CITY OF NORTH MIAMI. CASE STUDY.





How Foamstream can be used to help cities implement a successful herbicide-free integrated pest management strategy (IPM)

Client name: City of North Miami, Florida. Sector: Councils and municipalities.

Background: North Miami went herbicide-free in 2018 however were struggling to control weeds using manual practices and vinegar.

Machine type: M1200.

Areas treated: Parks, playgrounds, planter beds, mulch beds, swales,

artificial turf, paver stones, sidewalks and fence-lines.

Previous methods used: Chemical weed control, weed whacking, vinegar.



BACKGROUND

City of North Miami is a city in Florida, USA. Having moved to a herbicide-free strategy back in 2018, this had begun to fail as the manual practices of weed whacking and hand-pulling were too costly and time intensive with residents becoming increasingly unhappy with the standard of cleanliness.

The city started working with Non-Toxic Neighbourhoods, an organisation that assists municipalities and communities across the USA to switch to proven alternative solutions for organic land management and provides the necessary resources for engaging community leaders to do this.

The city has been using herbicide for a long time - so the introduction of Foamstream has been a lifesaver. We love the machine and it works very well for us - we get great results in a much quicker time than when using previous methods." Roger Museau - Parks Coordinator, City of North Miami

PROBLEM

Having moved to manual methods (weed whacking and hand-pulling) the city were finding that they were spending much greater time and cost on these intensive alternatives (an example of the costs incurred by another US municipality using hand-weeding are shown by the graph below)

Cost per acre of one treatment carried out by one operator				
Method	Cost per hr. (\$)	Sq.ft.per hr.	TOTEX per sq.ft. (\$)	Cost per acre (\$)
Hand weeding	15.00	250	0.06	2,613.60
Foamstream M600	34.57	3700	0.009	406.99
Foamstream M1200	40.99	6000	0.007	297.59

The high frequency of weed regrowth with hand-pulling adds a repetitive labor cost and makes the weed whacking so ineffective. Weed whacking also stimulates further weed growth in an area, exacerbating the problem rather than controlling it.

"The problem with weed whacking is that after a week, the weeds start to grow back" (Kelly Errol).

Using vinegar was proving problematic. It was even more weather dependent than glyphosate and caused an unpleasant smell for operators and anyone in the area being treated. As the city had already gone chemical free it was important that the chosen method needed to be suitable for use in public.



Hike it, Hike it a lot. Foamstream's biggest benefit has been its instantaneous results. Its so effective. When I treat it, I know by the end of the day it will be dead. It's great when we need to clear an area quickly. This is a great benefit over chemicals and also vinegar. The machines are simple and straightforward to use - no certification, no masks, no suits. Foamstream has meant we can completely remove chemicals from our city. "

Kelly - Operator, City of North Miami





ACTION

The city of North Miami worked with Non-Toxic Neighborhoods (NTN), whose remit was to help them find the most effective alternative to use. This meant the city could feasibly remove chemicals from their public spaces without a negative impact on the cost, time spent on management or aesthetics of the city. Previously using weed whacking and vinegar



based solutions, NTN facilitated the initial Foamstream trial which was then adopted by North Miami for city wide use in public spaces permanently. Foamstream has become the core solution to their IPM strategy.



RESULTS

All weather, all surface, all year round use

With regular rainfall and warm climatic conditions in Miami, there is very rarely a dormancy period of weed growth. It is therefore important that any weed control solution used can be operated all year round and in any weather.

Foamstream is used across all surfaces hard and soft, from paver stones and sidewalks to mulch beds, planter beds and fence-lines.

"It rains a lot here in Miami, we've been out when its pouring with rain and still use it no problem. The hot water temperature is still high and it still knocks everything dead." (Kelly Errol)

Instant results

"We love the machine and it works very well for us – we get great results in a much quicker time than when using previous methods. Its results are instant and it's great to be able to use the system on any area that needs managing quickly. It's a great benefit over chemicals and vinegar." (Kelly Errol)

Treats weeds of all types and sizes

"It doesn't matter whether you have two inches or a foot of grass you're trying to treat, it knocks it down straight away and the next day when you come back, everything is dead." (Kelly Errol)

Allowed removal of all chemicals previously used in public spaces

"The city has been using herbicide for a long time, so the introduction of Foamstream has been a lifesaver. Foamstream has meant we can completely remove chemicals from our city." (Roger Museau)

Simple to use and operate and no additional PPE

"I love Foamstream. I've had no problems with it over the last nine months. It's very easy to use and requires no certification, no masks, no suits." (Kelly Errol)

Excellent service support from Weedingtech

"I've been cleaning and maintaining it too. With the help of Weedingtech engineers who have trained me, I am now totally self-sufficient on looking after the machine." (Kelly Errol)

Faster and more efficient than alternative solutions, saving time and labor

The city have found Foamstream to be as effective as chemicals and more effective than vinegar. It has a marginally slower application rate, but due to its high efficacy and instant results, areas only need treating once every few months.

"Fence-lines have to be treated here and the guys don't like weed eating," comments Kelly Errol, "it takes up a lot more time for the guys to do it. I go over with Foamstream and kill it for them so they just have to cut it which means one less step than when weed whacking saving time and money."

Positive public engagement

Foamstream has been positively accepted by the residents as an effective and efficient form of vegetation control and become a point of engagement for the city to educate their residents.

"When I'm out treating and I tell people it's herbicide-free, they ask me where they can buy the machine from. Not only has it been well received by the public, but the staff have found the system easy to use and effective." (Kelly Errol)