SUMMERLAND
Sanitary District

ANNUAL REPORT
2016

NPDES NO. CA0048054
ORDER NO. R3-2013-0042

SUMMERLAND
Sanitary District

January 23, 2017

SUBJECT: NPDES Permit No. CA0048054
ORDER No. R3-2013-0042
Annual Report-2016

In accordance with the requirements of the general provisions of the Summerland Sanitary District's NPDES Permit No. CA0048054, we are transmitting the District's Annual Report for 2016. The monitoring data is compiled throughout the year and is presented in both tabular and graphic form.

As required, the following is a list of certified operators currently employed by the District:

- Michael J. Sullivan, Treatment Plant Operations Supervisor/General Manager, Grade III-9077, expiration date 12/31/2017
- Servando A. Aguilar, Sr. Operator I, Grade I-9369, expiration date 12/31/2017
- Noe Aguilar Vega, Operator II, Grade II- 42178, expiration date 03/29/2018
- Eduardo Nava, Internship Operator-In-Training, OIT-I, expiration date 07/23/2017. Mr. Nava has completed Grade I and Grade II SWRCB exams.

During 2016, all parameters of the effluent quality were within the limits set by the District's discharge permit. The monthly grease and oil, ammonia (nitrogen), total and fecal coliform, BOD, total suspended solids and turbidity were analyzed by Fruit Growers Laboratory (FGL) of Santa Paula, California. FGL also completed the analysis for the annual effluent, ocean and sludge sampling. Aquatic Bioassay & Consulting Laboratories, Inc (ABC Labs) in Ventura, California, performed the chronic toxicity testing.

For 2016, 67.02 tons of biosolids were hauled to San Joaquin Composting facility in Kern County by Liberty Compost.

On August 15th, 2016, Salty Dog Dive Service of Santa Barbara California completed the inspection of the District's ocean outfall pipeline. The entire outfall inspection report is attached as a separate document and uploaded under the CIWQS reporting system ID 123918017.

T: 805.969.4344 F: 805.969.5794 • P.O. Box 417 • Summerland, CA • 93067 • www.summerlandsd.org

Collection System Maintenance and Renovation Program

Objective:

To reduce sanitary overflows, increase system reliability, optimize service life of collection system components, plan for facility replacement and educate public on importance of maintaining private laterals.

Goals- Short Term:

- Continue systematic cleaning and closed circuit televising of collection system to identify problem areas and effectiveness of cleaning efforts. Repair problem areas if found.
- As needed, locate, raise, and repair District manholes and cleanouts.
- Annual updating of GIS system to reflect maintenance work as well as owner information.
- Annual updating of District Atlas as areas are visited with any changes that may be needed.
- As system televised, update property connection data for future reference. This entails getting footage from nearest manhole to property lateral connection into District main sewer line. Other property information will be entered if pertinent to sewer service.

Goals- Long Term:

- Repair collection system mainlines if problems found by means of point repair or slip-lining of collection mainline.
- To have the collection system in a state of operation where only minor repairs are needed.
- To continue to bring property owners sewer service who are currently on septic systems for their sanitary needs.
- Continue to stay abreast of future reclamation needs in conjunction with local water district.
- Continue educating the public on wastewater issues with quarterly Summerland Sanitary District newsletters.

Actions completed in 2016

- In 2016, approximately 34,529 feet of collection mainline was cleaned by District staff using trailer jetter. Approx. 1,374 feet of mainline was televised by District staff with closed circuit televising equipment.
- Maintenance on motor control center (MMC).

- Installation of new VFD controllers for chemical feed pumps.
- Annual and routine maintenance of three lift stations and four on-site generators.
- Spent approx. $34,950.00 on repairs to collection system which included pipeline repair and replacement.
- Raised and repaired 6 District manholes.
- Upgrade of GIS system.

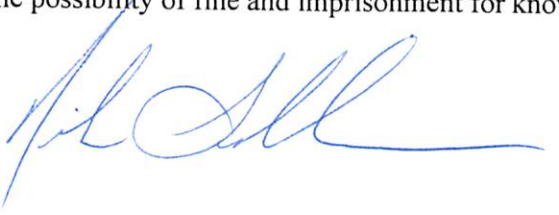
2016 Reported Overflows:

- No overflow spills to report for calendar year 2016.

Please feel free to contact me if you have any questions, or need additional information.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." [40 CFR §122.22(d)].

Sincerely,



Michael J. Sullivan
General Manager
Summerland Sanitary District

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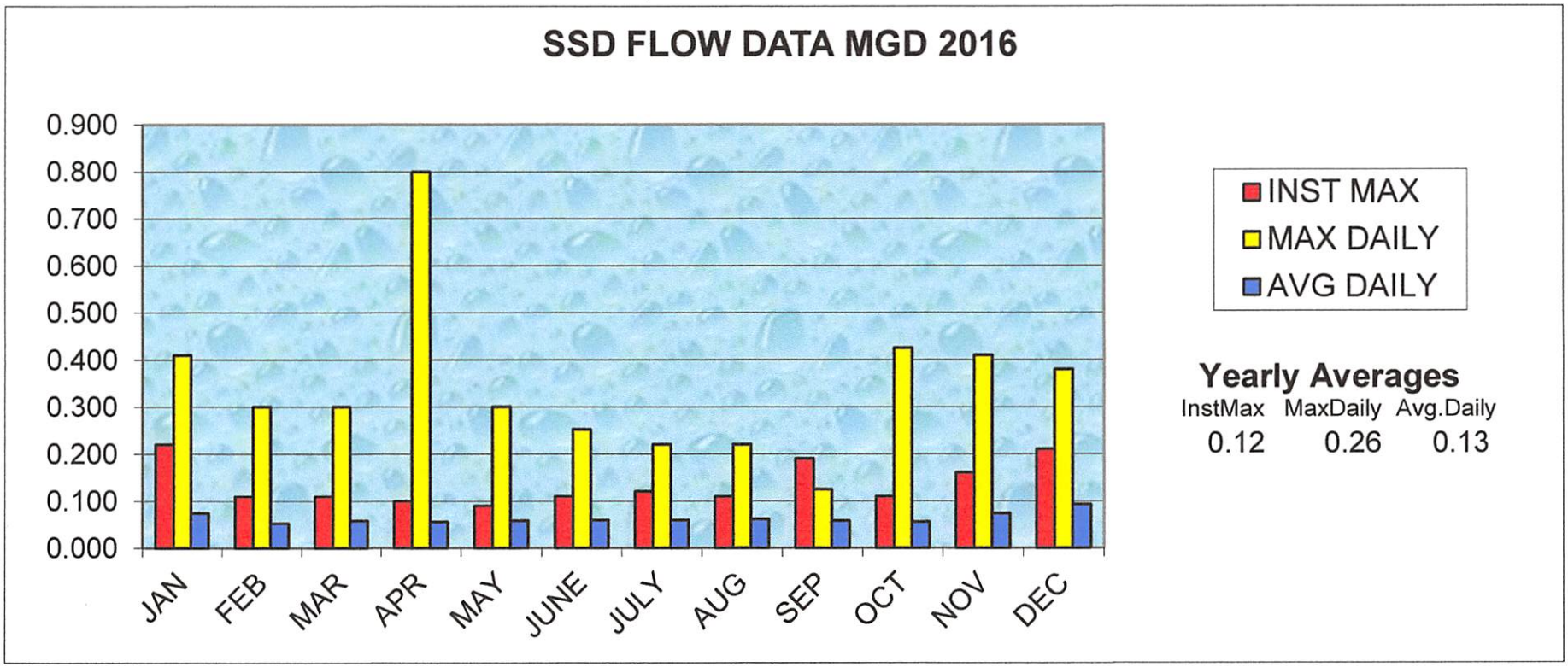
Attachment A – Outfall Report 2016

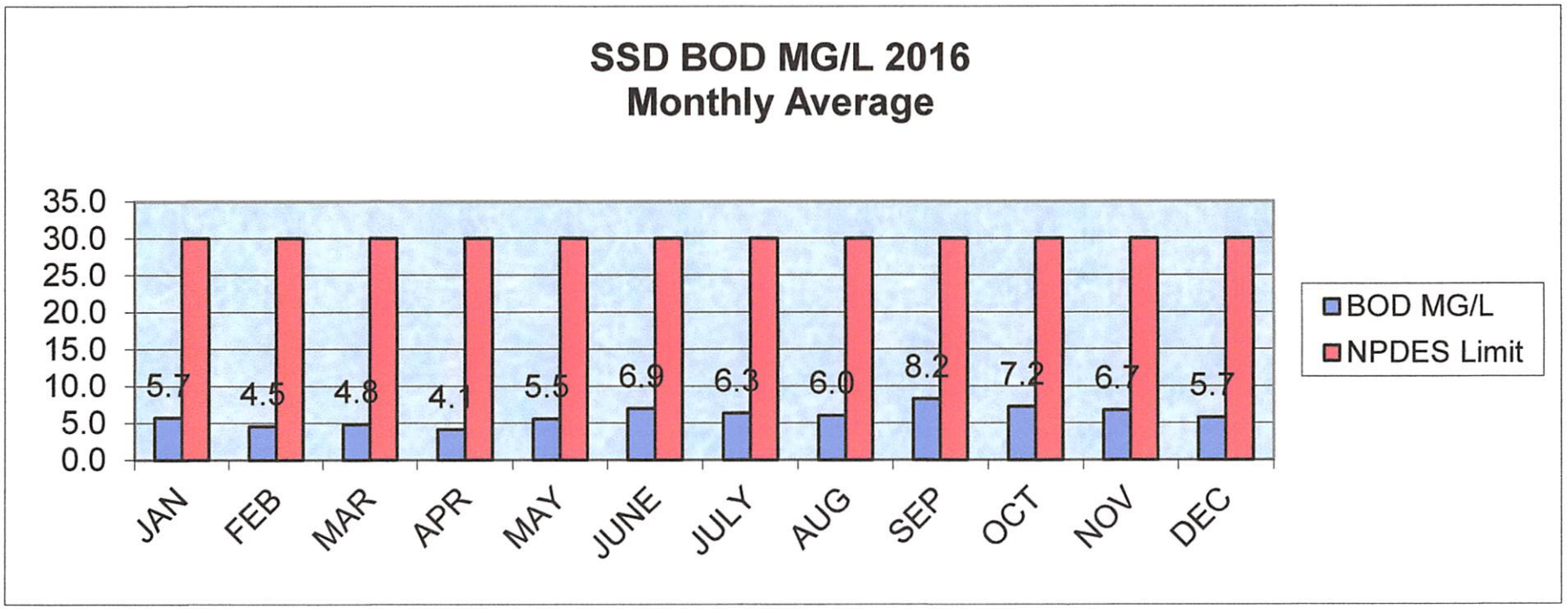
Attachment B – Map

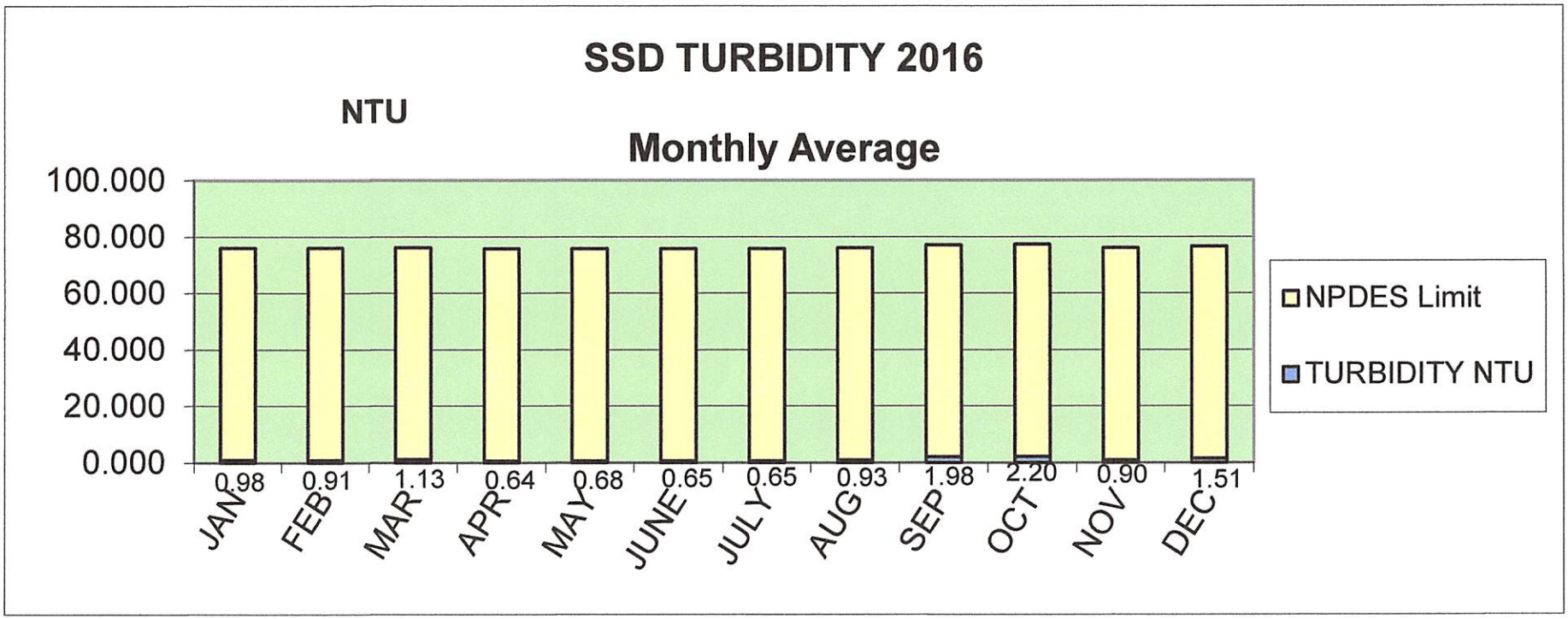
Attachment C – Flow Schematic

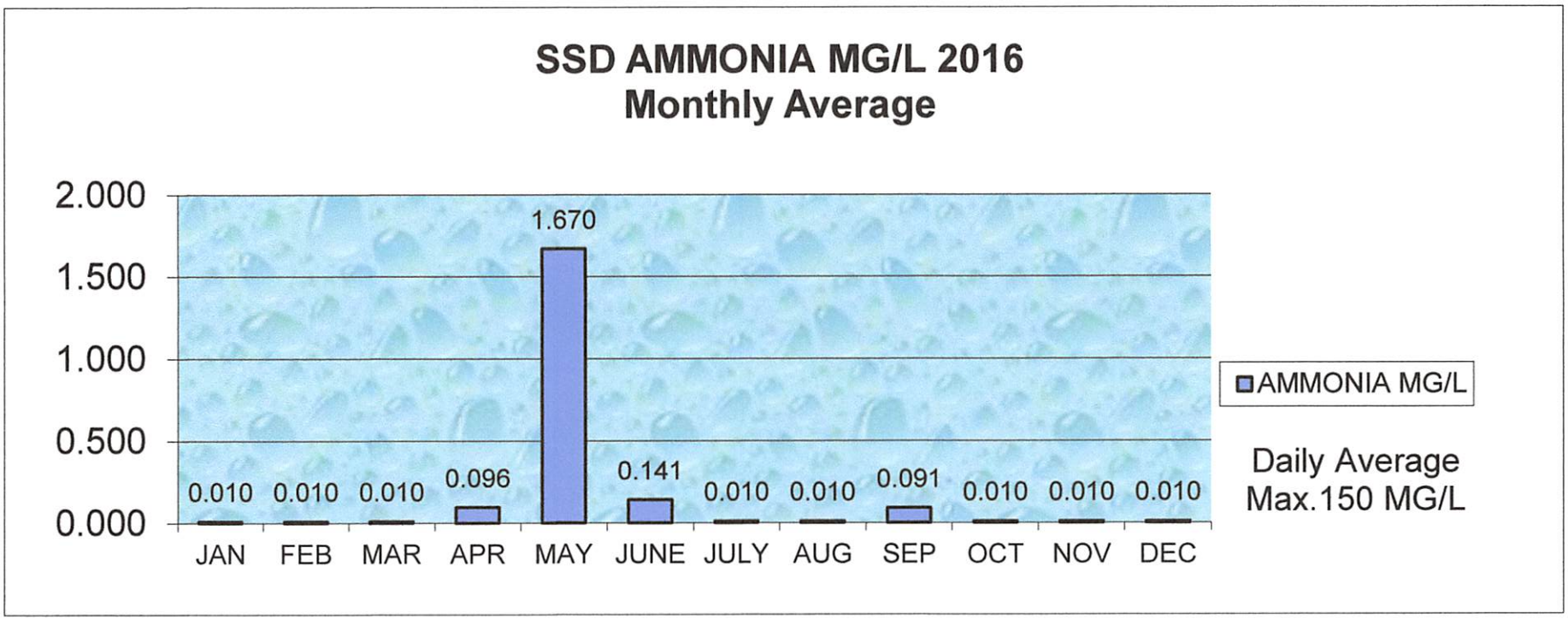
Attachment D – Organization Chart

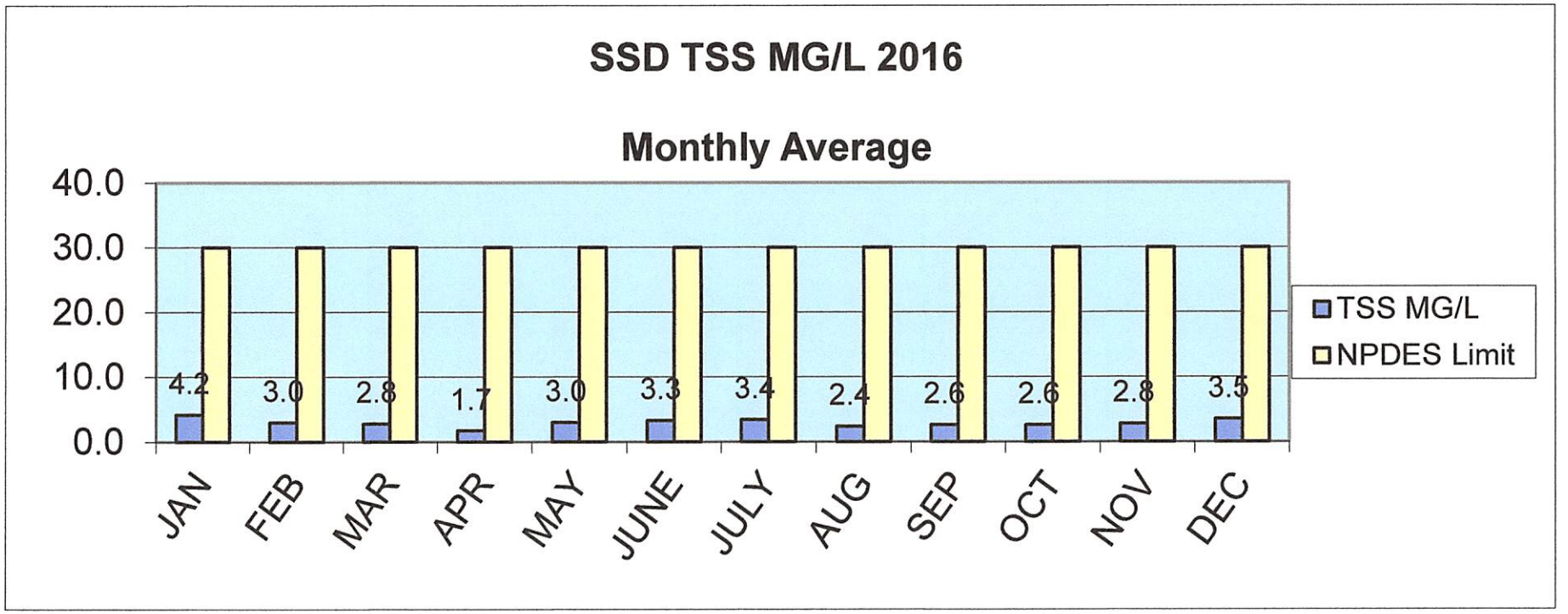
Attachment E - Biosolids Report 2016

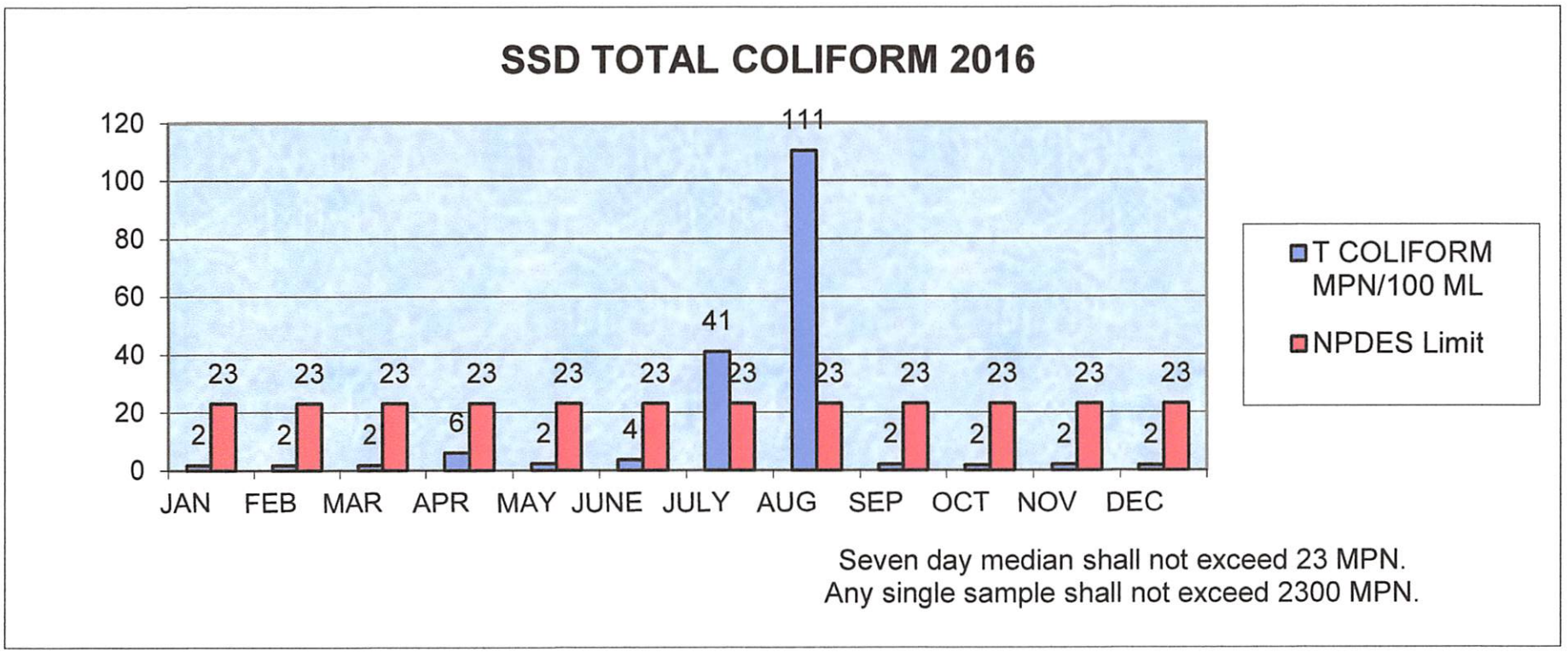

SSD FLOW DATA MGD 2016
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
JAN
FEB
MAR
APR
MAY
JUNE
JULY
AUG
SEP
OCT
NOV
DEC
INST MAX
MAX DAILY
AVG DAILY
Yearly Averages
InstMax MaxDaily Avg.Daily
0.12 0.26 0.13

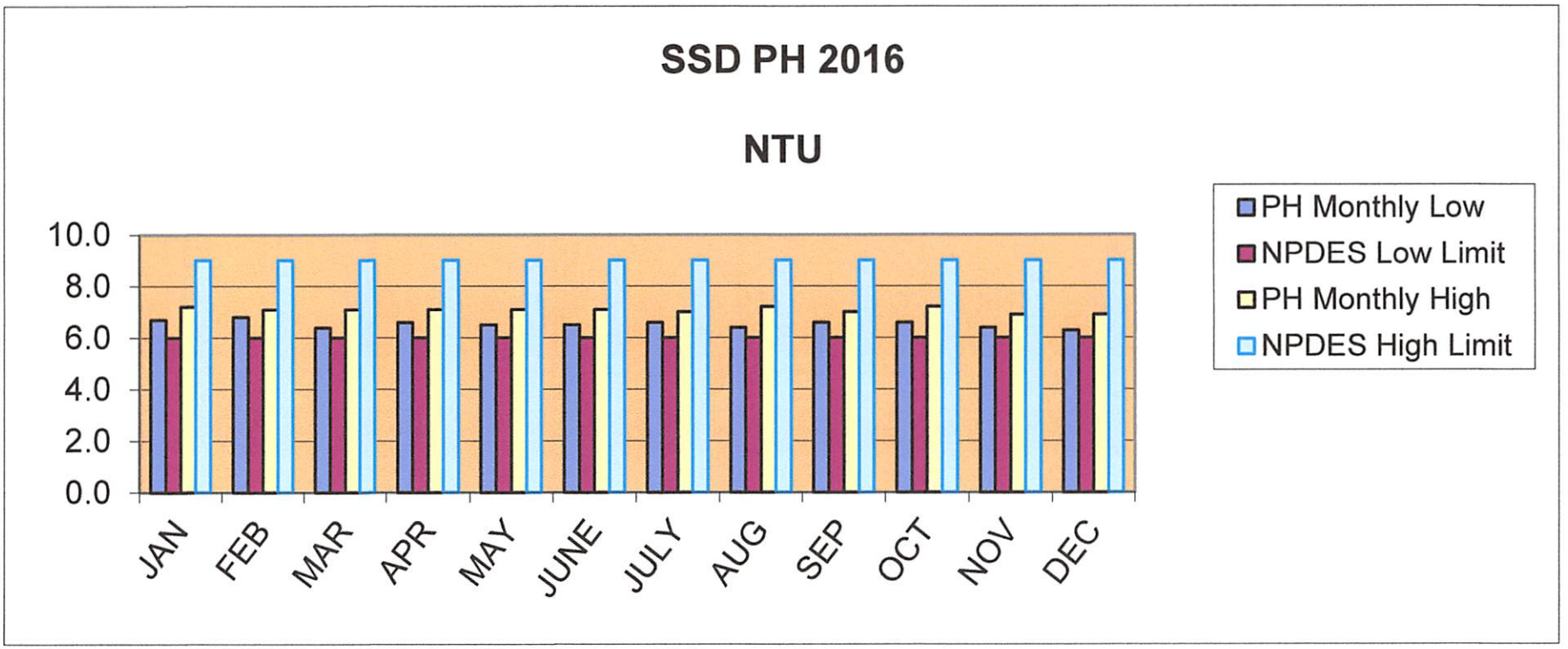

SSD BOD MG/L 2016
Monthly Average
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
5.7
4.5
4.8
4.1
5.5
6.9
6.3
6.0
8.2
7.2
6.7
5.7
JAN
FEB
MAR
APR
MAY
JUNE
JULY
AUG
SEP
OCT
NOV
DEC
BOD MG/L
NPDES Limit

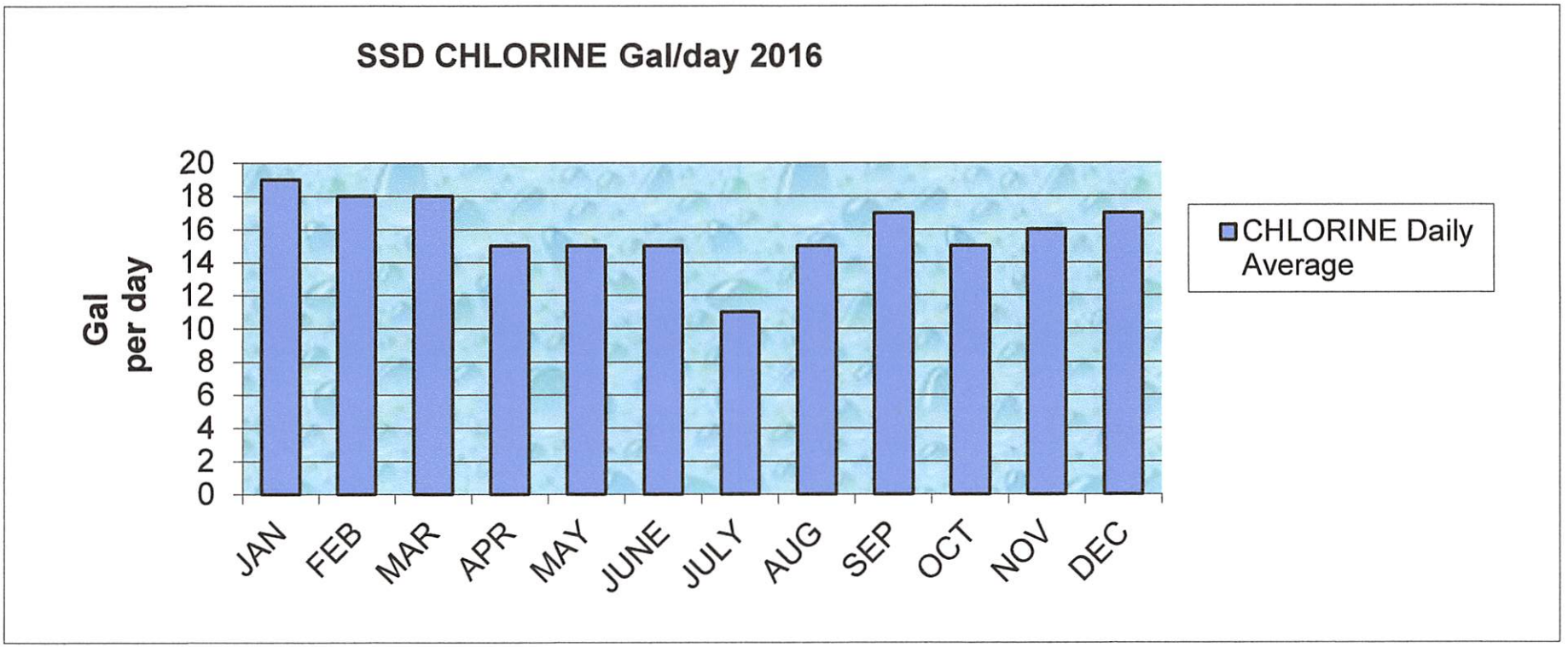

SSD TURBIDITY 2016
NTU
Monthly Average
100.000
80.000
60.000
40.000
20.000
0.000
0.98
0.91
1.13
0.64
0.68
0.65
0.65
0.93
1.98
2.20
0.90
1.51
JAN
FEB
MAR
APR
MAY
JUNE
JULY
AUG
SEP
OCT
NOV
DEC
NPDES Limit
TURBIDITY NTU


SSD AMMONIA MG/L 2016
Monthly Average
2.000
1.500
1.000
0.500
0.000
0.010
0.010
0.010
0.096
1.670
0.141
0.010
0.010
0.091
0.010
0.010
0.010
JAN
FEB
MAR
APR
MAY
JUNE
JULY
AUG
SEP
OCT
NOV
DEC
AMMONIA MG/L
Daily Average
Max.150 MG/L

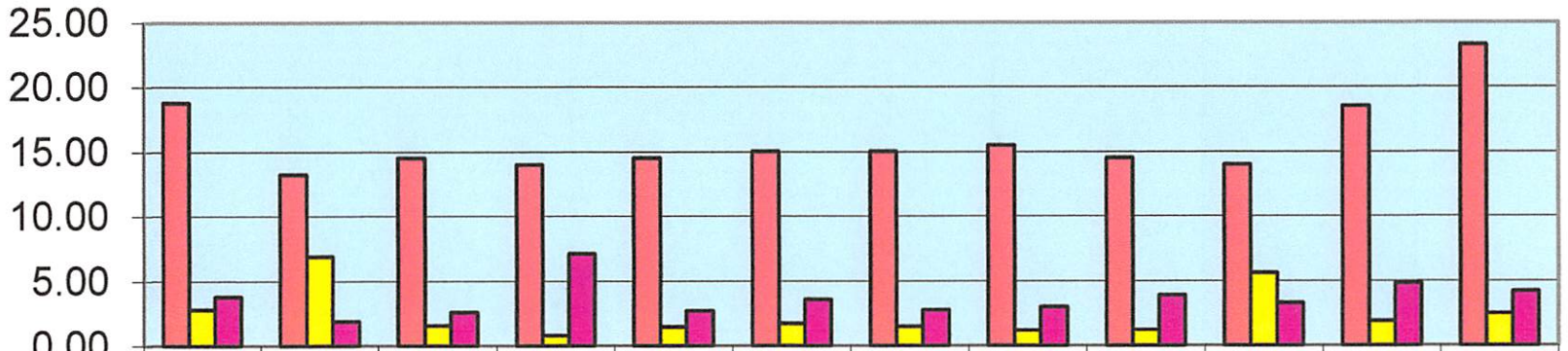

SSD TSS MG/L 2016
Monthly Average
40.0
30.0
20.0
10.0
0.0
4.2
3.0
2.8
1.7
3.0
3.3
3.4
2.4
2.6
2.6
2.8
3.5
JAN
FEB
MAR
APR
MAY
JUNE
JULY
AUG
SEP
OCT
NOV
DEC
TSS MG/L
NPDES Limit


SSD TOTAL COLIFORM 2016
120
100
80
60
40
20
0
JAN
FEB
MAR
APR
MAY
JUNE
JULY
AUG
SEP
OCT
NOV
DEC
2
23
2
23
2
23
6
23
2
23
4
23
41
23
111
23
2
23
2
23
2
23
2
23
T COLIFORM MPN/100 ML
NPDES Limit
Seven day median shall not exceed 23 MPN.
Any single sample shall not exceed 2300 MPN.


SSD PH 2016
NTU
10.0
8.0
6.0
4.0
2.0
0.0
JAN
FEB
MAR
APR
MAY
JUNE
JULY
AUG
SEP
OCT
NOV
DEC
PH Monthly Low
NPDES Low Limit
PH Monthly High
NPDES High Limit


SSD CHLORINE Gal/day 2016
Gal per day
20
18
16
14
12
10
8
6
4
2
0
JAN
FEB
MAR
APR
MAY
JUNE
JULY
AUG
SEP
OCT
NOV
DEC
CHLORINE Daily Average

SSD EFFLUENT Mass Emissions Monthly 2016



	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
Max Emissions Lbs/d	18.76	13.26	14.51	14.01	14.51	15.01	15.01	15.51	14.51	14.01	18.51	23.26
Suspd"d Solids Lbs/d	2.82	6.88	1.60	0.77	1.49	1.72	1.51	1.20	1.23	5.60	1.90	2.50
BOD Lbs/d	3.8	1.9	2.6	7.1	2.7	3.6	2.8	3.0	3.9	3.3	4.8	4.2

Summerland Sanitary District
Annual 2016

MONTH	INST MAX	MAX DAILY	AVG DAILY	BOD MG/L	NPDES Limit	TURBIDITY NTU	NPDES Limit	AMMONIA MG/L	NPDES Limit	TSS MG/L	NPDES Limit
JAN	0.220	0.410	0.075	5.7	30.0	0.975	75.00	0.010	150	4.2	30
FEB	0.110	0.300	0.053	4.5	30.0	0.905	75.00	0.010	150	3.0	30
MAR	0.110	0.300	0.058	4.8	30.0	1.128	75.00	0.010	150	2.8	30
APR	0.100	0.800	0.056	4.1	30.0	0.644	75.00	0.096	150	1.7	30
MAY	0.090	0.300	0.058	5.5	30.0	0.684	75.00	1.670	150	3.0	30
JUNE	0.110	0.252	0.060	6.9	30.0	0.646	75.00	0.141	150	3.3	30
JULY	0.120	0.220	0.060	6.3	30.0	0.649	75.00	0.010	150	3.4	30
AUG	0.110	0.220	0.062	6.0	30.0	0.931	75.00	0.010	150	2.4	30
SEP	0.190	0.125	0.058	8.2	30.0	1.978	75.00	0.091	150	2.6	30
OCT	0.110	0.425	0.056	7.2	30.0	2.199	75.00	0.010	150	2.6	30
NOV	0.160	0.410	0.074	6.7	30.0	0.900	75.00	0.010	150	2.8	30
DEC	0.210	0.380	0.093	5.7	30.0	1.510	75.00	0.010	150	3.5	30
AVERAGE	**0.137**	**0.345**	**0.064**	**6.0**	30.0	**1.096**	75.00	**0.173**	150	**2.9**	30

MONTH	T COLIFORM MPN/100 ML	NPDES Limit	PH Monthly Low	NPDES Low Limit	PH Monthly High	NPDES High Limit	CHLORINE Daily Av.	SLUDGE TONS	Max Emissions Lbs/d	TSS Lbs/d	BOD Lbs/d
JAN	2	23	6.7	6	7.2	9	19	0	18.76	2.82	3.8
FEB	2	23	6.8	6	7.1	9	18	0	13.26	6.88	1.9
MAR	2	23	6.4	6	7.1	9	18	0	14.51	1.60	2.6
APR	6	23	6.6	6	7.1	9	15	0	14.01	0.77	7.1
MAY	2	23	6.5	6	7.1	9	15	0	14.51	1.49	2.7
JUNE	4	23	6.5	6	7.1	9	15	0	15.01	1.72	3.6
JULY	41	23	6.6	6	7.0	9	11	45.37	15.01	1.51	2.8
AUG	111	23	6.4	6	7.2	9	15	0	15.51	1.20	3.0
SEP	2	23	6.6	6	7.0	9	17	0	14.51	1.23	3.9
OCT	2	23	6.6	6	7.2	9	15	0	14.01	5.60	3.3
NOV	2	23	6.4	6	6.9	9	16	21.65	18.51	1.90	4.8
DEC	2	23	6.3	6	6.9	9	17	0	23.26	2.50	4.2
AVERAGE	**15**	23	**6.5**	6	**7.1**	9	15	**136.1**	**15.91**	**2.44**	**3.6**

Salty Dog Dive Service

SEP 01 RECD

Summerland Sanitary Outfall Dive Inspection Report
August 15, 2016

On August 15, 2016 Salty Dog Dive Service performed an under water inspection of the Summerland Sanitary District outfall pipe and diffusers. We also cleaned and inspected the pipeline marker buoy, chain, shackles, and swivels. Under water visibility varied between 4' – 6'. Below are our findings.

On the first dive we cleaned the buoy, chain, swivel, and shackles of the ground tackle which marks the end of the outfall pipe. The buoy, chain, and all hardware were fouled with mussels and soft marine growth. Everything cleaned up well and looked good. The buoy chain shows moderate wear. The chain should be replaced next year. The buoy is in good condition and floating well. The plastic cover we installed on the top of it 3 years ago is still intact and holding well. The eye of the buoy shows slight wear and should be good for another year or two. All of the shackles and the swivel are holding up well but should be replaced with the chain next year. The shackles are all seized with stainless steel seizing wire. The chain, shackles and swivel appear sound until next year.

The clump weight, which holds the buoy in place, is partially buried. Since it is partially buried it is holding the buoy in place. There is a piece of ¾" chain from the clump weight which is attached to the buoy chain. This chain from the clump weight was exposed so we were able to inspect it and the attaching shackle to the clump weight. It is sound for another year but will probably need to be replaced next year. I recommend raising the clump weight completely out of the sand next year so it can be inspected and also replace all of the chain, shackles and swivel from the clump weight to the buoy.

We then started the outfall pipe inspection from the offshore end of the outfall working toward the beach. First we inspected the diffusers and found only the west diffuser flowing. There was no effluent flowing from the east diffuser. We inspected the outfall until it became completely buried in sand at the surf zone. Under water visibility was 4' - 6' at the offshore end of the outfall but became worse as we worked in towards shore into the surf zone.

The diffusers and the outfall pipe are fouled with very heavy marine growth as well as having a lot of kelp growing off of it. The majority of the pipeline is laying flat in the sand and ½ to ¾ buried. There is one section toward the surf zone where the sand is scoured out approximately 8" to 1' from under the pipe. This section is about 15 feet long and only supported in a few short areas. The areas of the pipe that were visible appear to be sound. We did not see areas of rust on the pipe. We did not see any damage to the exposed areas of the pipeline. The section of the pipe where we installed cement bags 2 years ago was mostly visible. It appears that some of the bags have shifted but they are mainly still under the pipe and supporting it as when we originally installed them. We did not see any damage to the pipe in this area and the areas where epoxy was applied 2 years ago were mostly covered with growth. The cement bags were also

Marine Contracting and Dive Service
6 Harbor Way #205, Santa Barbara, CA 93109 phone (805) 962-9009 • fax (805) 962-1979
CA State License #763868

covered with heavy marine growth. This section was completely covered last year and this year it is mostly exposed, a result of the constant shifting sand.

In summary, the outfall pipeline looks good. The only area of concern would be the short area toward the surf zone where part of the pipe is scoured out.

Recommendations:

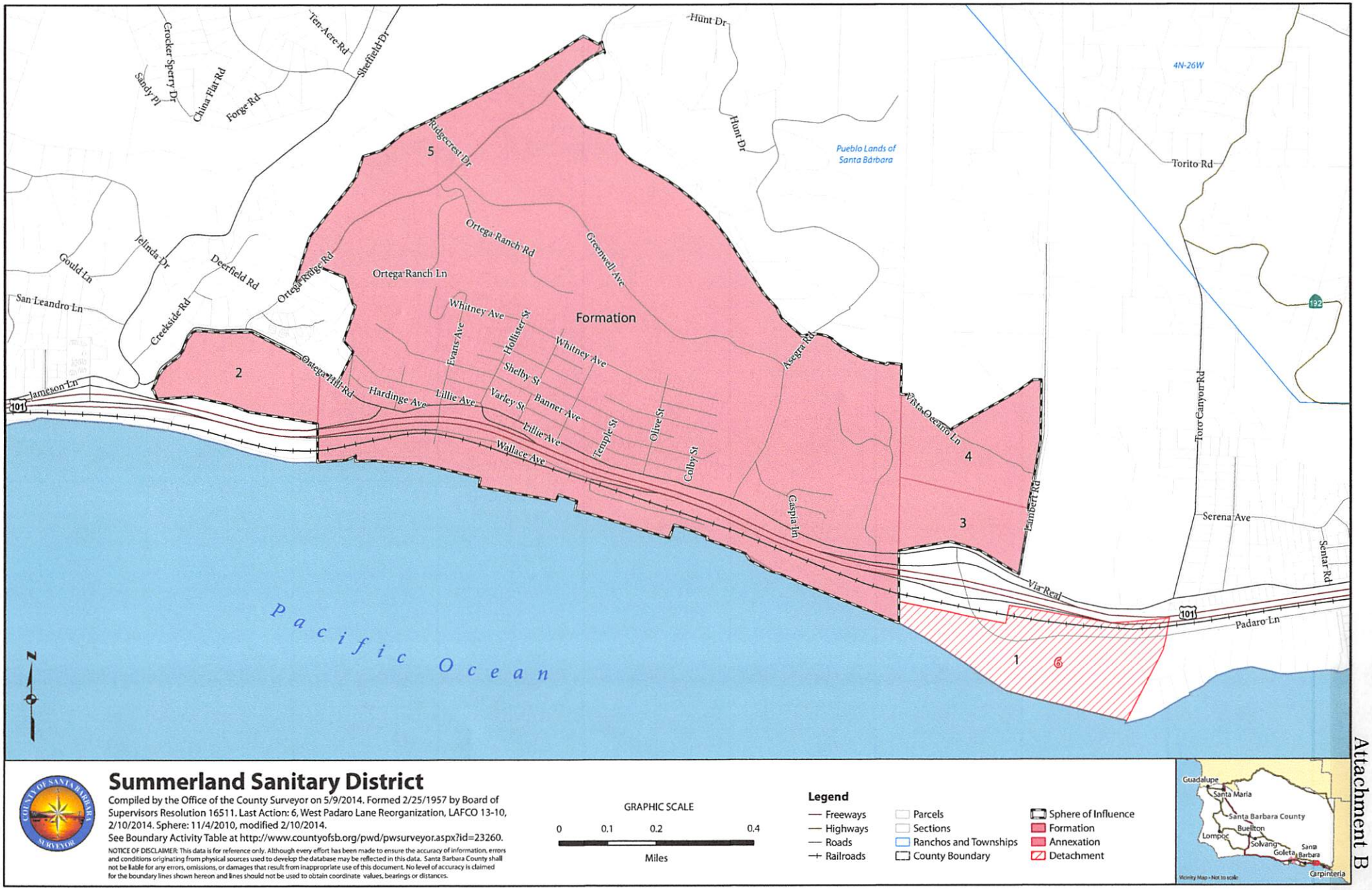
Monitor the scoured area or set cement bags under and around this section as a safety precaution to support it. Winter storms will move a lot of sand and the pipe may become more buried or if unsupported, move and be damaged.

Monitor the buoy as it is listing slightly and has been repaired 3 years ago. If it starts to list excessively it would be good to replace it, as the interior foam would be saturated and not provide adequate buoyancy to float.

For next year the clump weight and ground tackle for the buoy should be raised and the chain, shackles and swivel should be replaced. It is a few years old and showing some wear. It is good until next year but if we have big storms this winter, the chain could wear faster.

Report prepared by Rick Sanchez
Salty Dog Dive Service
6 Harbor Way #205
Santa Barbara CA 93109

Rick Sanchez
8/29/16



Summerland Sanitary District

Compiled by the Office of the County Surveyor on 5/9/2014. Formed 2/25/1957 by Board of Supervisors Resolution 16511. Last Action: 6, West Padaro Lane Reorganization, LAFCO 13-10, 2/10/2014. Sphere: 11/4/2010, modified 2/10/2014.
See Boundary Activity Table at http://www.countyofsb.org/pwd/pwsurveyor.aspx?id=23260.

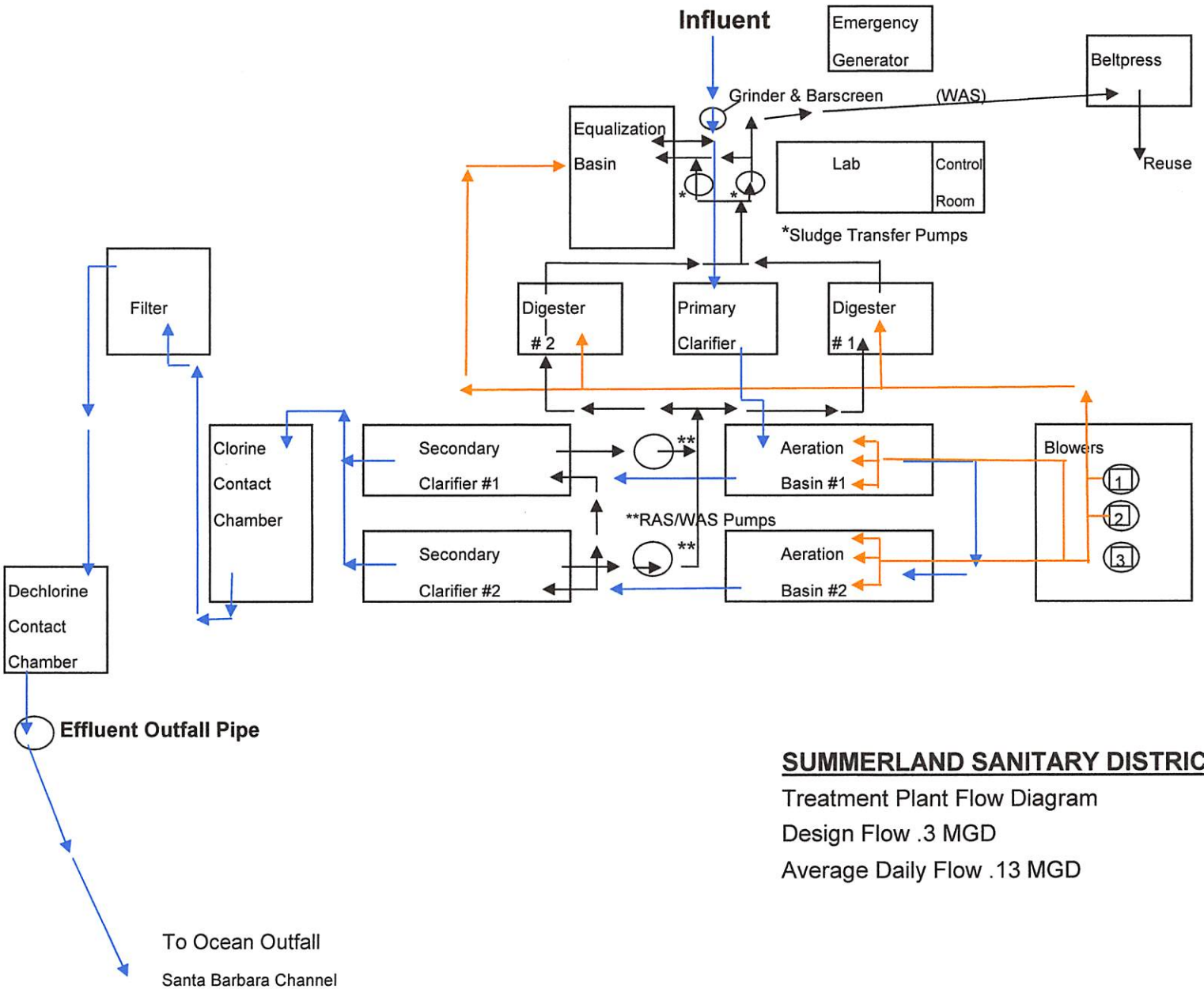
NOTICE OF DISCLAIMER: This data is for reference only. Although every effort has been made to ensure the accuracy of information, errors and conditions originating from physical sources used to develop the database may be reflected in this data. Santa Barbara County shall not be liable for any errors, omissions, or damages that result from inappropriate use of this document. No level of accuracy is claimed for the boundary lines shown hereon and lines should not be used to obtain coordinate values, bearings or distances.

GRAPHIC SCALE
0 0.1 0.2 0.4
Miles

Legend

- Freeways
- Highways
- Roads
- Railroads
- Parcels
- Sections
- Ranchos and Townships
- County Boundary
- Sphere of Influence
- Formation
- Annexation
- Detachment

Attachment B



SUMMERLAND SANITARY DISTRICT

Treatment Plant Flow Diagram

Design Flow .3 MGD

Average Daily Flow .13 MGD

To Ocean Outfall

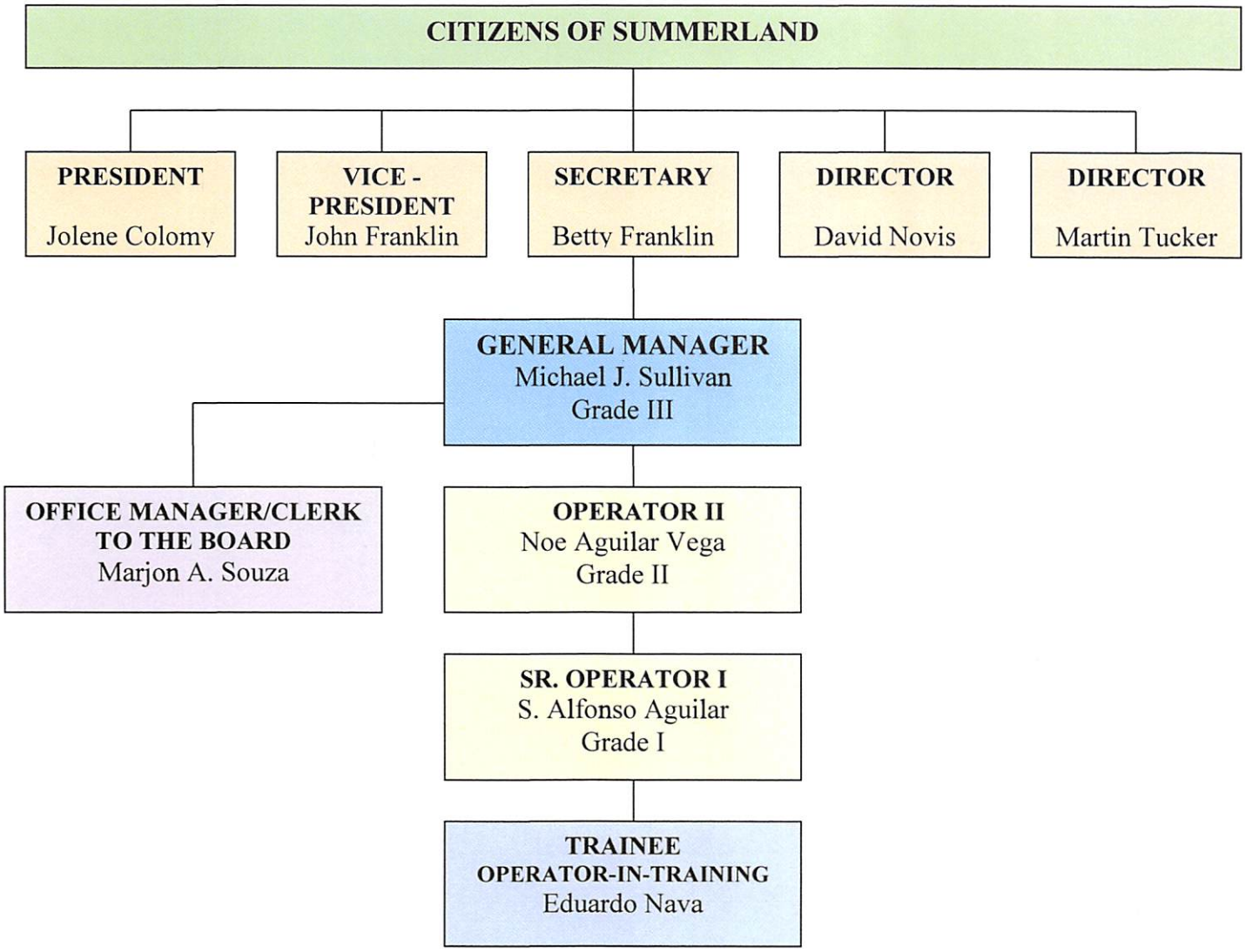
Santa Barbara Channel

34° 25' 00" North Latitude 119° 35' 48" West Longitude

Attachment C

NPDES No. CA0048054
Order No. R3-2013-0042

SUMMERLAND SANITARY DISTRICT
ORGANIZATION CHART



September 14, 2016

Lab ID : SP 1609018-001
Customer ID : 2-2306

Summerland Sanitary District
P.O. Box 0417
Summerland, CA 93067-0417

Sampled On : August 8, 2016-13:50
Sampled By : Al Aguilar
Received On : August 8, 2016-15:10
Matrix : Biosolids

Description : Biosolids
Project : RWQCB Biosolids Monitoring

Sample Result - Inorganic

Constituent	Result	PQL	MDL	Units	Dilution	DQF	Sample Preparation Method	Sample Preparation ID	Sample Preparation Time	Sample Analysis Method	Sample Analysis ID	Sample Analysis Time
Metals, Total [G:1]												
Boron	115	5.7	0.38	mg/kg	1	P	3050	209766	08/17/16 05:30	200.7	211959-IT203	08/18/16-20:00AC
Cadmium	0.983	0.34	0.16	mg/kg	1		3050	209766	08/17/16 05:30	200.7	211959-IT203	08/18/16-20:00AC
Chromium	13.3	0.57	0.15	mg/kg	1	P	3050	209766	08/17/16 05:30	200.7	211959-IT203	08/18/16-20:00AC
Copper	574	0.57	0.11	mg/kg	1	P	3050	209766	08/17/16 05:30	200.7	211959-IT203	08/18/16-20:00AC
Lead	18.6	2.3	0.24	mg/kg	1	P	3050	209766	08/17/16 05:30	200.7	211959-IT203	08/18/16-20:00AC
Mercury	0.0838	0.034	0.0	mg/kg	1		7471	210574	09/01/16 12:00	245.1	213014-HG204	09/07/16-11:50AC
Nickel	15.1	0.57	0.096	mg/kg	1	P	3050	209766	08/17/16 05:30	200.7	211959-IT203	08/18/16-20:00AC
Phosphorus	20300	57	0.39	mg/kg	10	P	3050	209766	08/17/16 05:30	200.7	211985-IT203	08/19/16-13:37AC
Silver	3.32	0.57	0.16	mg/kg	1	hP	3050	209766	08/17/16 05:30	200.7	211985-IT203	08/19/16-13:33AC
Zinc	717	1.1	0.16	mg/kg	1	P	3050	209766	08/17/16 05:30	200.7	211959-IT203	08/18/16-20:00AC
Wet Chemistry [G:1]												
% Moisture	12.8	0.1	0.030	%	0.99953	bT	2540G	210148	08/24/16 11:30	2540B	212392-WT215	08/26/16-07:26JMG
Nitrate Nitrogen	590	100	0.24	mg/kg	10		300	210015	08/22/16 13:30	300.0	212201-IC208	08/22/16-22:43mca
pH	5.80	--	0.0	units	1	T	9045C	209356	08/16/16 15:03	4500HB	211775-PH203	08/16/16-15:05JBA

DQF Flags Definition:

- b The Blank was detected above method MDL for constituent but less than the PQL
- h The MS/MSD did not meet QC criteria.
- P Post Digestion Spike (PDS) not within Acceptance Range (AR).
- T Exceeded method-specific holding time.

ND=Non-Detected. PQL=Practical Quantitation Limit. Containers: (G) Glass Jar Preservatives: N/A

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December 8, 2016

Lab ID : SP 1613162-001
Customer ID : 2-2306

Summerland Sanitary District
P.O. Box 0417
Summerland, CA 93067-0417

Sampled On : November 2, 2016-09:26
Sampled By : Noe A.
Received On : November 2, 2016-14:30
Matrix : Biosolids

Description : Biosolids
Project : RWQCB Biosolids Monitoring

Sample Result - Inorganic

Constituent	Result	PQL	MDL	Units	Dilution	DQF	Sample Preparation Method	Sample Preparation ID	Sample Preparation Time	Sample Analysis Method	Sample Analysis ID	Sample Analysis Time
Wet Chemistry												
Ammonia Nitrogen	2670	16	0.16	mg/kg	20	h	4500NH3B	214203	11/28/16 04:00	4500NH3G	217385-FI207	11/30/16-06:46AMB
Nitrogen, Total Kjeldahl	22200	1700	30	mg/kg	33.333		351.2	213896	11/17/16 08:00	EPA351.2	217204-FI206	11/28/16-08:57AMB

DQF Flags Definition:
h The MS/MSD did not meet QC criteria.

ND=Non-Detected. PQL=Practical Quantitation Limit.

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Summerland - 2016

Month	Wet Tons	% Solids	Dry Tons
Jan	-	-	-
Feb	-	-	-
Mar	-	-	-
April	-	-	-
May	-	-	-
June	-	-	-
July	45.37	16.3%	6.71
Aug	-	-	-
Sept	-	-	-
Oct	-	-	-
Nov	21.65	16.3%	3.20
Dec	-	-	-
Total	67.02		9.91