

<i>CONCERN</i>	<i>WHY?</i>	<i>NH DRINKING WATER STANDARDS</i>	<i>NH WATER QUALITY STANDARDS (AQUATIC HABITAT)</i>	<i>POTENTIAL SOURCES</i>	<i>AVAILABLE DATA</i>	<i>DATA/INFO NEEDED</i>	<i>RELATED CURRENT PROGRAMS/ACTIVITIES</i>	<i>POTENTIAL RECOMMENDATIONS/ACTIONS</i>
Petroleum Products/MtBE	Contaminant/pollutant in water – highly water soluble, not easily removed, possible human carcinogen, toxicity effects	MtBE – 13ug/L EPA- 20-40ug/L		Boats Marinas Gas Stations Underground fuel storage	UNH/Paugus Bay MtBE study DES – ASTs, USTs, LUSTs, etc.	Boat usage/counts Underground storage tanks less than 1100 gallons residential fuel oil tanks	MtBE free gasoline	Limitation of Certain Activities & locations – boat storage, refueling activities, idling Educate boaters about MtBE free gasoline bilge socks
Road Salts & Storage	high chloride concentrations toxic to aquatic life – both plant & fish		No numeric standard, not regulated Chloride: 230 mg/L chronic 860 mg/L acute	Roads, salt storage sheds, snow dumps leachate from landfills sewage	Conductivity data from Tributary sampling – only 2 streams within Subwatershed areas (Hawkins Brk and Gunstock Brk)	Amount of road salt applied by town/yr Designated Low Salt/No Salt Rds		
Nutrients								
Phosphorus	Encourages plant growth, more algal blooms, eutrophication (aging) – limiting factor in fresh water Cyanobacteria (blue-green algae)		8.0 ug/L for oligotrophic status	Agriculture Golf courses Fertilizers – improper lawn care practices erosion – phosphorus binds to soil particles	Tributary sampling Lake Sampling – UNH LLMP Paugus Bay sampling Laconia Water Works		UNH LLMP LWW Meredith CC – trib sampling	Education to residents on both lawn care BMPs and septic system maintenance & issues Erosion & Sedimentation controls Stormwater Management
Nitrates	Less concern than phosphorus in fresh water. Can be indicator of sewage, animal waste, fertilizer,	10 mg/L	no numeric standard as naturally occurs	Failed Septic Systems Agriculture wildlife – water fowl	Tributary sampling Lake sampling			
Septic Systems	Failed systems leaching nutrients, bacteria into ground and surface waters Cyanobacteria			Conversion of summer cottages to year round, residents lack of knowledge & maintenance regarding septic systems Older systems	Winni Sewer Project – mapped Town lot by lot info not digitized Laconia – Sewage Facilities Plan update	Individual Town sewer lots Science/Data documenting failed systems	Gilford – publishing septic system brochure to be mailed to residents Meredith – Pinnacle Park area – UNH Study to be done Gilford – recently expanded sewer line through historic district, school and residential areas. Laconia – Roller Coast Rd., Moultons/Pickerel areas, east side Opechee	Septic System Maintenance Program/Ordinance Outreach/brochure to residents

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Surface & Groundwater Contamination	Large Aquifer – direct development away from ecologically sensitive areas			Marinas Gas Stations Underground fuel storage Hazardous Waste Land fills/transfer stations Pesticides	Aquifer Maps digitized DES has Aboveground and Underground fuel storage tanks mapped Hazardous waste, RCRA, leaking USTs, etc.		Aquifer Protection Ordinance - Gilford	-Inventory and compliance history of all marinas and Gas Stations/ Service Stations -prohibit high risk land uses, require strict development/ construction guidelines -Spill Containment
Invasives	Loss of open water habitat, crowds out native species, decreased recreational/property values			Boats – transport Wildlife Unknown	DES list of areas treated Some mapping	Complete inventory & mapping of infestations	DES Exotic Species Program – grants Weed Watchers Program Lake Host Program	
Sediment and Erosion	Affects water quality, aquatic habitat, clogs fish gills, contributes to lake aging (eutrophication), decreased water clarity (turbidity)		Turbidity – 10 NTU	Construction activities Steep Slopes Logging Sand & Gravel operations Lack of vegetated buffers	Lakes Region Plaza Black Brook, Gilford Corliss Brook, Meredith Akwa Soleil, Laconia Gunstock Brook, Gilford	WQ Monitoring	Gilford – limit development of slopes over 15%	Stream and wetland buffers – filter sediments, nutrients, metals, etc. Steep Slope Ordinances Construction BMPs
Impervious Surfaces/ Stormwater Runoff	Decreases rainfall infiltration into ground (less groundwater recharge) Increases amt. of pollutants (oil, salts, sand, etc) that get washed or carried into stormwater system or streams		0-10% Sensitive 11-25% Impacted >25% non supporting (general guidelines for streams of subwatersheds)	Roads Parking lots Buildings	Paugus Bay Planning Study – based on 1998 aerial photos Impervious cover estimate Laconia – Stormwater Discharge sites mapped	Buildout Analyses Estimate of current & future impervious cover Estimate of stormwater inputs	Waukegan Watershed – Center for the Environment conducting Impervious cover?	Catch basins – oil separator hoods & oil absorbing pillows Vegetative buffers Options to asphalt – pervious surfaces
E. Coli	Bacteria – human health risk	47 counts/100ml (3 samples in 60 days) 153 counts/100 ml (any one sample) Class A Standards	126 counts/100 ml (3 samples in 60 days) 406 counts/100 ml (any one sample) Class B Standards	Public bathing areas waterfowl septic systems	NHDES Public beach e. coli monitoring data		NHDES Designated Beach Program	
Water Contact	Public Water Supply							
Mercury	Human health risk							