

ACCOUNTING FOR GROWTH

aka “AfG” –

Growth Offsets

Presented to Water Resources Coordination Council

December 5, 2012

MARYLAND PHASE II WATERSHED IMPLEMENTATION PLAN (WIP)

- ▶ Reduce existing loads to restore health of Bay
- ▶ Accommodate new growth while not adding to existing loads

ACCOUNTING FOR GROWTH

Section 1.8 of MD Phase II WIP

- ▶ Available capacity in wastewater treatment plants (WWTPs) allotted to new development, provided WWTP is under nutrient cap
- ▶ Other new loads from development to be offset
 - ▶ Wastewater over nutrient cap
 - ▶ Stormwater

GROWTH OFFSET OBJECTIVE

- ▶ Minimizing loads from new development
 - ▶ Reduces need for offsets
 - ▶ Helps preserve offsets for economic development
- ▶ Begin to address need to reduce current loadings – safety margin:
 - ▶ Nutrient trading policies require to purchase more credits than will receive
 - ▶ Policy does not account for load reductions from land use change

SENATE BILL 236

Section 8

- ▶ Requires MDE to propose by December 31, 2012, regulations that establish nutrient offset requirements for new residential major subdivisions within Tier III areas that are to be served by septics
- ▶ MDE shall consult with counties & other stakeholders
- ▶ MDE shall brief House Environmental Matters and Senate Education, Health, and Environmental Affairs Committees before submitting to Joint Committee on Administrative, Executive, and Legislative Review (AELR)

LOAD TO BE OFFSET

- ▶ **Based on delivered loads** (*use MD land-river segment delivery factors from Chesapeake Bay Program*)
- ▶ **Nitrogen only** (*phosphorus also*) 
- ▶ **100% post-development load** (*subtract forest load*) 
- ▶ **No credit for pre-development load**



Note: Thumbs up or down indicates changes that may help or be detrimental to municipalities.

Note: Pale green italicized text represents revision MDE is considering.

TRIGGER FOR APPLICABILITY


- ▶ **Change in land use** (*base on development activity:*
 - ▶ *Alteration of land or structure that intensifies use of land or increases wastewater load OR* 📢
 - ▶ *Any construction or alteration that changes runoff characteristics* 📢
 - ▶ *Will exclude more agricultural activities)*
- ▶ **Not apply to disturbance < 1 acre** (*Smaller area of land as trigger*) 📢

CALCULATING POST-DEVELOPMENT LOAD FOR NEW DEVELOPMENT

Using statewide average loading rates

- ▶ **Septics – assume 50% reduction for BAT**
 - ▶ *(Use field-verified BAT efficiency)*
 - ▶ *Use area-specific loading rate based on 3 zones – assume 80% of load reaches stream in critical area, 50% w/i 1,000 ft of stream, 30% for all other areas)*
- ▶ **Stormwater – assign 50% reduction for ESD to MEP**
 - ▶ *(Use regional loading rates)*
 - ▶ *Recognize additional reduction for more effective BMPs) 🍷*

CALCULATING POST-DEVELOPMENT LOAD FOR NEW DEVELOPMENT

- ▶ Wastewater
 - ▶ Septic – more for conventional than BAT
 - ▶ Wastewater treatment plants
 - ▶ No offset required if capacity below cap
 - ▶ If above nutrient cap & discharge permit, offset required; offset greater for lower levels of treatment (secondary & BNR)
- ▶ Stormwater (using Bay model loading rates) – more for impervious than pervious
- ▶ Residential Mobile Emissions (*remove from calculations*) –  more for lower density areas than higher

CALCULATING POST-DEVELOPMENT LOAD FOR REDEVELOPMENT

Exempt from stormwater offset if complies with stormwater management regulations (*Use more expansive redevelopment definition and exempting infill in a Priority Funding Area (PFA)*) 👍

MAINTENANCE OF OFFSET BEST MANAGEMENT PRACTICES (BMP)

- ▶ Offset BMPs must be in place before State stormwater permit for construction (NOI) issued
 - ▶ *(BMPs to be installed & generating reductions before post-development load begins;*
 - ▶ *Allow phase of BMPs to match construction schedule if guaranteed w/ contract)* 👍
- ▶ **Offsets must be permanent & guaranteed; local jurisdiction could be responsible for O&M** (*Offsets to last minimum 30 years w/ broker able to guarantee w/ MDE approval*)

AVAILABILITY OF FEE-IN-LIEU

No fee-in-lieu available

- ▶ *(Fee-in-lieu for nitrogen only*
- ▶ *Payable to Bay Restoration Fund (BRF), w/ projects following priorities in BRF law) 👎*

OBTAINING OFFSETS

- ▶ Direct purchase, construction, or planting, per requirements of MD Nutrient Trading Policies OR
- ▶ Purchase from MD Nutrient Trading Program

NUTRIENT TRADING

- ▶ Ag BMPs Currently Through Maryland Department of Agriculture (MDA)
- ▶ Submit to MDE proof of verified, certified credits
- ▶ Expire in 5 years, or 3 years if construction not started
- ▶ Must comply with local TMDL

OFFSET GEOGRAPHIES

- ▶ Development in Targeted Growth & Revitalization Areas offset anywhere; all other development offset in county
 - ▶ *(For Tier III:*
 - ▶ *Offset obtained in same county where development located*
 - ▶ *If watershed is impaired for phosphorus, offset must be in same watershed as development*
 - ▶ *For AfG: to be determined)*

EFFECTIVE DATE

- ▶ December 31, 2014 for AfG
 - ▶ *(Tier III – one year after adoption of regulations)*
 - ▶ *AfG – to be determined)*
- ▶ Implement through State General Permit

CONSEQUENCES

After Dec 31, 2025, if Chesapeake Bay is not meeting water quality standards:

- ▶ Offset requirement increases by 4 times
- ▶ Unless county implemented actions designed to meet Bay TMDL, then offset requirements same minus forest load

MDE SCHEDULE (2012): TIER III

- ▶ Nov 8 – Present to Sustainable Growth Commission
- ▶ Nov – Draft regulations complete
- ▶ Nov 28 – Brief House & Senate Committees
- ▶ ASAP – Submit to AELR & DLS
- ▶ 15 days later – Submit to MD Register

MDE SCHEDULE (2013): AFG

- ▶ Apr to Jun 2013 – Stakeholder meetings on AfG and trading policies
- ▶ Aug 2013 – Propose regulations
- ▶ Dec 2013 – Have AfG policy and regulations in place

MDE'S ACCOUNTING FOR GROWTH WEBSITE

- ▶ MDE's Accounting for Growth website

http://www.mde.state.md.us/programs/Water/TMDL/TMDLImplementation/Pages/Accounting_For_Growth.aspx

- ▶ LUPD Growth Offsets website (under development)