



February 3, 2021

Ms. Sabrina Charney Hull, AICP  
Director of Planning  
Town of New Castle  
200 South Greeley Avenue  
Chappaqua, NY 10514

***Via Electronic Transmission***

RE: Sunshine Children’s Home ZBA Special Permit  
Offsite Well Monitoring Program  
January 2021 Semi-Annual Summary Report

Dear Ms. Charney Hull:

WSP USA Inc., and related company Hydrogeologic, Architecture, Land Surveying, Landscape Architecture Services, P.C. (WSP), has prepared the following semi-annual summary report for the Offsite Well Monitoring Program that is being conducted on behalf of the Sunshine Children’s Home (Sunshine). Pressure transducers were installed in eight residential wells near the Sunshine property in July 2018 by WSP under the supervision of the Town’s hydrogeologic consultant HydroEnvironmental Solutions (HES). The pressure transducer installation dates have been provided on the table below with their corresponding Well IDs. Well ID’s have been assigned to each of the eight offsite wells being measured to respect the privacy of the program participants.

<b>Well ID</b>	<b>Transducer Installation</b>
Well A	Completed 7/20/18
Well B	Completed 7/05/18
Well C	Completed 7/05/18
Well D	Completed 7/20/18
Well E	Completed 7/05/18
Well F	Completed 7/10/18
Well G	Completed 7/05/18
Well H	Completed 7/10/18

Water-level data from the pressure transducers installed in the offsite wells are downloaded monthly by WSP and monthly letters are sent to the participating property owners containing graphs of the water-level data collected from their respective wells. Once per quarter, HES accompanies WSP on the visits to check and download the water-level monitoring equipment installed in the offsite wells.

Hydrographs of the water-level measurements collected through January 21, 2021 are provided on the hydrographs in Appendix I. The water-level measurements from the wells are also provided in a spreadsheet on the attached CD. Daily precipitation data from the nearby Westchester County Airport weather station have also been provided on the hydrographs for reference. Included on the table below are the monthly total precipitation values starting in July 2018 and the 30-year normal precipitation values from 1981-2010 for the Westchester County Airport weather station.

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4 Research Drive, Suite 204  
Shelton, CT 06484

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wsp.com



Month	Monthly Precipitation Total (inches)	30-Year Normal Precipitation Value (inches)
July 2018	4.21	3.71
August 2018	7.93	4.16
September 2018	9.11	4.72
October 2018	4.50	4.41
November 2018	6.16	3.97
December 2018	6.43	4.32
January 2019	4.42	3.78
February 2019	2.54	2.99
March 2019	2.83	4.52
April 2019	4.76	4.40
May 2019	6.94	4.12
June 2019	2.77	4.25
July 2019	7.56	3.71
August 2019	2.70	4.16
September 2019	0.72	4.72
October 2019	8.29	4.41
November 2019	1.96	3.97
December 2019	5.71	4.32
January 2020	2.02	3.78
February 2020	2.45	2.99
March 2020	3.04	4.52
April 2020	5.22	4.40
May 2020	1.94	4.12
June 2020	1.81	4.25
July 2020	5.68	3.71
August 2020	3.30	4.16
September 2020	3.49	4.72
October 2020	4.15	4.41
November 2020	4.45	3.97
December 2020	1.79	4.32
January 2021	1.62	3.78

The water-level data on the offsite well hydrographs show background conditions. This data will be used for comparison to future water levels once pumping volumes in the Sunshine production wells are established for the new facility.

Should you have any questions, please do not hesitate to contact me directly at (475) 882-1704.

Kind regards,

WSP USA Inc.

Thomas P. Cusack, CPG, PG(NY)  
Senior Supervising Hydrogeologist

TPC:cmm

Enclosures

cc: Ari Friedman

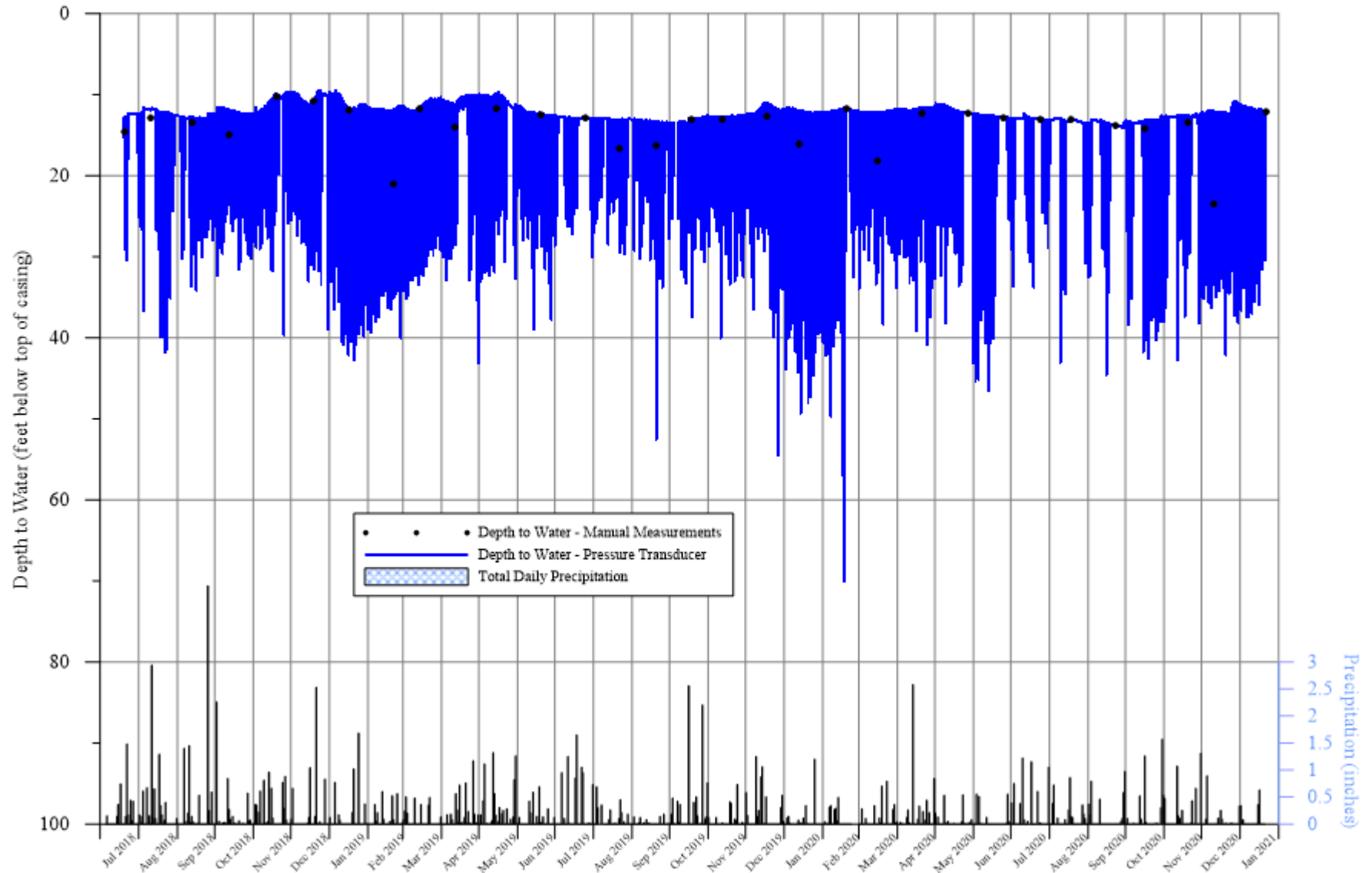
H:\Sunshine Home\2021\Semi-annual rpts\Offsite Well Monitoring Program\_January.docx



## **APPENDIX I**

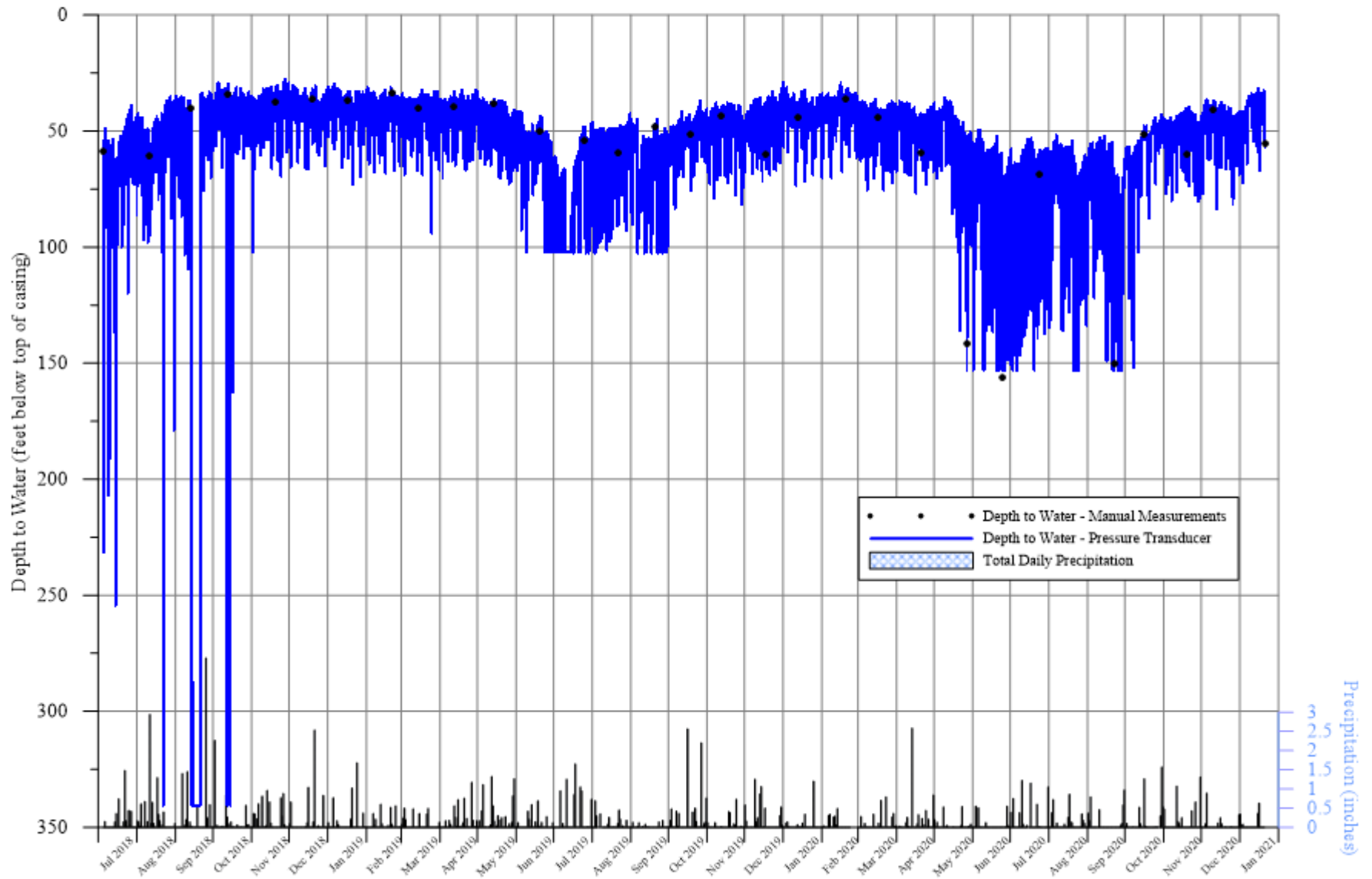
# SUNSHINE CHILDRENS HOME NEW CASTLE, NEW YORK

## Well Monitoring Program Hydrograph of Water-Level Measurements Collected from Well A



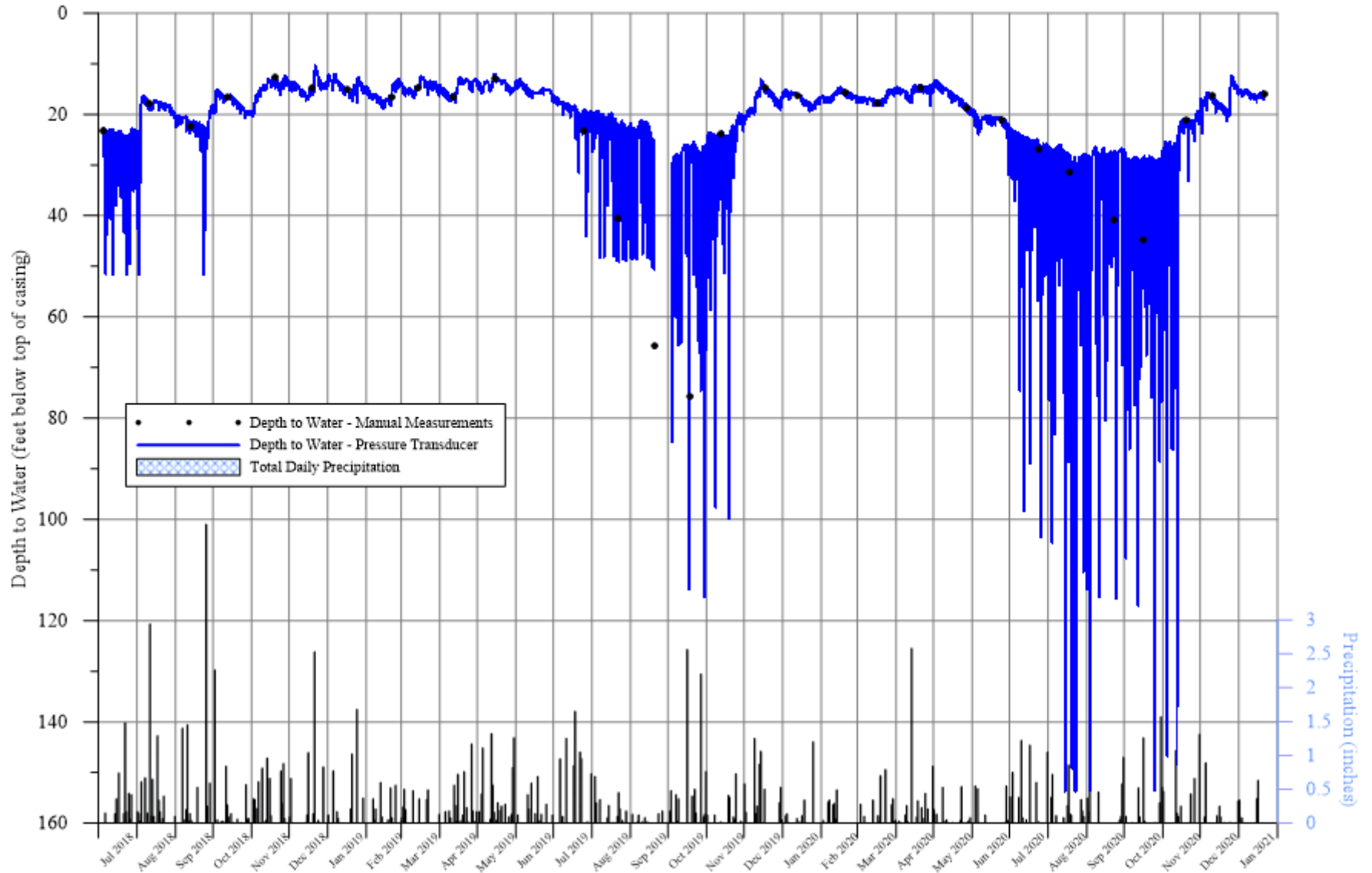
# SUNSHINE CHILDRENS HOME NEW CASTLE, NEW YORK

## Well Monitoring Program Hydrograph of Water-Level Measurements Collected from Well B



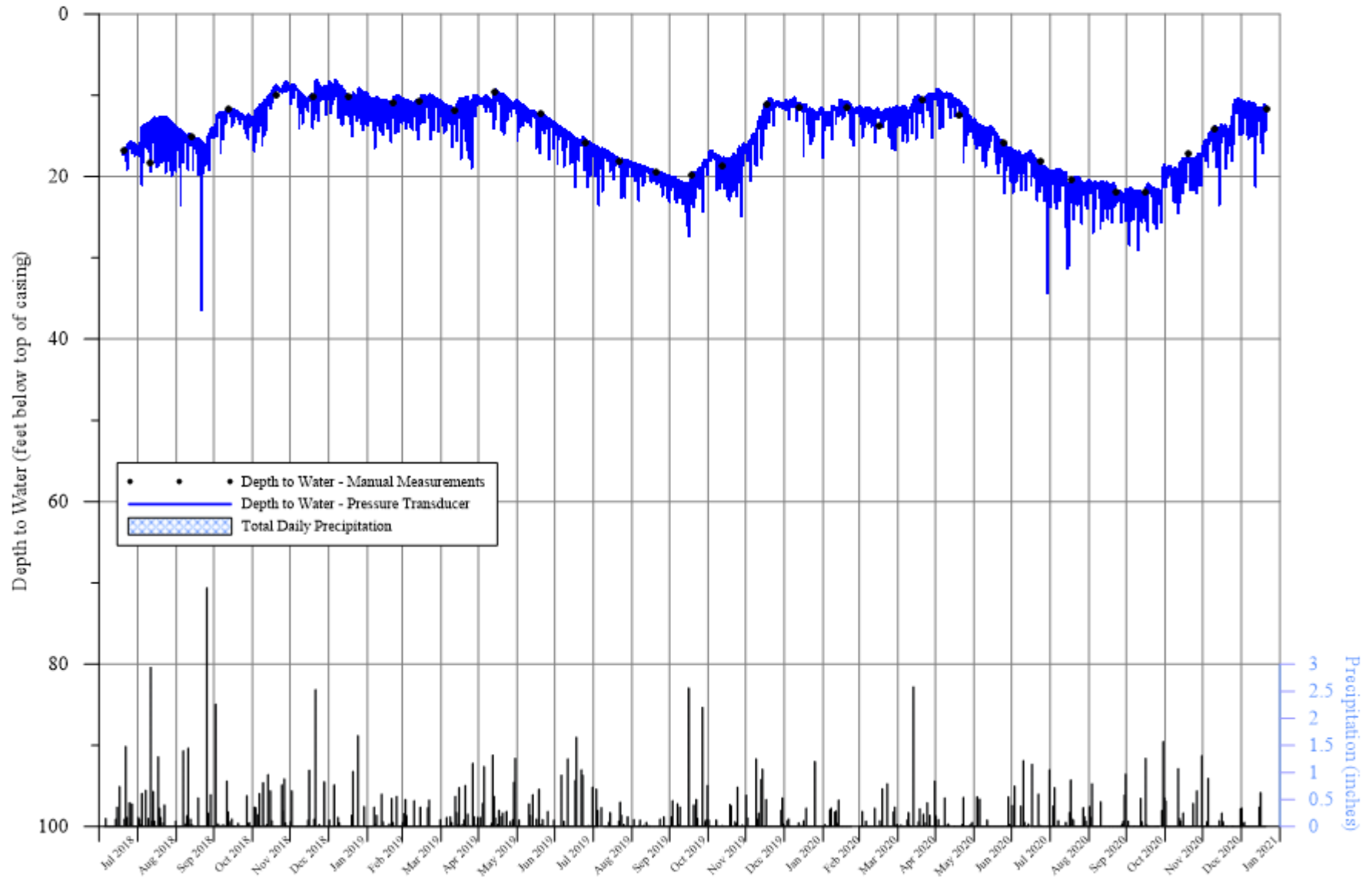
# SUNSHINE CHILDRENS HOME NEW CASTLE, NEW YORK

## Well Monitoring Program Hydrograph of Water-Level Measurements Collected from Well C



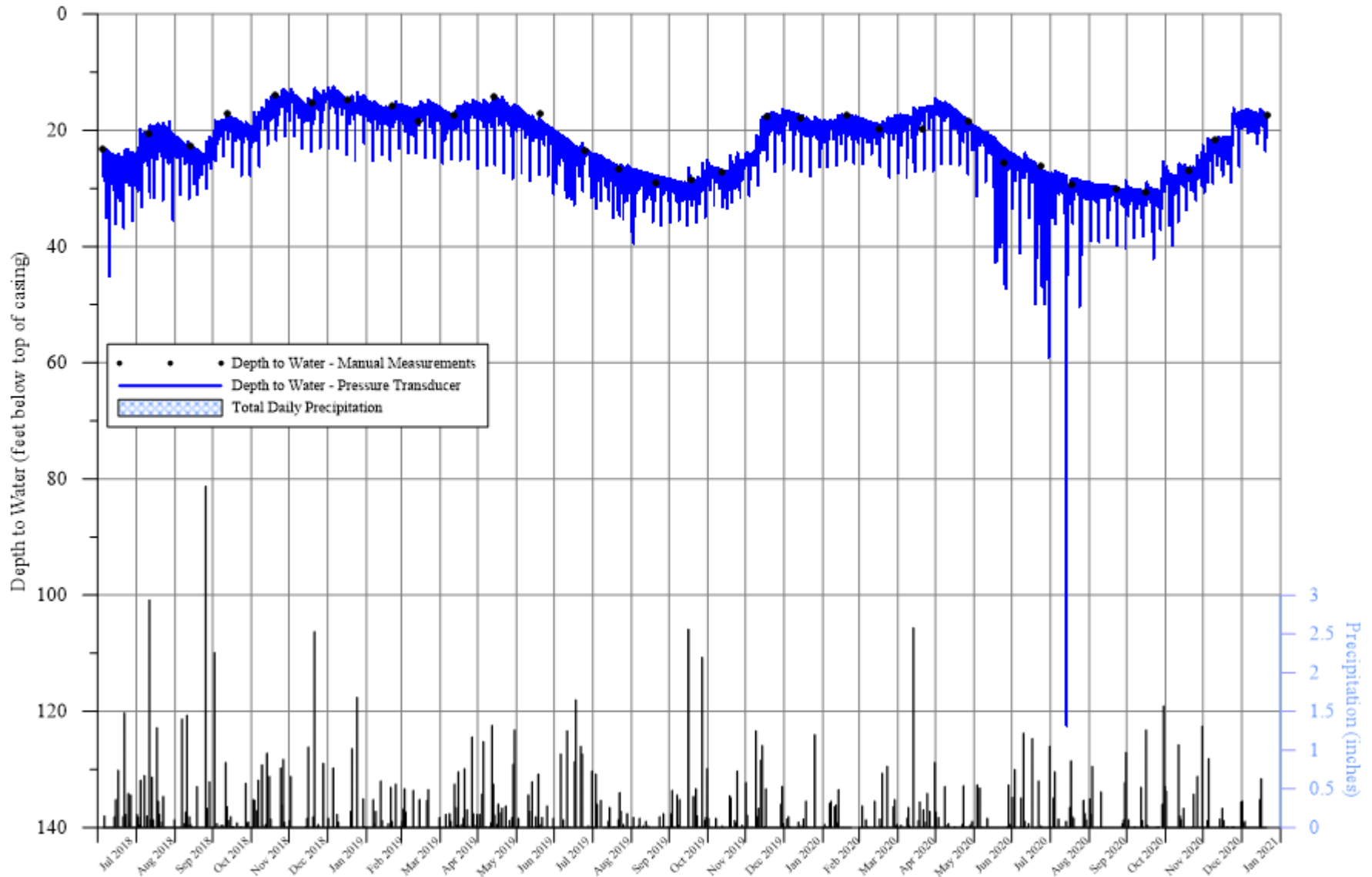
# SUNSHINE CHILDRENS HOME NEW CASTLE, NEW YORK

## Well Monitoring Program Hydrograph of Water-Level Measurements Collected from Well D



# SUNSHINE CHILDRENS HOME NEW CASTLE, NEW YORK

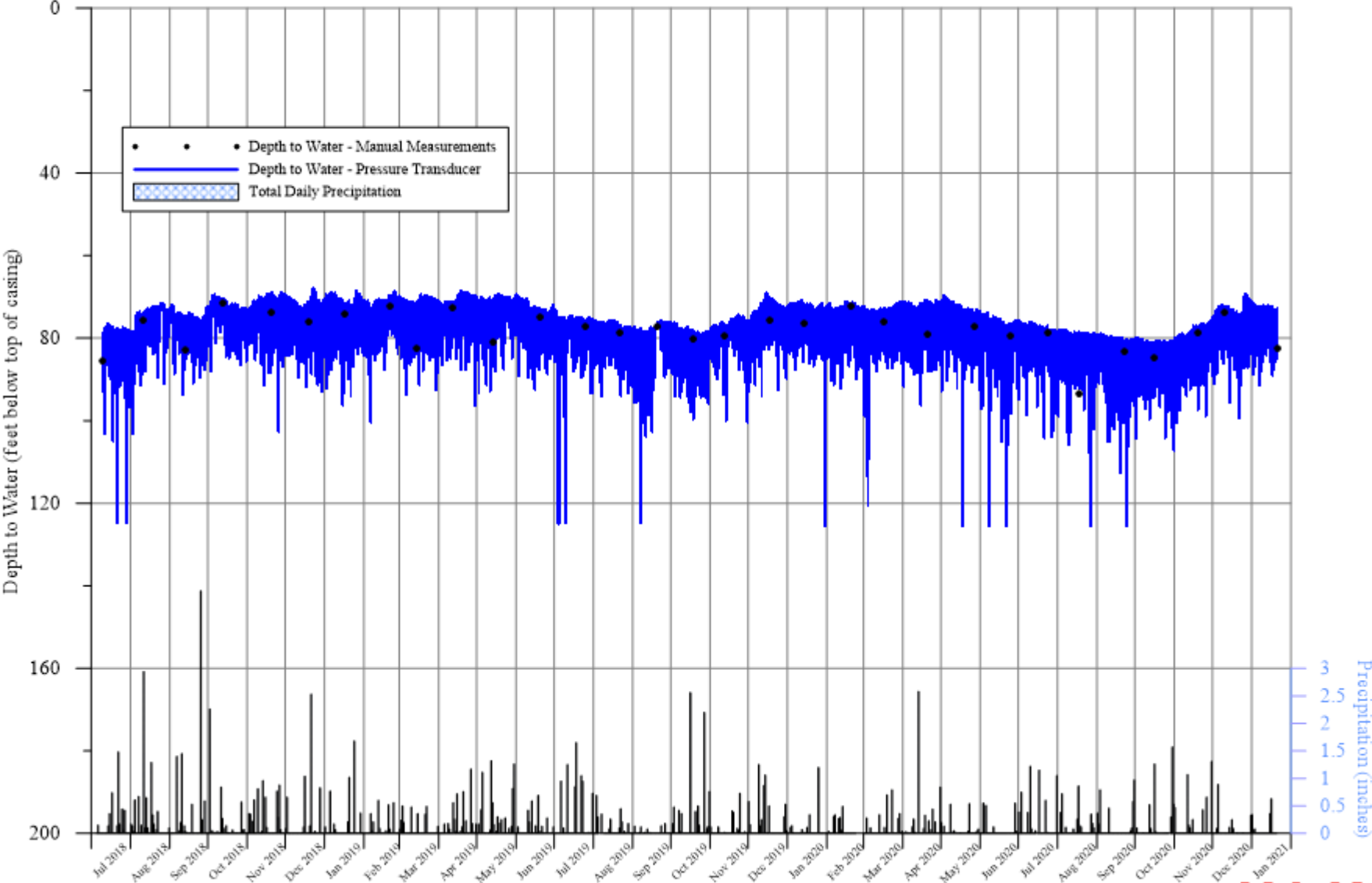
## Well Monitoring Program Hydrograph of Water-Level Measurements Collected from Well E





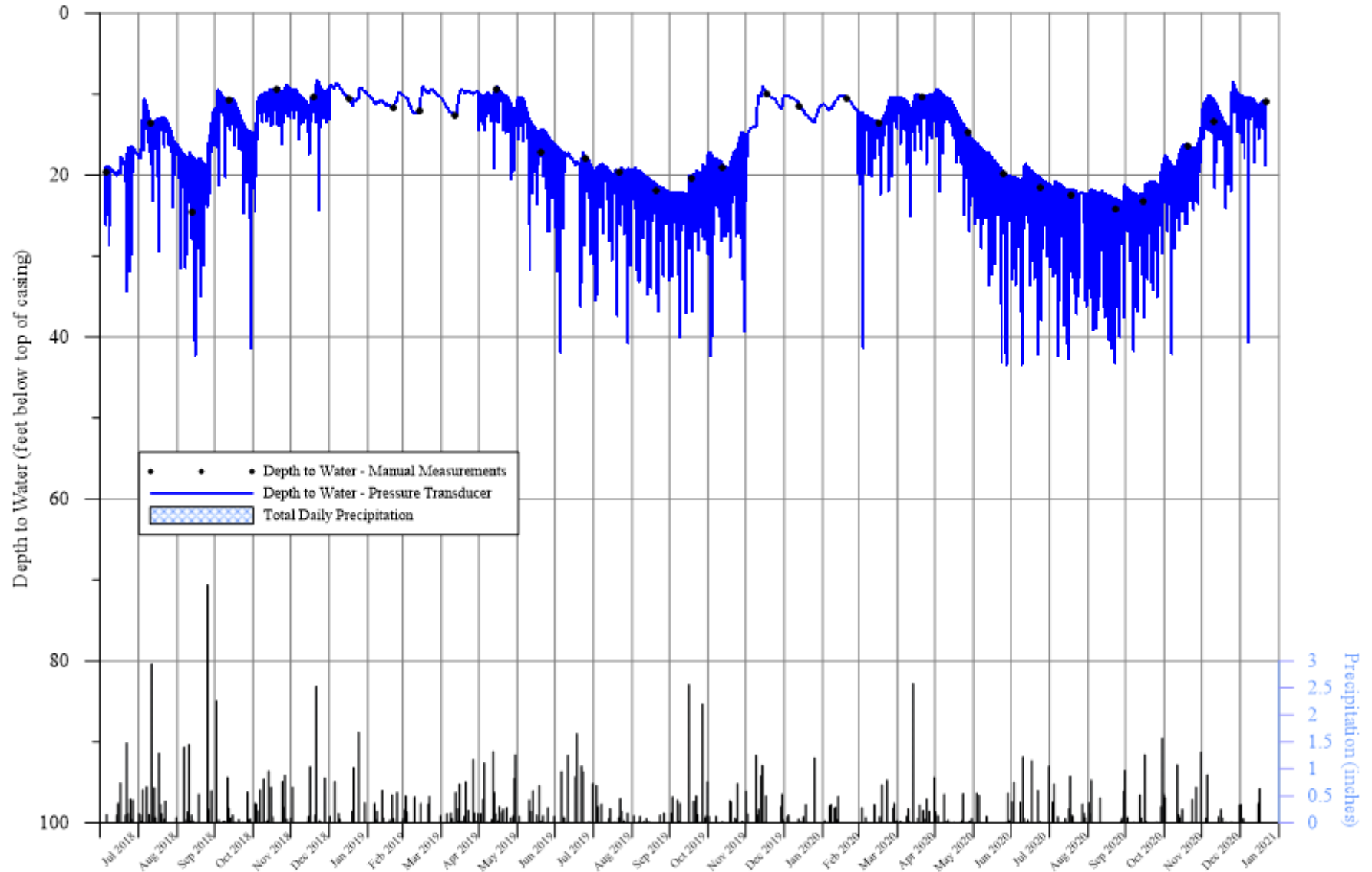
SUNSHINE CHILDRENS HOME  
NEW CASTLE, NEW YORK

Well Monitoring Program  
Hydrograph of Water-Level Measurements Collected from Well F



# SUNSHINE CHILDRENS HOME NEW CASTLE, NEW YORK

## Well Monitoring Program Hydrograph of Water-Level Measurements Collected from Well G



# SUNSHINE CHILDRENS HOME NEW CASTLE, NEW YORK

## Well Monitoring Program Hydrograph of Water-Level Measurements Collected from Well H

