

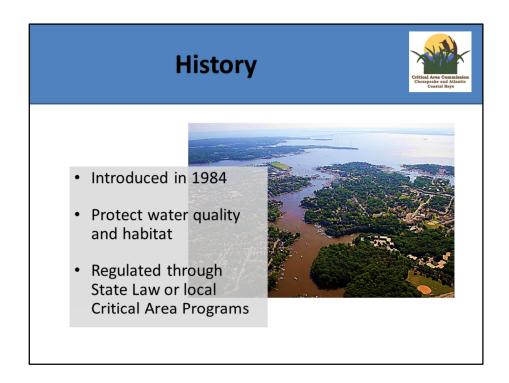
Chesapeake and Atlantic Coastal Bays Critical Area 101

Nov. 13, 2019 & Nov. 20, 2019 Critical Area Commission Staff

Overview



- History & Purpose of the Critical Area Law
- Critical Area Development Standards
- Project Review
- *Break*
- Activities
- Local Government Projects



Based on Chesapeake Bay Critical Area Act introduced by Governor Harry Hughes in 1984.

State Program focused on protecting the water quality and habitat of Maryland's Bays.

Study of the Bay was performed by EPA and revealed sources of problems:

- Sprawl development
- Polluted stormwater run-off
- Forest clearing
- Drainage from agricultural lands
- Sediment and erosion from construction sites
- Removal of natural stream buffers
- Decline in living resources (especially oysters)
- Decreases in wetlands, transitional habitat, and SAVs

All land within Critical Area is regulated by State Law or local Critical Area Programs.

The Atlantic Coastal Bays were added in 2002.

Where is the Critical Area?





- All tidal waters of the Chesapeake and Atlantic Coastal Bays
- All land within 1,000 feet of tidal waters and tidal wetlands
- 11% State
- 5,200 miles of shoreline

Purpose of the Law



"It is the purpose of the General Assembly in enacting this subtitle:

- To establish a Resource Protection Program for the Chesapeake and the Atlantic Coastal Bays and their tributaries by fostering more sensitive development activity for certain shoreline areas so as to minimize damage to water quality and natural habitats; and
- To implement the Resource Protection Program on a cooperative basis between the State and affected local governments, with local governments establishing and implementing their programs in a consistent and uniform manner subject to State and local leadership, criteria, and oversight."

Goals of the Law



- Minimize adverse impacts to water quality from runoff
- Conserve fish, wildlife, and plant habitat
- Establish land use policies that:
 - accommodate growth
 - address the fact that the number, movement, and activities of people in the Critical Area can have adverse environmental impacts



Local Critical Area Programs



- Every jurisdiction is responsible for implementing a local program approved by the Commission
- Most development approvals and enforcement actions are local
- Commission focus is on local alternatives for local needs



We have the regulations in COMAR to fulfill the goals of the law, but you will also find them in your local programs.

Every jurisdiction is responsible for implementing a local program approved by the Commission.

Most development approvals and enforcement actions are at the local level.

The Commission is focused on working with individual jurisdictions to develop local alternatives for local needs.

Coordination with Local Governments



- Law requires full compliance with State regulations, even if not yet adopted in local program
- State regulations are minimum standards
 - If conflict between State and local, stricter provisions apply
- Coordination with Commission Staff



5 Natural Resource Planners & 2 Circuit Riders

Development Standards Land use classifications Forest & Developed Woodland Habitat Protection Areas (HPAs) Buffer

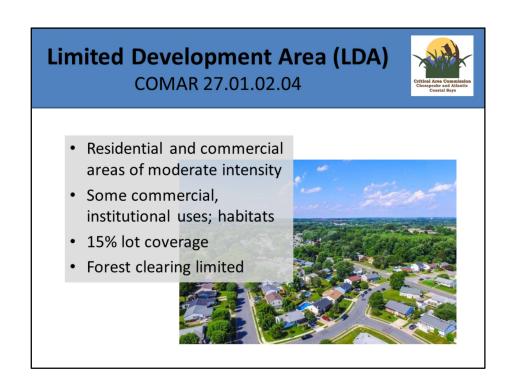
What are the rules for development in the Critical Area?

There are three classifications for land in the Critical Area. These were mapped as part of the original Critical Area Program, developed for each county and are based on the characteristics of the existing development.

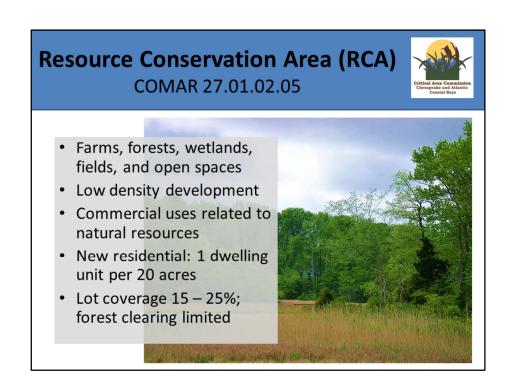
Other areas with development standards include: forests & developed woodlands, habitat protection areas, and the buffer.

Intensely Developed Area (IDA) COMAR 27.01.02.03 • Existing urban, industrial, institutional, commercial and other developed areas • Little existing natural habitats • Pollutant reduction of 10% required for development

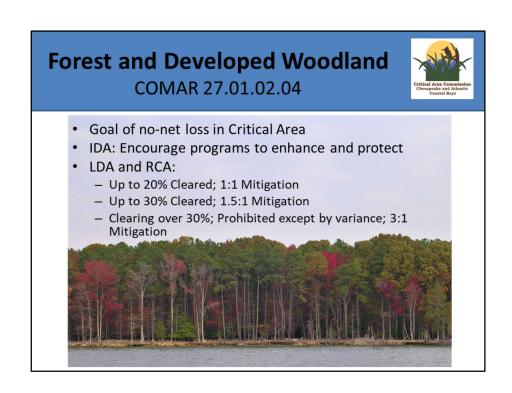
The IDA, or Intensely Developed Areas, generally occurs within cities, towns, and other growth areas. In IDAs, the intensity of the development is regulated by underlying zoning. The most important development standard relates to stormwater; water quality must be improved by 10% from pre-development loads. There are no forest clearing limits, but cleared forest should be replaced in order to meet the no net loss of forest goal. Additionally, if a site is in the Buffer or if there are other HPAs that may be impacted, the development must meet those standards.



Like IDA, density in LDA is regulated by underlying zoning. However, there are limits to the amount of lot coverage that can be built on a site as well as the amount of forest that can be cleared. Generally lot coverage is limited to 15% of the area of LDA on a site. Clearing is limited to 20% with 1:1 mitigation required, clearing may be permitted up to 30% in some cases, but mitigation increases to 1.5:1. Development on steep slopes is prohibited and development standards related to the Buffer and other HPAs also apply.



Development in the RCA is limited to single family residential at one house per 20 acres, and to certain uses such as agriculture, forestry and fisheries. Generally new commercial, industrial, etc. is not permitted in the RCA. The same LDA lot coverage, forest clearing, mitigation, and steep slope standards apply, as do the development standards for the Buffer and other HPAs.



Goal of no-net loss in the Critical Area.

IDA: Encourage programs to enhance and protect forests and developed woodlands.

There are clearing limits for development in the LDA and RCA. We'll go over the clearing limits in more detail later in the presentation.

Grandfathering

COMAR 27.01.02.07



- Recorded before December 1, 1985 or before local program approval
- May be developed with a single family dwelling
- Comply to the maximum extent possible



There are grandfathering provisions for parcels which were created prior to the law.

Critical Area development standards still apply to new development.

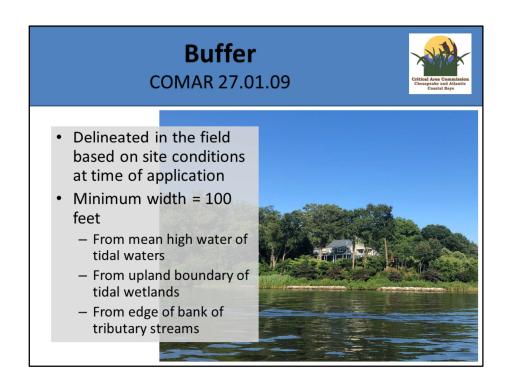
Habitat Protection Areas (HPA) COMAR 27.01.09 100-foot Buffer Forest interior dwelling bird (FIDS) habitat Nontidal wetlands Riparian forests Threatened and endangered species Historic waterfowl habitats staging & concentration areas Species in need of conservation Colonial Water Bird **Nesting Areas** Anadromous fish spawning waters Natural Heritage Areas

HPAs can occur in all overlay zones (IDA/LDA/RCA). They are protected from development and how they are protected can be done in a variety of ways.

The Buffer has specific requirements that are laid out in COMAR (will review more next).

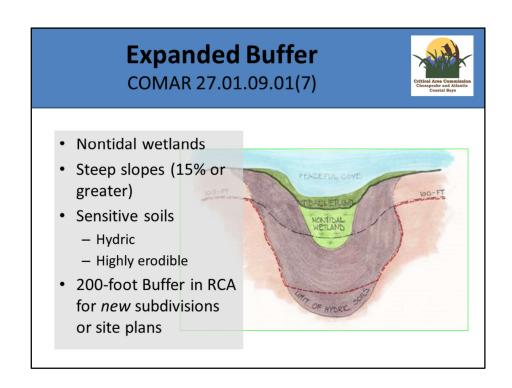
Non-tidal wetlands are regulated by MDE, but may also be regulated by local jurisdiction.

Remainder require consultation with DNR Wildlife Heritage Service and other agencies for recommendations on how to protect these resources during development.



Studies have shown the ecological importance of Buffers in terms of erosion control, protection from sediment and nutrient runoff, and habitat. This is why there are specific provisions for the Buffer.

The Buffer and expanded Buffer are field-delineated based on the edge of tidal waters, tidal wetlands and tributary streams. Any property that falls within the limit of the Buffer or expanded Buffer is subject to the development standards for the Buffer (mitigation required for square footage of disturbance plus additional mitigation for square footage of canopy coverage removal).



The Buffer is expanded for contiguous sensitive features. Including to the limit of nontidal wetlands, to the edge of hydric (consistently wet) or highly erodible soils or to 300 feet whichever is less, and for steep slopes based on a formula of 4 feet for every one percent of steep slope if the steep slopes are 15% or greater.

The Buffer is a minimum of 200' for all new subdivisions or site plans proposed in the RCA. That Buffer may also be expanded.

Lots platted before Jan 1, 2010 and on which the expanded Buffer encompasses more than 75% of the lot may develop in the expanded Buffer with lesser mitigation requirements.

Buffer Establishment



COMAR 27.01.09.01-1

- · Amount of establishment based on type of activity
- Fully established Buffer required for subdivisions and land use changes

Development Category	Lot Created Before Local Program Adoption	Lot Created After Local Program Adoption
New development on vacant lot	Total lot coverage	Full establishment
New subdivision or new lot	Full establishment	
New lot with existing dwelling unit	Establishment = total lot coverage	
Conversion of land use to another land use	Full establishment	
Addition, accessory structure, or redevelopment	Establishment = increase in lot coverage	
Substantial alteration	Establishment = total lot coverage	

Buffer establishment applies to any site that contains Buffer or expanded Buffer. Basically it requires that some amount of planting be provided in the Buffer for development that occurs outside the Buffer. New subdivisions or a change in land use require full Buffer establishment. Lesser amounts may be required for development on grandfathered lots or lots with existing development.

Buffer Mitigation

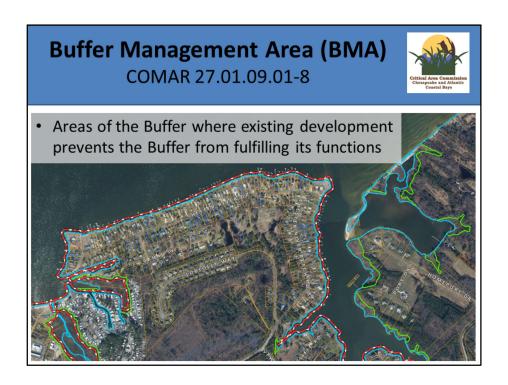
COMAR 27.01.09.01-2



- Impact
 - Area of Disturbance
 - Canopy Cleared
- Mitigation
 - Ratios dependent upon type of activity

	Mitigation Ratio	
Activity	Permanent	Temporary
	Disturbance	Disturbance
Septic on grandfathered lot if no	N/A	0
clearing required		
Septic on grandfathered lot where	1:1	N/A
clearing is required		
Shore erosion control	1:1	1:1
Riparian water access	2:1	1:1
Water-dependent facility	2:1	1:1
Variance	3:1	1:1
Violation	4:1	N/A

Buffer mitigation applies to any development activity that is permitted in the Buffer or expanded Buffer. This includes building permits or grading permits approved by variance, shore erosion control activities, water-dependent facilities, or other types of approvals. The amount of mitigation required is based on a ratio for the area of disturbance in the Buffer plus the amount of any canopy cover cleared. The ratio varies depending on the type of activity, for example it's 3:1 for a variance but 1:1 for a shore erosion control activity.



Buffer Management Areas aka Buffer Modification Areas aka Modified Buffer Areas... Local jurisdictions may request an exemption of certain portions of the Critical Area from the buffer requirements where it can be sufficiently demonstrated that the existing pattern of residential, industrial, commercial, or recreational development prevents the buffer from fully functioning.

This is an example from Queen Anne's County – the red line indicates BMA (blue line is shoreline, green line is wetland).

Typical Buffer development standards do not apply, however, if an exemption is requested, local jurisdictions shall propose other measures for achieving water quality and habitat protection objectives.

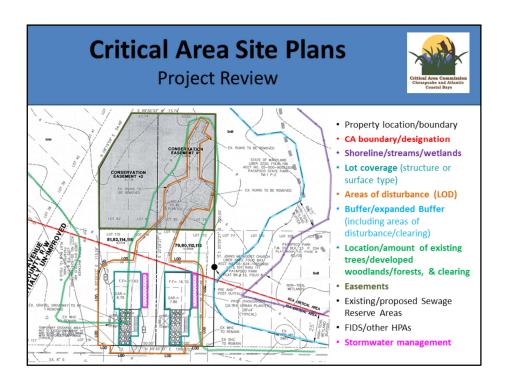
Setbacks: Typically, no new development is permitted forward of a setback line which usually varies between 25'-50'.

Mitigation is 2:1 for the area of development.



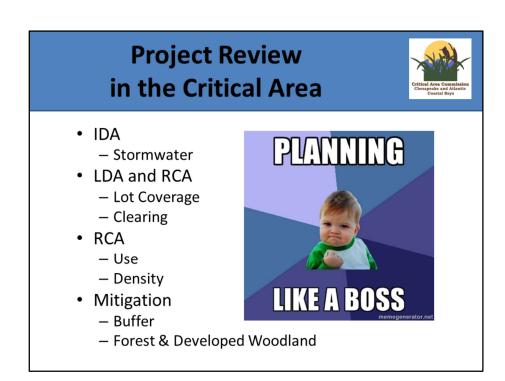
Now we will take a look at how to review a plan based on development standards.

If development is proposed in the Critical Area, it needs some types of review. This includes everything from site plans and subdivisions to special exceptions or new trails.



Even something as minor as a building permit, should be reviewed using a site plan. A site plan can be pretty simple, such as based on a boundary lot survey for a building permit, or more complex, based on engineered plans. But you should be able to identify the following type of information:

- The location and boundary of the property
- The location of the CA boundary and its designation
- The location of the shoreline, streams, or wetlands
- The location and size of lot coverage, which should ideally be called out by structure or surface type
- Any areas of disturbance that may be proposed
- The location of the Buffer or expanded Buffer, including amount of disturbance or clearing in the Buffer
- The location and amount of existing trees, developed woodlands or forests, as well as those proposed to be cleared
- Any other easements
- Location of existing or proposed Sewage Reserve Areas
- FIDS and/or other HPAs
- Location of proposed stormwater management measures



Development standards vary depending on the size and type of the proposed project as well as the location and characteristics of the project site.

Residential Projects in the IDA



Stormwater Management

- < 250 sf of disturbance = no stormwater
- > 250 sf but < 5,000 sf disturbance = 10% Rule
 - Tree and/or shrub plantings
 - Best Management Practices (rain gardens, pervious pavers, etc.)
- > 5,000 sf of disturbance = ESD Stormwater
 Management Plan

Residential projects that involve an impervious surface area less than 250 square feet are exempt from the 10% Rule requirements. Though, it is recommended that applicants plant trees and/or shrubs, to compensate for site impacts.

If the project disturbs between 250 and 5,000 square feet, the 10% Phosphorus Reduction Rule is required. There are various non-structural stormwater Best Management Practices that can be implemented on-site to help fulfill stormwater requirements, such as the use of rain gardens or pervious pavers. The spreadsheet to calculate the amount of phosphorus required to be removed for a project can be found on our website. However, often times the simplest way to fulfill the stormwater requirement is with tree and/or shrub plantings. Within the Buffer, a minimum of three trees or nine shrubs can be planted for every 100 square feet of proposed development activity. Outside the Buffer, one tree or three shrubs can be planted for every 100 square feet of new impervious surface created.

Projects with over 5,000 square feet of disturbance must have an approved Stormwater Management Plan that complies with Environmental Site Design as required by the local Stormwater Management Code.

Residential Projects in the LDA & RCA



Lot Coverage Limits

- · Grandfathered Lot coverage limits
 - 15% (typically)
 - Provisions for smaller, grandfathered lots

Lot/Parcel Size (sq. ft.)	Lot Coverage Limit	
0 - 8,000	25% of Parcel + 500 sq. ft.	
8,000 - 21,780	31.25% of Parcel	
21,781 – 36,300	5,445 sq. ft.	
36,301 or greater	15% of Parcel	

• New subdivisions = 15% overall

Lot coverage is any manmade surface including structures, parking areas, roads, driveways, stairs, and walkways. It also includes any area covered by gravel, stone, shell, pavers, porous concrete, or any other man-made materials. It does not include mulch paths, decks with gaps for water to pass freely, fences or walls that are less than 1-foot wide that are not constructed with a footer, or walkways/stairs in the Buffer that provide direct access to piers.

Generally, lot coverage is limited to 15% of the parcel or lot, or of the subdivision or development project as a whole. For lots under a half-acre that were created prior to the effective date of the Critical Area regulations, lot coverage is limited to 25% of the parcel.

There are provisions that allow for additional lot coverage on small, grandfathered lots subject to limits based on lot size and appropriate mitigation, as shown in this chart. The local government can provide specific information regarding theses allowances.

For new subdivisions, individual lots that are less than 1 acre in size may exceed the 15% lot coverage limit; however, lot coverage for the entire subdivision (including internal roads) cannot exceed 15%.

The Lot Coverage Assistance Guide (included in handouts) is a great resource.

Residential Projects in the LDA & RCA





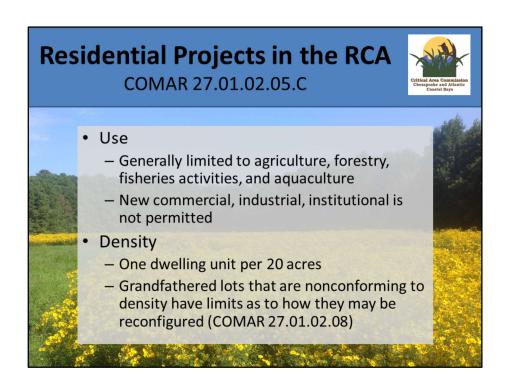
- Forest and developed woodland clearing limits
 - Clearing up to 20% = 1:1 mitigation
 - Clearing between 20-30% = 1.5:1 mitigation
 - Clearing above 30% requires a variance (3:1)
- 15% afforestation (creating new forest)



Reforestation required for all clearing. Please note: 28% clearing = **all 1.5:1 mitigation** (not 20% @ 1:1 + 8% @ 1.5:1)

In areas of new development or redevelopment, where no forest coverage existed prior to development, for example when a subdivision is platted on agricultural lands, 15% of the area must be planted with trees.

For some jurisdictions, this also applies to projects in the IDA, so check your local program.



Additional development standards apply to projects within the RCA, specifically.

New development is limited to residential uses and uses associated with resource utilization activities. In general, new commercial, industrial, and institutional uses are not permitted in the RCA.

And residential density for new development, including subdivisions, is limited to one dwelling unit per 20 acres. The regulations do not require 20-acre lots, in fact, clustering of development is encouraged. Well-designed development at the 1-per-20 density is intended to ensure that RCAs maintain a natural character, allowing the continuation of resource related land uses while avoiding fragmentation of important areas of wildlife and plant habitat.

In the case of a subdivision, it's important to accurately research and track subdivision history so that density can be calculated correctly and to ensure density requirements are being met. Density should be calculated based on the grandfathered parcel size. Due to clustering you can't necessarily rely on absolute acreage numbers. Ideally, RCA land which has been used to create cluster density has been restricted through old plats, but this isn't always the case.

There are also limits to how nonconforming lots in the RCA may be reconfigured or consolidated. See COMAR 27.01.02.08

Residential Projects in the RCA



Natural Resources Article § 8-1808.1(e)(2)(i)

- · Accessory dwelling units
 - An additional dwelling unit per lot may be considered part of the primary dwelling unit if:
 - Served by same sewage system as primary unit

Does not increase lot coverage (if located within primary unit)

 Within 100 ft of primary unit and does not exceed 900 sq ft in total enclosed area (if located outside of primary unit)



Residential Projects in the RCA



Natural Resources Article § 8-1808.2

- Intrafamily Transfers
 - Parcels must be of record on March 1, 1986
 (Chesapeake) or June 1, 2002 (Atlantic)
 - Immediate family: father, mother, son, daughter, grandfather/mother, grandson/daughter, or sibling

A local jurisdiction must have this provision in their program in order to do a intrafamily subdivision. (Local jurisdictions have to opt in)

Eligible parcels must be of record on March 1, 1986 in the Chesapeake Bay Critical Area or on June 1, 2002 in the Atlantic Coastal Bays Critical Area.

They can only go to immediate family members, which is a father, mother, son, daughter, grandfather, grandmother, grandson, granddaughter, or sibling. Note: Siblings are a new addition.

A parcel that is at least 7 acres and at most 12 acres, may be subdivided into 2 lots. A parcel that is at least 12 acres and at most 60 acres, may be subdivided into 3 lots.

All of this information should be stated on the subdivision plat as a condition of approval. See Natural Resources Article 8-1808.2 for more info.

Buffer Management Plans

COMAR 27.01.09.01-3



A Buffer Management Plan is required for:

 Buffer Establishment (planting in the Buffer for development elsewhere on the property)



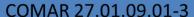
- Disturbance to the Buffer resulting from:
 - Variance
 - Subdivision approval
 - Site plan approval
 - Shore erosion control
 - Grading permit
 - Special exception
 - Permitted installation/repair/ replacement of septic system

A Buffer Management Plan is required for any project that involves Buffer establishment or mitigation for disturbance in the Buffer. Disturbance may result from activities such as development or redevelopment, grading, sediment and erosion control, shoreline erosion control, installation of a septic system and drain field, and operation of a water-related facility. A Buffer Management Plan is not required for maintenance of an existing grass lawn or for gardening.

If any planting is required, whether it's for mitigation or establishment, it must be shown on a Buffer Management Plan. There are very specific standards for the number and amount of plants required, and the size of plants, trees and shrubs. There are also requirements for maintenance and survivability, and protection and inspection by the local government.

A BMP is also required when a subdivision is proposed on lands that will remain in agricultural use for some time after the subdivision is approved. However, the implementation of the plan is delayed until the land is developed.

Buffer Management Plans





- Three types:
 - Simplified (COMAR 27.01.09.01-3.H)
 - Minor (COMAR 27.01.09.01-3.I)
 - Major (COMAR 27.01.09.01-3.J)
- The Green Book for the Buffer



A Simplified Buffer Management Plan is applicable for Buffer management activities of minor or limited scope and intensity, such as: construction of a 3-foot wide path to a pier or cutting a tree that is in imminent danger of falling and causing damage or accelerating shore erosion. For an emergency situation, the Plan may be filed after the tree has been cut. For a Simplified BMP, an applicant is required to provide a brief narrative of the activity, the proposed mitigation, the proposed planting date, and the signature of the party responsible for the proposed activity and for ensuring the survival of the planting.

Minor Buffer Management Plans are applicable for projects of larger scope that result in less than 5,000 square feet of establishment or mitigation. And, if over 5,000 square feet of establishment or mitigation is required, the applicant must complete a Major Buffer Management Plan. More detail and information is required for Minor and Major BMPs. COMAR 27.01.09.01 lists all the information that is required for these types of BMPs.

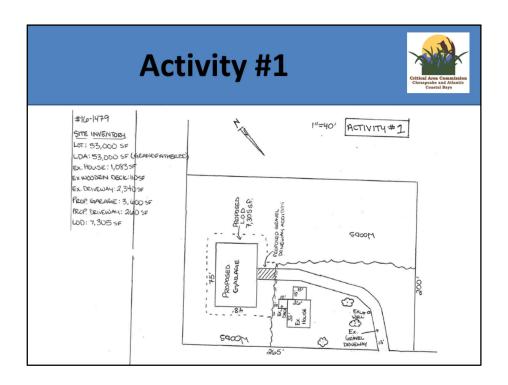
If Buffer planting is required for a new house, the local jurisdiction may not issue the final use and occupancy permit until either the planting is completed or the property owner has posted financial assurance to complete planting in next planting season. If a buffer management plan is required for a subdivision, the local jurisdiction may not approve the subdivision until they have approved buffer management plan.

The Green Book for the Buffer is a great resource as you work with the applicant to create a BMP that best suits the requirements of the project and site. See our website for electronic copy of book.



This is the type of information that should be included on a Planting Plan. We recommend that you reference the Green Book during the design process.





Use Critical Area Project Review Worksheet to review site plan.

Any variances required? (No for Buffer; No for lot coverage; Unknown for clearing)

More information needed on canopy removal.

Note: Wooden deck does not count as lot coverage.

Any info missing from the site plan? (Clearing info)

Activity #2





- Proposed project:
 - Construct new concrete patio
- LOD:
 - 500 square feet
- Canopy coverage removed:
 - 600 square feet
- What is the <u>total mitigation</u> required?

Variance required (disturbance within Buffer).

If variance is approved, mitigation is 3:1 for LOD plus 1:1 for tree removal = 3(500) + 600 = 2,100 sf

Activity #3



Step-by-Step Guide

Buffer Management Plans: Planting Plan and Landscape Schedule



Coordinated Review Process for Local Government Projects

Overview



- Local Government Projects Defined
- Projects of Local Significance
- Consistency Reports
- Major Development Projects
- Conditional Approval Projects
- Commission Review

Local Government ProjectsWhat Are They?



- Development or landdisturbing activities:
 - Sponsored by a County or Town
 - Proposed on County- or Town-owned land <u>or on</u> <u>private land</u>
- Require review for compliance with local Critical Area regulations
- COMAR 27.02.02 thru 27.02.04



Local Government Projects



• Type of review depends on scope of project:

No land disturbance/ only impacts existing structures

 No review by Critical Area Commission required

Minor Land Disturbance (Projects of Local Significance)

 Submit Consistency Report (and applicable plans) for Staff review

Major Land Disturbance

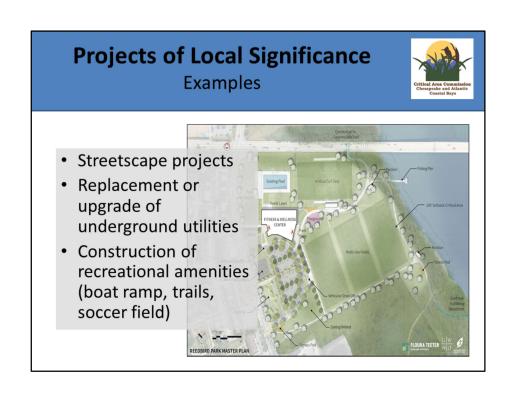
- Submit plans for full Commission review and vote; or
- Submit request for Conditional Approval for full Commission review and vote

Projects of Local Significance

COMAR 27.02.02



- Minor in scale
- Environmental impacts confined to parcel or immediate area
- Is consistent with Critical Area Program per COMAR 27.01
- Does not meet definition of "major development"





Projects of local significance are reviewed by Commission Staff through a consistency report.

It's up to the local jurisdiction to determine if project is consistent with local program. By submitting consistency report to CA Staff for review, it is our understanding that the project is already consistent with program.

Major Development Projects

COMAR 27.02.04



- Larger in scale or scope
- State-wide, regional, or inter-jurisdictional impacts
- Environmental or economic effects within Critical Area
- Substantial impacts on local jurisdiction's Critical Area program
- Is consistent with Critical Area Program, but must come before full Commission for vote



Major Development Projects

Examples



- Hospitals
- Public housing
- Airports
- Prisons
- Wastewater treatment plants
- Power plants and major utility
- Highways
- Public beaches
- Intensely developed park and recreation facilities



Conditional Approval COMAR 27.02.06



- Applies to development that cannot comply with the CA Program
- Similar to a "variance process" for local governments
- Review by full Commission
- Conditional Approval form
- Sponsoring agency must address specific project characteristics
- Sponsoring agency must show project is otherwise compliant
- Project must include mitigation measures



If a State or local agency proposes development within the Critical Area that does not meet the applicable development standards, the agency may seek conditional approval from the Commission. The conditional approval process for local governments is similar to the variance process for private residents.

There is certain criteria that a project or program must have in order to qualify to be considered for conditional approval by the Commission:

- The site must have special features or there are special circumstances where the literal enforcement of the regulations would preclude the project from being implemented.
- The project or program must provide substantial public benefits.
- And there must be general conformance with the regulations.
- The proposed plan must also include measures to mitigate any adverse effects of the project or program.

Conditional Approval Mitigation

COMAR 27.02.06



- Shall be in *addition* to general requirements
- Benefits should be related to the Critical Area Program
- If applicable, off-site mitigation should occur close to project site and in Critical Area
- Implementation should be tied to the project itself
- Can be creative!



Local Projects





<u>Local Project Checklist</u> on CAC website:

 Local Project Submittal Instructions and Application Checklist



Public Notice Requirements



COMAR 27.03.01.03

- Only for projects that go to Commission for a vote
- Newspaper
 - Local paper for one day
- · Onsite posting
 - At least 30x40 inches
 - Posted no later than the date of newspaper posting
- At least 14 days for comments
- Evidence of each posting must be provided to Commission



Public notice is required for projects that go to the Commission for a vote, which are Conditional Approval projects – It is not applicable for projects of local significance that are reviewed via a consistency report.

Public notice must be posted in a local newspaper and at the project site. The specific posting requirements can be found in COMAR 27.03.01.03

Local Government Projects



Summary

- Many local projects can be reviewed through consistency report process
- Conditional approval projects and major development projects require Commission review
- Commission review process is comprehensive, requires interagency coordination, public notice and property posting
- Plan ahead and coordinate with Commission Staff



Resources



- Forms and publications can be found on our website: https://dnr.maryland.gov/criticalarea
 - Bay Smart
 - The Green Book
 - <u>USFW Native Plants</u>
 - Backyard Makeover
 - Climate Change Resiliency for Coastal Landowners