

Tough work, a smart solution -

The choked and polluted waterbodies of Chennai are in need of immediate restoration. The Greater Chennai Corporation uses efficient Watermaster equipment for fixing the problem



Greater Chennai Corporation's massive task:

Cleaning Chennai's waterways

Greater Chennai Corporation (GCC) works to clean the dirtiest waterbodies running in and through the Metropolitan area of Chennai. Discharge of untreated sewage, industrial effluents and urban trash has left many local waterbodies heavily polluted and prone to flooding. The River Cooum, Adyar River, North Buckingham Canal, Captain Cotton Canal and Link Canal are some of the waterways that are in need of urgent attention. Greater Chennai Corporation's dream is to provide a healthy water environment for the locals, but in these hard conditions it is not an easy job.

BACKGROUND

Chennai is a vast megalopolis of about 5 million inhabitants. The local waterbodies are under immense pressure since the city's sewage water treatment and other waste management have not been able to keep up with the quickly growing population. **Many of the city's canals had become fully silted and swamp-like, covered with condensed water hyacinth and submerged weeds.** The conditions were optimal for the **spreading of disease-carrying mosquitoes**, which had swarmed the area and had become a real menace and health risk for the local people. Because the canals were choked, they also struggled to carry rainwaters out from the city, causing **severe floods during heavy rainfalls.**

THE OLD WAY

In the absence of better equipment, Greater Chennai Corporation used backhoes for the restoration and dredging work, loading the machines onto floating barges. They soon noticed, however, that it was a dangerous and inefficient working method. **Backhoes are land-based machines, their work stability and safety in water is poor.** After a few accidents they understood, that they needed a better solution.

THE NEW WAY

There are many **Watermaster** units cleaning and maintaining shallow waterbodies across India. **Encouraged by the positive feedback from many local states and the Central Government of India**, who all utilize Watermasters, GCC decided to try this



Chennai is home to about 5 million inhabitants and is situated on the eastern coast of India

Briefly

- **Greater Chennai Corporation's job is to clean the waterbodies of Chennai**
- **Fully amphibious multipurpose Watermaster helps them to take care of the work with fewer machines and costs**
- **Watermasters are in active use all around India, helping to keep the country's shallow waterbodies clean and safe**



Invasive water hyacinth and excessive silt cause many problems



Watermaster raking the silt and vegetation out of the canal

new approach. **Dharsan Dredging & Constructions Pvt. Ltd.** represents Watermaster in India. They also handle the operation of the machines as required. Greater Chennai Corporation followed the example of many other customers in India and hired Dharsan Dredging & Constructions Pvt. Ltd., to implement the work.

Unlike GCC's previous equipment, the **Watermaster proved to be very stable, safe and efficient in shallow water work.**

The fully amphibious machine can work and move independently, precisely and effectively in Chennai's narrow and shallow rivers and canals. It can go under bridges and reach difficult parts of the waterbodies, where conventional machinery cannot go. In addition, with the multipurpose Watermaster they have **more solutions** in their hands; depending on the area they can choose between suction dredging, excavating, raking, hammering and pile driving – always selecting the best approach for the site. Watermaster also carries out larviciding (for controlling mosquitoes) with a purpose-built attachment.

THE RESULTS

Greater Chennai Corporation is actively cleaning the River Cooum, Adyar River, North Buckingham Canal and many other waterbodies in the city. Their process is to first excavate and rake the trash, debris, silt, water hyacinth and rooted aquatic vegetation to the shore with Watermaster. Then they load the sediment and vegetation into trucks and transport it for further processing or final placement, depending on the material.

During the past **36 months**, they have removed approximately **2,7 million tons of polluted silt, water hyacinth and trash out of the city's drains, rivers and canals.**

In the same time, the number of mosquitoes has declined significantly. Their Watermaster unit has been very dependable and it is not a surprise – Aquamec has been developing the technology for over 30 years, utilizing the feedback from hundreds of clients and thousands of different environments. Watermaster uses the best components and field-proven solutions, which are reliable and easy to service. This

is what makes the Watermaster a professional tool for tough work and conditions. GCC's unit has completed **13,500 operational hours in 36 months.** Watermaster's automatic central pressure greasing system increases productive work time by reducing the time needed for routine daily maintenance. Dharsan Dredging's practise is to arrange a comprehensive preventive maintenance program once a year, including minor paintings and system checks. The local Caterpillar dealer provides the service for Watermaster's **Caterpillar** engine.

THE FUTURE

Greater Chennai Corporation was quickly convinced that Watermaster was the right tool for their work. Watermaster had already paid for itself after only six months of operation. The saved costs from using fewer machines have enabled GCC to invest in **another fully amphibious multipurpose Watermaster Classic V unit this year.** It will further enhance their restoration efforts and **help to make their dream of providing clean waters for the local people of Chennai a reality.**



Clean and safe waters for the people of Chennai - This is the dream of Greater Chennai Corporation. Watermasters are helping them to achieve it. The picture is from Captain Cotton Canal after cleaning work