Incorporating Trees into the Roadside Environment

6 Dec 2016

Maryland Tree Laws

MD Tree Laws

- MD Roadside Tree Law
- MD Reforestation Law (5-103)
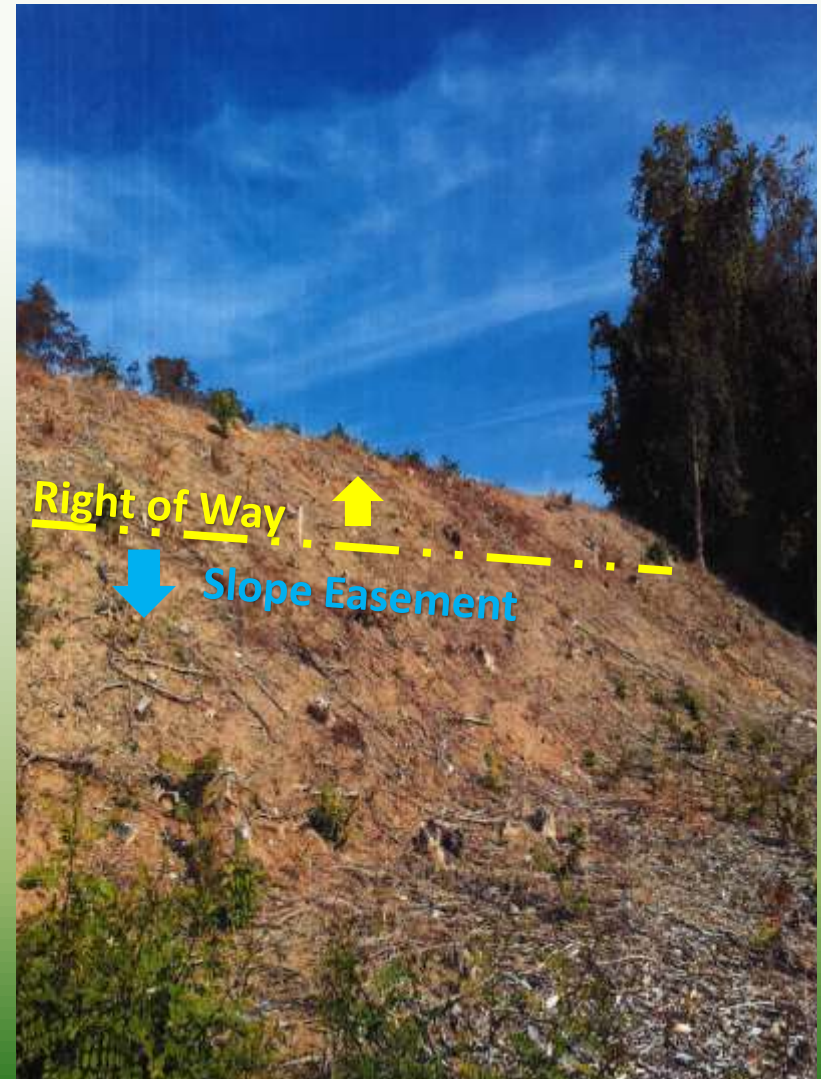- MD Forest Conservation Act (FCA)

MD Roadside Tree Law

- Governs trees growing within the public space of a State, County or Local Roadway.

- Covers removal of individual trees as well as limb pruning, root pruning & other treatments.

- Covers forest clearing under one acre

Two Types of RT Permits

- **Individual**
  - New construction
  - Submitted prior to Advertisement Date
  - Included in IFB so it is readily available on site throughout life of construction contract.
  - Good for one year from date of issuance.

Two Types of RT Permits

- **Public Agency**
  - Maintenance
  - Issued as a Blanket Permit to individual shops
  - Must designate a Certified Tree Care Expert on Application.
  - As of Jan 2005, these permits include removals
  - Must tally all removals under permit for year end reporting
  - Must be renewed every year

MD Reforestation Law (5-103)

- Governs linear projects (highways and utilites) which clear one acre or more of forest

- Also covers removal of individual trees within the project limits

- MD DNR-Forest Service issues an Approval letter rather than a permit

- Provides a 1:1 replacement for the loss of forest cover

- Generally, pay into Fee-in-lieu program for anything that can't be mitigated in ROW

MD Forest Conservation Act (FCA)

- Governs facility type, non-linear projects
  - Salt Barns
  - Stand Alone Park & Ride lots
  - New facility construction (labs, offices, etc...)
  - Stream & Wetland Mitigation Projects (TMDL may be exempt)
- Applies when grading exceeds 40,000 square feet, regardless of tree/forest cover on the site
- If less than 40,000 square feet of grading
  - Project may qualify for an Exemption
  - Must still submit site plan showing limits of grading to MD DNR-Forest Service
  - DNR-FS will review and issue "letter of exemption" if deemed appropriate
- Mitigation Bank

Integrated Roadside Vegetation Management Overview

Integrated Roadside Vegetation Management Overview

<u>3 Phase approach</u>

– Phase 1 – Invasive vegetation removal and treatment

– Phase 2 – Native species planting

– Phase 3 – Establishment

Integrated Roadside Vegetation Management Overview

Scope of Projects:

- Removal of invasive brush, vines and trees including, but not limited to Multiflora Rose, Greenbrier, Japanese Honeysuckle, Oriental Bittersweet, Wild Grape, Porcelainberry , Phragmities, Callery Pear and various trees growing in the drainage swales. In some instances, this vegetation makes up between 30%-70% of the vegetation present.
- In some areas, Meadow grasses will be seeded in select areas and turf grass will be seeded in drainage swales.
- Some areas will be replanted with native trees including a mix of deciduous and evergreens at a density of approximately 200 trees per acre.

Integrated Roadside Vegetation Management Overview

Methods To Be Used:

- Cutting, chipping and chemically treating stumps year-round.

- Beginning the end of April – early May we begin to chemically treat foliage and mowing treated vegetation.

- From August thru October we perform basal treatments on any remaining woody material.

- Removal on treated woody vegetation will resume thereafter. Regenerative growth throughout the project limits will be foliar treated as weather permits.

IRVM in the
US 50 Median West of US 13

BEFORE: Invasive trees and brush taking over median

AFTER: Establishment of native meadow species

IRVM in US 50 WBRS in Cordova, Adjacent to the Woodlawn Memorial Gardens

BEFORE: Ditch Line overgrown with invasive brush and vines

AFTER: Functioning Drainage Ditch

IRVM at the I-695/Cove Road Interchange

BEFORE: Interchange overgrown with invasive trees, shrubs and vines

AFTER: Establishment of healthy native trees

Recent Successes of IRVM at the I-495/US 50 Interchange

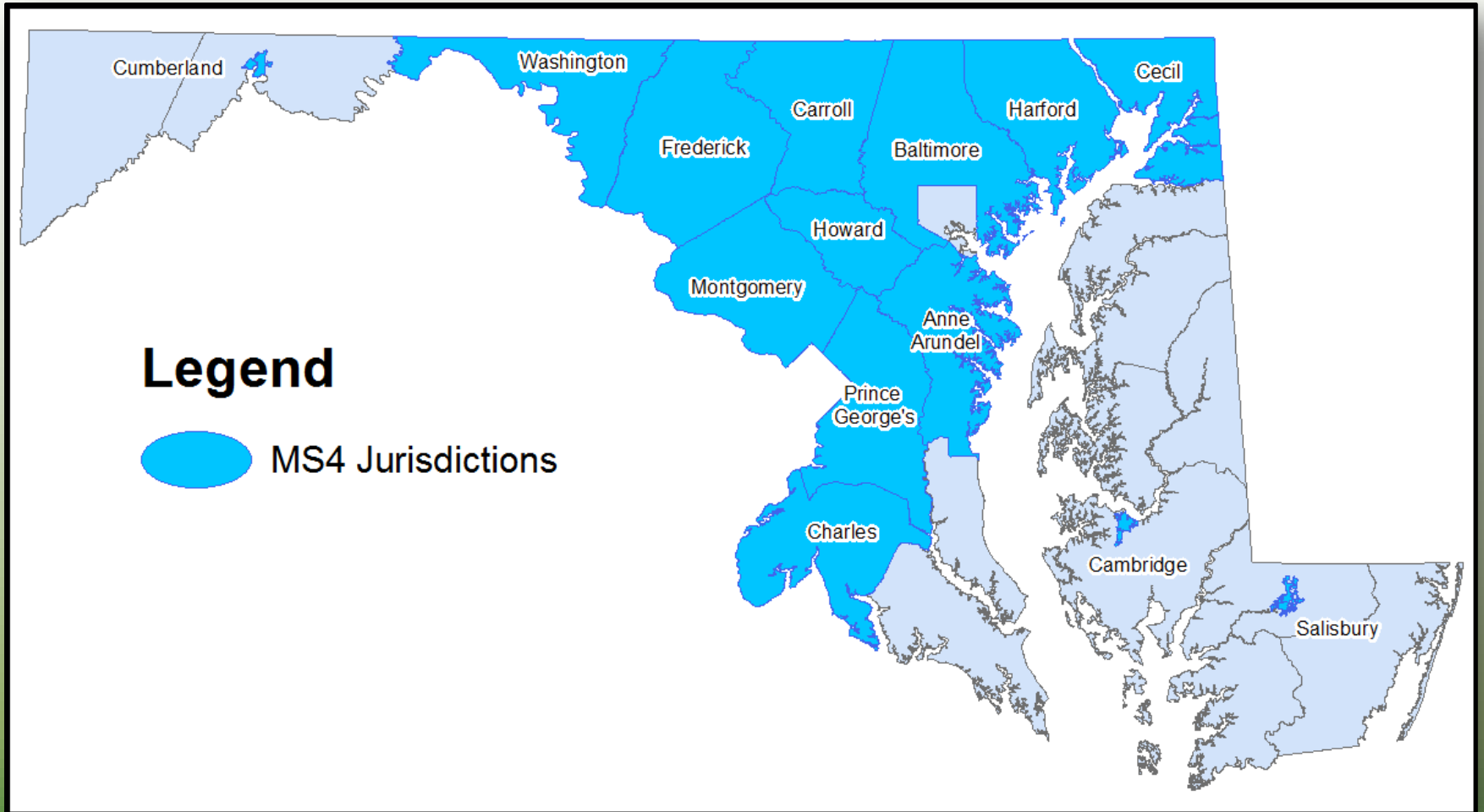**BEFORE: Invasive Callery Pear taking over at I-495/US50 Interchange**

AFTER: Establishment of healthy native trees

Chesapeake Bay & Local Watershed Restoration Efforts (TMDL and MS4)

SHA MS4 Jurisdictions

Update on Bay Restoration Program
Impervious Acres Treated by Strategy for FY16-21

BMPs	Impervious Acreage Treated	Impervious Acreage Treated (Restored)					
		Completed	Fiscal Year Planned Completion				
		2012 -15	2016	2017	2018	2019	2020
New SWM	662	87	70	30	75	300	100
SW Retrofits	555	0	30	125	100	100	200
Tree Plantings	686	436	70	5	75	100	200
Stream Restoration	998	443	150	30	0	75	300
Pavement Removal	16	1	0	15	0	0	0
Veg Open Channels	450	50	-	100	100	100	100
Outfall Stabilization	157	0	2	10	0	5	140
Street Sweeping		33					
Catch Basin Cleaning		1254					
Running Total IA Treatment		1,017	2,624	2,939	3,289	3,969	5,009
Total IA Treatment by CY2020		5,004					
Percent IA Treatment by CY2020		20%					

SHA Restoration Strategy ($/IAT)

BMP Type	Cost Per Imp Acre
Pavement Removal	$375,616
New SWM (Includes GS)	$273,263
Outfall Stabilization	$218,102
Trees	$99,756
Trees w/o ROW	$88,477
Retrofits	$91,770
Streams	$73,294
Average	$143,993

Tools

- Website
  - http://www.roads.maryland.gov/index.aspx?PageId=333

- Interactive Map
  - http://www.roads.maryland.gov/Index.aspx?PageId=714
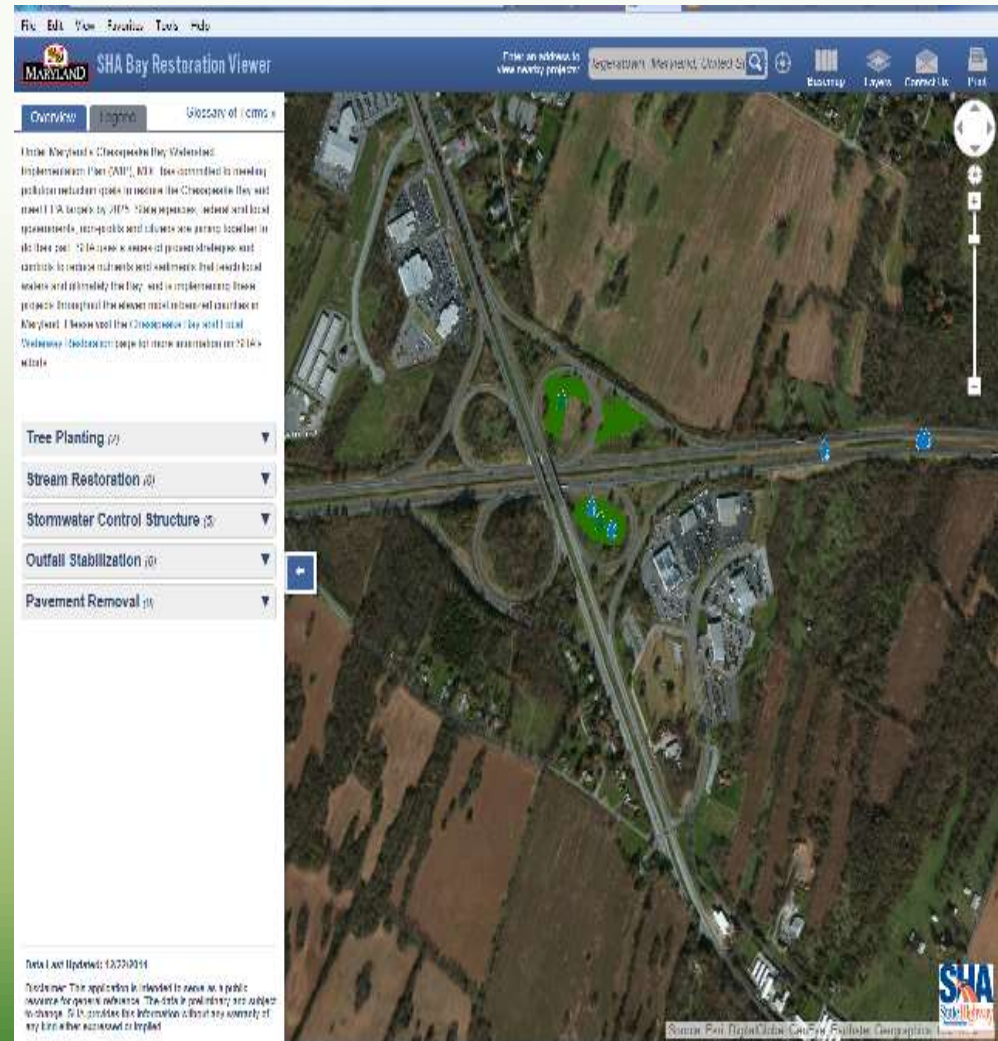
Tree Planting

Installation
- 3 planting seasons
- 2 years of care and replacement
  - Vegetation Management
  - Watering
  - Replacement of dead material

Establishment
- Vegetation management
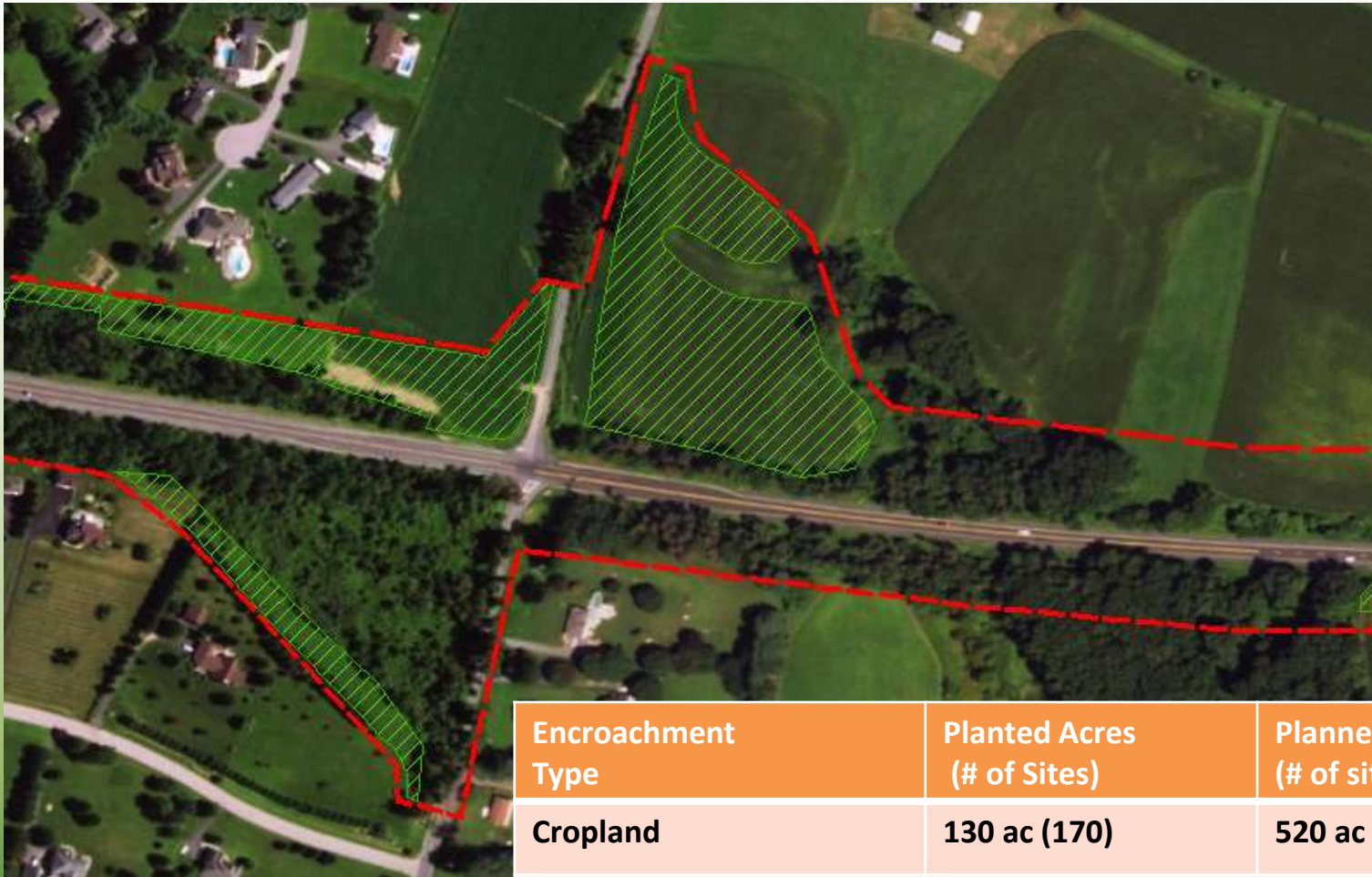- Replacement of dead material
- 8 years

Tree Planting – SHA Right of Way

- Fee Simple
- Permit or Lease

- Encroachments
  - Crops and mowing
  - Structures
    - Fences
    - Sheds
    - Signs

Tree Planting – SHA Right of Way

Encroachment Type	Planted Acres (# of Sites)	Planned Acres (# of sites)
Cropland	130 ac (170)	520 ac (1232)
Pasture (fence)	32 ac (23)	986 ac (422)

Questions

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