

the City of Cuitzeo, Michoacan, Mexico



The City of Cuitzeo is located in the eastern part of the State of Michoacan, Mexico. The city was founded in 1545, and by the year 2000, Cuitzeo had grown to 15,000 inhabitants. Although the City had sewers, there was no treatment facility. The city's raw sewage was being discharged into the adjacent Lake.

Because of the importance of the Lake, the Mayor and the Ecology Minister were interested in implementing an affordable wastewater treatment solution.

Working in conjunction with our Mexican counterparts NSI designed a completely passive wastewater treatment system that contained no moving parts. Treatment consists of a primary sedimentation tank, a reed bed for treatment of solids, and surface flow constructed wetland.

Treated effluent flows through fish ponds and then into the lake. Construction costs were \$NP500/person (about \$50) and operational costs are 50 centavos/person per month (50 cents).

Design Flow = 2100 m³/d
Influent BOD = 800 mg/L
Effluent BOD = 30 mg/L



3 images above:
The Cuitzeo surface flow constructed wetlands