



DATE: May 8, 2018

TO: Paul Stoddard, AICP, Planning Director

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SUBJECT: Elements of Natural Resources Chapters of Comprehensive Plans

Introduction

This memo summarizes a review of six Natural Resources chapters of Comprehensive Plans.

I reviewed more than 10 Natural Resources chapters of Comprehensive Plans of U.S. localities that are generally considered progressive in planning. This memo covers the contents of six of the most comprehensive chapters reviewed: from Annapolis, MD; Austin, TX; Bucks County, PA; Burlington, VT; Fort Collins, CO; and Virginia Beach, VA . The chapters average 17 pages in length.

Elements Covered in Natural Resources Chapters

Most of the plan chapters dealing with Natural Resources are actually chapters on “Environment,” and half of those reviewed focus on the broader topic of Environmental Sustainability. Several are very comprehensive in coverage. For example, Virginia Beach’s chapter covers natural resources, parks and open space, sustainability, and climate change. A few are much narrower. For example, the Bucks County chapter covers specific ground-related natural resources, but the Bucks County plan also includes separate chapters on Parks, Open Space and Agriculture; Energy Conservation and Efficiency; Water Resources and Waste Management; and Hazards. The Environment chapter from the Annapolis plan includes sustainability but there is also a separate chapter on Water Resources, covering wastewater, shorelines, and the like. A matrix that shows the key elements included in each chapter follows.

Natural Resources/Environment Plan Elements

Plan Element	Annapolis Comprehensive Plan (2009)	Imagine Austin Comprehensive Plan (2012)	Bucks County Comprehensive Plan (2011)	planBTV: Burlington Municipal Development Plan (2014)	City Plan Fort Collins (2011)	It's Our Future: A Choice City, Virginia Beach Comprehensive Plan (2016)
Title of Chapter Reviewed	Environment	Conservation and Environment	Natural, Historic, and Scenic Resources	Natural Environment	Environmental Health	Environmental Stewardship Framework
Separate chapter on Sustainability?	No	No	Yes (Energy)	Yes (Energy)	No	No
Separate chapter on Parks/Open Space?	Yes	No	Yes	No	Yes	No
Topo, Soils	√		√	√		
Water Resources		√	√	√	√	√
Wetlands, Floodplains, Shores		√	√	√	√	√
Stormwater Mgmt/LID	√			√	√	√
Habitat/Wildlife		√	√	√		√
Urban Forestry	√	√	√		√	√
Green Infrastructure		√		√		√
Open Space	√	√		√	√	√
Urban Agriculture		√		√		
Solid Waste/Recycling	√	√			√	√
Energy	√				√	√
Green Building	√	√			√	√
Air Quality	√	√	√		√	√
Light and Noise	√					√

Pollution						
Climate change, Flooding, Sea Level Rise	√	√			√	√
Natural Hazards	√					√

Discussion

Based on this review of comprehensive plans, it appears that many communities choose to combine natural resources and environmental sustainability into a chapter covering multiple aspects of “Environment.” The topics covered relate directly to the physical environment. None of the chapters reviewed covers transportation, economic sustainability, or social sustainability. There is obvious overlap between Environmental Sustainability and Chapter 6, Parks for People, as well as Chapter 7, Mobility for All Modes—but that is inevitable in any “comprehensive” plan (just as there is obvious overlap among the elements of a chapter dealing with the environment).

From the table of plan elements above, I recommend that the following topics be covered in the City’s Natural Resources/Environmental Sustainability chapter:

- Topo, soils
- Water resources
- Floodplains
- Stormwater management
- Habitat/wildlife
- Urban forestry
- Green infrastructure
- Open space
- Solid waste

- Energy
- Green building
- Air quality
- Natural hazards
- Climate change