

# CATCH

an Interreg North Sea Region project

**Good practice:**

**Water quality improvement**  
of lake Kyrkviken with screen basins  
and constructed wetlands  
*Arvika, Sweden* 🇸🇪

In leaps and bounds to a water sensitive city

## ABOUT THE PILOT

In this CATCH pilot project, Arvika has been working on water quality improvement of lake Kyrkviken. The project aims to reduce the amount of phosphorous that ends up in the lake through stormwater from the city and adjacent land uses. The water quality improvement measures consist of screen basins and constructed wetlands. The screens divert the stormwater into vegetation which reduces the velocity of the water and enables particles to settle within the screens and be removed in a controlled way, instead of being flushed out to the lake.

The constructed wetlands provide a curtain of roots that also reduces water velocity. Additionally, the roots absorb dissolved pollutions and the plants provide a pleasant scenery and a favourable setting for pollinating insects.







## POSITIVE OUTCOMES FOR OUR RESIDENTS AND ORGANISATION

- Reduction of nutrients and pollutions to the lake.
- Created awareness among residents.
- Climate adaptation strategy and identified climate adaptation measures.

“It is impressive to see the difference in colour between the different sections in the screen basin – which means that the sedimentation process works and that the water is cleaner when entering the lake.”





## LESSONS LEARNED

- Permit and procurement procedure are time consuming.
- Conditions need to be suitable for implementing screen basins and constructed wetlands –consider water level variations, water velocity and waves.

“The added value of the constructed wetlands is to see how pollinating insects like the plants”



### More information

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Or visit our website:

<https://northsearegion.eu/catch/pilot-projects/arvika/>

