

T&E ITEM 3
July 22, 2010
Worksession

MEMORANDUM

TO: Transportation, Infrastructure, Energy and Environment Committee
MK

FROM: Michael Faden, Senior Legislative Attorney
Amanda Mihill, Legislative Analyst *AMihill*

SUBJECT: **Worksession:** Expedited Bill 40-10, Stormwater Management - Revisions

Expedited Bill 40-10, Stormwater Management - Revisions, sponsored by the Council President at the request of the County Executive, was introduced on June 29, 2010. A public hearing was held on July 13 (see written testimony, ©42-77). Council action on this Bill is tentatively scheduled for September 21, assuming that this Committee has finished its work by then.

Bill 40-10 would require management of stormwater runoff through the use of nonstructural best management practices to the maximum extent practicable for new development and redevelopment projects approved by the Department of Permitting Services, and generally bring local stormwater management requirements into compliance with the Maryland Stormwater Management Act of 2007 and the state implementing regulations adopted this year.

Fiscal impact OMB's fiscal impact statement (see ©87-88) estimates that modest fee increases will eventually be necessary to fund certain costs triggered by this Bill.

Issues/Questions

1) Grandfather provisions Are the grandfather provisions in ©7-8, lines 156-184, and ©21, lines 517-525, optional or required? The state does not require local jurisdictions to adopt a grandfather provision, but if a jurisdiction does it must track the state regulations (which the provisions in this Bill do). (The state grandfather regulations are shown on ©78-79.) Executive branch staff emphasize that the Bill does not assume blanket approval of all administrative waivers (the term used for grandfathering), but rather would subject each administrative waiver request to a "good cause" test, with the burden on the applicant to show good cause to approve the waiver (see ©7, lines 157-160). Councilmember Berliner asked if staff from the Maryland Department of the Environment (MDE) could attend this worksession, but none were available; however, they will be able to answer questions forwarded to them.

2) Redevelopment This Bill continues the current County policy of requiring a higher stormwater management standard for redevelopment than the state requires. Under the state law and implementing regulations, environmental site design (ESD) is required to control 50% of the first inch of rainfall in a redevelopment project, but the County would require it to control 100% (see table on ©41). Environmental organizations support this higher standard, while building industry representatives are not happy with it but are not contesting it.

3) Waivers Testimony from environmental organizations focused on the Bill's waiver provisions on ©21, lines 508-516, urging that these provisions be deleted. The waiver authority in the current law, shown on ©21, lines 526-528 and on ©21-22, lines 531-555, appears to be less restrictive than the Bill's language. Nonetheless, environmental groups urged that the waiver provisions be tightened further and consolidated, as well as more explicitly placing the burden of proof on the applicant for a waiver (see Stormwater Partners memo, ©89-90).

4) Environmental organizations' issues The Stormwater Partners memo, received after the public hearing, (see ©89-92) summarizes major issues that environmental organizations have raised. (Also see the letter from Linda Silversmith on ©47.) Department of Permitting Services (DPS), Planning staff, building industry representatives, and Council staff are able to discuss the issues not already covered.

5) Interagency coordination While DPS is clearly the lead agency for stormwater reviews, the Planning Board is also directly involved. At the hearing, Councilmember Knapp asked how the two agencies will work together on this issue. The Planning staff's memo to the Board (see ©82-83 in particular) identified some coordination issues which the staff believes involve this Bill as well as the agencies' administrative practices. (The Planning Board did not send its official position in time to be printed in this packet.)

In addition, Council staff has revised the Bill's language in certain places to be consistent with Council drafting standards and returned to the current section numbering in Chapter 19 to avoid confusing and unnecessary renumbering.

This packet contains:

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Expedited Bill No. 40-10
Concerning: Stormwater Management --
Revisions
Revised: 7/20/10 Draft No. 2
Introduced: June 29, 2010
Expires: December 29, 2011
Enacted:
Executive:
Effective:
Sunset Date: None
Ch. , Laws of Mont. Co.

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND

By: Council President at the Request of the County Executive

AN EXPEDITED ACT to:

- (1) require management of stormwater runoff through the use of nonstructural best management practices to the maximum extent practicable for new development and redevelopment projects approved by the Department of Permitting Services;
- (2) bring local stormwater management requirements into compliance with the Maryland Stormwater Management Act of 2007; and
- (3) generally amend County law regarding stormwater management.

By amending

Montgomery County Code
Chapter 19, Erosion, Sediment Control and Storm Water Management
Sections 19-20 through 19-35

By adding

Montgomery County Code
Chapter 19, Erosion, Sediment Control and Storm Water Management
Sections 19-21A[[,]] and 19-22A[[, 19-23A]]

Boldface	<i>Heading or defined term.</i>
<u>Underlining</u>	<i>Added to existing law by original bill.</i>
[Single boldface brackets]	<i>Deleted from existing law by original bill.</i>
<u>Double underlining</u>	<i>Added by amendment.</i>
[[Double boldface brackets]]	<i>Deleted from existing law or the bill by amendment.</i>
* * *	<i>Existing law unaffected by bill.</i>

The County Council for Montgomery County, Maryland approves the following Act:

Sec. 1. Sections 19-20 through 19-35 are amended, and Sections 19-

2 21A[[,]] [[and 23A]] and 19-22A are added as follows:

3 19-20. Purpose of article; scope.

4 The purpose of this Article is to protect, maintain and enhance the public
5 health, safety, and general welfare by establishing minimum requirements and
6 procedures to control the adverse impacts associated with increased stormwater
7 runoff from developed and developing lands. [The policy of the County is to
8 minimize damage to public and private property, reduce the effects of development
9 on stream water quality, control stream channel erosion, reduce local flooding, and,
10 to the extent reasonable, maintain the pre-development runoff characteristics of land
11 after development through proper management of stormwater runoff.] The primary
12 goal of the County is to maintain after development, as nearly as possible, the
13 predevelopment runoff characteristics, and to reduce stream channel erosion,
14 pollution, siltation and sedimentation, and local flooding by implementing
15 environmental site design to the maximum extent practicable and using appropriate
16 structural best management practices only when necessary. The 2000 Maryland
17 Stormwater Design Manual and any [[subsequent]] later revisions are incorporated
18 by reference as if fully [[set forth]] contained in this Article.

19 19-21. Definitions.

* * *

21 *Administrative waiver:* A decision by the Department to allow the
22 construction of a development to be governed by the County stormwater
23 management law in effect as of May 4, 2009. An administrative waiver is distinct
24 from a waiver granted under Section 19-25.

25 Agricultural land management practice: [[Those methods]] Any method or
26 [[procedures]] procedure used in the cultivation of land in order to further crop and
27 livestock production and conservation of related soil and water resources.

28 * * *

29 Approval: A documented action by the Department after a review to

30 determine and acknowledge the sufficiency of submitted material to meet the

31 requirements of a specified stage in the County's development review process.

32 Approval does not mean an acknowledgement by the Department that submitted

33 material has been received for review.

39 * * *
40 *Channel protection storage volume*: The volume used to design structural best
41 management practices to control stream channel erosion.

43 *Concept plan:* The first of 3 required plan approvals that includes the
44 information necessary to allow an initial evaluation of a proposed project.

46 *Design Manual:* The [applicable] 2000 Maryland Stormwater Design Manual,
47 as revised from time to time, which serves as the official guide for stormwater
48 management principles, methods, and practices in Maryland.

Drainage area: That area[, which is enclosed by a ridge line,] that contributes runoff to a single point, measured in a horizontal plane.

Environmental site design [or] (ESD): Using small-scale stormwater management practices, nonstructural techniques, and better site planning to mimic natural hydrologic runoff characteristics and minimize the impact of development on

55 water resources. Methods [[for designing]] to design ESD practices are specified in
56 the Design Manual.

* * *

58 Final project approval: Approval of the final stormwater management plan
59 and erosion and sediment control plan required to construct a project's stormwater
60 management facilities. Final project approval also includes securing bonding or
61 financing for final development plans if either is required as a prerequisite for
62 approval.

63 Final stormwater management design plan: The last of 3 required plan
64 approvals that includes the information necessary to allow all approvals and permits
65 to be issued by the appropriate authority.

* * *

67 Impervious area: Any surface that prevents or significantly impedes the
68 infiltration of water into the underlying soil, including any [[structures, buildings,
69 patios, decks, sidewalks]] structure, building, patio, deck, sidewalk, compacted
70 gravel, pavement, asphalt, concrete, stone, brick, tile, swimming [[pools]] pool,
71 [[and]] or artificial turf. Impervious surface also includes [[all areas]] any area used
72 by or for motor vehicles or heavy commercial equipment, regardless of surface type
73 or material, including any [[roads]] road, road [[shoulders]] shoulder, [[driveways]]
74 driveway, [[and]] or parking [[areas]] area.

75 Infiltration: The passage or movement of water into the soil surface.

76 Maximum extent practicable [[or]] (MEP): Designing stormwater
77 management systems so that all reasonable opportunities for using environmental site
78 design planning techniques and treatment practices are exhausted and, only where
79 absolutely necessary, a structural best management practice is implemented.

80 Nonstructural maintenance: Grass cutting; removal of litter and debris, tree
81 limbs, algae and aquatic plants; tree and shrub trimming and removal; maintenance

82 of fences; aesthetic improvements such as graffiti removal, and any other
83 [[enhancements]] enhancement in and around a stormwater management facility that
84 [[are]] is not [[necessarily]] essential [[for ensuring]] to ensure that the facility
85 continues to function properly.

86 * * *

On-site stormwater management: The design and construction of [a facility] stormwater practices to control [all] stormwater runoff in a development.

Overbank flood protection volume: The volume controlled by structural practices to prevent an increase in the frequency of out of bank flooding generated by development.

92 * * *

Planning Director: The Director of the County Planning Department, or the
Director's designee

Planning techniques: A combination of strategies employed early in project design to reduce the impact from development and to incorporate natural features into a stormwater management plan.

98 * * *

99 Preliminary project approval: An approval as part of the Department's
100 preliminary development or planning review process that includes[[,]] at [[a
101 minimum]] least:

- 102 (a) the number of planned dwelling units or lots;
103 (b) the proposed project density;
104 (c) the proposed size and location of all land uses for the project;
105 (d) a plan that identifies:
106 (1) the proposed drainage patterns;
107 (2) the location of [[all points]] each point of discharge from the site;
108 and

(3) the type, location, and size of [[all]] each stormwater management [[measures]] measure based on site-specific stormwater management requirement computations; and

(e) any other information required by the Department, including:

(1) the proposed alignment, location, and construction type and standard for [[all roads]] any road, access [[ways]] way, and [[areas]] area of vehicular traffic;

(2) a demonstration that the methods by which the development will be supplied with water and wastewater service are adequate; and

(3) the size, type, and general location of all proposed wastewater and water system infrastructure.

* * *

Redevelopment: Any construction, alteration, or improvement [which] that:

(a) exceeds or equals 5,000 square feet of land disturbance; and

(b) is performed on a site where the existing land use is commercial, industrial, institutional, or multifamily residential and existing imperviousness is greater than 40 percent.

* * *

Site development stormwater management plan: The second of 3 required plan approvals [[that include]] which includes information necessary to allow detailed evaluation of a proposed project.

Stabilization: the prevention of soil movement by any of various vegetative or structural means.

132 **Stormwater**: [That precipitation which travels over natural, altered, or
133 impervious surfaces to the nearest stream, channel, conduit, or impoundment and
134 appears in surface waters. Stormwater also includes snow melt] Water that originates
135 from [[a]] precipitation [[event]].

Stormwater management: The collection, conveyance, storage, treatment, and control of stormwater [runoff] as needed to reduce accelerated stream channel erosion, increased flood damages, or water pollution.

Stormwater management facility: An infiltration device, [vegetative filter,]
filtering device, stormwater pond, stormwater wetland, hydrodynamic structure,
[channel, pipe, weir, orifice, or combination of those measures,] or other [[best
management]] practice designed and constructed to control stormwater [runoff] to
reduce accelerated stream channel erosion and pollution of surface waters. A
stormwater management facility does not include environmental site design practices
or any nonstructural stormwater management system.

146 * * *

147 Stormwater management system: Natural areas, environmental site design
148 practices, stormwater management measures, and any structure through which
149 stormwater flows, infiltrates, or discharges from a site.

Structural maintenance: The inspection, construction, reconstruction, modification, [or] repair, and cleaning of any part of a stormwater management facility undertaken to assure that the facility remains in the proper working condition to serve its intended purpose and prevent [structural] failure. Structural maintenance does not include landscaping, grass cutting, or trash removal.

155 * * *

- 157 (a) The Director may, for good cause shown, grant an administrative
158 waiver to a development that received a preliminary project approval
159 before May 4, 2010. Administrative waivers expire as provided under
160 subsection (b) and may be extended as provided under subsection (c).

161 (b) Expiration of an administrative waiver.

- 162 (1) Except as provided in subsection (c), an administrative waiver
163 must expire on:
164 (A) May 4, 2013, if the development does not receive final
165 project approval before that date; or
166 (B) May 4, 2017, if the development receives final project
167 approval before May 4, 2013.
- 168 (2) All construction authorized under an administrative waiver must
169 be completed by:
170 (A) May 4, 2017; or
171 (B) if the waiver is extended under subsection (c), [[by]] the
172 [[expiration]] date [[of]] the waiver [[extension]] expires.
- 173 (c) Extension of an administrative waiver.
174 (1) Except as provided in paragraph (2), an administrative waiver
175 must not be extended.
176 (2) An administrative waiver may only be extended if, by May 4,
177 2010 the development:
178 (A) received a preliminary project approval; and
179 (B) was subject to a development rights and responsibilities
180 agreement or a tax increment financing approval.
181 (3) An administrative waiver extended under paragraph (2) expires
182 when the development rights and responsibilities agreement[[,]]
183 or the tax increment financing approval[[, or the annexation
184 agreement]] expires.

185 **19-22. Watershed management plans.**

- 186 (a) The Department of Environmental Protection, in cooperation with the
187 Department, the Board, and other appropriate agencies, may develop
188 watershed management plans to implement stormwater management

189 policies that apply individually to specific watersheds in the County.
190 Each watershed management plan should:

191 * * *

192 (5) specify the types of [quantitative] stormwater management,
193 stream restoration and wetlands protection practices to be
194 implemented;

195 * * *

196 (7) specify where the [Department] Director may grant waivers of
197 on-site stormwater management controls;

198 * * *

199 **[[19-23]] 19-22A. Stormwater management measures.**

200 (a) An applicant must use the ESD planning techniques and practices and
201 structural stormwater management measures established in this Article
202 and the Design Manual, either alone or in combination, in a stormwater
203 management plan. An applicant must demonstrate that environmental
204 site design has been implemented to the maximum extent practicable
205 before [[the use of]] a structural best management practice is
206 [[considered]] included in [[developing the]] a stormwater management
207 plan.

208 (b) ESD planning techniques and practices.

209 (1) An applicant must apply the following planning techniques
210 according to the Design Manual to satisfy the on-site stormwater
211 management requirements of Section [[19-25]] 19-24:

- (A) preserve and protect natural resources;
- (B) conserve natural drainage patterns;
- (C) minimize impervious area;
- (D) reduce runoff volume;

- 216 (E) use ESD practices to maintain 100% of the average annual
217 predevelopment groundwater recharge volume for the site;
218 (F) use green roofs, permeable pavement, reinforced turf, and
219 other alternative surfaces;
220 (G) limit soil disturbance, mass grading, and compaction;
221 (H) cluster development; and
222 (I) any practice approved by the Administration.
- 223 (2) An applicant must design the following ESD treatment practices
224 according to the Design Manual to satisfy the on-site stormwater
225 management requirements of Section [[19-25]] 19-24:
- 226 (A) disconnection of rooftop runoff;
227 (B) disconnection of nonrooftop runoff;
228 (C) sheetflow to conservation areas;
229 (D) rainwater harvesting;
230 (E) submerged gravel wetlands;
231 (F) landscape infiltration;
232 (G) infiltration berms;
233 (H) dry wells;
234 (I) micro-bioretention;
235 (J) rain gardens;
236 (K) swales;
237 (L) enhanced filters; and
238 (M) any practice approved by the Administration.
- 239 (3) The use of ESD planning techniques and treatment practices
240 specified in this Section must not conflict with existing State or
241 County laws.
- 242 (c) Structural stormwater management [[measures]] practices.

- 243 (1) An applicant must design the following structural stormwater
244 management practices according to the Design Manual to satisfy
245 the on-site stormwater management requirements of Section [[19-
246 25]] 19-24:
247 (A) stormwater management ponds;
248 (B) stormwater management wetlands;
249 (C) stormwater management infiltration;
250 (D) stormwater management filtering systems; and
251 (E) stormwater management open channel systems.
252 (2) An applicant must consider the performance criteria specified in
253 the Design Manual with regard to general feasibility, conveyance,
254 pretreatment, treatment and geometry, environment and
255 landscaping, and maintenance when selecting structural
256 stormwater management practices.
257 (3) An applicant must select structural stormwater management
258 practices to accommodate the unique hydrologic or geologic
259 [[regions]] region of the County where the property to be
260 developed is located.
261 (d) An applicant may use an alternative ESD planning [[techniques and]]
262 technique or treatment [[practices and]] practice or structural
263 stormwater management [[measures]] measure for new development
264 runoff control if [[they meet]] it meets the performance criteria
265 established in the Design Manual and [[are]] is approved by the
266 Administration. [[Practices]] Any practice used for a redevelopment
267 [[projects]] project must be approved by the Department.
268 (e) [[For purposes of]] Before modifying the on-site stormwater control
269 requirements or design criteria, the applicant must submit to the

270 Department an analysis of the impacts of stormwater flows downstream
271 in the watershed. The analysis must include hydrologic and hydraulic
272 calculations necessary to determine the impact of hydrograph timing
273 modifications of the proposed development [[upon]] on a dam,
274 highway, structure, or natural point of restricted streamflow, established
275 with the Department's concurrence, downstream [[of]] from the first
276 downstream tributary whose drainage area equals or exceeds the
277 contributing area to the project or stormwater management facility.

278 **[[19-23A. Specific design criteria.]]**

279 [[The basic design criteria, methodologies, and construction specifications,
280 subject to the approval of the Department and the Administration, must be those of
281 the Design Manual.]]

282 **[19-23] [[19-24]] 19-23. Review and approval of stormwater management plans.**

283 (a) *Concept plan.* Before the Board may approve a preliminary plan of
284 subdivision, an applicant must submit a stormwater management and
285 sediment control concept plan to the Department for review and
286 approval. [If a preliminary plan of subdivision or site plan is not
287 required, the applicant must submit a stormwater management concept
288 plan to the Department for review and approval before submitting an
289 application for a sediment control permit.] [[All plans]] Each plan
290 submitted for concept approval must provide sufficient information for
291 the Department to make an initial assessment of the proposed project
292 and determine whether stormwater [[management]] can be [[provided]]
293 managed according to this Article and the Design Manual. Each
294 concept plan is subject to the following conditions and requirements:

295 (1) A natural resources inventory must be reviewed and approved by
296 the Department or the [[Board]] Planning Director before the

297 applicant submits a concept plan [[as required]] under this
298 Section.

299 [(1)] (2) The plan must indicate how the stormwater management and
300 sediment control criteria will be applied to each proposed
301 development or redevelopment project. The Department may
302 require a plan to analyze the downstream effects of any proposed
303 development or redevelopment project. [The plan must indicate
304 how the development will minimize any interference with or
305 addition to the current flow of water onto adjacent properties.
306 The applicant may include structural and nonstructural
307 stormwater management measures in the plan.] The basic design
308 criteria, [[and]] methodologies, and construction specifications
309 used in developing the plan must be [[consistent with criteria]]
310 specified in the Design Manual and any other criteria established
311 by regulation.

312 (3) The plan must describe how environmental site design practices
313 will be implemented to the maximum extent practicable and
314 [[provide for]] allow use of any structural best management
315 [[practices]] practice only where the applicant [[is able to
316 demonstrate to the Director's satisfaction]] shows that
317 environmental site design or [[other]] another nonstructural best
318 management [[practices are]] practice is not a viable option.

319 (4) The plan must include [[the following]]:
320 (A) a map, at a scale specified by the Department, showing site
321 location, existing natural features, water and other sensitive
322 resources, topography, and natural drainage patterns;

- 323 (B) the anticipated location of [[all]] each proposed impervious
324 [[areas, buildings, roadways, parking, sidewalks, utilities]]
325 area, building, roadway, parking, sidewalk, utility, and
326 other site [[improvements]] improvement;
- 327 (C) the location of the proposed limit of disturbance, erodible
328 soils, steep slopes, and any [[areas]] area to be protected
329 during construction;
- 330 (D) preliminary estimates of stormwater management
331 requirements, the [[selection and]] location of each ESD
332 [[practices]] practice to be used, and the location of [[all
333 points]] each point of discharge from the site; and
- 334 (E) any other information the Director requires.

335 [(2)] (5) Any stormwater management plan must be consistent with any
336 watershed management plan that the Department of
337 Environmental Protection has approved or any flood management
338 plan that the [Maryland Department of the Environment]
339 Administration has approved involving the site of the proposed
340 development or redevelopment project.

341 [(3)] (6) The Department must refer the concept plan [back] to the
342 Department of Environmental Protection, the Department of
343 Transportation, and the Board for comment before approving the
344 plan [if the Board so requests].

345 [(4)] The Department may require incrementally more specific
346 submittals at each stage of the approval process for a project
347 which requires site plan or development plan review.]

348 (b) Site development stormwater management plan. Before the Board may
349 approve a site plan, the applicant must submit a site development

350 stormwater management plan to the Department for review and
351 approval. The applicant may combine the site development stormwater
352 management plans with the concept [[plans]] plan required under
353 subsection (a) if [[acceptable to]] the Director approves. Any site
354 development stormwater management plan submitted for review and
355 approval must include [[the following]]:

- 356 (1) all information provided during the concept plan review
357 [[phase]];
- 358 (2) final site layout, exact impervious area locations and acreages,
359 proposed topography, a delineated drainage [[areas]] area at [[all
360 points]] each point of discharge from the site, and stormwater
361 volume computations for ESD practices and structural measures;
- 362 (3) a proposed erosion and sediment control plan that contains the
363 construction sequence, any phasing necessary to limit earth
364 disturbances and impacts to natural resources, and an overlay
365 plan showing the [[types]] type and [[locations]] location of each
366 ESD and erosion and sediment control [[practices]] practice to be
367 used;
- 368 (4) a narrative that supports the site development design, describes
369 how ESD will be used to meet the minimum control
370 requirements, and justifies any proposed structural stormwater
371 management measure; and
- 372 (5) any other information the Director requires.

373 [(b)] (c) [Design] Final stormwater management design plan.

- 374 (1) Any person required under this Chapter to obtain a sediment
375 control permit must include a final stormwater management
376 design plan as part of the permit application. The final

377 stormwater management design plan must conform to both the
378 concept plan and site development stormwater management
379 [u]concept] plan and serve as the basis for all later construction.
380 [All construction specifications must adhere to the requirements
381 in the Design Manual and any applicable regulations.] The
382 applicant must submit a final stormwater management design
383 plan for approval in the form of construction drawings
384 accompanied by a report that includes sufficient information to
385 evaluate the effectiveness of the proposed runoff control design.
386 The applicant must also submit a final erosion and sediment
387 control plan under [[Section 26.17.01.05 of the Maryland Code
388 of]] applicable State Regulations[], as amended]]. Any plan
389 submitted under this paragraph must meet all [[of the]]
390 requirements of the Design Manual.

- 391 (2) Any report submitted for final stormwater management design
392 plan approval must include[], but is not limited to]]:
- 393 (A) geotechnical investigations, including soil maps, borings,
394 site-specific recommendations, and any additional
395 information necessary for the final stormwater
396 management design;
- 397 (B) a drainage area map depicting predevelopment and post-
398 development runoff flow path segmentation and land use;
- 399 (C) hydrologic computations of the applicable ESD and
400 unified sizing criteria according to the Design Manual for
401 [[all points]] each point of discharge from the site;

- 402 (D) hydraulic and structural computations for [[all]] each ESD
403 [[practices]] practice and structural stormwater
404 management [[measures]] measure to be used; and
405 (E) a narrative that supports the final stormwater management
406 design.
- 407 (3) Construction drawings submitted for final stormwater
408 management design plan approval must include[[, but are not
409 limited to]]:
- 410 (A) a vicinity map;
411 (B) existing and proposed topography and any proposed
412 drainage area, including any area necessary to determine
413 downstream analysis for [[the]] each proposed stormwater
414 management [[facilities]] facility;
415 (C) any proposed improvement, including the location of any
416 building or other structure, impervious surface, storm
417 drainage facility, and all grading;
418 (D) the location of any existing and proposed structure;
419 (E) any easement and right-of-way;
420 (F) the delineation, if applicable, of the 100-year floodplain
421 and any on-site [[wetlands]] wetland;
422 (G) structural and construction details, including representative
423 cross sections for [[all components]] each component of
424 the proposed drainage system or systems and stormwater
425 management facilities;
426 (H) all necessary construction specifications;
427 (I) a sequence of construction;

- 428 (J) data for total site area, disturbed area, new impervious
429 area, and total impervious area;
- 430 (K) a table showing the ESD and unified sizing criteria
431 volumes required in the Design Manual;
- 432 (L) a table of materials to be used for stormwater management
433 facility planting;
- 434 (M) [[all]] each soil boring [[logs]] log and [[locations]]
435 location;
- 436 (N) an inspection and maintenance schedule;
- 437 (O) certification by the [[owner/developer]] applicant that all
438 stormwater management construction will be [[done]]
439 completed according to this plan; and
- 440 (P) an as-built certification signature block, to be executed
441 after project completion.
- 442 (4) The maintenance schedule required under this Section must cover
443 the life of any structural stormwater management facility or
444 system of ESD practices and must specify the maintenance to be
445 completed, the time period for completion, and the responsible
446 party that will perform the maintenance. The maintenance
447 schedule must be printed on the approved final stormwater
448 management plan.

449 [(c)] (d) Plan preparation. The Director may require the stormwater
450 management concept, site development stormwater management, and
451 final stormwater management and design plans to be prepared by a
452 professional engineer, professional land surveyor, registered architect or
453 landscape architect licensed in Maryland, or any other individual whose
454 qualifications are acceptable to the Department. If a stormwater best

455 management practice requires either a dam safety permit from the
456 [Maryland Department of the Environment] Administration or a small
457 pond approval from the District, the Director must require the design
458 plan to be prepared by a professional engineer licensed by the State of
459 Maryland.

460 (e) Runoff. If a stormwater management plan involves direction of some or
461 all runoff off [[of the]] site, [[it is]] the [[developer's responsibility to]]
462 developer must obtain from any adjacent property owner any easement
463 or other necessary property interest concerning water flow. Approval of
464 a stormwater management plan does not create or [[affect]] imply any
465 right to direct runoff onto any adjacent property without that property
466 owner's permission.

467 [19-24] [[19-25]] **19-24. On-site requirements; County participation; waivers.**

468 (a) *On-site stormwater management.*

469 (1) A person that receives [a building permit or] a sediment control
470 permit must provide on-site stormwater management unless the
471 Director waives this requirement.

472 (2) The Director may waive the on-site stormwater management
473 requirement if the Director finds that:

474 (A) environmental site design has been implemented to the
475 maximum extent practicable, and stormwater from the site
476 is safely conveyed to a Department approved off-site
477 facility that has been constructed to provide stormwater
478 management for the site; or

479 (B) on-site stormwater management is not required under
480 applicable State law.

- (3) [[The use of]] ESD planning techniques and treatment practices must be [[exhausted]] used to the maximum extent practicable under the Design Manual before any structural best management practice [[may be]] is implemented. A stormwater management plan for a development project subject to this Article must be designed using the ESD sizing criteria, recharge volume, water quality volume, and channel protection storage volume criteria according to the Design Manual. The MEP standard is met when channel stability is maintained, predevelopment groundwater recharge is replicated, nonpoint source pollution is minimized, and structural stormwater management practices are used only if [[determined to be]] absolutely necessary.

* * *

(c) *Waiver.*

- (1) An applicant seeking a waiver of any on-site stormwater management requirement must submit a request to the Department in writing in a form acceptable to the Director. [The applicant must submit a separate written request for each later addition, extension, or modification to a development that has received a waiver.]
 - (2) A request for quantitative stormwater control waivers must contain sufficient descriptions, drawings, and any other information that is necessary to [[demonstrate]] show that environmental site design has been implemented to the maximum extent practicable. The applicant must submit a separate written request for each later addition, extension, or modification to a development that has received a waiver.

- 508 (3) Except as provided in paragraph (4), stormwater management
509 qualitative control waivers apply only to:
510 (A) an infill development project where environmental site
511 design is not feasible;
512 (B) a redevelopment project if the applicable requirements of
513 this Article are satisfied; or
514 (C) a site where [[the Director determines that]] circumstances
515 exist that prevent the reasonable implementation of
516 environmental site design.
- 517 (4) The Director may grant a stormwater management quantitative
518 and qualitative control waiver for a phased development project if
519 a system designed to meet the 2000 State and County regulatory
520 requirements [[under State and County law]] for multiple phases
521 was constructed by May 4, 2010. If the 2009 regulatory
522 requirements cannot be met for any future [[phases]] phase
523 constructed after May 4, 2010, the applicant must [[demonstrate]]
524 make all reasonable efforts to incorporate environmental site
525 design in each future [[phases]] phase.
- 526 [(2)] (5) The Director may grant a waiver if the applicant shows that
527 existing physical conditions prevent full compliance with any on-
528 site stormwater management requirement. However, the
529 applicant must still demonstrate that environmental site design
530 has been implemented to the maximum extent practicable.
- 531 [(3)] (6) If a site is an infill development or redevelopment site, the
532 Director may waive channel protection requirements[,] if all
533 reasonable options for implementing environmental site design to
534 the maximum extent practicable have been exhausted, and:

564 [19-25] [[19-26]] **19-25. Contributions, dedications, and stream restoration.**

* * *

- 566 (c) *Stream and wetlands restoration measures.* [The] For redevelopment
567 only, the Department may allow an applicant to construct stream or
568 wetland restoration measures instead of [on-site stormwater
569 management controls] monetary contributions or dedications if:
570 (1) the Director of Permitting Services and the Director of
571 Environmental Protection both find that it is in the County's best
572 interest for the applicant to provide stream or wetland restoration
573 measures; and
574 (2) the estimated cost of the stream or wetland restoration measures
575 do not exceed the estimated cost of on-site stormwater
576 management controls that the applicant would otherwise be
577 required to [construct] provide for new development.

578 [19-26] [[19-27]] 19-26. Stormwater management design criteria.

- 579 (a) [Each applicant must use recharge volume, water quality volume, and
580 channel protection storage volume sizing criteria to design a stormwater
581 management facility for new development as required by the Design
582 Manual and any applicable regulation. Each applicant must also use
583 water quality volume and channel protection storage criteria for any
584 redevelopment project.] [Unless otherwise indicated, redevelopment is
585 subject to the same requirements that are applicable to new development
586 under this Article.] Each applicant must use planning techniques,
587 nonstructural practices, and design methods to implement

588 environmental site design to the [[MEP standard]] maximum extent
589 practicable. The use of environmental site design must be exhausted
590 before any structural best management [[practices are]] practice is used.
591 Each stormwater management [[plans]] plan must be designed using
592 ESD sizing criteria, recharge volume, water quality volume, and
593 channel protection storage volume sizing criteria, according to the
594 Design Manual and any applicable regulation. If the Department finds
595 that historical flooding problems exist at the site of a new development
596 or redevelopment project, the Director may require the use of overbank
597 flood protection volume [and], extreme flood volume criteria, or both.

598 (b) [The Director may reduce the minimum control requirements if the
599 applicant incorporates nonstructural stormwater management measures
600 into the site design plans in accordance with the Design Manual and any
601 applicable regulations.] Unless otherwise indicated, redevelopment is
602 subject to the same requirements that apply to new development under
603 this Article. For redevelopment, the applicant may use alternative
604 stormwater management measures to satisfy the requirements in
605 subsection (a) if the applicant [[satisfactorily demonstrates to the
606 Director]] shows that impervious area reduction and environmental site
607 design have been implemented to the maximum extent practicable. The
608 use of environmental site design for redevelopment projects must not
609 reduce the density [[established]] allowable under [[the County Zoning
610 Code,]] Chapter 59 and any master [[plans, and]] or sector [[plans]]
611 plan. Alternative stormwater management measures include[[, but are
612 not limited to]]:

613 (1) an on-site structural best management practice;

- (2) an off-site structural best management practice to provide water quality treatment; or
 - (3) a combination of impervious area reduction, environmental site design implementation, and an on-site or off-site structural best management practice within the limit of disturbance.

[c] The applicant may use alternative structural and nonstructural practices to satisfy water quality volume requirements if the Director finds that those practices satisfy the criteria in the Design Manual and any additional criteria established by regulation. The Department must approve any alternative practice used for either a new development or redevelopment project. The Administration must also approve any alternative practice used for a new development project.]

[19-27] [[19-28]] 19-27. Financial security.

- (a) *Required.*

(1) Before issuing a [building] sediment control permit for a development which requires a stormwater management [facility] system, the Director must require the applicant or owner to furnish a performance or cash bond, irrevocable letter of credit, certificate of guarantee, or other instrument from a financial institution or issuing person satisfactory to the Director and the County Attorney, for construction of the on-site stormwater management [facility] system in an amount equal to the estimated cost of the construction.

* * *

- (3) The bond, letter of credit, certificate of guarantee, or other instrument must be conditioned on the faithful performance of the terms and conditions of an approved stormwater management

641 plan and construction of the [facility] system as provided in that
642 plan and under this Article. The bond, letter of credit, certificate
643 of guarantee, or other instrument must inure to the benefit of the
644 County if the applicant or owner does not comply with the
645 conditions of the bond, letter of credit, certificate of guarantee, or
646 other instrument.

647 (b) *Release.*

648 (1) The Director must not release a bond, letter of credit, certificate
649 of guarantee, or other instrument until the [Department, after a
650 final inspection,] applicant has [found] submitted “as-built” plans
651 and the Department has issued a certification of completion based
652 on the Director’s finding, after having performed a final
653 inspection, that the stormwater management [facility] system
654 complies with the approved plan and this Article.

655 (2) The Department may agree with an applicant regarding the stages
656 of the work to be done on the [facility] system. After completing
657 each stage, the applicant must notify the Department that the
658 applicant is ready for an inspection and, after the Director
659 certifies that the applicant has completed that stage of work under
660 the approved plan and this Article, the Director may reduce the
661 bond, letter of credit, certificate of guarantee, or other instrument
662 pro rata, or may direct the Director of Finance to refund to the
663 applicant a prorated share of the amount that the applicant
664 deposited with the County.

665 * * *

666 [19-28] [[19-29]] **19-28. Inspection and maintenance of stormwater management**
667 **[facilities] systems.**

668 (a) *Installation inspections.*

669 (1) The [Department] Director, or [an individual] a person designated
670 by the applicant that is also qualified and approved by the
671 Department to supervise construction, must inspect each
672 [stormwater] best management [facility] practice under
673 construction as needed to certify the [facility's] system's
674 compliance with approved plans. The inspector must conduct
675 each inspection as provided in a checklist or in any other manner
676 that the Department has approved for each type of stormwater
677 management [facility] system. The inspector must prepare a
678 written inspection report that includes [[the following
679 information]]:

- 680 (A) the date and location of the inspection;
681 (B) whether construction [complied] complies with the
682 approved stormwater management plan;
683 (C) any variation from approved construction specifications;
684 and
685 (D) any [[violations]] violation of law or regulations that the
686 inspector observes.

- 687 (2) The Department must notify the applicant in writing if the
688 inspector observes any [[violations]] violation of this Article
689 during the inspection. The written notice must describe the
690 nature of [[the]] each violation and prescribe any corrective
691 action needed.
692 (3) Construction work on a stormwater management [facility] system
693 must not proceed until the Department:

- 694 (A) inspects and approves the work previously completed or
695 the plans and certifications previously submitted; and
696 (B) furnishes the inspection reports to the applicant after each
697 inspection.
- 698 (4) Once construction is complete, the applicant must submit as-built
699 plan certification to the Department to ensure that ESD planning
700 techniques, treatment practices, and structural stormwater
701 management measures and conveyance systems comply with the
702 specifications [[contained]] in each approved [[plans]] plan. At a
703 minimum, as-built certification must include a set of drawings
704 comparing the approved stormwater management plan with what
705 was constructed. The Director may require additional
706 information if needed.
- 707 (5) [[All]] Each as-built [[plans]] plan submitted to the Department
708 under this subsection must be prepared by a design professional
709 or other person qualified and approved by the Department.
- 710 [(b) *Inspection and maintenance of off-site facilities.* The Department of
711 Environmental Protection must inspect and approve each off-site
712 stormwater management facility for acceptance for County
713 maintenance. After a facility is accepted, the Department of
714 Environmental Protection must inspect each underground facility at
715 least once each year and each above-ground facility at least once every
716 3 years, and must maintain each accepted facility in good working
717 condition.]
- 718 [(c) (b) *[Inspection and maintenance] Maintenance of new [on-site facilities]*
719 *stormwater management systems.*

- 720 (1) Before issuing a [building] sediment control permit to develop
721 any property that requires [an on-site stormwater management
722 facility] implementation of best management practices, the
723 Department must require the property owner to execute an
724 easement and an inspection and maintenance agreement that is
725 binding on [[all]] [later] [[subsequent owners]] each later owner
726 of the land to be served by any private stormwater management
727 system.
- 728 (2) The easement [and agreement] must give the County a perpetual
729 right of access to the [facility] stormwater management system at
730 all reasonable times[[,]] to inspect, operate, monitor, install,
731 construct, reconstruct, modify, maintain, clean, or repair any part
732 of the stormwater management [facility] system within the area
733 covered by the easement as needed to assure that the [facility]
734 system remains in proper working condition under approved
735 design and environmental standards. The inspection and
736 maintenance agreement must require the owner to be responsible
737 for all maintenance of any completed ESD treatment system and
738 nonstructural maintenance of [the] any on-site stormwater
739 management facility if the development consists of residential
740 property or associated nonresidential property. Otherwise, the
741 inspection and maintenance agreement must require the owner to
742 be responsible for all maintenance of the [facility] entire on-site
743 stormwater management system, including [structural
744 maintenance] maintaining in good condition, and promptly
745 repairing and restoring, [[all]] each ESD [[practices]] practice,
746 grade [[surfaces, walls, drains, dams]] surface, wall, drain, dam

747 and [[structures]] structure, vegetation, erosion and sediment
748 control [[measures]] measure, and any other protective [[devices
749 in perpetuity]] device forever.

* * *

- 751 (5) [The Department of Environmental Protection must inspect each
752 County- maintained underground facility at least once every year
753 and each County-maintained above-ground facility at least once
754 every 3 years.] Any repair or restoration and maintenance
755 performed under this Section must [[be in accordance]] comply
756 with each previously approved or newly submitted [[plans]] plan
757 and any reasonable corrective measure specified by the Director
758 of Environmental Protection.

- 761 (1) The owner of [an on-site] a stormwater management facility that
762 is not subject to subsection [(c)] (b) must perform all structural
763 maintenance needed to keep the facility in [property] proper
764 working condition. The owner of a residential property or
765 associated nonresidential property, or a homeowners' association
766 [which] that includes the residential property, may execute a
767 stormwater management easement granting the County a
768 perpetual right of access to inspect, operate, monitor, install,
769 construct, reconstruct, modify, maintain, clean, or repair any part
770 of the stormwater management facility within the easement as
771 needed to assure that the facility remains in proper working
772 condition under approved design standards.

- 773 (2) If the owner of a stormwater management facility grants a
774 stormwater management easement to the County, the owner must
775 make any structural repairs needed to place the facility in proper
776 working condition, as determined by the Department of
777 Environmental Protection, before the County enters into an
778 inspection and maintenance agreement with the owner that
779 obligates the County to assume responsibility for structural
780 maintenance of the facility. After the owner and the County have
781 agreed that the County will assume responsibility for structural
782 maintenance of the facility, the owner must record in the County
783 land records the easement and any other [[agreements]]
784 agreement executed in conjunction with the easement that [[are
785 binding on]] binds any later [[owners]] owner of the land. The
786 owner must deliver a certified copy of each recorded document to
787 the Department of Environmental Protection.
- 788 (3) After the Department of Environmental Protection receives a
789 certified copy of the easement and agreements, the County must
790 structurally maintain and inspect the facility as provided in
791 subsection [c] (b).
- 792 (e) Abandonment instead of repair.]
- 793 (d) Maintenance inspections.
- 794 (1) The Department of Environmental Protection must inspect each]
795 ensure preventive maintenance [[through inspection of]] by
796 inspecting all stormwater management facility to see what
797 repairs, if any, are needed to restore the facility to proper working
798 condition. If the Director of Environmental Protection finds that
799 the stormwater management facility is no longer needed to

control stormwater runoff or that the benefits of a repaired stormwater management facility are not justified by the cost of repair, the owner of the stormwater management facility must abandon the use of the facility for stormwater functions as the Director of Environmental Protection orders. Any order issued under this subsection must not restrict the facility from being used for recreational or other purposes not related to stormwater control.] systems. The inspection must occur during the first year of operation and then at least once every 3 years.

- (2) [[Inspection reports must be maintained by the]] The Department of Environmental Protection must maintain an inspection report for [[all]] each stormwater management [[systems and]] system. Each report must include [[the following]]:
- (A) the date of inspection;
 - (B) name of inspector;
 - (C) the condition of each:
 - (i) vegetation or filter [[media]] medium;
 - (ii) [[fences]] fence or other safety [[devices]] device;
 - (iii) [[spillways, valves]] spillway, valve, or other control [[structures]] structure;
 - (iv) [[embankments, slopes]] embankment, slope, and safety [[benches]] bench;
 - (v) reservoir or treatment [[areas]] area;
 - (vi) inlet and outlet [[channels]] channel or [[structures]] structure;
 - (vii) underground drainage;

- 826 (viii) sediment and debris accumulation in storage and
827 forebay areas;
- 828 (ix) [[any]] nonstructural [[practices]] practice to the
829 extent practicable; and
- 830 (x) [[any]] other item that could affect the proper
831 function of the stormwater management system; and
- 832 (D) description of any needed maintenance.
- 833 (3) The owner of any privately maintained stormwater management
834 system must correct [[the deficiencies]] each deficiency
835 discovered during the inspection within the time period specified
836 in any written notice issued by the Director of Environmental
837 Protection.
- 838 (e) Abandonment instead of repair. If the Director of Environmental
839 Protection finds that the stormwater management facility is no longer
840 needed to control stormwater runoff or that the benefits of a repaired
841 stormwater management facility are not justified by the cost of repair,
842 the owner of the stormwater management facility must abandon the use
843 of the facility for stormwater functions as the Director of Environmental
844 Protection orders. Any order issued under this subsection must not
845 restrict the facility from being used for any recreational or other
846 [[purposes]] purpose not related to stormwater control.
- 847 (f) Nonstructural maintenance of [on-site] stormwater management
848 facilities. The owner of [an on-site] a stormwater management facility
849 must [provide landscaping and] perform [any other] routine inspection
850 and nonstructural maintenance that impacts the effectiveness of routine
851 structural maintenance, performed either privately or publicly. Among
852 other actions, the owner must:

- (1) prevent the accumulation of solid waste on the property and the generalized growth of weeds or plants in violation of Section 58-3;
 - (2) clear any woody vegetation, including trees and brush along with their root systems, within 25 feet of the facility's control structure and within 15 feet of an upstream or downstream dam embankment; and
 - (3) abate any other condition on the property that the Department of Environmental Protection reasonably finds may adversely affect the facility's proper functioning.

* * *

- (h) *Stop work orders.*

(1) If a maintenance inspection reveals that the maintenance, repair, or restoration of a stormwater management facility is being performed in a manner that is hazardous, creates a nuisance, or endangers human life or the property of others, or is otherwise being preformed in an unauthorized manner, the Director of Environmental Protection may, without advance [[warning]] notice, post [[the site with]] a stop work order at the site directing that all maintenance, repair, or restoration activity [[cease]] must stop immediately.

(2) The Director of Environmental Protection must provide written notice to the property owner, any designated representative of the property owner, or any on-site person in charge of the work when a stop work order is issued. That notice must specify the extent to which work is stopped and the conditions under which work may resume.

880 (3) A person must not continue, or allow the continuance of, work on
881 a stormwater management facility covered by a stop work order,
882 except for work necessary to abate [[the]] a nuisance[[,]] or
883 hazardous [[conditions as]] condition identified by the Director.

884 (i) *Emergency authority.* If, after inspection, the Director of
885 Environmental Protection finds that the condition of a privately
886 maintained stormwater management facility presents an immediate
887 danger to the public health or safety because of an unsafe condition, [or]
888 improper construction, or poor maintenance, the Director of
889 Environmental Protection may take any needed [[actions]] action to
890 protect the public and make the facility safe, including entering the
891 property to make any needed [[repairs]] repair. The County must assess
892 any [[costs]] cost incurred as a result of the Director of Environmental
893 Protection's actions against each owner of the facility. The County may
894 collect the costs in the same manner as real property taxes are collected
895 against the property where the facility is located. In addition, the
896 County may seek reimbursement under any other method legally
897 available to collect debts owned to the County.

898 **[19-29.] [[19-30]] 19-29. Stormwater management loan program.**

899 * * *

900 **[19-30.] [[19-31]] 19-30. Regulations.**

901 * * *

902 **[19-31.] [[19-32]] 19-31. Exemptions.**

903 The following development activities are exempt from the stormwater
904 management requirements under this Article:

905 (a) agricultural land management [activities] practices;

906 * * *

907 [19-32] [[19-33]] **19-32.** Transition for approved plans.

908 Each new development or redevelopment project must comply with this
909 Article, except [that:

- 910 (a) A previously approved] when the Department issues final sediment
911 control and stormwater management [concept] design plan [remains
912 valid if the Department issues a sediment control permit] approval for
913 the property covered by the plan before May 4, 2010. [July 1, 2003.
914 The applicant must construct the stormwater management system within
915 2 years after the Department issues the sediment control permit.
916 (b) A residential lot containing 2 or more acres is exempt from any on-site
917 stormwater management requirement if the preliminary plan creating
918 the lot was approved before July 1, 2002 and the Department issues the
919 sediment control permit before July 1, 2003.] \

920 [19-33] [[19-34]] **19-33. Agreements between the County and municipalities.**

* * *

- 922 (c) If a municipality operates a stormwater management program that
923 serves substantially the entire municipality and meets all applicable
924 federal and [state] State standards, the County must reimburse the
925 municipality, subject to appropriation, for the cost of operating the
926 program, limited to the amount the Director of Environmental
927 Protection estimates the County would spend for that municipality if it
928 were operating the program, by means of a cooperative agreement under
929 subsection (b).

930 [19-34. Reserved.] 19-34. Reserved.

931 19-35. Water Quality Protection Charge.

- 932 (a) As authorized by [state] State law (Maryland Code, Environment Art., §
933 4-204), the Director of Finance must annually impose and collect a

934 Water Quality Protection Charge, as provided in this Section. The
935 Director must collect the Charge in the same manner as County real
936 property taxes, apply the same interest, penalties, and other remedies
937 (including tax sale) if the Charge is not paid, and generally treat the
938 Charge for collection and administration purposes as if it were a County
939 real property tax. The Director may treat any unpaid Charge as a lien
940 on the property to which the charge applies.

941 (b) The Charge must be imposed on each residential property and
942 associated nonresidential property, as specified in regulations adopted
943 by the Executive under Method (1) to administer this Section. The
944 regulations may define different classes of real property, depending on
945 the amount of impervious surface on the property, stormwater runoff
946 from the property, and other relevant characteristics, for purposes of
947 applying the [charge] Charge.

948 * * *

949 (e) The regulations may allow credits against and exemptions from the
950 Charge:
951 (1) to the extent that credits and exemptions are not prohibited by
952 [state] State law; and
953 (2) if each credit or exemption will enhance water quality or
954 otherwise promote the purposes of this Article.

955 * * *

956 (g) This Charge does not apply to any property located in a municipality in
957 the County which:
958 (1) operates a stormwater management program that meets all
959 applicable federal, [state] State, and County requirements and has
960 received any necessary federal or [state] State permit; and

- (2) imposes a similar charge or other means of funding its stormwater management program in that municipality.

(h) A person that believes that the Director of Environmental Protection has mistakenly assigned a Charge to the person's property or computed the Charge incorrectly may apply to the Director of Environmental Protection in writing for a review of the Charge, and request an adjustment to correct any error, [within 21 days after receiving a bill for] not later than September 30 of the year that payment of the Charge is due. An aggrieved property owner may appeal the Director's decision to the County Board of Appeals within 10 days after the Director issues the decision.

(i) [If] A person that believes that the Director of Environmental Protection [denies any requested adjustment, the applicant may] has incorrectly denied the person's request [reconsideration of the Director's denial in writing within 10 days after the date of the denial. An aggrieved property owner] for a credit under subsection (b) may appeal the Director's [final] decision to the County Board of Appeals within 10 days after the Director issues the decision.

(j) The Board of Appeals may hear and decide all appeals taken from a [final] decision of the Director of Environmental Protection under this [subsection] Section as provided in Article I of Chapter 2A.

Sec. 2. Expedited Effective Date. The Council declares that this Act is

983 necessary for the immediate protection of the public interest. This Act takes effect on
984 the date [[on which]] when it becomes law.

LEGISLATIVE REQUEST REPORT

Expedited Bill 40-10
Stormwater Management

DESCRIPTION:	Amends Chapter 19, Article II of the County Code to comply with the Maryland Stormwater Management Act of 2007
PROBLEM:	The Stormwater Management Act of 2007 requires the use of environmentally sensitive site design (ESD) to the maximum extent practicable on development and redevelopment sites and went into effect on May 4, 2010. ESD encourages more stormwater to be infiltrated into the ground rather than stored and released slowly. ESD requires more surface areas to treat stormwater.
GOALS AND OBJECTIVES:	The County legislation mirrors the requirements in State law and regulations for new development. Current County requirements are more stringent than state requirements. This legislation maintains those more stringent standards. This legislation also includes provisions for grandfathering which were recently adopted by the State in emergency regulations.
COORDINATION:	Department of Permitting Services, Department of Environmental Protection
FISCAL IMPACT:	To be requested.
ECONOMIC IMPACT:	To be requested.
EVALUATION:	To be requested.
EXPERIENCE ELSEWHERE:	To be determined.
SOURCE OF INFORMATION:	Rick Brush, Manager, Water Resources Plan Review, Department of Permitting Services, 240-777-6343; Steve Shofar, Chief, Division of Watershed Management, 240-777-7736
APPLICATION WITHIN MUNICIPALITIES:	To be determined.
PENALTIES:	Class A



OFFICE OF THE COUNTY EXECUTIVE
ROCKVILLE, MARYLAND 20850

Isiah Leggett
County Executive

MEMORANDUM

June 17, 2010

TO: Nancy Floreen, Council President

FROM: Isiah Leggett, County Executive 

SUBJECT: Proposed Legislation to Comply with the Stormwater Management Act of 2007

I am forwarding to the Council for introduction an Expedited Bill to revise Chapter 19, Article II of the County Code to comply with State stormwater management requirements. I am also forwarding a Legislative Request Report for this bill.

The Stormwater Management Act of 2007 (2007 Act), which sets the minimum standards that the County law must meet, requires the use of Environmentally Sensitive Site Design (ESD) to the maximum extent practicable (MEP) on new development and redevelopment sites. The 2007 Act took effect on May 4, 2010. ESD encourages stormwater to be infiltrated into the ground rather than stored in structural facilities such as stormwater ponds and released slowly into the environment.

Prior to enactment of the 2007 Act, the County's stormwater requirements for new development sites were the same as the State law requirements for new development sites. This bill maintains that symmetry and adopts the same requirements for new development that are included in the 2007 Act.

Prior to enactment of the 2007 Act, the County's stormwater management requirements for redevelopment sites were more stringent than the State law requirements for redevelopment sites. This bill maintains more stringent requirements for redevelopment sites than those that are included in the 2007 Act. In essence, the bill applies the same stormwater management requirements to new development and redevelopment except that it provides more flexibility regarding the use of alternative stormwater management measures for redevelopment sites.

Before enactment of the 2007 Act, the State required stormwater management for redevelopment sites to protect Water Quality. Specifically, the State required management of the first inch of runoff from 20% of a redevelopment site. To

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protect Water Quality, the 2007 Act requires management of the first inch of runoff from 50% of redevelopment site using ESD to the maximum extent practicable. County law currently requires stormwater management to protect Water Quality (the first inch of runoff from 100% of the redevelopment site) *and* Channel Protection (the expected runoff from a 1-year 24-hour duration rainfall event from 100% of a redevelopment site). This bill maintains the same standards for redevelopment sites and requires the use of ESD to the maximum extent practicable to meet these standards. The attached chart provides a comparison of former and new State and County law requirements for both new development and redevelopment.

This bill includes provisions recently adopted by the Maryland Department of the Environment (MDE) in emergency regulations to implement the 2007 Act, which allow the County to grant administrative waivers from the new standards for projects that have prior preliminary approvals.

For more information on this bill, please contact Rick Brush, DPS Water Resources Plan Review Manager, at 240-777-6343 or Steve Shofar, DEP Watershed Management Division Chief, at 240-777-7736.

Attachments

cc: Kathleen Boucher, Assistant Chief Administrative Officer
Carla Reid, Director, Department of Permitting Services
Robert Hoyt, Director, Department of Environmental Protection

State and County Stormwater Requirements - Former and New¹

New Development

	Definition	MDE Former	Mo. Co. Former	MDE New	Mo. Co. New
Water Quality	-First flush -First 1" of rainfall	-ESD or structural	-ESD or structural	-ESD	-ESD
Channel Protection	-Volume stored and slowly released to minimize erosion to stream banks from high velocities. -2.6" of rainfall	-Structural (unless flows are less than 2 cubic ft/second)	-Structural (unless flows are less than 2 cubic ft/second)	-ESD to MEP -Structural where ESD not possible	-ESD to MEP -Structural where ESD not possible
Recharge	-Volume needed to maintain groundwater	Required	Required	Required	Required

Redevelopment

	Definition	MDE Former	Mo. Co. Former	MDE New	Mo. Co. New
Water Quality	-First flush -First 1" of rainfall	-20% of WQv	-100% of WQv	-50% WQv -ESD to MEP	-100% of WQv -ESD to MEP
Channel Protection	-Volume stored and slowly released to minimize erosion to stream banks from high velocities. -2.6" of rainfall	-Not required	-100% of CPv (unless flows are less than 2 cubic ft/second)	-Not required	-100% -ESD to MEP -Structural where ESD not possible
Recharge	-Volume needed to maintain groundwater	Not Required	Not Required	Required	Required

¹ "WQv" means Water Quality volume (first inch of runoff)

"CPv" means Channel Protection Volume (1-year 24-hour duration rainfall event). This is 2.6 inches in Montgomery County.

"ESD" means Environmentally Sensitive Site Design.

"MEP" means Maximum Extent Practicable

Testimony of Diane Cameron

Audubon Naturalist Society

Montgomery County Stormwater Partners Network

On Expedited Bill 40-10,

Revisions to the Montgomery County Stormwater Code, Chapter 19.

My name is Diane Cameron and I am here today representing the Audubon Naturalist Society and the Montgomery County Stormwater Partners Network. The Stormwater Partners represent 22 organizations comprising more than 55,000 residents of Montgomery County.

The Stormwater Partners have been collaborating with the County Council and County Executive since 2005 in crafting and improving Montgomery's stormwater policies, programs, and funds.

We strongly support the bill's maintenance of Montgomery's longstanding tradition of requiring the same Stormwater standards for both new development and redevelopment. This is one of the reasons that

Montgomery County has a reputation as a leader in the Stormwater field regionally, statewide, and nationally.

In order to maintain and to increase our role as Stormwater leaders, though, there are some necessary changes to some other provisions of this bill. We are pleased that there are now two T&E worksessions scheduled on this important legislation.

I want to highlight three changes that we request to Ex. Bill 40-10:

- 1) Please remove the waiver provision, Section 19-25 (c) (3), that pertains to the stormwater capture and treatment requirements for infill, redevelopment and projects with unspecified special circumstances. This categorical waiver provision is superfluous, could increase administrative and fiscal burdens, and slow or reverse our efforts at restoring our degraded waters.

- 2) The bill's grandfathering provisions should be tightened to require that all County-owned project proposals, such as the Silver Spring Library, and all private projects with substantial county subsidies, such as the

Wheaton Costco, that went into facility planning in or after Fiscal Year 2009, comply with the new Environmental Site Design (ESD) requirements. This is consistent with the Clean Water Task Force recommendations of 2007.

- 3) Though we recognize that off-site options are sometimes necessary, they should be rare, and in keeping with current County practice, should pertain to the meeting of the Channel Protection Volume only, not the Water Quality Volume.

The Stormwater Partners have additional requests for changes to the Bill regarding: tightening the requirements for off-site measures; making use of public parkland for stormwater measures rare and only through a partnership with the Parks Department; providing a reasonable public review and comment opportunity for Concept Plans; establishing the Water Quality Protection Charge as a fee-for-service; and substituting the term "*standard*," rather than the word "*structural*," to refer to non-ESD practices.

Thank you for considering our comments on this bill.

The Montgomery County Stormwater Partners Network

The Honorable Nancy Floreen
President, Montgomery County Council
100 Maryland Avenue
Rockville, MD

July 13, 2010

Dear Council President Floreen,

The Montgomery County Stormwater Partners consist of 22 organizations working together for the protection and restoration of Montgomery's streams, rivers, and lakes. We appreciate this opportunity to convey our comments on Expedited Bill 40-10, containing proposed changes to our County's stormwater regulations (Chapter 19 of the County Code). We ask that the Council engage the public in full and careful consideration of these proposed code changes before they are voted upon.

We support several key aspects of the proposed stormwater code changes, including the continuance of Montgomery's longstanding tradition of applying the same stormwater volume standards to both new development and redevelopment projects. It is crucial that as we shift to Environmental Site Design as the new norm, we maintain our tradition of requiring both new development and redevelopment projects to capture and treat on-site, the first one-inch of each storm. Maintaining this strong standard will further Montgomery's role as a regional and national leader in Stormwater management.

Other aspects of Bill 40-10 are counter to the Stormwater Management Act and/or existing County policy; the Council must remedy these problems before approving the ordinance:

- 1) Please remove the waiver provision that pertains to the stormwater capture and treatment requirements for infill, redevelopment and projects with unspecified special circumstances. This categorical waiver provision is superfluous, because there is a general waiver provision already in the code. Adding new waiver provisions could increase administrative and fiscal burdens on Montgomery County and slow or reverse our efforts at restoring the Anacostia, Rock Creek and other waters. The provision is also at odds with existing County policy and practice, and with the Stormwater Management Act. We therefore request that Section 19-25 (c) (3) of this bill be removed.
- 2) The bill's grandfathering provisions are too broad and lenient. The revised stormwater ordinance should require that all County-owned project proposals, and all private projects with substantial county subsidies, that went into facility planning in or after Fiscal Year 2009, comply with the new Environmental Site Design (ESD) requirements. This is consistent with the 2007 Clean Water Task Force recommendations, and with the widely-acknowledged need for the public sector to take the lead in applying ESD to new and redevelopment projects.
- 3) There are several provisions in this bill that enable off-site stormwater and stream restoration projects to be undertaken in lieu of on-site ESD approaches. Though we recognize that off-site options are sometimes necessary, they should be rare, and in keeping with current County practice, off-site options should generally pertain to the meeting of the Channel Protection Volume only, not the Water Quality Volume (roughly the first one inch of each storm is termed the Water Quality Volume). Finally, the code should specify that the off-site device must itself

Montgomery County Stormwater Partners Network
Letter to Council President Floreen regarding
Stormwater Code, Chapter 19 Proposed Changes
(Expedited Bill 40-10)

July 13, 2010

be an ESD system.

- 4) Also related to off-site measures is the question of the use of public parkland for stormwater management. This is a very controversial topic, and the Code must be written such that this approach is rarely undertaken. The bill must designate the Department (and Director) of Parks as full partners in the process of deciding whether or not to allow placement of stormwater facilities on parkland, or to allow stream restoration or wetland restoration on parkland. Any parkland projects should be ESD based, and should be required to show benefit to the watershed from a hydrologic perspective.
- 5) The bill should include a requirement that DPS provide reasonable opportunity for public review and input on proposed Concept Plans.
- 6) We request that Chapter 19 be amended to establish that the Water Quality Protection Charge is a fee for service, not a tax.
- 7) Change the word "*structural*" to the word "*standard*," since the Stormwater Management Act prioritizes ESD techniques over *standard* techniques. ESD techniques include bioretention and green roofs, while standard techniques include stormwater ponds and underground storage tanks and sand filters; all are considered "*structural*." The current bill's use of the word *structural* would create confusion in the future, and could even hamper the growth of green businesses and technology evolution in the ESD field, since designers and decisionmakers may erroneously conclude that only "*non-structural*" measures constitute Environmental Site Design.

We will greatly appreciate your support of these needed changes to the expedited bill, and your partnership with the public in a deliberative process to make this one of the best stormwater codes in Maryland.

Thank you for considering our request,

Diane M. Cameron
Steve Dryden
Co-Chairs, Montgomery County Stormwater Partners

MF

Marin, Sandra**From:** Linda Silversmith [linsil@usermail.com]**Sent:** Monday, July 12, 2010 11:59 PM**To:** Floreen's Office, Councilmember; Montgomery County Council**Cc:** Andrew's Office, Councilmember; Berliner's Office, Councilmember; Elrich's Office, Councilmember; Knapp's Office, Councilmember; Ervin's Office, Councilmember; Trachtenberg's Office, Councilmember; Leventhal's Office, Councilmember**Subject:** Comments on expedited bill 40-10 - for Tues., July 13, 2010**057960****Re:** Expedited Bill 40-10, affecting the County's stormwater code, Chapter 19

Dear Council President Floreen and other Council members: :

I am writing to you concerning Expedited Bill 40-10. While the bill does maintain the County's longstanding tradition and code requirement -- that redevelopment projects be required to manage the same stormwater volumes on-site as new development projects in greenfields -- it unfortunately has grandfathering provisions that are much too sweeping (that is, too broad and lenient). **It will be important that the County Council take the time to fix these provisions rather than expediting Bill 40-10 in its present form.** The bill in its present form could harm our local efforts to restore the Anacostia River and our countywide efforts to restore degraded waters.

Indeed, Bill 40-10 as now written would make it easier for redevelopment, infill, phased, and other projects to apply for (and some would say, to expect) water quality Environmental Site Design waivers from on-site stormwater management just because the project falls into one of the too-broad categories. I hope you will agree with me that these potential loopholes are unprecedented in state and local stormwater policy and law, and are unacceptable.

Here are the provisions that particularly need modification before passage:

(1) The revised stormwater ordinance should require that all County-owned project proposals -- and all private projects with substantial county subsidies -- that went into facility planning in or after Fiscal Year 2009 comply with the new Environmental Site Design (ESD) requirements. This is consistent with the 2007 Clean Water Task Force recommendations. **Grandfathering these projects does not fit with the County's goals of good stormwater management.**

(2) The proposed waiver eligibilities would make it easier for projects to be waived from the Water Quality volume requirement, for on-site stormwater capture and treatment requirements for infill, redevelopment and phased projects, and projects with unspecified special circumstances. Because such broad categorical waiver eligibility is counter to existing County policy and practice, and to the Stormwater Management Act, **these proposed waiver eligibilities should be removed.**

(3) **Use of public parkland for off-site stormwater management should be discouraged.** Consequently, please ensure that the bill designate the Department (and Director) of Parks as full partners in the process of deciding whether or not to allow placement of stormwater facilities on parkland, or to allow stream restoration or wetland restoration on parkland.

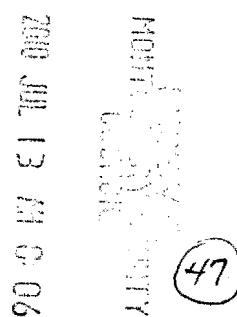
I appreciate your consideration of my comments on Expedited Bill 40-10. I would also appreciate (a) being informed how the Council plans to fully consider the public input it receives on this bill this month and (b) your own views on this legislation.

Sincerely,

Linda Silversmith, Ph.D.

Biochemist/science writer

260 New Mark Esplanade
Rockville MD 20850-2733
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Maryland National Capital Building Industry Association

Comments on Bill 40-10

Before the County Council

July 13, 2010

Good Afternoon, Madame President and Councilmembers. My name is Bob Spalding. This afternoon, I am here as Chair of the Montgomery County Liaison Committee representing the Maryland National Capital Building Industry Association (MNCBIA). The MNCBIA represents over 650 companies that strive to provide housing in Montgomery County and six surrounding jurisdictions.

Thank you for the opportunity to testify before you today.

As noted by the County Executive's Transmittal letter, Bill 40-10, which has been reviewed and approved by MDE, *mirrors* the State's Stormwater Act of 2007, except where current Montgomery County law *exceeds* it.

The new state law went into effect on May 4 of this year and the County's adoption is overdue.

The Stormwater Management Act of 2007 requires new development projects to incorporate Environmental Site Design (ESD) to the Maximum Extent Practicable (MEP) to control stormwater runoff. ~~While~~ the new state law requires a 50% impervious surface reduction and enhanced stormwater controls for redevelopment projects, ~~Emergency~~ ~~redevelopment~~.

In addition to the statutory provisions and regulations finalized in 2009, the Maryland Department of Environment (MDE) has adopted additional regulatory guidance to specifically address transition for pipeline projects and clarification for alternative treatment options for redevelopment projects. (Concerns raised by county and municipal officials and the commercial and residential development industry culminated in a collaborative negotiation during the 2010 General Assembly Session in order to address transition issues; the effort was led by House ENV Matters Committee Chair Maggie McIntosh, resulting in a brokered agreement with a wide-range of stakeholders, that included 1000 Friends of Maryland, MACO, MML, NAIOP, Chesapeake Bay Foundation, several Counties, and MSBA. The Emergency Regulations were approved on April 6, 2010.

The negotiated agreement allows for a waiver process for pipeline projects that meet specific criteria and have received *preliminary project approval* by May 4, 2010. It is important to note that the state's criteria for "*preliminary project approval*" is different than Montgomery County's preliminary plan of subdivision. These projects, having used current best management practices to address stormwater requirements, could be eligible to move forward on the condition that they must receive final plan approval by May 4, 2013 and must complete construction by May 4 of 2017.

BUILDING HOMES, CREATING NEIGHBORHOODS

Representing the Building and Development industry in Calvert, Charles, Montgomery,
Prince George's and St. Mary's Counties and Washington, D.C.

Affiliated with the Maryland State Builders Association and the National Association of Home Builders

While the industry remains concerned about the potential negative impact that the SW Act of 2007 and Bill 40-10 could have on Smart Growth development and redevelopment, we believe that the Bill recognizes the inherent constraints inhibiting redevelopment, and provides the County the flexibility to balance the visions of the County's Master Plans while achieving the legislative goals of increased stormwater management, albeit thru an unclear and potentially economically-crippling path.

The timing of the Council's action on Bill 40-10 is critical because ***state law required adoption by May 4*** ... almost 3 months before your current process will be completed. This lag-time has placed several projects, that meet the state's requirements for administrative waivers and can't apply or move forward, in "limbo". As explained by staff, any changes to the MDE-approved language will delay the implementation of the Bill and increase the current uncertainty. While there are issues that we believe need to be modified, we support keeping this adoption straight-forward with a subsequent process to address issues raised by various stakeholders.

Rather than address the industry's concerns - over process, delegation of authority, and clarification of "MEP" - during worksessions on Bill 40-10 the BIA would look to the regulations for definitions. The industry would ask that the regulations:

- clearly designate and define the Department of Permitting Services as the "lead agency" on stormwater management procedures
- clarify the administrative waiver ***criteria***, as defined by the State through the MDE regulations
- set a time line for the administrative waiver submission, approval, and appeal
- define parties that are vested

The County is facing several federal, state, and local environmental initiatives that create mandates that overlap, conflict, and duplicate requirements, often adding thousands of dollars to an application, as well as extending the development approval process. The industry would ask that the County evaluate these complex mandates, and prioritize them, given the limited resources available to both the public and private sector.

The State's requirement that local jurisdictions monitor, identify and report back to the State any impediments that restricts the ability to achieve Smart Growth development, as well as ESD to the MEP, acknowledges that there is still much to be learned on what are the most effective tools that can, and should, be used when addressing stormwater, and environmental changes.

We believe that the state-mandated assessment should include a revisit to the County's requirement that 100% ESD be used when addressing stormwater runoff *on redevelopment and Smart Growth sites*. We believe that a more practicable application, that requires 100% management of stormwater, is to treat stormwater with a comprehensive approach that allows for broader-based solutions (instead of site-restricted solutions), thereby providing a better 'bang for the buck' and actual improvement of the County's streams.

The BIA would stipulate that three critical components are missing in the discussion of how to effectively manage stormwater:

MNCBIA Testimony on Bill 40-10
Before the Montgomery County Council
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- County data that separates existing development from new development (see attached pie charts on Maryland's Chesapeake Bay Model Results: Breakdown of All Land Uses)
 - The BIA believes that only after the New Construction data is separated from the Urban/Suburban category, can the County identify the most efficacious approach to addressing stormwater management concerns on redevelopment sites, especially where there is no SW. When this data was dissected in EPA's Chesapeake Bay Phase 5.3 Model, only **0.2%** of the land was in **new** development and **14.3% was in existing development.** According to Park & Planning, less than 4% of the County's land is available for new construction.
- clear understanding of what the new requirements will cost (the County Executive's Transmittal of the Bill did not include a fiscal impact analysis of the Bill 40-10, nor did it acknowledge the link to the mandated retrofit activity that the County must undertake to meet the MS4 requirements, so as to comply with the upcoming TMDL [total maximum daily load]),
- cost- effectiveness of ESD on in-fill redevelopment sites and if they are proportionate to the environmental benefits, which have only been modeled.

The BIA would ask that the Council request that these requirements, the resulting financial obligation, and the data be part of long-term planning and Master Plans.

With these considerations, and reservations, the BIA supports the adoption of Bill 40-10 as approved by MDE and asks that the Council move to pass the Bill by July 27. We are available for questions today, and during upcoming worksessions. Thank you.

Attachments:

- SB 784: Stormwater Management Act of 2007
- The Stormwater Management Act of 2007 – Proposed Time Line for Regulation Adoption (Dec 14, 2007 – Dec 31, 2008)
- Maryland Department of the Environment: Stormwater Management Regulations: Guidance for Implementation of Local Stormwater Management Programs, March 2010
- Comparison of requirements for Implementation of SW Requirements per the SWA of 2000 vs SWA of 2007
- Task Force on the Future for Growth and Development in Maryland Stormwater Management Forum - January 15, 2010: presenters List
- PHASE 3 Chesapeake Bay Model Results
 - Breakdown of **all land** uses
 - Breakdown of Maryland **Urban** Land Uses
 - Breakdown of Maryland **total Nitrogen Loading** by Land Uses
 - Breakdown of Maryland **total Phosphorous Loading** by Land Uses
 - Breakdown of Maryland **total Sediment Loading** by Land Uses

CHAPTER 121

(Senate Bill 784)

AN ACT concerning

Stormwater Management Act of 2007

FOR the purpose of ~~requiring certain local governments to update certain zoning ordinances to allow for the implementation of certain environmental site design techniques in certain stormwater management practices; requiring the Department of the Environment to adopt regulations that establish certain regulations and a certain model ordinance or model regulation for certain purposes; requiring the Department to adopt regulations that specify certain criteria for certain stormwater management plans and certain stormwater control ordinances; requiring the Department to adopt regulations that specify certain environmental site design techniques as the primary method for managing stormwater under certain circumstances; requiring the Department to adopt regulations that establish a certain comprehensive process for approving certain grading and sediment control plans and certain stormwater management plans; requiring the Department, on or before a certain date, to review a certain fee system and establish a certain schedule of fees necessary to enforce certain provisions of law to evaluate certain options and report certain findings on or before a certain date; requiring the Department to seek certain input and work with certain parties in the creation of certain regulations and a certain model ordinance; defining certain terms; and generally relating to stormwater management.~~

BY adding to

Article – Environment
Section 4-201.1
Annotated Code of Maryland
(1996 Replacement Volume and 2006 Supplement)

BY repealing and reenacting, with amendments,

Article – Environment
~~Section 4-202 and 4-203~~
Annotated Code of Maryland
(1996 Replacement Volume and 2006 Supplement)

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That the Laws of Maryland read as follows:

Article - Environment

4-201.1.

(A) IN THIS SUBTITLE THE FOLLOWING WORDS HAVE THE MEANINGS INDICATED.

(B) "ENVIRONMENTAL SITE DESIGN TECHNIQUE" MEANS A ~~TECHNIQUE USED IN A SITE DESIGN STRATEGY INTENDED TO MAINTAIN OR REPLICATE THE PREDEVELOPMENT HYDROLOGIC AND WATER QUALITY REGIME OF A BUILDING SITE USING SMALL-SCALE STORMWATER MANAGEMENT PRACTICES, NONSTRUCTURAL TECHNIQUES, AND BETTER SITE PLANNING TO MIMIC NATURAL HYDROLOGIC RUNOFF CHARACTERISTICS AND MINIMIZE THE IMPACT OF LAND DEVELOPMENT ON WATER RESOURCES.~~

(C) "ENVIRONMENTAL SITE DESIGN TECHNIQUE" INCLUDES:

(1) OPTIMIZING CONSERVATION OF NATURAL FEATURES, SUCH AS DRAINAGE PATTERNS, SOILS, AND VEGETATION;

(2) MINIMIZING USE OF IMPERVIOUS SURFACES, SUCH AS PAVED SURFACES, CONCRETE CHANNELS, ROOFS, AND PIPES;

(3) SLOWING DOWN RUNOFF TO MAINTAIN DISCHARGE TIMING AND TO INCREASE INFILTRATION AND EVAPOTRANSPIRATION; AND

(4) ~~USING AT THE SOURCE INTEGRATED CONTROL TECHNIQUES, SUCH AS BIORETENTION, VEGETATED SWALES, AND INFILTRATION DEVICES; AND~~

(5) ~~USING POLLUTION PREVENTION MEASURES TO REDUCE THE INTRODUCTION OF POLLUTANTS INTO THE ENVIRONMENT OTHER NONSTRUCTURAL PRACTICES OR INNOVATIVE STORMWATER MANAGEMENT TECHNOLOGIES APPROVED BY THE DEPARTMENT.~~

4-202.

~~(A) By July 1, 1984, each county and municipality shall adopt ordinances necessary to implement a stormwater management program. These stormwater management programs shall be consistent with flood management plans, if any, developed under Title 5, Subtitle 8 of this article for a particular watershed, shall meet the requirements established by the Department under § 4-203 of this subtitle, and shall be consistent with the purposes of this subtitle.~~

~~(B) (1) EACH COUNTY AND MUNICIPALITY THAT EXERCISES PLANNING AND ZONING AUTHORITY SHALL UPDATE LOCAL ZONING ORDINANCES TO ALLOW FOR THE IMPLEMENTATION OF ENVIRONMENTAL SITE DESIGN TECHNIQUES IN STORMWATER MANAGEMENT PRACTICES.~~

~~(2) EACH COUNTY AND MUNICIPALITY THAT IS SUBJECT TO THE REQUIREMENTS OF THIS SECTION MAY BASE THEIR LOCAL ZONING ORDINANCE ON THE DEPARTMENT'S MODEL ORDINANCE OR MODEL RULES AND REGULATIONS REQUIRED UNDER § 4-203 OF THIS SUBTITLE.~~

4-203.

(a) The Department of the Environment shall implement the provisions of this subtitle and shall consult the Department of Natural Resources from time to time, INCLUDING DURING THE ADOPTION OF REGULATIONS, concerning the impact of stormwater on waters of the State.

(b) The Department shall adopt rules and regulations which establish criteria and procedures for stormwater management in Maryland. The rules and regulations shall:

(1) Indicate that the primary goal of the State and local programs will be to maintain after development, as nearly as possible, the predevelopment runoff characteristics;

(2) Make allowance for the difference in hydrologic characteristics and stormwater management needs of different parts of the State;

(3) Specify that watershed-wide analyses may be necessary to prevent undesirable downstream effects of increased stormwater runoff;

(4) Specify the exemptions a county or municipality may grant from the requirements of submitting a stormwater management plan;

(5) (I) Specify the minimum content of the local ordinances or the rules and regulations of the affected county governing body to be adopted which may be done by inclusion of a model ordinance or model rules and regulations; AND

(II) ~~ESTABLISH REGULATIONS AND A MODEL ORDINANCE OR MODEL RULE AND REGULATION FOR A LOCAL ZONING ORDINANCE THAT ALLOWS FOR THAT REQUIRE:~~

1. THE IMPLEMENTATION OF ENVIRONMENTAL SITE DESIGN TECHNIQUES IN STORMWATER MANAGEMENT PRACTICES TO THE MAXIMUM EXTENT PRACTICABLE;

2. THE REVIEW AND MODIFICATION, IF NECESSARY, OF PLANNING AND ZONING OR PUBLIC WORKS ORDINANCES TO REMOVE IMPEDIMENTS TO ENVIRONMENTAL SITE DESIGN IMPLEMENTATION; AND

3. A DEVELOPER TO DEMONSTRATE THAT:

A. ENVIRONMENTAL SITE DESIGN HAS BEEN IMPLEMENTED TO THE MAXIMUM EXTENT PRACTICABLE; AND

B. STANDARD BEST MANAGEMENT PRACTICES HAVE BEEN USED ONLY WHERE ABSOLUTELY NECESSARY;

(6) Indicate that water quality practices may be required for any redevelopment, even when predevelopment runoff characteristics are maintained; [and]

(7) Specify the minimum requirements for inspection and maintenance of stormwater practices;

(8) ~~SPECIFY ALL STORMWATER MANAGEMENT PLANS AND STORMWATER CONTROL ORDINANCES SHALL BE DESIGNED TO:~~

(I) ~~PREVENT SOIL EROSION FROM ANY DEVELOPMENT OR CONSTRUCTION PROJECT;~~

(II) ~~PREVENT, TO THE MAXIMUM EXTENT PRACTICABLE, AN INCREASE IN NONPOINT POLLUTION;~~

(III) MAINTAIN THE INTEGRITY OF STREAM CHANNELS FOR THEIR BIOLOGICAL FUNCTION, AS WELL AS FOR DRAINAGE;

(IV) MINIMIZE POLLUTANTS IN STORMWATER RUNOFF FROM NEW AND EXISTING DEVELOPMENT AND REDEVELOPMENT IN ORDER TO:

1. RESTORE, ENHANCE AND MAINTAIN THE CHEMICAL, PHYSICAL, AND BIOLOGICAL INTEGRITY OF THE WATERS OF THE STATE;

2. PROTECT PUBLIC HEALTH;

3. SAFEGUARD FISH AND AQUATIC LIFE AND SCENIC AND ECOLOGICAL VALUES; AND

4. ENHANCE THE DOMESTIC, MUNICIPAL, RECREATIONAL, INDUSTRIAL, AND OTHER USES OF WATER AS SPECIFIED BY THE DEPARTMENT;

(V) PROTECT PUBLIC SAFETY THROUGH THE PROPER DESIGN AND OPERATION OF STORMWATER MANAGEMENT FACILITIES;

(VI) 1. MAINTAIN 100% OF AVERAGE ANNUAL PREDEVELOPMENT GROUNDWATER RECHARGE VOLUME FOR THE SITE; OR

2. ~~ENSURE THAT THE SITE WILL INFILTRATE THE POSTDEVELOPMENT INCREASE OF STORMWATER RUNOFF VOLUME FOR THE 2 YEAR STORM EVENT COMPARED TO THE SITE'S PREDEVELOPMENT RUNOFF VOLUME; AND~~

(VII) ~~REQUIRE A DEMONSTRATION THROUGH HYDROLOGIC AND HYDRAULIC ANALYSES THAT:~~

1. ~~FOR STORMWATER LEAVING THE SITE, POSTCONSTRUCTION RUNOFF HYDROGRAPHS FOR THE 2, 10, AND 100 YEAR STORM EVENTS DO NOT EXCEED, AT ANY POINT IN TIME, THE PRECONSTRUCTION RUNOFF HYDROGRAPHS FOR THE SAME STORM EVENTS; OR~~

2. ~~THERE IS NO INCREASE, AS COMPARED TO THE PRECONSTRUCTION CONDITION, IN THE PEAK RUNOFF RATES OF STORMWATER~~

~~LEAVING THE SITE FOR THE 2 , 10 , AND 100 YEAR STORM EVENTS AND THAT THE INCREASED VOLUME OR CHANGE IN TIMING OF STORMWATER RUNOFF WILL NOT INCREASE FLOOD DAMAGE AT OR DOWNSTREAM OF THE SITE;~~

(VII) CAPTURE AND TREAT STORMWATER RUNOFF TO REMOVE POLLUTANTS AND ENHANCE WATER QUALITY;

(VIII) IMPLEMENT A CHANNEL PROTECTION STRATEGY TO REDUCE DOWNSTREAM EROSION IN RECEIVING STREAMS; AND

(IX) IMPLEMENT QUANTITY CONTROL STRATEGIES TO PREVENT INCREASES IN THE FREQUENCY AND MAGNITUDE OF OUT-OF-BANK FLOODING FROM LARGE, LESS FREQUENT STORM EVENTS;

(9) ~~(I)~~ SPECIFY THAT:

~~1. ENVIRONMENTAL SITE DESIGN TECHNIQUES ARE THE PRIMARY METHOD FOR MANAGING STORMWATER;~~

~~2. STANDARD BEST MANAGEMENT PRACTICES MAY BE USED ONLY AS A BACK-UP TO CATCH-RUNOFF NOT DEALT WITH THROUGH ENVIRONMENTAL SITE DESIGN TECHNIQUES; AND~~

~~3. A DEVELOPER HAS THE BURDEN OF PROOF TO SHOW THAT THE USE OF ENVIRONMENTAL SITE DESIGN TECHNIQUES IS NOT PRACTICAL; AND~~

~~(10) (I) ESTABLISH A COMPREHENSIVE PROCESS FOR APPROVING GRADING AND SEDIMENT CONTROL PLANS AND STORMWATER MANAGEMENT PLANS; AND~~

~~(II) SPECIFY THAT THE COMPREHENSIVE PROCESS ESTABLISHED UNDER SUBPARAGRAPH (I) OF THIS PARAGRAPH TAKES INTO ACCOUNT THE CUMULATIVE IMPACTS OF BOTH PLANS.~~

(c) Before the regulations required under this subsection are final, the Department shall hold at least one public hearing in the affected immediate geographic areas of the State and shall consult with the affected counties and municipalities.

(d) The Department shall provide technical assistance, training, research, and coordination in stormwater management technology to the local governments consistent with the purposes of this subtitle.

~~(e) ON OR BEFORE OCTOBER 1, 2009, THE DEPARTMENT SHALL REVIEW THE DEPARTMENT'S STORMWATER MANAGEMENT FEE SYSTEM AND ESTABLISH AN APPROPRIATE SCHEDULE OF FEES NECESSARY TO ENFORCE THE PROVISIONS OF THIS SUBTITLE.~~

SECTION 2. AND BE IT FURTHER ENACTED, That:

(a) The Department of the Environment shall evaluate options for a stormwater management fee system and an appropriate schedule of fees necessary to improve the enforcement of the provisions of Title 4, Subtitle 2 of the Environment Article.

(b) On or before December 1, 2007, the Department shall report its findings to the House Environmental Matters Committee and the Senate Education, Health, and Environmental Affairs Committee, in accordance with § 2-1246 of the State Government Article.

SECTION 3. AND BE IT FURTHER ENACTED, That:

(a) During the creation of the regulations and model ordinance required under § 4-203(b)(5)(ii) of the Environment Article, as enacted by this Act, the Department of the Environment shall seek the input of interested parties, including each county and municipality that operates a stormwater management program.

(b) The Department shall work with the counties, municipalities, and other interested parties to address any reasonable concern raised by the parties.

SECTION 4. AND BE IT FURTHER ENACTED, That this Act shall take effect October 1, 2007.

Approved by the Governor, April 24, 2007.

The Stormwater Management Act of 2007 - Proposed Time Line for Regulation Adoption

- December 14,2007 - Complete updates to the Stormwater Manual (Chapter 5) and publish regulation adoption schedule through an Advanced Notice of Proposed Rule Making (ANPRM) in the Maryland Register
- January 31,2008 - Hold regional focus group meetings
- May 31,2008 - Finalize design standards and schematics, prepare technical guidance, draft regulation changes, and draft model ordinance
- June 2008 - Complete regional guidance and finalize COMAR modifications
- July 2008 - Solicit public comment on technical guidance and proposed COMAR modifications
- August 2008 - Distribute model ordinance
- September 2008 - Begin formal 90+ day regulation promulgation
- December 31,2008 - Anticipated Regulation Adoption

**Task Force on the Future for Growth and Development in Maryland
Stormwater Management Forum - January 15, 2010
Presenter List**

1. MDE /10 minutes

2. MD Homebuilders/20 minutes

Contact/Presenter: Katie Maloney
katmaloney@verizon.net
410.263.0070
Elliot Powell, Whitehall Development
Tom Farasy, Terre Verde Communities
Michael Powell, Gordon Feinblatt
Mark Morelock, VIKA
Stuart Greenebaum, Greenebaum and Rose Associates
Sean Davis, Morris Ritchie Assoc.

3. Maryland Municipal League (MML) Panel 1/20 minutes

Contact/Presenter: Candace Donoho
CandaceD@mdmunicipal.org
410.268.5514
Pete Fosselman, Kensington Mayor
Henry Burden, Planner, Port Deposit

4. City of Brunswick, MD/20 minutes

Contact/Answer Brunswick municipal questions if necessary: Bruce Dell
planner@brunswickmd.gov
301.834.7500, X-105
Jerry Connelly, Pleasants Development
Dan Snyder, Pleasants Development
Scott Roser, Macris, Hendricks and Glascock

5. Maryland Association of Counties (MACo)/20 minutes

Contact/Presenter: Leslie Knapp Jr.
LKnapp@mdcounties.org
410.269.0043
Pat Keller, Director, Office of Planning, Baltimore County
pkeller@baltimorecountymd.gov
410.887.3211
Todd Mohn, Director of Public Works, Queen Anne's County
tmohn@qac.org
410.758.0925
Bill Stack, Acting Chief, Surface Water Management Division, Baltimore City
bill.stack@baltimorecity.gov
410.396.0732
Howard County Representative TBD

6. Chesapeake Bay Foundation/Natural Resources Defense Council/ MD Stormwater Consortium /20 minutes

Contact/Presenter: Lee Epstein
lepstein@cbf.org
Nancy Stoner
nstoner@nrdc.org
202.289.2394
Diane M. Cameron
dianemcameron@verizon.net

7. Town of La Plata, MD/ 10 minutes

Contact/Presenter: Cathy Flerlage
CFlerlage@townoflaplata.org

8. Coalition for Smarter Growth/ 10 minutes

Contact/Presenter: Stewart Schwartz
sschwartz@smartergrowth.net
202.244.4408 x121

9. Loiederman Soltesz Associates/ 10 minutes

Contact/Presenter: Ken Dunn
kdunn@lsassociates.net
301.794.7555

10. Biohabitats/ 20 minutes

Contact/Presenter: Jennifer Dowdell
jdowdell@bihabitats.com
410.554.0156
Presenter: Christopher Streb, Biohabitats

11. The Michael Companies/Ben Dyer Associates/20 minutes

Contact: Rachel Brunk (Assistant to Kenneth Michael)
RBrunk@themichaelcos.com
or
Contact: Rosewin Sweeney, Esq., Venable, LLP
MRSweeney@Venable.com
410.244.7587
Presenter: Kenneth H. Michael, The Michael Companies, Inc.
Presenter: Paul Woodburn, Ben Dyer Associates

12. National Association of Industrial and Office Properties (NAIOP)/20 minutes

Contact/Presenter: Tom Ballentine
naiop.md.tom@verizon.net
410.977.2053
Carl Gutschick, Gutschick, Little and Weber
Bill Joyce, Joyce Engineering

**Maryland Department of the Environment
Stormwater Management Regulations
Guidance for Implementation of Local Stormwater Management Programs
March 2010**

Introduction

The Stormwater Management Act of 2007 requires that environmental site design (ESD), previously optional under regulations issued in 2000, now be used to the maximum extent practicable (MEP) to control runoff. Implementation of Maryland's stormwater requirements occurs at the State and local level. The State establishes technical requirements and provides a Model Ordinance, and county governments are required to adopt an ordinance that meets these regulatory requirements. A municipality may either adopt its own local ordinance or rely on the county program. In each case, the Maryland Department of the Environment (MDE or the Department) must review and approve the local stormwater management ordinances.

The new State regulations implementing the Stormwater Management Act of 2007 became effective on May 4, 2009. They appear in the Code of Maryland Regulations at 26.17.02. These regulations state that, unless final approval for erosion and sediment control and stormwater management plans for a project (Final Approval) was granted by May 4, 2010, the project will be required to comply with the new regulatory requirements.

Drafts of local ordinances from counties and those municipalities electing to implement the program were due to MDE for review by November 11, 2009 and must be adopted by May 4, 2010. To date, all counties and 31 municipalities have submitted proposed code changes for MDE review. The Department provided comments on 54 proposed local stormwater management ordinances and approved 22 as of March 5, 2010.

It became apparent that local jurisdictions and the development community perceived that the regulations and provisions of the Model Ordinance were not sufficient to assure fair application of the new regulatory requirements in some circumstances. The Department, after discussions with stakeholders, determined to amend the regulations and provide additional guidance to address concerns in three general categories:

- Grandfathering - the impact of the new requirements on projects that have advanced partially through the development approval process, but that will not receive Final Approval by May 4, 2010.
- Redevelopment - the impact of the new requirements on redevelopment projects and the feasibility of using ESD for redevelopment projects.
- Smart Growth - a perception that the stormwater regulations will have an adverse impact on Smart Growth, whether new development or redevelopment.

This guidance addresses a new regulation, illustrates how certain projects could qualify for waivers, and provides criteria applicable to other aspects of the regulations. It will help guide local governments as they adopt or amend their ordinances and exercise the flexibility inherent in

the State regulations. The examples listed in this guidance are for illustrative purposes only and are not intended to limit the flexibility available to local governments.

With the issuance of this guidance, MDE will submit a proposed emergency regulation to the Joint Committee on Administrative, Executive, and Legislative Review. The emergency regulation will allow a local jurisdiction to incorporate into its ordinance, waiver provisions to address grandfathering of projects under certain conditions or when circumstances prevent the reasonable implementation of ESD to the MEP.

These proposed changes will not affect the requirement for local jurisdictions to adopt modified ordinances by May 4, 2010. The Department acknowledges that some local jurisdictions may wish to incorporate into their local ordinances provisions that reflect the emergency regulations and this guidance. The Department will develop Model Ordinance language and work with local jurisdictions to accommodate these new grandfathering and waiver provisions.

The Department will exercise discretion during its review of local stormwater programs who are making a good faith effort to reach the May 4, 2010 deadline.

Grandfathering Provisions

The emergency regulation will allow a local jurisdiction to incorporate into its ordinance a waiver provision for projects that had completed part of the development review process but had not received Final Approval by May 4, 2010.

Upon the effective date of the emergency regulations and incorporation of consistent provisions into local ordinances, local jurisdictions will be able to issue a waiver that will “grandfather” certain projects. Eligible projects will be those that have cleared an appropriate stage in the development process before May 4, 2010, even though they will not have received Final Approval by that date. Because local jurisdictions have different development review procedures and use various terms for the steps in their processes, the State regulations will identify the appropriate stage of the development process by defining the terms “Approval”, “Preliminary Project Approval”, “Final Project Approval” and “Administrative Waiver”.

“Approval” means a documented action by a local jurisdiction following local review to determine and acknowledge the sufficiency of submitted materials to meet the requirements of a specified stage in a development process. “Approval” does not mean an acknowledgement by the jurisdiction that submitted materials have been received for review.

“Preliminary Project Approval” means a plan approval or completed review by a local jurisdiction that includes the following as part of the a local jurisdiction’s preliminary planning approval process at a minimum: 1) the number of planned dwelling units or lots and proposed density; 2) the proposed size and location of all land uses in the project; 3) a plan that identifies the proposed drainage patterns, locations of all points of discharge from the site, and the type, location and size of all stormwater management controls based upon site-specific computations of stormwater management requirements.

Additionally, a “Preliminary Project Approval” may include the following items if currently required as part of a local jurisdiction’s preliminary planning approval process: 4) the proposed alignment, location and construction type and standard for all proposed roads, access ways and areas of vehicular travel; 5) the proposed method and adequacy of wastewater disposal and provisions of potable water; 6) the general location size and type of all infrastructure proposed for water and wastewater systems; and 7) any other information deemed necessary by the local jurisdiction to adequately review the proposal.

“Final Project Approval” means that the appropriate local authority has approved the final erosion and sediment control plan for the project’s stormwater facilities ,and approved the final stormwater management plan, and, if applicable, bonding and/or financing has been secured based on the final plans for the development.

“Administrative Waiver” means a waiver that allows the construction of the development to be governed by the stormwater management ordinance in effect in the local jurisdiction where the project will be located as of May 4, 2009. The Administrative Waiver is to remain in effect for the time described below. Any construction after expiration of the Administrative Waiver must follow the local ordinance in force at the time of expiration. Phased projects which have been granted an administrative waiver, and have constructed stormwater facilities designed to meet local requirements in place as of May 4, 2009, shall use reasonable efforts to incorporate ESD.

A project that received Preliminary Project Approval before May 4, 2010 will be eligible for an “Administrative Waiver.” If the local jurisdiction grants the Administrative Waiver, the project will not be required to meet the new regulations; instead, construction of the project will be governed by the stormwater ordinance in effect as of May 4, 2009, in the jurisdiction where the project will be located. This local ordinance will include the design criteria established in the 2000 Design Manual prior to May 2009. The regulation will also address the expiration of the Administrative Waiver if the project does not obtain Final Approval by May 4, 2013, or begin construction before May 4, 2017. Lastly, a local jurisdiction may extend the deadline for Final Project Approval for the expiration of the Administrative Waiver only if by May 4, 2010, the development had received a “Preliminary Project Approval” and was subject to a Development Rights and Responsibilities Agreement, a Tax Increment Financing approval or an Annexation Agreement. Any extension granted under this paragraph shall expire when the Development Rights and Responsibilities Agreement, the Tax Increment Financing approval or Annexation Agreement expires.

The following examples illustrate circumstances where an Administrative Waiver may be appropriate:

Example 1:

A proposed development project received Preliminary Plan Approval before May 4, 2010, but will not receive Final Approval by that date. The local jurisdiction may grant an Administrative Waiver, but the final approved project plans must meet the 2000 stormwater regulatory requirements, and the waiver will be subject to expiration as stated in the State regulations.

Example 2:

In 2008, a local government gave a project Preliminary Plan Approval and executed a DRRA with a term of ten years (expiring in 2018). The project will not be able to obtain Final Approval by May 4, 2010, and the local jurisdiction decides to grant an Administrative Waiver. The project experiences further delay due to the economic downturn and will not be able to obtain Final Approval by May 4, 2013. As that date approaches, because the project is subject to a DRRA, the local approving authority could extend the deadline. If it does, the local approving authority could, in 2014 or later, approve final erosion and sediment control plan and stormwater management plans that meets the 2000 regulatory requirements and allow the project to move forward without requiring a redesign to meet 2009 requirements.

Example 3:

A project is granted an Administrative Waiver, but does not receive Final Approval by May 4, 2013. In the absence of special circumstances such as a DRRA, the local jurisdiction cannot extend the Administrative Waiver and the project must meet the stormwater requirements of the local jurisdiction that are in effect as of May 4, 2013.

Example 4:

A proposed development project received Final Approval prior to May 4, 2010, but the project experiences delay due to the economic downturn and will not be able to proceed to construction. When the approved erosion and sediment control plan expires, the local authority could issue a waiver of the 2009 requirements and approve a new stormwater management plan provided the project meets, at a minimum, the stormwater regulatory requirements that were in effect at the time of Final Approval. In the absence of special circumstances such as a DRRA, the waiver cannot extend beyond May 4, 2017.

Other Waiver Provisions

The regulations that became effective on May 4, 2009, authorized a local government to include in its ordinances provisions for waivers of the quantitative and qualitative control requirements if it determined that circumstances exist that prevent the reasonable implementation of those control practices. For example, although projects with less than 40% existing imperviousness would normally require full implementation of ESD to the MEP, the regulations acknowledge that circumstances might exist that prevent the reasonable implementation of these requirements.

For these projects, provided that the project meets the applicable local stormwater requirements as of May 4, 2009, the local jurisdiction may grant a waiver of the 2009 stormwater requirements under the following conditions: 1) phased projects that have already constructed stormwater management facilities that are designed to meet 2000 regulatory requirements, and implementation of ESD to the MEP cannot be met, as long as reasonable efforts to incorporate ESD have been demonstrated; and, 2) infill development projects that are located in Priority Funding Areas with existing stormwater conveyance, and public water and sewer, and where the economic feasibility of the project is tied to the planned density.

If implementation of the 2009 regulatory requirements would result in a loss of the planned development density, a quantitative waiver may be applied to the project for the impervious cover that previously existed on the project site. ESD to the MEP shall be provided to meet the full water quality treatment requirements for the entire development. ESD to the MEP shall be utilized to provide full quantity control for all new impervious surfaces.

The Department will review each jurisdiction's waiver policies in the course of its regular triennial evaluations of the local stormwater programs. In order to assess the initial implementation of the 2009 regulatory requirements, the Department intends to monitor local government's review and approval processes, including the issuance of waivers. Therefore, local approving authorities shall provide to MDE a copy of all approved waivers within 30 days of the approval.

The following examples illustrate circumstances where a waiver may be appropriate.

Example 5:

A developer planned a phased project for a site. Before May 4, 2010, stormwater management facilities designed to meet 2000 regulatory requirements for multiple phases were approved and constructed. If the developer demonstrates that reasonable efforts to incorporate ESD in future phases have been made, and the project meets local stormwater requirements that were in effect as of May 4, 2009, the local jurisdiction may grant a waiver of the 2009 stormwater requirements for the future phases.

Example 6:

An infill development project is planned on a site with existing impervious surface, although less than 40%. It is in a Priority Funding Area (PFA) with existing stormwater conveyance and public water and sewer. The economic feasibility of the project is tied to the planned density. If implementation of the 2009 regulatory requirements would result in a loss of the planned development density, a quantitative waiver may be applied to the project for the impervious cover that previously existed on the project site. ESD to the MEP shall be provided to meet the full water-quality treatment requirements for the entire development. ESD to the MEP shall be utilized to provide full quantity control for all new impervious surfaces.

Redevelopment

The regulations for redevelopment are applicable only to projects that meet the definition of "redevelopment." Sites that do not meet the definition are considered "development." State regulations define redevelopment as "*any construction, alteration, or improvement performed on sites where existing land use is commercial, industrial, institutional, or multifamily residential and the existing site impervious area exceeds 40 percent.*" MDE adopted this definition only after considering comments and suggestions from the regulators, engineers, homebuilders, and environmental organizations that comprised MDE's redevelopment committee. While the recommendations from this group varied widely, there were areas of consensus. For example, the committee agreed that the regulations should require more management on less densely developed sites, encourage redevelopment by imposing reduced requirements, and allow greater flexibility compared to new development requirements.

There is precedent for requiring greater management for redevelopment on less densely developed sites in other state and national programs. For example, the policy in the western portion of Washington State defines redevelopment as sites with greater than 35% impervious area. The United States Green Building Council provides different standards for stormwater management on previously developed sites with greater than 50% impervious area in order to meet LEED™ certification standards.

For all redevelopment projects, the primary goal is to achieve water quality improvements on existing developed lands. To accomplish this, the stormwater regulations require reducing imperviousness, implementing ESD to the MEP to provide water quality treatment for one-inch of rainfall, or using some combination of these for at least 50% of the existing impervious area. This standard is significantly less stringent than the requirements for new development, which require the use of ESD to the MEP to treat up to 2.7 inches of rainfall.

The Department recognizes that designers, developers, engineers and reviewers need significant flexibility as they consider stormwater management in a redevelopment context. For this reason, both the Model Ordinance and the regulations describe several alternative stormwater management measures that may be considered if addressing 50% of the site's impervious area cannot be accomplished. These include a combination of ESD and on-site or off-site structural Best Management Practices (BMPs), or any of the following options:

- Other types of retrofitting (BMP upgrades, filtering practices, implementing ESD off-site)
- Participation in a stream restoration project
- Pollution trading with another entity
- Watershed Management Plans
- Payment of a fee-in-lieu
- Partial Waiver of the treatment requirement to the extent that ESD is not practicable.

The determination of what alternative stormwater management measures will be available may be made by the local government at the appropriate point in the development review process. The local government shall consider the prioritization of alternative measures outlined above, after ESD to the MEP has been determined to be impracticable. In deciding what alternatives measures may be required, a local government may use considerations including, but not limited to the following:

1. whether the project is in an area targeted for development incentives, such as a PFA, a designated Transit Oriented Development (TOD) area, or a designated BRAC Revitalization and Incentive Zone;
2. whether the project is necessary to accommodate growth consistent with comprehensive plans; and
3. whether bonding and/or financing has already been secured based on an approved development plan.

These options provide developers significant flexibility with which to address the State's new stormwater requirements. Local governments exercised this same flexibility in implementing the 2000 regulatory requirements.

The following examples illustrate the application of these principles to redevelopment projects.

Example 7:

A redevelopment project in a highly urbanized area plans to match or increase existing density. Opportunities to reduce imperviousness are limited or non-existent and site constraints limit the ability to use ESD practices. Upon a determination by the local authority that it is not practicable to achieve the 50% treatment level, the remaining volume requirement could be addressed with on-site or off-site BMPs, such as underground storage, a pond, or some other traditional practice.

Example 8:

Site constraints on a redevelopment site limit options for ESD, and reductions to imperviousness are not practicable. Reconstruction of a nearby school site offers opportunities for mitigation of stormwater. A local reviewer could allow the developer to perform or fund the installation or upgrade of BMPs at the school to satisfy the regulatory requirements.

Example 9:

A redevelopment site cannot practicably meet ESD requirements and there are no reasonable opportunities for installing on-site or off-site BMPs. The local jurisdiction has a stream restoration project planned but unfunded. The restoration project could be completed or funded by the developer to compensate for the redevelopment project.

Example 10:

Site constraints on a redevelopment project limit options for ESD and reductions to imperviousness are not practicable. The developer may propose to use an innovative approach to stormwater management such as storage and potential reuse of stormwater. In this case, the local reviewer could allow the developer to use alternative approach as long as the practice was consistent with local codes, and opportunities to either reduce imperviousness or practicably implement ESD to the MEP had been exhausted.

Example 11:

A local jurisdiction has identified a developed area where zoning allows more dense development and where it wants to encourage redevelopment. The local jurisdiction has the option of developing a Watershed Management Plan, using the guidelines described in State regulations, and implementing a watershed-based approach to stormwater management. This approach would allow implementation of less stringent stormwater management within the redevelopment area provided that the local jurisdiction targeted restoration activities to other parts of the watershed management area to compensate for the less stringent controls in the targeted area.

Example 12:

A local jurisdiction is heavily urbanized and has encountered many development scenarios where stormwater requirements cannot practicably be met. The local jurisdiction has developed a fee-in-lieu program to streamline the process of identifying off-site mitigation opportunities. Developers who cannot practicably meet requirements using on-site or off-site practices could pay a fee set by the locality based on criteria outlined in the ordinance. Many jurisdictions currently use a fee-in-lieu option to fund a wide range of stormwater projects.

Example 13:

A project is proposed for a reclaimed mine site with an impervious cap to prevent the infiltration of water into the fill material. In this case, the local approving authority may allow alternative management options to meet the unique constraints of the site.

Example 14:

A proposed redevelopment project in a TOD has been designed to achieve the overall density necessary to support transit and mixed uses. Because of the important public benefit and the public investment in the transportation infrastructure, a local jurisdiction could grant a waiver of the 2009 regulatory requirements if meeting the requirements adversely affects the larger goal of the TOD, and approve the project under the 2000 regulatory requirements.

Example 15:

A local government has approved a development plan for a redevelopment project that is located within a designated growth area. Financing for a portion of the project has been secured based on an approved build-out plan yielding a certain density and rate of return. A redesign of the project to meet the new requirements for stormwater management would adversely affect the project's economic viability, resulting in a loss of financing or bonding for the project. In this case, the local approving authority could grant a partial waiver from the new requirements and approve the project under the 2000 regulatory requirements, after ESD to the MEP has been determined to be impracticable.

Example 16:

A local government has approved a redevelopment plan for a project that is located within a designated growth area. The local jurisdiction took a loan or issued bonds to finance infrastructure to serve the project; the financing has been premised on an approved build-out plan yielding a certain density. A redesign of the project to meet the new requirements for stormwater management would result in reduced density or affect the project's economic viability. In this case, the local approving authority could grant a partial waiver from the new requirements and approve the project under the 2000 regulatory requirements, after ESD to the MEP has been determined to be impracticable.

Smart Growth and Stormwater Management

MDE regulations and programs support the principles of Smart Growth, which are critical to achieving federal and State air pollution and water quality standards. Since 1997, the

Department has specifically considered whether every new regulation or program supports Smart Growth. In the case of the stormwater regulations, the standard for redevelopment projects is significantly less stringent than the standard for new development. In addition, the definition of redevelopment was carefully analyzed to establish a definition that reasonably enables ESD to be implemented. To the extent ESD cannot be implemented, due to site constraints, the regulations provide the necessary flexibility to allow a project to reasonably proceed. The guidance recognizes that the local jurisdiction can take into account whether the project is in an area targeted for development incentives, such as a PFA, a TOD, or a designated BRAC Revitalization and Incentive Zone.

Smart Growth projects that are already in the development pipeline can proceed to completion under the new regulations by taking advantage of the available flexibility and waivers. Future Smart Growth projects may comply with the new regulations either by incorporating ESD from the initial concept stage or by using the flexibility described above.

In order to assure that the stormwater regulations do not disproportionately affect Smart Growth, MDE will develop a system for tracking future developments and, if necessary, consider adjustments to the regulations. Local jurisdictions are encouraged to notify MDE if they encounter instances where the new requirements prevent or significantly discourage Smart Growth projects.

Other Provisions

At the request of the Critical Area Commission, a clarifying amendment will be made to the regulations by adding the following:

The provisions of these regulations may not be construed to affect the requirements for a project located in an Intensely Developed Area of the Chesapeake and Atlantic Coastal Bays Critical Area to comply with the 10% Pollution Reduction Requirement under COMAR 27.01.02.03 D (3).

LIST OF MEETING ATTENDEES

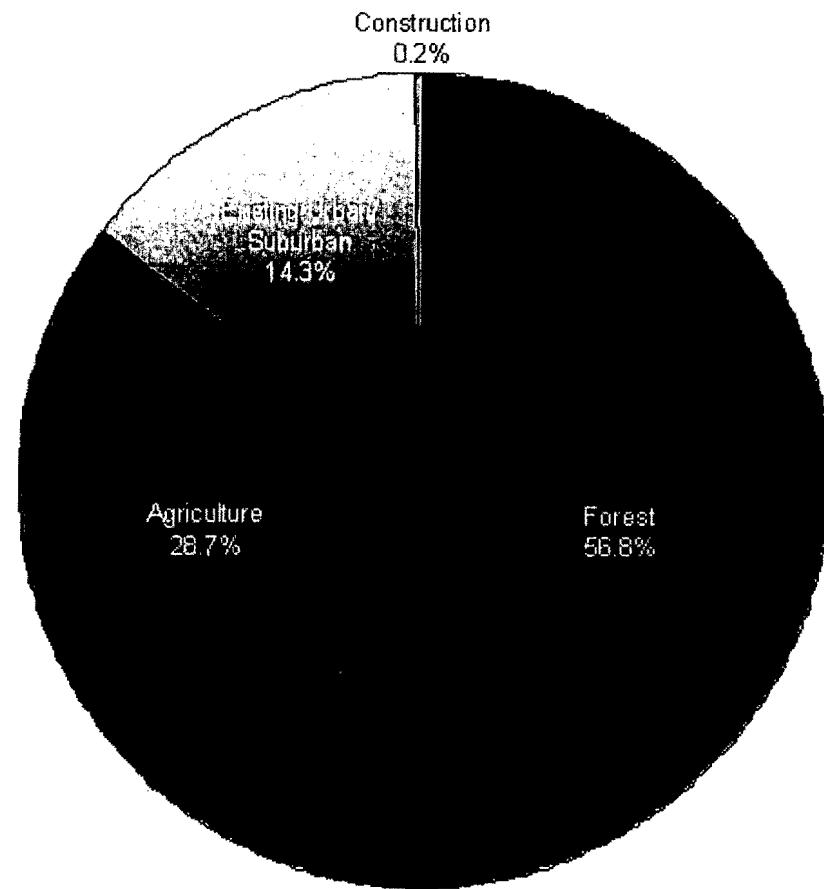
A. Morton Thomas & Associates: Stuart Robinson
Anne Arundel County Department of Public Works: Ronald Bowen
ATCS, P.L.C.: James Whitehead
Ausherman Development Corporation: Jeremy Holder
Alliance for Sustainable Communities: Anne Pearson
Baltimore City Department of Public Works: William Stack
Biohabitats, Inc.: Ted Brown
Ecosite, Inc.: Michael Clar
Carroll County Department of Planning & Resource Management: Martin Covington
Carroll County Office of Environmental Compliance: James Slater
Center for Watershed Protection: Karen Cappiella, Paul Sturm
Centex Homes: Paul Ferreri
Charles County Planning & Growth Management: Robert Harrington, Karen Wiggen
Chesapeake Bay Foundation: Jenn Aiosa, Bruce Gilmore
Chesapeake Stormwater Network: Tom Schueler
CNA: Carl Corse
Consultant to EcoLogix Group: Fran Flanigan
Constellation Generation Group: Ed Miller
D.S. Thaler and Associates, Inc.: David S. Thaler
EcoLogix Group (EcoLogix): Glenn Page, Paul Massicot
Frederick County Division of Permitting and Development Review: Betsy Smith
Gaylord Brooks Realty Co.: Stephen Smith
Greenhorne & O'Mara: Al Arnold
Guttschick, Little & Weber, P.A.: David Little
Harford County Department of Public Works: Bruce Appell
Hedgerow Land Ecology Services: Deborah Slawson
Howard County Bureau of Environmental Services: Mark Richmond
Johnson, Mirmiran, and Thompson: Paul Clement
Lobbyist: Bruce Bereano
Loiderman Soltesz Associates, Inc.: Andrew Der
Low Impact Development Center: Neil Weinstein
Maryland Association of Counties: Les Knapp
Maryland Critical Areas Commission: Lee Anne Chandler, Lisa Hoerger
Maryland Department of the Environment: Robert Summers, Ken Pensyl, Brian Clevenger, Raymond Bahr, Deborah Cappuccitti, Stewart Comstock, Dela Dewa, Maria Warburton, Lorrie Delpizzo, John Joyce, Amanda Sigillito, Bill Sieger
Maryland Department of Natural Resources Coastal Zone Management Division: Carrie Decker
Maryland Department of Planning: Jason Dubow
Maryland Environmental Service (MES): Anna Compton, Megan Simon, Stephanie Peters, James Jett, Brad Dinder
Maryland Municipal League: Candace Donoho

Maryland Society of Professional Engineers: Eduardo Acevedo, Robert Mead
Maryland State Builders Association: Kathleen Maloney
Maryland State Highway Administration: Karuna Pujara
Moffatt Nichol: Mitchell Manchester
Montgomery County Department of Permitting Services: Richard Brush
Morris & Ritchie Associates, Inc.: Ernie Sheppe
National Association of Home Builders: Glynn Rountree
Patuxent Riverkeeper: Jennifer Bevan-Dangel, Fred Tutman
Prince George's Soil Conservation District: Dave Bourbon
Queen Anne's County Development Review: John Scarborough, Vijay Kulkarni
Rockville Department of Public Works: Lise Soukup
Salisbury Department of Public Works: Dale Pusey
South River Federation: Drew Koslow
Stormwater Partner's Coalition: Diane Cameron
Talbot County Department of Public Works: Michael Mertaugh
University of Maryland: Houn Li
Washington County Engineering Department: Terrence McGee
Worcester County Department of Development Review & Permitting: Chris McCabe

<u>MDE 2000</u>	<u>MDE 2007</u>
Calculations	
All calculations done mathematically to mitigate site impervious area. SWM facility sizing is based on treating a volume.	Utilizes charts to base on impervious cover to dictate treatment amounts over the total site area (P_e) that make the site function after development as if it were a wooded site in good condition <i>regardless</i> of the existing site condition. SWM sizing is based on filter area. The Min ESD requirement is 1" over your site area. Additional requirements are not clearly defined and left open to interpretation. The new manual states that Environmental site design must be used to the maximum extent practicable but no definition for what this means is given. This allows a more subjective review since there is no clear definition as to what is expected from the designer
The requirements and means for meeting full swm compliance (Rev, Wqv, @ Cpv) are clearly designated.	Currently no design examples are available although full implementation is slated for May 4 th 2010. This has led to confusion as to what is expected in both the engineering community and the review agencies.
Structural Requirements	
Structural underground facilities such as Stormfilters are allowed to treat the water quality volume.	Structural underground facilities are <u>not</u> allowed although these facilities have been reviewed and approved by MDE.
The maximum drainage area to a sandfilter or biofilter was 10 acres or less.	The maximum drainage area has been reduced to ½ acre to these facilities and sandfilters are no longer an acceptable ESD measure
Facilities sized based on how much impervious area flows to the facility for treatment. The SWM credits are available for use, but not mandated for use	Facilities are sized the same regardless to the amount of impervious flowing to each facility. This causes you to have the same size filtering device for a parking lot as you do for a playground. The same credits are now mandated for use as ESD practices.
Additional Issues	
Minor revisions to jurisdictional codes required for implementation	Requires total rewrite of zoning and building codes for implementation to the full extent of the law. The manual states that access and maintenance and access easements must be provided for the swm facilities, but it doesn't outline how this are to be done for all of the on lot facilities that will be required or how these easements may encumber the proposed housing lot. If an access easement is required then will it prohibit someone from fencing or installing a swing set in their back yard? Can the local jurisdiction come in and maintain the facility at their leisure, do they have to replace in kind any items that they disturb on the individuals lot?

New Construction took 8,646 acres or .148%
(less than 20/100s of 1%) of the 5,900,000 acres in Maryland

Phase 5.3 Chesapeake Bay Model Results*
Breakdown of *All* Maryland Land Uses (2007)

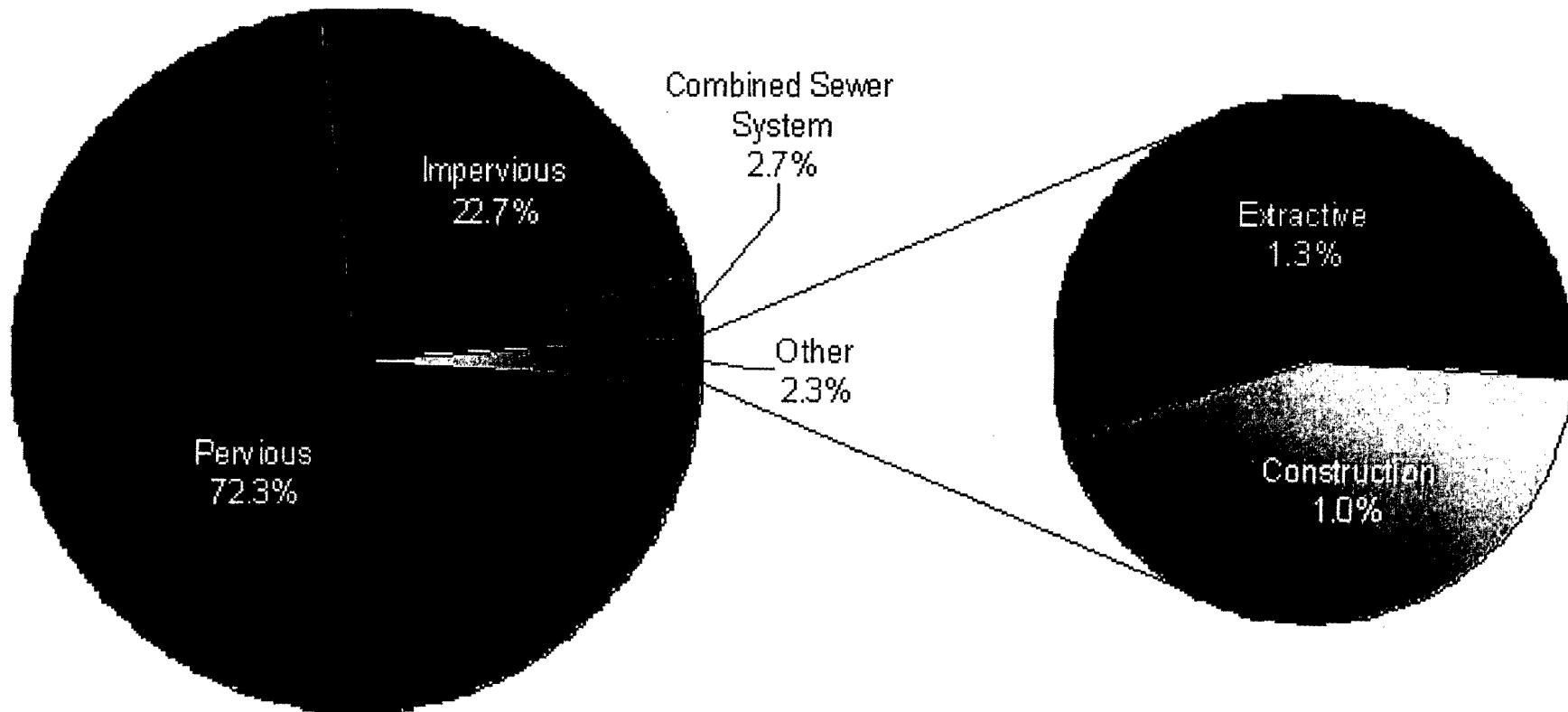


*Based on Phase 5.3 Model released 5/19/10

***Impervious* surfaces cover 191,028 acres and are 22.7% of urban surfaces
and 3.3% of the total watershed land surface**

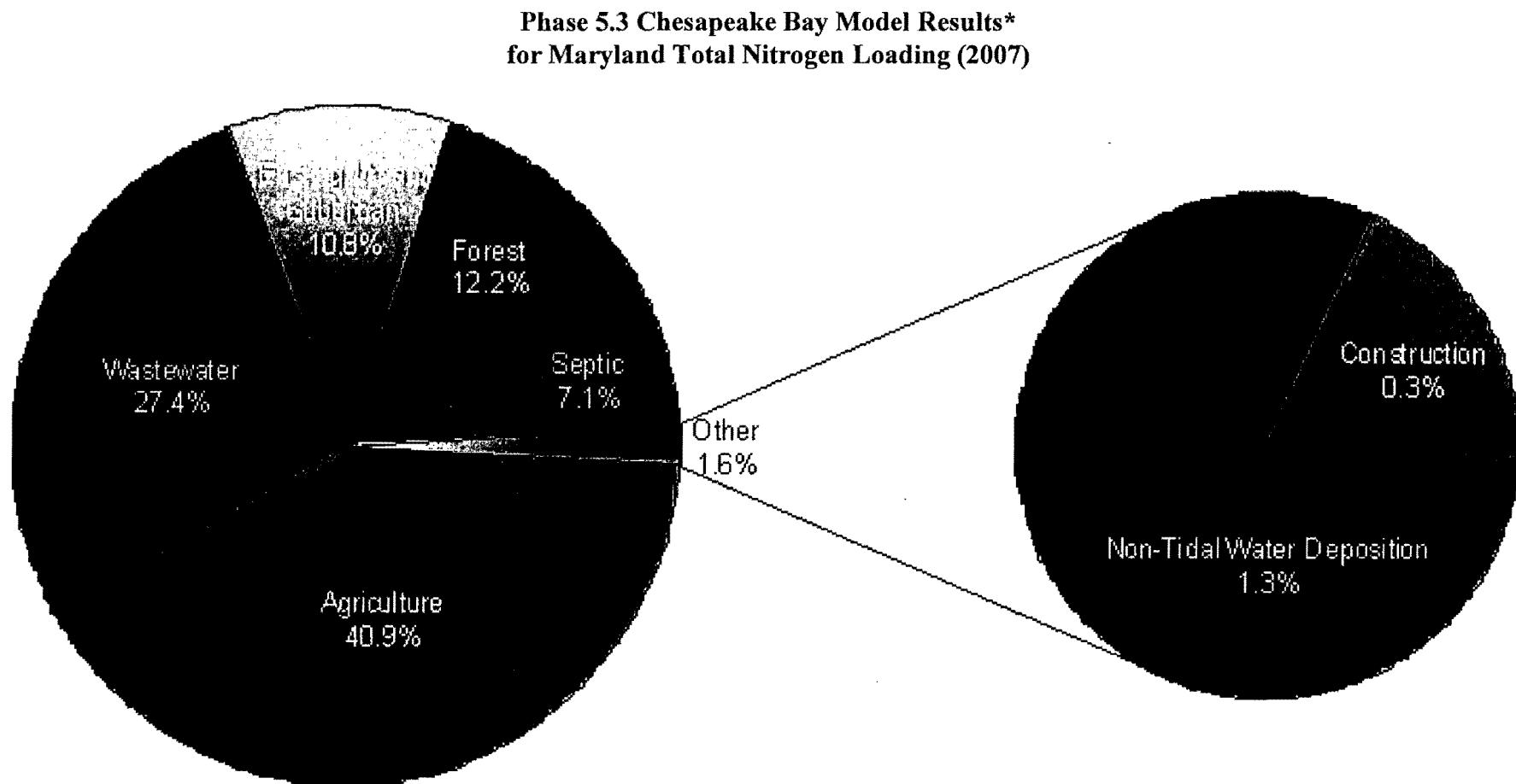
***Pervious* surfaces cover 609,036 acres. They are 72.3% of urban surfaces
and 10.5% of the total watershed land surface**

Phase 5.3 Chesapeake Bay Model Results*
Breakdown of Maryland *Urban* Land Uses (2007)



*Based on Phase 5.3 Model released 5/19/10

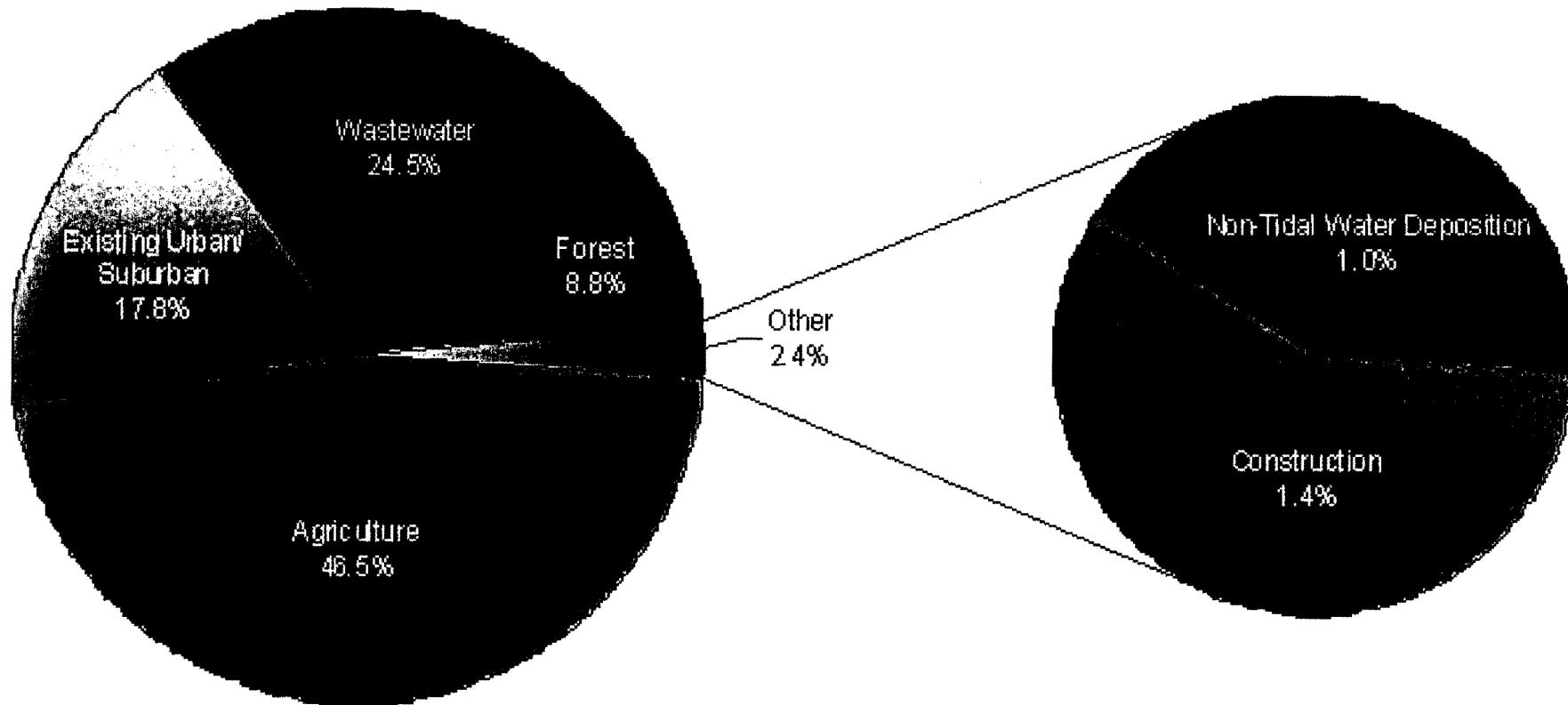
New Construction's contribution of the *nitrogen* pie is 163,598 lbs.
or .30% (less than 30/100s of 1%) of the total



*Based on Phase 5.3 Model released 5/19/10

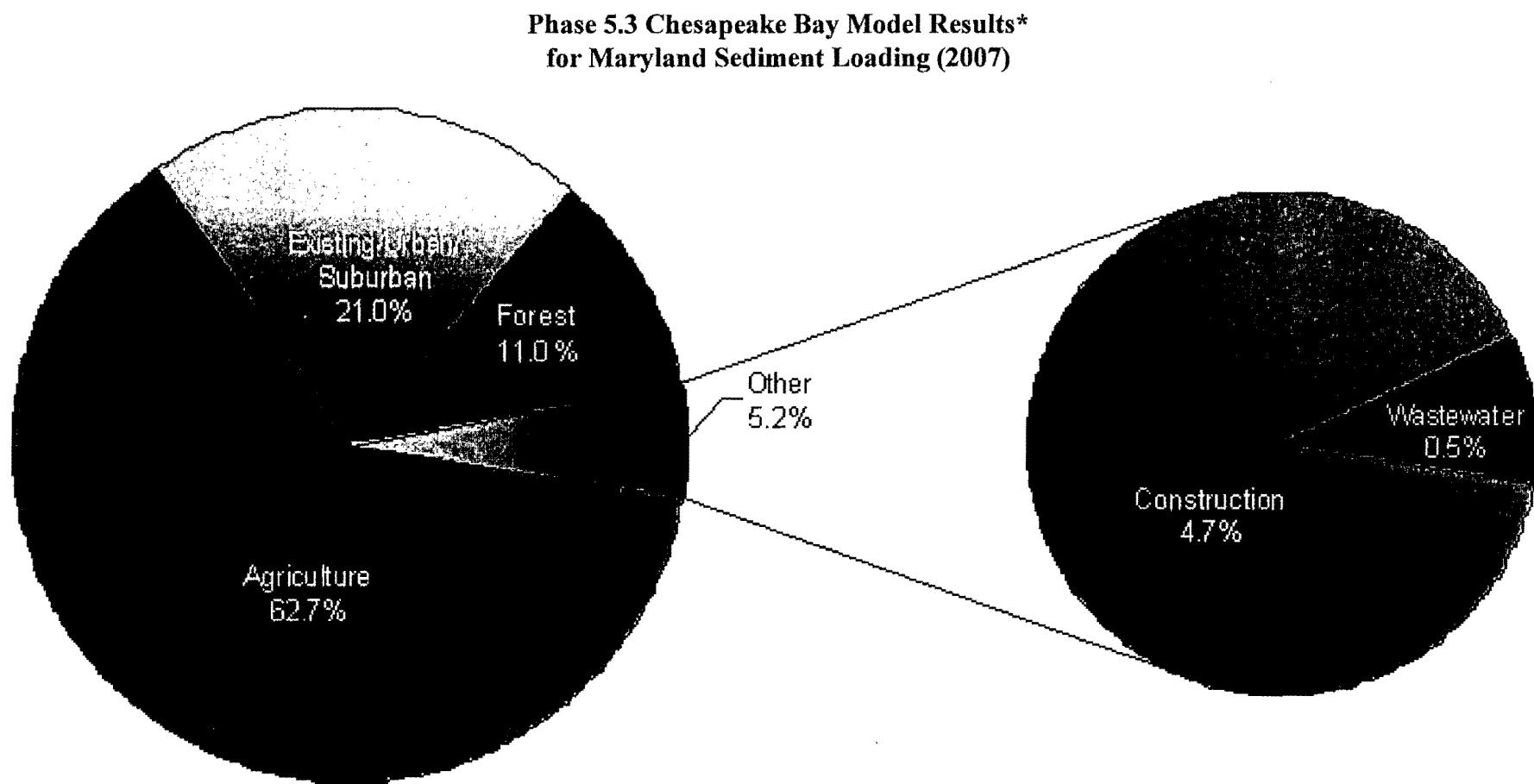
New Construction's contribution of the *phosphorus pie* is 54,164 lbs. or 1.44% of the total

Phase 5.3 Chesapeake Bay Model Results*
for Maryland Total Phosphorus Loading (2007)



*Based on Phase 5.3 Model released 5/19/10

New Construction's contribution of the *sediment* pie is
38,043 lbs. or 4.72% of the total



*Based on Phase 5.3 Model released 5/19/10



1 of 1 DOCUMENT

CODE OF MARYLAND REGULATIONS

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This document is current through the 6/18/10 issue of the Maryland Register

TITLE 26. DEPARTMENT OF ENVIRONMENT
SUBTITLE 17. WATER MANAGEMENT
CHAPTER 02. STORMWATER MANAGEMENT

COMAR 26.17.02.01-2 (2010)

.01-2 Grandfather Provisions.

A. In this regulation, the following terms have the meanings indicated:

(1) Administrative Waiver.

(a) "Administrative waiver" means a decision by the approving agency pursuant to this regulation to allow the construction of a development to be governed by the stormwater management ordinance in effect as of May 4, 2009, in the local jurisdiction where the project will be located.

(b) "Administrative waiver" is distinct from a waiver granted pursuant to Regulation .05C of this chapter.

(2) Approval.

(a) "Approval" means a documented action by a county or municipality following a review to determine and acknowledge the sufficiency of submitted material to meet the requirements of a specified stage in a local development review process.

(b) "Approval" does not mean an acknowledgement by the approving agency that submitted material has been received for review.

(3) Final Project Approval.

(a) "Final project approval" means approval of the final stormwater management plan and erosion and sediment control plan required to construct a project's stormwater management facilities.

(b) "Final project approval" includes securing bonding or financing for final development plans if either is required as a prerequisite for approval.

(4) "Preliminary project approval" means an approval as part of a local preliminary development or planning review process that includes, at a minimum:

(a) The number of planned dwelling units or lots;

- (b) The proposed project density;
- (c) The proposed size and location of all land uses for the project;
- (d) A plan that identifies:
 - (i) The proposed drainage patterns;
 - (ii) The location of all points of discharge from the site; and
 - (iii) The type, location, and size of all stormwater management measures based on site-specific stormwater management requirement computations; and
- (e) Any other information required by the approving agency including, but not limited to:
 - (i) The proposed alignment, location, and construction type and standard for all roads, access ways, and areas of vehicular traffic;
 - (ii) A demonstration that the methods by which the development will be supplied with water and wastewater service are adequate; and
 - (iii) The size, type, and general location of all proposed wastewater and water system infrastructure.

B. An approving agency may grant an administrative waiver to a development that received a preliminary project approval prior to May 4, 2010. Administrative waivers expire according to § C of this regulation and may be extended according to § D of this regulation.

C. Expiration of Administrative Waivers.

- (1) Except as provided for in § D of this regulation, an administrative waiver shall expire on:
 - (a) May 4, 2013, if the development does not receive final project approval prior to that date; or
 - (b) May 4, 2017, if the development receives final project approval prior to May 4, 2013.
- (2) All construction authorized pursuant to an administrative waiver must be completed by May 4, 2017, or, if the waiver is extended as provided in § D of this regulation, by the expiration date of the waiver extension.

D. Extension of Administrative Waivers.

- (1) Except as provided in § D(2) of this regulation, an administrative waiver shall not be extended.
- (2) An administrative waiver may only be extended if, by May 4, 2010, the development:
 - (a) Has received a preliminary project approval; and
 - (b) Was subject to a Development Rights and Responsibilities Agreement, a Tax Increment Financing approval, or an Annexation Agreement.
- (3) Administrative waivers extended according to § D(2) of this regulation shall expire when the Development Rights and Responsibilities Agreement, the Tax Increment Financing approval, or the Annexation Agreement expires.



MONTGOMERY COUNTY PLANNING DEPARTMENT
THE MARYLAND NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MCPB
July 8, 2010
Item # 2

MEMORANDUM

TO: Montgomery County Planning Board

VIA: Mark Pfefferle, Acting Chief, Environmental Planning *MP*

FROM: Stephen Federline, Master Planner, Environmental Planning¹
Mark Symborski, Planner Coordinator

DATE: July 1, 2010

SUBJECT: Bill 40-10, Stormwater Management- Revisions to Chapter 19 of the Code

RECOMMENDATIONS

Support Changes to Chapter 19: Revisions to County SWM Law (CB # 40-10), and recommend clarifications and refinements for County Council consideration.

OVERVIEW

The Maryland Stormwater Management Act was first passed by the Maryland General Assembly in 1982. In 1984, the State required all counties and municipalities to have a stormwater management program, including local ordinances, plan review and approval processes, and inspection and enforcement capabilities. With the Maryland Stormwater Management Act of 2007, significant changes in the types of stormwater management strategies that are acceptable in land development projects are being defined, as well as new processes for the review of stormwater management plans.

In the past, requirements for treating stormwater runoff from land development projects emphasized a strategy that included a combination of centralized structural practices for pollutant removal (e.g., infiltration trenches) with channel erosion or flood control impoundments (e.g., stormwater management ponds).

With the new state stormwater management requirements, the emphasis has shifted to a comprehensive land development design strategy to more closely replicate pre-development stormwater runoff characteristics and to better protect natural resources. The state requirements now focus on the implementation of "Environmental Site Design" (or ESD) to the "Maximum Extent Practicable" (or "MEP"). The Stormwater

¹ Since the publication of this report, Mr. Federline has retired

Management Act of 2007 defines ESD as a design strategy that uses “small-scale stormwater management practices, nonstructural techniques, and better site planning to mimic natural hydrologic runoff characteristics and minimize the impact of land development on water resources.” ESD incorporates the following principles in the design of a site development project: conservation of natural features (including vegetation) and pre-development drainage patterns; minimization of impervious surfaces; maximizing the infiltration of stormwater runoff to help the recharge of groundwater supplies and nearby stream baseflow; and minimizing surface stormwater runoff velocities.

The state Act requires developers, designers, and plan review agencies to consider stormwater runoff control methods for land development projects from the beginning of the regulatory review process. Since land use and site layout are required components in the new ESD strategy, local stormwater regulatory agencies are required to more closely coordinate with land use and land planning agencies in the review of land development projects.

PURPOSE

This memo contains recommendations from MNCPPC Planning staff regarding development and implementation of the revised County’s SWM Regulations. (Article II. Chapter 19-20 of the County Code) in response to the directives of the State’s Stormwater Management Act of 2007. The Act establishes Environmental Site Design (ESD) as the priority method in controlling stormwater runoff and providing groundwater recharge *in situ*. This memo addresses issues of policy, process, and recommended changes to the proposed text to improve the legislative clarity in the County’s effort to actively and efficiently implement the State’s directive.

The Annotated Code of Maryland governing the implementation of the Stormwater Management Act of 2007 has recently been amended by the General Assembly of Maryland to address several concerns raised by interested parties. House Bill HB 1125 (passed March, 2010) provides a mechanism to grandfather certain projects currently under review, guidance on the impact of ESD requirements on redevelopment, and further, addresses the perception that ESD will have an adverse effect on Smart Growth initiatives. An attached MDE guidance document was provided in March 2010 to clarify the flexibility inherent in the state regulations, with illustrative examples as to how such flexibility may be used.

REVISIONS TO THE PROPOSED LEGISLATION:

Attachment B contains the legislative language changes and comments on proposed Council Bill #40-10. The changes and comments are imbedded in the margin, while certain major policy considerations and issues are highlighted below for detailed discussion with Board.

MAJOR POLICY ISSUES:

1) DPS' Proposed SWM Review Process: Need for Early, Intense Coordination

The State Stormwater Management Act of 2007 and the updated Chapter V of the Design Manual prescribe a three- stage process of review in taking the initial ESD concept through to final design. The first stage or “concept plan” requires local stormwater authorities to have a comprehensive review process in place for all aspects of development planning, and to collaborate to provide coordinated feedback to the designer. This stage necessarily involves both a planning and technical exercise to integrate/weave the use of ESD measures and techniques into a plan while assuring that it works with all other necessary elements of a development plan.

This process will require intense coordination between the technical review staff at DPS and the Planning staff. The Planning staff will contribute several vital functions to the effort:

- i. Environmental Planning staff is directly responsible for mapping natural resources, protecting identified resources through sensitive designs which explore all planning, zoning, and subdivision options, and implementing the forest conservation law.
- ii. Development Review staff brings its broad based knowledge of the comprehensive review process and all elements which together make up an approved plan, and all regulations which affect the ultimate design.
- iii. Community Planning brings its knowledge of the master and sector plan dictates, and the wishes of the community.

Accordingly, Staff comments on Section 19.24 (a) are as follows:

- a) Proposal to “refer” plan to MNCPPC does not reflect the need for intense coordination with MNCPPC at earliest stage to maximize implementation of preferred ESD options:
 - Environmental Planning staff has been responsible for implementing many ‘better site design techniques’ for decades; and
 - Development Review staff is intimately familiar with all requirements controlling and options for development, and can identify those options and opportunities for examination at the earliest stage.
- b) Identifies timing for concept plan approval (preliminary plan) which is too late in the process to maximize ESD; and identifies site plan as the benchmark for site development stormwater management plan approval. However, many development proposals do not go through site plan review.
- c) Identifies only preliminary subdivisions and site plans as the types of land development projects that are subject to the new SWM law requirements.

The law needs to reference other types of projects, such as mandatory referrals and special exceptions that may not require subdivision or site plan approvals.

- Staff recommends use of same timelines for concept plan and site development stormwater management plan approval, as is used for approval of the preliminary and final forest conservation plan as identified in Chapter 22A-11 of the County Code and COMCOR 22A.00.01.09 A-1 and B-1 of the Forest Conservation Regulations.
- Concept Plan process should be reviewed for consistency with the evolving single Planning Board approval process.

2) Impervious Surface: Continue Support of Board's Position

The Maryland SWM Act of 2007 requires minimization/reduction of impervious surface as the initial step in Environmental Site Design, together with protecting and enhancing natural resources. MNCPPC has carried out these objectives through implementation of the Planning Board's Environmental Guidelines since 1983, and application of impervious limits in certain areas as designated by the County Council since 1995.

Staff Recommendations:

- i. *Continue to encourage the use of engineered pervious surfaces and other alternative surfaces* (green roofs, reinforced turf) where pavement is necessary to maximize the achievement of SWM requirements through ESD practices, and credit their use against stormwater management requirements as such surfaces serve to reduce the effects of traditional impervious surfaces on quantity, quality and recharge requirements.
- ii. *Reiterate the Board's support for the consensus definition of "Impervious Area"* included in Section 19.21. (All relevant county agencies have concurred in this definition)
- iii. *Reinforce the Board's based on the Summary Rationale in Attachment C of not granting credit against imperviousness for use of extra or enhanced porous stormwater management BMPs.* The principal finding in the supporting rationale is that *the additional stormwater management benefits afforded by such systems are insufficient to counterbalance the additional negative environmental impacts that are associated with installation and operation of such measures, particularly over time.*

Although many arguments are convincing in support of this position, this most telling is Maryland Department of Natural Resources' (DNR) real-life experience in implementing the State "Critical Areas" Program. After initial approval of such surfaces as a credit towards impervious area limits in the Bay's Critical Areas, DNR reversed that decision after experience showed the cumulative impacts were unacceptable and not in keeping with the fullest measure of protection needed in the State's Critical Areas. The same rationale applies to this county's Council-defined critical areas: the special protection

areas and the Patuxent Primary Management Area.

3) Grandfathering of Projects in Process: Fair, but Too Fixed for Plans still in Process

The state legislature, via HB1125, made several changes to address the effects of the original law on projects already well within the development approval process, but still short of approval of final permits, or start of construction. These changes included:

- i. Allow local agencies (Department of Permitting Services – DPS) to grant an *administrative waiver “for good cause shown”* to allow projects which have received local SWM concept approval by the May 4, 2010 deadline to move forward.
- ii. Counties can allow phased developments to utilize traditional (pre-ESD) SWM facilities, but under condition that phased developments make “*reasonable attempts*” to follow the new rules.
- iii. Allows grandfathered plans up to three years (no later than May 4, 2013) to secure final SWM design approval.
- iv. *Staff Recommendation: Support the State’s recommended ESD grandfathering provisions for local use, but condition the grant of a three year window for implementation on “reasonable attempts” to achieve ESD. The grant of the administrative waiver by the county “for good cause shown” should be conditioned on a staff-level pre-submission review to explore what “reasonable attempts” could be made to implement ESD without significant changes to the approved plan. This condition should apply only to plans that are subject to one or more subsequent review(s) by the Planning Board.*

4) Review/Approval of Natural Resource Inventory (NRI) Plans: Budget/Staffing Issues

The state requires approval of a “natural resources inventory”, adding additional requirements which provide critical information for “site fingerprinting” which guides the location and type (s) of ESD measures which fit the site. Environmental Planning (EP) staff currently reviews all NRI plans (often combined with the Forest Stand Delineation, or FSD) and acts within 30 days, per Chapter 22A- the County code.

Staff Recommendation: *Staff believes the best and most efficient course of action is to expand MNCPPC staff’s current review and to incorporate information required by County DPS as needed per the new law. However, that decision depends on resolution on certain critical factors not yet resolved that may create obstacles to implementation:*

- i. **Nature of Additional ESD Information:** if the county specifies use of commonly-available information from published documents, EP staff can go

alone in assuring it is included on the NRI. If more complex information and/or analysis is required, DPS review would be necessary, but within the 30 day window.

- ii. **Adequate funding, cost recovery and staffing** are major issues if MNCPPC EP were to conduct the complete NRI review, including the additional DPS' specifications. Doing all NRI reviews, even those which do not have Board involvement, will dramatically increase the number of NRI reviews.
- iii. The current definition of NRI in Chapter 22A would need to be amended to include the expanded ESD components.

5) Redevelopment: Fair Solution, but Needs Aggressive Effort by County in Urban Areas

The concern was that the new regulations would discourage on redevelopment. The issue is addressed directly in the March, 2010 Guidance document from MDE (Attachment A).

Montgomery County has long applied a stricter standard for water quality control than the State for redevelopment, requiring 100% water quality control for both new development and redevelopment. The county law proposes use of ESD planning techniques and treatment practices to the maximum extent practicable (MEP) before structural SWM practices are allowed. After ESD to the MEP is achieved, on and offsite structural SWM measures can be used.

Staff Recommendation:

- i. *Support the County's continued use of the higher water quality standard for redevelopment which shall be provided via ESD to the MEP consistent with the state law's prioritized use of onsite ESD.*
- ii. *Recommend the legislation or any follow-up regulations promote a more aggressive and proactive posture by the County to identify, secure land, and fund construction of offsite alternative measures which will serve multiple sites in high density urban areas consistent with approved watershed management plans.*
While staff recognizes that this approach may appear contrary to fundamental ESD philosophy of replicating natural pre-development conditions onsite, it may also provide for more effective, opportunistic and accelerated improvement in redeveloping urban and smart growth areas to the benefit of the receiving waters.

ATTACHMENT "C"

**Summary Rationale for Defining and Limiting Impervious Area
As a Basic Watershed Protection Technique**

1. Areas developed with pervious pavement systems or green roofs become permanent parts of the stormwater management system. Depending on the system, they can provide a certain amount of infiltration, storage, and limited treatment. Because of this the County encourages their use and credits them against stormwater management requirements in all locations.
2. However, credit is not given for ground covered by pervious pavement systems or green roofs in excess of an imperviousness cap because their use results in the permanent loss of other environmental functions due to the removal of the upper soil profile, loss of natural vegetation, and compaction—functions that imperviousness caps are intended to safeguard for watershed protection. Some important features and functions significantly reduced or lost include:
 - Treatment and pollutant uptake by natural vegetation and soils;
 - Return of water to the atmosphere by evapotranspiration;
 - Sequestration of carbon by vegetative growth;
 - Release of oxygen into the atmosphere;
 - Infiltration of rainwater to naturally recharge aquifers;
 - Moderation of air and water temperatures; and
 - Preservation of habitat and food sources for plant and animals.
3. Maryland DNR originally approved use of pervious systems as a credit towards impervious area limits in the Chesapeake Bay Critical Area, but reversed this position after experience showed overall cumulative environmental impacts that were unacceptable. This experience should provide practical guidance towards continuing to provide maximum protection in the Council's designated areas with imperviousness limits.
4. The County Council has designated specific areas for special efforts to protect the environmentally sensitive features. These efforts include numeric impervious limitations, additional stormwater management, and enhanced forest conservation practices. The designated areas include: the Upper Paint Branch, Upper Rock Creek, and part of the Clarksburg Special Protection Areas (SPA's), the Patuxent Primary Management Area (PMA), and a watershed within the Germantown Master Plan.
5. Environmental Site Design, required by State law, gives first priority to minimizing the development footprint and associated impervious area and maximizing vegetated area. After this has occurred, small-scale stormwater management practices and permeable pavement systems are used to minimize environmental impacts due to runoff.
6. All County agencies involved with water quality (DPS, DEP and MNCPPC) concur with the definition of "impervious area" in the proposed DPS revisions to Chapter 19.

Impervious Area: Any surface that prevents or significantly impedes the infiltration of water into the underlying soil, including structures, buildings, patios, decks, sidewalks, compacted gravel, pavement, asphalt, concrete, stone, brick, tile, swimming pools, and artificial turf. Impervious surface also includes all areas used by or for motor vehicles or heavy commercial equipment, regardless of surface type or material, including roads, driveways, and parking areas.



OFFICE OF MANAGEMENT AND BUDGET

Isiah Leggett
County Executive

Joseph F. Beach
Director

M E M O R A N D U M

July 14, 2010

TO: Nancy Floreen, President, County Council
FROM: Joseph F. Beach, Director
SUBJECT: Expedited Bill 40-10, Stormwater Management – Revisions

The purpose of this memorandum is to transmit a fiscal and economic impact statement to the Council on the subject legislation.

LEGISLATION SUMMARY

This bill would require management of stormwater runoff through the use of nonstructural best management practices to the maximum extent practicable for new development and redevelopment projects approved by the Department of Permitting Services (DPS). It would require the implementation of environmental site design (ESD) to the maximum extent practicable and the use of structural stormwater management controls (best management practices) only when necessary, while bringing local stormwater management requirements into compliance with the Maryland Stormwater Management Act of 2007.

FISCAL SUMMARY

The DPS will be responsible for application processing, administration, plan review, and inspection of the relevant stormwater facilities during construction. The Department of Environmental Protection (DEP) will be responsible for periodic inspection and maintenance of those facilities after construction. The following fiscal impact estimates are based on the departments' current best judgments about the number of permits that will meet the requirements of the bill, the average number of additional ESD facilities per permit that will be needed to satisfy the bill, and the percentage of those facilities that will be maintained by DEP. It should be emphasized that at present the County has only limited experience with how the bill's requirements will affect the need for inspections and maintenance, so these estimates are very preliminary.

The additional cost to the DPS for application processing, administration, and plan review should be minimal. DPS estimates that an average of two (2) additional inspections per year will be needed for each permit that must meet the requirements of this bill. Each inspection would require about 1.5 hours and cost about \$65 in salaries, benefits, and operating expenses. Because of provisions in the bill that grandfather existing permits, plus the time required for Planning Board approval of new permits, no additional inspections would be needed in FY11. DPS expects the annual number of permits meeting the requirements of this bill to grow by about 125 per year starting in FY12. The table that follows summarizes the estimated cost to DPS of the additional inspections required. DPS estimates that by FY15, an additional inspector would have to be hired to handle the workload.

Office of the Director

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Nancy Floreen, President, County Council
July 14, 2010
Page 2

The DEP inspects above-ground stormwater management facilities once every three years. However, it expects to provide routine maintenance annually to the ESD facilities associated with Bill 40-10 for which it is responsible.

Based on DPS' estimate that the first permits meeting the requirements of the bill would be issued in FY12, the first completed additional ESD facilities attributable to the bill would be scheduled for inspection by DEP in FY15. If one assumes that an average of five (5) additional ESD facilities would be associated with each of the 125 permits affected by the bill in FY12, that one-third of those would be scheduled for inspection in FY15, and that the average contract cost per inspection is \$150, the additional cost to DEP for inspections in FY15 would be \$56,500 (which includes 0.25 workyear to manage and administer the effort).

Annual routine maintenance by DEP of the new ESD facilities included in its maintenance program would begin in FY14. Assuming that DEP will be responsible for maintaining 30% (210) of the 625 new ESD facilities attributable to Bill 40-10 from the FY12 permits, at an average contract cost of \$500 per facility, the total cost to DEP for maintenance of the additional ESD facilities in FY14 would be about \$120,000 (which includes 0.25 workyear to manage and administer the effort). However, this cost will be offset by the reduced influx of new structural stormwater management facilities requiring maintenance (these are discouraged by Bill 40-10). DEP assumes that the \$300,000 per year now budgeted for maintenance of additional structural stormwater management facilities will be phased out over four (4) years. The following table shows how DEP's inspection and maintenance costs would be affected by Bill 40-10 under these assumptions, as well as the total fiscal impact of the bill.

	Number of Permits Affected by Bill 40-10	Cost of Additional DPS ESD Inspections	Cost of Additional DEP ESD Inspections	Cost of Additional DEP ESD Maintenance	Phase-Out of Maintenance of New Structural Stormwater Facilities	Net Additional Cost for DEP Maintenance	Total DPS + DEP Fiscal Impact
FY11	0	0	0	0	0	0	0
FY12	125	16,230	0	0	0	0	16,230
FY13	250	32,450	0	0	0	0	32,450
FY14	375	48,680	0	120,000	-75,000	45,000	93,680
FY15	500	64,910	56,500	240,000	-150,000	90,000	211,410
FY16	625	81,130	113,000	360,000	-225,000	135,000	329,130

The economic impact of Bill 40-10 on developers is difficult to predict. Some in the development industry believe that construction and maintenance costs will be higher with the use of environmental site design, while other groups believe it will cost less. Mixed use and high density developments could experience some economic impact, while the cost would probably be less for construction of less densely developed sites. However, the magnitude of the economic impact would vary with the site and is very difficult to predict.

There would probably have to be increases in the relevant permitting fees and the Water Quality Protection Charge to recover the additional inspection and maintenance expenses incurred by DPS and DEP. Sediment control permit fees may have to be increased a fraction of a cent and the minimum fee by \$50 in FY15 to provide funding for one additional sediment control inspector in DPS. Based on the above cost estimates, the Water Quality Protection Charge may have to be raised by \$0.18 per Equivalent Residential Unit in FY14, an additional \$0.61 in FY15, and another \$1.04 in FY16 to cover the increased costs incurred by DEP.

The following contributed to and concurred with this analysis: John Greiner, Office of Management and Budget; Rick Brush, Department of Permitting Services; Steven Shofar, Department of Environmental Protection; Amy Stevens, Department of Environmental Protection; and David Platt, Department of Finance.

Montgomery County Stormwater Partners Network

To: Councilmembers Floreen, Berliner, and Leventhal
Fr: Diane Cameron, Bruce Gilmore, Brent Bolin and Ginny Barnes
Re: Proposed changes to Expedited Bill 40-10
Date: July 14, 2010

Thank you for including the Stormwater Partners in the T&E Committee sessions on this bill; we plan to participate in the 7/15 and 7/22 sessions. Below are the changes that we suggest to Bill 40-10. The most important change we seek is to narrow the waiver provisions in Section 19-25 (c); in addition, we seek several other changes including a requirement that public facilities will be excluded from grandfathering waivers and therefore, will be designed using Environmental Site Design to the Maximum Extent Practicable; and other changes described below.

Bill Section 19-25, part (c) *Waivers*

Suggested change: Please delete subsections (3), (5) and (6).

The waiver provisions we ask to be deleted pertain to stormwater capture and treatment requirements for infill, redevelopment and projects with unspecified special circumstances (subsection 3); an allowance for a waiver related to existing physical conditions (subsection 5) and an allowance for a Channel Protection Volume waiver if all reasonable options have been exhausted and the applicant can show that in-stream adverse effects will not be increased (subsection 6).

These three subsections are problematic in several respects:

- The overall effect of the current section 19-25 (c) as now written, is to stack waiver upon waiver, which is confusing and unnecessary. There's no need for a lot of local waivers, because the process of environmental site design to the MEP inherently allows for technical difficulties to be addressed and to be worked through.
- The main objective of Chapter 19 of our Code, and of the federal, state and local water quality and stormwater laws that it is implementing, is to restore and protect our streams. The provision of multiple waivers, as the draft is now written, is likely to result in less protection of our streams and rivers, which is unacceptable.
- These three subsections weaken the thrust of the statute (the Stormwater Management Act of 2007), and the historic tradition of Montgomery County to apply solid standards when it comes to new development and redevelopment. Montgomery County has a strong tradition of applying the "Water Quality Volume" (the 'qualitative' stormwater requirement) – roughly the first one inch – across the entire rural-urban spectrum of projects; it has reportedly almost never been waived.

Stormwater Partners suggested language changes to Expedited Bill 40-10
July 14, 2010

- The Stormwater Management Act of 2007 requires that all stormwater management plans “*implement a Channel Protection Strategy to reduce downstream erosion in receiving streams.*”¹ Thus, the language in Section 19-25 (c) (6), regarding potential waivers from the Channel Protection Volume requirement, for projects that show that their discharges will not adversely affect downstream erosion, is not acceptable, because the new standard created by the Stormwater Management Act is far more protective – the burden must be on the applicant to show that their resulting discharge will still enable the *reduction* of downstream erosion.
- In practical terms, this has meant in the past – and should continue to mean – that new development and redevelopment projects are held responsible for capturing and treating on-site, the first one-inch of each storm, along with addressing the Channel Protection Volume. The new requirement now added, is that the manner in which the stormwater will be treated, shall be through Environmental Site Design to the Maximum Extent Practicable. Let’s continue this local requirement and tradition as we make the shift to ESD.
- When it comes to the job of code changes in Montgomery County, we should keep our strengths, rather than bargaining them away or diluting them. Stronger and simpler stormwater codes will make it easier for our public servants to implement this law.

Therefore, subsections 3, 5 and 6 should be deleted.

Other suggested changes:

- 1) No Public Project should be grandfathered. The bill's grandfathering provisions are too broad and lenient. The revised stormwater ordinance should require that all County-owned project proposals, and all private projects with substantial county subsidies, that went into facility planning in or after Fiscal Year 2009, comply with the new Environmental Site Design (ESD) requirements. This is consistent with the 2007 Clean Water Task Force recommendations, and with the widely-acknowledged need for the public sector to take the lead in applying ESD to new and redevelopment projects.
- 2) There are several provisions in this bill that enable off-site stormwater and stream restoration projects to be undertaken in lieu of on-site ESD approaches, including sections 19-25 (a)(2), and 19-26. Though we recognize that off-site options are sometimes necessary, they should be rare, and in keeping with current County practice, off-site options should generally pertain to the meeting of the Channel Protection Volume only, not the Water Quality Volume (roughly the first one inch of each storm is termed the Water Quality Volume). Finally, the code should

¹ Environment Article, Annotated Code of Maryland, Section 6-201.1, Section 4-203 (b) (8) (VIII).

specify that the off-site device must itself be an ESD system.

- 3) Also related to off-site measures is the question of the use of public parkland for stormwater management. This is a very controversial topic, and the Code must be written such that this approach is rarely undertaken. The bill must designate the Department (and Director) of Parks as full partners in the process of deciding whether or not to allow placement of stormwater facilities on parkland, or to allow stream restoration or wetland restoration on parkland. Any parkland projects should be ESD based, and should be required to show benefit to the watershed from a hydrologic perspective.
- 4) We support the comments by Planning Staff regarding Section 19.24 (a). These include the need for DPS to intensely coordinate with MNCPPC at the earliest stage to maximize implementation of ESD options, using the same timelines as are used for the preliminary and final Forest Conservation Plan, as identified in Chapter 22-A-11 of the County Code and COMCOR 22A.00.01.09 A-1 and B-1 of the Forest Conservation Regulations. Preliminary Plan approval is too late in the process, and some plans do not go through site plan review. The law needs to reference other types of projects subject to the new stormwater management ESD requirements, such as mandatory referrals and special exceptions.
- 5) The bill should include a requirement that DPS provide reasonable opportunity for public review and input on proposed Concept Plans.
- 6) We request that Chapter 19 be amended to establish that the Water Quality Protection Charge is a fee for service, not a tax.
- 7) Throughout Chapter 19, we request that the word “*structural*” be changed to the word “*standard*,” since the Stormwater Management Act prioritizes ESD techniques over *standard* techniques.² ESD techniques include bioretention and green roofs, while standard techniques include stormwater ponds and underground storage tanks and sand filters; all are considered “*structural*,” meaning that they typically require engineering and/or architectural designs and use of standardized construction methods and materials. In contrast, “non-*structural*” in this context, typically refers to use of natural features like forest buffers as part of a stormwater management approach.

The current bill’s use of the word *structural* would create confusion in the future, and could even hamper the growth of green businesses and technology evolution in the ESD field, since it may lead designers and decisionmakers to erroneously

² The Stormwater Management Act of 2007 requires MDE to establish rules and regulations that among other things, require “a developer to demonstrate that Environmental Site Design has been implemented to the Maximum Extent Practicable, and **standard** best management practices have been used only where absolutely necessary.” (emphasis added). Environment Article, Annotated Code of Maryland, Section 6-201.1, Section 4-203 (b) (5) (II) (3) (A) and (B).

Stormwater Partners suggested language changes to Expedited Bill 40-10
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conclude that only “*non-structural*” measures constitute Environmental Site Design. In fact, *both structural and non-structural measures constitute ESD*.

We will greatly appreciate your support of these needed changes to the expedited bill, and your partnership with the public in a deliberative process to make this one of the best stormwater codes in Maryland.

Thank you for considering our requested changes.