

Baseline Allocation, Guiding Principles, & Land Use Change

The AfG Work Group is deliberating baseline allocation in relation to land use change.

State staff thinks it important that the WG understand all of the implications of the various proposals and how they relate to the Guiding Principles.

State's Considerations

1. Coming in to the workgroup process, the State was considering zero allocation for growth, i.e., 100% offset as a conservative approach to assure that all TMDL goals would be met. Because the purpose of the workgroup is to provide input and reach consensus, it was anticipated that other options for this and other issues might be recommended.
2. There were four reasons for starting with a conservative (safe from the TMDL perspective) zero baseline allocation:
 - a. The State of Maryland will be lucky to reduce the existing loads enough to meet the TMDL allocation by 2025 because of the cost involved, the complicated process and the likelihood that we will make some mistakes along the way.
 - b. Only 2 source sector loads are still increasing, SW and Septic; even WWTP loads, with growth allocation, are declining due to upgrades
 - c. From a water quality standpoint, there's no inherent reason that a subsequent land user should "inherit" the right to pollute at the rate the former land user had under the TMDL; there are some reasons they should not:
 - 1) Pre and post-development uses are different sources and belong to different source sectors
 - 2) Sectors are subject to different control strategies, BMPs, reduction potentials, implementation processes, and uncertainties
 - 3) Sectors demonstrate quite different levels of progress/success to this point
 - 4) Sectors have different odds for future success to reduce existing loads
 - 5) Fate of land not limited to pre-developed use: it might have gone out of production anyway, been used for GHG mitigation/ eco-service trading, reverted to forest, become estate, etc.
 - 6) Except for buffers, filters, & retirements of marginal lands, land conversion is not a load reduction practice
 - 7) Conversion reduces or eliminates other desirable public attributes, such as habitat value and carbon sequestration potential
 - 8) It is inconsistent with State decisions not to allow inheritance of discharge permit loads.
 - d. Baseline allocation proposals that use land use change:
 - 1) Do not address the considerations made in item 2.c (above)
 - 2) Create relative incentives to develop Ag land
 - 3) Are based on questionable assumptions about net load changes, due to Bay model differences between loads for sources by basin, 2010/2017/2025 model runs (See attached illustrative data in *Baseline Info.doc*, charts 1-3)
 - 4) Might excuse post-development loads from offsets when loads are actually increasing. (See attached illustrative data in *Baseline Info.doc*, charts 1-3)

5. From a water quality perspective, the Bay Cabinet concluded:
 - a. SW & Septic WW offsets less than post-development loads are not justified
 - 1) We might not make the goal
 - 2) Can't afford to excuse SW & Septic WW, the only new & increasing load sectors
 - 3) Other sector loads have been and are being more effectively reduced
 - b. Land conversion & possible associated load reductions
 - 1) Can't be reliably known
 - 2) Net reductions, if any, can be used to benefit of all sectors in 2017 or 2025; as a reserve to address shortfalls; revise allocations in 2017 or 2025 to greatest public benefit
 - 3) Will not be used as part of AfG policy
 - c. If SW & Septic sectors warrant relief in the name of inter-sector fairness,
 - 1) Consider finite offset periods (e.g., 30 yr. offset terms) to enable trading market,
 - 2) Consider use of a minimal baseline allocation (i.e., a universal forest baseline) that is not land use change dependent & is least likely to compromise the TMDL goal
 - 3) Do not consider alternatives that
 - a) Ignore source sector differences,
 - b) Link offset requirements to pre-development uses,
 - c) Rely on questionable/ changeable assumptions about land conversion & load changes,
 - d) Ignore uncertainties that we'll reach the TMDL, &
 - e) Ignore fact that SW & Septic WW sectors are the only ones increasing.

Relation of These Considerations to AfG Guiding Principles (GP)

GP #1: "...loads ... that do not have allocations under the TMDL will need to be offset." GP #1 is based directly on the Bay Cabinet's conclusions (item 5) summarized above. Only some WWTPs have growth allocations.

GP #2: "The AfG program cannot undermine ...important state policies such as growing the economy, preserving agricultural and forest land, revitalizing communities, conserving energy, and addressing climate change.." GP #2 is intended to ensure that the AfG program does not

- Incentivize conversion of Ag land;
- Contradict public priorities, policies, investments & AfG incentives (i.e., redevelopment/ infill provisions and WWTP growth allocations) to concentrate growth, revitalize communities, minimize mobile source GHG emissions, and minimize further climate impacts from mobile sources.
- Compromise ability to support economic / physical development. Priority is to maximize growth potential (residents, jobs). Policy must provide AfG incentives for development with low loading rates per capita growth (jobs & residents), disincentives for high per capita loading development.

GP #3: "The AfG program will encourage developers to plan and locate their developments to minimize pollution, and will require developers to offset the remaining pollution by securing reductions elsewhere." GP #3 is intended to ensure that we provide AfG incentives for development with low loading rates per capita growth (jobs & residents), disincentives for high per capita loading development.

GP #4 “A nutrient trading program will ... offset new and increased loads... spur innovation, accelerate pollution reductions, and reduce the overall cost of restoring and maintaining a clean Bay.” GP #4 reflects the foundational role that strong offset credit demand will play in stimulating credit generation. Once credit generation is established as a profitable enterprise, supply may increase, credits may become cheaper, trading between sectors for target load reductions may become feasible, and the overall cost of the TMDL may go down, while the trading “economy” is shared by trading system participants.

Conclusion: The State is seeking a solution to the baseline issue that will support the Guiding Principles and the considerations (above) on which they are based. Confidence that growth in loads will be addressed; the TMDL can be reached; other public priorities will not be compromised; and that offset capacity for economic growth will not be consumed unnecessarily by high per capita loading development (See attached illustrative data in *Baseline Info.doc*, chart 4); are issues that the State believes the workgroup should heavily weight during their deliberations.