RYMAR®
WATERWORKS INNOVATIONS

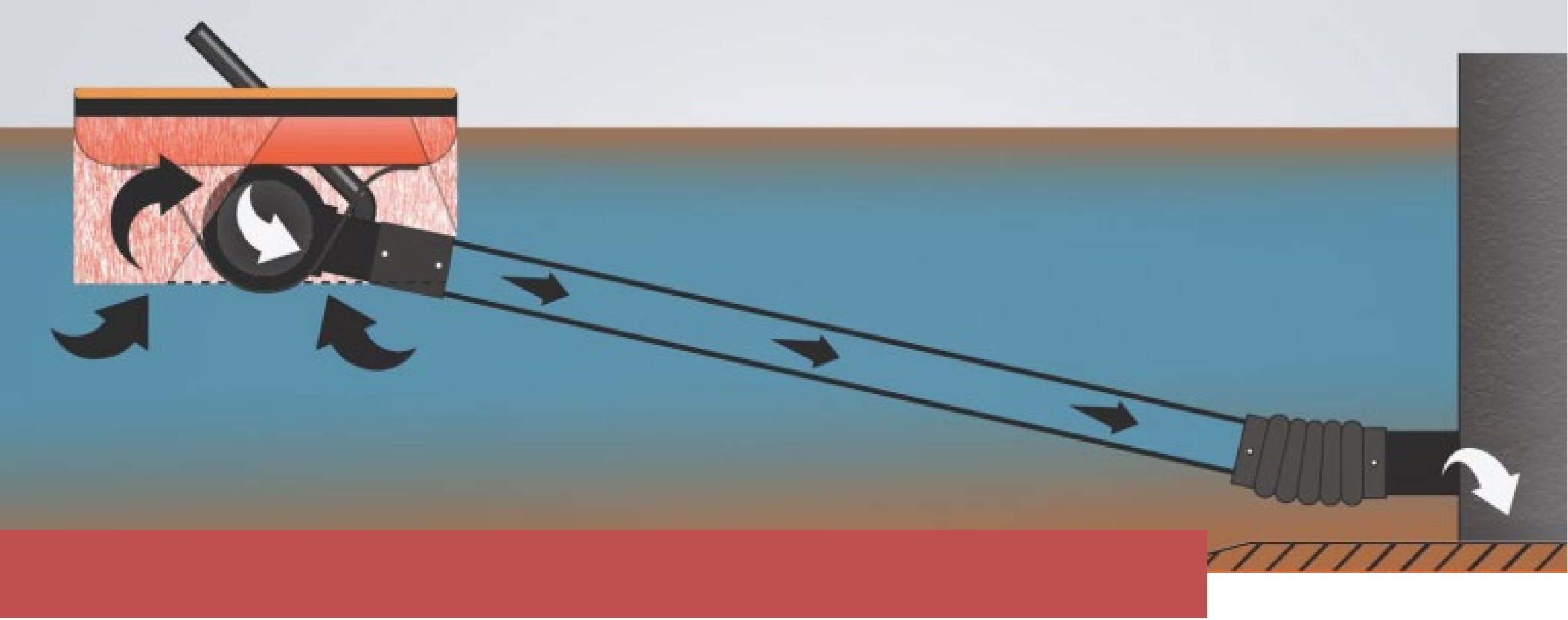
The Marlee Float Skimmer For Sediment Basins and Post-Construction Water Quality

Presentation Objectives

Features of the Marlee Float Skimmer and Sediment Basin Design Tool

Understand Benefits of Using Skimmers for Post-Construction

Introduce the new post-construction filter for water quality to achieve 90% TSS Removal



The Marlee Float Skimmers float at the surface of the water and withdraw from just below the surface to release the cleaner water at the top of the water column and prevent floating debris from being discharged or clogging the skimmer.

RYMAR
WATERWORKS INNOVATIONS

How is The Marlee Float™ Different?

State of the Art Design

- Made of HDPE pipe, polyethylene float and stainless steel fittings
- UV Resistant and virtually indestructible
- Fabricated to be part of the permanent outlet structure
- No moving parts

RYMAR
WATERWORKS INNOVATIONS

How is The Marlee Float™ Different?

Enhanced Water Quality

- Shielded orifice prevents clogging
- Flow enters from 4”-20” below water surface
- Unique design traps floatables in basin and increases sediment trapping efficiency
- Mud and debris do not get to outlet orifice
- Subsurface drain continues to work in mild frozen conditions of 4 – 6” of ice.

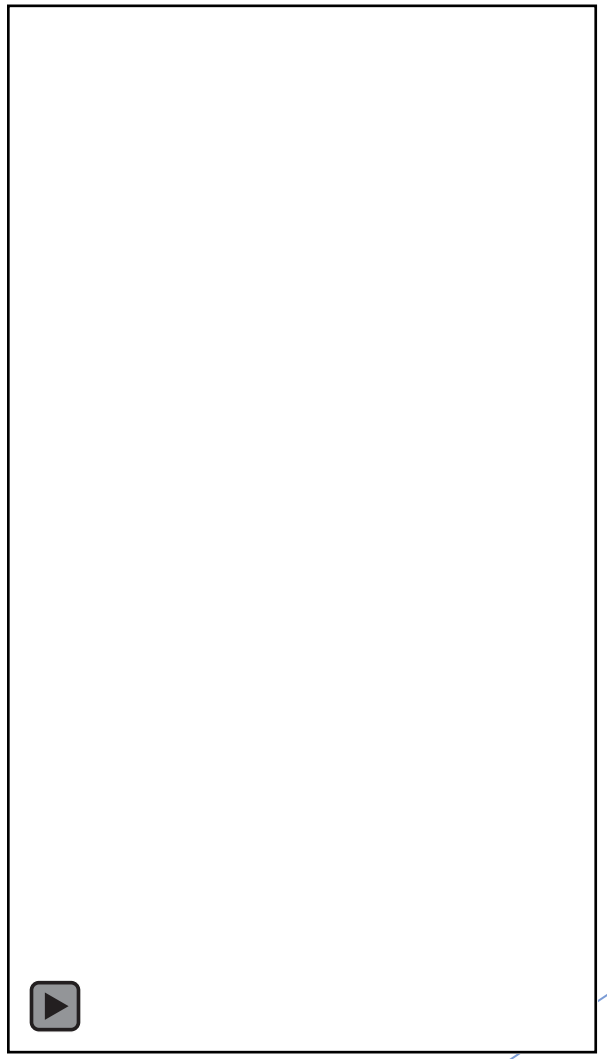
RYMAR
WATERWORKS INNOVATIONS

How is The **Marlee Float™** Different?

Cost Effective Product

- Six models to choose from with simple, cost effective conversion kits allow weir size to be easily changed
- Orifice Plate held securely in place
- Each model provides 3 to 5 flow rates with 1 device
- Third-party testing to verify flow rates and draw down times

Updated Design in 2020 to always stay level in pond



RYMAR™
WATERWORKS INNOVATIONS

How is The **Marlee Float™** Different?

- Custom Molded Float for the 3”, 4”, 6” & 8” Models
- Built-in handles make for easier carrying of 6” & 8”
- Custom colors are available with lead time of 2 months

RYMAR
WATERWORKS INNOVATIONS

6 Models available, each with a wide range of flow rates

8” skimmer with 8” pipe has the highest flow rate of any skimmer available

Ohio EPA Sediment Basin Sizing and Dewatering Compliance Tool

Step 1 – Sediment Basin Volume Requirements

Sediment Basin Sizing and Dewatering Compliance Tool

version 1.1 2020-06-26

Project Summary

Project Name:		
Project Location:		Street address (or street name and nearest intersection), City, state, zip code
Subwatershed ID/Label:		
Project Latitude:		Enter latitude at entrance to site in decimal degrees (format: 40.947544)
Project Longitude:		Enter longitude at entrance to site in decimal degrees (format: -81.465240)
NPDES Permit Applicant:		
Submitted by:		Name of design engineer
Date:		mm/dd/yyyy
Watershed:	Statewide	Select from dropdown which watershed the project is located in, select "Statewide" if not within the Big Darby Creek Watershed
Subwatershed Total Drainage Area, A_{total} =	15.00 acres = 653,400 ft^2	Report to the nearest 0.01 acre; include any drainage from off-site
Subwatershed Disturbed Drainage Area, A_{dist} =	10.00 acres = 435,600 ft^2	

All Basin dewatering discharge calculations in these worksheets assume free discharge from the outlet (i.e., no tailwater)

Step 1 - Sediment Basin Volume Requirements

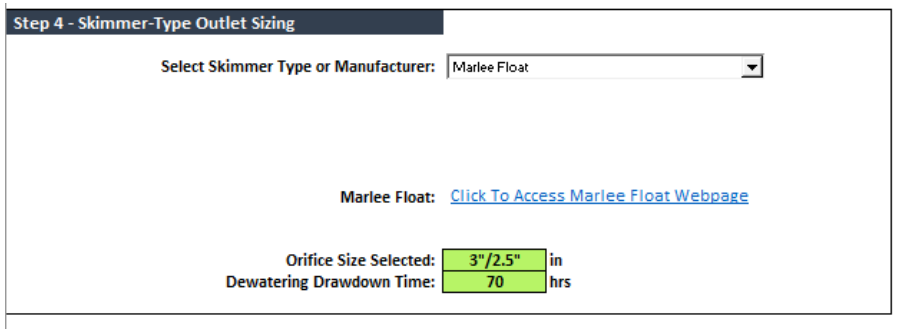
For Statewide Watersheds

Minimum Sediment Storage Volume, Vsediment =	10000 ft3	=	370 yd3	=	0.230 acre-ft	Requirement: Minimum Sediment Volume = 1000 ft3/acre of disturbed drainage area
Minimum Dewatering Zone Volume, Vdewatering =	27000 ft3	=	1,000 yd3	=	0.620 acre-ft	Requirement: Minimum Dewatering Volume = 1800 ft3/acre of total drainage area

Ohio EPA Sediment Basin Sizing and Dewatering Compliance Tool

Step 3 – Outlet Elevation and Storage Volumes
Step 4 – Skimmer Type Outlet Sizing - Includes Multiple Skimmer Options

Marlee Float Skimmer is included IN OH EPA Design Tool



Direct to webpage, open the Basin with Permanent Pool Design (Ohio) tool under Marlee Float: Design Tools. Fill out spreadsheet to determine skimmer size and model required. Include Marlee spreadsheet in SWP3

Check to ensure that orifice sizing calculation is done using required, NOT provided dewatering volume
Check that dewatering drawdown time is greater than 2 days and less than 7 days

Marlee Float Skimmer Design Tool

https://rymarwaterworks.com/marlee-float-specs/

Design Aid Tool – Permanent Pool - Input areas are shaded in yellow

Confirm Calculated Volume is similar to Required Dewatering Volume

Design Tool factors in change of flow rate with depth of basin

Marlee Float Skimmer Size Selection Tool for areas that require a permanent sediment storage volume and temporary dewatering volume - Version 2.1

This skimmer size selection tool is designed to more accurately calculate the draw down rate for specific skimmers based on specific basin criteria. Although they are often referred to as constant flow devices, skimmers have been shown to actually have variable flow rates, which are dependent upon a variety of factors. Testing is typically required to determine the actual flow rates. The use of a calculated flow rate to select a skimmer to meet a required draw down time has been widely accepted, however, as skimmer technology advances, many regulatory agencies are moving towards requiring more accurate models. This design tool takes into account basin size and depth, which directly correlate to skimmer flow rate. By incorporating these factors a more accurate selection of the skimmer can be made.

Date	August 1, 2020		User Entries														
Project Name	Buckeye Acres		Basin Description	Skimmer Basin 1													
Project Location	Columbus, OH		Required Sediment Storage Volume:	Disturbed Area	10	Acres	1000	CF/AC =	10,000	CF							
Company	Meyer Engineering		Required Dewatering Volume	Total Drainge Area	15	Acres	1800	CF/AC =	27,000	CF							
Engineer	J. Fields		For Calculated Pond Volume, adjust pond dimension inputs so that the volume is within 5% of Required Dewatering Volume														

Inputs		Calculations	
Max. Time to Drain, hrs =	168	Calculated Pond Volume, ft^3 =	27,500
Min. Time to Drain, hrs =	48		
Pond Depth, ft =	2.5	Calculated Pond Volume, gal =	205,700
Pond Top Length, ft =	200	No. of Depth Increments for Calcs, in. =	20
Pond Top Width, ft =	100	Depth Increments for Calcs, in. =	1.5
Pond Bottom Length, ft =	100	Note: Equations are from product testing:	
Pond Bottom Width, ft =	40		

									MF 2" - 0/5" Orifice			MF 2" - 0.75" Orifice			MF 2" - 1.0" Orifice			MF 2" - 1.5" Orifice		
									Flow Rate:			Flow Rate:			Flow Rate:			Flow Rate:		
									$1.6425 * depth^{0.0636}$			$6.4078 * depth^{0.0312}$			$7.5459 * depth^{0.0748}$			$14.221 * depth^{0.0401}$		
Water Level Depth, in.	Avg. Water Level Depth, in.	Incr. Depth, in	L	W	Incr. Dis-charge, ft3	Cumm. Dis-charge, ft3	Cumm. Dis-charge, gal	% of Total Volume Dis-charged	Skimmer Flow Rate, gal/min	Skimmer Flow Rate, cfs	Cumm. Drain Time, hrs.	Skimmer Flow Rate, gal/min	Skimmer Flow Rate, cfs	Cumm. Drain Time, hrs.	Skimmer Flow Rate, gal/min	Skimmer Flow Rate, cfs	Cumm. Drain Time, hrs.	Skimmer Flow Rate, gal/min	Skimmer Flow Rate, cfs	Cumm. Drain Time, hrs.
30			200	100																
28.5	29.25	1.5	195	97	2432	2432	18190	8.8%	1.7	0.004	174	6.6	0.015	46	8.1	0.02	38	14.7	0.03	21
27	27.75	1.5	190	94	2298	4730	35380	17.2%	1.7	0.004	340	6.6	0.015	90	8.0	0.02	73	14.7	0.03	40
25.5	26.25	1.5	185	91	2168	6898	51598	25.1%	1.7	0.004	496	6.6	0.015	131	8.0	0.02	107	14.7	0.03	58
24	24.75	1.5	180	88	2042	8940	66871	32.5%	1.7	0.004	644	6.6	0.015	170	8.0	0.02	139	14.6	0.03	76
22.5	23.25	1.5	175	85	1919	10859	81228	39.5%	1.7	0.004	784	6.5	0.015	206	7.9	0.02	169	14.6	0.03	92
21	21.75	1.5	170	82	1801	12660	94697	46.0%	1.7	0.004	916	6.5	0.015	241	7.9	0.02	198	14.6	0.03	108
19.5	20.25	1.5	165	79	1686	14346	107305	52.2%	1.7	0.004	1039	6.5	0.015	273	7.8	0.02	224	14.5	0.03	122

Design Aid Tool
Rest of Page Auto-calculates &
Puts Results on Skimmer Report Page

22	161	56	1838	5684	42517	19.6%	2	0.00	397	7	0.01	106	8
23	159	55	1783	7467	55852	25.7%	2	0.00	522	7	0.01	140	8
24	158	54	1728	9195	68779	31.7%	2	0.00	644	7	0.01	172	8
25	156	53	1674	10869	81301	37.4%	2	0.00	763	7	0.01	204	8
26	155	52	1621	12490	93425	43.0%	2	0.00	879	7	0.01	234	8
27	153	50	1568	14058	105156	48.4%	2	0.00	991	7	0.01	264	8
28	152	49	1516	15575	116499	53.6%	2	0.00	1100	7	0.01	293	8
29	150	48	1465	17040	127459	58.7%	2	0.00	1206	7	0.01	320	8
30	149	47	1415	18455	138043	63.6%	2	0.00	1309	7	0.01	347	8
31	147	46	1365	19820	148255	68.3%	2	0.00	1410	7	0.01	373	8
32	146	44	1316	21136	158101	72.8%	2	0.00	1507	6	0.01	399	8
33	144	43	1268	22404	167586	77.2%	2	0.00	1602	6	0.01	423	8
34	143	42	1221	23625	176715	81.4%	2	0.00	1694	6	0.01	447	8
35	141	41	1174	24799	185494	85.4%	2	0.00	1783	6	0.01	470	7
36	140	40	1128	25926	193929	89.3%	2	0.00	1871	6	0.01	492	7
37	138	38	1082	27009	202025	93.0%	2	0.00	1957	6	0.01	514	7
38	137	37	1038	28046	209786	96.6%	2	0.00	2042	6	0.01	534	7
39	135	36	994	29040	217219	100.0%	1	0.00	2129	6	0.01	555	6
40	**Skimmer / Orifice Combinations with Sufficient Flow:**						**no**			**no**			
41													
42									Skimmer draw down time for selection				
43									Typically recommend skimmer with draw				
44									down time closest to 72 hours				
45													
46													

Sizing Calcs | Skimmer Report | Sheet3

Skimmer Report Page

Design Aid Tool
Skimmer Size Selection Report Page

Confirm Sediment Storage and Dewatering Volume Match Basin Design

Using the input parameters from the Sizing Calcs entry page, this report is automatically generated.

Marlee Float Skimmer Size Selection Report

Date	August 1, 2020	
Company	Meyer Engineering	
Engineer	J. Fields	
Project Name	Buckeye Acres	
Project Location	Columbus, OH	
Basin Description	Skimmer Basin 1	
Total Disturbed Area	10	Acres
Required Sediment Storage Volume:	10,000	CF
Total Drainage Area	15	Acres
Required Dewatering Volume	27,000	CF

Confirm Calculated Pond Volume is similar to Required Dewatering Volume

Inputs		Calculations	
Max. Time to Drain, hrs =	168	Calculated Pond Volume, ft^3 =	27,500
Min. Time to Drain, hrs =	48		
Pond Depth, ft =	2.5	Calculated Pond Volume, gal =	205,700
Pond Top Length, ft =	200		
Pond Top Width, ft =	100		
Pond Bottom Length, ft =	100		
Pond Bottom Width, ft =	40		

Minimum Average Flow Rate Allowable	3,929	cfd to drain in	168	hrs
	0.045	cfs		
Maximum Average Flow Rate Allowable	13,750	cfd to drain in	48	hrs
	0.159	cfs		

Design Aid Tool
Skimmer Size Selection
Report Page

Skimmer Size Selection Report gives you skimmer size & orifice size to use for required flow rate

Select skimmer based on preferred draw down time – typically recommend skimmer with time closest to 72 hours

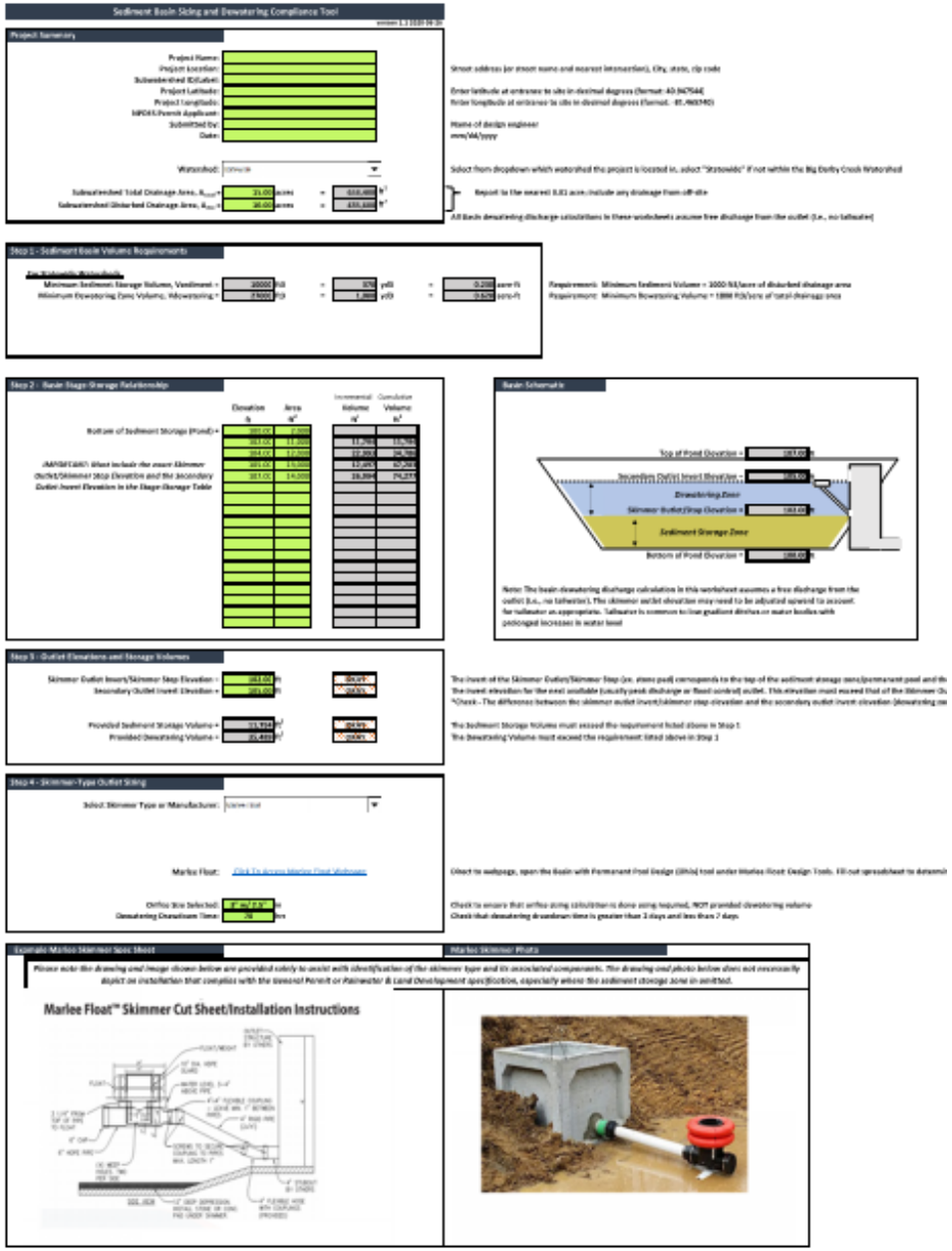
Include this report in SWPPP

Marlee Float Selection Chart

Model #	Orifice	Draw down time (hrs)	Acceptable for basin
2"	0.5"	1955	no
2"	0.75"	507	no
2"	1.0"	424	no
2"	1.5"	228	no
2"	2"	141	MF 2" - 2"
3"	1.5"	197	no
3"	2.0"	109	MF 3" - 2.0" Orifice
3"	2.5"	70	MF 3" - 2.5" Orifice
3"	3"	52	MF 3" - 3"
4"	2.0"	100	MF 4" - 2.0" Orifice
4"	2.5"	66	MF 4" - 2.5" Orifice
4"	3.0"	43	no
4"	4"	22	no
6"	3.5"	35	no
6"	4"	26	no
6"	4.5"	20	no
6"	5"	16	no
6"	6"	11	no
8"	5"	14	no
8"	6"	11	no
8"	6.5"	9	no
8"	7"	7	no
8"	8"	6	no
8"**	8"**	5	no

** This 8" skimmer requires an 8" pipe instead of a 6" pipe from the skimmer to the outlet and is a special order item. Make sure to note on plans this is needed if this version is specified. Requires two weeks for shipping

Ohio EPA Sediment Basin Sizing and Dewatering Compliance Tool
Includes Printout of Both Design Tools in SWPPP



RYMAR
WATERWORKS INNOVATIONS

Marlee Float Skimmer Size Selection Report

Date	August 1, 2020
Company	Meyer Engineering
Engineer	J. Fields
Project Name	Buckeye Acres
Project Location	Columbus, OH
Basin Description	Skimmer Basin 1
Total Disturbed Area	10 Acres
Required Sediment Storage Volume:	10,000 CF
Total Drainage Area	15 Acres
Required Dewatering Volume	27,000 CF

Confirm Calculated Pond Volume is similar to Required Dewatering Volume

Inputs	Calculations
Max. Time to Drain, hrs = 168	Calculated Pond Volume, ft^3 = 27,500
Min. Time to Drain, hrs = 48	
Pond Depth, ft = 2.5	Calculated Pond Volume, gal = 205,700
Pond Top Length, ft = 200	
Pond Top Width, ft = 100	
Pond Bottom Length, ft = 100	
Pond Bottom Width, ft = 40	

Minimum Average Flow Rate Allowable 3,929 cfd to drain in 168 hrs
0.045 cfs

Maximum Average Flow Rate Allowable 13,750 cfd to drain in 48 hrs
0.159 cfs

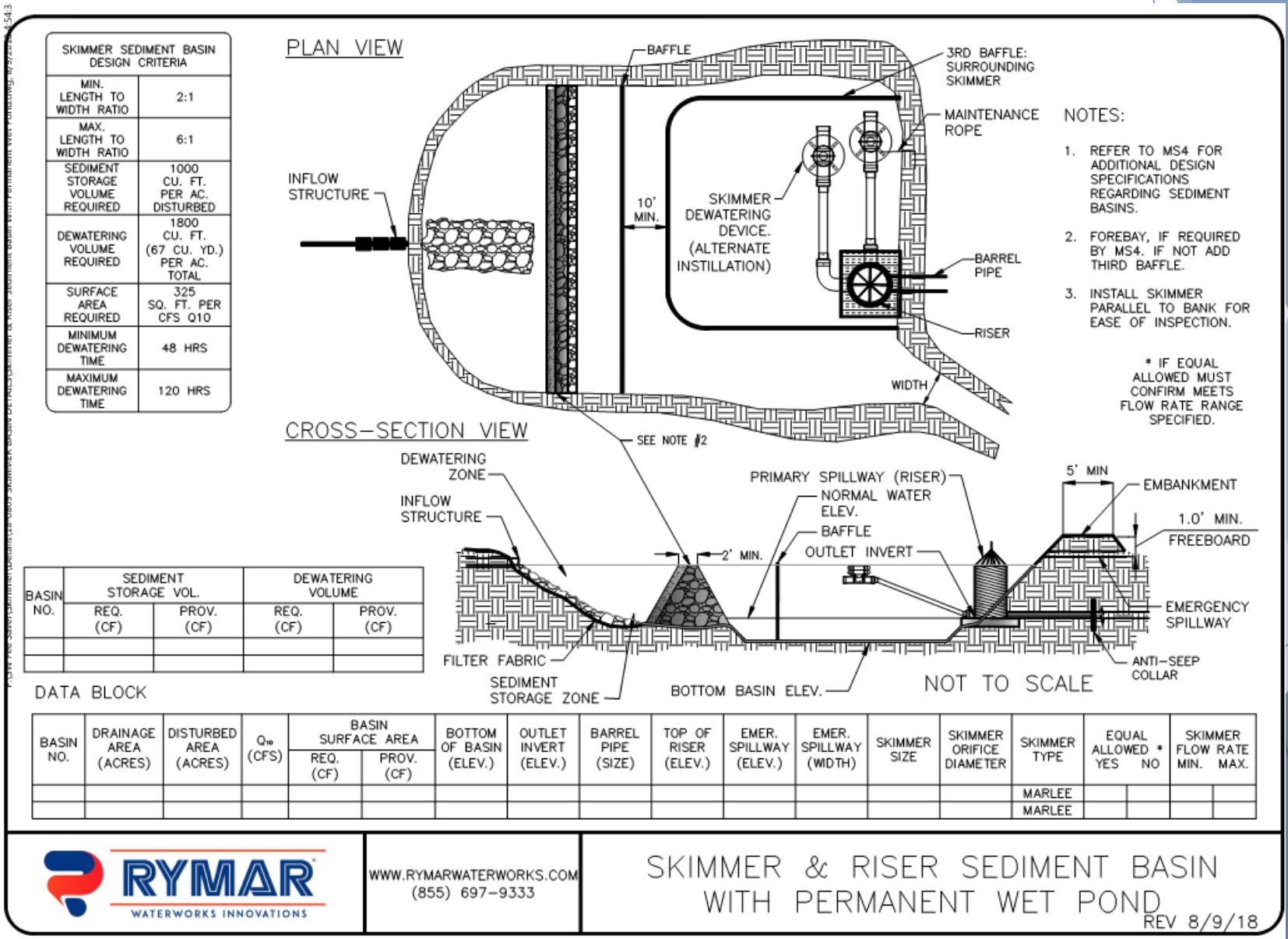
Marlee Float Selection Chart

Model #	Orifice	Draw down time (hrs)	Acceptable for basin
2"	0.5"	1955	no
2"	0.75"	507	no
2"	1.0"	424	no
2"	1.5"	228	no
2"	2"	141	MF 2" - 2"
3"	1.5"	197	no
3"	2.0"	109	MF 3" - 2.0" Orifice
3"	2.5"	70	MF 3" - 2.5" Orifice
3"	3"	52	MF 3" - 3"
4"	2.0"	100	MF 4" - 2.0" Orifice
4"	2.5"	66	MF 4" - 2.5" Orifice
4"	3.0"	43	no
4"	4"	22	no
6"	3.5"	35	no
6"	4"	26	no
6"	4.5"	20	no
6"	5"	16	no
6"	6"	11	no
8"	5"	14	no
8"	6"	11	no
8"	6.5"	9	no
8"	7"	7	no
8"	8"	6	no
8"**	8"**	5	no

** This 8" skimmer requires an 8" pipe instead of a 6" pipe from the skimmer to the outlet and is a special order item. Make sure to note on plans this is needed if this version is specified. Requires two weeks for shipping

Basin Details available on our website www.MarleeFloat.com

Make sure to specify the **required dewatering volume** and **draw down time frame** on your plan set



Design/Specs/Cut Sheets Page

Marlee Float Specs

We've assembled informational details including installation instructions, basin diagrams, and product cut sheets to better assist you in sourcing the Marlee Float for your next project. Please reach out to a RYMAR Specialist if you have additional questions.

Marlee Float: Design Tools

Download these simple tools to help you determine which skimmer size best fits your needs.

DESIGN TOOL (XLS)

Basin with Permanent Pool Design (Ohio)

COMPARISON CHART

Marlee Float: Product Detail Cut Sheets

2"

0.5-2 INCH DESIGN (PDF)

0.5-2 INCH DESIGN (DWG)

0.5-2 INCH DESIGN CUT SHEETS

3"

1.5-3 INCH DESIGN (PDF)

1.5-3 INCH DESIGN (DWG)

1.5-3 INCH DESIGN CUT SHEETS

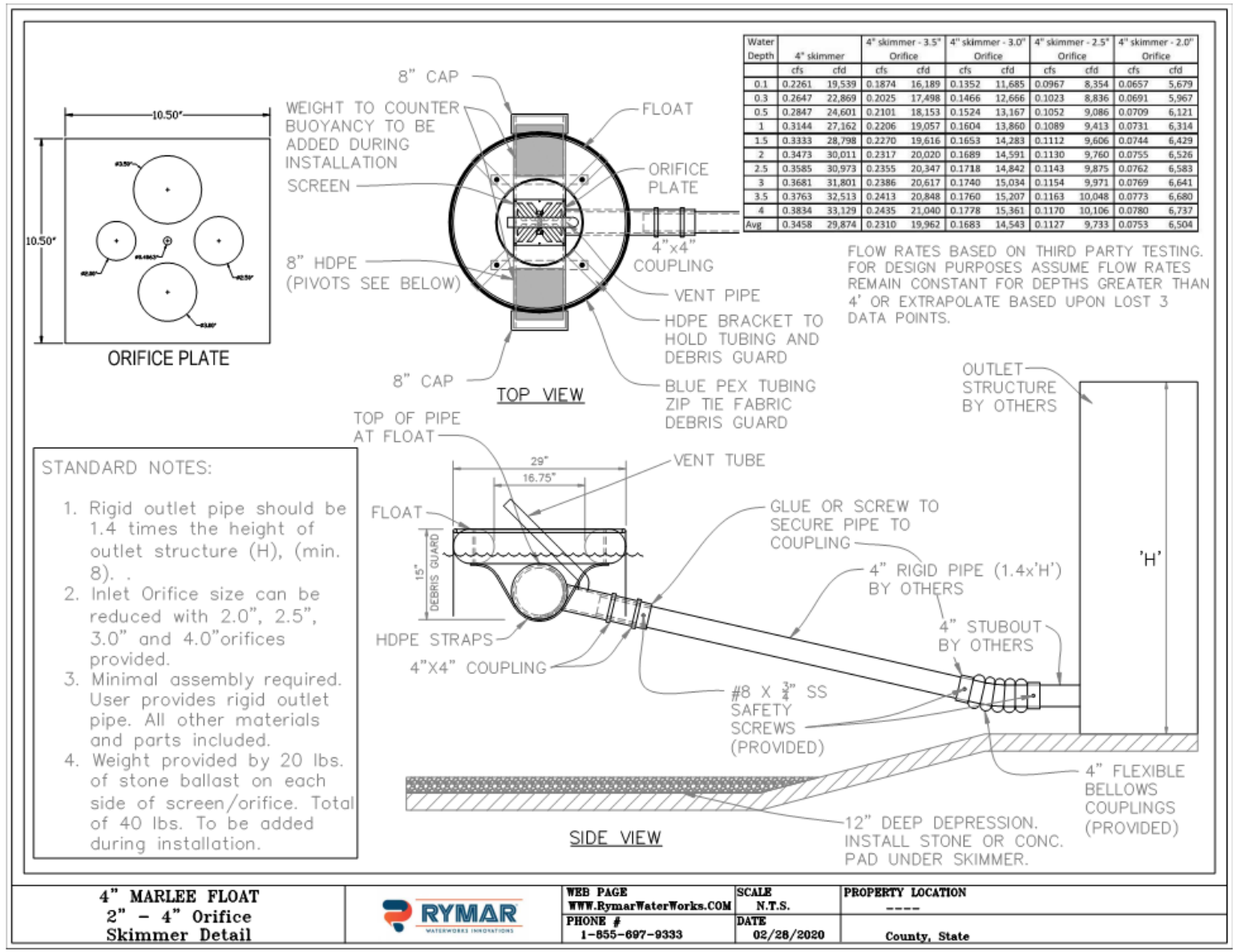
4"

2-4 INCH DESIGN (PDF)

2-4 INCH DESIGN (DWG)

2-4 INCH DESIGN CUT SHEETS

RYMAR
WATERWORKS INNOVATIONS



Water Depth	4" skimmer		4" skimmer - 3.5" Orifice		4" skimmer - 3.0" Orifice		4" skimmer - 2.5" Orifice		4" skimmer - 2.0" Orifice	
	cfs	cfd	cfs	cfd	cfs	cfd	cfs	cfd	cfs	cfd
0.1	0.2261	19,539	0.1874	16,189	0.1352	11,685	0.0967	8,354	0.0657	5,679
0.3	0.2647	22,869	0.2025	17,498	0.1466	12,666	0.1023	8,836	0.0691	5,967
0.5	0.2847	24,601	0.2101	18,153	0.1524	13,167	0.1052	9,086	0.0709	6,121
1	0.3144	27,162	0.2206	19,057	0.1604	13,860	0.1089	9,413	0.0731	6,314
1.5	0.3333	28,798	0.2270	19,616	0.1653	14,283	0.1112	9,606	0.0744	6,429
2	0.3473	30,011	0.2317	20,020	0.1689	14,591	0.1130	9,760	0.0755	6,526
2.5	0.3585	30,973	0.2355	20,347	0.1718	14,842	0.1143	9,875	0.0762	6,583
3	0.3681	31,801	0.2386	20,617	0.1740	15,034	0.1154	9,971	0.0769	6,641
3.5	0.3763	32,513	0.2413	20,848	0.1760	15,207	0.1163	10,048	0.0773	6,680
4	0.3834	33,129	0.2435	21,040	0.1778	15,361	0.1170	10,106	0.0780	6,737
Avg	0.3458	29,874	0.2310	19,962	0.1683	14,543	0.1127	9,733	0.0753	6,504

4" MARLEE FLOAT 2" – 4" Orifice Skimmer Detail	RYMAR	WEB PAGE WWW.RymarWaterWorks.COM PHONE # 1-855-697-9333	SCALE N.T.S. DATE 02/28/2020	PROPERTY LOCATION ---- County, State

Why Consider Surface Withdrawal for Permanent Basins?

Permanent basins rely upon settlement to capture pollutants. Designs are typically based on a “First Flush” volume released over 24 - 48 hours to attempt to achieve sufficient settlement time.

Low-flow water quality orifices often need to be 3” or less in diameter and are prone to clogging.

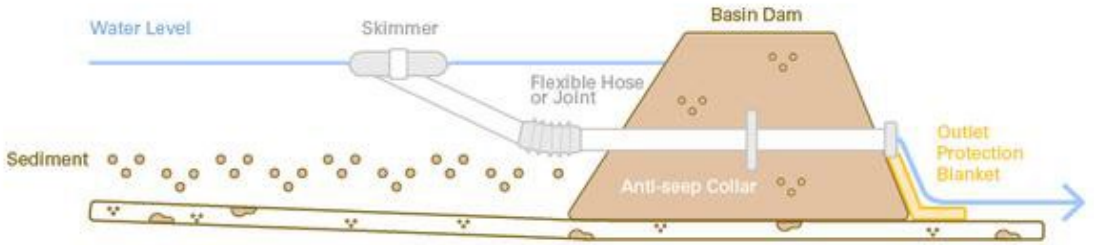
Basins are meant to collect sediment and will often have significant sediment build-up over time.

Surface withdrawal from permanent detention or retention basins releases the cleaner water from near the surface and allows more time for pollutants to settle.

Does it make sense to do this during construction but then use an orifice at the bottom of the pond for post-construction?

Basins rely upon the natural settling of sediment particles

as they travel from the inlet to the outlet.



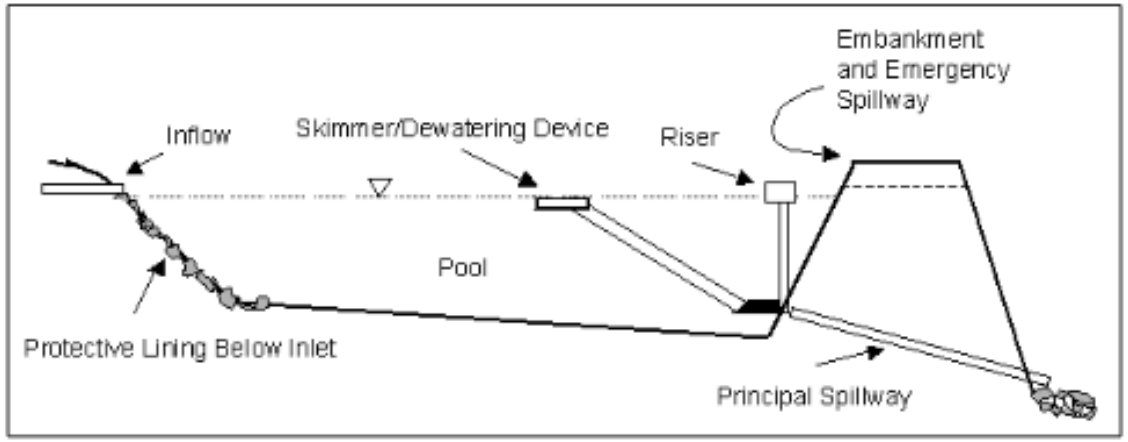
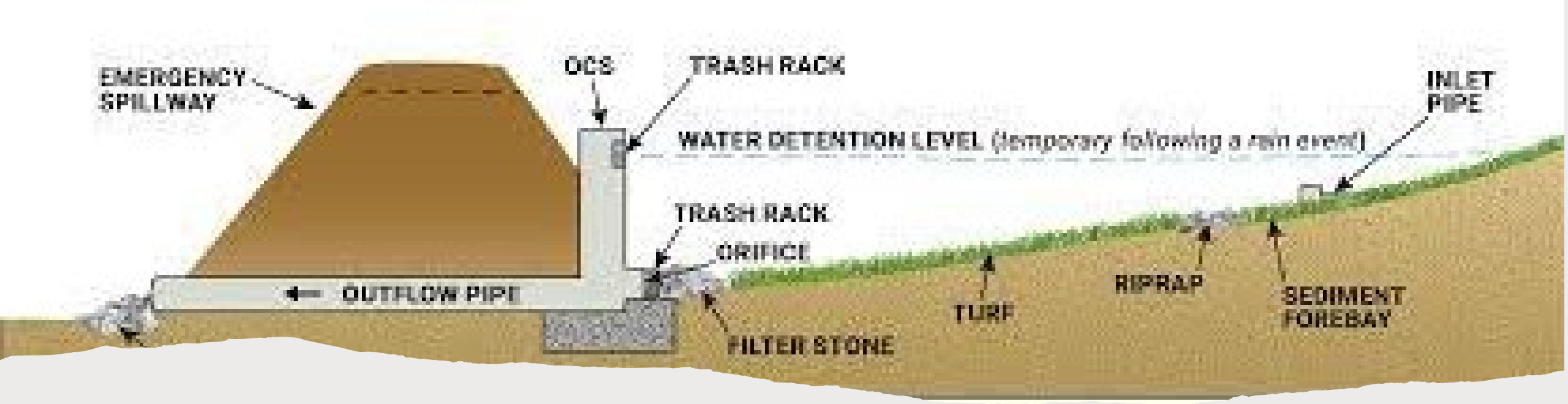


Figure 6.1.2 Typical components of a settling basin



Typical Dry Detention Basin

- Skimmer is removed
- Low Flow Orifce installed at bottom of riser to release “First Flush”
- Often includes some sort of guard or filter to attempt to reduce clogging, which requires routine maintenance to keep functional

Flaws with using Extended Detention for Water Quality

Basins are designed to capture pollutants by holding runoff for an extended time, allowing for settlement

Basins that rely on settling time provide very little treatment for smaller storm events due to limited ponding/holding time

Volume based design results in larger pond sizes

Benefits to Using Skimmers for Post Construction

- The skimmer can be sized to control the peak rate for lower storm events
- Skimmer increases trapping efficiency by withdrawing from the surface, where water is cleaner
- Skimmer is easy to access or pull to side of pond for maintenance

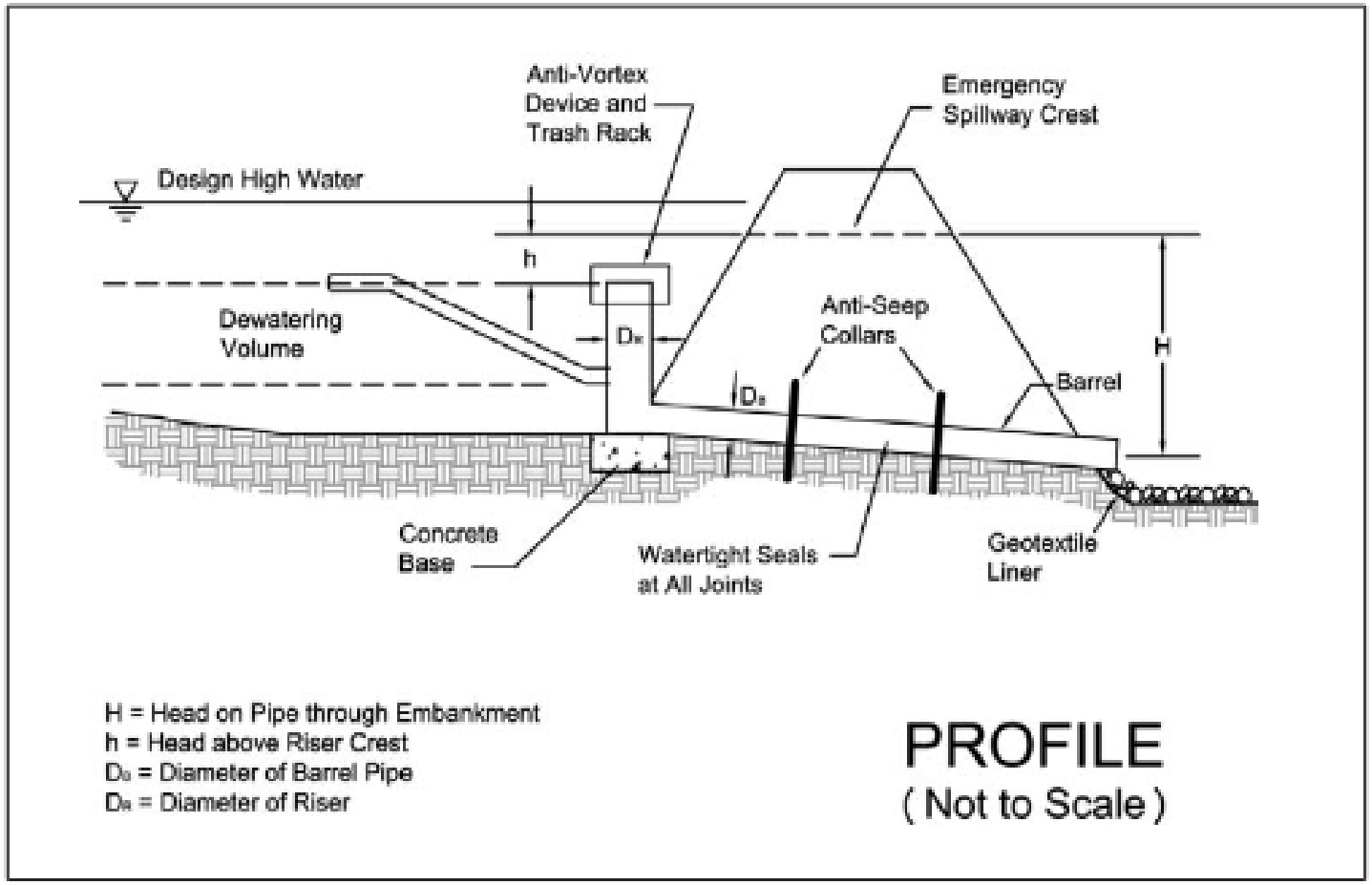


Figure 6.1.10 Principal Spillway Design

Audience Question

Have you ever considered using a Skimmer permanently?

If not, now that you are aware of the benefits would you?

Benefits to Filtration instead of Settling

Ponds provide a large containment volume to reduce maintenance frequency and treat larger drainage areas

There is excellent potential to retrofit older basins that did not include water quality benefits in the design if peak flow rate can be maintained

Filters around skimmers in ponds are relatively easy to access and maintain.

Challenges to Using Skimmers with Filtration

Filters are prone to clog over time and will require maintenance and periodic cleaning or changing

Skimmer must be durable and last more than a few years to be suitable for permanent use. May need alternate drain during frozen conditions.

There are no established standards for basis of design and permitting based upon combination of pond and filtration

Testing Protocol

There are currently two widely recognized testing protocols – Washington TAPE program and NJCAT Certification

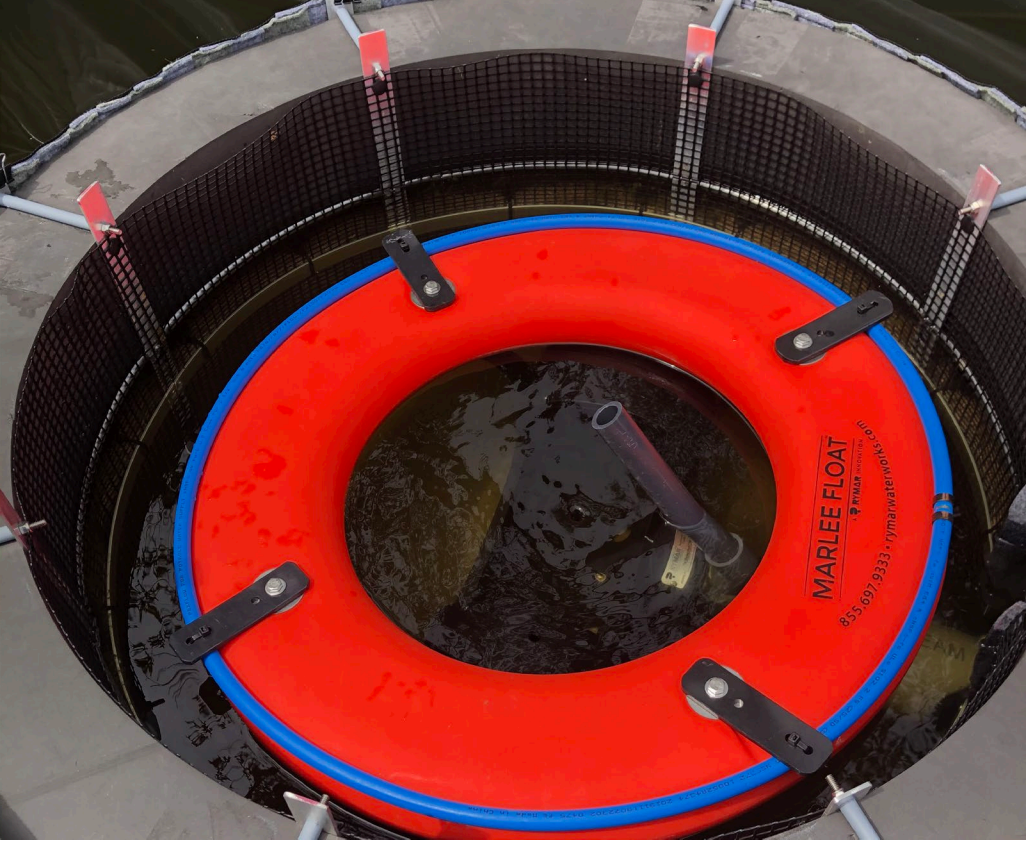
NJCAT has established testing procedures for Filtration Manufactured Treatment Devices (MTDs)

ASTM Standards have recently been established for Sediment Retention Testing and other ASTM Standards are in process

Filter Prototype Testing

Have gone through several rounds of testing to develop a final product

- **Tested High Flow Non-Woven Geotextile in strips with two offset inner layers of Coir Filter (openings at top or bottom of each layer)**
  - **AOS 100+**
  - **140-150+ gpm/ft flow rate**



Prototype Testing Results

- **Results**
  - **Flow rates of high flow geotextiles generally kept up with skimmer.**
  - **Provided very good filtration, even with open bottom of basket**

Field Test Site

The prototype was installed in March 2021
with latest model that uses two stage filter

Prototype Field Testing

- The prototype is regularly monitored and has been in the pond for over 24 months
- Area flowing to pond is highly developed with few other stormwater management facilities, therefore, large volume of sediment, trash and debris enters this pond

Prototype Field Monitoring

- Time lapse camera was installed to monitor flow.
- Evening of 7/7 – started to rain
- Morning of 7/8 – pond full

Prototype Field Monitoring

- Later Morning of 7/8 – pond starting to drain
- Evening of 7/8 – pond draining

Prototype Field Monitoring

- Morning 7/9 - Rained overnight, pond draining
- Morning 7/10 – Pond almost drained

Prototype Field Monitoring

- Vegetation has started to grow in inner non-woven filter. Will evaluate for nutrient removal potential.

Prototype Field Monitoring

March 2022

- The vegetation tended to die off over the winter and had minimal effect on the skimmer or filter.
- Future research could include use of specific vegetation for targeted pollutant removal, such as phosphorous or nitrogen

Prototype Field Monitoring

July 2022

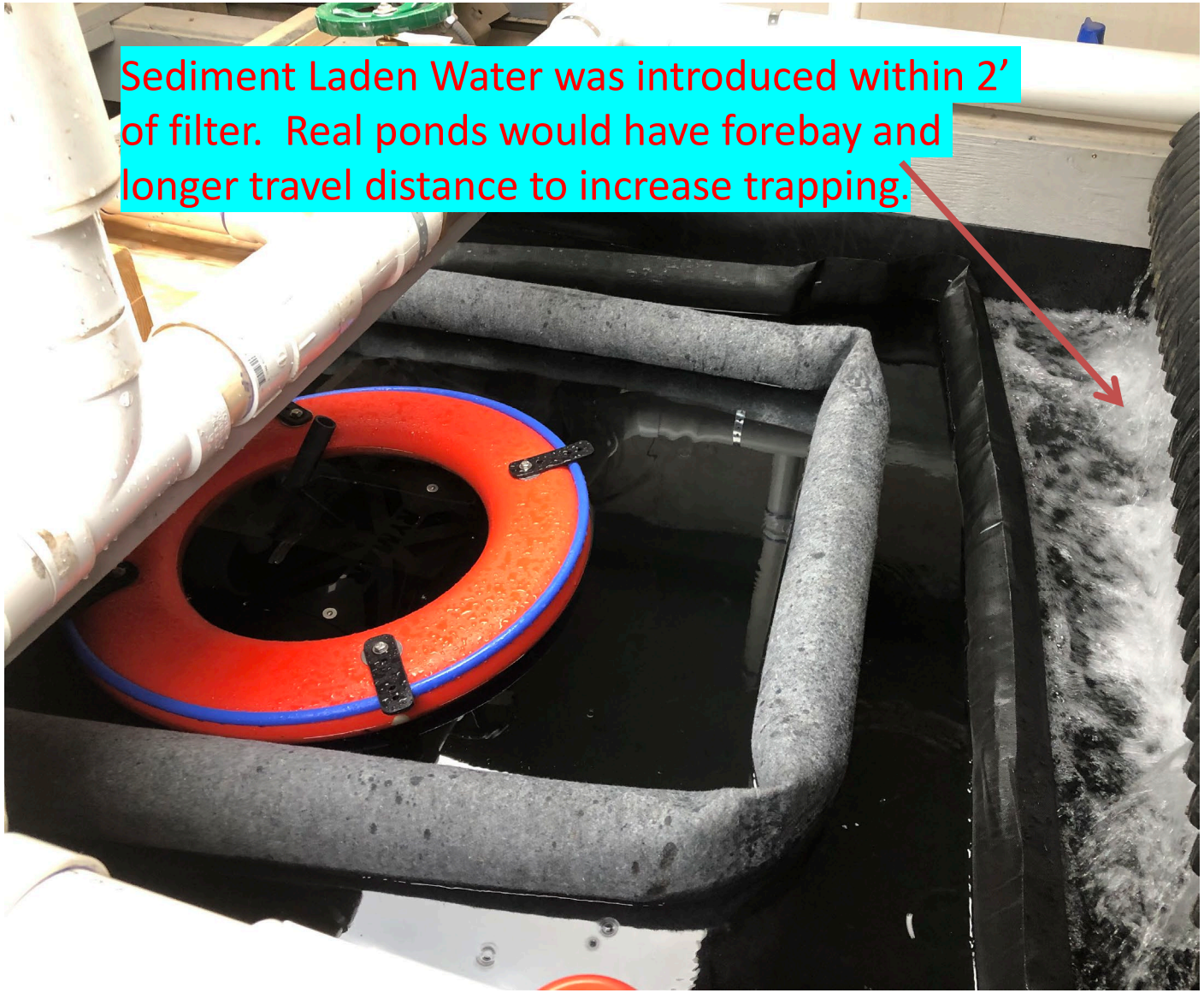
- The vegetation returned
- Future research could include use of specific vegetation for targeted pollutant removal, such as phosphorous or nitrogen

Field Testing Results

- **Results**
  - **Field testing of two stage filtration model shows discharge water has less turbidity and minimal sediment.**
  - **Third Party Testing to confirm TSS removal performed by TRI Environmental to confirm TSS removal efficacy**

Third Party Testing Results

- **TRI Environmental tested two versions of the skimmer with filter in accordance with ASTM C1746.**
- **ASTM C1746 is a standard test method for sediment retention devices.**
- **Tank was setup to minimize effect of the "pond" by introducing sediment laden water within 2' of the filter.**
- **Modeled as Dry Pond. Wet ponds would be expected to have higher trapping efficiency**



Testing Results

Both versions achieved greater than **<u>90% TSS Removal Efficiency</u>**

Future R&D will be conducted to test filter media to remove metals, hydrocarbons and other pollutants

Inner filter does absorb hydrocarbons and includes anti-microbial treatment

Benefits to Filtration vs Settlement

The peak rate of discharge can be based on filter treatment flow rate up to first quantity storm event

The filter treats 100% of runoff from storms up to the peak rate of the filter - treats larger portion of annual rainfall

The filtration media can be customized to target specific pollutants of concern, including hydrocarbons, metals, bacteria and possibly nutrients

Summary

Skimmers are less prone to clogging than orifices located at the bottom of the pond and often require less maintenance to keep the pond functioning properly.

Skimmers can be a very effective way to retrofit existing basins to reduce maintenance and provide enhanced water quality

Testing has confirmed 90% TSS Removal Efficiency for the Rymar Post-Construction Water Quality Filter.

This meets requirements for most MS4s.

RYMAR™
WATERWORKS INNOVATIONS

Questions?

- **Jamie McCutchen, PE**
- **3620 Pelham Road, PMB 390**
- **Greenville, SC 29615**
- **PH: 864-918-3676**
- **Email: jamie@rymarwaterworks.com**

- www.RymarWaterWorks.com
- www.MarleeFloat.com