

3-D.1.0. INTRODUCTION

The language, policies and requirements in local land development codes drives development patterns. Developers are constrained to follow the local requirements (and sometimes state requirements, such as subdivision street design criteria, that are passed down to localities).

While some land developers hold to more traditional development models, others are now pursuing Low Impact Development (LID) and Environmental Site Design (ESD) concepts, recognizing that doing so not only protects natural resources but avoids future problems such as inadequate space for necessary best management practice facilities. However, they often find that the more traditional local codes prevent them from incorporating many of the best design practices. It is also important to note that eliminating obstacles to ESD techniques through local ordinance amendments is a key component of an effective local stormwater management program, since various Runoff Reduction techniques cannot be implemented on development sites if local land use ordinances don't allow their use. This situation pushes the site designer toward the use of the more traditional on site detention and retention basins and away from the protection of natural areas to reduced runoff. Because of the amount of money involved to complete land development projects, minimizing the time involved is very important. For that reason, developers understandably prefer to take the path of least resistance. If localities don't provide incentives to do things in better ways or, much worse, put up impediments to using better practices, then developers will continue to do things in ways that are tried and true for them.

As noted in **Section 6.4** of **Chapter 6** of this Handbook, some local codes actually discourage or prohibit the use of LID and ESD practices and techniques. In other cases, local development review authorities are hesitant to approve innovative LID and ESD techniques, due to their unfamiliarity and lack of a locally demonstrated effectiveness. In a recent survey, the Center for Watershed Protection asked respondents to identify the three most common impediments to implementing LID and ESD principles within their jurisdictions. **Table 3-D.1** displays the top issues that make it difficult for developers to employ some of the best and most sustainable approaches to site design and BMP implementation.

Table 3-D.1. Barriers to the Use of LID and Environmental Site Design Techniques

What are the 3 most common impediments to implementing LID and ESD in your community?		
Answer Options	Response Percent	Response Count
Developers seek to maximize development of the parcel	87.1%	27
Developers seek to achieve minimum local requirements	54.8%	17
Standard design template (e.g., "cookie cutter" development)	54.8%	17
Not part of current regulations	51.6%	16
Training needed to better understand situations where ESD is applicable or where ESD techniques can be implemented	22.6%	7
Regulations restrict more innovative practices (e.g., curb and gutter requirements prohibit open-section streets and roads)	19.4%	6
Existing and/or dated regulations limit flexibility	16.1%	5
Limited staff or resources to change existing practices and to discuss options	12.9%	4
Review process limits time with client/developer (no pre-construction meeting)		

Source: CSN and CWP (2010)

These problems must be addressed in order to gain widespread acceptance and adoption of LID and ESD techniques. Communities may also need to carefully reevaluate their local codes and ordinances to overcome barriers to LID and ESD.

Code and Ordinance Worksheets allow an in-depth review of the standards, ordinances, and codes (i.e., the development rules) that shape how development is accomplished in a community. The Worksheets guide on through a systematic comparison of local development rules with the model development principles (Environmental Site Design practices and Sustainable Site principles discussed in this chapter). Institutional frameworks, regulatory structures and incentive programs are included in such a review. These Worksheets consist of series of questions that correspond to each of the model development principles. Points are assigned based on how well the current development rules agree with the site planning benchmarks associated with the Environmental Site Design benchmarks.

The Worksheets provided in this Appendix are intended to guide the user through the first two steps of a local site planning roundtable:

Step 1: Inventory the land use ordinances within the locality code.

Step 2: Determine how these requirements may conflict with LID, ESD and the Runoff Reduction approach fostered by the Virginian Stormwater Management Program (VSMP) Regulations.

This type of evaluation helps to identify which local development rules are potential candidates for change.

3-D.2.0. PREPARING TO COMPLETE A CODE AND ORDINANCE WORKSHEET

The initial and key task that needs to be performed before beginning to use a Worksheet is to identify all the development rules that apply in the locality. A team approach may be helpful, involving the locality's local VSMP program administrator, a site plan reviewer, a staff planner, and the locality's attorney. Their real-world experience with the development process is often very useful in completing the Worksheet. In addition, there are some watershed-focused non-profit organizations that have experience and can provide assistance in such reviews, and DEQ staff also may be able to provide advice and assistance.

3-D.2.1. Identify the Development Rules

The first step is to assess existing development codes and ordinances and then, compared with the principles of LID and ESD, to identify which ones may need changing. A Codes and Ordinances Worksheet helps a locality systematically compare their existing development requirements to the recommended ESD techniques by asking specific questions regarding how development actually occurs in the locality. To use the worksheet, localities assemble all local and state ordinances that collectively govern how development occurs in the community, including documents such as:

In some cases, information on a particular development rule may not be explicitly articulated in local code or may be hidden in supporting design manuals, review checklists, or as an unwritten review policy. Once current development rules and regulations are identified, the codes and ordinances worksheet can be completed. The CWP's Worksheet consists of 66 questions that compare local development rules against their 22 Better Site Design principles (CWP, 1998). Each question focuses on a specific site design practice, such as the minimum diameter of cul-de-sacs, the minimum width of streets, or the minimum parking ratio for a certain land use. Points are awarded if local development rules agree with the benchmark for a particular site design practice. In some instances, local codes and ordinances might not explicitly address a particular practice. In these cases, evaluators should use appropriate judgment based on standard community practices.

- Zoning Ordinance
- Subdivision Ordinance
- Comprehensive Land Use Plan
- Green Infrastructure Plan
- Street Standards or Road Design Manual
- Parking Requirements (these are often contained in a local zoning ordinance)
- Building and Fire Regulations/Standards
- Stormwater Management or Drainage Criteria
- Buffer or Floodplain Regulations
- Environmental Regulations
- Septic and Sewer Regulations
- Tree Protection or Landscaping Ordinance
- Erosion and Sediment Control Ordinance
- Public Fire Defense Master Plan
- Grading Ordinance
- Locality Comprehensive Plan
- Other documents that influence how development is conducted

The information sought about a particular development rule may not be found in ordinances or regulations, but may be found in supporting design manuals, review checklists, guidance documents, or construction specifications. Few localities include all their rules in a single document. It may be necessary to contact state and federal agencies and other local agencies to obtain copies of needed documents.

Once current development rules and regulations are identified, the codes and ordinances worksheet can be completed. The CWP's Worksheet consists of 66 questions that compare local development rules against their 22 Better Site Design principles (CWP, 1998). Each question focuses on a specific site design practice, such as the minimum diameter of cul-de-sacs, the minimum width of streets, or the minimum parking ratio for a certain land use. If the locality wants to keep score, points can be awarded where local development rules agree with the benchmark for a particular site design practice. In some instances, local codes and ordinances

might not explicitly address a particular practice. In these cases, evaluators should use appropriate judgment based on standard community practices.

3-D.2.2. Identify Development Authorities

Once the development rules are located, it is relatively easy to determine which local departments are responsible for administering and enforcing the rules. Completing this step will provide you with a better understanding of the intricacies of the development review process and helps identify key members of a future local roundtable. **Table 3-D.2** on the following pages provides a simple framework for identifying the agencies that influence development in your community. As you will see, space is provided not only for local agencies, but for state and federal agencies as well. In some cases, state and federal agencies may also exercise some authority over the local development process (e.g., wetlands, floodplains, some road design, and stormwater).

Table 3-D.2 Local, State and Federal Authorities Responsible for Development in Your Community

Development Responsibility	Contact Info	State/Federal	County	Town
Sets road standards	Agency: _____ Contact Name: _____ Phone No. _____	_____ _____ _____	_____ _____ _____	_____ _____ _____
Review/approve subdivision plans	Agency: _____ Contact Name: _____ Phone No. _____	_____ _____ _____	_____ _____ _____	_____ _____ _____
Establishes zoning ordinances	Agency: _____ Contact Name: _____ Phone No. _____	_____ _____ _____	_____ _____ _____	_____ _____ _____
Establishes subdivision ordinances	Agency: _____ Contact Name: _____ Phone No. _____	_____ _____ _____	_____ _____ _____	_____ _____ _____
Establishes Stormwater Management or drainage criteria	Agency: _____ Contact Name: _____ Phone No. _____	_____ _____ _____	_____ _____ _____	_____ _____ _____
Provides fire protection and fire protection code enforcement	Agency: _____ Contact Name: _____ Phone No. _____	_____ _____ _____	_____ _____ _____	_____ _____ _____

Development Responsibility	Contact Info	State/Federal	County	Town
Oversees buffer ordinance or requirements	Agency: _____ Contact Name: _____ Phone No. _____	_____ _____ _____	_____ _____ _____	_____ _____ _____
Oversees wetland protection	Agency: _____ Contact Name: _____ Phone No. _____	_____ _____ _____	_____ _____ _____	_____ _____ _____
Oversees floodplain regulation	Agency: _____ Contact Name: _____ Phone No. _____	_____ _____ _____	_____ _____ _____	_____ _____ _____
Establishes grading reqmts or oversees Erosion & Sediment Control program	Agency: _____ Contact Name: _____ Phone No. _____	_____ _____ _____	_____ _____ _____	_____ _____ _____
Reviews/approves septic systems	Agency: _____ Contact Name: _____ Phone No. _____	_____ _____ _____	_____ _____ _____	_____ _____ _____
Reviews/approves utility plans (e.g., water and sewer)	Agency: _____ Contact Name: _____ Phone No. _____	_____ _____ _____	_____ _____ _____	_____ _____ _____

Development Responsibility	Contact Info	State/Federal	County	Town
Reviews/approves forest conservation / tree protection plans	Agency: _____ Contact Name: _____ Phone No. _____	_____ _____ _____	_____ _____ _____	_____ _____ _____
Establishes the comprehensive land use plan	Agency: _____ Contact Name: _____ Phone No. _____	_____ _____ _____	_____ _____ _____	_____ _____ _____
Responsible for Green Infrastructure and/or Greenways planning	Agency: _____ Contact Name: _____ Phone No. _____	_____ _____ _____	_____ _____ _____	_____ _____ _____

Source: Adapted from CWP

3-D.2.3. Consider Establishing a Stakeholder Roundtable

It is often productive to use a roundtable process to accomplish a productive evaluation of local development codes and ordinances. This process harvests the best ideas and gets buy-in from those most affected by any changes that result from this process. An effective method for promoting code change is to establish a local land use/land development roundtable. Roundtables involve key stakeholders from the local government, development, and environmental communities that influence the development process in a community (see **Table 3-D.3** below).

Table 3-D.3. Potential Members to Invite to a Roundtable

Planning Agency or Commission	Manufacturer Associations
Department of Public Works	Engineering Consultants
Road or Highway Department	Homeowner Associations
Developers	Chamber of Commerce
Land Trusts	Elected Officials
Realtors	Urban Foresters
Real Estate Lenders	Site Plan Reviewers
Civic Associations	Stormwater Management Authority
Fire Official	Municipal Insurers
Health Department	Watershed Organization
Land Use Lawyers	Residents and Owners
Home Building Organizations	State Agencies
Industrial & Office Park Building Organizations	Environmental and Other NGOs

Source: MPCA (2006)

The Center for Watershed Protection has a *Do-It-Yourself Local Site Planning Roundtable CD-ROM* available from their web site at:

<http://bmb.goemerchant.com/cart/cart.aspx?ST=buy&Action=add&Merchant=centerforwatershedprotection&ItemNumber=WLK!45DIYRound>

The roundtable approach is but one of many different approaches that can be used for public participation in the development of improved local ordinances. The development of a good comprehensive plan that involves a local water or watershed component that includes an inventory of natural amenities and a stormwater management plan is another. The roundtable discussion is included here as an option that might not be as familiar as the comprehensive planning approach. The roundtable is a consensus process to negotiate new development guidance in the context of local conditions. Having already researched the applicable development codes and ordinances, a site planning roundtable is normally conducted in three steps, as described below.

3-D.2.3.1. Introduce Stakeholders to the Roundtable Process

The first meeting of a roundtable focuses on educating stakeholders to ensure they have a firm grasp of its purpose and goals. The initial meeting introduces stakeholders to three key topics:

- Provide education about LID and ESD techniques. Stakeholders initially may have different levels of understanding about ESD techniques, stormwater impacts or the development process. Stakeholders need to be educated on each topic so everyone starts off on a level playing field.
- Introduce them to the roundtable process. Roundtables are a structured process that consists of numerous facilitated meetings. Since participation entails a significant time commitment, stakeholders should clearly understand how the roundtable process works and the expectations for their participation.

- Review of the codes and ordinance analysis. Stakeholders should get a chance to review the codes and ordinances worksheet and help identify the real and perceived barriers that impede adoption of ESD techniques.

3-D.2.3.2. Conduct the Roundtable and Facilitate Consensus

The roundtable process may extend over an entire year. Subcommittee meetings are often used to focus the efforts of a smaller group of stakeholders on a limited number of topics, such as road and parking lot design. Several subcommittees work on their topics concurrently, and then report their recommendations during full roundtable meetings. An independent third party is often needed to manage stakeholders through the process and guide them toward consensus.

3-D.3.2.3. Implement Code and Ordinances Changes

The product of a roundtable is a list of specific recommendations on local code change that promote adoption of ESD techniques in new development projects. In addition, the roundtable may also recommend incentives, training, education or other measures to encourage greater use of ESD techniques. The full package of consensus recommendations is then presented to local elected officials and the larger community as well. In most cases, additional education of elected officials is needed to ensure that changes to local code and ordinance change are adopted or enacted.

3-D.3.0. CODE AND ORDINANCE REVIEW TOOLS THAT MAY BE USED TO IDENTIFIED CONFLICTS IN RUNOFF REDUCTION & ENVIRONMENTAL SITE DESIGN PRINCIPLES

3-D.3.1. Completing the Worksheet

Two worksheets are presented at the end of this Appendix.

The first worksheet (**Section 3-D.4.0**) has been used in the past to determine how well local ordinances in Virginia address water quality. This worksheet consists of two parts. The first part is a checklist addressing local requirements that address the three “general criteria” aimed at protecting water quality:

- minimize land disturbance
- Preserve Indigenous Vegetation
- Minimize Impervious Cover

This checklist also addresses general water quality protection provisions of local ordinances and plans.

The second worksheet (**Section 3-C.5.0**) is borrowed from the Center for Watershed Protection. It presents 77 site planning benchmarks, including some that are not included in the worksheet. The CWP worksheet is subdivided into three categories:

- Residential streets and parking lots (CWP model development principles 1-10)
- Lot development (CWP model development principles 11-16)
- Conservation of natural areas (CWP model development principles 17-22)

The benchmarks are posed as questions. Each benchmark focuses on a specific site design practice, such as the minimum diameter of cul-de-sacs, the minimum width of streets, or the minimum parking ratio for a certain land use. The user should refer to the codes, ordinances, and plans identified in the first step to determine the appropriate development rule(s) that applies in each case. The questions require either a *yes* or *no* response or a specific numeric criteria. If the development rule agrees with the site planning benchmark, points are awarded.

3-D.3.2. Calculating Your Score (*Optional*)

Keep in mind that the CWP model development (“Better Site Design”) principles are reflected in the 23 ESD practices discussed in **Chapter 6** of this Handbook. If the locality chooses to keep score, a place is provided on each page of the CWP worksheet to keep track of the running score. For each category, the user may also subtotal the score. *However, the locality does not have to score the worksheet – the basic purpose is to identify impediments to effective land development, with or without a score.*

This ***Time to Assess*** allows the user to consider which development requirements are most consistent with the site planning benchmarks and which requirements may represent conflicts and are potential candidates for change.

Once the worksheet is completed, the user should review the responses to determine if the development rules are generally consistent or if there are specific areas that result in impediments to ESD and need improvement. This review is a key to achieving more sustainable development in within the locality. It also directly leads to the next step of the process: convening a site planning roundtable (stakeholder advisory group) process, conducted by the local government to develop consensus regarding fruitful changes to local codes. The primary tasks of a local roundtable are to systematically review existing development requirements and determine if changes can or should be made. The roundtable can also review good examples of improved criteria from communities already implementing them, and recommend specific changes to local policies and rules. By providing an effective framework for overcoming barriers to better development practices, the site planning roundtable can serve as an important mechanism for local change.

3-D.4.0. CHECKLIST FOR ADVISORY REVIEW OF LOCAL ORDINANCES

DEQ has a checklist that both Department and local staff have used to review local land development ordinances and recommend needed revisions, in order to ensure these ordinances adequately address the protection of the quality of state waters. Three key categories of land use performance criteria that both address water quality, foster the use of ESD and advance the techniques used in the Runoff Reduction method include:

1. Land disturbance is minimized;
2. Indigenous vegetation is preserved; and
3. Impervious cover is minimized

There are two sections of this checklist: (1) *General Performance Criteria Implementation Options*, and (2) *General Water Quality Protection and Improvement Provisions*. These sections are used for advisory evaluation of local ordinances in preparation for future compliance evaluations and to provide technical assistance to localities that choose to add provisions to address the three performance criteria.

Section 1, *General Performance Criteria Implementation Options*, evaluates existing local land development ordinances to identify specific language that promotes or requires minimizing land disturbance (Part 1), maximizes protection of indigenous vegetation (Part 2), and minimizes impervious cover (Part 3) within a locality. This Section of the Checklist includes possible measures that implement the three general performance criteria that may be contained within a locality's land development ordinances. There is also space for a local government to reference specific measures that are included in an ordinance, but which are not included in this portion of the Checklist.

Part 4 (*General Water Quality Protection and Improvement Provisions*) of the Checklist includes practices and programs that may not fit into a general performance criterion, but which can be important to protecting and improving water quality.

In completing all sections of this Checklist, DEQ or local government staff review local ordinances and other documents adopted by the local governing body outlining specific requirements related to the development and use of land, to determine which of the measures within the Checklist are included in local ordinances.

The land development ordinances and other adopted documents should include specific standards that would address one or more of the three general performance criteria. Local governments are encouraged to indicate which of the three performance criteria the contents of a particular ordinance or adopted document may address. For example, a landscaping ordinance may include standards that would address the requirement to maximize the protection of indigenous vegetation.



CHECKLIST FOR ADVISORY REVIEW OF LOCAL ORDINANCES

LOCALITY: _____

DATE OF REVIEW: _____

REVIEWER: _____

GENERAL PERFORMANCE CRITERIA IMPLEMENTATION OPTIONS

PART 1 – MINIMIZE LAND DISTURBANCE: _____ PROVISIONS

PART 2 – PRESERVE INDIGENOUS VEGETATION: _____ PROVISIONS

PART 3 – MINIMIZE IMPERVIOUS COVER: _____ PROVISIONS

PART 4 – GENERAL WATER QUALITY PROTECTION PROVISIONS _____ PROVISIONS

_____ TOTAL NUMBER OF PROVISIONS

SUPPLEMENTAL REVIEW INFORMATION

LOCAL DOCUMENTS REVIEWED: _____

TRACKING SHEET:

General Performance Criteria Implementation Options	61 questions _____
Part 1 – Minimize Land Disturbance:	18 questions
1A – Open Space Requirements:	_____
1B – Clearing and Grading Requirements:	_____
1C – Utility and Easement Requirements:	_____
1D – LID/Environmental Site Design Concepts:	_____
1E – Other Standards:	_____
Part 2 – Preserve Indigenous Vegetation:	18 questions
2A – Sensitive Land Protection/Preservation:	_____
2B – Vegetation and Tree Protection Requirements:	_____
2C – LID/Environmental Site Design Concepts:	_____
2D – Other Standards:	_____
Part 3 – Minimize Impervious Cover:	25 questions
3A – Parking Requirements:	_____
3B – LID/Environmental Site Design Concepts:	_____
3C – Redevelopment and Infill Development Concepts:	_____
3D – Road Design Requirements:	_____
3E – Pedestrian Pathways and Driveways:	_____
3F – Other Standards:	_____
Part 4 – General Water Quality Protection Provisions	7 questions _____

GENERAL PERFORMANCE CRITERIA IMPLEMENTATION OPTIONS

PART 1: MINIMIZE LAND DISTURBANCE — 18 QUESTIONS

The minimization of land disturbance can be accomplished through the application of four general techniques included below as four sections. Each of these general techniques is presented below, with examples of more specific requirements that might minimize land disturbance. Additionally, space has been provided for the locality to include other options not listed in this Checklist.

Section 1A – Open Space Requirements – 3 questions

What is the definition of “open space” used by the locality, and in what document(s) is this term defined?

Definition: _____

Ordinance name and citation: _____

1. Is there an ordinance provision, or other adopted document that requires a certain portion or percentage of undisturbed open space as part of zoning district requirements?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

Zoning Districts and required percentages: _____

2. Is there a cluster ordinance, other ordinance provision, or other adopted document that allows flexibility for development intensity or density (through cluster developments, height flexibility, density bonuses, etc.) in exchange for increased resource protection (open space, preservation of natural, undisturbed buffers, etc.)?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

3. Do open space or other requirements within an ordinance, or other adopted document, protect land, other than RPAs?

- Wetlands Yes No
- Steep slopes Yes No
- Intermittent Streams Yes No
- Highly erodible soils Yes No
- Floodplains Yes No
- Other lands Yes No

Ordinance name and citation: _____

Other adopted document: _____

Section 1B – Clearing and Grading Requirements – 8 questions

4. Is there an ordinance provision, or other adopted document, that requires that all clearing and grading plans or equivalent (including individual lots) specify limits of clearing and restricts clearing to the minimum necessary for the construction of the project?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

5. Is there an ordinance provision, or other adopted document, that authorizes staff to establish limits on clearing and grading?
Yes No
Ordinance name and citation: _____
Other adopted document: _____
6. Is there an ordinance provision, or other adopted document, that includes a definition of “*construction footprint*” and limits clearing and grading to the construction footprint?
Yes No
Ordinance name and citation: _____
Other adopted document: _____
7. Is there an ordinance provision, or other adopted document, that requires that the RPA be physically marked on-site prior to any clearing and /or grading and throughout the development process?
Yes No
Ordinance name and citation: _____
Other adopted document: _____
8. Is there an ordinance provision, or other adopted document, that requires the limits of clearing and grading to be physically marked on-site?
Yes No
Ordinance name and citation: _____
Other adopted document: _____
9. Is there an ordinance provision, or other adopted document, that requires documentation of the condition of the RPA to be provided before and after development?
Yes No
Ordinance name and citation: _____
Other adopted document: _____
10. Is there an ordinance provision, or other adopted document, that prohibits clearing and grading on sensitive lands (i.e., steep slopes, highly erodible soils, etc.) in addition to require RPA features?
Yes No
Ordinance name and citation: _____
Other adopted document: _____
Other lands: _____
11. Is there an ordinance provision that designates other sensitive lands, such as steep slopes, highly erodible soils, non-RPA nontidal wetlands, etc. as RPA features?
- Wetlands Yes No
 - Steep slopes Yes No
 - Intermittent Streams Yes No
 - Highly erodible soils Yes No
 - Floodplains Yes No

- Other lands Yes No
- Yes No
- Ordinance name and citation: _____
- Other adopted document: _____

Section 1C – Utility and Easement Requirement (Public and Private) – 3 questions

For the purposes of this checklist, the term *public utilities* means those outlined under Section 9 VAC 10-20-150 B 2 of the regulations: “*Construction, installation and maintenance of water, sewer, natural gas, and underground telecommunications and cable television lines, owned, permitted or both by a local government or regional service authority.*”

12. Is there an ordinance provision, or other adopted document, that requires approval of utility installation plans, including temporary construction areas, prior to land disturbance?
 Yes No
 Ordinance name and citation: _____
 Other adopted document: _____
13. Is there an ordinance provision, or other adopted document, that requires a replanting plan, other than for stabilization required for erosion and sediment control, when vegetation is removed for temporary construction easements?
 Yes No
 Ordinance name and citation: _____
 Other adopted document: _____
14. Is there an ordinance provision, or other adopted document, that allows or requires the placement of public utilities within the right-of-way for public or private roads or alleys, when present?
 Yes No
 Ordinance name and citation: _____
 Other adopted document: _____

Section 1D – Low Impact Development/Environmental Site Design Concepts – 3 questions

For the purposes of this checklist, the term *Low Impact Development (LID)* includes those practices that combine hydrologically functional site designs with pollution prevention measures to compensate for land development impacts on hydrology and water quality.

15. Does the locality provide incentives for retaining natural, undisturbed open space on a site: These incentives may include intensity or density bonuses, stormwater credit, etc.
- Wetlands Yes No
 - Intermittent Streams Yes No
 - Steep slopes Yes No
 - Highly erodible soils Yes No
 - Floodplains Yes No
 - Other lands _____ Yes No
- Types of incentives provided: _____

Ordinance names and citations: _____

Other adopted documents: _____

16. Do local ordinance provisions, or other adopted documents, allow flexibility in practices to enable the implementation of LID practices that limit land disturbance?

Yes No

Ordinance names and citations: _____

Other adopted documents: _____

17. Are there ordinance provisions, or other adopted documents, that require the incorporation of existing drainageways and the integration of natural drainage patterns into site drainage plans?

Yes No

Ordinance names and citations: _____

Other adopted documents: _____

Section 1E – Other Standards

18. Are there other ordinance provisions, or other specific standards in other adopted documents, that limit land disturbance?

Yes No

Ordinance names and citations: _____

Other adopted documents: _____

Other standards: _____

PART 2: PRESERVE INDIGENOUS VEGETATION — 18 QUESTIONS

The preservation of indigenous vegetation can be accomplished through the application of three general techniques addressed in the following three sections. Each of these general techniques is presented below, with examples of more specific requirements that preserve indigenous vegetation. Additionally, space has been provided for the locality to include other options not currently listed in this Checklist.

Section 2A – Sensitive Land Protection/Preservation – 9 questions

19. Is there an ordinance provision, or other adopted document, that requires conservation areas or corridors (e.g., greenways, green infrastructure corridors, green belts, etc.)?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

20. Is there an ordinance provision, or other adopted document, that requires riparian vegetated buffers adjacent to non-perennial water bodies or wetlands not required to be include in RPAs?

- Wetlands Yes No
- Intermittent Streams Yes No
- Floodplains Yes No
- Other lands _____ Yes No

Ordinance name and citation: _____

Other adopted document: _____

21. Is there an ordinance provision, or other adopted document, that requires the permanent marking of the RPA boundaries and, if so, to which zoning districts does this apply?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

Zoning districts: _____

22. Is there an ordinance provision, or other adopted document, that requires a portion of open space, other than RPAs, to be left in a natural, vegetated condition?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

Percentage to be left natural: _____

23. Is there an ordinance provision, or other adopted document, that requires a building setback from the RPA boundary?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

Setback distance: _____

24. Is there an ordinance provision, or other adopted document, that requires a building setback from other sensitive lands, such as intermittent streams and non-RPA nontidal wetlands?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

Setback distance: _____

Sensitive lands protected: _____

25. Is there an ordinance provision, or other adopted document, that requires the preservation of indigenous vegetation on sensitive lands other than required RPA land types?

- Steep slopes Yes No
- Highly erodible soils Yes No
- Floodplains Yes No
- Wetlands Yes No
- Other lands _____ Yes No

Ordinance name and citation: _____

Other adopted document: _____

Land types protected: _____

26. Is there an ordinance provision, or other adopted document, that limits removal of indigenous vegetation for temporary construction easements for utilities?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

27. Is there an ordinance provision, or other adopted document, that limits removal of indigenous vegetation for maintenance of utility easements?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

Section 2B – Vegetation and Tree Protection Requirements – 7 questions

28. Does the locality have a tree protection ordinance that protects existing trees (if permitted by state law)?

Yes No

Ordinance name and citation: _____

29. Are there ordinance provisions, or other adopted documents, that include more specific tree preservation requirements for the preservation of stands of trees or contiguous wooded areas?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

30. Is there an ordinance provision, or other adopted document, that awards credit for maintaining indigenous vegetation when meeting landscaping requirements?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

31. Is there an ordinance provision, or other adopted document, that requires vegetated buffers adjacent to non-RPA wetlands, streams or other water bodies to be left undisturbed?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

32. Is there an ordinance provision, or other adopted document, that includes clear language to protect woody vegetation outside of the construction footprint on individual lots or development sites?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

33. Is there an ordinance provision, or other adopted document, that requires a landscape maintenance agreement or similar mechanism to protect indigenous vegetation to be preserved on-site throughout the construction process?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

34. Is there an ordinance provision, or other adopted document, that requires the preservation of indigenous vegetation in open space as a component of cluster development?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

Section 2C – Low Impact Development/Environmental Site Design Concepts – 1 question

35. Is there an ordinance provision, or other adopted document, that requires a natural resources (or environmental) assessment as the initial part of the plan-of-development review process (e.g., pre-submission/pre-application requirement for site plans, preliminary subdivision plats, etc.) and uses this information in the review of proposed projects to limit the impacts on natural resources?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

Section 2D – Other Standards

36. Are there other ordinance provisions, or other specific standards in other adopted documents, that preserve indigenous vegetation?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

Other standards: _____

PART 3: MINIMIZE IMPERVIOUS COVER — 25 QUESTIONS

The minimization of impervious cover can be accomplished through the application of five general techniques addressed below in five sections. Each of these general techniques is presented below, with examples of more specific requirements that minimize impervious cover. Additionally, space has been provided for the locality to include other options not currently listed in this Checklist.

Section 3A – Parking Requirements – 11 questions

37. Is there an ordinance provision, or other adopted document, that sets maximum parking space requirements for some or all zoning districts?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

Applicable zoning districts: _____

38. Is there an ordinance provision, or other adopted document, that allows or requires the use of alternative pervious surfaces for required parking and/or overflow parking areas?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

39. Are there ordinance provisions, or other adopted documents, that allow for shared and off-site parking in certain zoning districts, such as commercial and office districts?

Yes No

Ordinance names and citations: _____

Other adopted document: _____

Zoning districts where allowed: _____

40. Is there an ordinance provision, or other adopted document, that allows or requires a percentage of parking spaces for compact cars or motorcycles?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

Percentage of total: _____

Size of compact car spaces: _____

41. Is there an ordinance provision, or other adopted document, that provides incentives for structural parking versus surface parking?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

42. Is there an ordinance provision, or other adopted document, that limits the width of travel lanes in parking areas to the following chart of minimum widths?

<i>Parking Angle</i>	<i>1-Way</i>	<i>2-Way</i>
<i>90 degree</i>	<i>20 feet</i>	<i>24 feet</i>
<i>60 degree</i>	<i>16 feet</i>	<i>24 feet</i>
<i>45 degree</i>	<i>14 feet</i>	<i>24 feet</i>
<i>30 degree</i>	<i>12 feet</i>	<i>24 feet</i>
<i>Parallel</i>	<i>12 feet</i>	<i>24 feet</i>

Yes No

Ordinance name and citation: _____

Other adopted document: _____

43. Is there an ordinance provision, or other adopted document, that allows single travel aisles versus double aisles in parking areas?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

44. Is there an ordinance provision, or other adopted document, that limits the size of parking stalls to 9 feet x 18 feet for all passenger vehicle parking stalls (non-parallel parking) except handicapped stalls?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

45. Is there an ordinance provision, or other adopted document, that allows on-street parking to count towards required minimum parking spaces?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

46. Is there an ordinance provision, or other adopted document, that sets parking space minimums for commercial and office uses to 4 spaces or less per 1,000 net square feet of floor area?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

47. Is there an ordinance provision, or other adopted document, that sets parking space minimums for churches, schools, theaters, etc. to 1 space or less for every 4 fixed seats, or 10 spaces or less per 1,000 net square feet of floor space?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

Section 3B – Low Impact Development/Environmental Site Design – 4 questions

For the purpose of this Checklist, “*lot coverage*” means all impervious surfaces, such as buildings, structures, decks, driveways, patios, parking lots and sidewalks, etc.

48. Is there an ordinance provision, or other adopted document, that sets maximum impervious coverage or lot coverage for lots and/or parcels based on zoning districts?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

Zoning districts and percentage of impervious coverage allowed: _____

49. Is there an ordinance provision, or other adopted document, that allows or encourages increased building height, floor area ration, density, etc. to limit impervious coverage?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

50. Is there an ordinance provision, or other adopted document, that allows or encourages the use of vegetated bioretention facilities to meet parking lot landscaping requirements?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

51. Is there an ordinance provision, or other adopted document, that allows or promotes LID practices (e.g., green roof, bioretention, etc.) for new development projects?

Yes No

Ordinance names and citation: _____

Other adopted document: _____

Section 3C – Redevelopment or Infill Development Concepts – 3 questions

52. Are there ordinance provisions that promote infill or redevelopment through techniques such as tax and other local incentives, or through other methods?

Yes No

Ordinance names and citations: _____

Other adopted documents: _____

Promotion methods: _____

53. Is there an ordinance provision, or other adopted document, that allows or promotes LID practices (e.g., green roof, bioretention, etc.) in redevelopment projects in urban areas?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

54. Is there an ordinance provision, or other adopted document, that reduces impervious cover on redevelopment projects?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

Section 3D – Road Design Requirements – 4 questions

55. Is there an ordinance provision, or other adopted document, that establishes the maximum radius of cul-de-sacs that does not exceed VDOT’s minimum standards?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

56. Is there an ordinance provision, or other adopted document, that permits the pavement width of private roads to be narrower than specified in VDOT standards?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

57. Is there an ordinance provision, or other adopted document, that limits turn lanes, road widths and other pavement requirements to the minimum specified in VDOT standards?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

58. Is there an ordinance provision, or other adopted document, that allows permeable surfaces for required emergency vehicle access lanes (aside from main roads)?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

Section 3E – Pedestrian Pathways and Residential Driveways – 3 questions

59. Is there an ordinance provision, or other adopted document, that permits shared driveways?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

60. Is there an ordinance provision, or other adopted document, that limits sidewalks and other pedestrian pathways to the minimum VDOT standards or other minimum required standards?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

61. Is there an ordinance provision, or other adopted document, that provides for the use of alternative permeable materials for sidewalks and/or driveways?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

Section 3F – Other Standards

62. Are there other ordinance provisions, or other specific standards in other adopted documents, that limit impervious cover?

Yes No

Ordinance names and citations: _____

Other adopted documents: _____

Other standards: _____

PART 4: GENERAL WATER QUALITY PROTECTION PROVISIONS – 8 QUESTIONS

These questions relate to general water quality protection or improvement provisions or program elements.

63. Does the locally designated Chesapeake Bay Preservation Ordinance or implementation of all CBPA performance criteria cover more than 50 percent of the locality's total land area or greater than 50 percent of the total land area in the Chesapeake Bay watershed portion of the locality?

Yes No

Ordinance name and citation: _____

Documentation: _____

64. Does the locally designated Chesapeake Bay Preservation Ordinance or implementation of all CBPA performance criteria apply to all land area within the locality or all land area within the Chesapeake Bay watershed portion of the locality?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

65. Is there an ordinance provision, or other adopted document, that requires or provides incentives for LID techniques during the plan review process or mandates their use when technically feasible?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

66. Is there an ordinance provision, or other adopted document, that requires environmental site design to be undertaken before land disturbance is approved?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

67. Is there an ordinance provision, or other adopted document, that permits the Purchase of Development Rights or the Transfer of Development Rights?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

68. Is there an ordinance provision, or other adopted document, that requires or provides incentives for the use of vegetated BMPs or additional vegetation as part of traditional BMPs, to enhance their pollution removal function?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

69. Is there an ordinance provision, or other adopted document, that includes other standards that provide for general water quality protection or improvement?

Yes No

Ordinance name and citation: _____

Other adopted document: _____

70. Is there an ordinance provision, or other adopted document, that includes standards to promote the revegetation of cleared areas for the purpose of general water quality protection or improvement?

Yes No

Ordinance name and citation: _____

Other adopted document: _____



SITE PLAN AND PLAT CONSISTENCY REVIEW CHECKLIST

LOCALITY: _____

DATE OF REVIEW: _____

REVIEWER: _____

The following questions relate to the requirements for information to be included on site plans and/or plats as outlined in the CBPA regulations. For consistency with the regulations, each applicable question should be answered in the affirmative. In cases where no new on-site septic systems are permitted by the local government, Questions #3 and #4 may not be applicable.

For the purposes of reviewing local government consistency with the requirements of 9 VAC 10-20-191 A 4 and 5, the terms “*plat*” and “*site plan*” will be interpreted as follows:

“*Plat*” means a survey developed for the purposes of subdividing from a larger parcel of land or adjusting the boundaries of the parcel showing the boundary lines and existing features of the property.

“*Site plan*” means those plans that are required by the local government as a part of the plan-of-development review process required by 9 VAC 10-20-120 4.

1. Do local land development ordinances require the depiction of Resource Protection Area (RPA) and Resource Management Area (RMA) boundaries on submitted plats and site plans? (9 VAC 10-20-191 A 4 i)

Yes No

Which ordinance(s): _____

Ordinance section(s): _____

Is this information required through some other mechanism? If so, please describe it:

2. Do local land development ordinances require a notation on plats of the requirement to retain an undisturbed and vegetated 100-foot wide riparian buffer area? (9 VAC 10-20-191 A 4 i)

Yes No

Which ordinance(s): _____

Ordinance section(s): _____

Is this information required through some other mechanism? If so, please describe it:

- 3. For areas that require on-site (including remotely located) sewage treatment systems, do local land development ordinances require plats to have a notation regarding the requirement for periodic pump-out of on-site sewage treatment systems? (9 VAC 10-20-191 A 4 ii)

Yes No

Which ordinance(s): _____

Ordinance section(s): _____

Is this information required through some other mechanism? If so, please describe it:

- 4. For areas that require on-site (including remotely located) sewage treatment systems, do local land development ordinances require plats to have a notation regarding the requirement that each on-site sewage treatment system must have a 100% reserve drainfield site? (9 VAC 10-20-191 A 4 ii)

Yes No

Which ordinance(s): _____

Ordinance section(s): _____

Is this information required through some other mechanism? If so, please describe it:

- 5. Do local land development ordinances require a notation on plats specifying that permitted development in the RPA is limited to water-dependent facilities or redevelopment, including in the 100-foot wide vegetated riparian buffer? (9 VAC 10-20-191 A 4 iii)

Yes No

Which ordinance(s): _____

Ordinance section(s): _____

Is this information required through some other mechanism? If so, please describe it:

- 6. Does the local government require, within the plan-of-development review process, the delineation of the buildable areas on each lot, based on the performance criteria, local front and side yard setbacks, and any other relevant easements or limitations regarding lot coverage? (Please note that this requirement is only applicable to plans, not plats) (9 VAC 10-20-191 A 4 i)

Yes No

Which ordinance(s): _____

Ordinance section(s): _____

Is this information required through some other mechanism? If so, please describe it:

3-D.5.0 CENTER FOR WATERSHED PROTECTION (CWP) CODE AND ORDINANCE WORKSHEET


Development Feature

Your Local Criteria

1. Street Width

What is the minimum pavement width allowed for streets in low density residential developments that have less than 500 average daily trips (ADT)?

_____ feet

If your answer is between **18-22 feet**, give yourself **4 points**. 

At higher densities, are parking lanes allowed to also serve as traffic lanes (i.e., queuing streets)?


YES / NO

If your answer is **YES**, give yourself **3 points**. 

2. Street Length

Do street standards promote the most efficient street layouts that reduce overall street length?

YES / NO

If your answer is **YES**, give yourself **1 point**. 

3. Right-of-Way Width


What is the minimum right-of-way (ROW) width for a residential street?

_____ feet

If your answer is **less than 45 feet**, give yourself **3 points**. 

Does the code allow utilities to be placed under the paved section of the ROW?

YES / NO

If your answer is **YES**, give yourself **1 point**. 

4. Cul-de-Sacs

What is the minimum radius allowed for cul-de-sacs?


_____ feet

If your answer is **less than 35 feet**, give yourself **3 points**. 

If your answer is **36 to 45 feet**, give yourself **1 point**. 


Can a landscaped island be created within the cul-de-sac?

YES / NO

If your answer is **YES**, give yourself **1 point**. 

Are alternative turn-arounds, such as "hammerheads," allowed on short streets in low-density residential developments?

YES / NO

If your answer is **YES**, give yourself **1 point**. 


Development Feature

Your Local Criteria

5. Vegetated Open Channels


Are curbs and gutters required for most residential street sections?

YES / NO

If your answer is **NO**, give yourself **2 points**. 

Are there established design criteria for swales that can provide stormwater quality treatment (i.e., dry swales, biofilters, or grass swales)?

YES / NO

If your answer is **YES**, give yourself **2 points**. 

6. Parking Ratios

What is the minimum parking ratio for a professional office building (per 1000 ft² of gross floor area)?

_____ spaces

If your answer is **less than 3.0 spaces**, give yourself **1 point**. 


What is the minimum required parking ratio for shopping centers (per 1000 ft² of gross floor area)?

_____ spaces

If your answer is **less than 4.5 spaces**, give yourself **1 point**. 


What is the minimum required parking ratio for single family homes (per home)?

_____ spaces

If your answer is **less than 2.0 spaces**, give yourself **1 point**. 

Are your parking requirements set as maximum or median (rather than minimum) requirements?


YES / NO

If your answer is **YES**, give yourself **2 points**. 

7. Parking Codes


Is the use of shared parking arrangements promoted?

YES / NO

If your answer is **YES**, give yourself **1 point**. 


Are model shared parking agreements provided?

YES / NO

If your answer is **YES**, give yourself **1 point**. 


Are parking ratios reduced if shared parking arrangements are in place?

YES / NO

If your answer is **YES**, give yourself **1 point**. 

If mass transit is provided nearby, is the parking ratio reduced?

YES / NO

If your answer is **YES**, give yourself **1 point**. 

Development Feature

Your Local Criteria

8. Parking Lots

What is the minimum stall width for a standard parking space?

_____ feet

If your answer **9 feet or less**, give yourself **1 point**. 


What is the minimum stall length for a standard parking space?

_____ feet

If your answer **18 feet or less**, give yourself **1 point**. 


Are the last 30% of the spaces at larger commercial parking lots required to have smaller dimensions for compact cars?

YES / NO

If your answer is **YES**, give yourself **1 point**. 

Can permeable paving materials be used for spillover parking areas?


YES / NO

If your answer is **YES**, give yourself **2 points**. 

9. Structured Parking

Are there any incentives to developers to provide parking within garages rather than surface parking lots?


YES / NO

If your answer is **YES**, give yourself **1 point**. 

10. Structured Parking


Is a minimum percentage of a parking lot required to be landscaped?

YES / NO

If your answer is **YES**, give yourself **2 points**. 

Is the use of bioretention islands and other stormwater practices allowed within landscaped areas or setbacks?

YES / NO

If your answer is **YES**, give yourself **2 points**. 

CWP Community Codes and Ordinances Worksheet

Subtotal Page 3

Time to Assess: Principles 1-10 focused on the codes, ordinances, and standards that determine the size, shape and construction of parking lots, roadways, and driveways in the suburban landscape. There were a total of **40** points available for Principles 1-10. What was your total score?

Subtotal Page 1 _____ + Subtotal Page 2 _____ + Subtotal Page 3 _____ =

Where were your codes and ordinances most in line with the principles? What codes and ordinances present potential impediments to better development?


11. Open Space Design

Development Feature

Your Local Criteria


Are open space and cluster development designs allowed in your community?

YES / NO

*If your answer is **YES**, give yourself 3 points. 
If your answer is **NO**, skip to question No. 12.*

Is land conservation or impervious cover reduction a major goal or objective of the open space design ordinance?

YES / NO

*If your answer is **YES**, give yourself 1 point. *


Are the submittal or review requirements for open space design greater than those for conventional development?

YES / NO

*If your answer is **NO**, give yourself 1 point. *


Is open space or cluster design a by-right form of development?

YES / NO

*If your answer is **YES**, give yourself 1 point. *

Are flexible site design criteria available for developers that use open space or cluster design options (e.g., setbacks, road widths, lot sizes, etc.)?


YES / NO

*If your answer is **YES**, give yourself 2 points. *

12. Setbacks and Frontages

Are irregular lot shapes (e.g., pie-shaped, flag lots, etc.) allowed in the community?

YES / NO

*If your answer is **YES**, give yourself 1 point. *

What is the minimum requirement for front setbacks for a **one-half (1/2) acre** residential lot?

_____ feet

*If your answer **20 feet or less**, give yourself 1 point. *

What is the minimum requirement for rear setbacks for a **one-half (1/2) acre** residential lot?

_____ feet

*If your answer **25 feet or less**, give yourself 1 point. *


What is the minimum requirement for side setbacks for a **one-half (1/2) acre** residential lot??

_____ feet

*If your answer **8 feet or less**, give yourself 1 point. *

What is the minimum frontage distance for a **one-half (1/2) acre** residential lot??

_____ feet

*If your answer **less than 80 feet**, give yourself 2 points *

CWP Community Codes and Ordinances Worksheet

Subtotal Page 4


Development Feature

Your Local Criteria

13. Sidewalks


What is the minimum sidewalk width allowed in the community?

_____ feet

If your answer **4 feet or less**, give yourself **2 points**. 


Are sidewalks always required on both sides of residential streets?

YES / NO

If your answer is **NO**, give yourself **2 points**. 


Are sidewalks generally sloped so they drain to the front yard rather than the street?

YES / NO

If your answer is **YES**, give yourself **1 point**. 

Can alternate pedestrian networks be substituted for sidewalks (e.g., trails through common areas)?


YES / NO

If your answer is **YES**, give yourself **1 point**. 

14. Driveways

What is the minimum driveway width specified in the community?

_____ feet

If your answer **9 feet or less (one lane) or 18 feet (two lanes)**, give yourself **2 points**. 


Can pervious materials be used for single family home driveways (e.g., grass, gravel, permeable pavers or pavement, etc.)?

YES / NO

If your answer is **YES** give yourself **2 points**. 


Can a “two track” design be used for single family home driveways?

YES / NO

If your answer is **YES**, give yourself **1 point**. 

Are shared driveways permitted in residential developments?

YES / NO

If your answer is **YES**, give yourself **1 point**. 

Development Feature


Your Local Criteria

15. Open Space Management

Skip to question 16 if open space, cluster, or conservation developments are not allowed in your community.


Does the community have enforceable requirements to establish associations that can effectively manage open space?

YES / NO

If your answer is **YES**, give yourself **2 points**. 


Are open space areas required to be consolidated into larger units?

YES / NO

If your answer is **YES**, give yourself **1 point**. 


Does a minimum percentage of open space have to be managed in a natural condition?

YES / NO

If your answer is **YES**, give yourself **1 point**. 


Are allowable and unallowable uses for open space in residential developments defined?

YES / NO

If your answer is **YES**, give yourself **1 point**. 

Can open space be managed by a third party using land trusts or conservation easements?

YES / NO

If your answer is **YES**, give yourself **1 point**. 

16. Rooftop Runoff


Can rooftop runoff be discharged to yard areas?

YES / NO

If your answer is **YES**, give yourself **2 points**. 

Do current grading or drainage requirements allow for temporary ponding of stormwater on front yards or rooftops?

YES / NO

If your answer is **YES**, give yourself **2 points**. 

CWP Community Codes and Ordinances Worksheet

Subtotal Page 6

Time to Assess: Principles 11-16 focused on the regulations which determine lot size, lot shape, housing density, and the overall design and appearance of our neighborhoods. There were a total of **36** points available for Principles 11-16. What was your total score?

Subtotal Page 4 _____ + Subtotal Page 5 _____ + Subtotal Page 6 _____ =

Where were your codes and ordinances most in line with the principles? What codes and ordinances present potential impediments to better development?

Development Feature


Your Local Criteria

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17. Buffer Systems

YES / NO

Is there a stream buffer requirement or ordinance in the community?

If your answer is **YES**, give yourself **2 points**. 


If so, what is the minimum buffer width?

_____ feet

If your answer **75 feet or more**, give yourself **1 point**. 

Is expansion of the buffer to include freshwater wetlands, steep slopes or the 100-year floodplain required?


YES / NO

If your answer is **YES**, give yourself **1 point**. 

18. Buffer Maintenance


YES / NO

Does the stream buffer requirement/ordinance specify that at least part of the stream buffer be maintained in native vegetation?

If your answer is **YES**, give yourself **2 points**. 


Does the stream buffer requirement/ordinance outline allowable uses within the buffer area?

YES / NO

If your answer is **YES**, give yourself **1 point**. 

Does the buffer requirement/ordinance specify enforcement and education mechanisms?


YES / NO

If your answer is **YES**, give yourself **1 point**. 

19. Clearing and Grading

YES / NO

Is there any ordinance that requires or encourages the preservation of natural vegetation at residential development sites?

If your answer is **YES**, give yourself **2 points**. 

Do reserve septic field areas need to be cleared of trees at the time of development?


YES / NO

If your answer is **NO**, give yourself **1 point**. 

20. Tree Conservation


YES / NO

If forests or specimen trees are present at residential development sites, does some of the stand have to be preserved?

If your answer is **YES**, give yourself **2 points**. 

Are the limits of disturbance shown on construction plans adequate for preventing clearing of natural vegetative cover during construction?

YES / NO


If your answer is **YES**, give yourself **1 point**. 

Development Feature

Your Local Criteria


21. Land Conservation Incentives

Are there any incentives to developers or landowners to conserve non-regulated land (e.g., open space design, density bonuses, stormwater credits, lower property tax rates, etc.)?

If your answer is **YES**, give yourself **2 points**. 

YES / NO

Is flexibility to meet regulatory or conservation restrictions (e.g., density compensation, buffer averaging, transferable development rights, off-site mitigation, etc.) offered to developers?

If your answer is **NO**, give yourself **2 points**. 

YES / NO


22. Stormwater Outfalls

Is stormwater required to be treated for quality before it is discharged?

If your answer is **YES**, give yourself **2 points**. 


YES / NO

Are there effective design criteria for stormwater best management practices (BMPs)?

If your answer is **YES**, give yourself **1 point**. 

YES / NO

Can stormwater be directly discharged into a jurisdictional wetland without pre-treatment?

If your answer is **NO**, give yourself **1 point**. 

YES / NO

Does the community have a floodplain management ordinance that restricts or prohibits development within the 100-year floodplain?

If your answer is **YES**, give yourself **2 points**. 

YES / NO

CWP Community Codes and Ordinances Worksheet

Subtotal Page 8

Time to Assess: Principles 17-22 addressed codes and ordinances that promote (or impede) protection of existing natural areas and incorporation of open spaces into new development. There were a total of **24** points available for Principles 17-22. What was your total score?

Subtotal Page 7 _____ + Subtotal Page 8 _____ =

Where were your codes and ordinances most in line with the principles? What codes and ordinances present potential impediments to better development?

To determine your final score, add up the subtotals from each **Time to Assess** box:






- Principles 1 – 10 (page 3) _____
- Principles 11 - 16 (page 6) _____
- Principles 17 – 22 (page 8) _____

Development Feature

Your Local Criteria

SCORING (A total of **100** points available):
 (See page 9 to see where your community'

TOTAL

Your Community's Score		
90 – 100		Congratulations! Your community is a real leader in protecting streams, lakes, and estuaries. Keep up the good work.
80 – 89		Your local development rules are pretty good, but they could use some tweaking in some areas.
70 – 79		Significant opportunities exist to improve your development rules. Consider creating a site planning roundtable.
60 – 69		Development site rules are inadequate to protect your local aquatic resources. A site planning roundtable would be very useful.
Less than 60		Your development rules definitely are not environmentally –friendly. Significant reform of the development rules is recommended.

3-D.6.0 REFERENCES

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CWP. July 2008b. *Managing Stormwater in Your Community: A Guide for Building an Effective Post-Construction Program*. Ellicott City, MD. available from the CWP online at: http://www.cwp.org/Resource_Library/Center_Docs/SW/pcguidance/Manual/PostConstructionManual.pdf

Chesapeake Stormwater Network (CSN) and CWP. March 9-11, 2010. *From the Rooftop to the Bay* Workshop. Staunton, Virginia.