

Basin 11: Williams, West, and Saxtons Rivers

Including the following sites:

Jelly Mill Falls	Stickney Brook, Dummerston
Hamilton Falls	Cobb Brook, Jamaica
Saxtons River Falls	Saxtons River, Westminster
Twin Falls	Saxtons River, Westminster
Rock River Cascades	Rock River, Dover
Pikes Falls	Kidder Brook, Jamaica
Brockway Mills Gorge	Williams River, Rockingham

See the appendix for:

Wardsboro Brook Ravine	Wardsboro Brook, Jamaica
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This basin includes three watersheds in southeastern Vermont. For the most part, they include hilly uplands rather than mountains. The area is fairly well settled and not very mountainous and it is possible that we have seen most of the larger sites in the basin.

Three sites in this basin are of high importance: Hamilton Falls, a popular recreational site which also has a secluded chain of pools below the main falls; the Rock River Cascades, a beautiful chain of pools and cascades; and Brockway Mills Gorge, a large undammed gorge.

Report 67, Jelly Mill Falls, Stickney Brook, Dummerston, Windham County, Vermont.

Site 542, surveyed on 22 July 1983 by J.C. Jenkins.

A series of stepwise falls and cascades with broad flat slabs; popular local swimming area.

Atlas map 3, USGS Brattleboro 15' quadrangle. Right next to road, right above where the brook crosses Route 30.

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The site is in hemlock-hardwoods forest, adjacent to a dirt road and one-quarter mile from a main road, just above the mouth of the brook. There are houses nearby but not visible from the site; much of the surrounding land is wooded.

The site is on a mountain stream averaging ten feet wide. Water is very clean.

The falls consist of a series of cascades and short drops, and are about 30-50 feet wide and 100-150 feet long with a total drop of about 30 feet. The rock is apparently the Devonian Waits River but seems more massive and solid than is normal for this formation elsewhere. There are a series of horizontal joints and the rock has broken off in big blocks making stepwise falls. There are several shallow pools that are used for bathing.

No plant lists were made; the site itself is too scoured to support much except several mosses, particularly Hygrohypnum sp. and Eurhynchium riparioides. A few other mosses grow at the edges but the diversity is low, owing more to the lack of good rock faces than to disturbance or acidity. The common species are:

Coniocephalum conicum	Pellia epiphylla
Thuidium sp.	Ceratodon purpureus
Brachythecium rivulare	Hypnum lindbergii

The falls are a popular bathing and party place. The woods are somewhat trampled and there are small amounts of litter, but overall the area is in good condition.

A pretty place with nice rocks, and a favorite bathing and sitting and party place.

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Summary: Woodland setting with road near, nice rocks, poor botany, no seclusion, some trash, very clean water, fairly heavy recreational use, popular for bathing and parties.

Report 68, Hamilton Falls, Cobb Brook, Jamaica, Windham County, Vermont.

Site 518, described from ten visits (1973-1983) by J.C. Jenkins.

Steep cascade with pools above and below, very popular for swimming; chain of cascades in the woods with falls and pools.

Atlas map 7, USGS Londonderry 15' quadrangle. Main cascade is just south of bridge where Turkey Mountain Road crosses the bridge.

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The site is in the woods, about 50 yards from a dirt road and one-quarter mile from a house and small sawmill. It is undisturbed except for trampling.

Cobb Brook is a small mountain stream, averaging ten to 15 feet wide. The water is very clean.

The main falls are on a mountain slope, in pine-hemlock woods. They are more or less in the open and get a lot of sun. From the bridge going downstream there is a small ravine with low rock walls and pools, then a small falls about five feet high, and then a pothole 25 feet across and 15 feet deep with about eight feet of water in it. At the edge of a pothole is a lip directly overlooking the main falls. The main falls are a steep cascade 40-50 feet high. Below it are two more pools.

Below the falls there is about a mile of steep wooded ravine in which there are a series of small falls, pools, and cascades. None of these features is as striking as the main falls but taken together they make a beautiful area that would be of state importance even without the main falls.

The falls probably occur at the contact between the Hoosic and Cavendish schists, both garnet containing schists of Cambrian age. The contact is not visible (at least to a botanist) in the field. The rock is brown and blue schist with nice but not extravagant sculpturing, and is easy to climb and makes good potholes.

No rare plants occur. The main falls have very few plants, but the lower cascade is a good moss and liverwort area; no list is available yet, and so far the diversity is good but not exceptional. No lime occurs and the species all seem to be the reasonably standard ones expected on wet acid rocks.

The falls are much used for swimming and picnicking. They were formerly owned by the Southern Vermont Conservation Society and now by the state and the site is now a designated State Natural Area of the Vermont Department of Forests, Parks & Recreation.



HAMILTON FALLS

There have been a half dozen or so deaths there in the last 20 years. A sign warns of the danger. We suggest that the sign would have greater effect if it listed the names of the people killed there and the dates of the accident. The present warning is fairly meek, and since the danger is serious the sign ought to be as scary as possible.

A fine place; the main falls are big and sunny and pretty - we know of few places like them; the lower chain of pools and cascades is hardly used and not as spectacular but rates high for beauty, privacy, length and botany.

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Summaries:

1. Upper falls: Woodland setting, fine to spectacular rocks, average botany, no seclusion and wildness, clean site, very clean water, great swimming, very popular for parties and swimming, dangerous steep rocks and history of fatal accidents.
2. Lower chain of cascades and pools: Woodland setting, fine rocks, exemplary botany, wild and private, no use, no trash, very clean water.

HIGH IMPORTANCE: Exceptional wild chain of pools and cascades, major recreational site, impressive large cascade, State Natural Area.

Report 69, Saxtons River Falls, Saxtons River, Westminster, Windham County, Vermont.

Site V, surveyed in August 1983 by J.C. Jenkins.

Old dam site, with new dam construction and road relocation planned.

Atlas map 8, USGS Bellows Falls 15' quadrangle. Site is under Route 5, about one-quarter mile south of the junction with Route 121.

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The site is at the edge of town (Bellows Falls), with a major bridge (Route U.S. 5), houses, old mill foundations, etc. in the immediate vicinity. The river runs in a wooded gorge 50-100 feet deep. From the site itself you see trees and the road but not houses.

The river is a medium-sized lowland stream, near its confluence with the Connecticut, averaging over 30 feet wide. It receives treated waste about 12 miles upstream in Saxtons River. There is a two mile Class C zone directly below Saxtons River and below that the river becomes Class B. Some mild pollution was noted (algae, sediment), and a slight smell but the water was basically pleasant.

Site consists of an old dam about 100 feet long by 15 feet high, and above that a gorge about 200 feet long with rock walls to 20 feet high. Above the gorge there is a single set of sheer ledges about 50 feet high. The rock is a granitic gneiss of Devonian age. It is acid and makes smooth, plantless cliffs.

Upstream of the gorge there are extensive cobble and river bars.

No rare plants were found in the gorge or on the bars. Because the rock is granitic there are comparatively few plants at all in the gorge. No lists were made.

There is a pool below the timber crib dam but there are no cascades or pools above the dam. The area is used by fisherman and for swimming, but is not a popular recreation site.

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Summary: Urban setting, site of proposed hydroelectric project, average rocks, poor botany, no seclusion, clean site, fair swimming, mildly polluted water, only occasional use.



SAXTONS RIVER FALLS

Report 70, Twin Falls, Saxtons River, Westminster, Windham County, Vermont.

Site W, surveyed in August 1983 by J.C. Jenkins.

A small gorge with small cascades and falls; popular swimming and party site.

Atlas map 8, USGS Bellows Falls 15' quadrangle. On a side road off 121, about one mile west of the junction of Routes 121 and 5.

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The site is in the woods, about one-quarter mile from several houses, and about 75 feet from a dirt road. Surrounding woods are hemlock-hardwoods.

The stream is a medium-sized lowland river, about 20-30 feet wide below the site, in a fairly broad wooded valley. Just below the site it enters an alluvial plain. The water receives treated waste 12 miles upstream; it is mildly polluted but not objectionable at the site.

The site consists of several cascades totaling about 150 feet long, dropping perhaps 20-30 feet, with falls up to five feet high. There are a number of exposed ledges overlooking the cascade and a few pools to 15 feet in diameter. There are no large falls, major rock pools, or potholes. The cascade has sloping rock walls eight to 20 feet high and so may be considered a shallow gorge with sloping walls.

The rock is probably a quartz granulite (? Silurian Fitch formation). This formation is supposed to have limy beds but in the vicinity of the falls no limestone outcrops or limestone indicators were seen.

The cascade itself has only a few plants. The following (all common species) were noted:

<i>Panicum lanuginosum</i>	<i>Oxalis europaea</i>
<i>Carex torta</i>	<i>Hieracium</i> sp.
<i>Apocynum cannabinum</i>	<i>Muhlenbergia mexicana</i>
<i>Aster puniceus</i>	<i>Onoclea sensibilis</i>
<i>Panicum clandestinum</i>	<i>Agrostis</i> sp.
<i>Aster simplex</i>	<i>Polygonum cuspidatum</i>
<i>Solidago graminifolia</i>	<i>Solidago rugosa</i>
<i>Solidago juncea</i>	<i>Phalaris arundinacea</i>
<i>Aster cordifolius</i>	<i>Aster lateriflorus</i>
<i>Phalaris arundinacea</i>	<i>Juncus tenuis</i>
<i>Sagina procumbens</i>	<i>Athyrium filix-femina</i>
<i>Deschampsia flexuosa</i>	etc.

There were comparatively few mosses; the channel is too scoured and the walls too exposed. No list was made.

The site is a popular swimming and party place; there was some trash along the paths.

A nice local cascade and a good swimming place, but not distinguished in either size or detail. Pretty but not exceptionally so.

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Summary: Rural setting, average rocks, average botany, not secluded, some trash, mildly polluted water, good swimming, popular place.

Report 71, Rock River Cascades, Rock River, Dover, Windham County, Vermont.

Site 603, surveyed on 8 October 1983 by J.C. Jenkins.

A chain of pools and cascades along the upper parts of a mountain brook; a remote, interesting, lovely place.

Atlas map 7, USGS Wilmington 15' quadrangle. From East Dover go to Goose City, take the dirt road west that follows the stream, park at the last house and ask permission. Bushwhack along the east bank of the stream for about one mile, descend to the stream and follow it up through the cascades.

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The setting is a narrow mountain valley at elevation 1,900-2,300 feet, mostly in hardwoods. There is almost no hemlock, only a little pine, and almost no spruce. Soil is moderately rich: leeks occur in the river bottoms. The nearest house or road is about one mile downstream.

The Rock River is a mountain stream, averaging five to ten feet across, with very clean water. It is moderately steep but not precipitous, and probably has an average gradient through the cascades of 15 degrees. The bottom is variously bedrock, boulders, and sand.

Ascending the stream, there are approximately nine separate cascades or falls and pools. These are typically separated from each other by ten to 50 yards but occasionally meet and overlap. Potholes and carved chutes are common. There are three falls over ten feet high. The largest falls is 15 feet high and 30 feet wide, and has a broad lip from which the water arches out in the classic waterfall manner. There is a cave under the lip which is wet and slippery but has some interesting liverworts.

The pools and cascades vary greatly: there are continuous cascades over boulders, stepwise cascades descending from pool to pool, small gorges with rock walls ten to 15 feet high, and in one place there are seven linked potholes, each spilling into the next.

The rock is a dark schist, slippery under foot (? Cambrian Ottauquechee phyllite schist). It is not described as limy but the diversity of plant species seen and the presence of some lime requiring mosses strongly suggests that there is some lime in the rocks.

Unlike many mountain brooks, this stream has carved its channel rather than just smashed its way down, and in doing so has created rippled rocks, potholes, sculptured walls, and carved channels and chutes. The features are small compared to those on

larger streams, but the individual formations are varied and interesting.

About 30 vascular plants were noted in the stream channel or immediately adjacent to it. This is not a large number but is in fact more than usually diverse for a fairly dark mountain stream.

The cascade is an excellent place for mosses: it has wet rock walls, lots of spray, very little disturbance, and is high enough in the watershed that it is not exceptionally violent in the spring. About 25 species were noted, including one (Thamnobryum alleghaniense) which was not seen elsewhere in this study, and another (Metzgeria conjugata) which so far appears to be rare in Vermont.

The cascades get very little use; they are not well known, and are only occasionally visited. They mean a great deal to the people that visit them.

It is a beautiful place. The individual cascades are fairly small, but each is fine by itself, and seen one after another you are left with a wonderful sense of how the variety of shapes a single stream can produce. The botany is also varied; many plants are seen in one cascade but not another, and the proportions of the common species also change from place to place. The cascades are private and remote and unspoiled; they are at the head of a roadless valley, and in woods that have not been logged for some years. They have great charm, using the word in its precise sense: they are not big or dramatic but are finely made and inviting and memorable; you keep thinking about them and want to come back to them.

The falls are currently privately owned.

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Summary: Mountain setting, fine rocks, exemplary botany, very wild and private, no trash, no regular use, no paths or trails, very clean water, good bathing.

HIGH IMPORTANCE: As fine as any chain of pools and cascades in the state.

Plants Seen at the Rock River Cascades

Mosses and Liverworts

Paraleucobryum longifolium	Pogonatum alpinum
Herzogiella striatella	Atrichum undulatum
Pohlia sp.	Thuidium sp.
Marsupelia emarginata	Mnium punctatum
Hygrohypnum sp.	Hygrohypnum ochraceum
Metzgeria conjugata	Campylium polygamum
Diucranum flagellare	Philonotis sp.
Eurhynchium hians	Pellia epiphylla
Coniocephalum conicum	Thamnobryum alleghaniense
Fissadens adiantoides	Plagiothecium laetum
Bryum sp.	Mnium (double-toothed)
Mnium punctatum	

Vascular plants

Glyceria melicaria	Cinna latifolia
Dennstaedtia punctilobula	Aster divaricatus
Aster lateriflorus	Aster acuminatus
Aster puniceus	Agrostis perennis
Solidago flexicaulis	Viburnum lantanoides
Epilobum sp.	Acer pensylvanicum
Dryopteris intermedia	Dryopteris marginalis
Thelypteris phegopteris	Mitella or Tiarella or both
Hydrocotyle americana	Galium sp.
Laportea canadensis	Carex torta
Oxalis montana	Lycopus uniflorus
Glyceria striata	Viola sp.
Rubus flagellaris	Thalictrum polygamum

Report 72, Pikes Falls, North Branch of Ball Mountain Brook,
Jamaica, Windham County, Vermont.

Site 909, surveyed on 2 October 1983 by P.F. Zika.

Several small woodland cascades.

Atlas map 6, Londonderry 15' quadrangle. From Route 30 in the center of Jamaica take a secondary road southwest. After 0.1 mile fork right (north) and continue another 2.5 miles to a bridge over the North Branch. The houses near here are the Village of Pikes Falls and a pulloff 0.1 mile to the east is the access to the cascades.

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The falls are in second-growth hemlock-hardwoods forest in hill country near the base of Stratton Mountain. There are a few houses within one-quarter of a mile of the cascades.

The North Branch is a small mountain stream averaging about ten feet wide with clear, clean, cold water.

At the falls, the stream flows past a ledge with an odd dike formation, then funnels into a narrow channel and splits into three cascades over a single broad ledge. These cascades are one, three, and seven feet high. Below the cascades the stream runs through a narrow chute (less than four feet wide) and spills into a large pool nearly 50 feet wide. In the spring, water from the lowest cascade shoots halfway across the pool.

The rock is a massive gneiss or quartzite from the Precambrian Mt. Holly formation. There are ledges on either side of the cascade and, in all, there is a 50 foot wide band of exposed rock. There are no potholes or any other sculptured features and the rock has no lime.

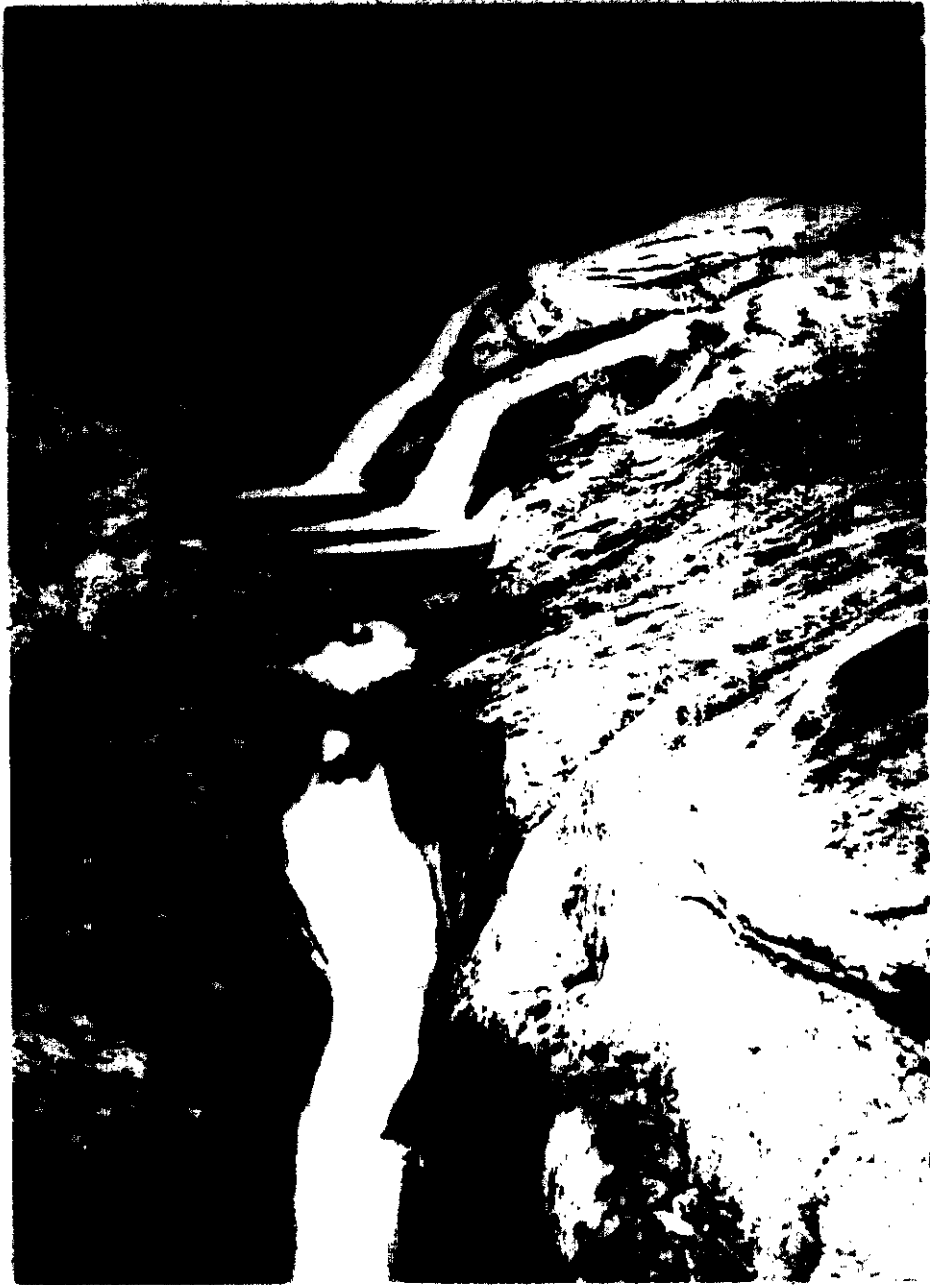
No uncommon vascular plants were present. Bryophytes were not diverse or abundant.

The falls are a popular swimming hole and receive heavy local use. There is an old dump on one bank, but otherwise the area is clean.

A short distance above the falls, there are old foundations, probably of a mill and perhaps even of the sawmill that Isaac Pike built here in 1846.

A pretty place but with no outstanding features.

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PIKES FALLS

Summary: Woodland setting, average rocks, average botany, moderately wild, some trash, clean water, good swimming, popular swimming hole, probably good fishing.

Vascular Plants of Pikes Falls

Aster acuminatus
Salix rigida
Taraxacum officinale
Osmunda claytoniana
Aster puniceus
Fagus grandifolia
Pinus strobus
Tsuga canadensis

Betula alleghaniensis
Betula papyrifera
Rhododendron prionophyllum
Polypodium virginianum
Viburnum alnifolium
Dryopteris intermedia
Dryopteris marginalis
Fragaria virginiana

Report 73, Brockway Mills Gorge, Williams River, Rockingham, Windham County, Vermont.

Site 609, surveyed on 20 October 1983 by P.F. Zika.

A large, deep, winding gorge with a number of small cascades.

Atlas map 12, Saxtons River 15' quadrangle. Take Route 103 north from the center of Rockingham; at about one mile turn right (north). This road crosses the upper end of the gorge in about 0.3 miles.

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The gorge is at the bottom of a deep ravine about 100 yards south of the Village of Brockway Mills. There is a road bridge over the upper end of the gorge, a railroad bridge at the lower end, and houses nearby.

The Williams River is a medium-sized to large lowland river in the vicinity of the site, averaging 75 feet wide and running in an alluvial channel. It receives some treated sewage in Chester (six miles upstream) and perhaps some unofficial sewage in Bartonville. At the gorge, the water is fairly clean but definitely fertile.

The gorge is perhaps 80 feet deep by about 1,000 feet long and about as wide as deep. There are steep rock walls up to 50 feet high. Hence, it is a large gorge, and in fact, one of the three or four largest in the state. The river zigzags within the gorge and descends through potholes, pools and five foot high cascades. There are many potholes eight to ten feet wide and some fine rounded and sculptured rocks.

The bedrock is schist and phyllite of the Standing Pond member of the lower Devonian Waits River formation. It is layered with thin beds of quartz, strikingly colored and carved, and quite pretty. It is at least partially limy.

One rare plant occurs, the fleabane Erigeron hyssopifolius. The species is restricted in Vermont to two alpine areas and several deep limy gorges. The population was well distributed on ledges on both shores of the river; more than 100 plants were present.

Bryophytes were common on damp ledges; no collections were made.

The gorge is quite attractive and receives heavy use from tourists as well as locals. There are good views of it from the road, and a fine view from the railroad bridge. There is good swimming and probably good fishing at the lower end of the gorge. The area is reasonably clean.



BROCKWAY MILLS GORGE

Because of the depth, the gorge is quiet and seems more secluded than it is. There are some beautiful rocks and attractive pools and cascades, and it is both a pretty place to look at and an exciting one to be in. It must be considered one of the five finest large gorges in the state.

The site is threatened by a hydropower proposal. Water would be diverted from the river at the head of the gorge by a dam and reintroduced at the foot of the first main cascade by a tailrace; a minimum flow is required over the bypassed cascade, and the diversion would only affect a short stretch near the upper end of the gorge.

It appears that the proposal is a careful one and will do physical harm to only the upper cascade, and, so far as we can see, should not affect the plants in the gorge. Hence, the question is one of intrusion: at present you have a gorge that is completely natural except for the bridges over it, and is in fact one of the three gorges this large in the whole state that have not been dammed or seriously altered. (The others are the Clarendon Gorge and the deep but shorter gorge at the Big Falls of the Missisquoi.) After development, a powerplant and powerlines will be within the gorge, and since it appears to be a fairly big powerplant, the landscape will be rearranged, as occurs at every sizeable industrial site. The gorge will be largely intact, but the sense of naturalness and wildness will be less, and the landscape will be altered.

In this report, our general recommendation is that, since naturalness and wildness are rare, they should be preserved when possible, especially in the case of large sites of types that are themselves rare in the state. This is especially so when, as at Brockway Mills, a large secluded natural area occurs in an area that is otherwise farmed and civilized. Our feeling is that since very few large waterfalls or gorges are both natural and wild, and since when these qualities are lost, they are irrecoverable, they should be preserved where they can be.

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Summary: Rural setting, fine rocks, one rare plant species, moderately wild and secluded, some trash, mild pollution, good swimming, very popular for scenery, photography, walking, and fishing. Threatened by a hydro proposal.

HIGH IMPORTANCE: Beautiful place, important tourist site, rare landform.

Vascular Plants of Brockway Mills Gorge

Solidago puberula	Solidago graminifolia
Apocynum androsaemifolium	Juncus brevicaudatus
Parthenocissus quinquefolia	Poa compressa
Panicum sp.	Muhlenbergia frondosa
Erigeron canadensis	Salix rigida
Erigeron hyssopifolius	Leersia oryzoides
Aster divaricatus	Digitalis sanguinalis
Aster lateriflorus	Taraxacum officinale
Clematis virginiana	Bidens frondosa
Lycopus americana	Polygonum sp.
Polygonum cuspidatum	Juncus dudleyi
Athyrium filix-femina	Aster novae-belgii
Osmunda regalis	Potentilla canadensis
Houstonia caerulea	Osmunda claytoniana
Fragaria virginiana	Phleum pratense
Acer rubrum	Eupatorium maculatum
Hypericum perforatum	Achillea millefolium
Solidago canadensis	Betula papyrifera