

# MANAGEMENT of RISK TOOLS

METHOD	ACTIONS/STRATEGIES	Immediate, short term, long term, ongoing	Check
<b>Acquisition/Control</b>	Landownership of isolation zone around water source (minimum of 200 ft)		
	Own or acquire land within the Source Protection Area to increase control of land uses and activities occurring in the SPA; exercise First Right of Refusal.		
	Easements		
	Restrictive Covenants, Homeowner Association policies		
	Deed Restrictions		
	Partner with Land Trusts for conserved lands		
	DWGPD funding opportunities for acquisition		
	Transfer of Development Rights		
<b>Communication</b> <i>This is a key tool for Promoting protection. The management of contaminants from PSOCs is a process which requires at least some level of cooperation from the person or persons responsible for the activity which is the PSOC.</i> <b>At a minimum, the Water System must notify all landowners within the SPA of the Source Protection Plan.</b>	Talk with Landowners/business owners		
	Promote voluntary participation		
	Perform field visits, conduct surveys		
	Attend and participate in local town board and committee meetings and hearings (planning, zoning, Selectboard, conservation commission, Recreation, sewer and water, fire dept.)		
	Reach out to Emergency Contacts (Fire, police, emergency management, Health officer)		
	Hold Informational Gatherings		
	Present/Display at Town Meeting Day		
	Annual letters, newsletters, notes in billing statements and or CCR (Consumer Confidence Report)		
<b>Forestry Stewardship</b>	Develop and maintain a Forest Management Plan and Timber Harvest Plan for the Town/Municipal Forest and other forested lands within the SPA		
	Inform individuals about participation in the Current Use Program		
	Promote Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in VT, revised August 2018.		
	Encourage Best Management Practices.		
	Develop relationship with County Forester		
	Promote and participate, as applicable, in forest stewardship incentives and opportunities provided by the US Forestry Service, VT Forest Parks and Recreation Service, and NRCS		

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<b>Educational Opportunities</b>	Distribute information handouts and brochures (i.e., "Do your Part. Be Septic Smart" produced by EPA), fact sheets, direct mail. Use digital and social media for messaging, email blasts.		
	Promote VT Dept. of Health drinking water testing for private wells		
	Demonstrate with Ground Water Flow Model (model available from VRWA, Friends of the Winooski, ANR, AOT)		
	Insert Flyers in water bills & CCRs		
	Town Meeting Day displays and handouts		
	School classroom demonstrations		
	Be a guest speaker (LEPC-Local Emergency Planning Commission, schools, Board Meetings, Conservation Groups, Rotary, Fire Dept. etc.)		
	Work with local Conservation Commission, schools, scouting, 4H and other similar organizations to plant Vegetative Buffer Strips along waterways.		
	Sponsor a Household Hazardous Waste Day with the solid waste district.		
	Maintain your water systems Operator Training		
	Post signage of the SPA boundary		
	Promote use of Storage Tank Program of the VT Waste Management and Prevention Division for above ground and underground tanks.		
	Plant buffer strips to intercept storm water runoff from parking lots.		
<b>Agricultural Conservation Practices</b>	Promote use of VT Required Agricultural Practices and Best Management Practices		
	Inform individuals of the NRCS Conservation Programs and priority conservation practices that encourage and promote source water protection: <ul style="list-style-type: none"> <li>➤ Groundwater testing</li> <li>➤ Well Decommissioning</li> <li>➤ Integrated Pest Management</li> <li>➤ Nutrient Management</li> <li>➤ Filter Strips</li> <li>➤ Riparian Forest Buffer</li> <li>➤ Field Borders</li> <li>➤ Cover Crops</li> <li>➤ Heavy Use Area Protection</li> <li>➤ Conservation Crop rotation</li> <li>➤ Agrichemical Handling Facility</li> </ul>		
	National Water Quality Initiative, Farm Bill-priority watersheds & conservation practices (EQIP, RCPP)		

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<b>Public Water System Infrastructure Improvements</b>	Well camera investigations – detect cracks, leaks, well casing condition		
	Perform scheduled monitoring and sampling for water quality		
	Review and Analyze Existing Data, monitoring samples, etc. to better understand what contaminants are being monitored, where pollution problems may exist, and where to focus pollution control initiatives. Look for increasing trends and potential contaminants.		
	Install barriers such as fencing, bollards, or cement blocks to protect well casing.		
	Provide secondary containment for chemical and fuel/oil storage. Follow proper handling and storage practices.		
	Maintain & Inspect facility components- i.e., properly fitted well caps, screening, locks, secondary containment, pumps, storage tanks		
	New treatment systems and sources		
	Replace broken or leaky water lines		
	Maintain and Update O&M Manual to address any new infrastructure improvements.		
	<b>Land Use Regulations and Planning</b> <i>Evaluate the options for local government to participate in SPA protection. In most cases, local governmental support will greatly facilitate source protection.</i>	Work with local Planners to ensure source water protection and Public water systems are incorporated into the Town Plan, Regional Plan, municipal Emergency Management Plan, local Hazard Mitigation Plan, Road policies, Watershed Management Plan, Stormwater Management Plan, etc.	
Adopt & maintain Zoning Regulations and Overlay Districts to provide minimum isolation distances & regulate land use activities within SPAs & APAs.			
Adopt a Groundwater Protection Ordinance			
Groundwater Reclassification			
Work with Selectboards, Public Works Departments, Homeowner Associations, and businesses to institute a road salt reduction policy			
Participate in local, state, and regional permitting applications and decisions such as Act 250 and Section 248, Subdivisions, Special Use Permits.			
Participate in master stormwater planning and MRGP (Municipal Roads General Permit).			
Ensure Hazard Mitigation Plan considers hazards impacting both water quality & quantity. Floods, drought, & ice storms impact drinking water supplies. Consider incidents of vandalism, cybercrimes, and bioterrorism.			

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<b>FORM STRONG PARTNERSHIPS</b> <i>Source water protection involves everyone</i>	Town/Village Public Works Department, Municipal Departments and Officials		
	Friends of the Winooski River, Friends of the Mad River		
	VT Land Trust		
	VT Natural Resource Conservation Service (NRCS)		
	VT Association of Conservation Districts (VACD)		
	County Forester		
	UVM Extension Service		
	VT Rural Water Association		
	Utilities- GMP, WEC, VELCO, Railroads, Solar entities		
	Well Driller Associations		
	Municipal Officials		
	Lake Shore Associations		
	Emergency Responders – Fire, Police, EMDs, LEPC, Haz Mat		
	Rotary and Business Development organizations		
	Solid Waste District		
	Schools and colleges		
	VT Agency of Natural Resources DEC programs		
	VT Dept. of Health		
	VT Dept. of Agriculture		
	VT Agency of Transportation		
	VT Forest, Parks, and Recreation		
	VT Emergency Management		
	Many Others.....		