A Comparative Analysis of Wellhead Protection:
Virginia and Massachusetts

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Major Paper submitted to the faculty of
Virginia Polytechnic Institute and State University
in partial fulfillment of requirements for the degree of

Master of Urban & Regional Planning

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May 8, 2002
Blacksburg, VA

Keywords: Safe Drinking Water Act, Wellhead Protection, Virginia, and Massachusetts

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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.
Acknowledgements

I would like to thank my committee members, Dr. John Randolph and Dr. David Keuhl, for their wonderful help and advice. My committee chair, Jesse Richardson, deserves a special thanks for his marathon patience and endless support.

Thank you to all the wonderful professors in the Department of Urban Affairs & Planning. I would like to thank Mary Ann Massie, Virginia Department of Environmental Quality, for providing me with several publications.

I would like to thank my parents, John and Lynne Raftery, for their love, support, and understanding. They have been a source of inspiration to me.

Much love to Anthony Reichel, Kelly Hartman, and Jannessa Frook. Cheers to all my friends and family:

Sean Raftery
Janet Lacertosa
Madeline Scott
Mike Mummford
Kevin Waclawicz
Adrianne Lucas
Jill Kelso

Mis Amigos que visitan El Guadalupe’s conmigo

My fellow classmates and housemates
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