory Committee as we work together to delist this AOC in the years to come. If you have any further questions, please contact me at (312) 353-8320 or your staff can contact Leah Medley at (312) 886-1307.

Sincerely,

Chris Korleski, Director

Great Lakes National Program Office

cc:

Richard Balla, USEPA Region 2 Aisha Sexton-Sims, USEPA Region 2

Elizabeth VanRabenswaay, USEPA Region 2

Michael Kuzia-Carmel, NYSDEC Jim Tierney, NYSDEC Mark Klotz, NYSDEC Wade Silkworth, Monroe County Dept. Of Public Health Raj Bejankiwar, IJC

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

**Great Lakes Programs** 

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July 16, 2019

Mr. Chris Korleski Director Great Lakes National Program Office U.S. Environmental Protection Agency 77 West Jackson Boulevard Chicago, Illinois 60604-3507

Dear Mr. Korleski:

I would like to request the U.S. Environmental Protection Agency's concurrence with the removal of the Rochester Embayment Area of Concern (AOC) "Beach Closings" Beneficial Use Impairment (BUI). The New York State Department of Environmental Conservation (NYSDEC) has determined that the established restoration targets for this impairment have been met in the Rochester Embayment AOC.

The enclosed BUI Removal Report describes NYSDEC's evaluation of the current status of the impairment, which is based on a multitude of local and county-wide initiatives, as well as water quality monitoring conducted at swimming beaches in the Rochester Embayment AOC by the Monroe County Department of Public Health (MCDPH). MCDPH and NYSDEC have collaboratively developed the removal proposal in accordance with the process contained in New York State's *Guidance for Delisting (Redesignation) of AOCs and their BUI Indicators*, which is consistent the U.S. Policy Committee's *Delisting Principles and Guidelines* document.

The Rochester Embayment Remedial Advisory Committee fully supports the removal of this BUI. In addition, NYSDEC and MCDPH held a public meeting on removal of the BUI. The comments received were addressed as documented in the enclosed report.

If you need further information, please contact either Mr. Michael Kuzia-Carmel, NYSDEC State AOC Coordinator, at 518-402-7231 or Mr. Wade Silkworth, MCPDH Rochester Embayment AOC Coordinator, at 585-753-5470. Thank you for your consideration of this request.



Sincerely,

Donald Zelazny

Great Lakes Programs Coordinator

# Enclosure

cc: Mr. Richard Balla, USEPA Region 2

Ms. Aisha Sexton-Sims, USEPA Region 2

Ms. Elizabeth VanRabenswaay, USEPA Region 2

Mr. Marc Tuchman, GLNPO

Ms. Amy Pelka, GLNPO

Ms. Leah Medley, GLNPO

Mr. Jim Tierney, NYSDEC

Mr. Mark Klotz, NYSDEC

Mr. Michael Kuzia-Carmel, NYSDEC

Mr. Wade Silkworth, Monroe County Dept. Of Public Health





# ROCHESTER EMBAYMENT AREA OF CONCERN

Beach Closings Beneficial Use Impairment Removal Report

**JULY 2019** 



# Rochester Embayment Area of Concern

# **Beach Closings**

Beneficial Use Impairment (BUI) Removal Report

July 2019

# Prepared by:

New York State Department of Environmental Conservation

And

Monroe County Department of Public Health

This Beneficial Use Impairment (BUI) Removal Report was prepared by the New York State Department of Environmental Conservation (NYSDEC) and the Monroe County Department of Public Health (MCDPH) and was substantially funded by the United States Environmental Protection Agency (USEPA) through the Great Lakes Restoration Initiative (GLRI). The NYSDEC and MCDPH have engaged stakeholders and the public, including the Remedial Advisory Committee, through the BUI removal process. For more information please contact the Remedial Action Plan Coordinator at MCDPH or the AOC Coordinator at NYSDEC Division of Water.

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# I. Introduction

This BUI Removal Report identifies the background, criteria, supporting data, and rationale to remove the "Beach Closings" BUI from the Rochester Embayment Area of Concern (AOC). The status of this BUI is currently listed as "impaired" for the Rochester Embayment portion of the AOC due to harmful filamentous algae propagating throughout the AOC and high turbidity contributing to the presence of coliform bacteria at Ontario and Durand Beaches.

To address the prevalence of beach closures at Ontario and Durand Beaches, the Rochester Embayment Remedial Advisory Committee (RAC), in partnership with the Monroe County Department of Public Health (MCDPH), New York State Department of Environmental Conservation (NYSDEC), United States Army Corps of Engineers (USACE), and United States Environmental Protection Agency (USEPA), have implemented several programs to address the root causes of the impairment. Chief among these programs are the Combined Sewer Overflow Abatement Program (CSOAP), the Algae Control System at Ontario Beach, and the Durand-Eastman Beach Water Quality Improvement Project. Concurrently with these initiatives, MCDPH has been collecting water quality data at public beaches within the AOC to assess the status of the Beach Closings BUI. Members of the Rochester Embayment RAC are listed in **Appendix A**.

Following an evaluation of the data and evidence gathered to address this impairment, the RAC and NYSDEC have determined that the conditions have been met for removal of the Beach Closings BUI from the AOC in accordance with the USEPA Delisting Guidance document, Restoring United States Great Lakes Areas of Concern: Delisting Principles and Guidelines (USEPA, 2001). The RAC fully supports the recommendation that the Beach Closings BUI be removed from the list of impaired BUIs for the Rochester Embayment AOC.

# II. Background

In the Great Lakes Basin, the International Joint Commission (IJC) has identified 43 Areas of Concern (AOC) under Annex 1 of the Great Lakes Water Quality Agreement (GLWQA) where pollution from past industrial production and waste disposal practices has created hazardous waste sites and contaminated sediments. Up to fourteen beneficial uses impairments (BUIs), or indicators of poor water quality, are used to evaluate the condition of an AOC.

The Rochester Embayment AOC encompasses the lower portion of the Genesee River from the mouth up to the Lower Falls in Rochester, NY and the portion of Lake Ontario within a straight line drawn from Bogus Point to Nine Mile Point (**Figure 1**). This was originally listed as an AOC due to the known or suspected presence of multiple BUIs, including Beach Closings, which is generally considered impaired when waters used for body contact recreation exceed standards, objectives, or guidelines for such use.

All AOCs develop a Remedial Action Plan (RAP) in three stages, which collectively identifies specific BUIs and their causes (Stage I), outlines the restoration work needed (Stage II), and documents completion of these restoration activities and the delisting of the AOC (Stage III). Currently, the Rochester Embayment RAP consists of the Stage I and Stage II RAP.

The Beach Closings BUI was originally listed as impaired in the Stage I and Stage II RAPs due to:

- Water quality problems related to storm water flow from streams which flow directly onto the beach;
- Excessive rainfall events;
- High bacteria levels in the Genesee River from combined sewer overflows;
- · Accumulated masses of algae on the shoreline of the beaches; and
- Harbor dredging activities re-suspending sediments into the river.

# A. BUI Removal Criteria

The removal criteria and monitoring methods for the Beach Closings BUI were reported in the 2002 Addendum to the Stage II RAP. These removal criteria were revisited in 2008 by the RAP Coordinator and the Oversight Committee. The Oversight Committee determined it was best to refine the BUI removal criteria to encompass conditions at Durand-Eastman Beach and to remove the model used to determine beach closures from the removal criteria and instead utilize actual bacteria levels in assessing the status of this BUI (E&E 2009).

As stated in the Rochester Embayment Area of Concern Beneficial Use Impairment Delisting Criteria Report (E&E 2009), the removal criteria for the Beach Closings BUI are as follows:

"During eighty percent of the swimming season, bathing beaches in the Rochester Embayment meet bacterial standards and water clarity standards."

The above criteria are further clarified as follows (E&E 2009):

- Beaches consist of Ontario Beach and Durand Eastman Beach (Figure 2). The bacterial standards are 235 colony-forming units (cfu) or most probable number (mpn) E. coli per 100 milliliters (mL) for a single sample or 126 cfu or mpn E. coli per 100 mL for the geometric mean of at least five samples in a 30-day period for a Tier I beach. Beaches that meet the criteria of coastal recreation waters are identified and ranked as Tier I, II or III, (high, medium, or low risk) to identify the potential risk of disease to swimmers as well as protect public health. Characteristics used to identify the tier include but are not limited to: rainfall, potential pollution, bather usage, past water quality monitoring data, and public comment and/or perception. All beaches in Monroe County are Tier I according to the Monroe County Department of Public Health (MCDPH), which means they are high risk and are required to be sampled at least once per week during the swimming season.
- New York State Sanitary Code has a clarity standard of a Secchi depth of 4 feet (approximately 1.2 meters); however, Great Lakes and ocean beaches are exempt from this. Monroe County uses a clarity standard of less than 0.6 meters in a water depth of 1 meter to determine beach closings.

The above BUI removal criteria are consistent with the USEPA Delisting Guidance document (USPC, 2001) and the International Joint Commission (IJC) delisting guidelines (IJC, 1991).

The updated BUI removal criteria do not provide a specific time period for which this condition must be met. However, the previous removal criteria, as stated in the RAP 2002 Addendum, were based on meeting conditions on a 5-year rolling average. As such, the previous timeframe has been carried forward and results presented herein will show the 5-year average.

The endpoint to restore this BUI is achieved by satisfying the above criteria. As described below, beach monitoring data collected by the MCDPH demonstrate that this endpoint is achieved.

# III. BUI Indicator Status Resolution – Management Actions

Several projects and programs support or contribute to the BUI removal, as summarized below.

# A. Combined Sewer Overflow Abatement Program (CSOAP)

Historical water quality problems associated with effluent discharges in and around Ontario Beach resulted in the development of a comprehensive sewerage system for the City of Rochester in the early 1900's. Still, by the 1960's, most of the County's water resources were affected by pollution. This led to the creation of the Monroe County Pure Waters Agency in 1967. Through this agency, a comprehensive plan was developed and released to address the county's sewerage needs through the year 2020. The plan recommended the construction of a regional sewerage conveyance and treatment system to aid in the handling of effluent entering creeks and streams in Monroe County.

In addition to developing a master plan for the Rochester sewage system, in 1972 the extended staff of Pure Waters accepted responsibility for the care and maintenance of these systems. In conjunction with the Pure Waters plan, the development of the Combined Sewer Overflow Abatement Program (CSOAP) was created and began operation in 1993. Through a series of tunnels and holding basins, over 99% of the total volume of CSO's is captured and properly treated at the Frank E. VanLare Wastewater Treatment Facility. This program saves an average of 3.75 billion gallons per year of untreated overflow from entering local waterways.

# B. Algae Control System

Excessive masses of stagnant algae, especially *Cladophora*, have traditionally accumulated in the nearshore area adjacent to the West Pier at Ontario Beach, and have been responsible for decreased water quality. In years past, the control of algal mats on the beach has required both manual and mechanical collection systems, which caused inconsistent water quality results. To address this problem, USACE and NYSDEC collaborated on the construction of an algae control system at Ontario Beach along the West Pier. The construction of this system was possible due to its grant funded purchase supplied by the USACE. The system consists of a combination of a portable pump, intake, piping and hoses, which collect the algae from the West side of the pier and redistribute to the East side of the pier (Genesee River). The algae are eventually carried out to the deeper lake waters via river flow. Ownership and maintenance is the responsibility of the Monroe County Department of Environmental Services while operation of the algae pump is overseen by the Department of Parks. After being operational for the full 2015 beach season, the system proved effective in the elimination of algal mats previously known to accumulate in this area. There have been no beach closures caused by excessive algae since the algae control system first became operational in 2015.

# C. Durand Eastman Beach Water Quality Improvement Project

In 2013, the City of Rochester commenced implementation of a water quality improvement project to address the bacteria issues at Durand Eastman Beach. This project focused on the Sherry Swamp outfall, which was identified as a critical source of *E. coli* discharging to Lake Ontario approximately 300 feet to the east of the Durand Eastman Beach public swimming area. The water quality improvement project included the construction of a storm water detention basin

upstream from the main tributary to Sherry Swamp and the installation of an antimicrobial filtration system near the outfall. A diversion vault ensures that flows 4.8 cubic feet per second or less are pumped through the filtration system prior to discharging to Lake Ontario. The system has been operating part time while under assessment, with full time operation planned to begin in 2018. Sampling specific to the monitoring of this project has shown that the detention facility coupled with the filtration system works to significantly reduce *E. coli* counts entering the Lake in this location.

#### D. Stormwater Coalition

One of the greatest sources of pollution contributing to beach closures in the Rochester Embayment AOC and other local waterways is stormwater pollution accumulated from roadways, lawns, farms, and other anthropogenic sources. To address local stormwater pollution concerns, the Stormwater Coalition of Monroe County was formed in 2000 involving the collaboration of 29 county municipalities. The Stormwater Coalition serves as a cooperative organization where the permitted municipalities can work together towards a common cause of improving stormwater quality in Monroe County in a cost effective and efficient manner. In addition to the permitted municipalities the Stormwater Coalition partners with organizations such as the Monroe County Soil and Water Conservation District and the Water Education Collaborative (WEC) in order to utilize local expertise.

To achieve the goal of reducing stormwater pollution and improving local water quality the Stormwater Coalition acts through three taskforces that focus on education, construction, and illicit discharge/pollution prevention. One of the most successful projects carried out by the education taskforce and the WEC fostered increased public education and awareness through programming consistent with the Rochester Embayment Remedial Action Plan (RAP) and other water resource-focused community organizations. This partnership launched the "H2O Hero" campaign with the vision that any individual can have a positive impact on local water conditions through awareness and small lifestyle changes. Through the implementation of this campaign, the Stormwater Coalition has successfully raised public awareness of the contaminant sources that can lead to beach closure conditions and has increased public involvement in the management of local stormwater pollution.

# IV. Monitoring Success of Management Actions

In addition to the projects and programs that directly address the root causes of this BUI, MCDPH conducts direct monitoring of conditions at bathing beaches within the Rochester Embayment AOC. This monitoring has helped to ensure the success of these efforts, and demonstrates the achievement of the BUI removal criteria.

# A. Water Quality Monitoring at Ontario and Durand Eastman Beaches

MCDPH has compiled and reviewed bacteriological and other routinely collected water quality data to determine if the removal criteria for the Beach Closing BUI have been appropriately satisfied. This was accomplished using the results of routine water quality monitoring (water clarity and *E. coli* concentrations) at Ontario Beach and Durand Beach, both located in the Rochester Embayment AOC, as described below. Additionally, the predictive model that MCDPH uses, independent of these datasets to make beach closure decisions, is described.

# i. Sample Collection

MCDPH staff are assigned to the beach sampling duties and are trained annually on the proper sample collection techniques and chain of custody documentation. Beginning on or about the third week in May, samples are collected twice weekly in approximately knee-deep water, at each beach. At Durand Beach, one sample is collected from the center of the swimming area. Two samples are currently collected from Ontario Beach, one from the eastern and one from the western ends of the beach. Through the 2014 beach season, an additional third sample was collected at the center of the Ontario Beach swimming area. This center sample was not collected from 2015 on, as the sampling procedures were changed in the MCDPH Beach Act grant workplan approved by NYSDOH, and the sample was no longer required.

Sampling at each beach begins approximately one month before the scheduled opening of the swimming season. If sampling results exceed the EPA standards for a designated beach area, as described below, more frequent sampling may be implemented. Upon the seasonal opening of Ontario Beach and Durand Beach, sampling is performed daily and continues until Labor Day, or until seasonal closing.

Water samples are submitted to the Monroe County Department of Environmental Services Environmental Laboratory (NYSDOH ELAP# 10373) for analysis for *E. coli* using the Colilert test (Standard Methods 18th edition # 9223). The laboratory conforms to the National Environmental Laboratory Accreditation Conference (NELAC) requirements for Quality Assurance and Quality Control, including analysis of reference materials, duplicate aliquots, and blank aliquots in bacteriological analysis.

# ii. Bacterial Standards Used

The bacterial standards used for the BUI removal criteria [235 colony-forming units (cfu) or most probable number (mpn) E. coli per 100 milliliters (mL) for a single sample or 126 cfu or mpn E. coli per 100 mL for the geometric mean of at least five samples in a 30-day period] are consistent with Subpart 6-2 of the New York State Sanitary Code, and are used by MCDPH. Although the single sample threshold is useful for determining day-to-day closures to protect the health of the public, the long term geometric mean (equivalent to the arithmetic mean of the logarithms) is the more relevant value when taking a broader look at water quality issues. The standard of 126 mpn E. coli (geometric mean) originated from USEPA's Ambient Water Quality Criteria of 1986 and has been upheld through years of published standards and USEPA recommendations. The New York State Sanitary Code Subpart 6-2 (2011), and the Beaches Environmental Assessment and Coastal Health (BEACH) Act of 2000 each reference this standard. The Ambient Water Quality Criteria of 1986 states that the geometric mean indicator densities corresponding to the accepted gastrointestinal illness rates were calculated by equations developed by A. P. Dufour and V. J. Cabelli and that these geometric mean indicator densities are for steady state dry weather conditions. It further states in the "Recommendations on Bacterial Criteria Monitoring" section that samples "should be collected during dry weather periods to establish so-called 'steady state' conditions."

Therefore, upon compiling the historical beach sampling data for the Rochester Embayment beaches, only the samples taken during dry weather conditions were used in calculating the geometric mean over a rolling 30-day interval. In order to determine when wet weather conditions were occurring, the local rainfall data for the 24 hours prior was considered. If the 24-hr rainfall

was 0.10" or greater, the sample was not considered to be representative of dry weather conditions and the result was omitted from the rolling geometric mean calculation. If the 24-hr rainfall was 1.0" or greater, the conditions were considered wet for one extra day. If the 24-hr rainfall was 2.0" or greater, the conditions were considered wet for two extra days. The daily rainfall data are presented with the bacteria results and calculations in **Appendix B**. Samples that are highlighted were omitted from calculations. Omitting wet weather samples from these calculations allows for establishing a genuine look at the steady state conditions, as initially intended. Because MCDPH takes daily samples (weekly sampling is the minimum used by most beaches in New York) during the beach season, an accurate representation of the water quality can be observed. It should be noted that, although not included in the steady state geometric mean calculations used to assess the BUI status, the wet weather sample results are very important to calibrating the predictive model used by the MCDPH to determine beach closure days.

# iii. Water Clarity Standards Used

Although the Great Lakes and ocean beaches are exempt from the New York State Sanitary Code requirements for water clarity, Monroe County has its own policy stated in its beach model used to determine daily beach closures. The MCDPH beach model states that a Secchi disk reading of below 0.6 meters in water with a depth of 1 meter will give the justification for closing the beach. This standard is also used for water clarity as it pertains to meeting the BUI removal criteria.

# iv. Predictive Model

Due to the turnaround time in receiving daily *E. coli* sample results from the analytical laboratory, it isn't feasible to rely on these results to determine the status of bathing beaches. Therefore, MCDPH uses a predictive model to make daily beach closure decisions. This model is constructed based on previously recorded daily *E. coli* samples and observable data including rainfall, streamflow, algae presence, and Secchi disk readings collected by the MCDPH throughout the Rochester Embayment AOC. Each morning, the suite of observable data and past daily *E. coli* sample data are fed into the predictive model and, based on known water clarity data and predicted *E. coli* levels, a decision is made as to whether each beach is open or closed that day. The model containing the closure criteria is updated and reviewed continually to ensure maximum accuracy for safe beach openings/closures. Through employing this model, the MCDPH can efficiently and effectively predict beach conditions to allow for the best use of local beaches as a public resource.

# v. Agency Roles

When considering and evaluating water quality data at the beaches, each involved agency may use the data in different ways. While NYSDOH and/or MCDPH regularly use this data to make public health decisions, the way it is used or interpreted within the AOC program may differ from that. In the process to develop the Remedial Action Plan, the RAC established the criteria to remove the BUI, as presented in section II.A. The RAC then reviewed the data and determined that the criteria had been achieved. Under the AOC program, the NYSDEC facilitates the process and assists in coordinating all activities within an AOC, including providing technical assistance with drafting the BUI removal reports. Ultimately, the removal of a BUI is finalized after being reviewed and approved by the USEPA Great Lakes National Program Office (GLNPO), who determines if the report properly documents and proves that the BUI removal criteria have been met, and that the RAC accepts that they have been met.

# **B.** Water Quality Monitoring Results

As previously discussed, MCDPH uses a predictive model derived from multiple lines of environmental data to make final beach closure decisions. Bacterial and water clarity data for the swimming seasons of 2012-2018 have been compiled to calculate the percentage of the days which the water quality standards were met. From 2014-2018, Durand Eastman and Ontario beaches in the Rochester Embayment met both established bacterial and water clarity standards for 80% of the swimming season based on a 5-year rolling average. Therefore, the removal criteria for the Beach Closings BUI ("During eighty percent of the swimming season, bathing beaches in the Rochester Embayment meet bacterial standards and water clarity standards.") have been satisfied. The results are summarized below:

'' '' ''	% OF THE SWIMMING SEASON THAT BATHING BEACHES IN ROCHESTER EMBAYMENT MEET BACTERIAL AND/OR CLARITY STANDARDS								
YEAR	Bacterial Standards Met	Water Clarity Standards Met	Bacterial Standards AND Water Clarity Standards Met On Same Day						
2012	71.2%	92.2%	65.4%						
2013	89.7%	89.7%	81.5%						
2014	82.0%	81.3%	69.8%						
2015	70.6%	83.7%	61.4%						
2016	97.4%	96.1%	94.1%						
2017	100.0%	82.4%	82.4%						
2018	100.0%	92.5%	92.5%						
AVG 2012-2016	82.2%	88.6%	74.4%						
AVG 2013-2017	87.9%	86.6%	77.9%						
AVG 2014-2018	90.0%	87.2%	80.0%						

Compiled bacterial and water clarity sampling data are provided in **Appendices B and C**, respectively. **Appendix B** shows the beach data compiled for the beach seasons 2012 through 2018. For each year, the data shows the individual daily *E. coli* results, the 30-day geometric mean calculated for each day, and a graphical representation of the 30-day geometric means trending throughout each beach season. **Appendix C** shows the Secchi disk readings for each beach season for the years 2012 through 2018. Separate beach closing data for both locations of Durand Eastman and Ontario are presented in **Appendix D**. Data for both beaches are organized to show number of days in each of four categories (Closed/Dirty, Open/Clean, Closed/Clean, Open/Dirty) for each season from 2010 through 2018. Additionally, **Appendix D** 

presents the annual data for percent accuracy of closures as well as the annual percentage for each closure reason per season 2010 through 2018.

# V. Public Outreach

NYSDEC and MCDPH hosted a public meeting on the status of Rochester Embayment Beneficial Use Impairments at 5:30 p.m. on March 15, 2018 at the Roger Robach Community Center, located 180 Beach Avenue on the shore of Lake Ontario. Notification of this meeting was distributed to local government officials, local media, and local environmental advocacy groups. Postcards were mailed to 600+ local resident addresses. Approximately 40 people attended. Pamphlets about the Rochester Embayment AOC and its BUIs were distributed and posters focusing on three specific BUIs targeted for removal (Beach Closings, Eutrophication or Undesirable Algae, and Restrictions on Dredging Activities) were displayed and staffed by State and County experts. This public outreach meeting served as an opportunity for NYSDEC and MCDPH to share with the public those achievements that have made on the path to implementing the Stage II RAP and removing those specific BUIs. Overall, the comments received were positive and the few questions that were formally posed were answered.

# **VI. Summary and Conclusion**

# A. Removal Statement

The Beach Closings BUI was originally listed as impaired due to water quality problems related to storm water runoff from streams that flow onto the beach, excessive rainfall events, high bacteria levels attributed to combined sewer overflows discharging into the Genesee River, decaying algae, and re-suspended sediments caused by harbor dredging. Through the RAP process, several measures were taken to improve water quality and reduce the occurrence of beach closures (as summarized above) and specific criteria were created to determine when the impairment can be considered removed. MCDPH and NYSDEC have determined that the beach monitoring data presented herein illustrate that the water quality of the bathing beaches in the Rochester Embayment AOC meet the criteria to remove the Beach Closings BUI (bathing beaches met bacterial standards and water clarity standards during eighty percent of the swimming season). In addition, the RAC fully supports the removal of this BUI.

# B. BUI Removal Steps (To be completed as steps are taken)

	Completed	Date	Step Taken
1.	V	8/1993	BUI first documented as "Impaired" in the Stage I RAP (for the Rochester Embayment portion of the AOC).
2.	<b>√</b>	3/2009	BUI removal criteria revised with RAC consensus based on recommendations in E&E report.
3.	V	12/2017	RAP advisory committee agreed to proceed forward with BUI removal.
4.	<b>√</b>	3/15/2018	Public meeting advertised and held, information, outreach, and comment on removal

			recommendation conducted (included a 30-day public comment period) – see Appendix F.
5.		9/21/2018	Comments assembled, re-drafted BUI removal report prepared to include necessary changes.
6.	V	7/15/2019	NYSDEC (in consultation with USEPA R2/GLNPO) completes final modifications to the Beach Closings BUI removal document.
7.	V	TBD	Coordinate the formal transmittal of the BUI removal with USEPA GLNPO and communicate result with IJC.
8.	V	TBD	Communicate results to local RAP Coordination for appropriate recognition and follow-up.

# C. Post Removal Responsibilities

Following removal of the Beach Closings BUI, the organizations listed below will continue ongoing environmental programs to ensure that the restored beneficial use is protected and continues to remain unimpaired. The environmental programs relating to this beneficial use are: continued CSO abatement, operation of the algae control system, monitoring at Ontario and Durand Eastman beaches, and coordination of the Rochester Embayment RAC.

# 1. New York State Department of Environmental Conservation

NYSDEC, through its Great Lakes Program staff, will continue to assist MCDPH in coordinating the Rochester Embayment RAP, facilitating RAC efforts, and providing technical assistance in meeting AOC-related program goals.

NYSDEC will continue to issue permits for future dredging projects within the lower Genesee River. Per the conditions established in the Rochester Embayment AOC, overflow dredging will continue to be prohibited in the Rochester Embayment. This will mitigate the risk of sediment resuspension into the lower Genesee. Future dredging projects will have to undergo all necessary NYSDEC permitting procedures.

NYSDEC's State Pollutant Discharge Elimination System (SPDES) program will ensure that surface wastewater and stormwater discharges are adequately controlled throughout the Rochester Embayment AOC.

# 2. United States Environmental Protection Agency

The USEPA will continue to provide funding for RAP/RAC Coordination and technical assistance to the extent that resources are available to support the removal of remaining BUIs and ultimately the Delisting of the AOC.

# 3. Monroe County Department of Public Health

With EPA/GLRI funding, MCDPH currently provides a Coordinator for the AOC RAP, facilitation with RAC efforts, and technical assistance for AOC documentation and project design. With

ongoing funding support, MCDPH will continue in these roles to assist the RAC and USEPA in achieving the long-term goal of delisting the Rochester Embayment AOC.

MCDPH will continue to conduct routine water quality monitoring at Durand Eastman and Ontario beaches throughout the swimming season. The Monroe County Department of Environmental Services will continue to provide oversight and maintenance for the algae control system at Ontario Beach, with the Monroe County Department of Parks operating the algae control system.

CSO abatement will continue under the leadership of Monroe County through both the CSOAP program as well as the Monroe County Stormwater Coalition.

# D. Future Improvements

Although the removal of this BUI is warranted because the criteria for removal have been met under the AOC program, continued work and future improvements can and should be made at the beaches in the Rochester Embayment AOC. Ontario Beach and Durand Eastman Beach have a documented history of water quality being influenced by discharges from the Genesee River and nearby storm sewer outlets. Although outside of the AOC program, it is important to recognize that future funding sources should be pursued by stakeholders when they become available to study and address these issues. One example of this is the current NYSDEC grant for Non-Agricultural Nonpoint Source Planning.

# References

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# Figure 1 Map of the Rochester Embayment AOC

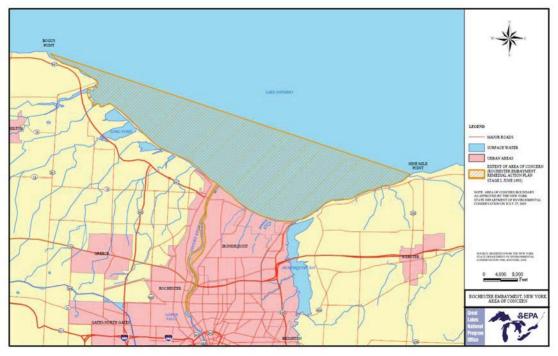


Figure 2
Ontario and Durand Eastman Beach Location Map



# Appendix A

List of Remedial Advisory Committee members

# Appendix A

# List of Remedial Advisory Committee Members

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Rochester Embayment Area of Concern Remedial Action Plan Coordinator
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585-753-5470

Monroe Co. Department of Public Health 111 Westfall Road - Room 938 Rochester, NY 14620

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# APPENDIX B Beach Monitoring Data

**Source: Monroe County Department of Public Health** 

2018 BE	ACH DA	TA				
	RESULT					
		ASON, BEACH N	OT OPEN			
		,				
	= DAYS C	MITTED FROM	CALCULATION O	F STEADY STATE	GEOMETRIC ME	AN
	DUE TO	WET WEATHER	RCONDITIONS			
		ONTARIO	ONTARIO	ONTARIO	DURAND	
	Date	E-COLI (mpn/100ml) WEST	E-COLI (mpn/100ml) EAST	E-COLI (mpn/100ml) GEOMETRIC MEAN	E-COLI (mpn/100ml)	
	22-May		1	1	25	
	24-May		51	51	8	
	30-May		12	12	10	
	31-May		1	1	1	
	5-Jun 7-Jun		435 19	435 19	345 11	
	13-Jun		6	6	1	
	15-Jun		11	11	3	
	19-Jun		1990	1990	84	
	21-Jun		13	95	45	
	22-Jun	5	16	9	28	
	23-Jun	3	17	7	5	
	24-Jun	120	101	110	30	
	25-Jun	649	613	631	62	
	26-Jun	45	122	74	2	
	27-Jun	6	6	6	6	
	28-Jun		3	2	276	
	29-Jun 30-Jun		26 8	23 5	20 1	
	1-Jul		5	5	3	
	2-Jul		261	16	5	
	3-Jul		33	32	8	
	4-Jul		3	3	4	
	5-Jul		2	3	4	
	6-Jul		2420	2420	1600	
	7-Jul		27	94	17	
	8-Jul		13	14	20	
	9-Jul		38	22	2	
	10-Jul		261	242	51	
	11-Jul 12-Jul		23 7	33 24	162 4	
	13-Jul		16	88	1	
	14-Jul		21	17	4	
<u> </u>	1 1 7 3 01	± '		Δ,	'	

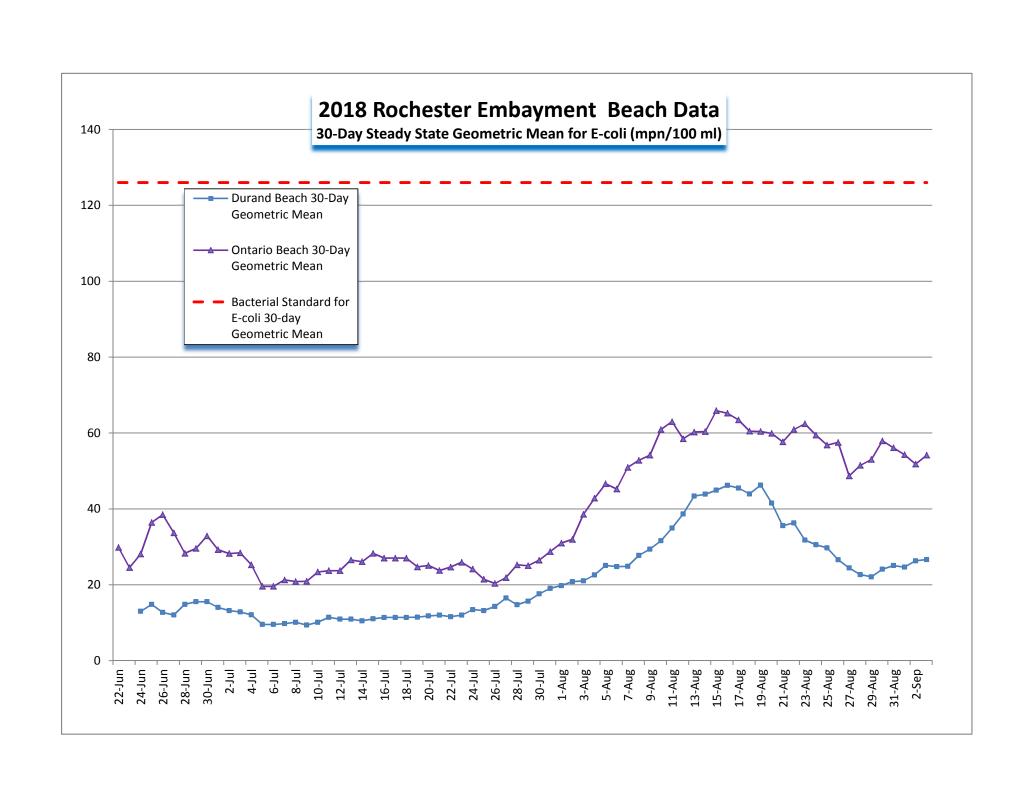
2018 BEACH D	ATA				
SAMPLE RESU	LTS				
	SEASON, BEACH N	OT OPEN			
= DAYS	OMITTED FROM	CALCULATION O	F STEADY STATE	GEOMETRIC ME	AN
DUE	TO WET WEATHE	R CONDITIONS			
	ONTARIO	ONTARIO	ONTARIO	DURAND	
Date	E-COLI (mpn/100ml) WEST	E-COLI (mpn/100ml) EAST	E-COLI (mpn/100ml) GEOMETRIC MEAN	E-COLI (mpn/100ml)	
15-J	ul 131	52	83	10	
16-J		13	9	26	
17-J		34	33	2420	
18-J		2897	4175	866	
19-J		291	191	101	
20-J	_	22	38	24	
21-J		43 285	22	71	
22-Ji		86	442 83	866 82	
24-J		34	18	517	
25-J		29	32	38	
26-J		2	3	179	
27-J	_	35	34	199	
28-J	ul 72	81	76	18	
29-Ji	ul 22	16	19	91	
30-J	ul 23	16	19	16	
31-J	ul 73	18	36	20	
1-Au		138	96	12	
2-Au		124	68	28	
3-Au		816	271	5	
4-Au		118	122	2420	
5-Au		185	327	276	
6-Au 7-Au		36 138	46 238	13 21	
8-Au		27	230	36	
9-Au		168	438	196	
10-Au		581	486	852	
11-Au		48	51	41	
12-Au		15	16	10	
13-Au		43	34	57	
14-Au	g 104	72	87	13	
15-Au		517	579	1046	
16-Au	g 33	82	52	85	

EACH DA	TA				
E RESULT					
	ASON, BEACH N	OT OPEN			
= DAYS C	MITTED FROM (	CALCULATION O	F STEADY STATE	GEOMETRIC ME	AN
DUE TO	O WET WEATHER	R CONDITIONS			
	CAUTABLO	CAUTABLO	01174710	21124112	
	ONTARIO	ONTARIO	ONTARIO	DURAND	
	E-COLI	E-COLI	E-COLI		
Date	(mpn/100ml)	(mpn/100ml)	(mpn/100ml)	E-COLI	
	WEST	EAST	GEOMETRIC	(mpn/100ml)	
			MEAN		
17-Aug		44	34	32	
18-Aug		308	331	442	
19-Aug		38	36	78	
20-Aug	16	20	18	6	
21-Aug	29	20	24	1	
22-Aug	276	186	227	59	
23-Aug	10	118	34	19	
24-Aug	8	11	9	14	
25-Aug	20	17	18	15	
26-Aug	46	48	47	11	
27-Aug	1	1	1	2	
28-Aug	60	104	79	13	
29-Aug	58	30	42	8	
30-Aug	770	172	364	192	
31-Aug	56	31	42	34	
1-Sep	29	29	29	18	
2-Sep		77	79	27	
3-Sep		261	172	37	

2018 BEAC	H DATA					
		TADV CT		AT A NI		
RUNNING 3	JU-DAY SI	EADY SIA	ATE GEOMETRIC M	IEAN		
	- 30-DAV G	SEOMETRIC	MEAN EXCEEDS 126 mg	n /100ml		
	- 30-DAT C	DECIVIETRIC	WIEAN EXCEEDS 120 III	)		
		ONT	ARIO		DUR	AND
			STEADY STATE			STEADY STATE
			30-DAY GEO MEAN			30-DAY GEO MEAN
			OF E-COLI RESULTS			OF E-COLI RESULTS
	FROM	TO	(mpn/100ml)	FROM	ТО	(mpn/100ml)
		Z			Z	
		PRE-SEASON			PRE-SEASON	
		-SE,			-SE,	
		PRE			PRE	
	24-May	22-Jun	29.8			
	25-May	23-Jun	24.5			
	26-May	24-Jun	28.1	26-May	24-Jun	13.0
	27-May	25-Jun	36.4	27-May	25-Jun	14.8
	28-May	26-Jun	38.5	28-May	26-Jun	12.7
	29-May	27-Jun 28-Jun	33.7 28.3	29-May	27-Jun 28-Jun	12.0 14.8
	30-May 31-May	29-Jun	29.6	30-May 31-May	29-Jun	15.5
	1-Jun	30-Jun	32.9	1-Jun	30-Jun	15.5
	2-Jun	1-Jul	29.2	2-Jun	1-Jul	14.0
	3-Jun	2-Jul	28.2	3-Jun	2-Jul	13.2
	4-Jun	3-Jul	28.4	4-Jun	3-Jul	12.8
	5-Jun	4-Jul	25.3	5-Jun	4-Jul	12.1
	6-Jun	5-Jul	19.6	6-Jun	5-Jul	9.5
	7-Jun	6-Jul	19.6	7-Jun	6-Jul	9.5
	8-Jun	7-Jul	21.3	8-Jun	7-Jul	9.8
	9-Jun	8-Jul	20.9	9-Jun	8-Jul	10.1
	10-Jun	9-Jul	20.9	10-Jun	9-Jul	9.4
	11-Jun 12-Jun	10-Jul 11-Jul	23.4 23.7	11-Jun 12-Jun	10-Jul 11-Jul	10.1 11.4
	13-Jun	12-Jul	23.7	12-Jun 13-Jun	12-Jul	10.9
	14-Jun	13-Jul	26.5	14-Jun	13-Jul	10.9
	15-Jun	14-Jul	26.1	15-Jun	14-Jul	10.5
			-			

2018 BEACH	Ι ΠΔΤΔ					
		EADV CT	L ATE GEOMETRIC M	A E A NI		
KOMMING 3	U-DAT SI	EAUT ST	ATE GEOIVIETRIC IV	ILAIN		
	= 30-DAY 6	 SEOMETRIC	MEAN EXCEEDS 126 mg	on/100ml		
	30 5/11 0		INIE/WY EXCEEDS 120 M	311/ 1001111		
		ONT	TARIO		DUR	,
			STEADY STATE			STEADY STATE
			30-DAY GEO MEAN			30-DAY GEO MEAN
	50014	то.	OF E-COLI RESULTS	50014	<b>T</b> O	OF E-COLI RESULTS
	FROM	TO	(mpn/100ml)	FROM	TO	(mpn/100ml)
	16-Jun 17-Jun	15-Jul 16-Jul	28.3 27.0	16-Jun 17-Jun	15-Jul 16-Jul	11.0 11.4
	17-Jun 18-Jun	16-Jul 17-Jul	27.0	17-Jun 18-Jun	15-Jul 17-Jul	11.4
	19-Jun	17-Jul 18-Jul	27.0	19-Jun	18-Jul	11.4
	20-Jun	19-Jul	24.7	20-Jun	19-Jul	11.5
	21-Jun	20-Jul	25.1	21-Jun	20-Jul	11.8
	22-Jun	21-Jul	23.8	22-Jun	21-Jul	12.0
	23-Jun	22-Jul	24.7	23-Jun	22-Jul	11.6
	24-Jun	23-Jul	25.9	24-Jun	23-Jul	12.0
	25-Jun	24-Jul	24.1	25-Jun	24-Jul	13.4
	26-Jun	25-Jul	21.4	26-Jun	25-Jul	13.2
	27-Jun	26-Jul	20.4	27-Jun	26-Jul	14.3
	28-Jun	27-Jul	21.9	28-Jun	27-Jul	16.5
	29-Jun 30-Jun	28-Jul 29-Jul	25.2 25.0	29-Jun 30-Jun	28-Jul 29-Jul	14.7 15.7
	1-Jul	30-Jul	26.5	1-Jul	30-Jul	17.6
	2-Jul	31-Jul	28.8	2-Jul	31-Jul	19.1
	3-Jul	1-Aug	31.0	3-Jul	1-Aug	19.8
	4-Jul	2-Aug	32.0	4-Jul	2-Aug	20.8
	5-Jul	3-Aug	38.6	5-Jul	3-Aug	21.0
	6-Jul	4-Aug	42.8	6-Jul	4-Aug	22.6
	7-Jul	5-Aug	46.6	7-Jul	5-Aug	25.1
	8-Jul	6-Aug	45.2	8-Jul	6-Aug	24.8
	9-Jul	7-Aug	50.9	9-Jul	7-Aug	24.8
	10-Jul 11-Jul	8-Aug 9-Aug	52.8 54.2	10-Jul 11-Jul	8-Aug 9-Aug	27.7 29.4
	12-Jul	10-Aug	60.9	11-Jul 12-Jul	10-Aug	31.6
	13-Jul	11-Aug	63.0	13-Jul	11-Aug	35.0
	14-Jul	12-Aug	58.5	14-Jul	12-Aug	38.6
	15-Jul	13-Aug	60.3	15-Jul	13-Aug	43.4
	16-Jul	14-Aug	60.4	16-Jul	14-Aug	43.9
	17-Jul	15-Aug	65.9	17-Jul	15-Aug	44.9
	18-Jul	16-Aug	65.2	18-Jul	16-Aug	46.2

<b>2018 BEACH</b>	H DATA					
RIINNING 3	n-DΔY ST	FΔDY STA	ATE GEOMETRIC N	<b>ΛΕΔΝ</b>		
NO MINIO	DAI 31	LADISIA	ATE GEOWIETMICH			
	= 30-DAY G	FOMETRIC	MEAN EXCEEDS 126 m	pn/100ml		
	33 2711 3			p, 200		
		ONT	ARIO		DUR	AND
			STEADY STATE			STEADY STATE
			30-DAY GEO MEAN			30-DAY GEO MEAN
			OF E-COLI RESULTS			OF E-COLI RESULTS
	FROM	ТО	(mpn/100ml)	FROM	ТО	(mpn/100ml)
	19-Jul	17-Aug	63.5	19-Jul	17-Aug	45.5
	20-Jul	18-Aug	60.5	20-Jul	18-Aug	43.9
	21-Jul	19-Aug	60.4	21-Jul	19-Aug	46.2
	22-Jul	20-Aug	59.9	22-Jul	20-Aug	41.5
	23-Jul	21-Aug	57.7	23-Jul	21-Aug	35.6
	24-Jul	22-Aug	60.9	24-Jul	22-Aug	36.3
	25-Jul	23-Aug	62.4	25-Jul	23-Aug	31.8
	26-Jul	24-Aug	59.4	26-Jul	24-Aug	30.6
	27-Jul	25-Aug	56.8	27-Jul	25-Aug	29.7
	28-Jul	26-Aug	57.5	28-Jul	26-Aug	26.6
	29-Jul	27-Aug	48.7	29-Jul	27-Aug	24.4
	30-Jul	28-Aug	51.4	30-Jul	28-Aug	22.7
	31-Jul	29-Aug	53.0	31-Jul	29-Aug	22.1
	1-Aug	30-Aug	57.9	1-Aug	30-Aug	24.1
	2-Aug	31-Aug	56.1	2-Aug	31-Aug	25.1
	3-Aug	1-Sep	54.3	3-Aug	1-Sep	24.7
	4-Aug	2-Sep	51.8	4-Aug	2-Sep	26.3
	5-Aug	3-Sep	54.2	5-Aug	3-Sep	26.6
	ONTARIO E	BEACH 2018	<u> </u>	DURAND BEA		
	# BEACH D		74	# BEACH DAY		72
	# DAYS WF			# DAYS WHE		
	DAY GEOM		0	GEOMETRIC	MEAN >	0
	MEAN > 12	6 ECOLI =		126 ECOLI =		
			MING SEASON THAT B			100.0%
	ROCHESTE	R EMBAYM	ENT MEET BACTERIAL	STANDARDS :	≡	===:



2017 BE	ACH DA	TA				
SAMPLE						
		ASON, BEACH N	OT OPEN			
			CALCULATION O	F STEADY STATE	GEOMETRIC ME	AN
	DUE TO	O WET WEATHER	R CONDITIONS			
		ONTARIO	ONTARIO	ONTARIO	DUBAND	
		UNTARIO	ONTARIO	E-COLI	DURAND	
	Date	E-COLI (mpn/100ml) WEST	E-COLI (mpn/100ml) EAST	(mpn/100ml) GEOMETRIC MEAN	E-COLI (mpn/100ml)	
	17-May		124	92	11	
	19-May	101	64	80	116	
	22-May		154	58	55	
	24-May		2	3	13	
	30-May	<u>8</u> 4	14	11	41	
	1-Jun 5-Jun		15 53	8 19	11 20	
	9-Jun	11	12	11	20	
	16-Jun		2	1		
	22-Jun		20	25		
	23-Jun	36	27	31	RAND BEACH CLOSED SEASON DUE TO HIGH LAKE LEVEL	
	24-Jun	517	62	179	CLO TO	
	25-Jun	34	20	26	CH C	
	26-Jun		28	47	3EA( N D	
	27-Jun	28	23	25	JD E SOI	
	28-Jun	67	25	41	RAN SEA	
	29-Jun		13	24	DUF	
	30-Jun		36	33	ш	
	1-Jul 2-Jul		17 11	19 29		
	3-Jul		46	126		
	4-Jul		28	13		
	5-Jul		4	6		
	6-Jul		14	12		
	7-Jul	51	6	17		
	8-Jul		225	193		
	9-Jul		80	52		
	10-Jul		13	10		
	11-Jul		11	16		
	12-Jul		4	5		
	13-Jul		79 16	82		
	14-Jul 15-Jul		16 40	13 50		
	12-Jul	62	40	50		

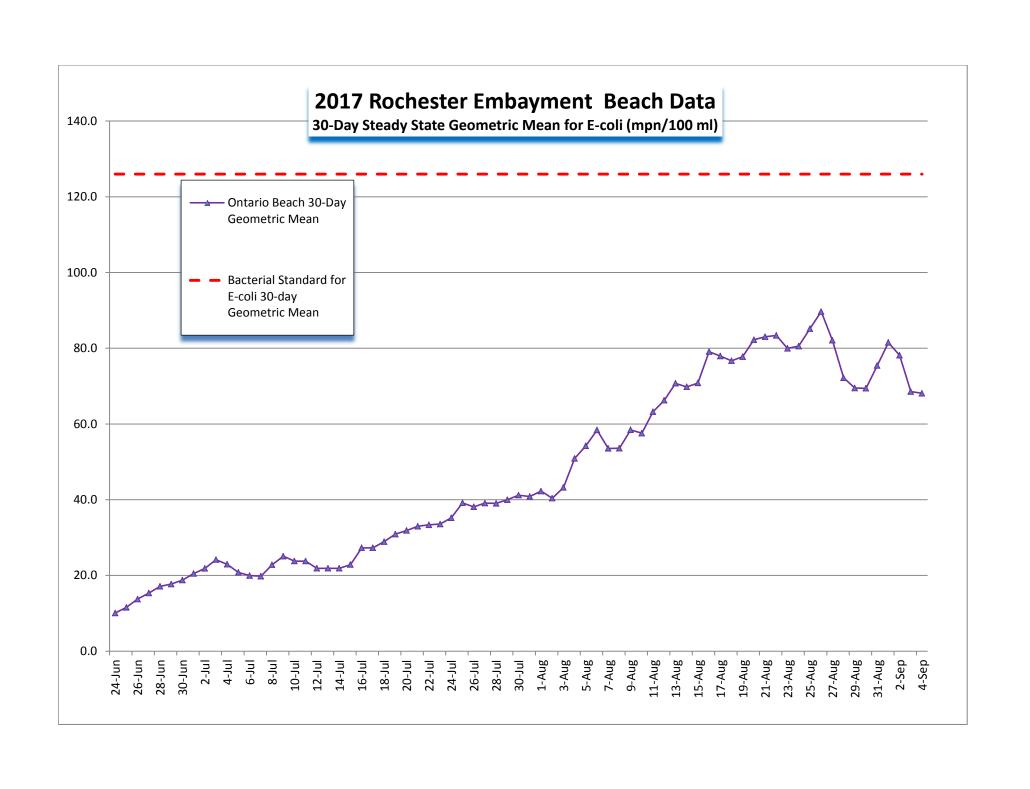
2017 BE	ACH DA	TA				
	E RESULT					
<b>0</b> 7 11111 <b>2</b> 1		ASON, BEACH N	OT OPEN			
		•				
	= DAYS O	MITTED FROM	CALCULATION O	F STEADY STATE	GEOMETRIC ME	AN
	DUE TO	O WET WEATHER	R CONDITIONS			
		ONTABIO	ONTARIO	CNITABIO	DUD AND	
		ONTARIO	ONTARIO	ONTARIO E-COLI	DURAND	
	Date	E-COLI (mpn/100ml) WEST	E-COLI (mpn/100ml) EAST	(mpn/100ml) GEOMETRIC MEAN	E-COLI (mpn/100ml)	
	16-Jul	56	31	42		
	17-Jul	1306	2053	1637		
	18-Jul	86	86	86		
	19-Jul	108	127	117		
	20-Jul	70	52	60		
	21-Jul	71	69	70		
	22-Jul 23-Jul	19 119	58 11	33 36		
	23-Jul 24-Jul	213	244	228		
	25-Jul	159	150	154		
	26-Jul	28	21	24		
	27-Jul	60	37	47		
	28-Jul	80	60	69		
	29-Jul	49	38	43		
	30-Jul	130	32	64		
	31-Jul	74	15	33		
	1-Aug	219	43	97	O E	
	2-Aug	146	152	149	SEE HIG	
	3-Aug		68	66	CLC TO	
	4-Aug		411	321	CH OE EVE	
	5-Aug		101	187	SEA N D	
	6-Aug		70	95	ND I	
	7-Aug		43	26	DURAND BEACH CLOSED FOR SEASON DUE TO HIGH LAKE LEVEL	
	8-Aug		153	121	DU :OR	
	9-Aug		49	69	ш.	
	10-Aug		25	41		
	11-Aug 12-Aug		40 138	46 194		
	13-Aug		461	338		
	14-Aug		27	36		
	15-Aug		76	60		
	16-Aug		649	1253		
	17-Aug		59	58		

BEACH DA	ΔTA				
PLE RESUL					
	ASON, BEACH N	OT OPEN			
TILE SI	DETTERM	0.0.2.0			
= DAYS (	□ DMITTED FROM (	CALCULATION O	F STEADY STATE	GEOMETRIC ME	AN
	O WET WEATHER				•
	ONTARIO	ONTARIO	ONTARIO	DURAND	
	F 6011	F 6011	E-COLI		
Data	E-COLI	E-COLI	(mpn/100ml)	E-COLI	
Date	(mpn/100ml)	(mpn/100ml)	GEOMETRIC	(mpn/100ml)	
	WEST	EAST	MEAN	, , , ,	
18-Aug	59	119	84		
19-Au	59	125	86		
20-Au	184	435	283		
21-Aug	99	18	42		
22-Aug		33	40		
23-Aug		358	883		
24-Aug	175	194	184		
25-Au		74	92		
26-Aug	224	120	164		
27-Au	8	12	10	O #	
28-Aug	1	3	2	RAND BEACH CLOSED SEASON DUE TO HIGH LAKE LEVEL	
29-Au	25	25	25	CLO TO	
30-Aug	32	33	32	CH C	
31-Aug	866	687	771	EAC V DI	
1-Sep	312	1023	565	D B SOF AKE	
2-Sep		24	22	AN SEA: L	
3-Sep		15	15		
4-Sep		35	41	DU FOR	

2017 BEACH								
-		FADV CT	ATE CEONALTRIC N	4 F A A I				
RUNNING 3	O-DAY STI	EADY STA	ATE GEOMETRIC M	ILAN				
	- 30 DAY C	CONTENT	MEAN EVECTEDS 126 mm	an /100ml				
= 3U-DAY GEOMETRIC		MEAN EXCEEDS 126 mpn/100ml						
	ONTARIO			DURAND				
					STEADY STATE			
			30-DAY GEO MEAN			30-DAY GEO MEAN		
			OF E-COLI RESULTS			OF E-COLI RESULTS		
	FROM	TO	(mpn/100ml)	FROM	TO	(mpn/100ml)		
		z			z			
		PRE-SEASON			PRE-SEASON			
		-SE/			-SE/			
		)RE.			PRE			
				24-May	22-Jun			
				25-May	23-Jun	o		
	26-May	24-Jun	10.1	26-May	24-Jun	AND BEACH CLOSED EASON DUE TO HIGH LAKE LEVEL		
	27-May	25-Jun	11.5	27-May	25-Jun	CLC TO L		
	28-May	26-Jun	13.8	28-May	26-Jun	CH OCE EVE		
	29-May	27-Jun	15.3	29-May	27-Jun	3EA N D Œ LI		
	30-May	28-Jun	17.1	30-May	28-Jun	ND R		
	31-May	29-Jun	17.7	31-May	29-Jun	RAI SE/		
	1-Jun 2-Jun	30-Jun 1-Jul	18.8 20.5	1-Jun 2-Jun	30-Jun 1-Jul	DURAL FOR SE/		
	3-Jun	2-Jul	21.8	3-Jun	2-Jul			
	4-Jun	3-Jul	24.2	4-Jun	3-Jul			
	5-Jun	4-Jul	22.9	5-Jun	4-Jul			
	6-Jun	5-Jul	20.8	6-Jun	5-Jul			
	7-Jun	6-Jul	20.0	7-Jun	6-Jul			
	8-Jun	7-Jul	19.8	8-Jun	7-Jul			
	9-Jun	8-Jul	22.8	9-Jun	8-Jul			
	10-Jun	9-Jul	25.1	10-Jun	9-Jul			
	11-Jun	10-Jul	23.8	11-Jun	10-Jul			
	12-Jun	11-Jul	23.8	12-Jun	11-Jul			
	13-Jun	12-Jul	21.9	13-Jun	12-Jul			
	14-Jun	13-Jul	21.9	14-Jun	13-Jul			
	15-Jun	14-Jul	21.9	15-Jun	14-Jul			
	16-Jun	15-Jul	22.8	16-Jun	15-Jul			

2017 BEACH DAT	Δ					
		EADV ST	ATE GEOMETRIC M	1 E A NI		
ROMMING 30-DA	1 311	LADI 317	TE GEOWIET RIC IV	ILAIN		
= 30-[	DAY G	EOMETRIC	MEAN EXCEEDS 126 mg	on/100ml		
				.,		
		ONT	ARIO		DUR	1
			STEADY STATE			STEADY STATE
			30-DAY GEO MEAN OF E-COLI RESULTS			30-DAY GEO MEAN OF E-COLI RESULTS
FRC	) N /	то	(mpn/100ml)	FROM	то	(mpn/100ml)
	7-Jun	16-Jul	27.3	17-Jun	16-Jul	(IIIpii) 100iiii)
	3-Jun	17-Jul	27.3	17-Jun 18-Jun	17-Jul	
	9-Jun	18-Jul	28.9	19-Jun	18-Jul	
+	)-Jun	19-Jul	30.9	20-Jun	19-Jul	
21	L-Jun	20-Jul	31.9	21-Jun	20-Jul	
22	2-Jun	21-Jul	33.0	22-Jun	21-Jul	
	3-Jun	22-Jul	33.4	23-Jun	22-Jul	
	l-Jun	23-Jul	33.6	24-Jun	23-Jul	
	5-Jun	24-Jul	35.2	25-Jun	24-Jul	
	5-Jun 7-Jun	25-Jul 26-Jul	39.2 38.1	26-Jun 27-Jun	25-Jul 26-Jul	
	3-Jun	27-Jul	39.1	27-Jun 28-Jun	27-Jul	
	9-Jun	28-Jul	39.0	29-Jun	28-Jul	
	)-Jun	29-Jul	40.0	30-Jun	29-Jul	
	1-Jul	30-Jul	41.2	1-Jul	30-Jul	O #
	2-Jul	31-Jul	40.8	2-Jul	31-Jul	OSED O HIGH
	3-Jul	1-Aug	42.3	3-Jul	1-Aug	CLC T0
	4-Jul	2-Aug	40.4	4-Jul	2-Aug	CH
	5-Jul	3-Aug	43.2	5-Jul	3-Aug	BEA ON C
	6-Jul 7-Jul	4-Aug 5-Aug	50.9 54.2	6-Jul 7-Jul	4-Aug 5-Aug	ND ASC LAI
	8-Jul	6-Aug	58.4	8-Jul	6-Aug	DURAND BEACH CLOS FOR SEASON DUE TO H LAKE LEVEL
	9-Jul	7-Aug	53.5	9-Jul	7-Aug	JQ
	0-Jul	8-Aug	53.6	10-Jul	8-Aug	
1	1-Jul	9-Aug	58.4	11-Jul	9-Aug	
1	2-Jul	10-Aug	57.6	12-Jul	10-Aug	
	3-Jul	11-Aug	63.2	13-Jul	11-Aug	
	4-Jul	12-Aug	66.3	14-Jul	12-Aug	
	5-Jul	13-Aug	70.7	15-Jul	13-Aug	
	6-Jul	14-Aug	69.8 70.8	16-Jul	14-Aug	
+	7-Jul 8-Jul	15-Aug 16-Aug	70.8	17-Jul 18-Jul	15-Aug 16-Aug	
	9-Jul	10-Aug 17-Aug	77.9	19-Jul	10-Aug 17-Aug	
1	Jul	±1 Aug	, , , , ,	15 101	±1 /7ug	

2017 BEACH	I DATA					
RUNNING 3	η-υσλί ετι	FΔDV ST	ATE GEOMETRIC N	<b>ΛΕΔΝ</b>		
KOMMING 5	DAISI	LAD 1 317	ATE GEOMETRIC II	/ILAIT		
	= 30-DAY G	FOMETRIC	MEAN EXCEEDS 126 m	pn/100ml		
	1	ONT	ARIO		DUR	AND
			STEADY STATE			STEADY STATE
			30-DAY GEO MEAN			30-DAY GEO MEAN
			OF E-COLI RESULTS			OF E-COLI RESULTS
	FROM	TO	(mpn/100ml)	FROM	ТО	(mpn/100ml)
	20-Jul	18-Aug	76.7	20-Jul	18-Aug	
	21-Jul	19-Aug	77.8	21-Jul	19-Aug	
	22-Jul	20-Aug	82.2	22-Jul	20-Aug	
	23-Jul	21-Aug	83.0	23-Jul	21-Aug	
	24-Jul	22-Aug	83.4	24-Jul	22-Aug	
	25-Jul	23-Aug	80.0	25-Jul	23-Aug	
	26-Jul	24-Aug	80.5	26-Jul	24-Aug	
	27-Jul	25-Aug	85.1	27-Jul	25-Aug	
	28-Jul	26-Aug	89.7	28-Jul	26-Aug	
	29-Jul	27-Aug	82.1	29-Jul	27-Aug	_ <del>I</del>
	30-Jul	28-Aug	72.2	30-Jul	28-Aug	CLOSED TO HIGH EL
	31-Jul	29-Aug	69.5	31-Jul	29-Aug	CLC TO
	1-Aug	30-Aug	69.4	1-Aug	30-Aug	CH UE
	2-Aug	31-Aug	75.4	2-Aug	31-Aug	3EA N D E LI
	3-Aug	1-Sep	81.5	3-Aug	1-Sep	DURAND BEACH CLOSED OR SEASON DUE TO HIGH LAKE LEVEL
	4-Aug	2-Sep	78.1	4-Aug	2-Sep	SEA I
	5-Aug	3-Sep	68.6	5-Aug	3-Sep	POR
	6-Aug	4-Sep	68.1	6-Aug	4-Sep	_ <u> </u>
	ONTARIO B		_	DURAND BEA		
	# BEACH DA		74	# BEACH DAY		0
	# DAYS WH			# DAYS WHEI		
	DAY GEOM		0	GEOMETRIC	MEAN >	0
	MEAN > 12	6 ECOLI =		126 ECOLI =		
	0/ OF THE 3	047 61405 4	MAINIC CEACON THAT S	ATUNIO DE CO	LIEC IN	
			MING SEASON THAT BARNET MEET BACTERIAL			100.0%
	1					



2016 BE	ACH DA	TA				
SAMPLE						
	_	ASON, BEACH NO	OT OPEN			
			CALCULATION O	F STEADY STATE	GEOMETRIC ME	AN
	DUE TO	O WET WEATHER	R CONDITIONS			
		ONTARIO	ONTARIO	CNITABIO	DUBAND	
		ONTARIO	ONTARIO	ONTARIO E-COLI	DURAND	
	Date	E-COLI (mpn/100ml) WEST	E-COLI (mpn/100ml) EAST	(mpn/100ml) GEOMETRIC MEAN	E-COLI (mpn/100ml)	
	17-May		1	2	6	
	19-May	3	1	2	1	
	24-May	2	2	2	6	
	25-May	5	5	5	3	
	31-May	131	387	225	1553	
	1-Jun 7-Jun	17 6	16 127	16 28	261 140	
	9-Jun	37	86	56	27	
	13-Jun	74	78	76	155	
	16-Jun	21	7	12	11	
	18-Jun				3	
	19-Jun				8	
	20-Jun				2	
	21-Jun	248	2420	775	2420	
	22-Jun	93	2420		770	
	23-Jun		613	243	61	
	24-Jun		135	70	9	
	25-Jun	44	93	64	8	
	26-Jun 27-Jun		33 10	22 16	26 11	
	28-Jun		2897	525	2420	
	29-Jun		770	178	133	
	30-Jun		52	44	53	
	1-Jul	13	3	6	5	
	2-Jul	37	758	167	157	
	3-Jul	25	34	29	23	
	4-Jul	19	14	16	36	
	5-Jul	1	24	5	29	
	6-Jul	114	36	64	5	
	7-Jul	38	37	37	7	
	8-Jul	75	1046	280	33	
	9-Jul	96	55 4604	73	166	
	10-Jul	9932	4604	6762	687	

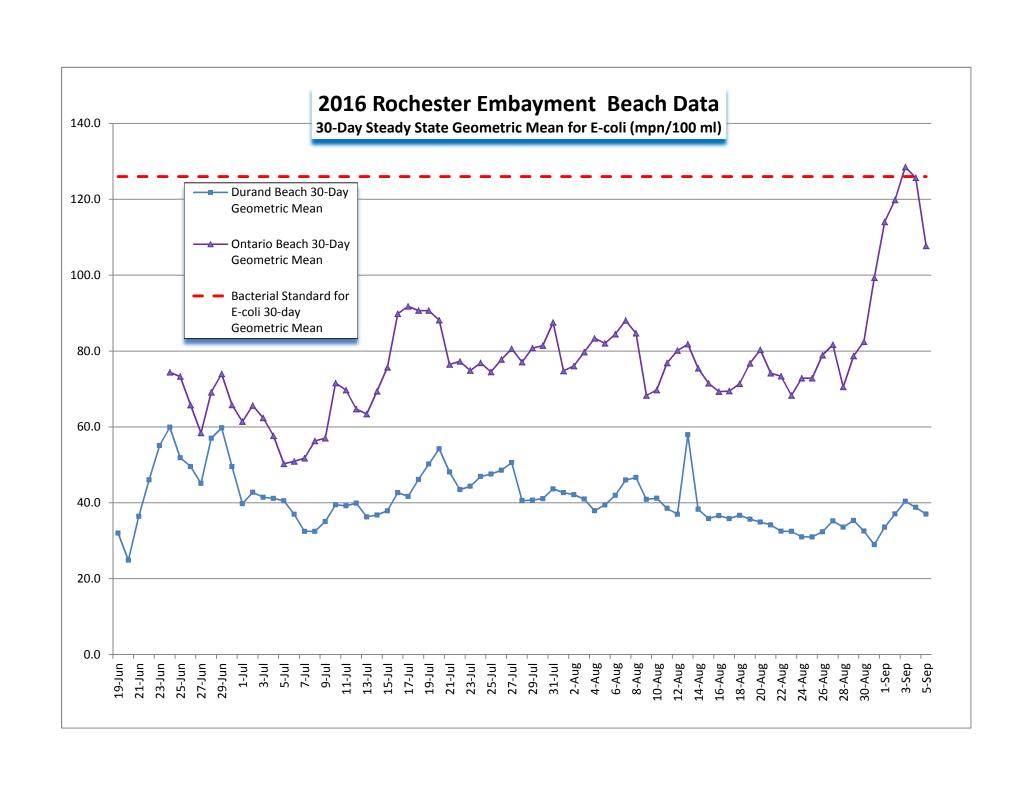
2016 BEACH DATA							
PRE-SEASON, BEACH NOT OPEN	2016 RE	VCH DV	TΛ				
= PRE-SEASON, BEACH NOT OPEN  DAYS OMITTED FROM CALCULATION OF STEADY STATE GEOMETRIC MEAN DUE TO WET WEATHER CONDITIONS  ONTARIO  Date    ONTARIO   CHARLO   CHARLO							
DUE TO WET WEATHER CONDITIONS	SAIVIPLE	_		07.00511			
DUE TO WET WEATHER CONDITIONS		= PRE-SE	ASON, BEACH N	OT OPEN			
DUE TO WET WEATHER CONDITIONS		- DAVS O	NAITTED EDONA	CALCULATION O	E STEADY STATE	GEOMETRIC ME	ΔN
ONTARIO   ONTARIO   DURAND   E-COLI   (mpn/100ml)   WEST   E-COLI   (mpn/100ml)   (mpn/10ml)   (mpn/1		_			I SILADI SIAIL	GLOWIL TRIC WIL	AIN
Date		50210	, , , , , , , , , , , , , , , , , , ,	CONDITIONS			
Date			ONTARIO	ONTARIO	ONTARIO	DURAND	
12-Ju		Date	(mpn/100ml)	(mpn/100ml)	(mpn/100ml) GEOMETRIC		
13-Jul   79   29   48   12     14-Jul   1986   155   555   54     15-Jul   435   866   614   86     16-Jul   387   1961   871   345     17-Jul   148   167   157   21     18-Jul   45   96   66   64     19-Jul   187   1007   434   101     20-Jul   73   23   41   20     21-Jul   35   6   14   68     22-Jul   69   157   104   36     23-Jul   120   77   96   112     24-Jul   150   155   152   49     25-Jul   36   18   25   12     26-Jul   4082   734   1731   411     27-Jul   22   84   43   36     28-Jul   365   1203   663   148     30-Jul   46   64   54   69     31-Jul   69   33   48   29     1-Aug   1   4   2   81     2-Aug   56   40   47   16     3-Aug   83   45   61   16     4-Aug   18   16   17   3     5-Aug   42   40   41   16     6-Aug   548   866   689   2420     7-Aug   1300   579   868   435     8-Aug   40   16   25   248     9-Aug   83   5   20   17     10-Aug   135   66   94   127     11-Aug   123   201   157   10		11-Jul	88	18	40	33	
14-Jul   1986   155   555   54   15-Jul   435   866   614   86   16-Jul   387   1961   871   345   17-Jul   148   167   157   21   18-Jul   45   96   66   64   19-Jul   187   1007   434   101   20-Jul   73   23   41   20   21-Jul   35   6   14   68   22-Jul   69   157   104   36   23-Jul   120   77   96   112   24-Jul   150   155   152   49   25-Jul   36   18   25   12   26-Jul   4082   734   1731   411   27-Jul   365   1203   663   148   30-Jul   46   64   54   69   31-Jul   69   33   48   29   1-Aug   14   4   2   81   2-Aug   56   40   47   16   3-Aug   83   45   61   16   4-Aug   18   16   17   3   3-Aug   83   45   61   16   4-Aug   18   16   17   3   3-Aug   83   45   66   69   40   41   16   6-Aug   548   866   689   2420   7-Aug   1300   579   868   435   8-Aug   40   16   25   248   27   11-Aug   135   66   94   127   11-Aug   135   66   94   127   11-Aug   123   201   157   10							
15-Jul		_					
16-Jul     387     1961     871     345       17-Jul     148     167     157     21       18-Jul     45     96     66     64       19-Jul     187     1007     434     101       20-Jul     73     23     41     20       21-Jul     35     6     14     68       22-Jul     69     157     104     36       23-Jul     120     77     96     112       24-Jul     150     155     152     49       25-Jul     36     18     25     12       26-Jul     4082     734     1731     411       27-Jul     22     84     43     36       28-Jul     387     59     151     4       29-Jul     365     1203     663     148       30-Jul     46     64     54     69       31-Jul     69     33     48     29       1-Aug     1     4     2     81       2-Aug     56     40     47     16       3-Aug     83     45     61     16       4-Aug     18     16     17     3       5-Aug     548 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
17-Jul							
18-Jul     45     96     66     64       19-Jul     187     1007     434     101       20-Jul     73     23     41     20       21-Jul     35     6     14     68       22-Jul     69     157     104     36       23-Jul     120     77     96     112       24-Jul     150     155     152     49       25-Jul     36     18     25     12       26-Jul     4082     734     1731     411       27-Jul     22     84     43     36       28-Jul     387     59     151     4       29-Jul     365     1203     663     148       30-Jul     46     64     54     69       31-Jul     69     33     48     29       1-Aug     1     4     2     81       2-Aug     56     40     47     16       3-Aug     83     45     61     16       4-Aug     18     16     17     3       5-Aug     42     40     41     16       6-Aug     548     866     689     2420       7-Aug     1300							
19-Jul     187     1007     434     101       20-Jul     73     23     41     20       21-Jul     35     6     14     68       22-Jul     69     157     104     36       23-Jul     120     77     96     112       24-Jul     150     155     152     49       25-Jul     36     18     25     12       26-Jul     4082     734     1731     411       27-Jul     22     84     43     36       28-Jul     387     59     151     4       29-Jul     365     1203     663     148       30-Jul     46     64     54     69       31-Jul     69     33     48     29       1-Aug     1     4     2     81       2-Aug     56     40     47     16       3-Aug     83     45     61     16       4-Aug     18     16     17     3       5-Aug     42     40     41     16       6-Aug     548     866     689     2420       7-Aug     1300     579     868     435       8-Aug     40							
20-Jul   73   23   41   20							
21-Jul       35       6       14       68         22-Jul       69       157       104       36         23-Jul       120       77       96       112         24-Jul       150       155       152       49         25-Jul       36       18       25       12         26-Jul       4082       734       1731       411         27-Jul       22       84       43       36         28-Jul       387       59       151       4         29-Jul       365       1203       663       148         30-Jul       46       64       54       69         31-Jul       69       33       48       29         1-Aug       1       4       2       81         2-Aug       56       40       47       16         3-Aug       83       45       61       16         4-Aug       18       16       17       3         5-Aug       42       40       41       16         6-Aug       548       866       689       2420         7-Aug       1300       579       868       43							
22-Jul   69   157   104   36   23-Jul   120   77   96   112   24-Jul   150   155   152   49   25-Jul   36   18   25   12   26-Jul   4082   734   1731   411   27-Jul   22   84   43   36   36   387   59   151   4   4   4082   37-Jul   365   1203   663   148   30-Jul   46   64   54   69   31-Jul   69   33   48   29   1-Aug   1   4   2   81   2-Aug   56   40   47   16   3-Aug   83   45   61   16   4-Aug   18   16   17   3   3   45   61   16   6-Aug   548   866   689   2420   7-Aug   1300   579   868   435   8-Aug   40   16   25   248   9-Aug   83   5   20   17   10-Aug   135   66   94   127   11-Aug   123   201   157   10							
23-Jul   120   77   96   112		_					
24-Jul   150   155   152   49     25-Jul   36   18   25   12     26-Jul   4082   734   1731   411     27-Jul   22   84   43   36     28-Jul   387   59   151   4     4     29-Jul   365   1203   663   148   30-Jul   46   64   54   69     31-Jul   69   33   48   29     1-Aug   1   4   2   81     2-Aug   56   40   47   16     3-Aug   83   45   61   16     4-Aug   18   16   17   3     3     42   40   41   16     6-Aug   548   866   689   2420     7-Aug   1300   579   868   435   8-Aug   40   16   25   248   9-Aug   135   66   94   127   11-Aug   123   201   157   10   10   10   10   10   10   10   1							
26-Jul     4082     734     1731     411       27-Jul     22     84     43     36       28-Jul     387     59     151     4       29-Jul     365     1203     663     148       30-Jul     46     64     54     69       31-Jul     69     33     48     29       1-Aug     1     4     2     81       2-Aug     56     40     47     16       3-Aug     83     45     61     16       4-Aug     18     16     17     3       5-Aug     42     40     41     16       6-Aug     548     866     689     2420       7-Aug     1300     579     868     435       8-Aug     40     16     25     248       9-Aug     83     5     20     17       10-Aug     135     66     94     127       11-Aug     123     201     157     10		24-Jul		155		49	
27-Jul     22     84     43     36       28-Jul     387     59     151     4       29-Jul     365     1203     663     148       30-Jul     46     64     54     69       31-Jul     69     33     48     29       1-Aug     1     4     2     81       2-Aug     56     40     47     16       3-Aug     83     45     61     16       4-Aug     18     16     17     3       5-Aug     42     40     41     16       6-Aug     548     866     689     2420       7-Aug     1300     579     868     435       8-Aug     40     16     25     248       9-Aug     83     5     20     17       10-Aug     135     66     94     127       11-Aug     123     201     157     10		25-Jul	36	18	25	12	
28-Jul     387     59     151     4       29-Jul     365     1203     663     148       30-Jul     46     64     54     69       31-Jul     69     33     48     29       1-Aug     1     4     2     81       2-Aug     56     40     47     16       3-Aug     83     45     61     16       4-Aug     18     16     17     3       5-Aug     42     40     41     16       6-Aug     548     866     689     2420       7-Aug     1300     579     868     435       8-Aug     40     16     25     248       9-Aug     83     5     20     17       10-Aug     135     66     94     127       11-Aug     123     201     157     10		26-Jul	4082	734	1731	411	
29-Jul     365     1203     663     148       30-Jul     46     64     54     69       31-Jul     69     33     48     29       1-Aug     1     4     2     81       2-Aug     56     40     47     16       3-Aug     83     45     61     16       4-Aug     18     16     17     3       5-Aug     42     40     41     16       6-Aug     548     866     689     2420       7-Aug     1300     579     868     435       8-Aug     40     16     25     248       9-Aug     83     5     20     17       10-Aug     135     66     94     127       11-Aug     123     201     157     10		27-Jul	22	84	43	36	
30-Jul 46 64 54 69 31-Jul 69 33 48 29 1-Aug 1 4 2 81 2-Aug 56 40 47 16 3-Aug 83 45 61 16 4-Aug 18 16 17 3 5-Aug 42 40 41 16 6-Aug 548 866 689 2420 7-Aug 1300 579 868 435 8-Aug 40 16 25 248 9-Aug 83 5 20 17 10-Aug 135 66 94 127 11-Aug 123 201 157 10		28-Jul	387	59	151	4	
31-Jul     69     33     48     29       1-Aug     1     4     2     81       2-Aug     56     40     47     16       3-Aug     83     45     61     16       4-Aug     18     16     17     3       5-Aug     42     40     41     16       6-Aug     548     866     689     2420       7-Aug     1300     579     868     435       8-Aug     40     16     25     248       9-Aug     83     5     20     17       10-Aug     135     66     94     127       11-Aug     123     201     157     10							
1-Aug     1     4     2     81       2-Aug     56     40     47     16       3-Aug     83     45     61     16       4-Aug     18     16     17     3       5-Aug     42     40     41     16       6-Aug     548     866     689     2420       7-Aug     1300     579     868     435       8-Aug     40     16     25     248       9-Aug     83     5     20     17       10-Aug     135     66     94     127       11-Aug     123     201     157     10							
2-Aug     56     40     47     16       3-Aug     83     45     61     16       4-Aug     18     16     17     3       5-Aug     42     40     41     16       6-Aug     548     866     689     2420       7-Aug     1300     579     868     435       8-Aug     40     16     25     248       9-Aug     83     5     20     17       10-Aug     135     66     94     127       11-Aug     123     201     157     10							
3-Aug 83 45 61 16 4-Aug 18 16 17 3 5-Aug 42 40 41 16 6-Aug 548 866 689 2420 7-Aug 1300 579 868 435 8-Aug 40 16 25 248 9-Aug 83 5 20 17 10-Aug 135 66 94 127 11-Aug 123 201 157 10							
4-Aug     18     16     17     3       5-Aug     42     40     41     16       6-Aug     548     866     689     2420       7-Aug     1300     579     868     435       8-Aug     40     16     25     248       9-Aug     83     5     20     17       10-Aug     135     66     94     127       11-Aug     123     201     157     10							
5-Aug     42     40     41     16       6-Aug     548     866     689     2420       7-Aug     1300     579     868     435       8-Aug     40     16     25     248       9-Aug     83     5     20     17       10-Aug     135     66     94     127       11-Aug     123     201     157     10							
6-Aug     548     866     689     2420       7-Aug     1300     579     868     435       8-Aug     40     16     25     248       9-Aug     83     5     20     17       10-Aug     135     66     94     127       11-Aug     123     201     157     10	-						
7-Aug     1300     579     868     435       8-Aug     40     16     25     248       9-Aug     83     5     20     17       10-Aug     135     66     94     127       11-Aug     123     201     157     10							
8-Aug     40     16     25     248       9-Aug     83     5     20     17       10-Aug     135     66     94     127       11-Aug     123     201     157     10							
9-Aug 83 5 20 17 10-Aug 135 66 94 127 11-Aug 123 201 157 10							
10-Aug 135 66 94 127 11-Aug 123 201 157 10							
11-Aug 123 201 157 10							
, <u> </u>		12-Aug		96	142		

EACH DA E RESULT					
	ASON, BEACH N	OT OPEN			
- FIXL-3L/	ASON, BLACITIN	OTOFLIN			
= DAYS O	MITTED FROM (	L CALCULATION O	F STEADY STATE	GEOMETRIC ME	AN
	O WET WEATHER				
	ONTARIO	ONTARIO	ONTARIO	DURAND	
Date	E-COLI (mpn/100ml) WEST	E-COLI (mpn/100ml) EAST	E-COLI (mpn/100ml) GEOMETRIC MEAN	E-COLI (mpn/100ml)	
13-Aug	1300	687	945	308	
14-Aug	1120	1046	1082	345	
15-Aug	276	185	226	63	
16-Aug	48	108	72	36	
17-Aug	895	1724	1242	93	
18-Aug	145	129	137	186	
19-Aug	222	291	254	10	
20-Aug	44	46	45	39	
21-Aug	20	10	14	21	
22-Aug	480	1007	695	40	
23-Aug	39 120	19 120	27	47	
24-Aug 25-Aug	219	161	120 188	43	
26-Aug	236	365	293	99	
27-Aug	345	345	345	31	
28-Aug	23	17	20	47	
29-Aug		866	750	236	
30-Aug		172	146	4	
31-Aug		179	173	5	
1-Sep		1307	1307	546	
2-Sep	173	234	201	172	
3-Sep	96	86	91	24	
4-Sep		32	24	6	
5-Sep	7	1	3	12	

2016 BEACH	ΠΔΤΔ					
				A F A NI		
KUNINING 30	J-DAT SII	EAUT 317	ATE GEOMETRIC M	ICAN		
	- 3U-DVA C	FOMETRIC	MEAN EXCEEDS 126 mj	nn/100ml		
	- 30-DAT G	LOWILTRIC	IVILAN EXCEEDS 120 III	311/ 1001111		
	,	ONT	ARIO		DUR	AND
			STEADY STATE			STEADY STATE
			30-DAY GEO MEAN			30-DAY GEO MEAN
			OF E-COLI RESULTS			OF E-COLI RESULTS
	FROM	ТО	(mpn/100ml)	FROM	ТО	(mpn/100ml)
		Z			Z	
		PRE-SEASON			PRE-SEASON	
		E-SE			E-SE	
		PRE			PRE	
				21-May	19-Jun	32.0
				22-May	20-Jun	24.9
				23-May 24-May	21-Jun 22-Jun	36.4 46.1
				24-May	23-Jun	55.1
	26-May	24-Jun	74.4	26-May	24-Jun	59.9
	27-May	25-Jun	73.3	27-May	25-Jun	51.9
	28-May	26-Jun	65.8	28-May	26-Jun	49.6
	29-May	27-Jun	58.4	29-May	27-Jun	45.1
	30-May	28-Jun	69.1	30-May	28-Jun	57.0
	31-May	29-Jun	74.0	31-May	29-Jun	59.8
	1-Jun	30-Jun	65.8	1-Jun	30-Jun	49.5
	2-Jun	1-Jul	61.4	2-Jun	1-Jul	39.8
	3-Jun	2-Jul	65.6	3-Jun	2-Jul	42.7
	4-Jun	3-Jul	62.4	4-Jun	3-Jul	41.4
	5-Jun 6-Jun	4-Jul 5-Jul	57.7 50.3	5-Jun 6-Jun	4-Jul 5-Jul	41.2 40.5
	7-Jun	6-Jul	50.9	7-Jun	6-Jul	37.0
	8-Jun	7-Jul	51.7	8-Jun	7-Jul	32.5
	9-Jun	8-Jul	56.3	9-Jun	8-Jul	32.5
	10-Jun	9-Jul	57.0	10-Jun	9-Jul	35.0
	11-Jun	10-Jul	71.6	11-Jun	10-Jul	39.5

2016 BEACH DATA					
RUNNING 30-DAY ST	EVDA CL	ATE GEOMETRIC N	1EAN		
RUNINING SU-DAT ST	EADT 317	ATE GEOIVIETRIC IV	ICAIN		
= 30-DAY (	 SEOMETRIC	MEAN EXCEEDS 126 mj	nn/100ml		
= 30 D/(1 C		WIENW EXCEEDS 120 III	311/ 1001111		
	ONT	ARIO		DUR	1
		STEADY STATE			STEADY STATE
		30-DAY GEO MEAN			30-DAY GEO MEAN
50004	то.	OF E-COLI RESULTS	50014	Τ0	OF E-COLI RESULTS
FROM	TO	(mpn/100ml)	FROM	TO	(mpn/100ml)
12-Jun		69.7	12-Jun	11-Jul	39.2
13-Jun 14-Jun		64.7 63.4	13-Jun 14-Jun	12-Jul 13-Jul	39.9 36.3
14-Jun		69.4	14-Jun 15-Jun	14-Jul	36.8
16-Jun		75.7	16-Jun	15-Jul	37.9
17-Jun		89.8	17-Jun	16-Jul	42.7
18-Jun		91.8	18-Jun	17-Jul	41.7
19-Jun	18-Jul	90.7	19-Jun	18-Jul	46.1
20-Jun	19-Jul	90.7	20-Jun	19-Jul	50.2
21-Jun	20-Jul	88.1	21-Jun	20-Jul	54.2
22-Jun		76.5	22-Jun	21-Jul	48.1
23-Jun		77.3	23-Jun	22-Jul	43.5
24-Jun		74.8	24-Jun	23-Jul	44.4
25-Jun		76.9	25-Jun	24-Jul	46.9
26-Jun 27-Jun		74.5 77.8	26-Jun 27-Jun	25-Jul 26-Jul	47.6 48.6
27-Juli 28-Jun		80.6	27-Jun 28-Jun	27-Jul	50.6
29-Jun		77.1	29-Jun	28-Jul	40.6
30-Jun		80.8	30-Jun	29-Jul	40.7
1-Jul		81.4	1-Jul	30-Jul	41.1
2-Jul	31-Jul	87.6	2-Jul	31-Jul	43.7
3-Jul	1-Aug	74.7	3-Jul	1-Aug	42.7
4-Jul		76.1	4-Jul	2-Aug	42.1
5-Jul	Ū	79.7	5-Jul	3-Aug	41.0
6-Jul		83.3	6-Jul	4-Aug	37.9
7-Jul		82.0	7-Jul	5-Aug	39.4
8-Jul 9-Jul		84.4 88.0	8-Jul 9-Jul	6-Aug 7-Aug	42.0 46.0
10-Jul		84.7	10-Jul	8-Aug	46.7
10-3di		68.3	10-Jul	9-Aug	40.9
12-Jul		69.7	12-Jul	10-Aug	41.2
13-Jul	ŭ	76.9	13-Jul	11-Aug	38.5
14-Jul	12-Aug	80.1	14-Jul	12-Aug	37.0

16 BEA	CH DATA					
		FADV ST	ATE GEOMETRIC N	<b>ΛΕΔΝ</b>		
	130-DA1311	LADISI		/ILAIN		
	= 30-DAY G	FOMETRIC	MEAN EXCEEDS 126 m	pn/100ml		
	30 27(1 0	LOWETHIC	TATE AND ENCEEDS 120 III	pii/ 100iiii		
		ONT	ARIO		DUR	AND
			STEADY STATE			STEADY STATE
			30-DAY GEO MEAN			30-DAY GEO MEA
			OF E-COLI RESULTS			OF E-COLI RESULT
	FROM	TO	(mpn/100ml)	FROM	TO	(mpn/100ml)
	15-Jul	13-Aug	81.8	15-Jul	13-Aug	57.9
	16-Jul	14-Aug	75.5	16-Jul	14-Aug	38.3
	17-Jul	15-Aug	71.5	17-Jul	15-Aug	35.9
	18-Jul	16-Aug	69.3	18-Jul	16-Aug	36.6
	19-Jul	17-Aug	69.5	19-Jul	17-Aug	35.8
	20-Jul	18-Aug	71.4	20-Jul	18-Aug	36.7
	21-Jul	19-Aug	76.8	21-Jul	19-Aug	35.7
	22-Jul	20-Aug	80.3	22-Jul	20-Aug	34.9
	23-Jul	21-Aug	74.2	23-Jul	21-Aug	34.2
	24-Jul	22-Aug	73.4	24-Jul	22-Aug	32.5
	25-Jul	23-Aug	68.3	25-Jul	23-Aug	32.5
	26-Jul	24-Aug	72.8	26-Jul	24-Aug	31.0
	27-Jul	25-Aug	72.8	27-Jul	25-Aug	31.0
	28-Jul	26-Aug	78.9	28-Jul	26-Aug	32.3
	29-Jul	27-Aug	81.7	29-Jul	27-Aug	35.2
	30-Jul	28-Aug	70.6	30-Jul	28-Aug	33.6
	31-Jul	29-Aug	78.7	31-Jul	29-Aug	35.3
	1-Aug	30-Aug	82.5	1-Aug	30-Aug	32.5
	2-Aug	31-Aug	99.3	2-Aug	31-Aug	29.0
	3-Aug	1-Sep	114.0	3-Aug	1-Sep	33.6
	4-Aug	2-Sep	119.8	4-Aug	2-Sep	37.1
	5-Aug	3-Sep	128.5	5-Aug	3-Sep	40.4
	6-Aug	4-Sep	125.7	6-Aug	4-Sep	38.8
	7-Aug	5-Sep	107.7	7-Aug	5-Sep	37.0
	ONTARIO B			DURAND BEA		
	# BEACH DA		74	# BEACH DAY		79
	# DAYS WH			# DAYS WHEF		
	DAY GEOM		1	GEOMETRIC I	MEAN >	0
	MEAN > 12	6 ECOLI =		126 ECOLI =		
	% OF THE 2	016 SWIM	MING SEASON THAT B	ATHING BEACI	HES IN	99.3%



2015 BEA	ACH DA	TA				
SAMPLE						
_		ASON, BEACH N	OT OPEN			
	= DAYS O	MITTED FROM (	CALCULATION O	F STEADY STATE	GEOMETRIC ME	AN
	DUE TO	WET WEATHER	RCONDITIONS			
		01/74/01/0	01/74/01/0	01,210,0	51154415	
		ONTARIO	ONTARIO	ONTARIO E-COLI	DURAND	
	Date	E-COLI (mpn/100ml) WEST	E-COLI (mpn/100ml) EAST	(mpn/100ml) GEOMETRIC MEAN	E-COLI (mpn/100ml)	
	19-May	24	816	140	19	
	21-May	72	153	105	6	
	26-May	2420	378	956	148	
	29-May 2-Jun	25 461	39 345	31 399	4 378	
	4-Jun	75	45	58	5	
	8-Jun	66	35	48	4	
	11-Jun	102	38	62	32	
	15-Jun	387	161	250	114	
	19-Jun	2420	308	863	166	
	20-Jun				122	
	21-Jun				47	
	22-Jun	1046	2420	1501	8	
	23-Jun 24-Jun	1046	2420	1591	488 101	
	25-Jun	201	105	145	40	
	26-Jun		687	614	73	
	27-Jun	155	236	191	12	
	28-Jun	238	1203	535	1,733	
	29-Jun	137	276	194	517	
	30-Jun		13	9	727	
	1-Jul	2420	867	1448	649	
	2-Jul	291	238	263	108	
<del>                                     </del>	3-Jul 4-Jul	39 345	17 435	26 387	148 64	
	4-Jul 5-Jul	111	76	92	29	
<del>                                     </del>	6-Jul	34	26	30	29	
	7-Jul	21	119	50	10	
	8-Jul	2420	2420	2420	2,420	
	9-Jul	99	365	190	80	
	10-Jul	365	137	224	50	
	11-Jul	517	201	322	72	
	12-Jul	249	15	61	81	

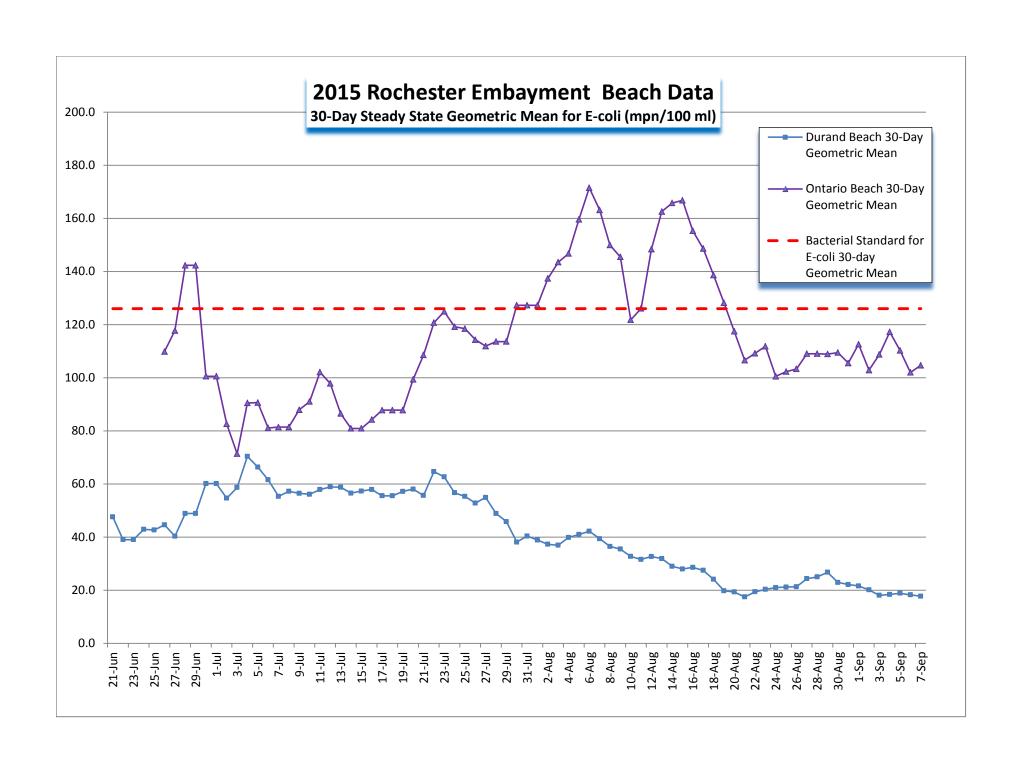
2015 DEACH D	<u> </u>				
2015 BEACH D					
SAMPLE RESU					
= PRE-S	EASON, BEACH N	OT OPEN			
DAVC	CEONALTRIC NAC	A N I			
	OMITTED FROM ( TO WET WEATHE		F STEADY STATE	GEOIVIETRIC IVIE	AN
DOL	VET WEATHE	CONDITIONS			
	ONTARIO	ONTARIO	ONTARIO	DURAND	
Date	E-COLI (mpn/100ml) WEST	E-COLI (mpn/100ml) EAST	E-COLI (mpn/100ml) GEOMETRIC MEAN	E-COLI (mpn/100ml)	
13-Jı	ال 30	13	20	56	
14-Jı	اد 37	31	34	26	
15-Jı		509	674	153	
16-Jı		85	148	72	
17-Jı		66	165	22	
18-Ji		2176	2114	866	
19-Ji		589	738	326	
20-Ji		863	719 488	172 18	
21-Jı 22-Jı		579 832	818	248	
23-Ji		221	240	31	
24-Jı		48	46	9	
25-Jı		132	127	22	
26-Jı	ıl 435	194	290	24	
27-Jı	ıl 108	138	122	31	
28-Jı	248 ال	99	157	3	
29-Jı	579 ال	167	311	9	
30-Jı		93	107	6	
31-J		770	563	186	
1-Au		1733	2048	124	
2-Au		866	841	49	
3-Au		1300	972	50	
4-Au 5-Au		96 1180	112 1386	210 291	
6-Au		221	1386	291	
7-Au		49	63	7	
8-Au		19	35	11	
9-Au		96	80	24	
10-Au		4	8	4	
11-Au		770	1365	11	
12-Au		589	511	133	
13-Au		387	210	14	
14-Au	g 866	70	246	13	

BEACH DA	ΤΛ				
IPLE RESULT					
= PRE-SE	ASON, BEACH N	OT OPEN			
	     MITTED FROM (   O WET WEATHEI 	CALCULATION OF CONDITIONS	F STEADY STATE	GEOMETRIC ME	AN
	ONTARIO	ONTARIO	ONTARIO	DURAND	
Date	E-COLI (mpn/100ml) WEST	E-COLI (mpn/100ml) EAST	E-COLI (mpn/100ml) GEOMETRIC MEAN	E-COLI (mpn/100ml)	
15-Aug	2420	488	1087	236	
16-Aug	49	32	40	38	
17-Aug	112	34	62	10	
18-Aug	47	22	32	11	
19-Aug	157	28	66	1	
20-Aug	77	79	78	10	
21-Aug		548	923	548	
22-Aug	517	291	388	435	
23-Aug		88	75	28	
24-Aug		12	15	50	
25-Aug		308	411	30	
26-Aug		161	149	36	
27-Aug		548	461	83	
28-Aug		79	86	18	
29-Aug		93	105	32	
30-Aug		127	121	4	
31-Aug		58	49	9	
1-Sep		517	474	26	
2-Sep		88	121	8	
3-Sep		490	388	13	
4-Sep		1191	715	29	
5-Sep		75 -	42	40	
6-Sep		5	9 67	3 5	
7-Sep	33	138	6/	5	

2015 BEACH D	ΔΤΔ					
		EADV ST	ATE GEOMETRIC M	IEANI		
KOMMING 30-I	DAI 311	LADISIA	TE GLOWILTRIC IV	ILAIN		
= 3	30-DAY G	FOMETRIC	MEAN EXCEEDS 126 mp	on/100ml		
	30 2711 3	20111211110	WEX !! V EXCEEDS 120 !!!	311/ 2001111		
		ONT	ARIO		DUR	,
			STEADY STATE 30-DAY GEO MEAN			STEADY STATE 30-DAY GEO MEAN
			OF E-COLI RESULTS			OF E-COLI RESULTS
	FROM	ТО	(mpn/100ml)	FROM	ТО	(mpn/100ml)
		. 0	(  - / /	1110111	. 0	(  - / /
		-			-	
		SON			SON	
		PRE-SEASON			PRE-SEASON	
		'RE-			RE-	
		Д.			Δ.	
				23-May	21-Jun	47.6
				24-May	22-Jun	39.0
				25-May	23-Jun	39.0
				26-May	24-Jun	42.9
	28-May	26-Jun	109.8	27-May 28-May	25-Jun 26-Jun	42.6 44.6
	29-May	27-Jun	117.7	29-May	27-Jun	40.3
	30-May	28-Jun	142.3	30-May	28-Jun	48.9
	31-May	29-Jun	142.3	31-May	29-Jun	48.9
	1-Jun	30-Jun	100.5	1-Jun	30-Jun	60.2
	2-Jun	1-Jul	100.5	2-Jun	1-Jul	60.2
	3-Jun	2-Jul	82.6	3-Jun	2-Jul	54.6
	4-Jun 5-Jun	3-Jul	71.4	4-Jun	3-Jul	58.7
	6-Jun	4-Jul 5-Jul	90.5 90.6	5-Jun 6-Jun	4-Jul 5-Jul	70.4 66.3
	7-Jun	6-Jul	81.1	7-Jun	6-Jul	61.5
	8-Jun	7-Jul	81.4	8-Jun	7-Jul	55.3
	9-Jun	8-Jul	81.4	9-Jun	8-Jul	57.2
	10-Jun	9-Jul	87.9	10-Jun	9-Jul	56.5
	11-Jun	10-Jul	91.0	11-Jun	10-Jul	56.1
	12-Jun	11-Jul	102.1	12-Jun	11-Jul	57.9
	13-Jun	12-Jul	97.8	13-Jun	12-Jul	58.9

2015 BEACH DA	ΤΔ					
		FADV ST	ATE GEOMETRIC M	1FAN		
KOMMING 30-DF	(1 31	LADISIA	TE GEOWIETKIC IV	ILAIN		
= 30-	DAY G	FOMETRIC	MEAN EXCEEDS 126 mg	on/100ml		
30	7	LOWETIME	10127 114 EXCEEDS 120 1117	011/ 1001111		
		ONT	ARIO		DUR	·
			STEADY STATE			STEADY STATE
			30-DAY GEO MEAN			30-DAY GEO MEAN
			OF E-COLI RESULTS			OF E-COLI RESULTS
	OM	TO	(mpn/100ml)	FROM	TO	(mpn/100ml)
	.4-Jun	13-Jul	86.5	14-Jun	13-Jul	58.8
	.5-Jun	14-Jul	80.9	15-Jun	14-Jul	56.5
	.6-Jun .7-Jun	15-Jul 16-Jul	80.9 84.2	16-Jun 17-Jun	15-Jul 16-Jul	57.3 57.9
	.7-Jun .8-Jun	17-Jul	87.8	17-Jun 18-Jun	16-Jul 17-Jul	55.5
	.9-Jun	18-Jul	87.8	19-Jun	18-Jul	55.5
	20-Jun	19-Jul	87.8	20-Jun	19-Jul	57.2
	21-Jun	20-Jul	99.4	21-Jun	20-Jul	58.0
2	2-Jun	21-Jul	108.5	22-Jun	21-Jul	55.7
2	23-Jun	22-Jul	120.7	23-Jun	22-Jul	64.6
2	4-Jun	23-Jul	124.9	24-Jun	23-Jul	62.7
2	25-Jun	24-Jul	119.2	25-Jun	24-Jul	56.7
	26-Jun	25-Jul	118.5	26-Jun	25-Jul	55.3
	7-Jun	26-Jul	114.3	27-Jun	26-Jul	52.8
	8-Jun	27-Jul	111.9	28-Jun	27-Jul	54.9
	9-Jun	28-Jul	113.6	29-Jun	28-Jul	48.9
3	0-Jun 1-Jul	29-Jul 30-Jul	113.6 127.3	30-Jun 1-Jul	29-Jul 30-Jul	45.8 38.1
	2-Jul	31-Jul	127.3	2-Jul	31-Jul	40.4
	3-Jul	1-Aug	127.3	3-Jul	1-Aug	38.9
	4-Jul	2-Aug	137.3	4-Jul	2-Aug	37.3
	5-Jul	3-Aug	143.5	5-Jul	3-Aug	36.9
	6-Jul	4-Aug	146.7	6-Jul	4-Aug	39.8
	7-Jul	5-Aug	159.6	7-Jul	5-Aug	41.0
	8-Jul	6-Aug	171.5	8-Jul	6-Aug	42.2
	9-Jul	7-Aug	163.1	9-Jul	7-Aug	39.4
	10-Jul	8-Aug	149.9	10-Jul	8-Aug	36.5
	11-Jul	9-Aug	145.5	11-Jul	9-Aug	35.5
	12-Jul	10-Aug	121.8	12-Jul	10-Aug	32.7
	13-Jul	11-Aug	126.1	13-Jul	11-Aug	31.6
	14-Jul 15-Jul	12-Aug 13-Aug	148.4 162.5	14-Jul 15-Jul	12-Aug 13-Aug	32.7 31.9
	16-Jul	13-Aug 14-Aug	165.8	16-Jul	14-Aug	29.0
	TO-JUI	±+-Aug	103.0	10-101	14-∀ng	23.0

D15 BEAC	CH DATA					
JNNING	30-DAY STI	EADY ST	ATE GEOMETRIC N	/IEAN		
	= 30-DAY G	EOMETRIC	MEAN EXCEEDS 126 m	pn/100ml		
		ON	TARIO		DUR	1
			STEADY STATE			STEADY STATE
			30-DAY GEO MEAN			30-DAY GEO MEA
	50014		OF E-COLI RESULTS	55014		OF E-COLI RESULT
	FROM	ТО	(mpn/100ml)	FROM	ТО	(mpn/100ml)
	17-Jul	15-Aug	166.8	17-Jul	15-Aug	28.0
	18-Jul	16-Aug	155.3	18-Jul	16-Aug	28.6
	19-Jul	17-Aug	148.6	19-Jul	17-Aug	27.5
	20-Jul 21-Jul	18-Aug	138.6 128.2	20-Jul	18-Aug	24.1 19.8
	21-Jul 22-Jul	19-Aug 20-Aug	128.2	21-Jul 22-Jul	19-Aug 20-Aug	19.8
	22-Jul 23-Jul	20-Aug 21-Aug	106.6	22-Jul 23-Jul	20-Aug 21-Aug	17.5
	23-Jul	22-Aug	109.2	23-Jul 24-Jul	21-Aug 22-Aug	19.4
	25-Jul	23-Aug	111.8	25-Jul	23-Aug	20.3
	26-Jul	24-Aug	100.5	26-Jul	24-Aug	21.0
	27-Jul	25-Aug	102.3	27-Jul	25-Aug	21.2
	28-Jul	26-Aug	103.3	28-Jul	26-Aug	21.3
	29-Jul	27-Aug	109.0	29-Jul	27-Aug	24.3
	30-Jul	28-Aug	109.0	30-Jul	28-Aug	25.0
	31-Jul	29-Aug	108.9	31-Jul	29-Aug	26.7
	1-Aug	30-Aug	109.5	1-Aug	30-Aug	22.9
	2-Aug	31-Aug	105.5	2-Aug	31-Aug	22.1
	3-Aug	1-Sep	112.6	3-Aug	1-Sep	21.6
	4-Aug	2-Sep	102.9	4-Aug	2-Sep	20.1
	5-Aug	3-Sep	108.7	5-Aug	3-Sep	18.1
	6-Aug	4-Sep	117.2	6-Aug	4-Sep	18.4
	7-Aug	5-Sep	110.3	7-Aug	5-Sep	18.8
	8-Aug	6-Sep	102.0	8-Aug	6-Sep	18.3
	9-Aug	7-Sep	104.7	9-Aug	7-Sep	17.7
	ONTARIO B			DURAND BEA		
	# BEACH DA		74	# BEACH DAY		79
	# DAYS WH			# DAYS WHEF		_
	DAY GEOM		22	GEOMETRIC I	VIEAN >	0
	MEAN > 12	6 ECOLI =		126 ECOLI =		
	0/ 05 7115 3	045 61412	DAING CEACON THE	ATURIC DE CO	HEC IN:	
			MING SEASON THAT B IENT MEET BACTERIAL			85.6%



		T			<u> </u>		
204 4 DE	A CI I D A						
2014 BE							
SAMPLE	RESULT	ΓS					
	= PRE-SE	ASON, BEACH NO	OT OPEN				
				F STEADY STATE	GEOMETRIC ME	AN	
	DUE TO WET WEATHE		R CONDITIONS				
		ONTARIO	ONTARIO	ONTARIO	ONTARIO	DURAND	
		E-COLI	E-COLI	E-COLI	E-COLI	L CO11	
	Date	(mpn/100ml)	(mpn/100ml)	(mpn/100ml)	(mpn/100ml) GEOMETRIC	E-COLI (mpn/100ml)	
		WEST	CENTER	EAST	MEAN	(IIIpii/100IIII)	
	20-May	16	23	18	19	194	
	22-May		26	26	24	112	
	27-May		107	16	17	23	
	29-May		20	5	19	50	
	3-Jun		980	649	652	3	
	5-Jun		51	38	51	30	
	10-Jun		40	23	35	29	
	12-Jun		10	11	15	19	
	17-Jun	5	8	5	6	2	
	19-Jun	579	461	770	590	172	
	21-Jun					19	
	22-Jun					12	
	23-Jun					6	
	24-Jun	3	4	1	2	2	
	25-Jun					687	
	26-Jun	328	365	276	321	435	
	27-Jun		73	47	66	12	
	28-Jun		16	45	23	27	
	29-Jun		5	4	6	19	
	30-Jun		93	93	178	19	
	1-Jul		10	8	12	3	
	2-Jul		3	1	3	2	
	3-Jul		57	58	51	15	
	4-Jul		345	921	488	649	
	5-Jul 6-Jul		326 8	228	295 9	58 6	
	7-Jul		37	11 20	30	23	
	8-Jul		39	37	50	61	
	9-Jul		1733	548	640	517	
	10-Jul		75	39	58	15	
	11-Jul		12	17	15	13	
	12-Jul		150	33	73	16	
	13-Jul		56	12	23	1	
L		_==		==	==	=	

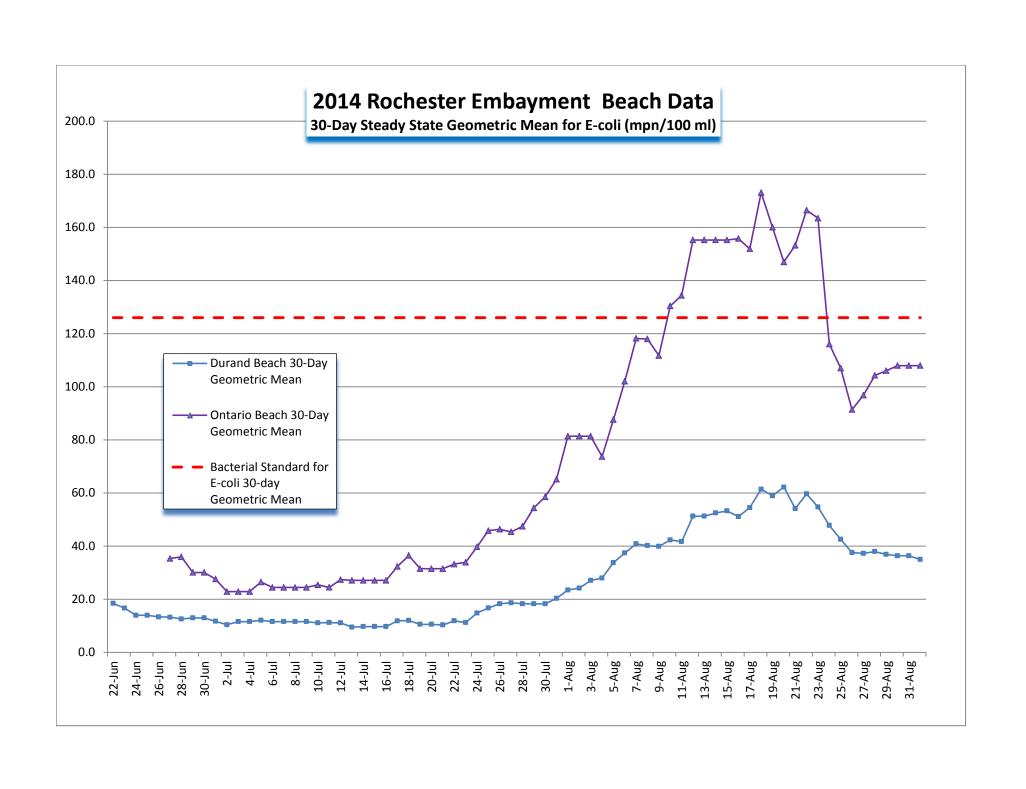
01 / D	EVCH DV.	TΛ					
	BEACH DA						<del>                                     </del>
AMP	LE RESULT						<u> </u>
	= PRE-SE/	ASON, BEACH N	OT OPEN				<del>                                     </del>
	- DAVC O	NAITTED EDONA		E CTEADY CTATE	 GEOMETRIC ME	ANI	
		WET WEATHER			GEOWIETRIC WIE	AIN	
	DOLIG	VVET WEATHE	CONDITIONS				
		ONTARIO	ONTARIO	ONTARIO	ONTARIO	DURAND	
	Date	E-COLI (mpn/100ml) WEST	E-COLI (mpn/100ml) CENTER	E-COLI (mpn/100ml) EAST	E-COLI (mpn/100ml) GEOMETRIC MEAN	E-COLI (mpn/100ml)	
	14-Jul	11	93	59	39	19	
	15-Jul	28	54	46	41	47	
	16-Jul	93	146	60	93	488	
	17-Jul	79	122	58	82	73	
	18-Jul	201	157	345	222	15	
	19-Jul	41	58	75	56	15	
	20-Jul	41	40	81	51	8	
	21-Jul	88	104	186	119	12	
	22-Jul	131	58	64	79	178	
	23-Jul	22	28	179	48	2	
	24-Jul	690	372	456	489	398	
	25-Jul 26-Jul	1120 579	488 461	261 225	523 392	167 110	
	26-Jul		308	172	160	225	
	28-Jul	1733	1733	2420	1937	1986	
	29-Jul	5446	5226	3130	4466	4839	
	30-Jul	139	252	155	176	1095	
	31-Jul	70	55	19	42	135	
	1-Aug	96	28	27	42	79	
	2-Aug		2420	2420	2420	1203	
	3-Aug	461	1046	488	617	147	
	4-Aug	345	210	387	304	99	
	5-Aug	42	46	19	33	122	
	6-Aug	517	770	649	637	192	
	7-Aug	100	1730	2910	796	182	
	8-Aug	145	118	88	115	30	
	9-Aug	33	31	17	26	13	
	10-Aug	210	127	129	151	40	
	11-Aug	145	120	84	113	12	
	12-Aug	111	78	980	204	69	
	13-Aug		75	66	66	66	
	14-Aug		3466	1773	1650	80	
	15-Aug	3106	2092	291	1237	70	<u> </u>

014 BE	ACH DA	TA				
AMPLE	RESULT	S				
	ſ	ASON, BEACH NO	OT OPEN			
	= DAYS O	MITTED FROM (	CALCULATION O	F STEADY STATE	GEOMETRIC ME	AN
		) WET WEATHER				
		ONTARIO	ONTARIO	ONTARIO	ONTARIO	DURAND
		E-COLI	E-COLI	E-COLI	E-COLI	
	Date	(mpn/100ml)		(mpn/100ml)	(mpn/100ml)	E-COLI
	Date	WEST	(mpn/100ml) CENTER	EAST	GEOMETRIC	(mpn/100ml)
		WEST	CENTER	EASI	MEAN	
	16-Aug	56	122	96	87	32
	17-Aug	308	488	921	517	1046
	18-Aug	147	238	1226	350	146
	19-Aug	61	39	63	53	27
	20-Aug	23	28	108	41	35
	21-Aug	57	40	83	57	11
	22-Aug	150	115	248	162	14
	23-Aug	115	93	190	127	71
	24-Aug	10	16	17	14	11
	25-Aug	23	17	42	25	11
	26-Aug	14	5	9	9	3
	27-Aug	205	88	816	245	32
	28-Aug	689	131	549	367	57
	29-Aug	225	236	249	236	19
	30-Aug	179	101	185	150	26
	31-Aug	23	16	29	22	9
	1-Sep	8	3	8	6	13

2014 DEACH	DATA					
2014 BEACH						
RUNNING 30	)-DAY ST	EADY ST	ATE GEOMETRIC M	1EAN		
	= 30-DAY G	EOMETRIC	MEAN EXCEEDS 126 mp	on/100ml		
		ONIT	'ARIO		DUD	AND
		ONI	STEADY STATE		DUR	STEADY STATE
			30-DAY GEO MEAN			30-DAY GEO MEAN
			OF E-COLI RESULTS			OF E-COLI RESULTS
	FROM	ТО	(mpn/100ml)	FROM	ТО	(mpn/100ml)
		. 0	(  - / /	o.w	. 0	(
		N O			Z O	
		AS			:AS(	
		PRE-SEASON			PRE-SEASON	
		PRE			PRE	
				24-May	22-Jun	18.4
				25-May	23-Jun	16.6
				26-May	24-Jun	13.9
				27-May	25-Jun	13.9
				28-May	26-Jun	13.3
	29-May	27-Jun	35.3	29-May	27-Jun	13.2
	30-May	28-Jun	35.9	30-May	28-Jun	12.5
	31-May	29-Jun	30.1	31-May	29-Jun	12.9
	1-Jun	30-Jun	30.1	1-Jun	30-Jun	12.9
	2-Jun 3-Jun	1-Jul	27.6 22.9	2-Jun 3-Jun	1-Jul	11.7 10.4
	3-Jun 4-Jun	2-Jul 3-Jul	22.9	3-Jun 4-Jun	2-Jul 3-Jul	10.4
	5-Jun	4-Jul	22.9	5-Jun	4-Jul	11.5
	6-Jun	5-Jul	26.5	6-Jun	5-Jul	12.1
	7-Jun	6-Jul	24.4	7-Jun	6-Jul	11.5
	8-Jun	7-Jul	24.4	8-Jun	7-Jul	11.5
	9-Jun	8-Jul	24.4	9-Jun	8-Jul	11.5
	10-Jun	9-Jul	24.4	10-Jun	9-Jul	11.5
	11-Jun	10-Jul	25.4	11-Jun	10-Jul	11.1
	12-Jun	11-Jul	24.4	12-Jun	11-Jul	11.2
	13-Jun	12-Jul	27.4	13-Jun	12-Jul	11.1
	14-Jun	13-Jul	27.1	14-Jun	13-Jul	9.5

2014 BEA	CH DATA					
		FADV ST	ATE GEOMETRIC M	1FAN		
KOMMINO	30-DA1 311	LADISI	ATE GEOWIETRIC IV	ILAIN		
	= 30-DAY G	FOMETRIC	MEAN EXCEEDS 126 m	nn/100ml		
	- 30 DAT G	LOWILTIME	WILAN EXCEEDS 120 III	511/ 1001111		
		ONT	ARIO		DUR	AND
			STEADY STATE			STEADY STATE
			30-DAY GEO MEAN			30-DAY GEO MEAN
			OF E-COLI RESULTS			OF E-COLI RESULTS
	FROM	TO	(mpn/100ml)	FROM	ТО	(mpn/100ml)
	15-Jun	14-Jul	27.1	15-Jun	14-Jul	9.7
	16-Jun	15-Jul	27.1	16-Jun	15-Jul	9.7 9.7
	17-Jun 18-Jun	16-Jul 17-Jul	27.1 32.3	17-Jun 18-Jun	16-Jul 17-Jul	11.8
	19-Jun	18-Jul	36.4	19-Jun	18-Jul	12.0
	20-Jun	19-Jul	31.5	20-Jun	19-Jul	10.5
	21-Jun	20-Jul	31.5	21-Jun	20-Jul	10.5
	22-Jun	21-Jul	31.5	22-Jun	21-Jul	10.3
	23-Jun	22-Jul	33.2	23-Jun	22-Jul	11.9
	24-Jun	23-Jul	33.9	24-Jun	23-Jul	11.2
	25-Jun	24-Jul	39.7	25-Jun	24-Jul	14.8
	26-Jun	25-Jul	45.8	26-Jun	25-Jul	16.7
	27-Jun	26-Jul	46.3	27-Jun	26-Jul	18.3
	28-Jun	27-Jul	45.4	28-Jun	27-Jul	18.6
	29-Jun	28-Jul	47.4	29-Jun	28-Jul	18.3
	30-Jun	29-Jul	54.4	30-Jun 1-Jul	29-Jul 30-Jul	18.2
	1-Jul 2-Jul	30-Jul 31-Jul	58.5 65.1	2-Jul	31-Jul	18.2 20.3
	3-Jul	1-Aug	81.4	3-Jul	1-Aug	23.4
	4-Jul	2-Aug	81.4	4-Jul	2-Aug	24.2
	5-Jul	3-Aug	81.4	5-Jul	3-Aug	27.0
	6-Jul	4-Aug	73.7	6-Jul	4-Aug	28.0
	7-Jul	5-Aug	87.6	7-Jul	5-Aug	33.8
	8-Jul	6-Aug	102.1	8-Jul	6-Aug	37.4
	9-Jul	7-Aug	118.2	9-Jul	7-Aug	40.8
	10-Jul	8-Aug	117.9	10-Jul	8-Aug	40.2
	11-Jul	9-Aug	111.7	11-Jul	9-Aug	39.9
	12-Jul	10-Aug	130.4	12-Jul	10-Aug	42.3
	13-Jul	11-Aug	134.4	13-Jul	11-Aug	41.7
	14-Jul 15-Jul	12-Aug 13-Aug	155.2 155.2	14-Jul 15-Jul	12-Aug 13-Aug	51.3 51.3
	16-Jul	13-Aug 14-Aug	155.2	16-Jul	13-Aug 14-Aug	52.5
	17-Jul	14-Aug 15-Aug	155.2	10-Jul	15-Aug	53.2

2014 BEA	CH DATA					
RUNNING	30-DAY ST	EADY ST	ATE GEOMETRIC N	<b>1EAN</b>		
	= 30-DAY G	EOMETRIC	MEAN EXCEEDS 126 m	pn/100ml		
		ONT	ARIO		DUR	AND
			STEADY STATE			STEADY STATE
			30-DAY GEO MEAN			30-DAY GEO MEAN
			OF E-COLI RESULTS			OF E-COLI RESULTS
	FROM	TO	(mpn/100ml)	FROM	TO	(mpn/100ml)
	18-Jul	16-Aug	155.8	18-Jul	16-Aug	51.1
	19-Jul	17-Aug	151.9	19-Jul	17-Aug	54.5
	20-Jul	18-Aug	173.1	20-Jul	18-Aug	61.4
	21-Jul	19-Aug	160.0	21-Jul	19-Aug	58.9
	22-Jul	20-Aug	147.0	22-Jul	20-Aug	62.2
	23-Jul	21-Aug	153.2	23-Jul	21-Aug	54.1
	24-Jul	22-Aug	166.5	24-Jul	22-Aug	59.6
	25-Jul	23-Aug	163.5	25-Jul	23-Aug	54.7
	26-Jul	24-Aug	116.0	26-Jul	24-Aug	47.8
	27-Jul	25-Aug	107.0	27-Jul	25-Aug	42.6
	28-Jul	26-Aug	91.4	28-Jul	26-Aug	37.5
	29-Jul	27-Aug	96.8	29-Jul	27-Aug	37.2
	30-Jul	28-Aug	104.3	30-Jul	28-Aug	37.9
	31-Jul	29-Aug	106.0	31-Jul	29-Aug	36.9
	1-Aug	30-Aug	108.0	1-Aug	30-Aug	36.3
	2-Aug	31-Aug	108.0	2-Aug	31-Aug	36.3
	3-Aug	1-Sep	108.0	3-Aug	1-Sep	34.9
	ONTARIO B	RFACH 2014	1	DURAND BEA	ACH 2014	
	# BEACH DA		<del>1</del> 67	# BEACH DAY		72
	# DAYS WH		<u> </u>	# DAYS WHE	_	, -
	DAY GEOM		14	GEOMETRIC		0
	MEAN > 12			126 ECOLI =		Ü
			MING SEASON THAT BA			89.9%



					<u> </u>		
2012 D		ΤΛ					
	EACH DA						
SAMPL	E RESULT						
	= PRE-SE	ASON, BEACH N	OT OPEN				
				F STEADY STATE	GEOMETRIC ME	AN	
	DOF 10	O WET WEATHER	R CONDITIONS				
		ONTARIO	ONTARIO	ONTARIO	ONTARIO	DUDAND	
		ONTARIO	ONTARIO	ONTARIO	ONTARIO	DURAND	
		E-COLI	E-COLI	E-COLI	E-COLI (mpn/100ml)	E-COLI	
	Date	(mpn/100ml)	(mpn/100ml)	(mpn/100ml)	GEOMETRIC	(mpn/100ml)	
		WEST	CENTER	EAST	MEAN	(IIIpii/ 100iiii)	
	28-May	70	411	10	66	15	
	30-May	32	12	24	21	5	
	3-Jun	727	517	770	661	299	
	6-Jun	649	99	816	374	178	
	11-Jun	5	488	58	52	336	
	13-Jun	39	326	2420	313	1230	
	17-Jun		49		49	44	
	18-Jun	579	71	687	305	245	
	19-Jun		186		186	58	
	20-Jun	36	6	7	11	23	
	21-Jun	20	9	36	19	1	
	22-Jun	8	17	12	12	3	
	23-Jun	22	24	47	29	35	
	24-Jun	121	28	12	34	2	
	25-Jun	44	26	35	34	3	
	26-Jun	114	133	179	139	115	
	27-Jun		6	26	20	13	
	28-Jun		770	178	320	172	<u> </u>
	29-Jun		79	140	104	688	
	30-Jun		45	58	54	579	
	1-Jul		41	32	40 69	126	
	2-Jul 3-Jul		60 36	70 37	37	461 99	
	4-Jul	186	74	72	100	160	
	5-Jul		120	91	110	16	
	6-Jul		649	261	507	96	
	7-Jul		187	142	148	99	
	8-Jul	25	46	46	38	11	
	9-Jul		61	22	44	45	
	10-Jul		35	71	50	4	
	11-Jul		770	921	605	308	
	12-Jul		104	82	101	162	
	13-Jul	36	55	51	47	22	

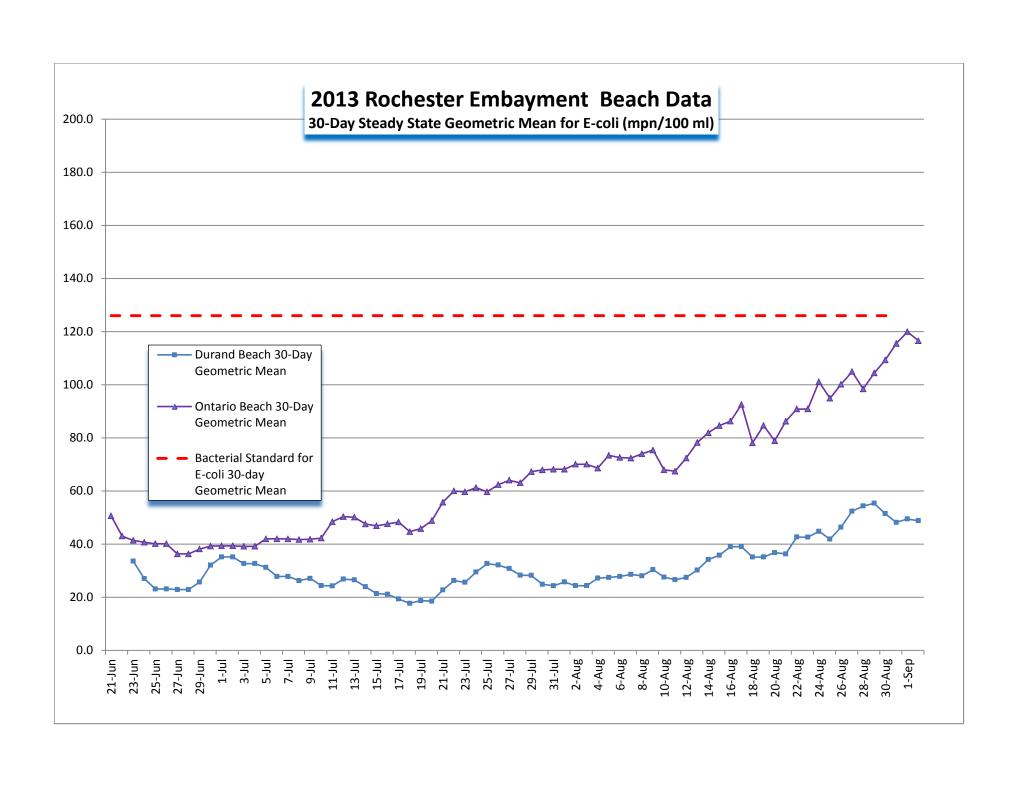
∩12 E	BEACH DA	ΤΛ					
AIVIP	LE RESULT						
	= PRE-SEA	ASON, BEACH N	OT OPEN				
	- DAVC O	NAITTED EDONA	CALCULATION O	CTEADY STATE	 GEOMETRIC ME	ANI	
		) WET WEATHE			GEOMETRIC ME	AN	1
	DOLIC	J WEI WEATHE	IN CONDITIONS				
		ONTARIO	ONTARIO	ONTARIO	ONTARIO	DURAND	
	Date	E-COLI (mpn/100ml) WEST	E-COLI (mpn/100ml) CENTER	E-COLI (mpn/100ml) EAST	E-COLI (mpn/100ml) GEOMETRIC MEAN	E-COLI (mpn/100ml)	
	14-Jul	11	16	26	17	3	
	15-Jul	29	41	34	34	2	
	16-Jul	84	82	43	67	16	
	17-Jul	27	50	249	70	6	
	18-Jul	61	77	27	50	31	
	19-Jul	548	517	129	332	206	
	20-Jul	2420	2420	1733	2165	580	
	21-Jul	615	163	429	350	91	
	22-Jul	58	21	172	59	72	
	23-Jul	23	44	17	26	20	
	24-Jul	2420	2420	2420	2420	44	
	25-Jul	6	86	15	20	29	
	26-Jul	111	261	131	156	22	
	27-Jul	63	23	32	36	5	
	28-Jul	69	43	31	45	4	
	29-Jul	179	345	411	294	26	
	30-Jul		80	87	117	38	
	31-Jul	78	40	27	44	74	
	1-Aug	47	45	49	47	101	
	2-Aug		345	2420	610	488	
	3-Aug		276	548	404	66	
	4-Aug		517	687	662	225	
	5-Aug	228	387	326	306	35	
	6-Aug		32	64	57	39	
	7-Aug	43	59	17	35	22	
	8-Aug		27	249	69	33	
	9-Aug		34	120	58	29	
	10-Aug	4839	4839	3466	4330	2420	
	11-Aug		35	73	87	66	
	12-Aug	96	96	770	192	48	
	13-Aug		150	261	150	24	
	14-Aug		870	456	625	105	
	15-Aug	449	45	86	120	44	

2013 BE		TΛ					
SAMPLE							
	= PRE-SE/	ASON, BEACH NO	OT OPEN				
				STEADY STATE	GEOMETRIC ME	AN	
	DUE TO	) WET WEATHER	RCONDITIONS				
		ONTARIO	ONTARIO	ONTARIO	ONTARIO	DURAND	
		E-COLI	E-COLI	E-COLI	E-COLI		
	Date	(mpn/100ml)	(mpn/100ml)	(mpn/100ml)	(mpn/100ml)	E-COLI	
		WEST	CENTER	EAST	GEOMETRIC	(mpn/100ml)	
		11231	OZIVI ZIV	27.01	MEAN		
	16-Aug	172	105	53	99	40	
	17-Aug	411	91	153	179	32	
	18-Aug	25	19	8	16	20	
	19-Aug	548	548	152	357	35	
	20-Aug	488	56	29	93	261	
	21-Aug	770	308	138	320	54	
	22-Aug	84	96	42	70	816	
	23-Aug	2420	2420	9678	3841	1733	
	24-Aug	135	79	326	151	88	
	25-Aug	47	54	40	47	5	
	26-Aug	2092	3106	3973	2955	411	
	27-Aug	488	649	816	637	225	
	28-Aug	59	40	50	49	137	
	29-Aug	308	205	308	269	79	
	30-Aug	99	111	79	95	17	
	31-Aug	155	435	387	297	27	
	1-Sep		291	155	236	84	
	2-Sep	44	63	111	68	37	

2013 BEACH D	ΛΤΛ					
		FADV CT	ATE CEONALTRIC NA	4 T A A I		
KUNNING 30-L	JAY SII	EADY SIA	ATE GEOMETRIC M	IEAN		
_ 2		CONTENIC	MEAN EVECTEDS 126 mm	an /100ml		
= 3	SU-DAY G	EUMETRIC	MEAN EXCEEDS 126 mp	)11/ 1001111		
	ONTARIO				DUR	AND
			STEADY STATE			STEADY STATE
			30-DAY GEO MEAN			30-DAY GEO MEAN
			OF E-COLI RESULTS			OF E-COLI RESULTS
- 1	FROM	TO	(mpn/100ml)	FROM	TO	(mpn/100ml)
		z			Z	
		PRE-SEASON			PRE-SEASON	
		-SE/			-SE/	
		PRE			or.	
		_			_	
	23-May	21-Jun	50.6			
	24-May	22-Jun	43.0			
	25-May	23-Jun	41.4	25-May	23-Jun	33.5
	26-May	24-Jun	40.7	26-May	24-Jun	27.0
	27-May	25-Jun	40.1	27-May	25-Jun	23.1
	28-May	26-Jun	40.1	28-May	26-Jun	23.1
	29-May 30-May	27-Jun	36.3 36.3	29-May	27-Jun 28-Jun	22.8 22.8
	31-May	28-Jun 29-Jun	38.1	30-May 31-May	29-Jun	25.7
	1-Jun	30-Jun	39.2	1-Jun	30-Jun	32.1
	2-Jun	1-Jul	39.3	2-Jun	1-Jul	35.1
	3-Jun	2-Jul	39.3	3-Jun	2-Jul	35.1
	4-Jun	3-Jul	39.2	4-Jun	3-Jul	32.6
	5-Jun	4-Jul	39.2	5-Jun	4-Jul	32.6
	6-Jun	5-Jul	42.0	6-Jun	5-Jul	31.2
	7-Jun	6-Jul	42.0	7-Jun	6-Jul	27.8
	8-Jun	7-Jul	42.0	8-Jun	7-Jul	27.8
	9-Jun	8-Jul	41.7	9-Jun	8-Jul	26.2
	10-Jun	9-Jul	41.8	10-Jun	9-Jul	27.1
	11-Jun 12-Jun	10-Jul 11-Jul	42.2 48.4	11-Jun 12-Jun	10-Jul 11-Jul	24.3 24.2
	13-Jun	12-Jul	50.3	12-Jun	12-Jul	26.8
	14-Jun	13-Jul	50.1	13-Jun	13-Jul	26.5
	T-T JUII	13 101	50.1	± <del>-</del> Juii	10 JUI	20.5

2013 BEACH DATA						
RUNNING 30-DAY	TFADV ST	L ATE GEOMETRIC N	ΛΕΔΝΙ			
KOMMING 30-DAT	ILADISI	ATE GEOMETRIC IV	ILAN			
= 30-DA	GFOMETRIC	L C MEAN EXCEEDS 126 mp	nn/100ml			
30 271		WIETHY EXCEEDS 120 III	011, 1001111			
	ON <sup>-</sup>	TARIO		DURAND		
		STEADY STATE			STEADY STATE	
		30-DAY GEO MEAN			30-DAY GEO MEAN	
		OF E-COLI RESULTS			OF E-COLI RESULTS	
FROM	ТО	(mpn/100ml)	FROM	ТО	(mpn/100ml)	
15-Ji		47.6	15-Jun	14-Jul	23.9	
16-Jı		46.9 47.6	16-Jun 17-Jun	15-Jul 16-Jul	21.4	
17-Ji		48.3	17-Jun 18-Jun	17-Jul	19.3	
19-Ji		44.7	19-Jun	18-Jul	17.7	
20-Ji		45.8	20-Jun	19-Jul	18.7	
21-Jı		48.8	21-Jun	20-Jul	18.5	
22-Jı	ın 21-Jul	55.7	22-Jun	21-Jul	22.7	
23-Jı	ın 22-Jul	60.0	23-Jun	22-Jul	26.2	
24-Jı	ın 23-Jul	59.7	24-Jun	23-Jul	25.6	
25-Jı		61.2	25-Jun	24-Jul	29.4	
26-Jı		59.7	26-Jun	25-Jul	32.6	
27-Jı		62.3	27-Jun	26-Jul	32.1	
28-Ji		64.0	28-Jun	27-Jul	30.8	
29-Ji	+	63.1	29-Jun	28-Jul	28.3	
30-Jı		67.3 67.9	30-Jun 1-Jul	29-Jul 30-Jul	24.8	
2-5		68.1	2-Jul	31-Jul	24.3	
3-5		68.1	3-Jul	1-Aug	25.7	
4-J		70.1	4-Jul	2-Aug	24.3	
5-J	ul 3-Aug	70.1	5-Jul	3-Aug	24.3	
6-J	ul 4-Aug	68.6	6-Jul	4-Aug	27.1	
7-J	ul 5-Aug	73.4	7-Jul	5-Aug	27.4	
8-5		72.6	8-Jul	6-Aug	27.8	
9-J		72.4	9-Jul	7-Aug	28.6	
10-J	_	74.0	10-Jul	8-Aug	28.0	
11-5		75.4	11-Jul	9-Aug	30.3	
12-J 13-J		67.9 67.4	12-Jul 13-Jul	10-Aug 11-Aug	27.6 26.5	
13-3		72.4	13-Jul 14-Jul	11-Aug 12-Aug	27.4	
15-5	_	78.2	15-Jul	13-Aug	30.2	
16-5		81.9	16-Jul	14-Aug	34.2	
17-5		84.6	17-Jul	15-Aug	35.8	

2013 BEACH DATA					
RUNNING 30-DAY ST	EVDA CL	ATE GEOMETRIC N	ΛΕΛΝΙ		
KOMMING 30-DAT 31	LADISI		/ILAIN		
- 30-DAV (	ECMETRIC	MEAN EXCEEDS 126 m	nn/100ml		
= 30-DAT C	JEOWIETKIC	WILAN LACLEDS 120 III	pri/100mm		
	ONI	   CARIO		DUR	AND
		STEADY STATE		DOM	STEADY STATE
		30-DAY GEO MEAN			30-DAY GEO MEAN
		OF E-COLI RESULTS			OF E-COLI RESULTS
FROM	ТО	(mpn/100ml)	FROM	то	(mpn/100ml)
18-Jul		86.3	18-Jul	16-Aug	39.0
19-Jul		92.6	19-Jul	17-Aug	39.0
20-Jul		78.1	20-Jul	18-Aug	35.1
21-Jul		84.6	21-Jul	19-Aug	35.1
22-Jul		78.9	22-Jul	20-Aug	36.8
23-Jul	Ŭ.	86.2	23-Jul	21-Aug	36.3
24-Jul		90.8	24-Jul	22-Aug	42.6
25-Jul	·	90.8	25-Jul	23-Aug	42.6
26-Jul	_	101.1	26-Jul	24-Aug	44.8
27-Jul	25-Aug	94.9	27-Jul	25-Aug	41.9
28-Jul	26-Aug	100.1	28-Jul	26-Aug	46.3
29-Jul	27-Aug	104.9	29-Jul	27-Aug	52.4
30-Jul	28-Aug	98.4	30-Jul	28-Aug	54.3
31-Jul	29-Aug	104.4	31-Jul	29-Aug	55.4
1-Aug	30-Aug	109.3	1-Aug	30-Aug	51.4
2-Aug	31-Aug	115.5	2-Aug	31-Aug	48.2
3-Aug	1-Sep	119.9	3-Aug	1-Sep	49.4
4-Aug	2-Sep	116.5	4-Aug	2-Sep	48.8
ONTARIO	BEACH 201		DURAND BEA	ACH 2013	
# BEACH D		74	# BEACH DAYS =		72
# DAYS WI			# DAYS WHERE 30 DAY		
DAY GEON		0	GEOMETRIC MEAN >		0
MEAN > 12	26 ECOLI =		126 ECOLI =		
		MING SEASON THAT BA			100.0%
ROCHESTE	===:				



					<u> </u>		
2012 B	DEACH DA	ΤΛ					
	BEACH DA						<u> </u>
AMP	LE RESULT						<u> </u>
	= PRE-SE	ASON, BEACH N	OT OPEN				
	D 41/6 0	AUTTED EDOM		- CTE 4 B.V. CT 4 TE	0501457010145		
				F STEADY STATE	GEOMETRIC ME	AN	
	DUETO	) WET WEATHER	RCONDITIONS				
		ONTARIO	ONTARIO	ONTARIO	ONTARIO	DURAND	
					E-COLI		
		E-COLI	E-COLI	E-COLI	(mpn/100ml)	E-COLI	
	Date	(mpn/100ml)	(mpn/100ml)	(mpn/100ml)	GEOMETRIC	(mpn/100ml)	
		WEST	CENTER	EAST	MEAN	(  - , ,	
	21-May	15	1	6	4		
	24-May	4	1	5	3		
	29-May	7	26	461	44	1	
	31-May	168	582	512	369	93	
	6-Jun	24	58	6	20	4	
	7-Jun	9	25	55	23	3	
	12-Jun	9	47	63	30	11	
	14-Jun	213	429	323	309	16	
	15-Jun	122	75	80	90		
	16-Jun	35	62	9	27		
	17-Jun	10	2	5	5		
	18-Jun	40	14	83	36		
	19-Jun	18	4	5	7	1	
	20-Jun	272	387	210	281		
	21-Jun	42	27	442	79	7	
	22-Jun	579	276	120	268		
	23-Jun	2452	890	714	1159	123	
	24-Jun	48	187	43	73	10	
	25-Jun	5654	2190	4480	3814	384	
	26-Jun	212	335	662	360	50	
	27-Jun	97	140	346	167	17	
	28-Jun	65	16	37	34	8	
	29-Jun	2420	579	261	715	73	
	30-Jun	74	104	411	147	22	
	1-Jul		194	142	140	11	
	2-Jul	141	91	152	125	60	
	3-Jul	158	216	53	122	15	
	4-Jul	291	613	344	394	12	
	5-Jul	696	806	707	735	650	
	6-Jul	198	135	163	163	6	
	7-Jul	372	323	237	305	94	
	8-Jul	2359	2382	744	1611	195	
	9-Jul	149	176	89	133	40	

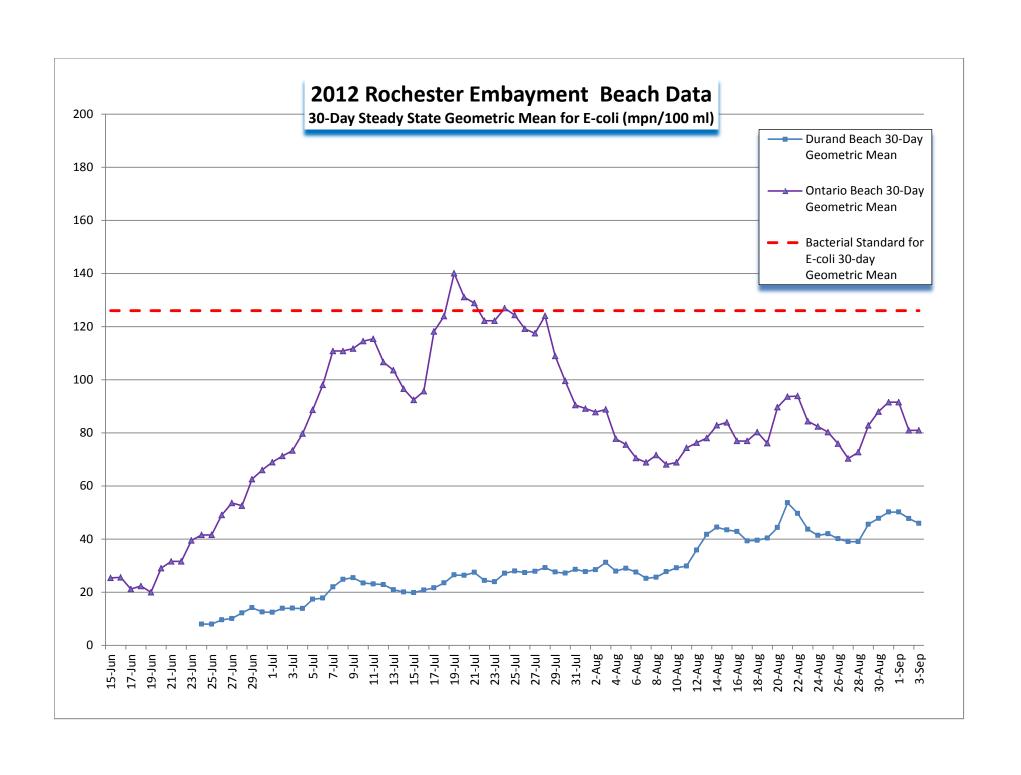
2012 BE	ACH DA	ΤΔ								
SAMPLE										
SAIVIPLE		ASON, BEACH N	ODEN.							
	- PKE-3E/	ASON, BEACH IN	JI OPEN							
	= DAYS OMITTED FROM CALCULATION OF STEADY STATE GEOMETRIC MEAN									
		O WET WEATHER								
		ONTARIO	ONTARIO	ONTARIO	ONTARIO	DURAND				
	Date	E-COLI (mpn/100ml) WEST	E-COLI (mpn/100ml) CENTER	E-COLI (mpn/100ml) EAST	E-COLI (mpn/100ml) GEOMETRIC MEAN	E-COLI (mpn/100ml)				
	10-Jul	157	345	141	197	5				
	11-Jul	162	73	219	137	17				
	12-Jul	20	15	14	16	18				
	13-Jul	88	53	26	49	3				
	14-Jul	121	16	66	50	6				
	15-Jul	16	43	33	28	15				
	16-Jul 17-Jul	70 2420	79 1094	54 545	67 1130	69 55				
	17-Jul 18-Jul	445	1741	1302	1003	203				
	19-Jul	2150	3294	6979	3670	954				
	20-Jul	118	53	30	57	22				
	21-Jul	75	27	70	52	22				
	22-Jul	47	54	16	34	1				
	23-Jul	145	1300	461	443	70				
	24-Jul	176	586	64	188	337				
	25-Jul	69	74	80	74	65				
	26-Jul		91	29	58	74				
	27-Jul		201	179	211	79				
	28-Jul	229	111	236	182	81				
	29-Jul		33	48	36	16				
	30-Jul		24	18	18	15				
	31-Jul	11	30 99	12 82	16 63	41				
	1-Aug 2-Aug		236	45	143	179 74				
	3-Aug		365	587	499	108				
	4-Aug		40	56	45	45				
	5-Aug		50	118	89	15				
	6-Aug		2495	4106	2940	217				
	7-Aug		21	365	43	55				
	8-Aug		291	326	302	58				
	9-Aug	39	88	47	55	78				
	10-Aug		120	403	172	49				
	11-Aug	105	49	45	61	135				

BEACH DA	TA				
LE RESULT					
		OT ODEN			
- PRE-3E	ASON, BEACH N	JI OPEN			
= DAYS C	     MITTED FROM	CALCULATION O	E STEADY STATE	GEOMETRIC ME	ΔΝ
	O WET WEATHER		I SILADI SIAIL	GEOIVIETING IVIE	AIV
DOL IV	VVET VVE/(111E)	CONDITIONS			
	ONTARIO	ONTARIO	ONTARIO	ONTARIO	DURAND
	L COLL	L COLL	F CO.I.	E-COLI	
Data	E-COLI	E-COLI	E-COLI	(mpn/100ml)	E-COLI
Date	(mpn/100ml)	(mpn/100ml)	(mpn/100ml)	GEOMETRIC	(mpn/100ml)
	WEST	CENTER	EAST	MEAN	
12-Aug	96	80	68	81	119
13-Aug	54	96	51	64	125
14-Aug	288	15	12	37	52
15-Aug	319	261	488	344	687
16-Aug	791	311	90	280	43
17-Aug	3106	4839	2240	3229	1986
18-Aug	138	344	84	159	44
19-Aug	32	20	19	23	33
20-Aug	996	1462	420	849	129
21-Aug	75	152	33	72	38
22-Aug	205	116	39	98	16
23-Aug	16	48	28	27	30
24-Aug	57	53	38	49	23
25-Aug	50	44	57	50	56
26-Aug		28	35	27	16
27-Aug		11	29	15	9
28-Aug	320	374	421	369	394
29-Aug		300	204	244	387
30-Aug		88	40	52	112
31-Aug		291	147	202	138
1-Sep		1379	420	1062	326
2-Sep		66	34	38	36
3-Sep	126	32	23	45	19

2012 BEAC	H DATA					
		FADV ST	L ATE GEOMETRIC M	ΛΕΛΝΙ		
KOMMING .	JU-DAT ST	LADISI	ATE GEOMETRIC IV	ILAIN		
	= 30-DAY G	FOMETRIC	MEAN EXCEEDS 126 m	nn/100ml		
	30 5/11 3	LOWILITA	TWEATT EXCEEDS 120 III	priy 100mm		
		ONT	TARIO	DURAND		
			STEADY STATE			STEADY STATE
			30-DAY GEO MEAN			30-DAY GEO MEAN
			OF E-COLI RESULTS			OF E-COLI RESULTS
	FROM	ТО	(mpn/100ml)	FROM	TO	(mpn/100ml)
		z				
		480				
		PRE-SEASON				
		PRE				
		_				
	17-May	15-Jun	25.4		NO	
	18-May	16-Jun	25.6		PRE-SEASON	
	19-May	17-Jun	21.2		E-SI	
	20-May	18-Jun	22.3		PR	
	21-May	19-Jun	20.0			
	22-May	20-Jun	29.1			
	23-May	21-Jun	31.6			
	24-May	22-Jun	31.6			
	25-May	23-Jun	39.5	26 14	2.4 1	0.0
	26-May 27-May	24-Jun 25-Jun	41.6 41.6	26-May 27-May	24-Jun 25-Jun	8.0 8.0
	28-May	26-Jun	49.1	27-iviay 28-May	26-Jun	9.6
	29-May	27-Jun	53.6	29-May	27-Jun	10.1
	30-May	28-Jun	52.6	30-May	28-Jun	12.2
	31-May	29-Jun	62.5	31-May	29-Jun	14.1
	1-Jun	30-Jun	66.0	1-Jun	30-Jun	12.5
	2-Jun	1-Jul	69.0	2-Jun	1-Jul	12.4
	3-Jun	2-Jul	71.3	3-Jun	2-Jul	13.9
	4-Jun	3-Jul	73.3	4-Jun	3-Jul	14.0
	5-Jun	4-Jul	79.7	5-Jun	4-Jul	13.8
	6-Jun	5-Jul	88.6	6-Jun	5-Jul	17.3
	7-Jun	6-Jul	98.0	7-Jun	6-Jul	17.8
	8-Jun	7-Jul	110.8	8-Jun	7-Jul	22.0
	9-Jun	8-Jul	110.8	9-Jun	8-Jul	24.8
	10-Jun	9-Jul	111.7	10-Jun	9-Jul	25.5

2012 BEACH DATA						
RUNNING 30-DAY	TEADV ST	ATE GEOMETRIC N	ΛΕΛΝΙ			
ROMINING 50-DAT 3	DIEADI 31	ATE GEOWIETRIC IV	ILAIN			
- 30-DV)	GEOMETRIC	MEAN EXCEEDS 126 m	nn/100ml			
- 30-DA1	GLOWILTRIC	NILAN LACLEDS 120 III	pri/100mm			
	ON.	ΓARIO		DURAND		
		STEADY STATE			STEADY STATE	
		30-DAY GEO MEAN			30-DAY GEO MEAN	
		OF E-COLI RESULTS			OF E-COLI RESULTS	
FROM	TO	(mpn/100ml)	FROM	TO	(mpn/100ml)	
11-Ju		114.5	11-Jun	10-Jul	23.5	
12-Ju		115.4	12-Jun	11-Jul	23.1	
13-Ju		106.7	13-Jun	12-Jul	22.8	
14-Ju		103.5	14-Jun	13-Jul	20.9	
15-Ju		96.6	15-Jun	14-Jul	20.0	
16-Jւ 17-Jւ		92.4 95.7	16-Jun 17-Jun	15-Jul 16-Jul	19.8 20.8	
17-JU		118.2	17-Jun 18-Jun	17-Jul	21.6	
19-Ju		123.9	19-Jun	18-Jul	23.5	
20-Ju		140.1	20-Jun	19-Jul	26.5	
21-Ju		131.1	21-Jun	20-Jul	26.3	
22-Ju		128.8	22-Jun	21-Jul	27.5	
23-Ju	ın 22-Jul	122.2	23-Jun	22-Jul	24.4	
24-Jւ	ın 23-Jul	122.2	24-Jun	23-Jul	23.9	
25-Jւ	ın 24-Jul	126.9	25-Jun	24-Jul	27.1	
26-Jւ	ın 25-Jul	124.3	26-Jun	25-Jul	27.9	
27-Ju		119.1	27-Jun	26-Jul	27.4	
28-Jı		117.5	28-Jun	27-Jul	27.9	
29-Ju		124.0	29-Jun	28-Jul	29.2	
30-Ju		109.0	30-Jun	29-Jul	27.6	
1-J		99.5 90.4	1-Jul 2-Jul	30-Jul 31-Jul	27.2 28.6	
3-J		89.1	3-Jul	1-Aug	28.6	
4-J		87.8	4-Jul	2-Aug	28.5	
5-J		88.8	5-Jul	3-Aug	31.2	
6-J		77.8	6-Jul	4-Aug	27.9	
7-J		75.6	7-Jul	5-Aug	29.0	
8-J		70.5	8-Jul	6-Aug	27.5	
9-J	ul 7-Aug	68.9	9-Jul	7-Aug	25.2	
10-J	ul 8-Aug	71.6	10-Jul	8-Aug	25.6	
11-J		68.1	11-Jul	9-Aug	27.7	
12-J		68.9	12-Jul	10-Aug	29.1	
13-J	ul 11-Aug	74.3	13-Jul	11-Aug	29.8	

012 BEA	CH DATA					
UNNING	30-DAY ST	EADY ST	ATE GEOMETRIC N	/IEAN		
	20.5.11/2			/4.00		
	= 30-DAY G	EOMETRIC	MEAN EXCEEDS 126 m	pn/100ml		
					5.15	••••
		ONI	ARIO STEADY STATE	1	DURA	
			30-DAY GEO MEAN			STEADY STATE 30-DAY GEO MEAN
			OF E-COLI RESULTS			OF E-COLI RESULT
	FROM	TO	(mpn/100ml)	FROM	TO	(mpn/100ml)
	14-Jul	12-Aug	76.2	14-Jul	12-Aug	35.9
	15-Jul	13-Aug	78.0	15-Jul	13-Aug	41.8
	16-Jul	14-Aug	82.8	16-Jul	14-Aug	44.4
	17-Jul	15-Aug	83.9	17-Jul	15-Aug	43.4
	18-Jul	16-Aug	76.9	18-Jul	16-Aug	42.8
	19-Jul	17-Aug	76.9	19-Jul	17-Aug	39.3
	20-Jul	18-Aug	80.3	20-Jul	18-Aug	39.5
	21-Jul	19-Aug	76.1	21-Jul	19-Aug	40.4
	22-Jul	20-Aug	89.6	22-Jul	20-Aug	44.3
	23-Jul	21-Aug	93.7	23-Jul	21-Aug	53.7
	24-Jul	22-Aug	93.9	24-Jul	22-Aug	49.7
	25-Jul	23-Aug	84.3	25-Jul	23-Aug	43.7
	26-Jul	24-Aug	82.4	26-Jul	24-Aug	41.4
	27-Jul	25-Aug	80.3	27-Jul	25-Aug	42.0
	28-Jul	26-Aug	75.9	28-Jul	26-Aug	40.1
	29-Jul	27-Aug	70.3	29-Jul	27-Aug	39.0
	30-Jul	28-Aug	72.7	30-Jul	28-Aug	39.0
	31-Jul	29-Aug	82.8	31-Jul	29-Aug	45.6
	1-Aug	30-Aug	88.0	1-Aug	30-Aug	47.8
	2-Aug	31-Aug	91.5	2-Aug	31-Aug	50.2
	3-Aug	1-Sep	91.5	3-Aug	1-Sep	50.2
	4-Aug	2-Sep	80.9	4-Aug	2-Sep	47.7
	5-Aug	3-Sep	80.9	5-Aug	3-Sep	45.9
	ONTARIO B	SFACH 2013	•	DURAND BEA	ACH 2012	
	# BEACH DA		<u>=</u> 81	# BEACH DAY		72
	# DAYS WH		<u> </u>	# DAYS WHER		, -
	DAY GEOM		4	GEOMETRIC I		0
	MEAN > 12		<del>-</del>	126 ECOLI =	VIL/ 114 /	Ū
	% OF THE 2	012 \$\\\\\	MING SEASON THAT B	ATHING REAC	HES IN	
			ENT MEET BACTERIAL			97.4%



### APPENDIX C Secchi Disk Data

**Source: Monroe County Department of Public Health** 

2010 DEACH	DATA				
2018 BEACH					
Water Clarity	/ Data				
=	= SECCHI D	ISK READING < 0.6 m			
-		ONTARIO		DURAND	
		SECCHI DISK READING		SECCHI DISK READING	
	DATE	(m)	DATE	(m)	
	22-Jun	1.0	DATE	(111)	
<del> </del>	23-Jun	1.0			
	24-Jun	1.0	24-Jun	1.0	
<del>                                     </del>	25-Jun	0.9	25-Jun	0.9	
<del>                                     </del>	26-Jun	1.0	26-Jun	1.0	
	27-Jun	1.0	27-Jun	1.0	
	28-Jun	1.0	28-Jun	1.0	
	29-Jun	1.0	29-Jun	1.0	
	30-Jun	1.0	30-Jun	1.0	
	1-Jul	1.0	1-Jul	1.0	
	2-Jul	1.0	2-Jul	1.0	
	3-Jul	1.0	3-Jul	1.0	
	4-Jul	1.0	4-Jul	1.0	
	5-Jul	1.0	5-Jul	1.0	
	6-Jul	0.4	6-Jul	0.6	
	7-Jul	1.0	7-Jul	1.0	
	8-Jul	1.0	8-Jul	1.0	
	9-Jul	1.0	9-Jul	1.0	
<b></b>	10-Jul	1.0	10-Jul	1.0	
	11-Jul	0.8	11-Jul	0.5	
-	12-Jul	1.0	12-Jul	1.0	
_	13-Jul	1.0	13-Jul	1.0	
	14-Jul	1.0	14-Jul	1.0	
-	15-Jul 16-Jul	1.0	15-Jul 16-Jul	1.0 1.0	
<del> </del>	17-Jul	1.0	17-Jul	0.8	
<del> </del>	18-Jul	0.8	17-Jul 18-Jul	0.5	
<del>                                     </del>	19-Jul	1.0	19-Jul	1.0	
<b> </b>	20-Jul	1.0	20-Jul	1.0	
<b> </b>	21-Jul	0.5	21-Jul	1.0	
	22-Jul	0.5	22-Jul	0.4	
<b>†</b>	23-Jul	0.4	23-Jul	0.9	
	24-Jul	0.9	24-Jul	1.0	
	25-Jul	1.0	25-Jul	1.0	
	26-Jul	1.0	26-Jul	1.0	

2018 BEACH DATA				
Water Clarity Data				
= SECCHI	DISK READING < 0.6 m			
	20174712			
	ONTARIO		DURAND	
	SECCHI DISK READING		SECCHI DISK READING	
DATE	(m)	DATE	(m)	
27-Jul	1.0	27-Jul	1.0	
27-Jul 28-Jul	1.0	27-Jul 28-Jul	1.0	
29-Jul	1.0	29-Jul	0.9	
30-Jul	1.0	30-Jul	1.0	
31-Jul	1.0	31-Jul	1.0	
1-Aug	0.6	1-Aug	0.6	
2-Aug	1.0	2-Aug	1.0	
3-Aug	1.0	3-Aug	1.0	
4-Aug	1.0	4-Aug	1.0	
5-Aug	1.0	5-Aug	1.0	
6-Aug	1.0	6-Aug	1.0	
7-Aug	0.8	7-Aug	1.0	
8-Aug	1.0	8-Aug	1.0	
9-Aug	0.7	9-Aug	0.8	
10-Aug	0.4	10-Aug	0.3	
11-Aug	0.5	11-Aug	0.7	
12-Aug	0.9	12-Aug	1.0	
13-Aug	0.8	13-Aug	0.7	
14-Aug	1.0	14-Aug	1.0	
15-Aug	1.0	15-Aug	0.9	
16-Aug 17-Aug	1.0 0.8	16-Aug 17-Aug	1.0 1.0	
18-Aug	0.8	18-Aug	0.7	
19-Aug	0.9	19-Aug	0.9	
20-Aug	1.0	20-Aug	1.0	
21-Aug	1.0	21-Aug	1.0	
22-Aug	0.7	22-Aug	1.0	
23-Aug	1.0	23-Aug	1.0	
24-Aug	1.0	24-Aug	1.0	
25-Aug	1.0	25-Aug	1.0	
26-Aug	0.5	26-Aug	1.0	
27-Aug	1.0	27-Aug	1.0	
28-Aug	1.0	28-Aug	1.0	
29-Aug	1.0	29-Aug	1.0	
30-Aug	1.0	30-Aug	1.0	

		T	T	T	T	
2018 BEACH	1 DATA					
<b>Water Clari</b>	ty Data					
	= SECCHI D	OISK READING < 0.6 m				
		ONTARIO		DURAND		
		SECCHI DISK READING		SECCHI DISK READING		
	DATE	(m)	DATE	(m)		
	31-Aug	0.8	31-Aug	1.0		
	1-Sep	1.0	1-Sep	1.0		
	2-Sep	1.0	2-Sep	1.0		
	3-Sep	1.0	3-Sep	1.0		
	<b>ONTARIO</b>	BEACH 2018	<b>DURAND B</b>	EACH 2018		
	# BEACH		# BEACH			
	DAYS =	74	DAYS =	72		
	# DAYS		# DAYS			
	SECCHI	7	SECCHI <	4		
	< 0.6 m =		0.6 m =			
	% OF THE	2017 SWIMMING SEASO	ON THAT			
		N ROCHESTER EMBAYN	MENT MEET	92.5%		
	WATER CL	ARITY STANDARDS =				

2017 BEACI	H DATA				
Water Clari					
water clair	lty Data				
	= SECCHI [	DISK READING < 0.6 m			
		ONTARIO		DURAND	
		SECCHI DISK READING		SECCHI DISK READING	
	DATE	(m)	DATE	(m)	
			18-Jun		
			19-Jun		
			20-Jun		
			21-Jun 22-Jun		
	23-Jun	1.0	22-Jun 23-Jun		
	24-Jun	1.0	24-Jun		
	25-Jun	1.0	25-Jun		
	26-Jun	1.0	26-Jun		
	27-Jun	1.0	27-Jun		
	28-Jun	1.0	28-Jun		
	29-Jun	1.0	29-Jun		
	30-Jun	1.0	30-Jun		
	1-Jul	1.0	1-Jul		
	2-Jul	1.0	2-Jul	Q. H5	
	3-Jul	1.0	3-Jul	OSE OSE	
	4-Jul	1.0	4-Jul	I CL	
	5-Jul	1.0	5-Jul	ACH DUE	
	6-Jul	1.0	6-Jul 7-Jul	BE, ON	
	7-Jul 8-Jul	1.0 1.0	8-Jul	DURAND BEACH CLOSED FOR SEASON DUE TO HIGH LAKE LEVEL	
	9-Jul	1.0	9-Jul	JRA R SE	
	10-Jul	1.0	10-Jul	JQ [G	
	11-Jul	1.0	11-Jul		
	12-Jul	1.0	12-Jul		
	13-Jul	0.5	13-Jul	_	
	14-Jul	0.7	14-Jul		
	15-Jul	0.7	15-Jul		
	16-Jul	0.7	16-Jul		
	17-Jul	0.4	17-Jul		
	18-Jul	0.4	18-Jul		
	19-Jul	1.0	19-Jul		
	20-Jul	1.0	20-Jul		
	21-Jul	1.0	21-Jul		
	22-Jul	1.0	22-Jul		

2017 BEACH DATA				
Water Clarity Data				
= SECCHI	DISK READING < 0.6 m			
- SECCITI	DISK READING V 0.0 III			
	ONTARIO		DURAND	
	SECCHI DISK READING		SECCHI DISK READING	
DATE	(m)	DATE	(m)	
23-Jul	1.0	23-Jul		
24-Jul	0.2	24-Jul		
25-Jul 26-Jul	0.1	25-Jul 26-Jul		
26-Jul 27-Jul	0.6	26-Jul 27-Jul		
28-Jul	0.7	27-Jul 28-Jul		
29-Jul	0.5	29-Jul		
30-Jul	0.4	30-Jul		
31-Jul	1.0	31-Jul		
1-Aug	1.0	1-Aug	D 3H	
2-Aug	1.0	2-Aug	OSE - HIC	
3-Aug	1.0	3-Aug	CL( : TO	
4-Aug	1.0	4-Aug	DURAND BEACH CLOSED FOR SEASON DUE TO HIGH LAKE LEVEL	
5-Aug 6-Aug	1.0	5-Aug 6-Aug	BE/ ON I	
7-Aug	1.0	7-Aug	AND EAS(	
8-Aug	1.0	8-Aug	UR⁄ R SE	
9-Aug	1.0	9-Aug	O	
10-Aug	1.0	10-Aug		
11-Aug		11-Aug		
12-Aug		12-Aug		
13-Aug		13-Aug		
14-Aug		14-Aug		
15-Aug 16-Aug		15-Aug 16-Aug		
17-Aug		17-Aug		
18-Aug		18-Aug		
19-Aug		19-Aug		
20-Aug		20-Aug		
21-Aug		21-Aug		
22-Aug		22-Aug		
23-Aug		23-Aug		
24-Aug		24-Aug		
25-Aug		25-Aug		
26-Aug	0.6	26-Aug		

2017 BEA	CH DATA				
Water Cla	rity Data				
	= SECCHI [	DISK READING < 0.6 m			
		ONTARIO		DURAND	
		SECCHI DISK READING		SECCHI DISK READING	
	DATE	(m)	DATE	(m)	
	27-Aug	1.0	27-Aug	O H.	
	28-Aug	1.0	28-Aug	DURAND BEACH CLOSED FOR SEASON DUE TO HIGH LAKE LEVEL	
	29-Aug	1.0	29-Aug	CLC TO L	
	30-Aug	1.0	30-Aug	ID BEACH C SON DUE T LAKE LEVEL	
	31-Aug	0.6	31-Aug	SEA N D E LE	
	1-Sep	0.1	1-Sep	ID B SOI	
	2-Sep	1.0	2-Sep	tan SEA	
	3-Sep	1.0	3-Sep	OUF OR (	
	4-Sep	1.0	4-Sep	1 X	
	ONTARIO	BEACH 2016	DUBAND	EACH 2016	
	# BEACH		# BEACH	EACH 2016	
	DAYS =	74	DAYS =	0	
	# DAYS	/ -	# DAYS	<u> </u>	
	SECCHI	13	SECCHI <	0	
	< 0.6 m =	15	0.6 m =	, , ,	
		2017 SWIMMING SEAS			
		N ROCHESTER EMBAYN	<b>MENT MEET</b>	82.4%	
	WATER CL	ARITY STANDARDS =			

2016 DEACH DATA				
2016 BEACH DATA				
Water Clarity Data				
= SECCHI	DISK READING < 0.6 m			
	0.17.0.0			
	ONTARIO		DURAND	
	SECCHI DISK READING		SECCHI DISK READING	
DATE	(m)	DATE	(m)	
DATE	(111)	19-Jun	1.0	
		20-Jun	1.0	
		21-Jun	1.0	
		22-Jun	1.0	
		23-Jun	1.0	
24-Jun	1.0	24-Jun	1.0	
25-Jun	1.0	25-Jun	1.0	
26-Jun	1.0	26-Jun	1.0	
27-Jun	1.0	27-Jun	1.0	
28-Jun	1.0	28-Jun	1.0	
29-Jun	0.9	29-Jun	1.0	
30-Jun	0.9	30-Jun	1.0	
1-Jul	1.0	1-Jul	1.0	
2-Jul	0.6	2-Jul	0.9	
3-Jul	0.7	3-Jul	1.0	
4-Jul	1.0	4-Jul	1.0	
5-Jul	1.0	5-Jul	1.0	
6-Jul	1.0	6-Jul	1.0	
7-Jul 8-Jul	1.0	7-Jul 8-Jul	1.0 1.0	
9-Jul	1.0	9-Jul	1.0	
10-Jul	0.6	10-Jul	0.8	
11-Jul	1.0	11-Jul	1.0	
12-Jul	1.0	12-Jul	1.0	
13-Jul	1.0	13-Jul	1.0	
14-Jul	1.0	14-Jul	1.0	
15-Jul	1.0	15-Jul	1.0	
16-Jul	1.0	16-Jul	1.0	
17-Jul	1.0	17-Jul	1.0	
18-Jul	1.0	18-Jul	1.0	
19-Jul	0.8	19-Jul	1.0	
20-Jul	1.0	20-Jul	1.0	
21-Jul	1.0	21-Jul	1.0	
22-Jul	1.0	22-Jul	1.0	
23-Jul	1.0	23-Jul	1.0	

2016 BEACH DAT	A			
Water Clarity Da				
Tracer Glarity Da				
= SEC	CHI DISK READING < 0.6 m			
	ONTARIO		DURAND	
	SECCHI DISK READING		SECCHI DISK READING	
DA	TE (m)	DATE	(m)	
24		24-Jul	1.0	
25		25-Jul	1.0	
26		26-Jul	0.7	
27		27-Jul	1.0	
28 29		28-Jul	1.0	
30		29-Jul 30-Jul	0.8 0.7	
31		30-Jul 31-Jul	0.7	
1-A		1-Aug	1.0	
2-A		2-Aug	1.0	
3-A		3-Aug	1.0	
4-A		4-Aug	1.0	
5-A	•	5-Aug	1.0	
6-A		6-Aug	0.8	
7-A	ug 0.7	7-Aug	1.0	
8-A	ug 0.9	8-Aug	1.0	
9-A		9-Aug	1.0	
10- <i>F</i>		10-Aug	1.0	
11-4		11-Aug	1.0	
12-4		12-Aug	1.0	
13-4		13-Aug	0.8	
14-4		14-Aug	1.0	
15-4		15-Aug	1.0	
16-A		16-Aug 17-Aug	1.0 1.0	
18-4		17-Aug 18-Aug	1.0	
19-4		19-Aug	1.0	
20-4		20-Aug	1.0	
21-4		21-Aug	1.0	
22-4		22-Aug	0.8	
23-4		23-Aug	1.0	
24-4	Aug 1.0	24-Aug	1.0	
25-4	Aug 1.0	25-Aug	1.0	
26-4		26-Aug	1.0	
27-4	Aug 0.9	27-Aug	1.0	

016 BEAC	H DATA			
Water Clai	itv Data			
	= SECCHI D	DISK READING < 0.6 m		
		ONTARIO		DURAND
		SECCHI DISK READING		SECCHI DISK READING
	DATE	(m)	DATE	(m)
	28-Aug	1.0	28-Aug	1.0
	29-Aug	0.9	29-Aug	1.0
	30-Aug	1.0	30-Aug	1.0
	31-Aug	1.0	31-Aug	1.0
	1-Sep	0.4	1-Sep	0.7
	2-Sep	0.4	2-Sep	0.6
	3-Sep	0.8	3-Sep	1.0
	4-Sep	1.0	4-Sep	1.0
	5-Sep	1.0	5-Sep	1.0
		BEACH 2016		EACH 2016
	# BEACH		# BEACH	
	DAYS =	74	DAYS =	79
	# DAYS		# DAYS	
	SECCHI	6	SECCHI <	0
	< 0.6 m =		0.6 m =	
	% OF THE	 2016 SWIMMING SEAS	ON THAT	
		N ROCHESTER EMBAYN		96.1%
		ARITY STANDARDS =	TILINI IVILEI	JU.1/0
	WAILK CL	ANITI STANDANDS -		

201F DEACH DATA				
2015 BEACH DATA				
Water Clarity Data				
= SECCHI	DISK READING < 0.6 m			
	ONTARIO		DURAND	
	SECCHI DISK READING		SECCHI DISK READING	
DATE	(m)	DATE	(m)	
DAIL	(****)	21-Jun	0.6	
		22-Jun	0.8	
		23-Jun	0.8	
		24-Jun	0.5	
		25-Jun	1.0	
26-Jun	0.5	26-Jun	0.5	
27-Jun	1.0	27-Jun	0.9	
28-Jun	0.4	28-Jun	0.4	
29-Jun	0.5	29-Jun	0.5	
30-Jun	1.0	30-Jun	0.4	
1-Jul	0.8	1-Jul	0.5	
2-Jul	0.8	2-Jul	0.6	
3-Jul	1.0	3-Jul	0.4	
4-Jul	1.0	4-Jul	0.7	
5-Jul	1.0	5-Jul	0.6	
6-Jul	1.0	6-Jul	1.0	
7-Jul	1.0	7-Jul	1.0	
8-Jul	0.1	8-Jul	0.1	
9-Jul 10-Jul	1.0	9-Jul 10-Jul	1.0 1.0	
10-Jul	1.0	10-Jul	1.0	
12-Jul	1.0	12-Jul	1.0	
13-Jul	1.0	13-Jul	1.0	
14-Jul	1.0	14-Jul	1.0	
15-Jul	0.3	15-Jul	0.2	
16-Jul	0.6	16-Jul	0.6	
17-Jul	1.0	17-Jul	0.9	
18-Jul	0.2	18-Jul	0.1	
19-Jul	0.2	19-Jul	1.0	
20-Jul	0.2	20-Jul	0.8	
21-Jul	0.8	21-Jul	1.0	
22-Jul	0.2	22-Jul	0.3	
23-Jul	0.7	23-Jul	0.8	
24-Jul	1.0	24-Jul	1.0	
25-Jul	1.0	25-Jul	1.0	

2015 BEACH	d DATA				
<b>Water Clari</b>					
	= SECCHI [	DISK READING < 0.6 m			
	_	ONTARIO		DURAND	
		SECCHI DISK READING		SECCHI DISK READING	
	DATE	(m)	DATE	(m)	
	26-Jul 27-Jul	1.0 1.0	26-Jul 27-Jul	1.0 1.0	
	27-Jul 28-Jul	1.0	27-Jul 28-Jul	1.0	
	29-Jul	1.0	29-Jul	1.0	
	30-Jul	1.0	30-Jul	1.0	
	31-Jul	0.6	31-Jul	1.0	
	1-Aug	0.5	1-Aug	1.0	
	2-Aug	0.6	2-Aug	1.0	
	3-Aug	0.5	3-Aug	1.0	
	4-Aug	1.0	4-Aug	1.0	
	5-Aug	0.0	5-Aug	1.0	
	6-Aug	0.1	6-Aug	1.0	
	7-Aug	1.0	7-Aug	1.0	
	8-Aug	1.0	8-Aug	1.0	
	9-Aug	1.0	9-Aug	1.0	
	10-Aug	1.0	10-Aug	1.0	
	11-Aug	1.0	11-Aug	1.0	
	12-Aug 13-Aug	0.5 0.6	12-Aug	0.8 1.0	
	14-Aug	1.0	13-Aug 14-Aug	1.0	
	15-Aug	1.0	15-Aug	1.0	
	16-Aug	1.0	16-Aug	1.0	
	17-Aug	1.0	17-Aug	1.0	
	18-Aug	1.0	18-Aug	1.0	
	19-Aug	1.0	19-Aug	1.0	
	20-Aug	1.0	20-Aug	1.0	
	21-Aug	1.0	21-Aug	1.0	
	22-Aug	1.0	22-Aug	1.0	
	23-Aug	1.0	23-Aug	1.0	
	24-Aug	1.0	24-Aug	1.0	
	25-Aug	1.0	25-Aug	1.0	
	26-Aug	1.0	26-Aug	1.0	
	27-Aug	0.9	27-Aug	1.0	
	28-Aug	1.0	28-Aug	1.0	
	29-Aug	1.0	29-Aug	1.0	

015 BEA	CH DATA			
Vater Cla	arity Data			
	= SECCHI E	OISK READING < 0.6 m		
		ONTARIO		DURAND
		SECCHI DISK READING		SECCHI DISK READING
	DATE	(m)	DATE	(m)
	30-Aug	1.0	30-Aug	1.0
	31-Aug	1.0	31-Aug	1.0
	1-Sep	1.0	1-Sep	1.0
	2-Sep	1.0	2-Sep	1.0
	3-Sep	1.0	3-Sep	1.0
	4-Sep	0.8	4-Sep	1.0
	5-Sep	0.7	5-Sep	0.7
	6-Sep	0.9	6-Sep	1.0
	7-Sep	1.0	7-Sep	1.0
	ONTARIO	BEACH 2015	DUDAND	EACH 2015
		BEACH 2015		EACH 2015
	# BEACH DAYS =	74	# BEACH DAYS =	79
	# DAYS	/4	# DAYS	79
	# DAYS SECCHI	14		1.1
		14	SECCHI <	11
	< 0.6 m =		0.6 m =	
	% OF THE	L 2015 SWIMMING SEAS	ON THAT	
		N ROCHESTER EMBAYN		83.7%
		ARITY STANDARDS =	TILINI IVILLI	03.770
	WAILN CL	ANITI STANDANDS -		

2014 BEACH	ΙΝΔΤΔ				
Water Clarit	ly Data				
	- CECCIII E	NCK BEADING 4 0.6 m			
	= SECCHI L	DISK READING < 0.6 m			
		ONTARIO		DURAND	
		ONTAMO		DONAND	
		SECCHI DISK READING		SECCHI DISK READING	
	DATE	(m)	DATE	(m)	
			22-Jun	1.0	
			23-Jun	1.0	
			24-Jun	1.0	
			25-Jun	1.0	
			26-Jun	1.0	
	27-Jun	1.0	27-Jun	1.0	
	28-Jun	1.0	28-Jun	1.0	
	29-Jun	1.0	29-Jun	0.9	
	30-Jun	1.0	30-Jun	1.0	
	1-Jul	1.0	1-Jul	1.0	
	2-Jul	1.0	2-Jul	1.0	
	3-Jul	1.0	3-Jul	1.0	
	4-Jul	0.2	4-Jul	0.2	
	5-Jul	0.3	5-Jul	0.4	
	6-Jul	1.0	6-Jul	0.9	
	7-Jul 8-Jul	1.0 1.0	7-Jul 8-Jul	1.0 0.8	
	9-Jul	0.5	9-Jul	0.8	
	10-Jul	1.0	10-Jul	1.0	
	11-Jul	1.0	11-Jul	1.0	
	12-Jul	1.0	12-Jul	1.0	
	13-Jul	1.0	13-Jul	1.0	
	14-Jul	1.0	14-Jul	1.0	
	15-Jul	1.0	15-Jul	1.0	
	16-Jul	1.0	16-Jul	1.0	
	17-Jul	1.0	17-Jul	1.0	
	18-Jul	1.0	18-Jul	1.0	
	19-Jul	1.0	19-Jul	1.0	
	20-Jul	1.0	20-Jul	1.0	
	21-Jul	1.0	21-Jul	1.0	
	22-Jul	1.0	22-Jul	1.0	
	23-Jul	1.0	23-Jul	1.0	
	24-Jul	0.4	24-Jul	0.5	
	25-Jul	0.6	25-Jul	0.5	
	26-Jul	0.8	26-Jul	0.8	

2014 BEACH	DATA				
Water Clarity	/ Data				
	CE CCI II D	ICK DEADING . O.C.			
=	= SECCHI D	ISK READING < 0.6 m			
		ONTARIO		DURAND	
		ONTANIO		DONAND	
		SECCHI DISK READING		SECCHI DISK READING	
	DATE	(m)	DATE	(m)	
	27-Jul	1.0	27-Jul	1.0	
	28-Jul	0.2	28-Jul	0.2	
	29-Jul	0.2	29-Jul	0.3	
	30-Jul	0.5	30-Jul	0.5	
	31-Jul	1.0	31-Jul	1.0	
	1-Aug	1.0	1-Aug	0.9	
	2-Aug	1.0	2-Aug	0.4	
	3-Aug	1.0	3-Aug	0.7	
	4-Aug	0.6	4-Aug	0.8	
	5-Aug	1.0	5-Aug	1.0	
-	6-Aug	0.8	6-Aug	0.9	
-	7-Aug	0.2	7-Aug	0.9	
-	8-Aug 9-Aug	1.0 1.0	8-Aug 9-Aug	1.0 1.0	
_	10-Aug	1.0	10-Aug	1.0	
	11-Aug	1.0	11-Aug	1.0	
	12-Aug	0.5	12-Aug	1.0	
	13-Aug	0.6	13-Aug	1.0	
	14-Aug	0.1	14-Aug	1.0	
	15-Aug	0.5	15-Aug	0.4	
	16-Aug	1.0	16-Aug	0.9	
	17-Aug	0.3	17-Aug	0.5	
	18-Aug	0.4	18-Aug	0.4	
	19-Aug	1.0	19-Aug	1.0	
	20-Aug	0.8	20-Aug	1.0	
	21-Aug	0.7	21-Aug	1.0	
<u> </u>	22-Aug	1.0	22-Aug	1.0	
	23-Aug	0.8	23-Aug	1.0	
<b> </b>					
<b> -</b>					
<del>                                     </del>					
<del>                                     </del>					
	24-Aug 25-Aug 26-Aug 27-Aug 28-Aug 29-Aug 30-Aug	0.7 1.0 1.0 1.0 0.1 0.4 0.7	24-Aug 25-Aug 26-Aug 27-Aug 28-Aug 29-Aug 30-Aug	0.7 1.0 1.0 1.0 0.6 0.7 1.0	

<b>2014 BEACH</b>	DATA			
Water Clarit	ty Data			
	= SECCHI D	OISK READING < 0.6 m		
		ONTARIO		DURAND
		SECCHI DISK READING		SECCHI DISK READING
	DATE	(m)	DATE	(m)
	31-Aug	1.0	31-Aug	1.0
	1-Sep	1.0	1-Sep	1.0
		BEACH 2014		EACH 2014
	# BEACH		# BEACH	
	DAYS =	67	DAYS =	72
	# DAYS		# DAYS	
	SECCHI	15	SECCHI <	11
	< 0.6 m =		0.6 m =	
	o/ OF THE	204.4 ()4//04/10/05 25 25	201 711 47	
		2014 SWIMMING SEASO		04.20/
		N ROCHESTER EMBAYN	IENI WEEI	81.3%
	WATER CL	ARITY STANDARDS =		

2013 BEACH	DATA				
Water Clarit					
water Clarit	.y Data				
	- CECCUI F	DISK READING < 0.6 m			
	- SECCHI L	JISK READING < 0.0 III			
		ONTARIO		DURAND	
		SECCHI DISK READING		SECCHI DISK READING	
	DATE	(m)	DATE	(m)	
	21-Jun	1.0			
	22-Jun	1.0			-
	23-Jun	1.0	23-Jun	1.0	
-	24-Jun	1.0	24-Jun	1.0	
	25-Jun	1.0	25-Jun	1.0	
	26-Jun	1.0	26-Jun	1.0	
	27-Jun	1.0	27-Jun	1.0	
	28-Jun	1.0	28-Jun	0.8	
	29-Jun	0.7	29-Jun	0.8	
	30-Jun	1.0	30-Jun	1.0	
	1-Jul	0.7	1-Jul	0.7	
	2-Jul	0.5	2-Jul	0.7	
	3-Jul	0.5	3-Jul	1.0	
	4-Jul	1.0	4-Jul	1.0	
	5-Jul 6-Jul	1.0 1.0	5-Jul 6-Jul	1.0 1.0	
	7-Jul	1.0	7-Jul	1.0	
	8-Jul	1.0	8-Jul	1.0	
	9-Jul	1.0	9-Jul	1.0	
	10-Jul	1.0	10-Jul	1.0	
	11-Jul	0.4	11-Jul	0.8	
	12-Jul	0.5	12-Jul	0.6	
	13-Jul	0.9	13-Jul	0.9	
	14-Jul	1.0	14-Jul	1.0	
	15-Jul	1.0	15-Jul	1.0	
	16-Jul	1.0	16-Jul	1.0	
	17-Jul	1.0	17-Jul	1.0	
	18-Jul	1.0	18-Jul	1.0	
	19-Jul	1.0	19-Jul	1.0	
	20-Jul	1.0	20-Jul	1.0	
	21-Jul	0.5	21-Jul	0.6	
	22-Jul	1.0	22-Jul	1.0	
	23-Jul	1.0	23-Jul	1.0	
	24-Jul	0.4	24-Jul	0.6	
	25-Jul	1.0	25-Jul	1.0	

2013 BEACH					
Water Clarit	y Data				
	CECCIII D	NCK DEADING . O.C.			
	= SECCHI D	ISK READING < 0.6 m			
		ONTARIO		DURAND	
		ONTANIO		DURAND	
		SECCHI DISK READING		SECCHI DISK READING	
	DATE	(m)	DATE	(m)	
	26-Jul	0.5	26-Jul	0.8	
	27-Jul	1.0	27-Jul	1.0	
	28-Jul	1.0	28-Jul	1.0	
	29-Jul	1.0	29-Jul	1.0	
	30-Jul	0.7	30-Jul	1.0	
	31-Jul	1.0	31-Jul	1.0	
	1-Aug	0.9	1-Aug	0.9	
	2-Aug	1.0	2-Aug	1.0	
	3-Aug	1.0	3-Aug	1.0	
	4-Aug	0.6	4-Aug	0.9	
	5-Aug	1.0	5-Aug	0.7	
	6-Aug	1.0	6-Aug	1.0	
	7-Aug	1.0	7-Aug	1.0	
	8-Aug	1.0	8-Aug	1.0	
	9-Aug 10-Aug	1.0 0.3	9-Aug	1.0 0.9	
	11-Aug	1.0	10-Aug 11-Aug	1.0	
	12-Aug	0.8	12-Aug	1.0	
	13-Aug	1.0	13-Aug	1.0	
	14-Aug	0.5	14-Aug	0.7	
	15-Aug	0.5	15-Aug	0.7	
	16-Aug	0.6	16-Aug	0.9	
	17-Aug	1.0	17-Aug	1.0	
	18-Aug	1.0	18-Aug	1.0	
	19-Aug	0.3	19-Aug	1.0	
	20-Aug	0.7	20-Aug	0.9	
	21-Aug	1.0	21-Aug	1.0	
	22-Aug	0.9	22-Aug	1.0	
	23-Aug	0.2	23-Aug	0.7	
	24-Aug	1.0	24-Aug	1.0	
	25-Aug	1.0	25-Aug	1.0	
	26-Aug	0.5	26-Aug	0.9	
	27-Aug	0.9	27-Aug	1.0	
	28-Aug	1.0	28-Aug	1.0	
	29-Aug	1.0	29-Aug	1.0	

2013 BEACH DATA					
<b>Water Clarit</b>	ty Data				
	= SECCHI D	ISK READING < 0.6 m			
		ONTARIO		DURAND	
		SECCHI DISK READING		SECCHI DISK READING	
	DATE	(m)	DATE	(m)	
	30-Aug	1.0	30-Aug	1.0	
	31-Aug	1.0	31-Aug	1.0	
	1-Sep	0.3	1-Sep	0.5	
	2-Sep	0.8	2-Sep	1.0	
	ONTARIO I	BEACH 2013	<b>DURAND B</b>	EACH 2013	
	# BEACH		# BEACH		
	DAYS =	74	DAYS =	72	
	# DAYS		# DAYS		
	SECCHI	14	SECCHI <	1	
	< 0.6 m =		0.6 m =		
	% OF THE 2	2013 SWIMMING SEASO	THAT		
	<b>BEACHES I</b>	N ROCHESTER EMBAYN	IENT MEET	89.7%	
	WATER CL	ARITY STANDARDS =			

2012 BEACH D	ΑΤΑ				
Water Clarity [					
vater clarity i	Jata				
= 9	ECCHI D	ISK READING < 0.6 m			
	LCCIII D	ISK KEADING V 0.0 III			
		ONTARIO		DURAND	
		SECCHI DISK READING		SECCHI DISK READING	
	DATE	(m)	DATE	(m)	
1	L5-Jun	1.0			
1	L6-Jun	1.0			
_ 1	17-Jun	1.0			
	L8-Jun	1.0			
	L9-Jun	1.0			
	20-Jun	1.0			
	21-Jun	1.0			
	22-Jun	1.0			
	23-Jun	0.3			
	24-Jun	1.0	24-Jun	1.0	
	25-Jun	0.2	25-Jun	0.4	
	26-Jun	0.6	26-Jun	0.6	
	27-Jun	0.4	27-Jun	0.8	
	28-Jun	1.0	28-Jun	1.0	
	29-Jun	0.7	29-Jun	1.0	
	30-Jun 1-Jul	1.0 1.0	30-Jun 1-Jul	1.0 1.0	
	2-Jul	1.0	2-Jul	1.0	
	3-Jul	1.0	3-Jul	1.0	
	4-Jul	1.0	4-Jul	1.0	
	5-Jul	0.7	5-Jul	0.7	
	6-Jul	1.0	6-Jul	1.0	
	7-Jul	1.0	7-Jul	1.0	
	8-Jul	0.7	8-Jul	1.0	
	9-Jul	0.7	9-Jul	1.0	
	10-Jul	1.0	10-Jul	1.0	
	11-Jul	1.0	11-Jul	1.0	
	12-Jul	1.0	12-Jul	1.0	
	13-Jul	1.0	13-Jul	1.0	
	14-Jul	1.0	14-Jul	1.0	
-	15-Jul	1.0	15-Jul	1.0	
-	16-Jul	1.0	16-Jul	1.0	
	17-Jul	0.7	17-Jul	1.0	
	18-Jul	0.8	18-Jul	0.6	
-	19-Jul	0.4	19-Jul	0.7	

2012 BEACH DA	TA				
Water Clarity D					
= SE	CCHI D	ISK READING < 0.6 m			
		ONTARIO		DURAND	
		CECCITI DICK DEV DIVIC		CECCITI DICK DE V DIVIC	
	ATE	SECCHI DISK READING (m)	DATE	SECCHI DISK READING (m)	
	O-Jul	0.5	20-Jul	0.8	
	յ-յս։ 1-Jul	1.0	20-Jul 21-Jul	1.0	
	2-Jul	1.0	22-Jul	1.0	
	3-Jul	1.0	23-Jul	1.0	
	1-Jul	1.0	24-Jul	1.0	
	5-Jul	1.0	25-Jul	1.0	
26	5-Jul	1.0	26-Jul	1.0	
27	7-Jul	1.0	27-Jul	1.0	
	3-Jul	0.7	28-Jul	0.7	
	9-Jul	1.0	29-Jul	1.0	
	)-Jul	1.0	30-Jul	1.0	
	1-Jul ·	1.0	31-Jul	1.0	
	Aug	1.0	1-Aug	1.0	
	Aug	1.0 0.8	2-Aug	1.0	
	Aug Aug	1.0	3-Aug 4-Aug	1.0 1.0	
	Aug	1.0	5-Aug	1.0	
	·Aug	0.2	6-Aug	0.7	
	Aug	0.6	7-Aug	1.0	
	-Aug	1.0	8-Aug	1.0	
	Aug	1.0	9-Aug	1.0	
10	-Aug	0.6	10-Aug	0.9	
11	-Aug	1.0	11-Aug	1.0	
	-Aug	0.8	12-Aug	1.0	
	-Aug	0.8	13-Aug	1.0	
	-Aug	1.0	14-Aug	1.0	
	-Aug	1.0	15-Aug	1.0	
	-Aug	1.0	16-Aug	1.0	
	-Aug -Aug	1.0 0.5	17-Aug 18-Aug	1.0 1.0	
	-Aug -Aug	1.0	19-Aug	1.0	
	-Aug	0.2	20-Aug	1.0	
	-Aug	0.8	21-Aug	1.0	
	-Aug	1.0	22-Aug	1.0	
	-Aug	0.9	23-Aug	1.0	

2012 BEACH	I DATA				
Water Clarit	tv Data				
	= SECCHI D	DISK READING < 0.6 m			
		ONTARIO		DURAND	
		SECCHI DISK READING		SECCHI DISK READING	
	DATE	(m)	DATE	(m)	
	24-Aug	1.0	24-Aug	1.0	
	25-Aug	1.0	25-Aug	1.0	
	26-Aug	1.0	26-Aug	1.0	
	27-Aug	1.0	27-Aug	1.0	
	28-Aug	0.2	28-Aug	1.0	
	29-Aug	0.8	29-Aug	1.0	
	30-Aug	1.0	30-Aug	1.0	
	31-Aug	1.0	31-Aug	1.0	
	1-Sep	0.2	1-Sep	0.2	
	2-Sep	1.0	2-Sep	1.0	
	3-Sep	1.0	3-Sep	1.0	
		BEACH 2012		EACH 2012	
	# BEACH		# BEACH		
	DAYS =	81	DAYS =	72	
	# DAYS	10	# DAYS		
	SECCHI	10	SECCHI <	2	
	< 0.6 m =		0.6 m =		
		2012 SWIMMING SEAS		00.007	
		N ROCHESTER EMBAYN	IENT MEET	92.2%	
	WATER CLARITY STANDARDS =				

# APPENDIX D Beach Closure Data

**Source: Monroe County Department of Public Health** 

Data contained in Appendix D is presented to show the actual closure rates for each beach. The Monroe County Department of Public Health (MCDPH) determines each morning whether the beaches will be open or closed based on a predictive model. These closure rates are not a reflection of the actual water quality. Rather, they a representation of how the MCDPH predicted the water quality.

Ontario and Durand Eastman Beaches differ in the reasons for their closure. The variation in closure between these two beaches may be a result of structural differences and location on the Lake Ontario shoreline. Ontario Beach experiences more closures due to bacteria and water clarity than compared to Durand. This could be due to lack of shoreline water flow due to the location of the pier at Ontario Beach. Durand has no obstructions in shoreline water flow allowing for continual movement of materials along the shore. In contrast Ontario has a pier which allows for the accumulation of materials and microorganisms as waves move down the shore resulting in greater frequency of water clarity and bacteria related closures.

### ONTARIO BEACH LONG TERM PERFORMANCE (DAYS)

(Based on E. coli only. Does not account for water clarity requirements)

Year	Closed/ Dirty	Open/Clean	Closed/Clean	Open/Dirty
2010	23	33	19	6
2011	19	33	10	19
2012	26	26	18	11
2013	24	24	18	8
2014	19	37	4	7
2015	25	29	4	15
2016	10	45	4	15
2017	13	56	8	5
2018	5	56	5	8
Average	18.2	37.7	70.0	10.4

 $(2014)\ 4$  of these days only one of three samples were > 235 mpn/100 ml

(2015) 7 of these days only one of two samples were >235mpn/100ml

 $(2016)\ 7$  of these days only one of two samples were > 235 mpn/100 ml

 $(2017)\ 2$  of these days only one of two samples were >235mpn/100ml

(2018) 9 of these days only one of two samples were >235mpn/100ml

### ONTARIO BEACH PREDICTION PERFORMANCE

Year	Accurate Predictions	Inaccurate Prediction
2010	64%	36%
2011	64%	36%
2012	67%	33%
2013	65%	35%
2014	84%	16%
2015	73%	27%
2016	74%	26%
2017	93%	7%
2018	88%	12%
Average	74.7%	25.3%

#### ONTARIO BEACH REASONS FOR CLOSURES

Year	# of Open days	% Open	# of Closed days	% Closed	% River Flow	% Rain	% Algae	% Water Clarity	% Bacteria
2010	39	48.1	42	51.9	0	16.3	7	36	40.7
2011	52	64	29	36	0	14.3	6.9	31.6	47.2
2012	37	45.7	44	54.3	0	7.6	1.1	21.2	70.1
2013	32	43	42	57	1	8.3	7.8	27	56
2014	44	65.7	23	34.3	0	0	0	78.3	21.7
2015	46	62.2	28	38	0	14	0	50	36
2016	60	81.1	14	18.9	0	0	0	64.3	35.7
2017	61	82.4	13	17.6	0	0	0	100	0
2018	64	86.5	10	13.5	0	30	0	70	0
Avg	48.3	64.3	27.2	35.7	0.1	10.1	2.5	53.2	34.2

#### DURAND EASTMAN BEACH LONG TERM PERFORMANCE (DAYS)

(Based on E. coli only. Does not account for water clarity requirements)

Year	Closed/ Dirty	Open/Clean	Closed/Clean	Open/Dirty	
2010	12	47	20	4	
2011	9	44	12	7	
2012	3	52	11	6	
2013	4	50	11	7	
2014	10	53	8	1	
2015	9	58	8	4	
2016	1	62	3	13	
2018	6	60	2	4	
Average	6.8	53.3	9.4	5.8	

<sup>\*\*</sup>Note: Durand Eastman Beach did not open in 2017

### DURAND EASTMAN BEACH PREDICTION PERFORMANCE

Year	Accurate Predictions	Inaccurate Prediction		
2010	71%	29%		
2011	74%	26%		
2012	76%	24%		
2013	75%	25%		
2014	94.4%	5.6%		
2015	93.5%	6.5%		
2016	79.7%	20.3%		
2018	93.1%	6.9%		
Average	82%	18%		

<sup>\*\*</sup>Note: Durand Eastman Beach did not open in 2017

## DURAND EASTMAN BEACH REASONS FOR CLOSURES

Year	# of Open days	% Open	# of Closed days	% Closed	% River Flow	% Rain	% Algae	% Water clarity	% Bacteria
2010	51	61.4	32	38.6	0	30.2	0	42.7	27.1
2011	51	71	21	29	0	25.4	0	25.4	49.2
2012	58	81	14	19	0	35.7	0	10.7	53.6
2013	57	79.2	15	20.8	3.3	33.3	0	20	43.3
2014	54	75	18	25	5.55	38.9	0	50	5.55
2015	62	78.5	17	21.5	0	23.5	0	70.6	5.9
2016	75	94.9	4	5.1	0	50	0	25	25
2018	64	88.9	8	11.1	0	50	0	50	0
Average	59.0	78.7	16.1	21.3	1.1	35.9	0.0	36.8	26.2

<sup>\*\*</sup>Note: Durand Eastman Beach did not open in 2017