Verification of Urban BMPs

Why do we care about verification ?

Because Rich Batiuk Does!

R.B. 1972

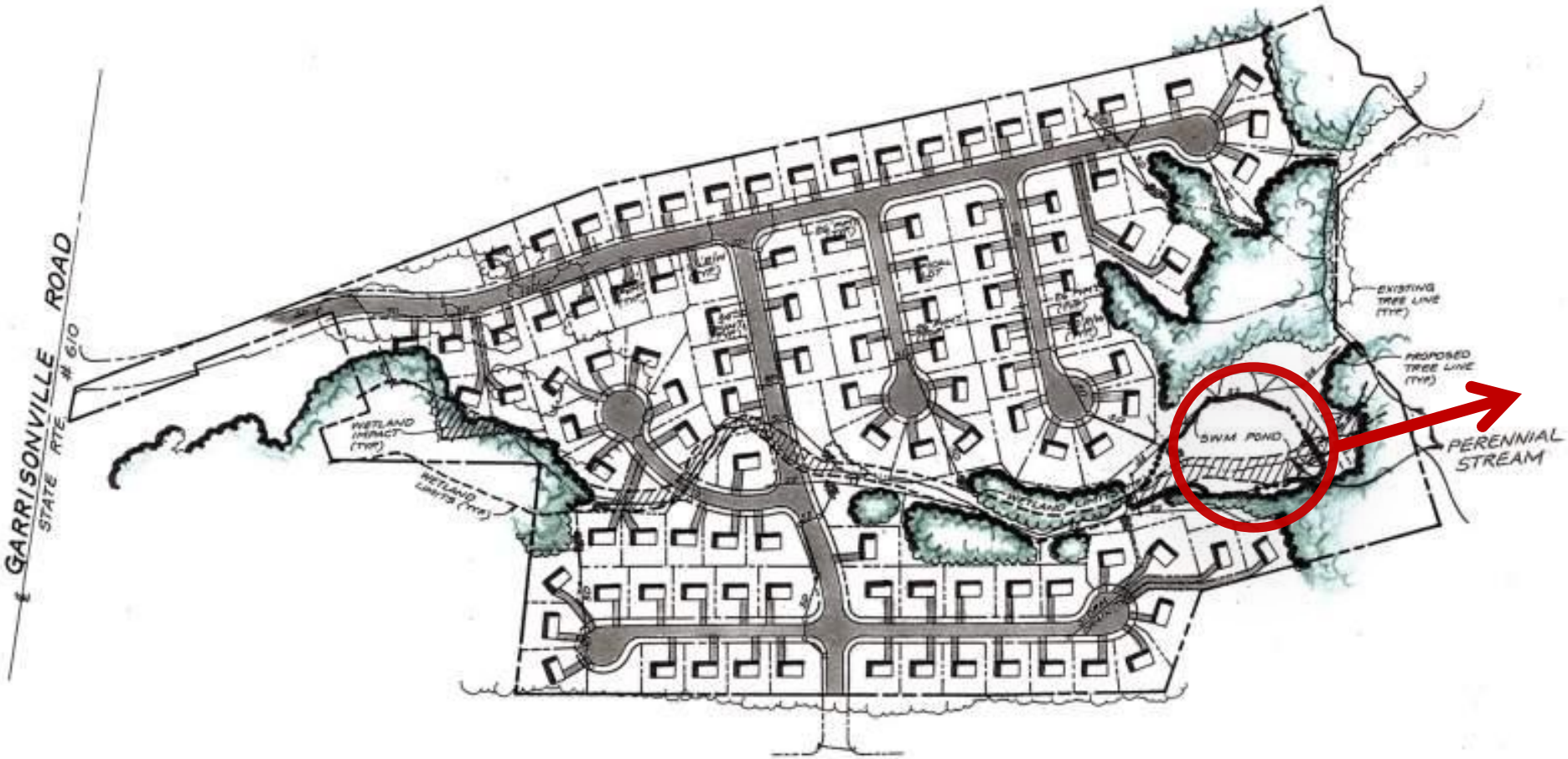
Except for a few cases, Urban BMPs are Not Perpetual !

Source: Kenneth Wright, WWE

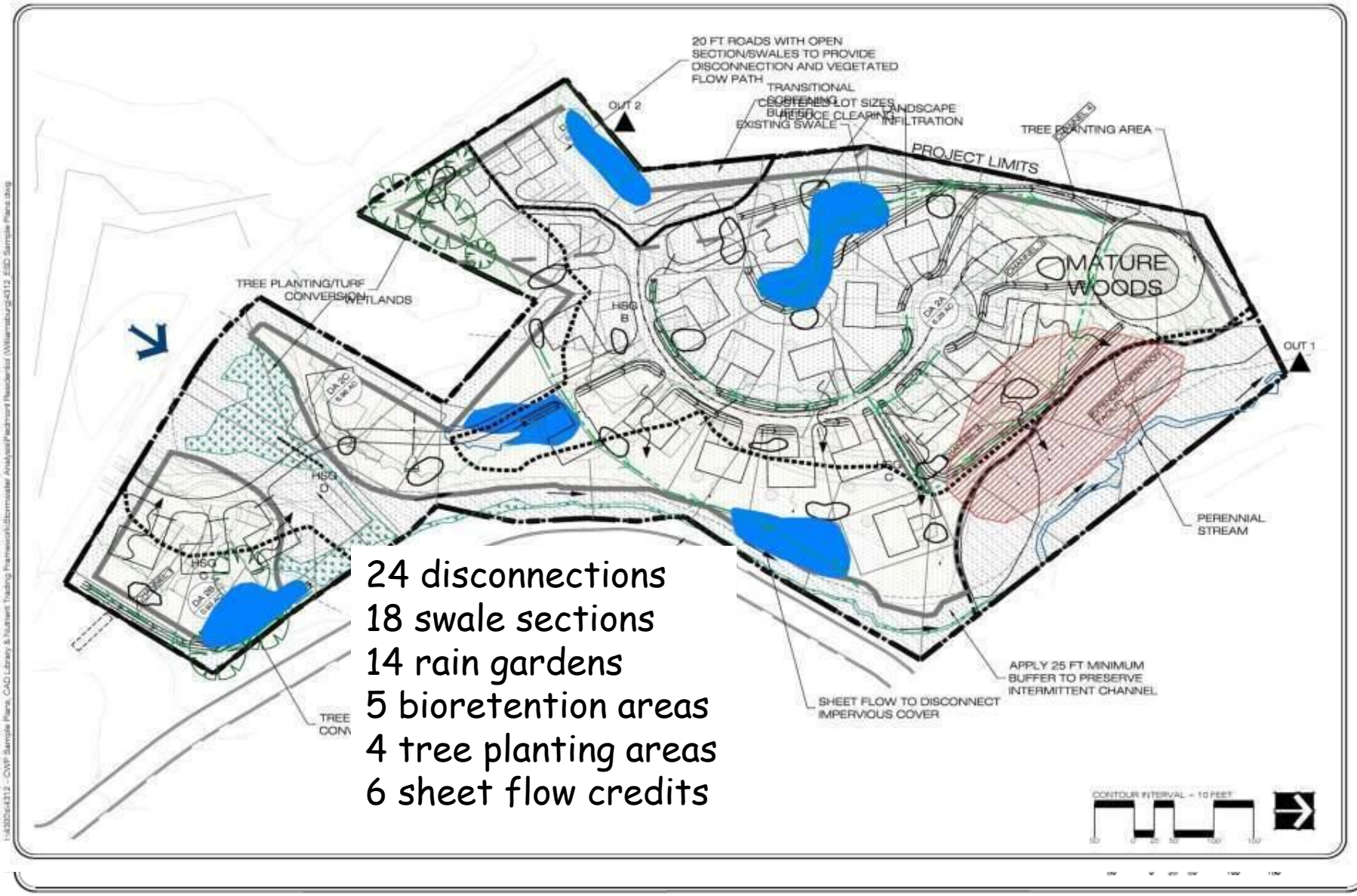
BMP Performance Is Inextricably Linked To Maintenance (which is not very sexy)

Our Old Approach to Urban BMPs

One big pond



Our New LID Model



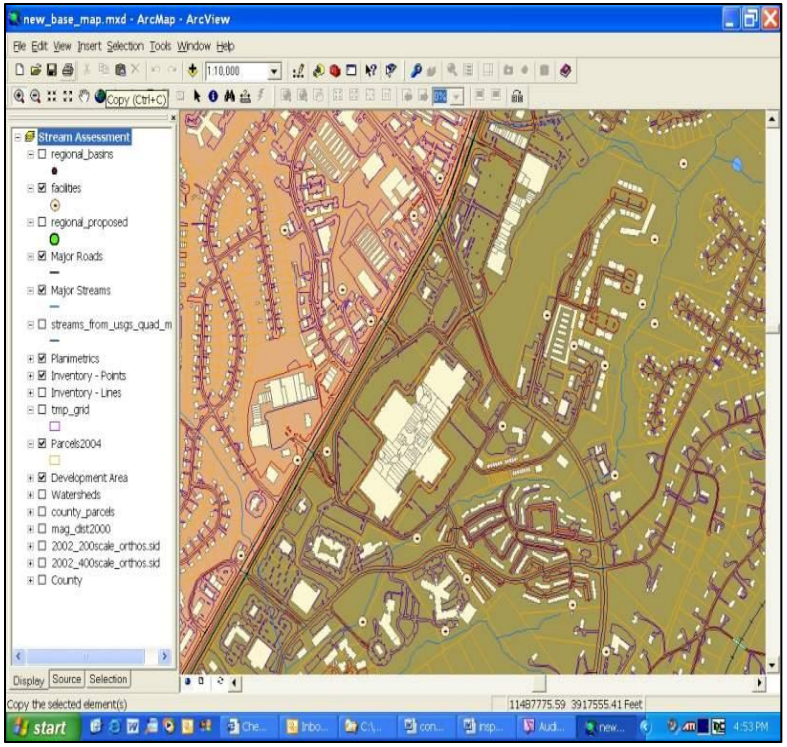
24 disconnections
18 swale sections
14 rain gardens
5 bioretention areas
4 tree planting areas
6 sheet flow credits

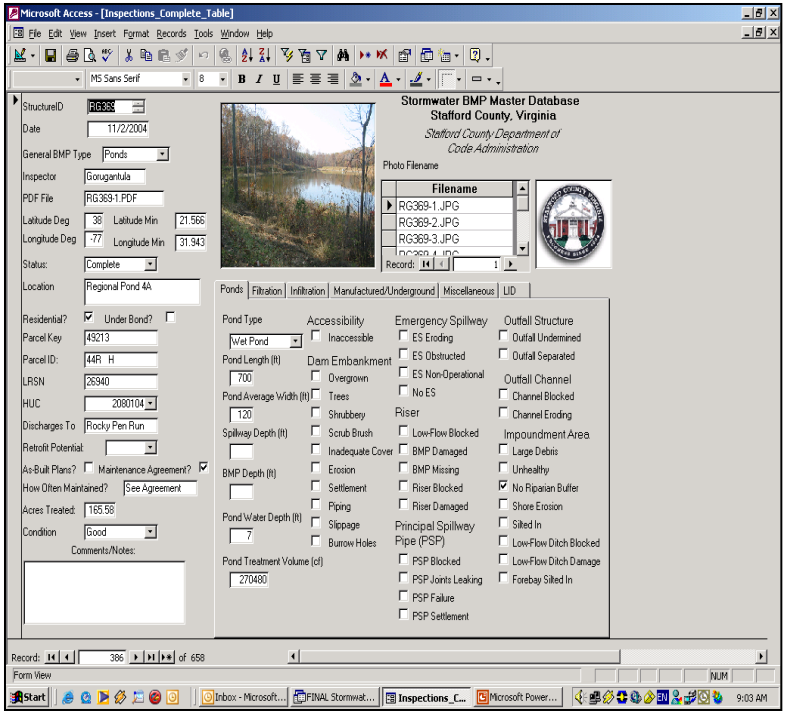

NE 35th Pl & Siskiyou St.


MAY 9 2001
Source: City of Portland, OR

Visual inspections needed to confirm BMP performance

A lot of BMP information to track



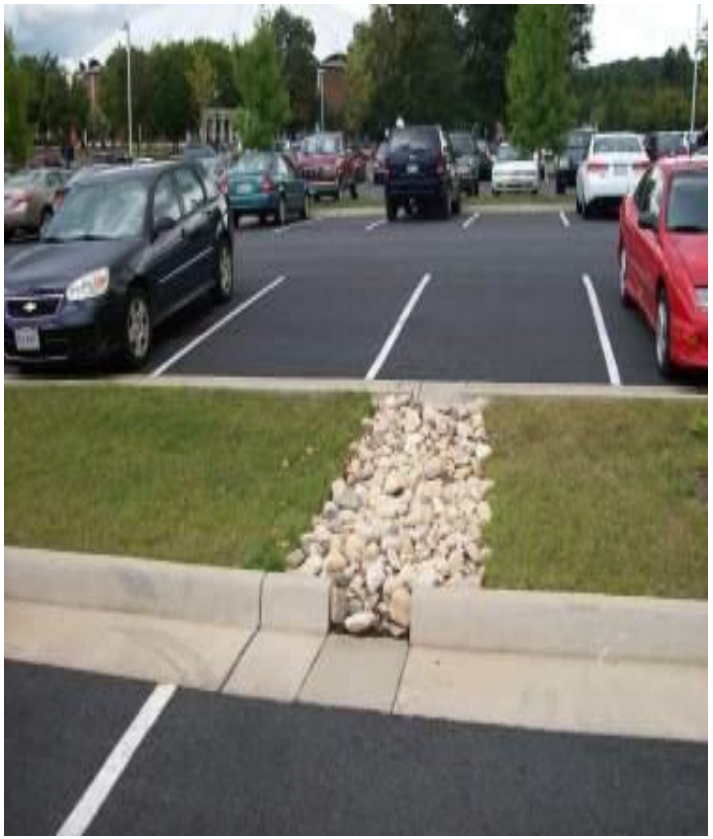


How to deal with our Legacy BMPs ?

Thirty Years of BMPs. The BMP Inventory in a Maryland County (2006)			
Potentially High Performers		*Known Low Performers*	
Bioretention/Dry Swales	49	Underground Detention	270
Sand Filters	279	Dry Ponds	528
Wet pond	212	Oil Grit Separators	805
Pond Wetland	98	Proprietary Practices	239
Infiltration Basin	58	Flow Splitter	321
Infiltration Trench	459	Other (plunge pools)	30
		Grand Total	**3350**

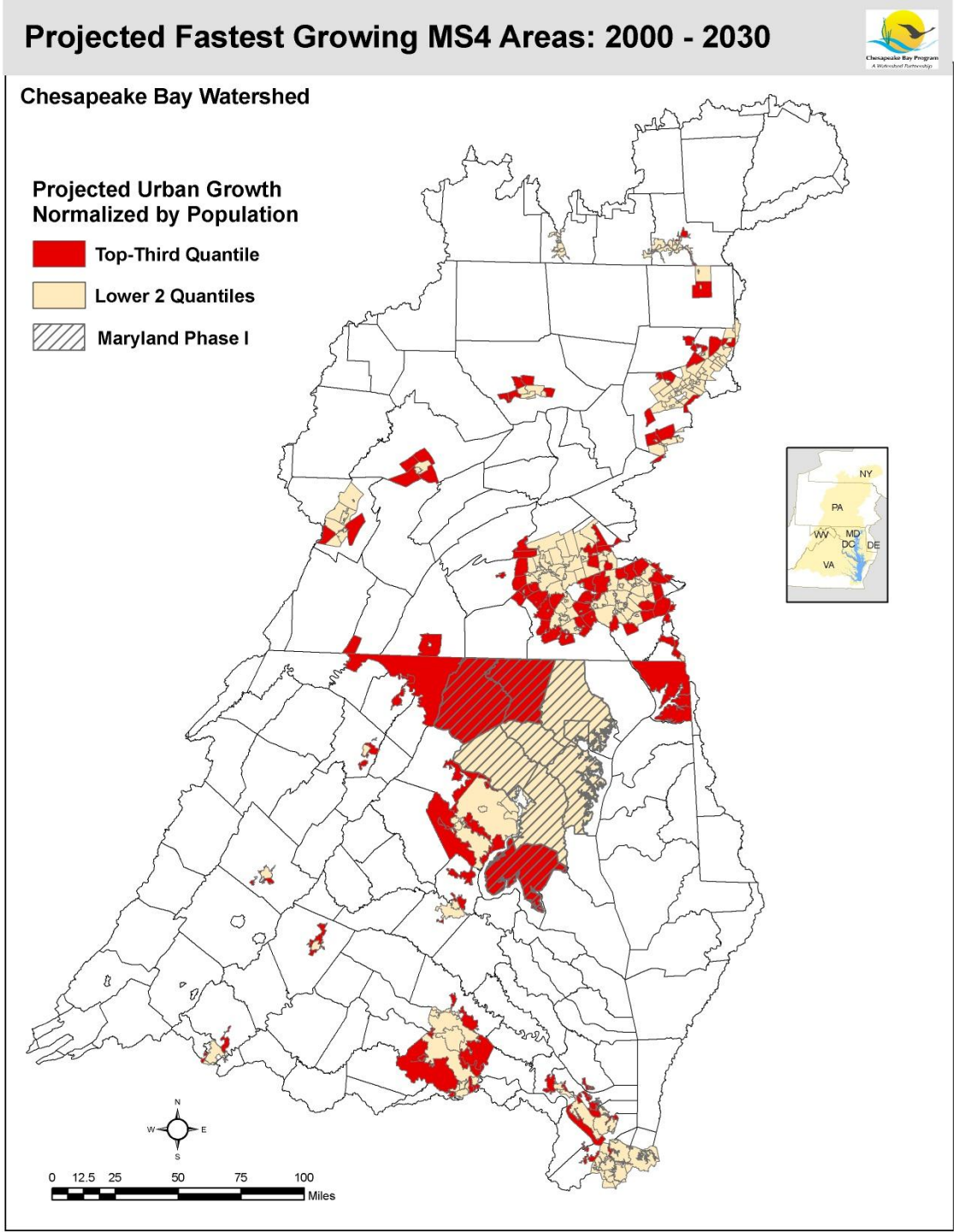
Studies show some of the old BMPs are not working

A few of our new BMPs don't perform well, either

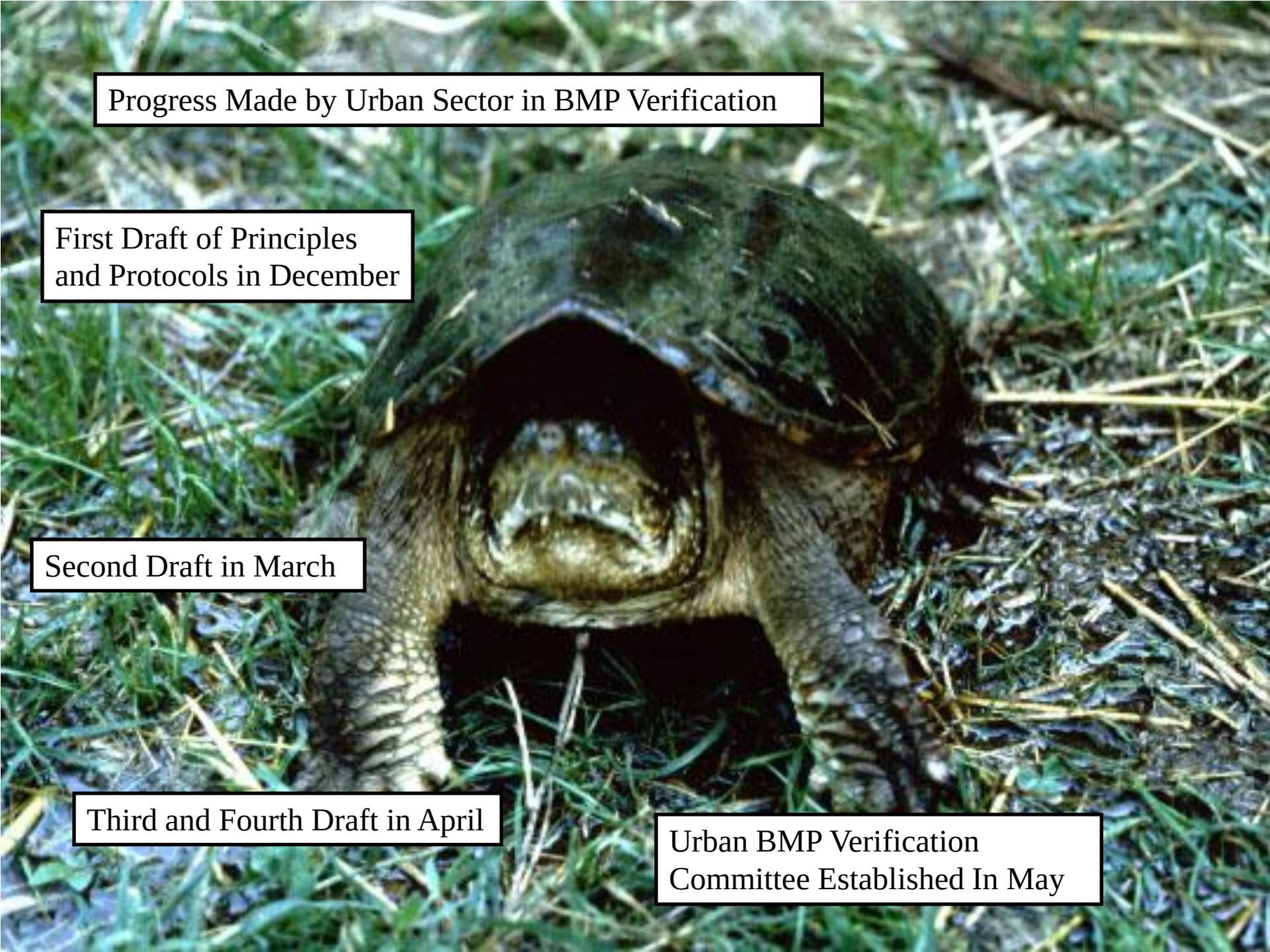


Some Urban BMPs have unique verification issues

We have an existing system in place to report, track and verify urban BMPs, but it needs some tweaks to assure actual BMP performance



Ability to Verify is Often Linked to Whether a community has a MS4 permit or not


Progress Made by Urban Sector in BMP Verification
First Draft of Principles and Protocols in December
Second Draft in March
Third and Fourth Draft in April
Urban BMP Verification Committee Established In May