



Promoting Pollinator Habitat on ROW

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Right-of-Way in U.S.





Right-of-Way in U.S.

Right-of-way	VM cycle (years)	Distance (miles)	Width (ft)	Year
Roadway ¹	Yearly	4,183,708	30-450 (pavement edge)	2017
Electric transmission ²	3-5	641,011 (pole)	75-700	2012
Electric distribution ³	5	5,500,000 (pole)	15-25 from pole	2010
Pipeline ¹	2	2,741,128	50-150	2016
Railroad ¹	1	125,718	50	2016

Approximately 61 million acres of ROW across every type of habitat in the U.S.



Managing Vegetation on Right-of-Way

What is a weed?

"A plant that causes economic losses or ~~ecological~~ damage, creates health problems for humans or animals, or is undesirable where it is growing."

Weed Science Society of America Board of Directors, 2015



Highway Right-of-Way Weed

Any plant that compromises highway safety, not economical, fails to prevent erosion, not environmentally friendly, negative public relation (perception), increases liability, not aesthetic, or reduces transportation sustainability.

American Association of State Highway Transportation Officials

Other segments have similar language





Managing Vegetation on Right-of-Way

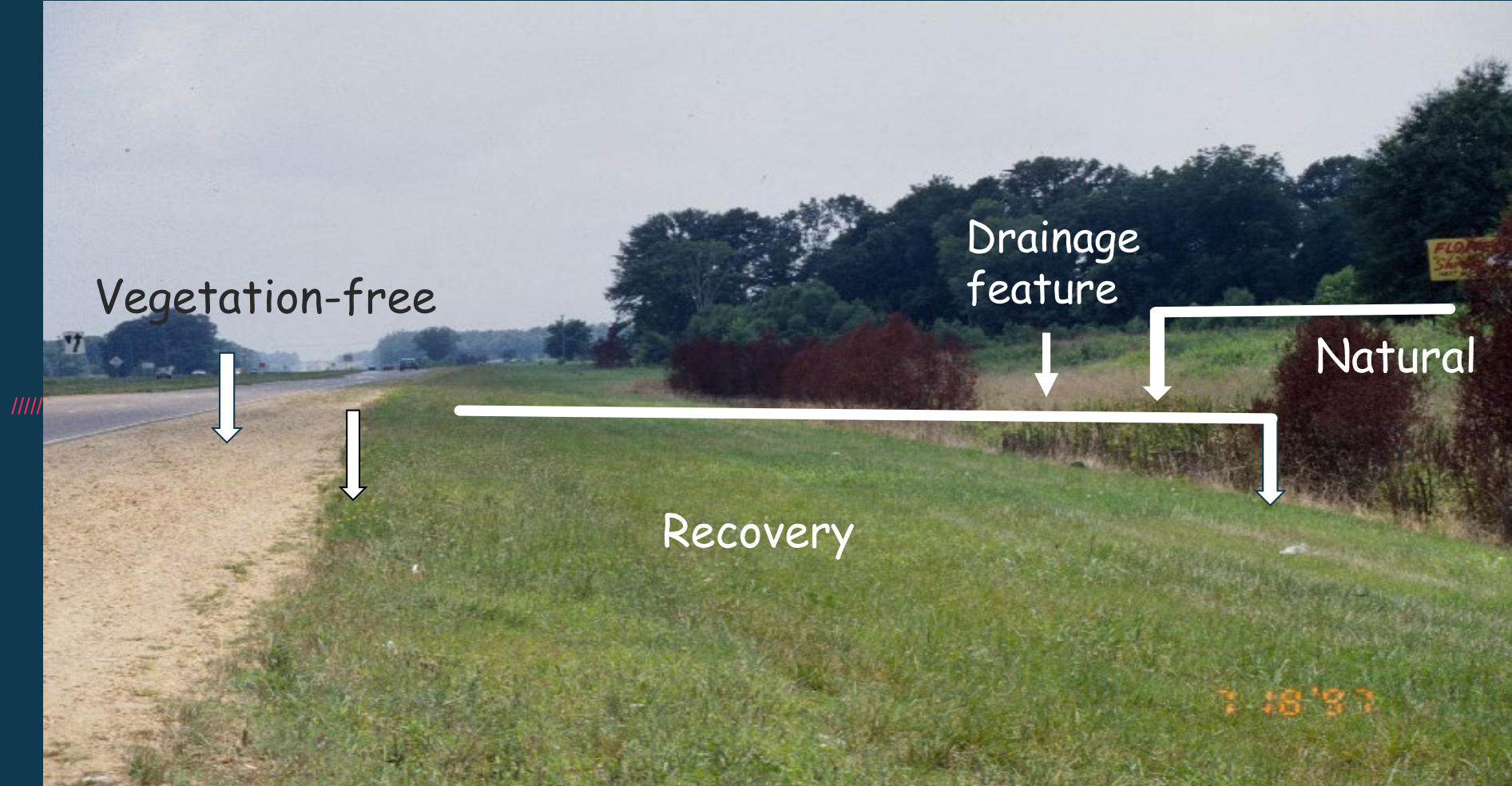


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Managing Vegetation on Right-of-Way





Managing Vegetation on Right-of-Way





Managing Vegetation on Right-of-Way with HERBICIDES





Managing Vegetation on Right-of-Way with HERBICIDES

- Herbicides now are much safer than in the past
- Use rates are MUCH lower than in the past
- More options for selective control of target species
- Application technique can be tailored to needs



Promotion of IPT Methodology – Target Individual Plants for Treatment



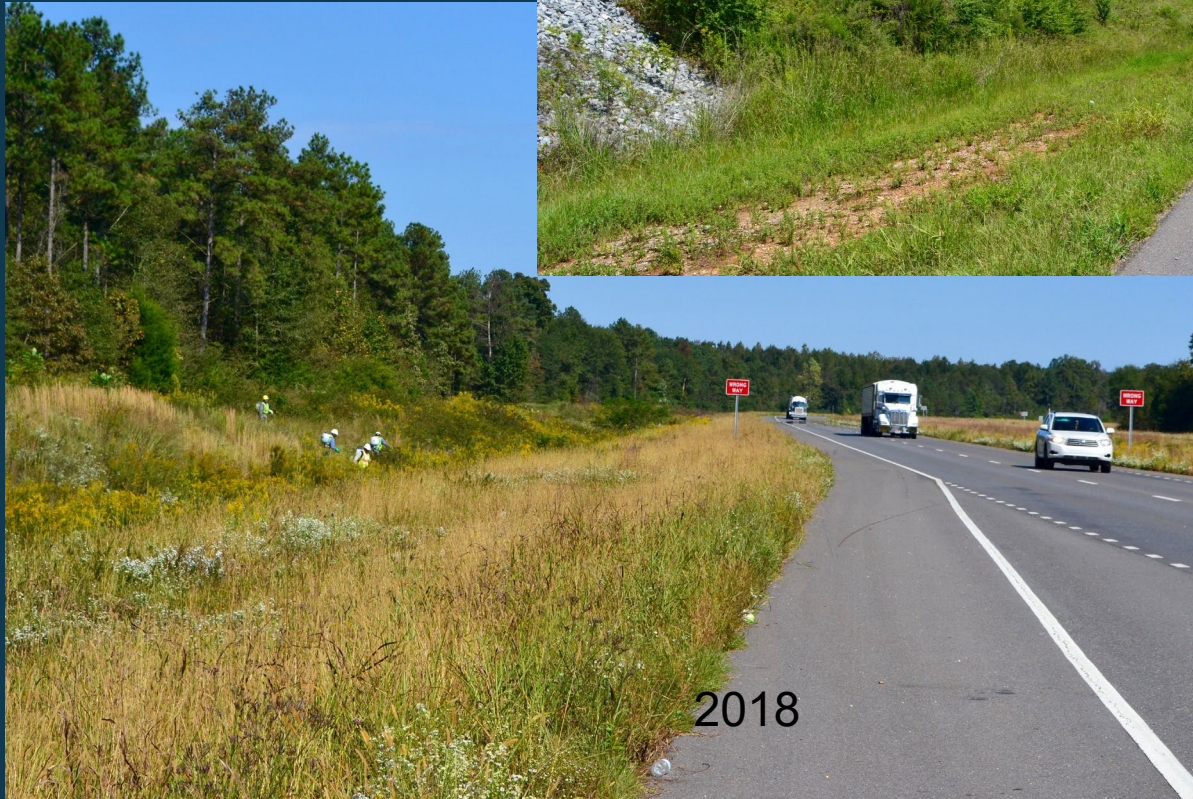
Method + Arsenal + Escort





Promotion of IPT Methodology – Target Individual Plants for Treatment





IVM Partners Project - ALDOT



Managing Vegetation on Right-of-Way with HERBICIDES

- One of the biggest obstacles: “this is how we have always done it.”
- Engineers like the uniformity of mowing
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- Agronomists don't have much influence
- A change in how we think about IVM is needed
- Need to show **COST SAVINGS**



Herbicide Toxicity - Honeybees

Herbicide	Active Ingredient	Ai Acute Contact LD ₅₀ (ug/bee)*	EPA Classification
Method 240SL	Aminocyclopyrachlor	>100	Practically non-toxic
Escort	Metsulfuron	>25	Practically non-toxic
Krenite	Fosamine	>200	Practically non-toxic
Arsenal	Imazapyr	>100	Practically non-toxic
Oust	Sulfometuron	>100	Practically non-toxic

LD₅₀ Values greater than 11 ug/bee are generally considered “practically non-toxic”.

Based on the contact LD50 value, the pesticide is classified as practically non-toxic (LD50 ≥11 µg/bee), moderately toxic (10.9 > LD50 >2 µg/bee), or highly toxic (<2 µg/bee). Unless the pesticide is determined to be practically non-toxic, EPA would then typically require a study on the toxicity of residues on foliage to honey bees (OSCPP 850.3030; USEPA 2012)17.

Sources:

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Managing Vegetation on Right-of-Way





Thank You

