

Heritage Gas Pictou County Natural Gas Pipeline Project - June 17 - June 21 2013

Surveyor: Tom Neily Heritage Gas Early 2013 - Tom Neily Plant Survey Data

Species	Common Name	S-Rank
Middle River Floodplain		
<i>Prunus virginiana</i>	Choke Cherry	S5
<i>Impatiens glandulifera</i>	Policeman's Helmet	SE
<i>Rubus allegheniensis</i>	Allegheny Blackberry	S5
<i>Heracleum maximum</i>	Cow Parsnip	S4S5
<i>Phalaris arundinacea</i>	Reed Canary Grass	S5
<i>Onoclea sensibilis</i>	Sensitive Fern	S5
<i>Arisaema triphyllum</i>	Swamp Jack-In-The-Pulpit	S4S5
<i>Alnus incana</i>	Speckled Alder	S5
<i>Hesperis matronalis</i>	Dame's Rocket	SE
<i>Solanum dulcamara</i>	Climbing Nightshade	SE
<i>Sambucus nigra ssp. canadensis</i>	Common Elderberry	S5
<i>Carex gynandra</i>	A Sedge	S5
<i>Geum laciniatum</i>	Rough Avens	S4S5
<i>Lysimachia nummularia</i>	Creeping Jennie	SE
<i>Galium palustre</i>	Marsh Bedstraw	S5
<i>Eupatorium maculatum</i>	Spotted Joe-Pye Weed	S5
<i>Echinocystis lobata</i>	Wild Mock-Cucumber	SE
<i>Galeopsis tetrahit</i>	Brittle-Stem Hempnettle	SE
<i>Hypericum ellipticum</i>	Pale St. John's-Wort	S5
<i>Galium mollugo</i>	Great Hedge Bedstraw	SE
<i>Urtica dioica</i>	Stinging Nettle	S4
<i>Spiraea alba</i>	Narrow-Leaved Meadow-Sweet	S5
<i>Ranunculus acris</i>	Tall Butter-Cup	SE
<i>Cornus alternifolia</i>	Alternate-Leaf Dogwood	S5
<i>Glechoma hederacea</i>	Ground Ivy	SE
<i>Thalictrum pubescens</i>	Tall Meadow-Rue	S5
<i>Rosa sp</i>	not a species at risk	n/a
<i>Rumex acetosa</i>	Garden Sorrel	SE
<i>Senecio jacobaea</i>	Tansy Ragwort	SE
<i>Galium sp</i>	not a species at risk	n/a
<i>Frangula alnus</i>	Glossy Buckthorn	SE
<i>Vicia cracca</i>	Tufted Vetch	SE
<i>Calystegia sepium</i>	Hedge Bindweed	S5
<i>Viburnum opulus</i>	Guelder-Rose Viburnum	S5
<i>Juncus effusus</i>	Soft Rush	S5
<i>Juncus pelocarpus</i>	Brown-Fruited Rush	S5
<i>Crataegus sp</i>	A Hawthorn	not at risk sp
<i>Epilobium sp</i>	A Epilobium	species to be confirmed
<i>Scrophularia sp (likely nodosa - SE)</i>	A Figwort	not at risk sp
<i>Picea glauca</i>	White Spruce	S5
<i>Carex intumescens</i>	Bladder Sedge	S5

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Species	Common Name	S-Rank
<i>Populus tremuloides</i>	Quaking Aspen	S5
<i>Carex stipata</i>	Stalk-Grain Sedge	S5
<i>Sanguinaria canadensis</i>	Bloodroot	S3S4
<i>Salix discolor</i>	Pussy Willow	S5
<i>Stachys sp</i>	A Stachys	species to be confirmed
<i>Graminoid?collected</i>	A grass	not at risk sp
<i>Cicuta maculata</i>	Spotted Water-Hemlock	S5
<i>Humulus lupulus var. lupuloides</i>	Common Hop	S1? To be confirmed

Mixed Regeneration/Abandoned Farmland

20 T 518677 5047453 - 20 T 518895 5047512

<i>Betula populifolia</i>	Gray Birch	S5
<i>Populus tremuloides</i>	Quaking Aspen	S5
<i>Vicia cracca</i>	Tufted Vetch	SE
<i>Centaurea nigra</i>	Black Starthistle	SE
<i>Taraxacum officinale</i>	Common Dandelion	SE
<i>Prunus virginiana</i>	Choke Cherry	S5
<i>Pinus strobus</i>	Eastern White Pine	S5
<i>Pinus sylvestris</i>	Scotch Pine	SE
<i>Picea glauca</i>	White Spruce	S5
<i>Trifolium pratense</i>	Red Clover	SE
<i>Phleum pratense</i>	Meadow Timothy	SE
<i>Rosa sp</i>	A rose	not at risk sp
<i>Rumex acetosa</i>	Garden Sorrel	SE
<i>Sorbus americana</i>	American Mountain-Ash	S5
<i>Equisetum arvense</i>	Field Horsetail	S5
<i>Hypericum ellipticum</i>	Pale St. John's-Wort	S5
<i>Alnus incana</i>	Speckled Alder	S5
<i>Crataegus sp</i>	A Hawthorn	not at risk sp
<i>Vaccinium angustifolium</i>	Late Lowbush Blueberry	S5
<i>Potentilla simplex</i>	Old-Field Cinquefoil	S5
<i>Spiraea alba</i>	Narrow-Leaved Meadow-Sweet	S5
<i>Rubus pubescens</i>	Dwarf Red Raspberry	S5
<i>Rubus allegheniensis</i>	Allegheny Blackberry	S5
<i>Ranunculus acris</i>	Tall Butter-Cup	SE
<i>Fragaria virginiana</i>	Virginia Strawberry	S5
<i>Salix discolor</i>	Pussy Willow	S5
<i>Malus pumila</i>	Common Apple	SE
<i>Galium palustre</i>	Marsh Bedstraw	S5
<i>Scirpus atrocinctus</i>	Black-Girdle Bulrush	S5
<i>Phalaris arundinacea</i>	Reed Canary Grass	S5
<i>Carex scoparia</i>	Pointed Broom Sedge	S5
<i>Tanacetum vulgare</i>	Common Tansy	SE

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Species	Common Name	S-Rank
Disturbed Urban		
20 T 518895 5047512 - 20 T 519116 5047538		
<i>Salix discolor</i>	Pussy Willow	S5
<i>Onoclea sensibilis</i>	Sensitive Fern	S5
<i>Spiraea alba</i>	Narrow-Leaved Meadow-Sweet	S5
<i>Juncus effusus</i>	Soft Rush	S5
<i>Galium palustre</i>	Marsh Bedstraw	S5
<i>Betula populifolia</i>	Gray Birch	S5
<i>Glechoma hederacea</i>	Ground Ivy	SE
<i>Athyrium filix-femina</i>	Lady-Fern	S5
<i>Thalictrum pubescens</i>	Tall Meadow-Rue	S5
Old Field		
<i>Oxalis acetosella</i>	Wood Sorrel	S5
<i>Fraxinus americana</i>	White Ash	S5
<i>Crataegus sp</i>	not a species at risk	n/a
<i>Prunus serotina</i>	Wild Black Cherry	S5
<i>Ostrya virginiana</i>	Eastern Hop-Hornbeam	S5
<i>Prunus virginiana</i>	Choke Cherry	S5
<i>Lonicera canadensis</i>	American Fly-Honeysuckle	S5
<i>Hieracium pilosella</i>	Mouseear	SE
<i>Anthoxanthum odoratum</i>	Sweet Vernal Grass	SE
<i>Abies balsamea</i>	Balsam Fir	S5
<i>Betula papyrifera</i>	Paper Birch	S5
<i>Vicia cracca</i>	Tufted Vetch	SE
<i>Luzula multiflora</i>	Common Woodrush	S5
<i>Spiraea alba</i>	Narrow-Leaved Meadow-Sweet	S5
<i>Chrysanthemum leucanthemum</i>	Ox-eye Daisy	SE
<i>Potentilla intermedia</i>	Downy Cinquefoil	SE
<i>Frangula alnus</i>	Glossy Buckthorn	SE
<i>Geum rivale</i>	Purple Avens	S5
<i>Galeopsis tetrahit</i>	Brittle-Stem Hempnettle	SE
<i>Arctium vulgare</i>	European Burdock	SE
Coniferous Woods		
20 T 519546 5047732		
<i>Picea abies</i>	Norway Spruce	SE
<i>Larix laricina</i>	American Larch	S5
<i>Frangula alnus</i>	Glossy Buckthorn	SE
<i>Prunus serotina</i>	Wild Black Cherry	S5
<i>Dryopteris intermedia</i>	Evergreen Woodfern	S5
<i>Maianthemum canadense</i>	Wild Lily-of-The-Valley	S5
<i>Carex arctata</i>	Black Sedge	S5
<i>Sorbus americana</i>	American Mountain-Ash	S5

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Species	Common Name	S-Rank
<i>Trientalis borealis</i>	Northern Starflower	S5
<i>Acer rubrum</i>	Red Maple	S5
<i>Carex intumescens</i>	Bladder Sedge	S5
<i>Picea glauca</i>	White Spruce	S5
<i>Osmunda claytoniana</i>	Interrupted Fern	S5
<i>Pteridium aquilinum</i>	Bracken Fern	S5
<i>Quercus rubra</i>	Northern Red Oak	S5
<i>Abies balsamea</i>	Balsam Fir	S5
<i>Viburnum nudum</i>	Possum-Haw Viburnum	S5
<i>Pinus strobus</i>	Eastern White Pine	S5
<i>Vaccinium angustifolium</i>	Late Lowbush Blueberry	S5
<i>Cypripedium acaule</i>	Pink Lady's-Slipper	S5

Wetland

20 T 519719 5047649

<i>Carex arctata</i>	Black Sedge	S5
<i>Betula populifolia</i>	Gray Birch	S5
<i>Alnus incana</i>	Speckled Alder	S5
<i>Rubus pubescens</i>	Dwarf Red Raspberry	S5
<i>Carex stipata</i>	Stalk-Grain Sedge	S5
<i>Vaccinium angustifolium</i>	Late Lowbush Blueberry	S5
<i>Iris versicolor</i>	Blueflag	S5
<i>Carex trisperma</i>	Three-Seed Sedge	S5
<i>Cypripedium acaule</i>	Pink Lady's-Slipper	S5
<i>Cornus canadensis</i>	Dwarf Dogwood	S5
<i>Kalmia angustifolia</i>	Sheep-Laurel	S5
<i>Lycopus uniflorus</i>	Northern Bugleweed	S5
<i>Carex echinata</i>	Little Prickly Sedge	S5
<i>Symphotrichum puniceum</i>	Swamp Aster	S5
<i>Carex gynandra</i>	A Sedge	S5
<i>Spiraea alba</i>	Narrow-Leaved Meadow-Sweet	S5
<i>Lysimachia terrestris</i>	Swamp Loosestrife	S5
<i>Thelypteris palustris</i>	Marsh Fern	S5
<i>Galium palustre</i>	Marsh Bedstraw	S5
<i>Viola cucullata</i>	Marsh Blue Violet	S5
<i>Carex magellanica</i>	A Sedge	S5
<i>Osmunda cinnamomea</i>	Cinnamon Fern	S5
<i>Rhododendron canadense</i>	Rhodora	S5

Abandoned Farmland

20 T 512516 5044662

<i>Alnus incana</i>	Speckled Alder	S5
<i>Betula papyrifera</i>	Paper Birch	S5
<i>Abies balsamea</i>	Balsam Fir	S5

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Species	Common Name	S-Rank
<i>Picea glauca</i>	White Spruce	S5
<i>Rubus allegheniensis</i>	Allegheny Blackberry	S5
<i>Maianthemum canadense</i>	Wild Lily-of-The-Valley	S5
<i>Spiraea alba</i>	Narrow-Leaved Meadow-Sweet	S5
<i>Frangula alnus</i>	Glossy Buckthorn	SE
<i>Cypripedium acaule</i>	Pink Lady's-Slipper	S5
<i>Aralia nudicaulis</i>	Wild Sarsaparilla	S5
<i>Carex stipata</i>	Stalk-Grain Sedge	S5
<i>Carex scoparia</i>	Pointed Broom Sedge	S5
<i>Ranunculus acris</i>	Tall Butter-Cup	SE
<i>Potentilla simplex</i>	Old-Field Cinquefoil	S5
<i>Anthoxanthum odoratum</i>	Sweet Vernal Grass	SE
<i>Silene vulgaris</i>	Maiden's Tears	SE
<i>Cerastium arvense</i>	Mouse-Ear Chickweed	S4?
<i>Typha latifolia</i>	Broad-Leaf Cattail	S5
<i>Alnus incana</i>	Speckled Alder	S5
<i>Erigeron strigosus</i>	Daisy Fleabane	S5
<i>Cornus alternifolia</i>	Alternate-Leaf Dogwood	S5
<i>Salix alba</i>	White Willow	SE
<i>Tsuga canadensis</i>	Eastern Hemlock	S4S5
<i>Amelanchier sp</i>	not a species at risk	n/a
<i>Sedum telephium</i>	Witch's-Moneybags	SE
<i>Equisetum sylvaticum</i>	Woodland Horsetail	S5
<i>Vicia sativa</i>	Spring Vetch	SE
<i>Sisyrinchium montanum</i>	Strict Blue-Eyed-Grass	S5
<i>Moehringia lateriflora</i>	Grove Sandwort	S5
<i>Epigaea repens</i>	Trailing Arbutus	S5
<i>Daucus carota</i>	Wild Carrot	SE
<i>Rhinanthus minor</i>	Little Yellow-Rattle	S5
<i>Lysimachia vulgaris</i>	Garden Loosestrife	SE
Black Spruce Woods		
20 T 520953 5048026		
<i>Picea mariana</i>	Black Spruce	S5
<i>Kalmia angustifolia</i>	Sheep-Laurel	S5
<i>Cornus canadensis</i>	Dwarf Dogwood	S5
<i>Pteridium aquilinum</i>	Bracken Fern	S5
<i>Epigaea repens</i>	Trailing Arbutus	S5
<i>Carex echinata</i>	Little Prickly Sedge	S5
<i>Coptis trifolia</i>	Goldthread	S5
<i>Acer rubrum</i>	Red Maple	S5
<i>Vaccinium myrtilloides</i>	Velvetleaf Blueberry	S5
<i>Vaccinium angustifolium</i>	Late Lowbush Blueberry	S5

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Species	Common Name	S-Rank
<i>Nemopanthus mucronatus</i>	Mountain Holly	S5
<i>Viburnum nudum</i>	Possum-Haw Viburnum	S5
<i>Abies balsamea</i>	Balsam Fir	S5
<i>Gaultheria procumbens</i>	Teaberry	S5
<i>Gaultheria hispidula</i>	Creeping Snowberry	S5
<i>Trientalis borealis</i>	Northern Starflower	S5
<i>Aralia nudicaulis</i>	Wild Sarsaparilla	S5
<i>Lycopodium clavatum</i>	Running Pine	S5
<i>Lycopodium obscurum</i>	Tree Clubmoss	S5
<i>Acer pensylvanicum</i>	Striped Maple	S5
<i>Aster acuminatus</i>	Wood Aster	S5
<i>Osmunda claytoniana</i>	Interrupted Fern	S5
<i>Carex trisperma</i>	Three-Seed Sedge	S5
<i>Carex crinita</i>	Fringed Sedge	S4S5
Wetland		
20 T 520616 5047920		
<i>Osmunda cinnamomea</i>	Cinnamon Fern	S5
<i>Carex trisperma</i>	Three-Seed Sedge	S5
<i>Ranunculus acris</i>	Tall Butter-Cup	SE
<i>Onoclea sensibilis</i>	Sensitive Fern	S5
<i>Chelone glabra</i>	White Turtlehead	S5
<i>Aralia nudicaulis</i>	Wild Sarsaparilla	S5
<i>Eupatorium maculatum</i>	Spotted Joe-Pye Weed	S5
<i>Linnaea borealis</i>	Twinflower	S5
<i>Impatiens capensis</i>	Spotted Jewel-Weed	S5
<i>Cardamine pensylvanica</i>	Pennsylvania Bitter-Cress	S5
<i>Hydrocotyle americana</i>	American Water-Pennywort	S5
<i>Symphotrichum puniceum</i>	Swamp Aster	S5
<i>Clematis virginiana</i>	Virginia Virgin-Bower	S5
<i>Dryopteris cristata</i>	Crested Shield-Fern	S5
<i>Glyceria striata</i>	Fowl Manna-Grass	S5
<i>Viola sp</i>	not a species at risk	n/a
Mixed Woods		
<i>Fraxinus americana</i>	White Ash	S5
<i>Clintonia borealis</i>	Clinton Lily	S5
<i>Trientalis borealis</i>	Northern Starflower	S5
<i>Picea glauca</i>	White Spruce	S5
<i>Pinus sylvestris</i>	Scotch Pine	SE
<i>Corylus cornuta</i>	Beaked Hazelnut	S5
<i>Diervilla lonicera</i>	Northern Bush-Honeysuckle	S5
<i>Luzula multiflora</i>	Common Woodrush	S5
<i>Gymnocarpium dryopteris</i>	Northern Oak Fern	S5

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Species	Common Name	S-Rank
<i>Phegopteris connectilis</i>	Northern Beech Fern	S5
<i>Thelypteris palustris</i>	Marsh Fern	S5
<i>Thelypteris noveboracensis</i>	New York Fern	S5
<i>Betula alleghaniensis</i>	Yellow Birch	S5
<i>Packera schweinitziana</i>	Robbins Squaw-Weed	S4S5
<i>Carex gracillima</i>	Graceful Sedge	S4S5
<i>Carex leptonevia</i>	Finely-Nerved Sedge	S5
<i>Eleocharis obtusa</i>	Blunt Spike-Rush	S4S5
<i>Eriophorum vaginatum</i>	Tussock Cotton-Grass	S5
Wetland Priority Plant		
<i>Carex wiegandii</i>	Wiegand's Sedge	S1
	5 tufts at east edge of wetland in sphagnum	

TYPICAL WETLAND SPECIES FROM DELINEATION

No priority species identified unless noted above

Wetland 0512658 5045114

<i>Abies balsamea</i>	Balsam Fir	S5
<i>Picea mariana</i>	Black Spruce	S5
<i>Cypripedium acaule</i>	Pink Lady's-Slipper	S5
<i>Maianthemum canadense</i>	Wild Lily-of-The-Valley	S5
<i>Kalmia angustifolia</i>	Sheep-Laurel	S5

Wetland 0511607 5044854

<i>Picea mariana</i>	Black Spruce	S5
<i>Abies balsamea</i>	Balsam Fir	S5
<i>Picea rubens</i>	Red Spruce	S5
<i>Ilex verticillata</i>	Winterberry	S5
<i>Betula populifolia</i>	Gray Birch	S5
<i>Osmunda cinnamomea</i>	Cinnamon Fern	S5
<i>Kalmia angustifolia</i>	Sheep-Laurel	S5
<i>Clintonia borealis</i>	Clinton Lily	S5
<i>Trientalis borealis</i>	Northern Starflower	S5
<i>Carex trisperma</i>	Three-Seed Sedge	S5

Wetland 0512658 5045114

<i>Picea mariana</i>	Black Spruce	S5
<i>Acer rubrum</i>	Red Maple	S5
<i>Larix laricina</i>	Larch	S5
<i>Rhododendron canadense</i>	Rhodora	S5

Wetland 0520606 5047922

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Species	Common Name	S-Rank
<i>Picea glauca</i>	White Spruce	S5
<i>Betula alleghaniensis</i>	Yellow Birch	S5
<i>Betula populifolia</i>	Gray Birch	S5
<i>Osmunda cinnamomea</i>	Cinnamon Fern	S5
<i>Chelone glabra</i>	Turtlehead	S5
<i>Impatiens capensis</i>	Spotted Jewel-Weed	S5
<i>Ranunculus acris</i>	Tall Butter-Cup	SE
<i>Hydrocotyle americana</i>	American Water-Pennywort	S5
<i>Chrysosplenium americanum</i>	Golden Saxifrage	S5
<i>Viola cucullata</i>	Marsh Blue Violet	S5
<i>Galium palustre</i>	Marsh Bedstraw	S5

Wetland 0520798 5047973

<i>Acer rubrum</i>	Red Maple	S5
<i>Abies balsamea</i>	Balsam Fir	S5
<i>Picea rubens</i>	Red Spruce	S5
<i>Ilex verticillata</i>	Winterberry	S5
<i>Osmunda claytoniana</i>	Interrupted Fern	S5
<i>Carex gynandra</i>	A Sedge	S5
<i>Coptis trifolia</i>	Goldthread	S5
<i>Cornus canadensis</i>	Dwarf Dogwood	S5
<i>Aralia nudicaulis</i>	Wild Sarsaparilla	S5

Wetland 05200357 5047822

<i>Acer rubrum</i>	Red Maple	S5
<i>Abies balsamea</i>	Balsam Fir	S5
<i>Picea mariana</i>	Black Spruce	S5
<i>Alnus incana</i>	Speckled Alder	S5
<i>Onoclea sensibilis</i>	Sensitive Fern	S5
<i>Equisetum sylvaticum</i>	Woodland Horsetail	S5
<i>Calamagrostis canadensis</i>	Blue-joint	S5
<i>Galium palustre</i>	Marsh Bedstraw	S5

Wetland 0520292 5047806

<i>Picea mariana</i>	Black Spruce	S5
<i>Nemopanthus mucronatus</i>	Mountain Holly	S5
<i>Carex trisperma</i>	Three-Seed Sedge	S5
<i>Smilacina trifolia</i>	Three-leaved False Solomons Seal	S5
<i>Ledum groenlandicum</i>	Labrador Tea	S5
<i>Iris versicolor</i>	Blueflag	S5

Wetland 0522056 5049382

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<i>Picea rubens</i>	Red Spruce	S5
<i>Abies balsamea</i>	Balsam Fir	S5
<i>Carex trisperma</i>	Three-Seed Sedge	S5
<i>Kalmia angustifolia</i>	Sheep-Laurel	S5
<i>Coptis trifolia</i>	Goldthread	S5
<i>Equisetum sylvaticum</i>	Woodland Horsetail	S5

Wetland 0522085 5049656

<i>Acer rubrum</i>	Red Maple	S5
<i>Betula populifolia</i>	Gray Birch	S5
<i>Alnus incana</i>	Speckled Alder	S5
<i>Osmunda cinnamomea</i>	Cinnamon Fern	S5
<i>Onoclea sensibilis</i>	Sensitive Fern	S5
<i>Glyceria striata</i>	Fowl Manna-Grass	S5
<i>Galium palustre</i>	Marsh Bedstraw	S5
<i>Lycopus uniflorus</i>	Northern Bugleweed	S5
<i>Viola cucullata</i>	Marsh Blue Violet	S5
<i>Impatiens capensis</i>	Spotted Jewel-Weed	S5
<i>Eupatorium perfoliatum</i>	Boneset	S5

Wetland 0522223 5050065

<i>Betula populifolia</i>	Gray Birch	S5
<i>Fraxinus americana</i>	White Ash	S5
<i>Corylus cornuta</i>	Beaked Hazelnut	S5
<i>Carex gynandra</i>	A Sedge	S5
<i>Impatiens capensis</i>	Spotted Jewel-Weed	S5
<i>Rubus hispidus</i>	Dewberry	S5

Wetland 0521014 5052392

<i>Populus tremuloides</i>	Quaking Aspen	S5
<i>Picea rubens</i>	Red Spruce	S5
<i>Alnus incana</i>	Speckled Alder	S5
<i>Viburnum nudum</i>	Possum-Haw Viburnum	S5
<i>Carex gynandra</i>	A Sedge	S5
<i>Onoclea sensibilis</i>	Sensitive Fern	S5

NOTES

***S Rank**

S1 Extremely rare: May be especially vulnerable to extirpation (typically 5 or fewer occurrences or very few remaining individuals).

S2 Rare throughout its range in the province (6 to 20 occurrences or few remaining individuals). May be vulnerable to extirpation due to rarity or other factors.

Heritage Gas Pictou County Natural Gas Pipeline Project - June 17 - June 21 2013

Surveyor: Tom Neily Heritage Gas Early 2013 - Tom Neily Plant Survey Data

Species	Common Name	S-Rank
S3	Uncommon throughout its range in the province, or found only in a restricted range, even if abundant in at some locations. (21 to 100 occurrences).	
S4	Usually widespread, fairly common throughout its range in the province, and apparently secure with many occurrences, but the Element is of long-term concern (e.g. watch list). (100+ occurrences).	
S5	Demonstrably widespread, abundant, and secure throughout its range in the province, and essentially ineradicable under present conditions.	
S##	Numeric range rank: A range between two consecutive numeric. Denotes range of uncertainty about the exact rarity of the Element (e.g., S1S2).	
S?	Unranked: Element is not yet ranked.	
SA	Accidental: Accidental or casual in the province (i.e., infrequent and far outside usual range).	
	Includes species recorded once or twice or only at very great intervals, hundreds or even thousands of miles outside their usual range; a few of these species may even have bred on the one or two occasions they were recorded.	
SE	Exotic: An exotic established in the province (e.g., Purple Loosestrife or Coltsfoot); may be native in nearby regions.	SNR
	Unranked: Provincial conservation status not yet assessed.	

Plant List - Heritage Gas Pictou County Natural Gas Pipeline Project - June 17 - June 21 2013

Surveyor: Tom Neily

Species	Common Name	S Rank*	River	Floodplain	Farmland	Abandoned	Disturbed	Old Field	Coniferous Woods	Wetland	Hardwoods	Black Spruce Woods	Streamside
<i>Abies balsamea</i>	Balsam Fir	S5						x	x			x	x
<i>Acer pensylvanicum</i>	Striped Maple	S5							x			x	
<i>Acer rubrum</i>	Red Maple	S5							x			x	
<i>Alnus incana</i>	Speckled Alder	S5	x		x					x			x
<i>Amelanchier sp</i>	not a species at risk	n/a											x
<i>Anthoxanthum odoratum</i>	Sweet Vernal Grass	SE						x					x
<i>Aralia nudicaulis</i>	Wild Sarsaparilla	S5								x		x	x
<i>Arctium vulgare</i>	European Burdock	SE						x					x
<i>Arisaema triphyllum</i>	Swamp Jack-In-The-Pulpit	S4S5	x										
<i>Aster acuminatus</i>	Wood Aster	S5										x	
<i>Athyrium filix-femina</i>	Lady-Fern	S5				x							
<i>Betula alleghaniensis</i>	Yellow Birch	S5									x		
<i>Betula papyrifera</i>	Paper Birch	S5			x			x					x
<i>Calystegia sepium</i>	Hedge Bindweed	S5	x										
<i>Cardamine pennsylvanica</i>	Pennsylvania Bitter-Cress	S5								x			
<i>Carex arctata</i>	Black Sedge	S5							x				
<i>Carex crinita</i>	Fringed Sedge	S4S5								x		x	
<i>Carex echinata</i>	Little Prickly Sedge	S5								x		x	
<i>Carex gracillima</i>	Graceful Sedge	S4S5									x		
<i>Carex gynandra</i>	A Sedge	S5	x							x			
<i>Carex intumescens</i>	Bladder Sedge	S5	x										
<i>Carex leptonevria</i>	Finely-Nerved Sedge	S5									x		
<i>Carex magellanica</i>	A Sedge	S5								x			
<i>Carex scoparia</i>	Pointed Broom Sedge	S5											x
<i>Carex stipata</i>	Stalk-Grain Sedge	S5	x		x					x			
<i>Carex trisperma</i>	Three-Seed Sedge	S5								x			
<i>Centaurea nigra</i>	Black Starthistle	SE			x								
<i>Cerastium arvense</i>	Mouse-Ear Chickweed	S4?											x
<i>Chelone glabra</i>	White Turtlehead	S5								x			
<i>Chrysanthemum leucanthemum</i>	Ox-eye Daisy	SE								x			
<i>Cicuta maculata</i>	Spotted Water-Hemlock	S5	x										
<i>Clematis virginiana</i>	Virginia Virgin-Bower	S5											
<i>Clintonia borealis</i>	Clinton Lily	S5								x			
<i>Coptis trifolia</i>	Goldthread	S5											
<i>Cornus alternifolia</i>	Alternate-Leaf Dogwood	S5	x									x	
<i>Cornus canadensis</i>	Dwarf Dogwood	S5											
<i>Corylus cornuta</i>	Beaked Hazelnut	S5								x			x
<i>Crataegus sp</i>	not a species at risk	n/a	x										
<i>Cypripedium acaule</i>	Pink Lady's-Slipper	S5			x								x
<i>Daucus carota</i>	Wild Carrot	SE											
<i>Diervilla lonicera</i>	Northern Bush-Honeysuckle	S5			x								x

Plant List - Heritage Gas Pictou County Natural Gas Pipeline Project - June 17 - June 21 2013

Surveyor: Tom Neily

Species	Common Name	S Rank*	River		Abandoned		Disturbed		Coniferous		Black Spruce	
			Floodplain	Old Field	Farmland	Urban	Wetland	Hardwoods	Woods	Streamside		
<i>Dryopteris cristata</i>	Crested Shield-Fern	S5										
<i>Dryopteris intermedia</i>	Evergreen Woodfern	S5							X			
<i>Echinocystis lobata</i>	Wild Mock-Cucumber	SE	X									
<i>Eleocharis obtusa</i>	Blunt Spike-Rush	S4S5										
<i>Epigaea repens</i>	Trailing Arbutus	S5										
<i>Epilobium sp</i>	not a species at risk	n/a	X									
<i>Equisetum arvense</i>	Field Horsetail	S5										
<i>Equisetum sylvaticum</i>	Woodland Horsetail	S5	X									
<i>Erigeron strigosus</i>	Daisy Fleabane	S5										
<i>Eriophorum vaginatum</i>	Tussock Cotton-Grass	S5										
<i>Eupatorium maculatum</i>	Spotted Joe-Pye Weed	S5	X									
<i>Fragaria virginiana</i>	Virginia Strawberry	S5										
<i>Fragula alnus</i>	Glossy Buckthorn	SE	X									
<i>Fraxinus americana</i>	White Ash	S5										
<i>Galeopsis tetrahit</i>	Brittle-Stem Hempnettle	SE	X									
<i>Galium mollugo</i>	Great Hedge Bedstraw	SE	X									
<i>Galium palustre</i>	Marsh Bedstraw	S5	X									
<i>Galium sp</i>	not a species at risk	n/a	X									
<i>Gaultheria hispida</i>	Creeping Snowberry	S5										
<i>Gaultheria procumbens</i>	Teaberry	S5										
<i>Geum laciniatum</i>	Rough Avens	S4S5	X									
<i>Geum rivale</i>	Purple Avens	S5										
<i>Glechoma hederacea</i>	Ground Ivy	SE	X									
<i>Glyceria striata</i>	Fowl Manna-Grass	S5										
<i>Graminoid collected</i>	?	?	X									
<i>Gymnocarpium dryopteris</i>	Northern Oak Fern	S5										
<i>Heracleum maximum</i>	Cow Parsnip	S4S5	X									
<i>Hesperis matronalis</i>	Dame's Rocket	SE	X									
<i>Hieracium pilosella</i>	Mouseear	SE	X									
<i>Humulus lupulus</i>	Common Hop	S4	X									
<i>Hydrocotyle americana</i>	American Water-Pennywort	S5										
<i>Hypericum ellipticum</i>	Pale St. John's-Wort	S5	X									
<i>Impatiens capensis</i>	Spotted Jewel-Weed	S5										
<i>Impatiens glandulifera</i>	Policeman's Helmet	SE	X									
<i>Iris versicolor</i>	Blueflag	S5	X									
<i>Juncus effusus</i>	Soft Rush	S5	X									
<i>Juncus pelocarpus</i>	Brown-Fruited Rush	S5	X									
<i>Kalmia angustifolia</i>	Sheep-Laurel	S5										
<i>Larix laricina</i>	American Larch	S5										
<i>Linnaea borealis</i>	Twinflower	S5										
<i>Lonicera canadensis</i>	American Fly-Honeysuckle	S5										

Plant List - Heritage Gas Pictou County Natural Gas Pipeline Project - June 17 - June 21 2013

Surveyor: Tom Neily

Species	Common Name	S Rank*	River	Floodplain	Farmland	Abandoned	Disturbed	Urban	Old Field	Coniferous Woods	Wetland	Hardwoods	Black Spruce Woods	Streamside
<i>Luzula multiflora</i>	Common Woodrush	S5							X			X		
<i>Lycopodium clavatum</i>	Running Pine	S5											X	
<i>Lycopodium obscurum</i>	Tree Clubmoss	S5											X	
<i>Lycopus uniflorus</i>	Northern Bugleweed	S5						X						
<i>Lysimachia nummularia</i>	Creeping Jennie	SE	X											
<i>Lysimachia terrestris</i>	Swamp Loosestrife	S5									X			
<i>Lysimachia vulgaris</i>	Garden Loosestrife	SE							X					
<i>Maianthemum canadense</i>	Wild Lily-of-The-Valley	S5								X		X		X
<i>Malus pumila</i>	Common Apple	SE			X									
<i>Moehringia lateriflora</i>	Grove Sandwort	S5												X
<i>Nemopanthus mucronatus</i>	Mountain Holly	S5										X		
<i>Onoclea sensibilis</i>	Sensitive Fern	S5	X				X				X			
<i>Osmunda cinnamomea</i>	Cinnamon Fern	S5								X			X	
<i>Osmunda claytoniana</i>	Interrupted Fern	S5								X		X		
<i>Ostrya virginiana</i>	Eastern Hop-Hornbeam	S5							X			X		
<i>Oxalis acetosella</i>	Wood Sorrel	S5							X					
<i>Packera schweinitziana</i>	Robbins Squaw-Weed	S4S5												X
<i>Phalaris arundinacea</i>	Reed Canary Grass	S5	X		X									
<i>Phegopteris connectilis</i>	Northern Beech Fern	S5									X			
<i>Pheleum pratense</i>	Meadow Timothy	SE			X									
<i>Picea abies</i>	Norway Spruce	SE								X				
<i>Picea glauca</i>	White Spruce	S5	X		X					X				X
<i>Picea mariana</i>	Black Spruce	S5										X		
<i>Pinus strobus</i>	Eastern White Pine	S5			X									
<i>Pinus sylvestris</i>	Scotch Pine	SE			X									
<i>Populus tremulooides</i>	Quaking Aspen	S5	X		X									
<i>Potentilla intermedia</i>	Downy Cinquefoil	SE							X					
<i>Potentilla simplex</i>	Old-Field Cinquefoil	S5			X				X					X
<i>Prunus serotina</i>	Wild Black Cherry	S5			X				X	X				
<i>Prunus virginiana</i>	Choke Cherry	S5			X				X					
<i>Pteridium aquilinum</i>	Bracken Fern	S5								X		X		
<i>Quercus rubra</i>	Northern Red Oak	S5								X				
<i>Ranunculus acris</i>	Tall Butter-Cup	SE	X		X						X			X
<i>Rhinanthus minor</i>	Little Yellow-Rattle	S5							X					
<i>Rhododendron canadense</i>	Rhodora	S5									X			
<i>Rosa sp</i>	not a species at risk	n/a	X		X			X						
<i>Rubus allegheniensis</i>	Allegheny Blackberry	S5	X		X									X
<i>Rubus pubescens</i>	Dwarf Red Raspberry	S5			X						X			
<i>Rumex acetosa</i>	Garden Sorrel	SE	X		X									
<i>Salix alba</i>	White Willow	SE												X
<i>Salix discolor</i>	Pussy Willow	S5	X		X			X						

Plant List - Heritage Gas Pictou County Natural Gas Pipeline Project - June 17 - June 21 2013

Surveyor: Tom Neily

Species	Common Name	S Rank*	River		Abandoned		Disturbed		Coniferous		Black Spruce	
			Floodplain	Farmland	Urban	Old Field	Woods	Wetland	Hardwoods	Woods	Streamside	
<i>Sambucus racemosa</i>	Red Elderberry	S5	x									
<i>Sanguinaria canadensis</i>	Bloodroot	S3S4	x									
<i>Scirpus atrocinctus</i>	Black-Girdle Bulrush	S5		x								
<i>Scrophularia sp</i>	?	?	x									x
<i>Sedum telephium</i>	Witch's-Moneybags	SE										
<i>Senecio jacobaea</i>	Tansy Ragwort	SE	x									x
<i>Silene vulgaris</i>	Maiden's Tears	SE										
<i>Sisyrinchium montanum</i>	Strict Blue-Eyed-Grass	S5										x
<i>Solanum dulcamara</i>	Climbing Nightshade	SE	x									x
<i>Sorbus americana</i>	American Mountain-Ash	S5		x					x			
<i>Spiraea alba</i>	Narrow-Leaved Meadow-Sweet	S5	x									
<i>Stachys sp</i>	?	?	x									
<i>Symphotrichum puniceum</i>	Swamp Aster	S5						x				x
<i>Tanacetum vulgare</i>	Common Tansy	SE		x								
<i>Taraxacum officinale</i>	Common Dandelion	SE		x								
<i>Thalictrum pubescens</i>	Tall Meadow-Rue	S5	x				x					
<i>Thelypteris noveboracensis</i>	New York Fern	S5								x		
<i>Thelypteris palustris</i>	Marsh Fern	S5							x			
<i>Trientalis borealis</i>	Northern Starflower	S5							x			x
<i>Trifolium pratense</i>	Red Clover	SE										
<i>Tsuga canadensis</i>	Eastern Hemlock	S4S5										x
<i>Typha latifolia</i>	Broad-Leaf Cattail	S5										x
<i>Urtica dioica</i>	Stinging Nettle	S4	x									
<i>Vaccinium angustifolium</i>	Late Lowbush Blueberry	S5							x			x
<i>Vaccinium myrtilloides</i>	Velvetleaf Blueberry	S5										x
<i>Viburnum nudum</i>	Possum-Haw Viburnum	S5								x		x
<i>Viburnum opulus</i>	Guelder-Rose Viburnum	S5	x									
<i>Vicia cracca</i>	Tufted Vetch	SE	x									
<i>Vicia sativa</i>	Spring Vetch	SE										
<i>Viola cucullata</i>	Marsh Blue Violet	S5									x	
<i>Viola sp</i>	not a species at risk	n/a									x	

NOTES

*S Rank

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Plant List - Heritage Gas Pictou County Natural Gas Pipeline Project - June 17 - June 21 2013

Surveyor: Tom Neely

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			Floodplain	Farmland	Urban	Woods	Woods
					Old Field	Wetland	Hardwoods
							Streamsides

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Heritage Gas Wetlands Pictou County Pipeline

Wetland M8

Description: Treed Swamp dominated by Balsam fir, Black Spruce with an understory of Alder and Willow

Species:

<i>Abies balsamea</i>	Balsam Fir	S5
<i>Picea mariana</i>	Black Spruce	S5
<i>Salix sp</i>	Willow	not at risk
<i>Salix discolor</i>	Pussy Willow	S5
<i>Scirpus cyperinus</i>	Cottongrass Bulrush	S5
<i>Kalmia angustifolia</i>	Sheep-Laurel	S5
<i>Acer rubrum</i>	Red Maple	S5
<i>Myrica pensylvanica</i>	Northern Bayberry	S5
<i>Populus tremuloides</i>	Quaking Aspen	S5
<i>Juncus effusus</i>	Soft Rush	S5
<i>Onoclea sensibilis</i>	Sensitive Fern	S5
<i>Osmunda cinnamomea</i>	Cinnamon Fern	S5
<i>Carex sp</i>	Sedge	not at risk
<i>Carex intumescens</i>	Bladder Sedge	S5
<i>Carex pseudocyperus</i>	Cyperus-Like Sedge	S5
<i>Alnus incana</i>	Speckled Alder	S5

Images/Observations:

20T 0521532 5053022 black duck nest, four eggs

Wetland M7

Description: Treed swamp, narrow drainage, right angle to highway, possibly manmade

Species:

<i>Populus tremuloides</i>	Quaking Aspen	S5
<i>Picea mariana</i>	Black Spruce	S5
<i>Scirpus cyperinus</i>	Cottongrass Bulrush	S5
<i>Onoclea sensibilis</i>	Sensitive Fern	S5
<i>Typha latifolia</i>	Broad-Leaf Cattail	S5
<i>Calamagrostis canadensis</i>	Blue-Joint Reedgrass	S5
<i>Acer rubrum</i>	Red Maple	S5
<i>Kalmia angustifolia</i>	Sheep-Laurel	S5
<i>Juncus effusus</i>	Soft Rush	S5

Wetland M5

Description: Treed swamp with a shrub understory

Species:

<i>Populus tremuloides</i>	Quaking Aspen	S5
<i>Abies balsamea</i>	Balsam Fir	S5
<i>Acer rubrum</i>	Red Maple	S5

Wetland Survey - Tom Neily
April 2013

<i>Betula papyrifera</i>	Paper Birch	S5
<i>Typha latifolia</i>	Broad-Leaf Cattail	S5
<i>Calamagrostis canadensis</i>	Blue-Joint Reedgrass	S5
<i>Scirpus cyperinus</i>	Cottongrass Bulrush	S5
<i>Alnus incana</i>	Speckled Alder	S5
<i>Ilex verticillata</i>	Black Holly	S5

Images/Observations:

20T 0522127 5051220 Stream draining wetland

Wetland M1

Description: Shrub Swamp with Typha Under Power Corridor

<i>Picea mariana</i>	Black Spruce	S5
<i>Picea rubens</i>	Red Spruce	S5
<i>Ilex verticillata</i>	Black Holly	S5
<i>Scirpus cyperinus</i>	Cottongrass Bulrush	S5
<i>Typha latifolia</i>	Broad-Leaf Cattail	S5
<i>Alnus incana</i>	Speckled Alder	S5
<i>Osmunda cinnamomea</i>	Cinnamon Fern	S5
<i>Betula populifolia</i>	Gray Birch	S5
<i>Abies balsamea</i>	Balsam Fir	S5
<i>Kalmia angustifolia</i>	Sheep-Laurel	S5

Wetland 5

Description: Open Sedge Bog south of rail, Treed Swamp Dominated by Black Spruce with shrub understorey at Pipeline Crossing

Species:

<i>Picea mariana</i>	Black Spruce	S5
<i>Typha latifolia</i>	Broad-Leaf Cattail	S5
<i>Carex sp</i>	A Sedge	not at risk
<i>Juncus effusus</i>	Soft Rush	S5
<i>Juncus sp</i>	A Rush	S5
<i>Betula populifolia</i>	Gray Birch	S5
<i>Acer rubrum</i>	Red Maple	S5
<i>Larix laricina</i>	American Larch	S5

Wetland 4B

Description: Alder Swale with Scattered Conifers

Species:

<i>Alnus incana</i>	Speckled Alder	S5
<i>Acer rubrum</i>	Red Maple	S5
<i>Picea mariana</i>	Black Spruce	S5
<i>Abies balsamea</i>	Balsam Fir	S5
<i>Calamagrostis canadensis</i>	Blue-Joint Reedgrass	S5

April 2013

<i>Juncus effusus</i>	Soft Rush	S5
<i>Osmunda cinnamomea</i>	Cinnamon Fern	S5

Wetland 3

Description: The Greater Portion of the Wetland is an Alder Swamp to the North. A Smaller Grass (*Phalaris arundinacea*) dominated area is found at the bottom

Species:

<i>Alnus incana</i>	Speckled Alder	S5
<i>Salix sp</i>	A Willow	not at risk
<i>Picea glauca</i>	White Spruce	S5
<i>Phalaris arundinacea</i>	Reed Canary Grass	S5
<i>Acer rubrum</i>	Red Maple	S5
<i>Populus tremuloides</i>	Quaking Aspen	S5
<i>Abies balsamea</i>	Balsam Fir	S5

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