

# **WASTEWATER & STORMWATER INTEGRATED PLANNING**

By  
DAVE ROSS  
[dave@sewerlock.com](mailto:dave@sewerlock.com)



***In the  
Beginning***

- Once upon a time, not so long ago, in a place, not so far away, lived a community of people surrounded by green country sides and blue water lakes and rivers.

# Everyone was welcome

- Being such a wonderful place to live others flocked in and it quickly grew.



- One day they realized that to sustain their quality of life, everyone needed to pitch in to protect it and they adopted clean water laws.







- With everyone's help, they prepared a plan to handle growth and provide for Capacity, Management, Operations, and Maintenance.
- First they improved their Operations and Maintenance.
- Then they looked at **Capacity Management**.

- Looking at their limited assets and the enormous costs to meet the objectives of the Clean Water Laws, they said why don't we combine our wastewater and stormwater funds and do affordable Integrated Projects.





- Without funding for the large project high cost solutions, they looked for other ways. Parks, school fields, landscape areas, outlying parking areas, bio-swales were used for storm water detention areas, along with underground detention, manhole inflow blocking, and storm inlet metering until capacity in the pipes returned.



- Integration Plan – They recognized that exorbitant increase in funds were necessary to cover the costs of adding large pipes, huge underground storage, and unattainable treatment requirements. Instead they adopted an integrated plan that meets the environmental objectives over a longer period of time. By working with the resource agencies they adopted an integrated plan and avoided heavy fines and penalties. The integrated Plan preserved their green country sides and blue water lakes and rivers.



# Blue Water Integration Planning

