

TO THE LAST DROP

Saving Our Groundwater

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More than 1.5 million persons rely on the groundwater supply of the Virginia Coastal Plain for their health and welfare. Each day more than 100 million gallons of groundwater are pumped from the artesian aquifers of the region. Because more groundwater is withdrawn from the aquifers than is naturally replenished, this valuable resource is non-renewable; the supply moves in one direction only—downward. Unless the groundwater supply is protected by an effective management program, the residents of the Virginia Coastal Plain risk severe social and economic consequences.

The purpose of this course is to learn what makes up the groundwater supply of the Virginia Coastal Plain, how it functions, why it is threatened, and what we must do about the threat.

TOPICS

Introduction

Foreword
Statement of the Problem
Statement of Purpose
Outline of Topics

What does the groundwater supply of the Virginia Coastal Plain look like?

Where do we find groundwater?
Where does groundwater come from?
What are the basic elements of a groundwater system?
What does the groundwater system of the Virginia Coastal Plain look like?

Who says our groundwater is threatened?

What is the evidence that the groundwater supply of the Virginia Coastal Plain is threatened?
Do falling water levels signal a shrinking groundwater supply?
Can we tell how fast the groundwater supply is being depleted?

Is Maryland stealing our groundwater?

Are excessively large volumes of groundwater being withdrawn from the aquifers of Southern Maryland?
Are the artesian aquifers of Southern Maryland connected hydrologically to the aquifers of the Northern Neck?
Does pumping artesian aquifers in Southern Maryland drain groundwater from the aquifers of the Northern Neck?

Are we running out of groundwater?

What's happening to our groundwater supply?
Why can't we predict when the groundwater supply will run out?
How can we understand what the future of the groundwater supply looks like?
What is the life-time behavior of a groundwater supply?

How can we protect our groundwater supply?

What does the law say about protecting the groundwater supply?
How do Ground Water Management Areas protect the groundwater supply?
What should an effective plan for groundwater protection look like?