

Appendix I. Tributaries to the Connecticut River in the Mt. Ascutney Region

New Hampshire

TOWN where trib. enters CT R.	Tributary	STATE ASSESSMENT Draft 2008 Section 303(d) List of Impaired Surface Waters	Local observations
Lebanon- (most of tributary located in Plainfield)	Bloods Brook (also known as Willow Brook and True's Brook)	not assessed	3d order stream. Watershed land use varies from dispersed to urban development, with roads, agriculture, roads, a cemetery, and conserved land. Significant parking lot runoff, erosion, recreational use, and lawns. Some livestock access. Bottom varies from cobbles and gravel to sandy/silty. Some erosion. Tends to be flashy during heavy rains. Trash and paint on ledges, E. side of Meriden swimming hole, under covered bridge. Popular swimming hole on Lebanon line with conservation easement. Stocked trout fishery. Scenic. Some wetlands violations. Town plans to reduce road runoff into brook. Large cobble and gravel deposit at mouth following heavy rains in 2006, has raised river bend 2 feet above previous level.
Plainfield	Hibbard Brook	safe for swimming, boating, fishing	
	Hanchett Brook	not assessed	
Cornish	Blow-Me-Down Brook	not assessed except for 0.36 mile segment, where it is safe for swimming but impaired for aquatic life due to aluminum	3d order stream. Most of tributary located in Plainfield, before it enters the forested and protected Saint-Gaudens National Historic Site in Cornish. Watershed land use in Plainfield is largely agriculture and dispersed development, some forest, and minor concentrated development. Some problems with intensive grazing, lack of buffer, lawns. Bottom type is largely sandy with some gravel, and some erosion. Used for irrigation. Flow tends to be consistent. Coldwater fishery, hiking and snowmobile trails nearby. Road salt storage close to brook. Slides along steep banks. Need for sound manure management at fish hatchery. Unauthorized dredging of brook for irrigation. Large infestation of Japanese knotweed at Daniels Meadow area.
	unnamed brook	not assessed	1 st order. Passes through forested ledges south of Saint-Gaudens. Some erosion, many small waterfalls. No evident WQ problems.
	unnamed brook	not assessed	1 st order. Enters CT R. at Cornish boat landing. Upper watershed steep and largely forested, lower is in corn production. No evident WQ problems Some erosion, purple loosestrife present.
	Dingleton Brook	not assessed	
	Mill Brook	not assessed	
	unnamed brooks	not assessed	
Claremont	unnamed brook	not assessed	Runs by Lambert's bike shop, past Silver's junkyard, and parking lot of Lambert used auto. Once had culverts made of old hot water heaters. Silver's junkyard has no fence, and state has been trying to follow up with capping, but owner has moved to Florida and not responded.
	North Branch Sugar River	many miles of tributaries to the Sunapee Lakes and to the North Branch exhibit low pH. The North Branch itself is impaired by E. coli for 7.98 miles and by low pH for 13.21 miles. Lake Sunapee is on NH's list of acid ponds.	

TOWN where trib. enters CT R.	Tributary	STATE ASSESSMENT Draft 2008 Section 303(d) List of Impaired Surface Waters	Local observations
Claremont	South Branch Sugar River	-safe for swimming from Blood Br. to Trow Br. -8.24 miles not safe for swimming (E. coli); 17.02 miles impaired for aquatic life due to low pH	
	Sugar River <i>** primary drinking water source for Claremont, after treatment</i>	-unsafe for swimming (E. coli) for 19.03 miles in Newport and Claremont. Aluminum impairs 15.91 miles. Aquatic life impaired by low pH in 20.14 miles and by low dissolved oxygen in 1.3 miles, partly due to municipal and industrial discharges in Newport and Sunapee.	
Charlestown	Little Sugar River	not assessed in most places; safe for swimming in 7 miles above Chase Brook	One of the few wild trout tribs to the Connecticut in this region. Intensively used Arabian horse farm near its mouth, then a couple of fairly pristine miles upstream, then the Unity Stage Road runs parallel to it for another couple of miles. Because of the bridge washout in October 2005, that road is getting a lot less traffic. (The detour is a Class 6 road through the woods). It is a beautiful little river. Watershed largely forested, with dispersed development and good riparian buffer. Bottom is mostly cobbles and gravel. No evident water quality problems. Popular swimming hole at Rt. 12 RR bridge. Scenic. Japanese knotweed. Salmon fry released here. Natural Heritage Bureau identified several rare plant species in the floodplain.
	Meadow Brook	not assessed	
	Gully Brook	not assessed	
	Ox Brook	not assessed	Watershed partly forested, some agriculture. Good riparian buffer. Sandy/silty bottom, waterfall, some erosion, some riprap. No evident WQ problems. History of wetlands violations in area.
	Beaver Brook	not assessed	
	Clay Brook	safe for swimming in lowest mile; fish bio-assessments indicate 1.11 miles impaired for aquatic life use	Watershed partly forested, some agriculture and dispersed development. Bottom largely small boulders, cobbles, gravel; some silt. Waterfall, some erosion, some riprap. Hall's Pond and old reservoirs on Hemlock Road. Nearby well. No evident WQ problems. Trash on bank. Some intensive cropping.
	Dickerson Brook	not assessed	Watershed largely in agriculture, some forest, and some development. Bottom largely silty. Waterfall, 25-50% eroded banks, WQ problems include turbidity and odor. Concern about cattle trampling and contaminating the brook. Lower course of brook is denuded. Water milfoil at mouth of brook, purple loosestrife along banks near mouth.
	Hackett Brook	not assessed	mostly forested

Vermont

TOWN where trib. enters CT R.	Tributary	STATE ASSESSMENT Draft 2008 Section 303(d) List of Impaired Surface Waters and 2002 VT Surface Water Quality Assessment Report and	Local observations
Hartland	Ottauquechee River	Controlled by NH Hartland Flood Control dam. 86%forested watershed. Phosphorus levels high in N. Hartland reservoir 1997; CSOs and golf course in Quechee. 0.9 miles below N. Hartland dam, pathogens from failing septic systems, fertilized turf, and horse farms, fluctuating flows, and warm, turbid water releases from dam result in "partial support" of river uses and values. Roaring Brook, a tributary of the Ottauquechee River, is affected by stormwater runoff, land development, and erosion. Leachate from the Bridgewater landfill is entering the river via a wetland. Several other tributaries are affected by sediment from road runoff, nutrients from horse recreation activity and golf course runoff, and sediment. EPA 2000 Sediment Study - sampled just above confluence with CT R., site # SD-090L, found 5 polyaromatic hydrocarbons (PAHs) exceeded low effects levels: phenanthrene, fluoranthene, pyrene, chrysene, benzo(a)pyrene	
	Lull's Brook	First 8 miles from the mouth have threats to aquatic biota/habitat, contact recreation, and aesthetics due to nutrients, pathogens, sediment from horse pasture with no buffers, horse manure on streambanks, gravel road runoff (1999). Wild brook trout.	
Windsor	Mill Brook	From Mill Pond Dam to CT River, partial support of aesthetics, aquatic biota/habitat, secondary contact recreation due to sedimentation, nutrients, and flow and habitat alteration caused by upstream impoundment and its desilting, urban and road runoff, and land development. Geomorphic assessment underway by State of VT .WQ monitoring by RPC and Mill Brook Association beginning 1997; also bank erosion survey 2000. From Reading through Brownsville to Mill Pond, stream may be polluted by E. coli, temperature, and sediment, and needs further assessment.	
Weathersfield	Spencer Brook	Loss of riparian vegetation is a threat, cows have access to stream. A lot of algae observed in stream.(1999).	
Weathersfield	Mill, Blood, Barkmill Brooks	No WQ problems seen; wild brook trout; water clarity excellent, water temps in 60sF (1999).	
Springfield	Black River	From mouth to 2.8 miles upstream, unsafe for contact recreation, poor aesthetics; polluted by E. coli and thick algal growth from CSOs, municipal WWTF, and road runoff. Threats from suspended solids, pH and toxic compounds from CSOs, urban and road runoff and a hazardous waste site. CSO abatement being phased. Roof drain disconnection work done in 2006. Partially controlled by N. Springfield Flood Control dam. Watershed 75% forested. Aquatic community rated "good." Some toxic urban impact suspected. Jones & Lamson site had contaminants of concern including PCBs, VOC, lead, #6 fuel on its 2 sites in Springfield. Some cleanup work done but it is not clear if flood drains from one of the plants have been cleaned and sealed. The drains (presumably connected to outfall pipes) are one of potential sources of pollution to the Black River. Town has achieved compliance with phosphorus effluent limit North Branch above Stoughton Pond is eroding and may be polluted by sediment, nutrients, and E. coli. Jewell Brook, a tributary in Ludlow, may be contaminated with arsenic in sediment from a former mill, and needs further assessment.	The CSO work is split up into six different phases. Four of the six phases completed so far. Fifth phase beginning in May 2007. Expect all CSOs will be eliminated by mid-2008.
Rockingham	Commissary Brook	Habitat degradation due to sedimentation & turbidity from channel modification, logging, discharges and erosion. Needs further assessment.	Subject of strong local concern. VT and NH agencies appear to believe the problem is too difficult to be solved; EPA should look at the site. Head cuts may be forming that could threaten other properties.

	Williams River	<p>From 2007 Draft Watershed Plan: The Williams River is 25 miles long and drains 117 square miles. Much of the upper basin is rugged, hilly land with steep slopes and poor drainage. At its lower end in Rockingham is an 80-foot gorge with pools, potholes, and small cascades. The Brockways Mills hydro dam has downstream fish passage. The upper portions of the mainstem Williams River and Middle Branch, as well as most of the smaller tributaries support healthy populations of wild native brook trout, and in some cases, wild brown trout. However, high summer water temperatures limit trout populations in the lower mainstem. Salmon have been stocked in the Williams River since 1993. One returning adult salmon entered the Williams River in 1999. The macro-invertebrate populations are considered good to very good. The lower Williams River (Mouth Upstream to Middle Branch Confluence) is compromised by sediments, nutrients, and temperature problems due to encroachments, poor riparian condition, and runoff from agriculture and development.</p>	
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2008 VT draft 303(d) List of Impaired Surface Waters and 2008 draft VT List of Priority Surface Waters Outside the Scope of Clean Water Act Section 303(d)