

MARYLAND SEPTIC TANK PROJECTIONS

CBP WWTWG
November 5, 2013
UPDATED



MARYLAND'S ASK

- Use MDP's projections to calibrate the Chesapeake Bay Land Change Model (CBLCM) septic projections for Maryland used for annual progress runs and projected baselines.



ADJUSTMENTS MADE

- MDP, MDE and EPA/CBP held a follow-up conference call on 9/26 to identify reasons for differences between the MDP and EPA/CBP 2013-2015 projected baseline for Maryland's septics
- As a result of the call, MDP and EPA/CBP both proposed adjustments to the 2013-2015 projections for Maryland's septics



ADVANTAGES OF MDP DATA

- Based on more recent and locally informed data of higher resolution.
- MDP projections use local data and MDP has agreements in place with local governments, this ensures timely and frequent updates.
- MDP has significant and long-term experience with data and projections used for land use planning.
- More geographically specific (Maryland has parcel data)



MDP PARCEL DATABASE

- Updated annually in September
- Single-Family Residential Parcels
- Inside PFA = sewer
- Outside PFA = septic



RECENT TRENDS

	Units	Acres	Lot/Acre	Outside PFA
2007	14,284	10,555	0.74	28.3%
2008	10,370	7,589	0.73	28.7%
2009	8,856	5,620	0.63	26%
2010	8,615	4,785	0.56	25.6%
2011	8,167	4,479	0.55	26.3%



% OUTSIDE PFA = % SEPTIC TANKS

- Statewide in Maryland, 23% of single-family households are on septic tanks (using parcel and sewer service area data)
- 1980-89 22% outside PFAs
- 1990-99 24% outside PFAs
- 2000-09 28% outside PFAs

RECENT SEPTIC TANKS

	Units	Outside PFA	Septic Tanks
2009	8,856	26%	2,303
2010	8,615	25.6%	2,205
2011	8,167	26.3%	2,148



FUTURE SEPTIC TANKS (2012)

- For 2012, assumed 100% of Building Permits Authorized for New Single-Family Homes resulted in new built homes
 - Due to the slow nature of the current housing market (and the cost of obtaining a building permit), we can make the assumption that almost all of the issued building permits will translate into a housing start.



FUTURE SEPTIC TANKS (2013-2015)

- MDP has 5-year housing unit projections that we translate into 5-year single-family and multi-family projections (2015, 2020, etc.)
 - MDP assumed a linear annual increase between the 2012 single-family housing unit estimate and the 2015 estimate
- To estimate 2012-2015 septic, MDP assumes 23% statewide share continues



2012-2015 SEPTIC TANKS

	Projected New SF Units	% Septic	Estimated
2012	9,232	23%	2,123
2013	11,724	23%	2,697
2014	11,801	23%	2,714
2015	11,878	23%	2,732

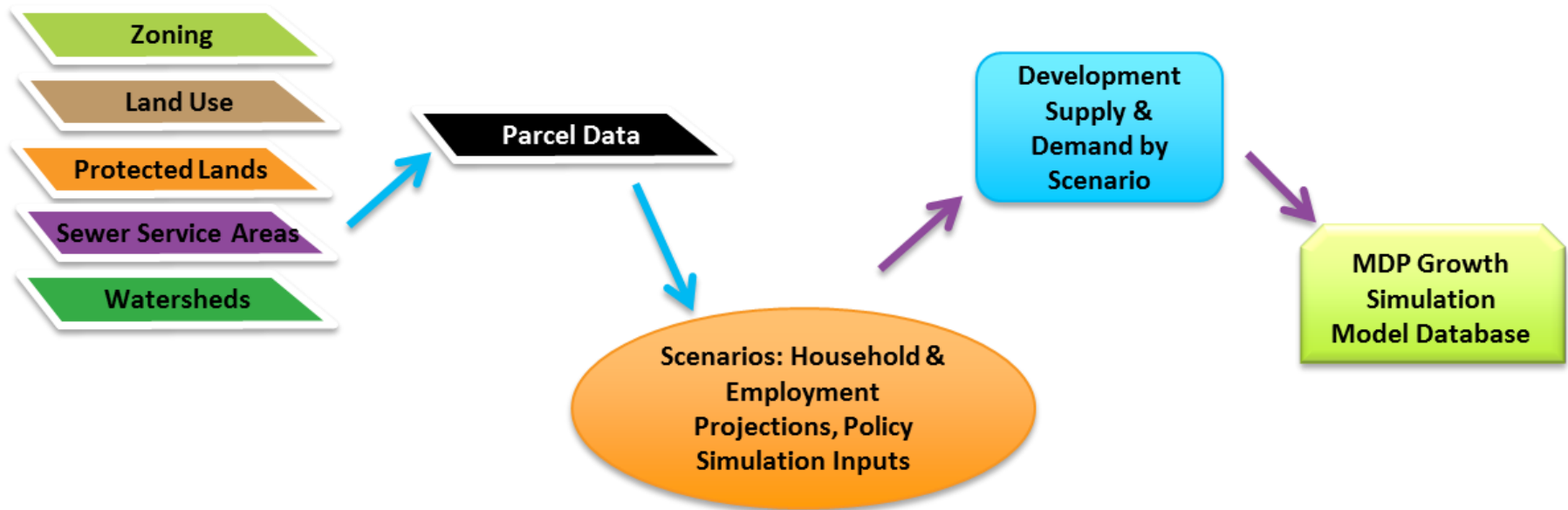
MDP GROWTH SIMULATION MODEL

- Estimates development capacity by land management scenario.
- Estimates land use change using population, household, and employment projections by scenario.
- Estimates future septic systems, guided by local water and sewer planning areas.



MDP GROWTH MODEL

MDP Growth Simulation Model



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QUESTIONS?

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