

2007 Meetings	Greatest Assets	Greatest Threats	Solutions
Headwaters Winooski	Natural Richness Swimming holes Educational Value Scenic Beauty Connection to the Land Open Space Fishes Recreation Wildlife Habitat (including rare species and breeding birds) Assimilation capacity Water quality	<ul style="list-style-type: none"> Lack of connection to the river Loss of wetlands and floodplains Toxic spills Dams- block fish, affect water levels Underground storage tanks Leachate from old dump(s) Farming practices Fishing practices- no catch/release, stocking Erosion and sedimentation Limited public access Sewage problems Beaver populations Toxic Development Power generation Loss of canopy vegetation and buffers Invasive species 	<ul style="list-style-type: none"> Assessment and monitoring: invasive species, consistent water quality monitoring Restoration projects: restore rifflepools, dam removal, buffers and streambank stability, improve fish habitat, use appropriate species for plantings, backroads projects Protection/Access: long term agreements with landowners, acquisition of riparian zones, more public access points on private land, protect land around Mansfield reservoir Education/awareness: stimulate landowners' interest, celebratory event Recreational projects
Kingsbury Branch	Number and variety of lakes and ponds and public access to many of them Human population (quality, character) Fishing/good fishery and habitat Aesthetics Wildlife (birds, turkey, other) Mts of landscape (fields, forests, villages)	<ul style="list-style-type: none"> Rising temperatures, especially on the Kingsbury below the North Montpelier Pond dam, and also somewhat on Pekin Brook and Kingsbury from East Cabot down to No. Montpelier Pond. Sediment contributions (erosion) Boating (emissions, wakes, safety, speed, noise) North Montpelier Pond dam condition Non-native invasive plants Native plants population fluctuations (increase in Lilies conflicting with recreation) Algae blooms Septic systems near/lake & ponds Increasing traffic on roadways resulting in increased sand/silt applications 	<ul style="list-style-type: none"> Education to inform watershed citizens about threats and what they can do Increase or expand water quality monitoring to track temperature and sediment (current lay monitoring on Bliss, Curtis, Nelson, No. 10, Woodbury and North Montpelier Ponds) Geomorphic assessment to identify erosion hazards Identify road related water conveyances (culverts, ditches) along road inventory like Better Backroads program and identify sediment contributions Septic "burn-out day" with reduced rates offered to lakeshore owners More/better riparian buffers especially in quality trout habitat and targeted areas from geomorphic assessment Investigate ability to modify dam operations on North Montpelier Pond to reduce temperature increases below the dam Improve fishery through instream habitat structures where buffers are not possible Prevent the spread of milfoil to other lakes and ponds (North Montpelier Pond is the only one in the Kingsbury watershed with milfoil infestation).
Stevens Branch	History (old dams, earlier uses of land & water) Reservoirs for drinking water supply Wildlife habitat (evergreen trees, deeryards) Diversity in land use- farms, forest & urban Potential urban economics and quality of life (Barre City) Public and private drinking water supplies (surface and ground water) Working landscape Industrial Uses, Wastewater treatment, and Educational assets tied Fishing Access to stream-banks and potential for more Potential for hydro power Fishes, Benjamin Falls and South Barre Falls @ Falls Bridge Road Recreation (aesthetics, swimming/wading, fishing) Distance between roads and streams as a place for run-off to go before getting to the streams. Quarries High density development is not visible everywhere Biological diversity due to different stream sizes & wetlands Historical/Cultural resources Wildlife/Birding, Recreational use	<ul style="list-style-type: none"> Old storm & sewer infrastructure in Barre City Financial constraints to correcting problems Erosion/slumping of the Cliff Recreational use conflicts (haphazard use/unplanned) Lack of riparian buffers Historically polluted sites Ignorance/abuse of resources Sediments/Nutrients and Intensity of development up to bank tied Industrial development Salt & sand for Department of Public Works Lack of access Impervious surface/stormwater waste from granite industry No regional control of homeowner pesticide use (or dog feces) Lack of floodplains Lack of connection to streams Lack of stormwater control Bridges & culverts, Riparian trees Channelized flow (stone channels) 	<ul style="list-style-type: none"> Municipalities need to be aware of/get on board with issues, solutions, grants, etc. Look/look for resources to use including grants (example VFC assessment, 319 grants, etc.) Historical society involved with dam remnants (historical tour of the river, etc) Engaging urban citizens Create setbacks & buffer requirements Creation of public spaces and pocket parks Incentives to remove structures along river edge Create conservation commissions Education on floodplain management Enforcement of current regulations Demonstration projects for urban retrofits for stormwater Demonstration bioaesthetics projects to show value of river Changing landscape and lawn-care norms Day-lighting Streams Program clean-up programs Getting access areas to rivers/streams Planting trees, shrubs Rain gardens (use of plants)
North Branch Winooski	Protected state forest/conserved land Recreation (canoeing, kayaking, fishing) Wildlife corridors (wood turtles, etc.) Fishes Swimming holes Open land, Forested areas Wrightsville Reservoir for energy/recreation/flood control Historical resources	<ul style="list-style-type: none"> To conserved land: <ul style="list-style-type: none"> Impacts/development surrounding conserved land Fragmentation of land Access issues Management decisions (logging techniques, septic systems, roads, driveways) P.L.U.T. program (loss in property taxes for towns) To recreation: <ul style="list-style-type: none"> Water quality (affect of agricultural use) User conflicts at Wrightsville Beach Public access limited Invasive species Flooding/erosion To wildlife: <ul style="list-style-type: none"> Development Fragmentation of corridors Car collisions as a result of increased traffic Invasive Availability of a variety of landscapes (open, successional, forested all needed) 	<ul style="list-style-type: none"> For conserved land: <ul style="list-style-type: none"> Education- living in harmony with the land State legislation regarding wilderness areas, etc Conserve more land Land use planning in towns (i.e. high elevation protection measures) Creation of a Conservation Fund in Worcester Better trails/access For recreation: <ul style="list-style-type: none"> Controlled access of farm animals Enforcement of inappropriate uses Easements/purchases for access More riparian buffers Water quality monitoring and \$ to fix septic problems Investigate dams' affects on water quality, temperature, and fish passage For wildlife: <ul style="list-style-type: none"> Large scale management Invasive management/control Identify wildlife population declines Forested buffers Education
Dog River	Wild Trout Fishery Unique river morphology (narrow river channel) and Water quality tied. Healthy wildlife ecosystem Fishes Aesthetics Swimming Canoeing/Kayaking Relatively undeveloped with few farms. Wildlife habitat and water quality tied Forest resources New treatment Well vegetated Few urban issues Public support & awareness at a high level	<ul style="list-style-type: none"> Recreational conflicts (watercrafts vs. fishing) Loss of riparian buffer Removal of riparian removal Town of Northfield chlorine dumping Lack of understanding of the watershed's characteristics Removal of dam on Cox Brook (deposition of sediment/gravel downstream) Changes in river meanders Ported property Houses near streambanks Unplanned/unwise development Water quality Lack of special fishing regulations (limits & baits used) Stream bank degradation/erosion (lack of buffers) Population (settlement plan) Invasive species Thermo stress Over fishing in certain areas 	<ul style="list-style-type: none"> Tighter regulation and enforcement of buffer zones both privately and municipally Towns & state don't have staff to monitor and enforce regulations State should be given more money Establish an enforcement component to existing zoning Educate community awareness People are afraid to make improvements but are afraid they'll be fined if attention is drawn to them (provide amnesty) Consistency in enforcement whether 1 property or more Planting trees Re-enforcement of banks Mutually agreeable access Planning development Public education Increase special fishing regulations Dam removal (Cox Brook dam) Streambank assessment to determine crucial stabilization areas Cooperation with municipal treatment plants Work with The Nature Conservancy and other organizations on controlling invasive species
Mad River	Clean water- including mainstem, support of river ecosystem Wetlands- ridges, corridors, public forests. Un-interrupted riverfront land Active & productive watershed group Swimmable river Boatable river Diverse/hydro resource Good fishing Community ties as a resource	<ul style="list-style-type: none"> Septic systems Agricultural runoff Development- on/near the river Encroachment roads, ATVs, pets, snowmobiles Erosion and siltation due to poor gravel roadway management Lack of buffers between animal pasture and septic systems and the river Debris from bridges during maintenance In-stream management - armoring Transportation infrastructure Horse/hobby farms Ag Runoff - ditched tribs in fields Invasives Personal ponds Drought conditions and large withdrawals from river Stormwater Dams Snow storage Climate change/extreme weather 	<ul style="list-style-type: none"> Improve septic construction, maintenance and enforcement. Build community septic systems. Regulate land application of pesticides and fertilizers. Build vegetated buffers, require buffers between pasture and water. Conserve more forestland. Protect existing agricultural land and meadows through zoning. Regulate motorized recreation on public lands. Expand education on wildlife values through hunting, fishing, tracking and feeding. Improve road management with better materials, steeper crowns, seeking and erosion cloth after ditching. Development restrictions near the river.
Little River	Recreation Waterbury reservoir (recreation, boating, swimming, camping), Cotton brook area, Stowe Recreation Path and association swimming holes (education signage, Stowe elementary school education program), Lake Mansfield, and Fishing Landscape Dramatic aesthetics, Tourism, State Forest (Mansfield and Putnam)	<ul style="list-style-type: none"> Overuse of resources (tourism) Gravel extraction Stability of dam and how long it's taking to fix Riprap Luze Hill bridge Nutrients from agriculture High elevation development (Waterbury-special review) Hubout club sells Lake Mansfield Management of state land- overuse of trails. 	<ul style="list-style-type: none"> Use money from tourism to protect natural resources Fix dam so recreational resource can be used Increase buffer and adjust bike path Enroll more properties in CREP Continue to monitor & see if regulations (high elevation development) are working State should have option to buy Lake Mansfield if it ever sells Utilize Wildlife Habitat Incentive Program
Main stem Upper Winooski	Energy potential/hydro Recreational value Ecological functions and Good drinking water (tied) Agriculture Working landscape/forests & Agriculture Visibility/aesthetics-scenic corridors Economy and tourism Good water quality conditions (fishing, recreation) Recreational opportunities (fishing, swimming, boating) Abundance of wildlife/ecosystemal levels of biological community Aesthetics- attractiveness, economic opportunity Human population and infrastructure, economic dependency on water quality Employment diversity Water Quality and Fish/Wildlife habitat (tied) Recreation and Communities (tied) Central transportation hub Lakes/streams/ponds Promotion of riparian buffer when possible and Aquatic life/water habitat (tied) Community health Clean swimming holes	<ul style="list-style-type: none"> Energy Public opinion of flooded land Climate change NFP regulations Conflict with recreation Other development Impacts to wildlife/habitat, Aesthetics Overuse, Lack of access (bike paths and boat launches) Dams Channelization Lack of information (maps and WQ testing) Conflicts between motorized and non-motorized uses Development Trash Pollution (septic, hydro, overdevelopment, streambank degradation, agricultural runoff, incompatible uses like hazardous waste and landfills) Invasive species (invasive purple loosestrife, Eurasian milfoil) Loss of access to water (posting, natural and human obstructions) Improperly sited bridges and culverts Beavers Sedimentation Aging population and taxes (economy) Urban pollution Stormwater runoff Urban attitudes Stream stability (Streambank Erosion - Tributary discharges) Removal of water by ski industry Dredging of river Stagnant water Land use Change of river dynamics Development and use of roads in corridor 	<ul style="list-style-type: none"> Restrict floodplain development Education & signage for recreation Reduce conflicts through conservation Money State policies - Enforcing existing state and local rules/laws Disseminate approach to gain consensus (common vision, action steps, balancing human needs and environmental quality) Distinguish between regulatory mechanisms and voluntary compliance (public relations/education) Dam removal Culvert inventory (FEMA, backroads, VTrans) Better streambank management (more fencing) Stabilize streams (geomorphic redesign, tax incentives, costshare programs), Education/teachers Demonstration projects Improvements to Use Value Appraisal Licensed horticulturalist Better job opportunities Less government Good science Condo/land conservation/acquisition Stream-friendly products (lawn care) Town zoning and planning