

GARDNER LAKE AUTHORITY

270 Hartford Road
Salem, CT 06240

Meeting Minutes of November 8, 2018
Salem Town Hall

The meeting was called to order at 7:10 p.m. by Henry Granger, Chair.

Attendees

Bozrah: Henry Granger, Scott Soderberg
Montville: Kate Johnson
Salem: Bob Neddo, Chris Rios, Suzanne Bennett

Excused: Mike Magliano, Jim McArdle, Bill Wrobel

A quorum was noted.

Guests: Bill Bennett

Minutes

The minutes of the October 11, 2018 meeting were presented for approval. Suzanne Bennett made a motion to approve the minutes as presented; seconded by Scott Soderberg. The motion passed unanimously.

Attachments

- Treasurer's Report through 10/17/2018
- Client Monitoring Field Data Sheet, dated 10/20/2018
- 2018 GLA Annual Report
- 2019 GLA Meeting Dates

Administration, Correspondence & Communication

- **CT DEEP Patrol Hours:** Some information was missing, so Henry will contact DEEP for the additional info.
- **Client Monitoring Field Data Sheet:** Dated 10/20/18.
- **Draft 2019 Meeting Dates**
- **Draft 2018 Annual Report**
- **Two Invoices from Ecosystem Consulting Service:** In the amounts of \$96.25 for sample processing and \$2,258.08 for lake studies. Kate Johnson made a motion to approve payment of both invoices [as budgeted] in the amount of \$2,354.33; seconded by Bob Neddo. The motion passed unanimously.

Treasurer's Report

Scott Soderberg presented the October Treasurer's Report (9/18/18-10/17/18) for approval. Kate Johnson made a motion to approve the Treasurer's Report as presented; seconded by Chris Rios. The motion passed unanimously.

Committee Business

- Law Enforcement Patrol:** There are no outstanding invoices. GLA will check with Montville to see if there will be patrol staffing for the 2019 season. Mayor McDaniel anticipates that it may be necessary to hire DEEP Patrol for next year.
- Boating:** Over for the season.

- C) **Water Quality Sampling:** Client monitoring sample collection for 2018 is concluded. Scott reported that the lake's temperature layers have inverted for the winter.

Old Business

- **Oxoboxo Dam Repair:** Dam repair permits have not been issued, and notification of the preceding 30-day comment has not gone out yet.
- **DEEP Patrol Invoice:** Henry requested rates and hours for DEEP's Patrol, but only received a limited amount of information back, which did not include all of the hours for the invoice. He will make a second request.

New Business

- **2018 Annual Report:** Bob Neddo made a motion to approve the 2018 Annual Report as presented; seconded by Chris Rios. The motion passed unanimously.
- **2019 Meeting Dates:** Approved by consensus.
- **CFL Dues:** Scott Soderberg made a motion to approve payment of the CT Federation of Lakes Annual Dues, not to exceed \$250; seconded by Kate Johnson. The motion passed unanimously.

Other Business

- **2019 Annual Budget:** Due to several invoices not yet received, GLA will schedule a Special Meeting for December 13, 2018 at the Salem Town Hall. This will allow for the collection of final invoices to determine the season's year end balances, and enable the budgeting of funds for next season.

Public Comment

- Kate Johnson reported on communications she has been conducting, independently of GLA, offering support service to the GLVFC to see the hydrant at the State Boat Launch repaired. She has been informed that appropriate measures are being taken and no further assistance is needed.

Next Meeting Date

A Special Meeting will be held on Thursday, December 13, 2018, at the Salem Town Hall beginning at 7:00 pm.

Adjournment

Bob Neddo made a motion to adjourn at 9:35 p.m.; seconded by Chris Rios. The motion passed unanimously.

Respectfully submitted,



Kate Johnson,
Secretary

2018 Gardner Lake Authority Annual Report

Mission Statement: The Gardner Lake Authority (GLA) is established with the Towns of Bozrah, Montville and Salem to govern the body of water know as Gardner Lake. The Authority shall act as agent for the Towns, cooperating with the State Boating Commission, in the enforcement of boating laws on Gardner Lake. The Authority shall also control and abate algae and aquatic weeds through the CT Department of Environmental Protection's (DEEP) managed drawdowns, and study and make recommendations concerning water management.

GLA hired a consulting service to continue the lake sampling and assess aquatic plant life. In October, limnologist Dr. Robert Kortmann, owner of Ecosystem Consulting Service, Inc. (ECS), presented this year's results of the lake's chemistry and aquatic plant study, with comparisons to prior year studies conducted by ECS. This year the lake's dissolved oxygen levels and water clarity readings saw a return to improved levels following last year's problems with defoliation. The two invasive plants present, fanwort and variable-leaf milfoil, continue to be well managed through the annual drawdown. Early on in the season, the state beach was briefly closed for cyanobacteria (blue-green algae).

As downstream mill owner, Westrock, plans for Oxoboxo Lake's dam repair and subsequent drawdown, Salem and Montville town officials have requested a reduction in the level of Gardner Lake's drawdown scheduled for the 2018-19 winter season, resulting in trepidation about the lake's ability to manage the invasive aquatic plants. When Oxoboxo Lake has its drawdown, there is concern regarding sufficient water capacity for mutual aid fire companies as a result of the dry hydrant at the boat launch being inoperable. At this time, no permit has been issued for the Oxoboxo dam repair.

GLA's Volunteer Cooperative Client Monitoring Program continues to conduct its own water sampling in collaboration with ECS. Samples are analyzed at the University of Connecticut lab and data is provided to ECS to be combined and assessed along with the study that they perform.

The Montville Police Department experienced staffing challenges that hindered their ability to provide water patrol this season. CT DEEP was contracted to patrol and maintained an effective presence on the water for the second half of the season.

GLA worked with DEEP personnel to implement the lowering of the lake's water level for the 2017-18 winter months to manage the invasive weed populations, control stormwater flooding downstream of the lake, reduce shoreline erosion and to support shoreline repair.

GLA supported this year's Boater Safety Course by distributing announcements of the course. Proceeds from registrations are donated to the Gardner Lake Volunteer Fire Company for the use of their facility.

GLA extends its sincere appreciation to our local legislators who take an active role in keeping informed and supporting the health and well-being of this beautiful natural resource that is Gardner Lake.

The Gardner Lake Authority meets the second Thursday of the month from March through November (no meetings in December, January and February). The location is on a rotating basis beginning at the Bozrah Senior Center/Maples Farm in March, Montville's Town Hall/Public Safety Building in April, Salem Town Hall in May, then the cycle rotates twice more.

The public is invited to attend the 7:00 p.m. meetings.

Respectfully submitted,

The Gardner Lake Authority

Bozrah: Henry Granger, Chair; Jim McArdle, Scott Soderberg, Treasurer
Montville: Bill Wrobel, Kate Johnson, Secretary; Mike Magliano
Salem: Bob Neddo, Bruce Henry, Vice Chair (resigned); Chris Rios, Suzanne Bennett

GARDNER LAKE AUTHORITY
 270 Hartford Road
 Salem, CT 06420
 Serving the Towns of Bozrah, Montville and Salem
Budget for January 1, 2018 to December 31, 2018

Date	Description	Bank Transactions				Administration Expenses				Education Expenses		Public Health & Safety Expenses				Acct. Bals.
		Checking	Checking Bal.	Savings	Savings Bal.	Secy Fees	Equip/Printer	Publicity	Flyers	Forums	CFL	Police Patrol	Dam Control	Lake Studies	Misc.	
Budgeted Amount:						\$400.00	\$150.00	\$250.00	\$200.00	\$100.00	\$250.00	\$12,000.00	\$2,200.00	\$8,500.00	\$400.00	
1/1/18	Starting Balances	\$1,100.11	\$1,100.11	\$12,742.85	\$12,742.85											\$13,842.96
1/17/18	Savings interest		\$1,100.11	\$0.58	\$12,743.43											\$13,843.54
2/16/18	Savings interest		\$1,100.11	\$0.52	\$12,743.95											\$13,844.06
3/16/17	Savings interest		\$1,100.11	\$0.49	\$12,744.44											\$13,844.55
4/17/18	Savings interest		\$1,100.11	\$0.56	\$12,745.00											\$13,845.11
5/17/18	Savings interest		\$1,100.11	\$0.52	\$12,745.52											\$13,845.63
6/15/18	Kate Johnson-reimb. office sup.	-\$132.91	\$967.20		\$12,745.52	\$132.91										\$13,712.72
6/15/18	Savings interest		\$967.20	\$0.51	\$12,746.03											\$13,713.23
7/17/18	Savings Interest		\$967.20	\$0.56	\$12,746.59											\$13,713.79
8/17/18	Town of Bozrah		\$967.20	\$447.00	\$13,193.59											\$14,160.79
8/17/18	Town of Montville		\$967.20	\$1,342.00	\$14,535.59											\$15,502.79
8/17/18	Town of Salem		\$967.20	\$5,160.00	\$19,695.59											\$20,662.79
8/17/18	Savings interest		\$967.20	\$0.58	\$19,696.17											\$20,663.37
9/17/18	Scott Soderberg-sample bottles	-\$119.33	\$847.87		\$19,696.17									\$119.33		\$20,544.04
9/17/18	UConn CESE-sample analysis	-\$235.29	\$612.58		\$19,696.17									\$235.29		\$20,308.75
9/17/18	Savings interest		\$612.58	\$0.84	\$19,697.01											\$20,309.59
10/17/18	Ttransfer to checking	\$3,500.00	\$4,112.58	-\$3,500.00	\$16,197.01											\$20,309.59
10/17/18	Henry Granger-reimb. postage	-\$6.70	\$4,105.88		\$16,197.01	\$6.70										\$20,302.89
10/17/18	Ecosystem Consulting Service	-\$2,456.35	\$1,649.53		\$16,197.01									\$2,456.35		\$17,846.54
10/17/18	Savings interest		\$1,649.53	\$0.73	\$16,197.74											\$17,847.27
Account Balances						\$139.61	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,810.97	\$0.00	Spent to date
		Checking	Bal. to Date	Savings	Bal. to Date	\$260.39	\$150.00	\$250.00	\$200.00	\$100.00	\$250.00	\$12,000.00	\$2,200.00	\$5,689.03	\$400.00	Remaining
						Secy Fees	Equip/Printer	Publicity	Flyers	Forums	CFL	Police Patrol	Dam Control	Lake Studies	Misc.	Acct. Bals.

2018 Town Requests:

Bozrah:	at 10% =	\$447.00	
Montville:	at 30% =	\$1,342.00	\$24,450.00 2018 Budget
Salem:	2017 bal@\$2475 + 60% =	\$5,160.00	-\$17,501.00 Less projected year end account balance overage.
		<u>\$6,949.00</u>	<u>\$6,949.00</u>

Gardner Lake Authority
Meeting Schedule for 2019

Meetings are held on the second Thursday of the month beginning at 7:00 p.m.

Bozrah Senior Center	March 14
Montville Public Safety Building	April 11
Salem Town Hall	May 9
Maples Farm	June 13
Montville Public Safety Building	July 11
Salem Town Hall	August 8
Bozrah Senior Center	September 12
Montville Public Safety Building	October 10
Salem Town Hall	November 14

CLIENT MONITORING FIELD DATA SHEET



**ECOSYSTEM CONSULTING
SERVICE, INC.**

Lake: Gardner Lake

Station: 10m

Date: 10/20/18

Time: 4:00 PM

Stage: 4 inches above spillway

Weather: Partly cloudy 58 deg. Wind SW 10 mph

Personnel: Jim McArdle, Scott Soderberg

Depth (m)	Temp (°C)	DO mg/L	DO %
0.5	14.6	9.54	93.1
1	14.6	9.69	95
2	14.6	9.57	94.7
3	14.6	9.42	93.3
4	14.6	9.47	93.2
5	14.6	9.5	93.4
6	14.5	9.51	93.6
7	14.4	9.51	93.2
8	14.4	9.41	92.1
9	14.4	9.2	90.5
10	14.4	8.77	87.5

Secchi Readings:			
	First	Second	Average
Depth:	4	3.5	3.75

Notes/Observations:

* Please Only enter data on this sheet.
The "RTRM Calculation Sheet" automatically updates by itself

Gardner Lake

Station	10m
Date	1/0/1900
SECCHI	3.8 meters
Compensation Depth	7.5 meters
Anoxic Boundary	#NAME? meters
Sum RTRM	4



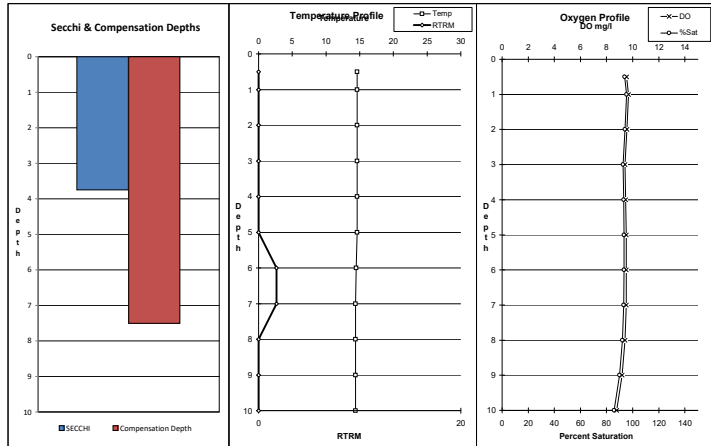
ECOSYSTEM CONSULTING SERVICE, INC.

Calculated
Data linked in from Client Data Entry Sheet

Depth (ft)	Temp	DO	%Sat	RTRM	RVG
0.5	14.6	9.5	94	0	0
1	14.6	9.7	95	0	0
2	14.6	9.6	94	0	0
3	14.6	9.4	93	0	0
4	14.6	9.5	93	0	0
5	14.6	9.5	93	0	0
6	14.5	9.5	93	2	9
7	14.4	9.5	93	2	9
8	14.4	9.4	92	0	0
9	14.4	9.2	90	0	0
10	14.4	8.8	86	0	0

Legend
 DO = Dissolved Oxygen
 Temp = Temperature
 RTRM = Relative Thermal Resistance to Mixing
 RVG = Relative Viscosity Gradient (analogous to RTRM using viscosity change as a function of temperature.)
 %Sat = % saturation of dissolved oxygen at the temperature

TEMP	O2 Saturation	Density	RVG
0	14.621	0.9998679	1.800
0.1	14.581	0.9998738	1.795
0.2	14.540	0.9998797	1.790
0.3	14.500	0.9998855	1.785
0.4	14.459	0.9998914	1.780
0.6	14.378	0.9999032	1.770
0.7	14.338	0.9999091	1.765
0.8	14.297	0.9999149	1.760
0.9	14.257	0.9999208	1.755
1	14.216	0.9999267	1.750
1.1	14.177	0.9999308	1.745
1.2	14.139	0.9999349	1.740
1.3	14.100	0.9999391	1.735
1.4	14.061	0.9999432	1.730
1.5	14.023	0.9999473	1.725
1.6	13.984	0.9999514	1.720
1.7	13.945	0.9999555	1.715
1.8	13.906	0.9999597	1.710
1.9	13.868	0.9999638	1.705
2	13.829	0.9999679	1.700
2.1	13.792	0.9999703	1.695
2.2	13.755	0.9999728	1.690
2.3	13.718	0.9999752	1.685
2.4	13.681	0.9999776	1.680
2.5	13.645	0.9999801	1.675
2.6	13.608	0.9999825	1.670
2.7	13.571	0.9999849	1.665
2.8	13.534	0.9999873	1.660
2.9	13.497	0.9999898	1.655
3	13.460	0.9999922	1.650
3.1	13.425	0.9999930	1.645
3.2	13.389	0.9999938	1.640
3.3	13.354	0.9999945	1.635
3.4	13.319	0.9999953	1.630
3.5	13.284	0.9999961	1.625
3.6	13.248	0.9999969	1.620
3.7	13.213	0.9999977	1.615
3.8	13.178	0.9999984	1.610
3.9	13.142	0.9999992	1.605
4	13.107	1.0000000	1.600
4.1	13.073	0.9999992	1.595
4.2	13.040	0.9999984	1.590
4.3	13.006	0.9999976	1.585
4.4	12.972	0.9999968	1.580
4.5	12.939	0.9999960	1.575
4.6	12.905	0.9999951	1.570
4.7	12.871	0.9999943	1.565
4.8	12.837	0.9999935	1.560
4.9	12.804	0.9999927	1.555
5	12.770	0.9999919	1.550
5.1	12.737	0.9999911	1.545
5.2	12.704	0.9999903	1.540
5.3	12.671	0.9999895	1.535
5.4	12.638	0.9999887	1.530
5.5	12.605	0.9999880	1.525
5.6	12.572	0.9999872	1.520
5.7	12.539	0.9999864	1.515
5.8	12.506	0.9999856	1.510
5.9	12.473	0.9999848	1.505
6	12.440	0.9999841	1.500
6.1	12.410	0.9999834	1.495
6.2	12.380	0.9999826	1.490
6.3	12.350	0.9999819	1.485
6.4	12.320	0.9999812	1.480
6.5	12.290	0.9999804	1.475
6.6	12.259	0.9999797	1.470
6.7	12.229	0.9999789	1.465
6.8	12.199	0.9999782	1.460
6.9	12.169	0.9999774	1.455
7	12.139	0.9999766	1.450
7.1	12.109	0.9999758	1.445
7.2	12.080	0.9999750	1.440
7.3	12.050	0.9999743	1.435
7.4	12.021	0.9999735	1.430
7.5	11.991	0.9999727	1.425
7.6	11.961	0.9999719	1.420
7.7	11.932	0.9999712	1.415
7.8	11.902	0.9999704	1.410
7.9	11.873	0.9999696	1.405
8	11.843	0.9999688	1.400
8.1	11.815	0.9999680	1.395
8.2	11.786	0.9999672	1.391
8.3	11.758	0.9999664	1.387
8.4	11.729	0.9999656	1.383
8.5	11.701	0.9999648	1.379
8.6	11.673	0.9999640	1.374
8.7	11.644	0.9999632	1.370
8.8	11.616	0.9999624	1.366
8.9	11.587	0.9999616	1.361
9	11.559	0.9999608	1.357
9.1	11.532	0.9999600	1.353
9.2	11.505	0.9999592	1.349
9.3	11.478	0.9999584	1.344
9.4	11.451	0.9999576	1.340
9.5	11.424	0.9999568	1.336
9.6	11.396	0.9999560	1.331
9.7	11.369	0.9999552	1.327
9.8	11.342	0.9999544	1.323
9.9	11.315	0.9999536	1.319
10	11.288	0.9999527	1.314
10.1	11.262	0.9999518	1.310
10.2	11.236	0.9999509	1.306
10.3	11.210	0.9999500	1.302
10.4	11.184	0.9999491	1.297
10.5	11.158	0.9999482	1.293
10.6	11.131	0.9999473	1.289
10.7	11.105	0.9999464	1.284
10.8	11.079	0.9999455	1.280
10.9	11.053	0.9999446	1.276
11	11.027	0.9999437	1.272
11.1	11.002	0.9999428	1.267
11.2	10.977	0.9999419	1.263
11.3	10.952	0.9999410	1.259
11.4	10.927	0.9999401	1.254
11.5	10.902	0.9999392	1.250
11.6	10.877	0.9999383	1.246
11.7	10.852	0.9999374	1.242
11.8	10.827	0.9999365	1.237
11.9	10.802	0.9999356	1.233
12	10.777	0.9999347	1.229
12.1	10.753	0.9999338	1.224
12.2	10.729	0.9999329	1.220
12.3	10.705	0.9999320	1.216
12.4	10.681	0.9999311	1.212
12.5	10.657	0.9999302	1.207
12.6	10.633	0.9999293	1.203
12.7	10.609	0.9999284	1.199
12.8	10.585	0.9999275	1.195
12.9	10.561	0.9999266	1.190
13	10.537	0.9999257	1.186
13.1	10.514	0.9999248	1.182
13.2	10.491	0.9999239	1.177
13.3	10.468	0.9999230	1.173
13.4	10.445	0.9999221	1.169
13.5	10.422	0.9999212	1.165
13.6	10.398	0.9999203	1.160
13.7	10.375	0.9999194	1.156
13.8	10.352	0.9999185	1.152
13.9	10.329	0.9999176	1.147
14	10.306	0.9999167	1.143



14.1	10.284	0.9992567	1.139
14.2	10.282	0.9992423	1.135
14.3	10.239	0.9992278	1.130
14.4	10.217	0.9992133	1.126
14.5	10.195	0.9991989	1.122
14.6	10.173	0.9991844	1.117
14.7	10.151	0.9991699	1.113
14.8	10.128	0.9991554	1.109
14.9	10.106	0.9991410	1.105
15	10.084	0.9991265	1.100
15.1	10.063	0.9991109	1.098
15.2	10.041	0.9990952	1.096
15.3	10.020	0.9990796	1.094
15.4	9.998	0.9990639	1.020
15.5	9.977	0.9990483	1.090
15.6	9.956	0.9990327	1.088
15.7	9.934	0.9990170	1.086
15.8	9.913	0.9990014	1.084
15.9	9.891	0.9989857	1.082
16	9.870	0.9989701	1.080
16.1	9.850	0.9989543	1.078
16.2	9.829	0.9989385	1.076
16.3	9.809	0.9989229	1.074
16.4	9.788	0.9989072	1.072
16.5	9.768	0.9988916	1.070
16.6	9.747	0.9988760	1.068
16.7	9.727	0.9988603	1.066
16.8	9.706	0.9988446	1.064
16.9	9.686	0.9988290	1.062
17	9.665	0.9988132	1.060
17.1	9.645	0.9987974	1.058
17.2	9.625	0.9987816	1.056
17.3	9.606	0.9987658	1.054
17.4	9.586	0.9987500	1.052
17.5	9.566	0.9987342	1.050
17.6	9.546	0.9987184	1.048
17.7	9.526	0.9987026	1.046
17.8	9.507	0.9986868	1.044
17.9	9.487	0.9986710	1.042
18	9.467	0.9986552	1.040
18.1	9.448	0.9986394	1.038
18.2	9.429	0.9986236	1.036
18.3	9.410	0.9986078	1.034
18.4	9.391	0.9985920	1.032
18.5	9.372	0.9985762	1.030
18.6	9.352	0.9985604	1.028
18.7	9.333	0.9985446	1.026
18.8	9.314	0.9985288	1.024
18.9	9.295	0.9985130	1.022
19	9.276	0.9984972	1.020
19.1	9.258	0.9984814	1.018
19.2	9.239	0.9984656	1.016
19.3	9.221	0.9984498	1.014
19.4	9.202	0.9984340	1.012
19.5	9.184	0.9984182	1.010
19.6	9.166	0.9984024	1.008
19.7	9.147	0.9983866	1.006
19.8	9.129	0.9983708	1.004
19.9	9.110	0.9983550	1.002
20	9.092	0.9983392	1.000
20.1	9.074	0.9983234	0.998
20.2	9.057	0.9983076	0.996
20.3	9.039	0.9982918	0.994
20.4	9.021	0.9982760	0.992
20.5	9.004	0.9982602	0.990
20.6	8.986	0.9982444	0.988
20.7	8.968	0.9982286	0.986
20.8	8.950	0.9982128	0.984
20.9	8.933	0.9981970	0.982
21	8.915	0.9981812	0.980
21.1	8.898	0.9981654	0.978
21.2	8.881	0.9981496	0.976
21.3	8.863	0.9981338	0.974
21.4	8.846	0.9981180	0.972
21.5	8.829	0.9981022	0.970
21.6	8.812	0.9980864	0.968
21.7	8.795	0.9980706	0.966
21.8	8.777	0.9980548	0.964
21.9	8.760	0.9980390	0.962
22	8.743	0.9980232	0.960
22.1	8.727	0.9980074	0.958
22.2	8.710	0.9979916	0.956
22.3	8.694	0.9979758	0.954
22.4	8.677	0.9979600	0.952
22.5	8.661	0.9979442	0.950
22.6	8.644	0.9979284	0.948
22.7	8.628	0.9979126	0.946
22.8	8.611	0.9978968	0.944
22.9	8.595	0.9978810	0.942
23	8.578	0.9978652	0.940
23.1	8.562	0.9978494	0.938
23.2	8.546	0.9978336	0.936
23.3	8.530	0.9978178	0.934
23.4	8.514	0.9978020	0.932
23.5	8.498	0.9977862	0.930
23.6	8.482	0.9977704	0.928
23.7	8.466	0.9977546	0.926
23.8	8.450	0.9977388	0.924
23.9	8.434	0.9977230	0.922
24	8.418	0.9977072	0.920
24.1	8.403	0.9976914	0.918
24.2	8.387	0.9976756	0.916
24.3	8.372	0.9976598	0.914
24.4	8.356	0.9976440	0.912
24.5	8.341	0.9976282	0.910
24.6	8.325	0.9976124	0.908
24.7	8.310	0.9975966	0.906
24.8	8.294	0.9975808	0.904
24.9	8.279	0.9975650	0.902
25	8.263	0.9975492	0.900
25.1	8.248	0.9975334	0.898
25.2	8.233	0.9975176	0.896
25.3	8.218	0.9975018	0.894
25.4	8.203	0.9974860	0.892
25.5	8.188	0.9974702	0.890
25.6	8.173	0.9974544	0.888
25.7	8.158	0.9974386	0.886
25.8	8.143	0.9974228	0.884
25.9	8.128	0.9974070	0.882
26	8.113	0.9973912	0.880
26.1	8.098	0.9973754	0.878
26.2	8.084	0.9973596	0.876
26.3	8.070	0.9973438	0.874
26.4	8.055	0.9973280	0.872
26.5	8.041	0.9973122	0.870
26.6	8.026	0.9972964	0.868
26.7	8.012	0.9972806	0.866
26.8	7.997	0.9972648	0.864
26.9	7.983	0.9972490	0.862
27	7.968	0.9972332	0.860
27.1	7.954	0.9972174	0.858
27.2	7.940	0.9972016	0.856
27.3	7.926	0.9971858	0.854
27.4	7.912	0.9971700	0.852
27.5	7.898	0.9971542	0.850
27.6	7.883	0.9971384	0.848
27.7	7.869	0.9971226	0.846
27.8	7.855	0.9971068	0.844
27.9	7.841	0.9970910	0.842
28	7.827	0.9970752	0.840
28.1	7.813	0.9970594	0.838
28.2	7.800	0.9970436	0.836
28.3	7.786	0.9970278	0.834
28.4	7.773	0.9970120	0.832
28.5	7.759	0.9969962	0.830
28.6	7.745	0.9969804	0.828
28.7	7.732	0.9969646	0.826
28.8	7.718	0.9969488	0.824
28.9	7.705	0.9969330	0.822
29	7.691	0.9969172	0.820
29.1	7.678	0.9969014	0.818
29.2	7.664	0.9968856	0.816
29.3	7.651	0.9968698	0.814
29.4	7.638	0.9968540	0.812
29.5	7.625	0.9968382	0.810
29.6	7.611	0.9968224	0.808
29.7	7.598	0.9968066	0.806
29.8	7.585	0.9967908	0.804

29.9	7.571	0.9957054	0.802
30	7.558	0.9956756	0.800
30.1	7.545	0.9956450	
30.2	7.532	0.9956143	
30.3	7.520	0.9955837	
30.4	7.507	0.9955530	
30.5	7.494	0.9955224	
30.6	7.481	0.9954918	
30.7	7.468	0.9954611	
30.8	7.456	0.9954305	
30.9	7.443	0.9953998	
31	7.430	0.9953692	
31.1	7.418	0.9953377	
31.2	7.405	0.9953062	
31.3	7.393	0.9952747	
31.4	7.380	0.9952432	
31.5	7.368	0.9952117	
31.6	7.355	0.9951802	
31.7	7.343	0.9951487	
31.8	7.330	0.9951172	
31.9	7.318	0.9950857	
32	7.305	0.9950542	
32.1	7.293	0.9950219	
32.2	7.281	0.9949895	
32.3	7.268	0.9949572	
32.4	7.256	0.9949248	
32.5	7.244	0.9948925	
32.6	7.232	0.9948602	
32.7	7.220	0.9948278	
32.8	7.207	0.9947955	
32.9	7.195	0.9947631	
33	7.183	0.9947308	
33.1	7.171	0.9946976	
33.2	7.159	0.9946645	
33.3	7.148	0.9946313	
33.4	7.136	0.9945981	
33.5	7.124	0.9945650	
33.6	7.112	0.9945318	
33.7	7.100	0.9944986	
33.8	7.089	0.9944654	
33.9	7.077	0.9944323	
34	7.065	0.9943991	
34.1	7.053	0.9943651	
34.2	7.042	0.9943312	
34.3	7.030	0.9942972	
34.4	7.019	0.9942632	
34.5	7.007	0.9942293	
34.6	6.995	0.9941953	
34.7	6.984	0.9941613	
34.8	6.972	0.9941273	
34.9	6.961	0.9940934	
35	6.949	0.9940594	
35.1	6.938		
35.2	6.927		
35.3	6.915		
35.4	6.904		
35.5	6.893		
35.6	6.882		
35.7	6.871		
35.8	6.859		
35.9	6.848		
36	6.837		
36.1	6.826		
36.2	6.815		
36.3	6.804		
36.4	6.793		
36.5	6.782		
36.6	6.771		
36.7	6.760		
36.8	6.749		
36.9	6.738		
37	6.727		
37.1	6.716		
37.2	6.706		
37.3	6.695		
37.4	6.684		
37.5	6.674		
37.6	6.663		
37.7	6.652		
37.8	6.641		
37.9	6.631		
38	6.620		
38.1	6.610		
38.2	6.599		
38.3	6.589		
38.4	6.578		
38.5	6.568		
38.6	6.557		
38.7	6.547		
38.8	6.536		
38.9	6.526		
39	6.515		
39.1	6.505		
39.2	6.494		
39.3	6.484		
39.4	6.474		
39.5	6.464		
39.6	6.453		
39.7	6.443		
39.8	6.433		
39.9	6.422		
40	6.412		