

A Comparative Analysis of Wellhead Protection:  
Virginia and Massachusetts

Kelley Lynne Raftery

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Jesse Richardson, Chair  
Dr. John Randolph  
Dr. David Keuhl

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(ABSTRACT)

Proactive drinking water programs assist communities in the long-term protection of their water supply. The 1986 amendments to the Safe Drinking Water Act (SDWA) seek to protect groundwater sources of public drinking water. 42 United States Code Section 300h-7 created the Wellhead Protection Program. The 1986 SDWA Amendments require all states to submit a Wellhead Protection Program for public groundwater drinking sources. The 1996 SDWA Amendments require all states to submit Source Water Assessment Plans for both groundwater and surface water sources. The 1986 and 1996 SDWA Amendments aim to protect public health by preventing contamination of drinking water sources.

This paper compares and contrasts the effectiveness of groundwater Wellhead Protection Programs (WHPP) in Virginia and Massachusetts. These states take different management approaches to protect public groundwater drinking sources. Virginia encourages local governments to participate voluntarily in wellhead protection activities. Massachusetts requires all municipal and private suppliers that provide public drinking water to adopt a WHPP. The relative success achieved by Massachusetts and Virginia was evaluated with two measures: percentage of wellhead protection programs implemented and the percentage of state reported drinking water quality violations.

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## TABLE OF CONTENTS

<b>CHAPTER 1 – INTRODUCTION.....</b>	<b>1</b>
1.1 Purpose of Paper.....	2
1.2 Impacts upon Health.....	3
1.3 Contamination Costs.....	3
1.4 Pollution Sources.....	4
<b>CHAPTER 2 – FEDERAL FRAMEWORK.....</b>	<b>6</b>
2.1 Introduction.....	6
2.2 Safe Drinking Water Act.....	7
2.3 1986 Safe Drinking Water Act Amendments.....	7
2.4 1996 Safe Drinking Water Act Amendments.....	16
2.5 Conclusions.....	16
<b>CHAPTER 3 – MASSACHUSETTS WELLHEAD PROTECTION PROGRAM.....</b>	<b>18</b>
3.1 Introduction.....	18
3.2 Drinking Water Programs.....	20
3.3 Wellhead Assessment Process.....	22
3.4 Implementation.....	25
3.5 Public Participation and Education.....	29
3.6 Contingency Planning.....	30
3.7 Conclusion.....	30
<b>CHAPTER 4 – VIRGINIA WELLHEAD PROTECTION PROGRAM.....</b>	<b>31</b>
4.1 Introduction.....	31
4.2 Drinking Water Program.....	33
4.3 Wellhead Assessment Process.....	35
4.4 Implementation.....	38
4.5 Public Participation and Education.....	42
4.6 Contingency Planning.....	43
4.7 Conclusion.....	43
<b>CHAPTER 5 – EVALUATING SUCCESS.....</b>	<b>45</b>
5.1 Comparison of Participating Public Water Systems.....	46
5.2 Local Government Participation.....	48
5.3 Comparison of Reported Violations.....	49
5.4 Conclusions.....	52

**CHAPTER 6 – CONCLUSIONS AND RECOMMENDATIONS.....54**

6.1 Massachusetts and Virginia Summary.....54

6.2 Conclusions.....55

6.3 Recommendations for Future Areas of Study.....60

  

**APPENDIX 1.....63**

  

**REFERENCES.....65**

## LIST OF TABLES

Table 3.1: Overview of Wellhead Primary and Secondary Recharge Area Regulations.....	23
Table 4.1: Characteristics of Virginia’s Five Geological Provinces.....	32
Table 5.1: Comparison of Virginia and Massachusetts Public Water Systems Participation in Wellhead Protection Activities in Percentages.....	48
Table 5.2: Comparison of MCL and M/R Violations in Massachusetts and Virginia.....	51
Table 6.1: Comparison of Virginia and Massachusetts Wellhead Protection.....	55

## LIST OF FIGURES

Figure 3.1: Map shows Zone I, II, and III (--) boundaries surrounding a public groundwater supply.....	24
Figure 3.2: Wellhead Protection Areas Sign.....	29