North Bay Village

OFFICIAL AGENDA
SUSTAINABILITY AND RESILIENCE TASK FORCE
VIRTUAL MEETING MEETING
ID# 828 6872 9559 PASSWORD - 003746
Tuesday, April 25, 2023
6:30 PM

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1. Opening Items
A. Call to Order
B. Roll Call

2. Guest Speaker

2a. Joseph Bonasia – Communications and Operations Director for Florida's Right to Clean Water

3. Approval of Meeting Minutes

3a. Approval of the March 28th, 2023 Meeting Minutes

03.28.23 Minutes SRTF.pdf

4. Old Business

4a. Future Village Hall – Green Build-Outs

5. New Business

5a. Presentation on Stormwater Filters

Stormwater filters for North Bay Village.pdf

5b. Presentation on Rainwater Harvesting and Finding Cleaner Solutions for Water Harvesting

5c. Updates on Yoga Under the Stars Event

6. Staff/Commission Liaison Updates

7. Public Comments

8. Agenda Items for Next Meeting: May 23, 2023

9. Adjournment

THIS MEETING IS OPEN TO THE PUBLIC. IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT OF 1990, ALL PERSONS THAT ARE DISABLED; WHO NEED SPECIAL ACCOMMODATIONS TO PARTICIPATE IN THIS MEETING BECAUSE OF THAT DISABILITY SHOULD CONTACT THE OFFICE OF THE VILLAGE CLERK AT 305-756-7171 EXT. 45 NO LATER THAN FOUR DAYS PRIOR TO SUCH PROCEEDING.

IN ACCORDANCE WITH THE PROVISIONS OF SECTION 286.0105, FLORIDA STATUTES, ANYONE WISHING TO APPEAL ANY DECISION MADE BY VILLAGE COMMISSION, WITH RESPECT TO ANY MATTER CONSIDERED AT THIS MEETING OR HEARING, WILL NEED A RECORD OF THE PROCEEDINGS AND FOR SUCH PURPOSE, MAY NEED TO ENSURE THAT A VERBATIM RECORD OF THE PROCEEDINGS IS MADE WHICH RECORD SHALL INCLUDE THE TESTIMONY AND EVIDENCE UPON WHICH THE APPEAL IS TO BE BASED. AGENDA ITEMS MAY BE VIEWED AT THE OFFICE OF THE VILLAGE CLERK, NORTH BAY VILLAGE, 1666 KENNEDY CAUSEWAY. ANYONE WISHING TO OBTAIN A COPY OF ANY AGENDA ITEM SHOULD CONTACT THE VILLAGE CLERK AT 305-756-7171 EXT 45. A COMPLETE AGENDA PACKET IS ALSO AVAILABLE ON THE VILLAGE WEBSITE AT www.nbvillage.com.

TO REQUEST THIS MATERIAL IN ACCESSIBLE FORMAT, SIGN LANGUAGE INTERPRETERS, INFORMATION ON ACCESS FOR PERSON WITH DISABILITIES, AND/OR ANY ACCOMMODATION TO REVIEW ANY DOCUMENT OR PARTICIPATE IN ANY VILLAGE-SPONSORED PROCEEDING, PLEASE CONTACT (305) 756-7171 FIVE DAYS IN ADVANCE TO INITIATE YOUR REQUEST. TTY USERS MAY ALSO CALL 711 (FLORIDA RELAY SERVICE).

ITEM NO. 2a

North Bay Village
Recommendation Memorandum

DATE: April 25, 2023

TO: Honorable Mayor, Vice Mayor and Members of the Village Commission

FROM: Genesis Guevara, Assistant to the Village Clerk

SPONSORED BY:

SUBJECT: Joseph Bonasia – Communications and Operations Director for Florida's Right to Clean Water

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RECOMMENDATION

BACKGROUND AND ANALYSIS

BUDGETARY/FINANCIAL IMPACT (Finance Dept.)
NONE

PERSONNEL IMPACT
NONE

ITEM NO. 3a

North Bay Village
Recommendation Memorandum

DATE: April 25, 2023

TO: Honorable Mayor, Vice Mayor and Members of the Village Commission

FROM: Genesis Guevara, Assistant to the Village Clerk

SPONSORED BY:

SUBJECT: Approval of the March 28th, 2023 Meeting Minutes

RECOMMENDATION

BACKGROUND AND ANALYSIS

BUDGETARY/FINANCIAL IMPACT (Finance Dept.)
NONE

PERSONNEL IMPACT
NONE

ATTACHMENTS
03.28.23 Minutes SRTF.pdf

NORTH BAY VILLAGE
SUSTAINABILITY AND RESILIENCE TASK FORCE
MEETING ON ZOOM
Tuesday, March 28th, 2023 - 6:30P.M.

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1. **Meeting was called to order by Denise O'Brien at 6:32pm.**

Board Members Present
Denise O'Brien, Chair
Alisha Graham, Vice Chair
Neil Krasner
Julia Stutts

Board Member Absent
Brenda Krebs

Village Staff Present
Commissioner Rachel Streitfeld
Marlon Lobban, Public Works Director
Silvia Vargas, NBV City Planner

Guests and Members of Public
Harold Somarriba, Architect with Wannemacher Jensen
Scarlett Lanzas - Accountable Impact
Natalia Livian - Project Manager, Wannemacher Jensen
Didier Munoz
Nicole Barnett

2. **Quick review** of tonight's agenda. Intro to participants.
   a. Commissioner Streitfeld announces that the "mermaid" swimmer will be making her way around our village again in April, to bring attention to clean water.

3. **Approval of Minutes:**
   a. Feb. 28, 2023, meeting, Neil moved for approval, Alisha seconded & all in favor.

4. **Green Code discussion:**
   a. Silvia Vargas leads comment that our point system was a good baby step, but questions: What we are looking to prioritize in our green code? Energy, emissions,

Stormwater, Health, Sea level rise? The system we have in place focuses a lot on green building techniques. Do we want to look more towards achieving other goals?

1. Certification challenges, like net zero building.
2. Example -Perez Museum is designed with holistic ideas.

b. Denise explains, we want to do it all. Where does green building fit in? Main objective is to find incentives for new developers. What design elements can be included in a building to make that structure more environmentally friendly. Hoping to make our green code richer.

c. (Silvia) Experience over the last few years has shown with larger projects, our green code elements are already a given. Can there be some level of certification for builders to strive for? Maybe separate out developments from single family homes in our code tables.

d. Harold Somarriba, Architect with Wannemacher Jensen, chosen by the city to design the new town hall and fire station. They will look at sustainable principles and this is where Scarlett Lanza fits in.

e. Scarlett Lanza speaks of looking at the NBV 100 strategy. How does a new green building fit in with the strategy. What standards or framework are we looking at? Referring to UN130 agenda and SDG's (Sustainable Development Goals). Ms. Lanza says her job is to help organizations (or municipalities) to set a plan. Deni brings this around to say that SDGs are a global standard and for our task force we are looking at the big issues through a micro level. Resiliency and sustainability is our focus in our task force. Maybe we can go through the principles and find a few areas to focus. The environmental footprint study would help, but we don't have that much we can collect data on at our small city level. Could start with Harbor Island study, but it may not support our goals. Deni and Scarlett both may study for SDGs together and discuss our goals as a village.

f. Harold Somarriba brings discussion around to say that silver certification for a green building may be suitable.

1. Alisha asks about costs of certification.
2. Harold replies that $6,000 is an administration cost, for commercial build. Fees are less for single family homes. City may want to add that into our city codes, to help, streaming it into our zoning process.

g. (Deni) Two separate tables for green codes for multifamily vs. single family recommended?

1. (Silvia) Possible that NBV could require any new building to be certified a green building in order to get build here. This could be the future? The city would have to give guidance to the individual homeowners. Keeping it easy and simple is important.
2. Alisha mentions plans for homeowners (rainwater harvesting).
3. (Deni), can we have some guidance for those who want to bring improvements to existing homes/buildings?
4. Silvia - the sections of 8.18 to 8.31 deal with sustainability features, like green walls, green roofs, wind turbines and clothes lines. Last section is fairly

weak but deals with this issue for existing buildings and fast tracking renovation permitting.
5. Alisha - met with architect who designs Net Zero energy - would like to meet with him for our brainstorming.
6. Deni - Beef up the incentives for retro-fitting - like for example, e-charging stations in existing condos.
7. Harold - Incentives for homeowners - additional ideas? The workforce housing incentives fall within this scope, and this is only on the 79th street corridor (transit zone), Silvia explains. Actually the site for town hall is in this zone. This project now does not include housing, however.
8. 15 minute city - we have that… 5 minute city, movie toward that. (Deni) Been 20 years that residents have asked for bay walk, and Silvia says this is the closest we have ever gotten to making this a reality. Our city manager has accomplished a lot. Fertilizer ban in summer, sea wall revision all here before greater Dade County.
9. Harold - as Florida becomes more desirable, an opportunity for growth. Deni - Newcomers can leave as water rises, they don't know what the challenges are here.

h. Bringing discussion around that we need a separate table system for green code for single family vs larger buildings.
1. Silvia- Green space? minimum requirements raised in NBI. Treasure island has lots of plans coming in where the lots are planned with no permeable areas. She believes they need to be heightened.
2. Driveways on treasure - Neil concerned about all the driveways that have large areas of poured concrete grids. Silvia explains, these are better than asphalt driveways. Permeable concrete is getting better. North Bay Island, there is a limitation on footprint. using permeable driveways are important. Hopes zoning can be similar on Treasure Island.
3. Need a robust set of requirements for builders and single Fam homes.
4. Value of points increased. include certifications.
5. Look toward having a liaison for certification system.
6. design elements.
7. Green space and permeability.
8. Implementation of incentives.

5. New City Hall Project: Harold Somarriba - met with city manager and staff regarding ideas. Looking to build aiming at silver certification. Looking to see what we can build that provides a vision of future of NBV. Ralph may be looking at another session to meet regarding plans around April 25th. By then we can have a more developed plan.

a. White roofs mentioned earlier, Deni says cant we do a green roof? we want to be a leader on this.

b. Water recovery systems? not looked into yet.

c. Discussion here today does identify what we can do. At end of day, balance budget and build a key structure for village. Deni reminds him that

our Task force is not for balancing the budget. We need to push to have a wonderful example of sustainability.

d. Alisha asks, shall we do some research? send ideas?

1. provide a list and goals for what we'd like to see.
2. 100% native plants and source locally.
3. Vertical garden.
4. Solar panels and use for back metering. Need to see what we can do with power we collect… Deni reminds us that FPL does not allow us to sell back to the grid. We need guidance on how to use solar.
4. Scarlett has a list of vendors for solar.
5. Solar, not on roof please, because we want a green roof. Other options are out there for solar. Harold will look at this and hurricane codes.

e. The support team here in NBV is there for the builder. We also have UM and FIU and access to teams there that work with us.

1. Grants definitely can to be accessed for some of this work.
2. Dream big and we will try to get the grants to make this happen.
3. (Scarlett) Department of energy may have some grants available.

f. (Deni) City hall to be built on busiest part of NBV, Harbor Island. We will have Freebie available for people to come to city hall or meetings, but this is a congested corner. Ralph mentioned to Harold we are looking at roundabout, Deni is discouraging this idea. Area is set by FDOT, and light that is there. Neil clarifies, a traffic study will be done, engineering will figure this out. (Harold) Have to look at needs of fire department.

6. New business: Neil- Evaluation Committee - consists of New Krasner, Marlon Lobban and Steve Williamson (city manager of Key Biscayne). After a large packet to review, there are now a short list of 3 vendors and Ralph will review and take to commission. This is for the hiring of a firm to handle the Stormwater master plan and implement construction. This committee has completed their task.

7. **New Business cont.: Baynanza** Clean up on April 15th, on Pelican Harbor. Island cleanup.

8. Alisha will have to chair next meeting set for April 25, 2023. Our Chair, Denise will not be in attendance.

9. Welcome to our new City Liaison, Genesis Guevara. Look forward to working with you.

11. Adjournment:

The motion to adjourn was made by: **Neil Krasner**
and seconded by **Alisha Graham.**

Meeting adjourned at: **8:18pm**

Prepared by Secretary: **Julia Stutts**
This 11th day of April, 2023.

ITEM NO. 4a

North Bay Village
Recommendation Memorandum

NORTH BAY VILLAGE
EST. 1945

DATE: April 25, 2023

TO: Honorable Mayor, Vice Mayor and Members of the Village Commission

FROM: Genesis Guevara, Assistant to the Village Clerk

SPONSORED BY:

SUBJECT: Future Village Hall – Green Build-Outs

RECOMMENDATION

BACKGROUND AND ANALYSIS

BUDGETARY/FINANCIAL IMPACT (Finance Dept.)
NONE

PERSONNEL IMPACT
NONE

ITEM NO. 5a

North Bay Village
Recommendation Memorandum

NORTH BAY VILLAGE
EST. 1945

DATE: April 25, 2023

TO: Honorable Mayor, Vice Mayor and Members of the Village Commission

FROM: Genesis Guevara, Assistant to the Village Clerk

SPONSORED BY:

SUBJECT: Presentation on Stormwater Filters

RECOMMENDATION

BACKGROUND AND ANALYSIS

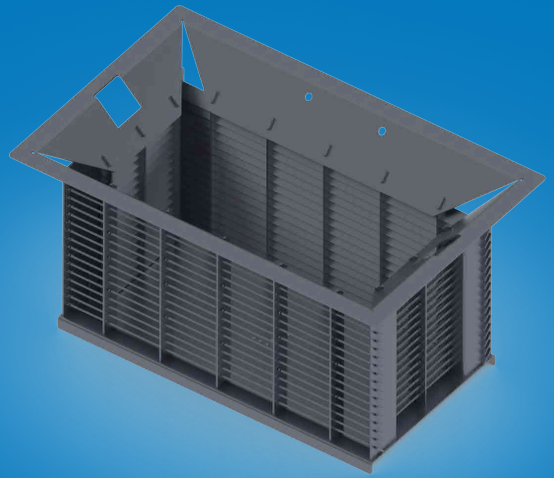
BUDGETARY/FINANCIAL IMPACT (Finance Dept.)
NONE

PERSONNEL IMPACT
NONE

ATTACHMENTS
Stormwater filters for North Bay Village.pdf

Stormwater Filters for North Bay Village

Project Kickoff Meeting: April 4, 2023



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QR Code Storm Drain Markers



Meeting Agenda Items

1. Importance of addressing stormwater pollution.
2. Project Deliverables, Timeline and Major Tasks
3. Sample report deliverables
4. Financials

SOP Technologies

Our company's mission is to Stop Ocean Pollution

We are based in Miami, FL and provide technologies to prevent ocean pollution, prevent floods, and provide cost savings to communities and businesses globally.

Our Tech: Patented Stormwater Filters & Patent Pending QR Code Drain Markers









Professional Associations and Collaborations

Why keep leaves and trash out of the stormwater systems?

Plastics Entering Waterways

"over 80 percent of ocean plastic comes from land-based sources"[1]

"19 to 23 million metric tons, or 11%, of plastic waste generated globally in 2016 entered aquatic ecosystems."[3]


2



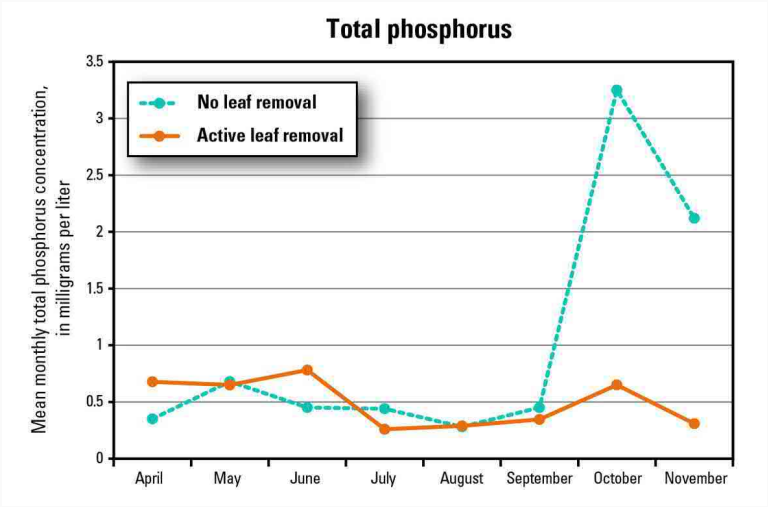
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5

1. Ocean Conservancy https://act.oceanconservancy.org/wp-content/uploads/2017/04/full-report-stemming-the.pdf
2. Scientific American https://www.scientificamerican.com/article/from-fish-to-humans-a-microplastic-invasion-may-be-taking-a-toll/
3. Science: https://science.sciencemag.org/content/369/6510/1515
4. ABC News https://www.abc.net.au/news/2018-09-14/eating-14-pieces-of-plastic-enough-to-kill-turtles/10243618
5. NPR https://www.npr.org/2014/06/17/322959714/plastics-dont-disappear-but-they-do-end-up-in-sea-birds-bellies

Nutrient Pollution





This graph shows a significant reduction in total phosphorus in a residential neighborhood in Madison, Wis., after the implementation of a timely leaf collection and street cleaning program (Selbig, 2016).

While the sources of nutrients to urban stormwater are many, a primary contributor is often decaying organic materials like leaves. [...]

The leaves continue to decay, releasing excess phosphorus and nitrogen into local streams and lakes.

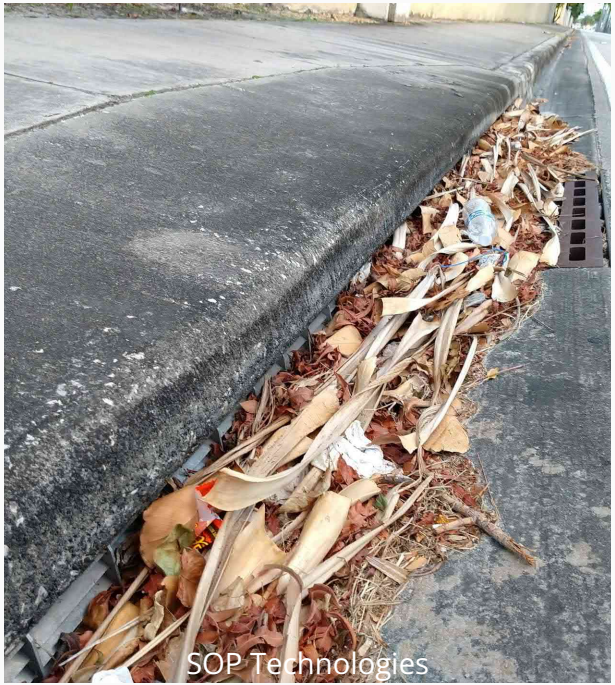
[...]
Loads of total and dissolved phosphorus were reduced by 84 and 83% ($p < 0.05$), and total and dissolved nitrogen by 74 and 71% ($p < 0.05$) **with an active leaf removal program.**[1]

1. USGS *Using leaf collection and street cleaning to reduce nutrients in urban stormwater*

Nutrient Pollution *(cont.)*







"Decomposition of **leaf litter has been reported to be one of the main contributors to [Dissolved Organic N] DON** in urban runoff suggesting that in order to reduce DON input in stormwater runoff, a control measure (e.g., street cleaning) prior to storm events could be used to eliminate the potential of PON decomposition to DON."[2]

"Today, a major concern is that **leaf litter (i.e., organic debris) spikes stormwater systems and watersheds with nutrients during and after rainfall, especially when it gathers along street curbs.**

Excess phosphorus and nitrogen often lead to major water quality problems for municipalities, a process called eutrophication, and harmful algal blooms (HABs)."[3]

2. Jani J, Yang Y-Y, Lusk MG, Toor GS (2020) Composition of nitrogen in urban residential stormwater runoff: Concentrations, loads, and source characterization of nitrate and organic nitrogen. PLoS ONE 15(2): e0229715. https://doi.org/10.1371/journal.pone.0229715
3. Water Quality and Health Council https://waterandhealth.org/disinfect/autumn-leaves-fall-can-water-quality/

Pollution Also Causes Flooding

SOP Technologies
Environmental Solutions
soptechint.com

"Never dump any waste in the storm sewers or canals within the City. It is illegal for any direct or indirect entry of any solid, liquid or gaseous matter to enter the drainage system. **Even grass clippings and branches can accumulate and plug channels.**

A plugged channel or storm drain cannot carry water and **when it rains, clogged storm drains will cause water to back up into the street and may cause flooding.**[1]

Inside a local stormwater basin (video)





1. City of North Miami: https://www.northmiamifl.gov/757/Flooding

Project Details for North Bay Village

Technologies and Locations

SOP Technologies
Environmental Solutions
soptechint.com

48 SOP Technologies
Stormwater Basket Filters



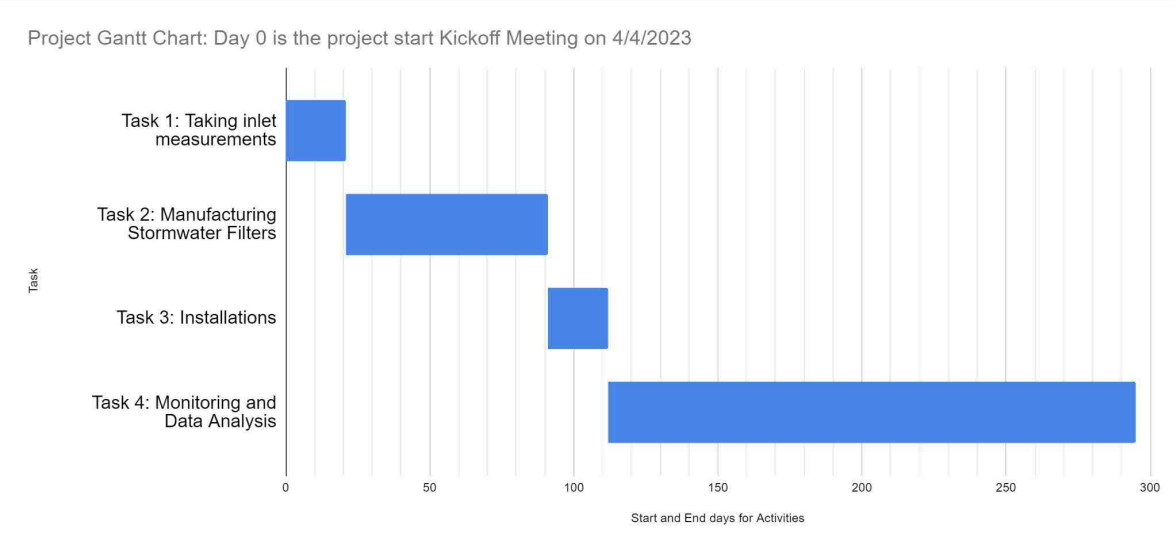
48 SOP Technologies
QR Code Storm Drain Markers
with Web App Service





Major Tasks and Timeline

Task	Start date	End date
Task 1: Taking inlet measurements	Apr 3, 2023	Apr 24, 2023
Task 2: Manufacturing Stormwater Filters	Apr 24, 2023	Jul 3, 2023
Task 3: Installations	Jul 3, 2023	Jul 24, 2023
Task 4: Monitoring and Data Analysis	Jul 24, 2023	Jan 23, 2024



Monitoring & Data Analysis

SOP Technologies
Environmental Solutions
soptechint.com

Goals

- During 6 months (twice per month at 20 sites)
  - Quantify the amount and types of debris captured by SOP Technologies Basket FIlters
- Determine the long-term maintenance costs, schedule, processes and technologies needed for effective debris/pollution removal in NBV.
- Identify spots with excessive amounts of pollutants, and develop strategies to address these issues.
- Promote your project on social media so community members can be reminded of NBV's leadership in protecting Biscayne Bay.

Examples of Data Analysis Reports

SOP Technologies
www.soptechint.com
251 Valencia Ave, #143501
Coral Gables, FL 33114

Village of Key Biscayne Analysis Report

Report #: 7
Report Date: 3/15/2023
Date of Analysis: 3/10/2023

This report shows data relating to the SOP Technologies Patented Stormwater Inlet Filters located in the Village of Key Biscayne. This is for the FDEP grant project in the K-8 area.

Summary
- Quantity of Stormwater Filter Baskets Analyzed: **20**
- Total pounds of debris collected (from within the basket filters): **62.08**
  > Organic Debris: **61.58 lbs (99.69%)**
  > Trash/Litter: **.50 lbs (.31%)**
- Total Nutrient Load Reductions*
  > Total Phosphorus (TP): **0.0178 lbs**
  > Total Nitrogen (TN): **0.0370 lbs**
- Number of days of debris accumulation: **25 days (from 2/13/23 to 3/10/23)**

		Nutrient Load Reductions*	
Catch basin number	**Total Pounds of Debris Collected** *(lbs of Wet Solids)*	**Total Phosphorus (TP)** *(lbs)*	**Total Nitrogen (TN)** *(lbs)*
CB-336	4.90	0.0014	0.0029
CB-339B	4.90	0.0014	0.0029
CB-415	9.80	0.0028	0.0058
CB-438	8.30	0.0024	0.0049
CB-493	1.90	0.0005	0.0011
CB-493B	1.60	0.0005	0.0010
CB-493C	2.30	0.0007	0.0014
CB-494	0.70	0.0002	0.0004
CB-611	3.50	0.0010	0.0021
CB-708C	6.10	0.0017	0.0036
CB-728	4.10	0.0012	0.0024
CB-729	0.90	0.0003	0.0005
CB-757	4.20	0.0012	0.0025
CB-758	1.58	0.0005	0.0009
CB-759C	1.30	0.0004	0.0008
CB-776	0.60	0.0002	0.0004
CB-777	0.50	0.0001	0.0003
CB-778	2.80	0.0008	0.0017
CB-779	1.20	0.0003	0.0007
CB-785	0.90	0.0003	0.0005
Total	**62.08**	**0.0178**	**0.0370**

**TP and TN Calculated using formulas from the FSA-MS4 Load Reduction Tool Updated 2019 (link). Pounds calculated are for Wet Weight (24.12% moisture content), and using the "Catch Basin Cleanout" category.*

					Nutrient Load Reductions*		Trash / Litter: Count of items identified, by category						
Catch basin number	**Photo of Stormwater Filter with Debris**	**Organic Debris** *(lbs of Wet Solids)*	**Trash/Litter** *(lbs of Wet Solids)*	**Total Pounds of Debris Collected** *(lbs of Wet Solids)*	**Total Phosphorus (TP)** *(lbs)*	**Total Nitrogen (TN)** *(lbs)*	**Hard Plastics (e.g. bottles and lids)**	**Soft plastics (e.g. bags and wrappers)**	**Cigarette Butts**	**Glass bottles and objects**	**Paper wrappers and objects**	**Metal can and objects**	**Styrofoam**
CB-336		4.9	0.00	4.90	0.0014	0.0029	0	0	0	0	0	0	0
CB-339B		4.9	0.00	4.90	0.0014	0.0029	0	0	0	0	0	0	0
CB-415		9.7	0.10	9.80	0.0028	0.0058	0	0	0	0	0	0	0
CB-438		8.3	0.00	8.30	0.0024	0.0049	0	0	0	0	0	0	0
CB-493		1.8	0.10	1.90	0.0005	0.0011	0	**1**	0	0	0	0	0

					Nutrient Load Reductions*		Trash / Litter: Count of items identified, by category						
Catch basin number	**Photo of Stormwater Filter with Debris**	**Organic Debris** *(lbs of Wet Solids)*	**Trash/Litter** *(lbs of Wet Solids)*	**Total Pounds of Debris Collected** *(lbs of Wet Solids)*	**Total Phosphorus (TP)** *(lbs)*	**Total Nitrogen (TN)** *(lbs)*	**Hard Plastics (e.g. bottles and lids)**	**Soft plastics (e.g. bags and wrappers)**	**Cigarette Butts**	**Glass bottles and objects**	**Paper wrappers and objects**	**Metal can and objects**	**Styrofoam**
CB-493B		1.6	0.00	1.60	0.0005	0.0010	0	0	0	0	0	0	0
CB-493C		2.3	0.00	2.30	0.0007	0.0014	0	0	0	0	0	0	0
CB-494		0.7	0.00	0.70	0.0002	0.0004	0	0	0	0	0	0	0
CB-611		3.5	0.00	3.50	0.0010	0.0021	0	0	0	0	0	0	0
CB-708C		6.1	0.00	6.10	0.0017	0.0036	0	0	0	0	0	0	0

					Nutrient Load Reductions*		Trash / Litter: Count of items identified, by category						
Catch basin number	**Photo of Stormwater Filter with Debris**	**Organic Debris** *(lbs of Wet Solids)*	**Trash/Litter** *(lbs of Wet Solids)*	**Total Pounds of Debris Collected** *(lbs of Wet Solids)*	**Total Phosphorus (TP)** *(lbs)*	**Total Nitrogen (TN)** *(lbs)*	**Hard Plastics (e.g. bottles and lids)**	**Soft plastics (e.g. bags and wrappers)**	**Cigarette Butts**	**Glass bottles and objects**	**Paper wrappers and objects**	**Metal can and objects**	**Styrofoam**
CB-728		4.1	0.00	4.10	0.0012	0.0024	0	0	0	0	0	0	0
CB-729		0.9	0.00	0.90	0.0003	0.0005	0	0	0	0	0	0	0
CB-757		4.2	0.00	4.20	0.0012	0.0025	0	0	0	0	0	0	0
CB-758		1.58	0.00	1.58	0.0005	0.0009	0	0	0	0	0	0	0
CB-759C		1.3	0.00	1.30	0.0004	0.0008	0	0	0	0	0	0	0

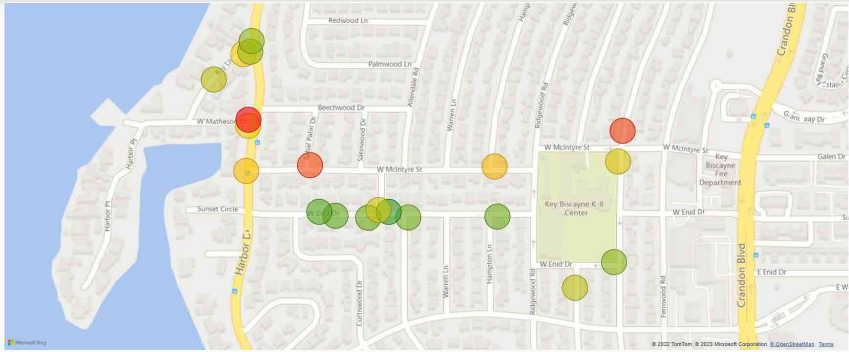
					Nutrient Load Reductions*		Trash / Litter: Count of items identified, by category						
Catch basin number	**Photo of Stormwater Filter with Debris**	**Organic Debris** *(lbs of Wet Solids)*	**Trash/Litter** *(lbs of Wet Solids)*	**Total Pounds of Debris Collected** *(lbs of Wet Solids)*	**Total Phosphorus (TP)** *(lbs)*	**Total Nitrogen (TN)** *(lbs)*	**Hard Plastics (e.g. bottles and lids)**	**Soft plastics (e.g. bags and wrappers)**	**Cigarette Butts**	**Glass bottles and objects**	**Paper wrappers and objects**	**Metal can and objects**	**Styrofoam**
CB-776		0.5	0.10	0.60	0.0002	0.0004	0	0	0	0	**1**	0	0
CB-777		0.5	0.00	0.50	0.0001	0.0003	0	0	0	0	0	0	0
CB-778		2.8	0.00	2.80	0.0008	0.0017	0	0	0	0	0	0	0
CB-779		1	0.20	1.20	0.0003	0.0007	**3**	0	0	0	0	0	0
CB-785		0.9	0.00	0.90	0.0003	0.0005	0	0	0	0	0	0	0
TOTALS	**----------**	**61.58**	**0.50**	**62.08**	**0.0178**	**0.0370**	**3**	**1**	**0**	**0**	**1**	**0**	**0**

Sample: Analysis in Key Biscayne

SOP Technologies
Environmental Solutions
soptechint.com









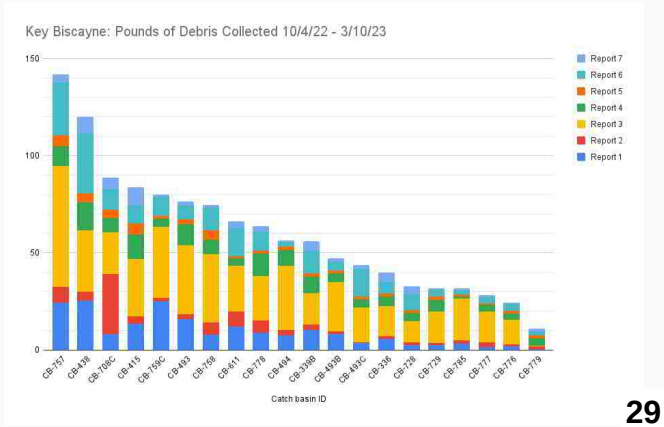












Expected Results from Past Projects

SOP Technologies
Environmental Solutions
soptechint.com

Solution Type	Basket Filters  	Curb Filters  
Annual Debris Capture	~199 lbs Per Basket Filter *Includes* 0.075 lbs of Total Phosphorus (TP) 0.157 lbs of Total Nitrogen (TN)	~166 lbs Per Curb Filter *Includes* 0.063 lbs of Total Phosphorus (TP) 0.130 lbs of Total Nitrogen (TN)
Maintenance Needs for Optimal Performance	Manual or vacuum truck emptying/cleaning Once every 2-3 months ~6 minutes per basket filter	Manual or street sweeping truck cleaning 1-4 times per month ~1 minute per curb inlet filter
Street Litter Captured	     Leaves/organics, glass, cigarette butts, hard plastics, soft plastics, metals, Styrofoam, and paper	

Financials

SOP Technologies
www.soptechint.com
251 Valencia Ave, #143501 Coral Gables, FL 33114
305-792-8778 info@soptechint.com

QUOTE

Customer Information		Quote Details	
Customer ID	2208	**Number**	22082023030101
Name	North Bay Village	**Date**	3/1/2023
Address	1666 Kennedy Causeway, Suite 300 North Bay Village,FL.33141	**Quote valid until**	3/31/2023
Main Contact	Delroy Peters, MPhil, MS, E.I.		
Phone	(305)756-7171 Ext. 29		
Email	dpeters@nbvillage.com		
Product/Services Summary	SOP Technologies patented stormwater filters. Includes SOP Technologies Pat. Pending QR Code Storm Drain Markers and data analysis of 20 sites for 6 months.		
Terms	50% of total due when placing order, and remainder within 30 days after products and services have been delivered.		

Sample product images







Item	Description	Price Per Unit	Quantity	Extended Price
Stormwater Basket Filters	- SOP Technologies Patented Stormwater Basket Filters. - Note: The price shown is the average per-unit price.	$2,699.00	48	$129,552.00
Product Shipping & Handling	- Packaging and shipping stormwater filters to North Bay Village.	$50.00	48	$2,400.00
Measurements for Basket Filters	Taking 48 catch basin measurements, in order to manufacture basket filters. Estimating 2 day(s) for 2 workers to complete the work. Daily rate is $1600.	$66.67	48	$3,200.00
Installation of Basket Filters	Installing 48 basket filters. Estimating 2 day(s) for 2 workers to complete the work. Daily rate is $1920.	$80.00	48	$3,840.00
Basket Filters Data Analysis	Analysis of stormwater filters to quantify debris, trash, TP and TN load reductions provided by stormwater basket filters. Total sites for analysis is 20. This includes removal of debris during analysis activities. Analysis and maintenance frequency is 2 time(s) per month for a duration of 6 months.	$13,440.00	1	$13,440.00
QR Code Storm Drain Markers included with Stormwater Filters	***Included with stormwater filters purchase at no extra charge.*** - SOP Technologies Patent Pending QR Code Storm Drain Markers (1 per stormwater filter). - Customizing website logo and text for your landing page. - Customizing the post-form-submission page. - Web app service.	**$0.00**	**1**	**$0.00**
Community Outreach	***Included with stormwater filters purchases at no extra charge.*** - Notifying local environmental groups about your project. - Sharing about your project on social media.	**$0.00**	**1**	**$0.00**
Discount	***Discount to meet your team's desired budget objectives.***	**-$2,432.00**	**1**	**-$2,432.00**
Taxes	- Not applicable for government entities.	$0.00	0	$0.00
			Grand Total	**$150,000.00**

Special Notes
A discount of $2,432 is being provided to help meet your team's desired budget objectives. Amounts by tasks for grant funds: - **Task 1** (Taking inlet measurements for 48 sites for custom built stormwater basket filters.) : **$3,200** - **Task 2** (Products: 48 SOP Technologies Patented Stormwater Basket Filters. Includes shipping and includes discount of $2,432): **$ 129,520** - **Task 3** (Installing 48 stormwater basket filters.): **$3,840** - **Task 4** (Monitoring and data analysis during a 6 month period for 20 sites (analysis being conducted 2 times per month).): **$13,440**

For questions, please contact Emilio Lopez at 305-792-8778 or emilio@soptechint.com

Thank you for your business!

NORTH BAY VILLAGE
1666 Kennedy Causeway, Suite 300
North Bay Village, FL 33141
(305) 756-7171

PURCHASE ORDER

PO Number: 008763 **Date:** 03/28/2023

Requisition #: REQ002552

ISSUED TO: EDDIE LOPEZ TECHNOLOGIES LLC
251 VALENCIA AVE #143501
CORAL GABLES, FL 33114-

SHIP TO: North Bay Village Hall
1666 Kennedy Causeway
Suite 300
North Bay Village, FL 33141

ITEM	UNITS	DESCRIPTION	GL ACCT #	PROJ ACCT #	PRICE	AMOUNT
1	0	STORMWATER INLET FILTERS-SW23-02	317-20-525-6307	SW23-02	0.00	150,000.00

This Purchase Order has been electronically approved

SUBTOTAL:	150,000.00
TOTAL TAX:	0.00
SHIPPING:	0.00
TOTAL	150,000.00

1. Original invoice must be sent to: North Bay Village, Accounts Payable, 1666 Kennedy Causeway Suite 300, North Bay Village, FL, 33141.
2. Payment may be expected within 30 days of receipt of goods, unless otherwise stated.
3. Purchase Order numbers must appear on all shipping containers, packing slips and invoices. Failure to comply with the above request may delay payment.
4. All Goods and Equipment must meet or exceed all necessary village, state and federal standards and regulations.
5. Seller acknowledges that the buyer is an equal opportunity employer. Seller will comply with all equal opportunity laws and regulations that are applicable to it as a supplier of the buyer.
6. The Village is exempt from all federal excise and Florida sales tax – ID#59-6000388; Florida Sales Tax Exemption #85-8012621652 C-8.

Finance Department (305) 756-7171 FAX (305) 756-7722

ITEM NO. 5b

North Bay Village
Recommendation Memorandum

DATE: April 25, 2023

TO: Honorable Mayor, Vice Mayor and Members of the Village Commission

FROM: Genesis Guevara, Assistant to the Village Clerk

SPONSORED BY:

SUBJECT: Presentation on Rainwater Harvesting and Finding Cleaner Solutions for Water Harvesting

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RECOMMENDATION

BACKGROUND AND ANALYSIS

BUDGETARY/FINANCIAL IMPACT (Finance Dept.)
NONE

PERSONNEL IMPACT
NONE

ITEM NO. 5c

North Bay Village
Recommendation Memorandum

DATE: April 25, 2023

TO: Honorable Mayor, Vice Mayor and Members of the Village Commission

FROM: Genesis Guevara, Assistant to the Village Clerk

SPONSORED BY:

SUBJECT: Updates on Yoga Under the Stars Event

RECOMMENDATION

BACKGROUND AND ANALYSIS

BUDGETARY/FINANCIAL IMPACT (Finance Dept.)
NONE

PERSONNEL IMPACT
NONE