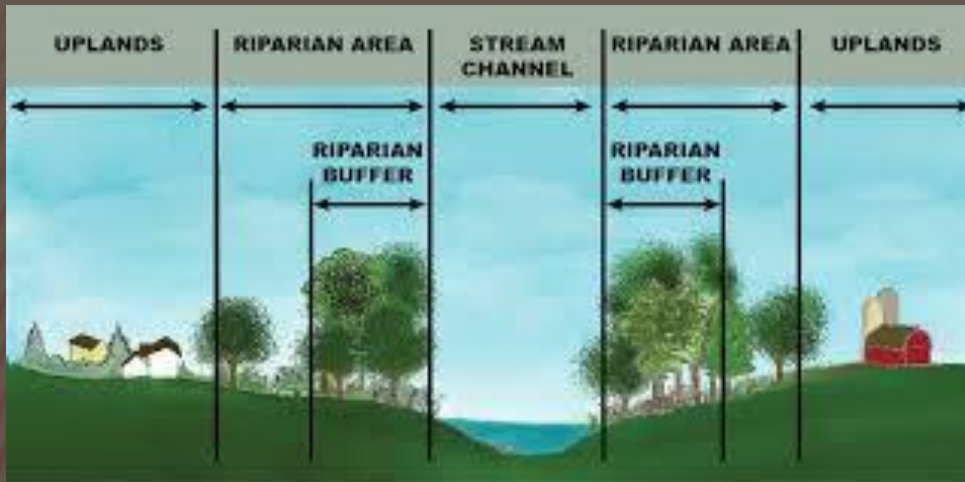


A BUFFER PROJECT

Riparian buffer is a vegetated area (a "buffer strip") near a stream, usually forested, which helps shade and partially protect a stream from the impact of adjacent land uses.



Candace Dolan
Hodgson Brook Watershed Coordinator
320 Corporate Dr.
Portsmouth, N.H. 03801
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Healthy diverse vegetation helps filter stormwater preventing sediment, nitrogen, phosphorous and pesticides from reaching surface waters.

Also....

- ✓ Buffers benefit wildlife by providing habitat and travel corridors
- ✓ Trees near stream banks provide shade helping to keep water cooler
- ✓ Deep rooted native plants dissipate runoff and help prevent bank erosion

THIS is NOT a buffer!!



CASE STUDY

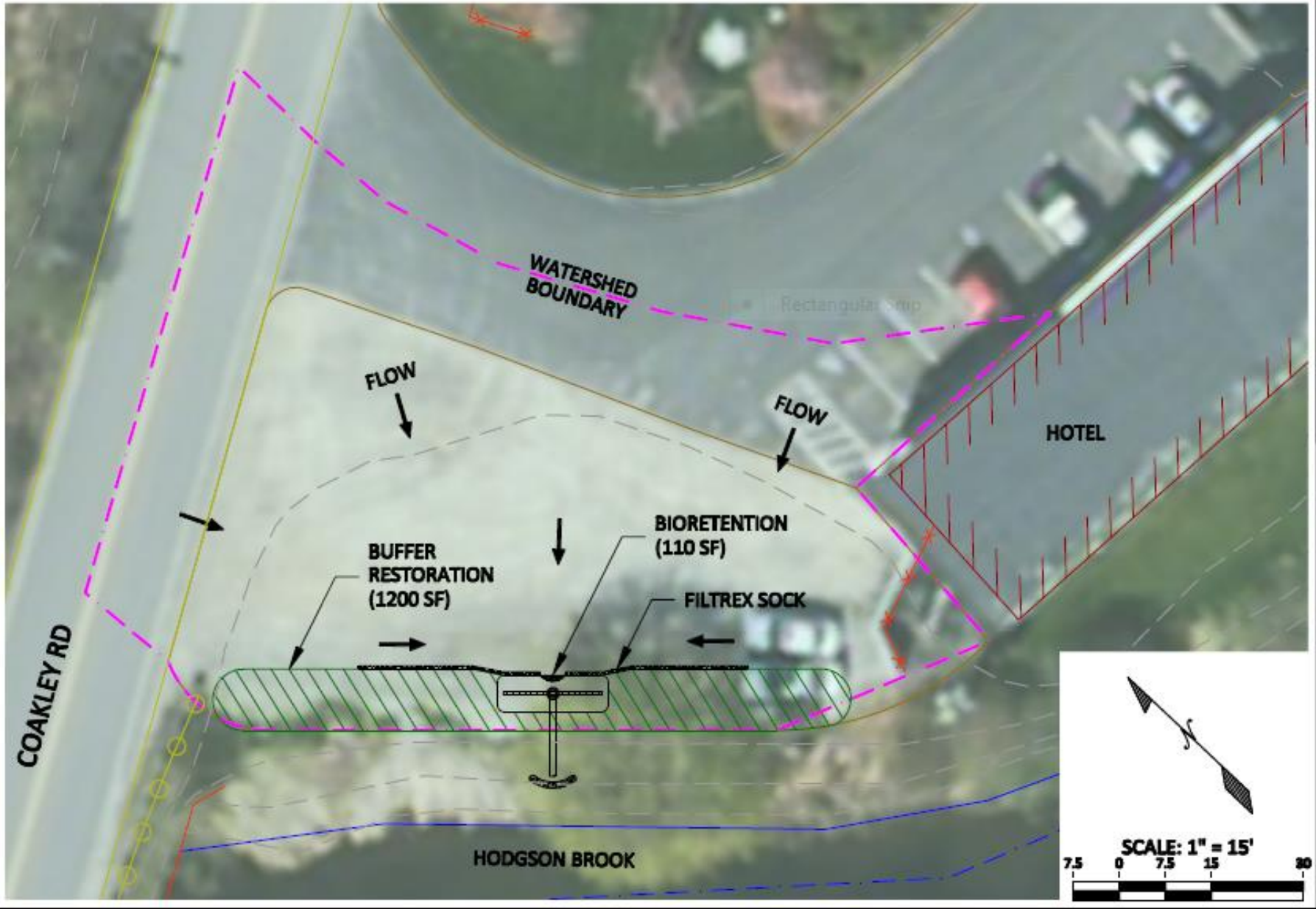
PORT INN, PORTSMOUTH, NH







Drainage area 15,000 sq ft



INVASIVES: BUCKTHORN, *ROSA MULTIFLORA* AUTUMN OLIVE, NORWAY MAPLES









NATIVE SHRUBS

- *Betula nigra* (River Birch)
- *Aronia Brilliantissima* (Red Chokeberry)
- *Cephalantus* (Button Bush)
- *Cornus sericea* (Bailey Dogwood)
- *Hamamelis virginiana* (Witch Hazel)
- *Ilex Verticillata* (Winterberry)
- *Myrica Pensylvanica* (Bayberry)
- *Salix caprea* (Pussy willow)
- *Amelanchier Regent* (Serviceberry)



Rhus aromatic
(Gro Low Sumac)



Aronia Brilliantissima



Amelanchier Regent

PERENNIALS

- Agastache (Blue Fortune)
- Aster laevis (Blue Bird)
- **Asclepias syriaca (Milkweed)**
- Aster oblong (October Skies)
- **Baptisia australis (False Indigo)**
- **Baptisia tinctoria (Wild indigo)**
- Echinacea Ruby Star (Rubenstein)
- Echinacea purpurea (Purple Coneflower) -

- Heuchera Americana (Dale's Strain)
- **Iris versicolor (Blue Flag)**
- Lobelia cardinalis (Cardinal Flower)
- Monarda fistulosa Bergamot (Bee Balm)
- Monarda didyma (Jacob Cline)
- Parthenocissus tricuspidata (Boston Ivy)
- **Persicaria amplex Firetail**
- Polygonatum commutatum (Solomon's Seal)
- Rudbeckia ful. Goldsturm
- Rudbeckia spp (Black/brown-eyed Susan)
- Tiarella cordifolia



Iris Versicolor



Eupatorium maculatum Gateway









May 2011







Black-eyed Susan
Rudbeckia hirta





PEASE TRADEPORT BUFFER ENHANCEMENT





98 NATIVE TREES AND SHRUBS



TREE AND SHRUB SELECTION

Shrub / Tree Distribution Hodgson Brook Main Stem Buffer enhancement 9/11/2013

Section 1 (STP)

M(1)HAMAMELIS VIRGINIANA 2.5-3' BB (Witch Hazel)

M(3)CEPHALANTHUS OCCIDENTALIS 18-24" #3(Button Bush)

L(1)CORNUS AMOMUM 18-24" #1B(Silky Dogwood)

L(1)ALNUS RUGOSA 18-24" #1(Speckled Alder)

M (1) Rubrum Acer #5 (Red Maple) 6-8 '

M (1) Rubrum Acer #5 (Red Maple) 6-8

Section 2

M(2)HAMAMELIS VIRGINIANA 2.5-3' BB (Witch Hazel)

H(1)ACER RUBRUM 2-2.5" BB (Red Maple)

M-H(1)ARONIA BRILLIANTISSIMA 3-4" #5 (Red Chokeberry)

M(1)AMELANCHIER CANADENSIS 4-5' BB (Shad Bush)

M-H(1)CLETHRA ALNIFOLIA 2.5-3' #7(Summer Sweet)

L(4)CEPHALANTHUS OCCIDENTALIS 18-24" #3(Button Bush)

L(3)CORNUS AMOMUM 18-24" #1B(Silky Dogwood)

L(2)ALNUS RUGOSA 18-24" #1 (Speckled Alder)

Section 3

M-H(2)CLETHRA ALNIFOLIA 2.5-3' #7(Summer Sweet)

M(1)NYSSA SYLVATICA 10-12" #5 (Tupelo)

M-H(2)ARONIA BRILLIANTISSIMA 3-4" #5 (Red Chokeberry)

M(4)CEPHALANTHUS OCCIDENTALIS 18-24" #3(Button Bush)

L(4)CORNUS AMOMUM 18-24" #1B(Silky Dogwood)

L(3)ALNUS RUGOSA 18-24" #1 (Speckled Alder)

M (1) Rubrum Acer #5 (Red Maple) 6-8

Section 4

M-H(2)CLETHRA ALNIFOLIA 2.5-3' #7(Summer Sweet)

M-H(2)ARONIA BRILLIANTISSIMA 3-4" #5 (Red Chokeberry)

H(1)ACER RUBRUM NORTHWOOD 2-2.5" BB (Red Maple)

M(1)AMELANCHIER CANADENSIS 4-5' BB (Shad Bush)

L(4)CEPHALANTHUS OCCIDENTALIS 18-24" #3(Button Bush)

L(3)CORNUS AMOMUM 18-24" #1B(Silky Dogwood)

L(3)ALNUS RUGOSA 18-24" #1 (Speckled Alder)

Section 5

M-H(3)ARONIA BRILLIANTISSIMA 3-4" #5 (Red Chokeberry)

M(1)AMELANCHIER CANADENSIS 4-5' BB (Shad Bush)

L(5)CEPHALANTHUS OCCIDENTALIS 18-24" #3(Button Bush)

L(4)CORNUS AMOMUM 18-24" #1B(Silky Dogwood)

L(5)ALNUS RUGOSA 18-24" #1 (Speckled Alder)

M (1) Rubrum Acer #5 (Red Maple) 6-8

Section 6

M-H(2)ARONIA BRILLIANTISSIMA 3-4" #5 (Red Chokeberry)

M(1)AMELANCHIER CANADENSIS 5-6' BB (Shad Bush)

L(5)CEPHALANTHUS OCCIDENTALIS 18-24" #3(Button Bush)

L(5)CORNUS AMOMUM 18-24" #1B(Silky Dogwood)

L(6)ALNUS RUGOSA 18-24" #1 (Speckled Alder)

M (1) Rubrum Acer #5 (Red Maple) 6-8

L=Low placement, can tolerate flooding, good for bank stabilization. Prefers saturated soils or fluctuating water levels

M= Tolerates dryer but likes moist to wet soil

H=Tolerates occasional wet /moist soils generally found higher in the buffer

40 VOLUNTEERS...98 DEGREES 3 HOURS.....



AN APPRECIATIVE RESIDENT

