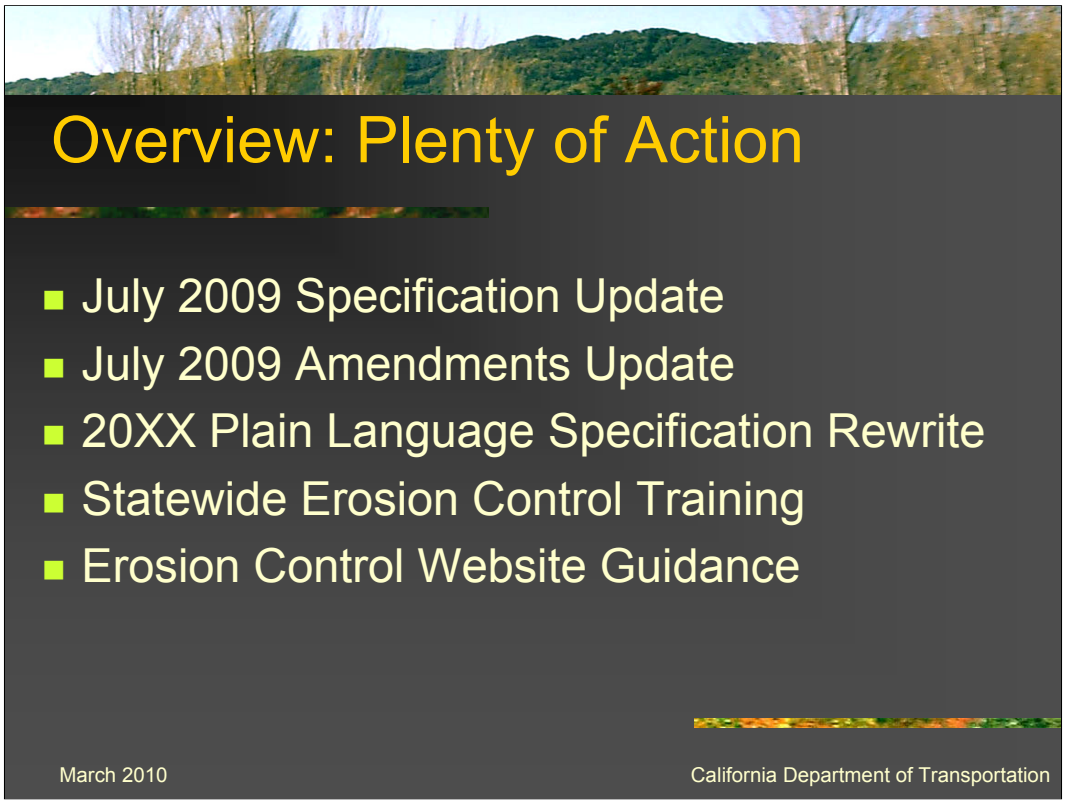
9:30 – 10:15

Greg Balzer's review of previous meeting Action Items



Some CONTEXT for this year's action item date.

In short – LOTS OF ACTION.

Many TECHNICAL updates to (mostly) erosion control specifications – issued July 2009 and in place NOW.

This was in preparation for the 2010 PLV update which is supposed to have FEW TECHNICAL CHANGES.

2010 PLV update currently under way – we have a DRAFT version.

BIG DIFFERENCE THIS YEAR HAS BEEN A PUSH FOR TRAINING AND GUIDANCE – NOT JUST SPECIFICATIONS

Statewide EC Training

Nine Statewide Webinars – average attendance of at least 45-60.

EC Toolbox Website

Seed Plant Calculator

RECAP – (1) 2009 update (2) 09/10 Update to the Amendments (3) 2010 PLV update (4) Erosion Control Training (5) EC Website.

A lot of these changes are technical in nature – sorry.

I tried to illustrate these changes graphically to communicate this information as quickly as possible.

Action Item Update:

March 2010 http://www.dot.ca.gov/hq/LandArch/webinars/ California Department of Transportation

Just a plug for our new EC Toolbox website and our EC/Planting webinars:

Optimizing Soil Compaction – Donald H Gray

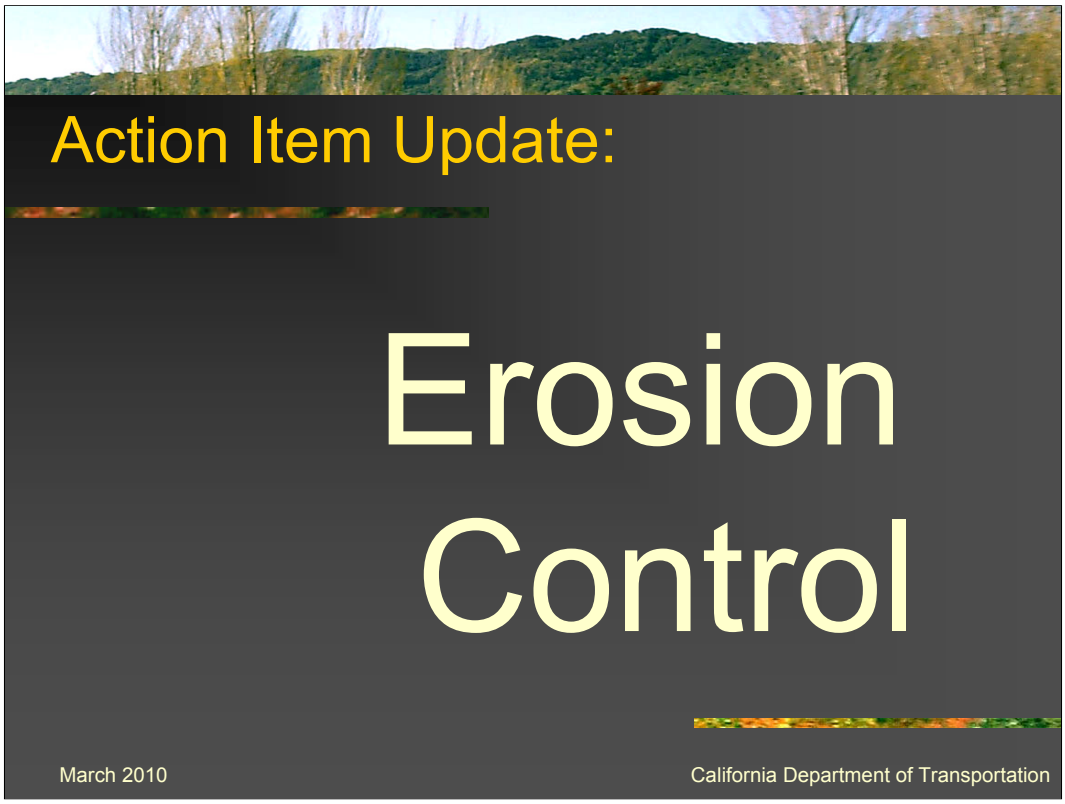
Strategies in Soils Based Revegetation – Michael Hogan

Soil Structure and Soil Health – Dr Vic Claassen

The benefits of Topsoil reuse and reapplication by Dr Keith Vogelsang.

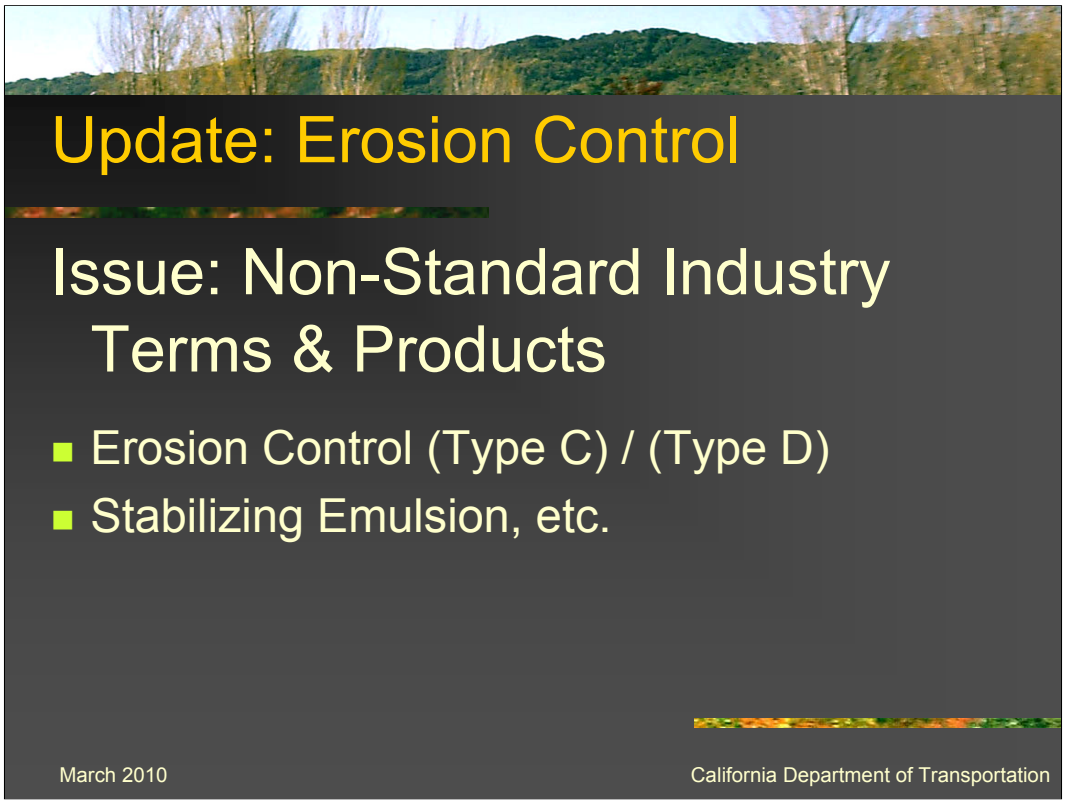
Native Grass Sod

Google: Caltrans Webinars or Caltrans Erosion Control Toolbox.



Let's focus first on past Erosion Control Action Items.

Landscape Contractors pay attention because some of these topics and thoughts will apply to you too.



You said Caltrans EC specifications were out-of-date and specified non-existent materials and used non-standard terminology.

Can anybody here tell me how Type C and Type D differ?

Can you still buy stabilizing emulsion?

So we…

Update: Erosion Control

Action: Industry Standard Terms

10-1.___ EROSION CONTROL (TYPE D) — **Old Language**

Erosion control (Type D) shall conform to the provisions in Section 20-3, "Erosion Control," of the Standard Specifications and these special provisions and shall consist of applying erosion control materials to embankment and excavation slopes and other areas disturbed by construction activities.

10-1.___ EROSION CONTROL (HYDROSEED) — **New 2009 Language**

GENERAL

Summary

This work includes removing and disposing of weeds, applying erosion control materials, seed, fiber, commercial fertilizer, organic fertilizer, straw, and tackifier to erosion control (Hydroseed) areas shown on the plans.

10-1.___ EROSION CONTROL (PUNCHED STRAW) — **New 2009 Language**

GENERAL

Summary

This work includes removing and disposing of weeds, applying erosion control materials, straw, seed, fiber, commercial fertilizer, organic fertilizer, and tackifier to erosion control (Punched Straw) areas shown on the plans.

March 2010 California Department of Transportation

Effective July 2009

Updated our terminology to match the industry.

Type D renamed to EC Hydroseed.

Type C renamed to EC Punched Straw.

These changes were based upon your suggestions.

Would it make more sense to rename hydroseed to hydromulch as it may not contain seed?

For example – hydromulch applied over Drill Seeded areas?

Update: Erosion Control

Action: Specify Industry Standard Products

Old Language

Stabilizing Emulsion

Stabilizing emulsion shall conform to the provisions in Section 20-2.11, "Stabilizing Emulsion," of the Standard Specifications and these special provisions.

Stabilizing emulsion shall be in a dry powder form, may be reemulsifiable, and shall be a processed organic adhesive used as a soil tackifier.

New 1999 Language

Tackifier

Tackifier must be:

1. Guar (Plant Based)
2. Psyllium (Plant Based)
3. Starch (Plant Based)
4. Polymeric Emulsion Blend

March 2010

California Department of Transportation

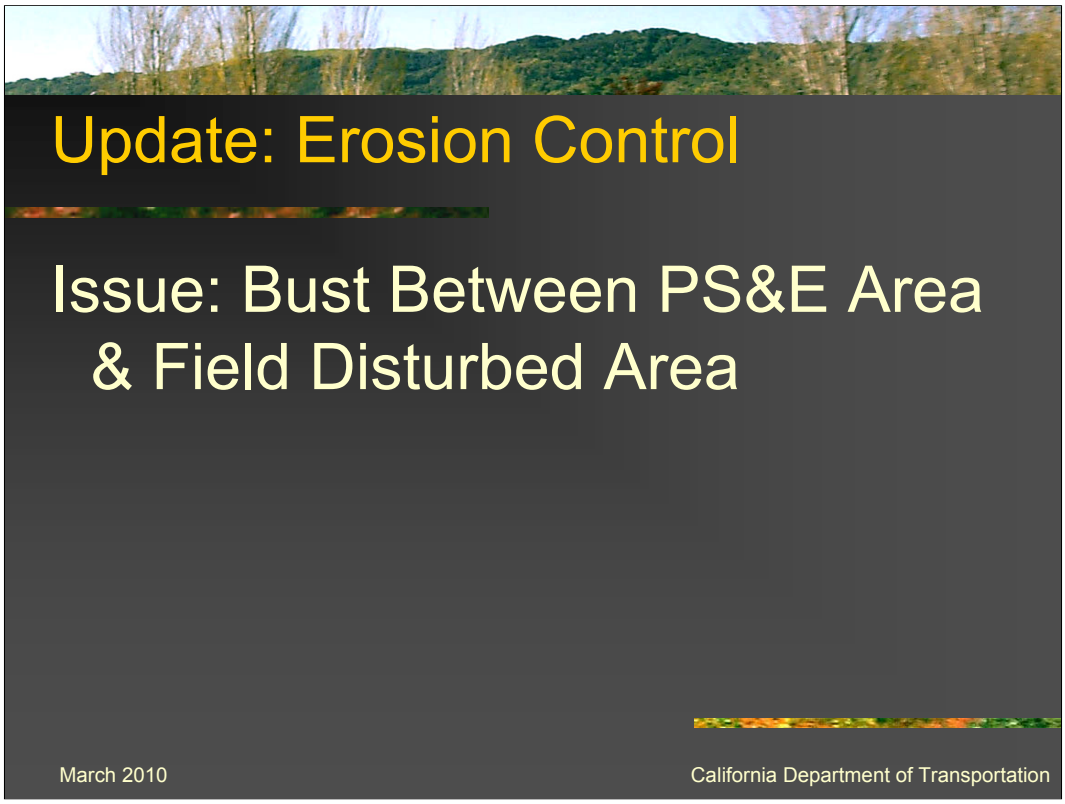
Effective July 2009

Stabilizing emulsion replaced with various forms of tackifiers.

These changes were based upon Contractor feedback.

<u>NOTE - All items in a list apply unless the items are specified as choices – CURRENTLY ADVERTISED CONTRACTS AND 2010 PLV.</u>

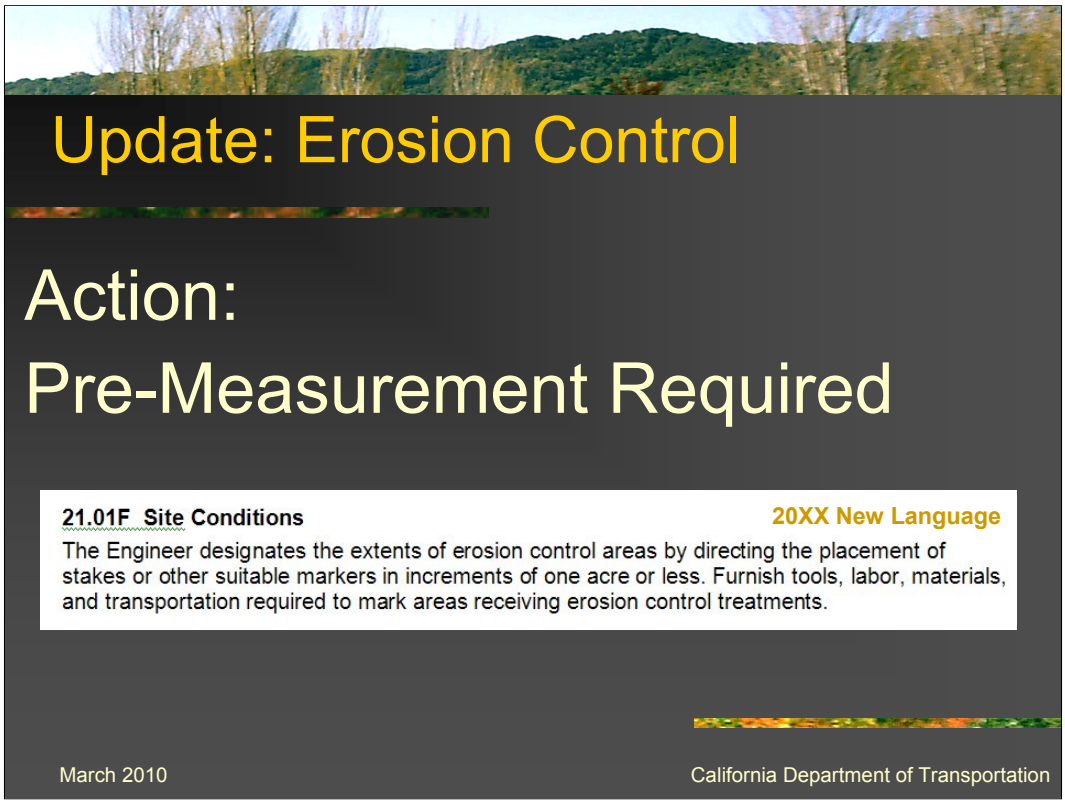
OK?



Past Feedback – Problems Bidding EC Work.

Frequent bust between areas shown in the PS&E and the field.

Units of measure didn't match industry standard.

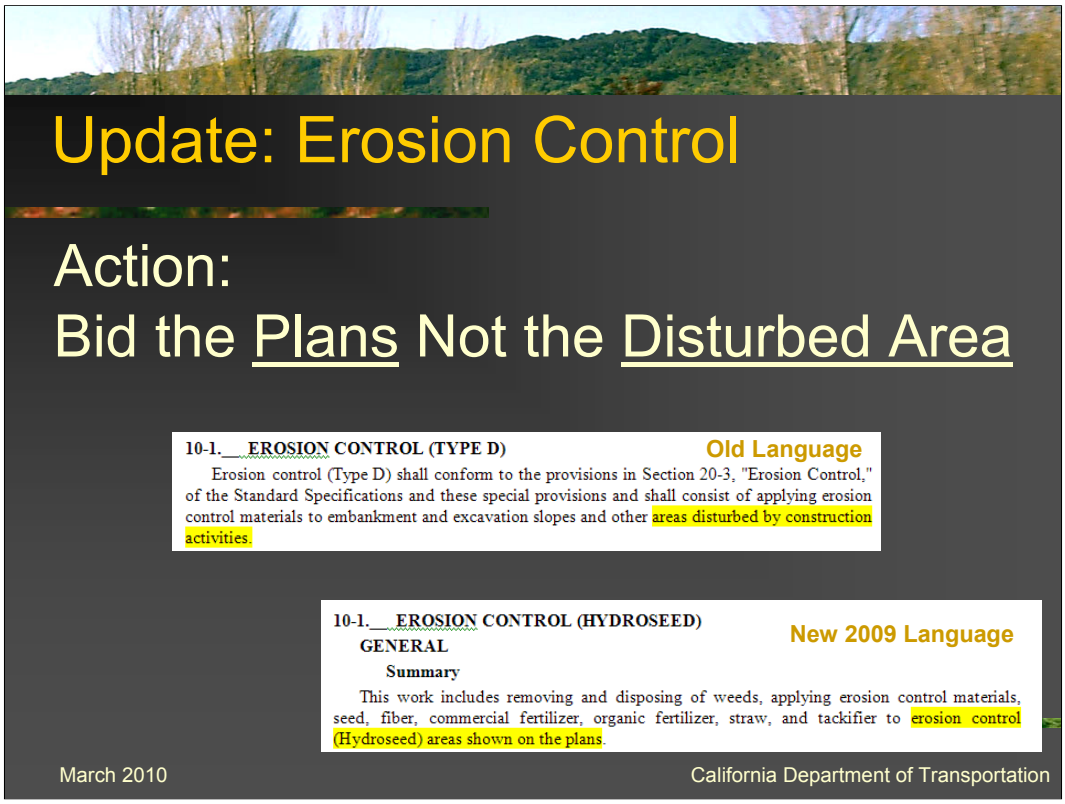


2008 – Changed to require pre-measurement per your request.

2009 – received positive feedback.

2010 – Is the language shown CLEAR for roles and responsibilities?

Bonus Points – should this apply to ALL EC Areas – Drill Seed, Compost Blanket, EC Blanket too?



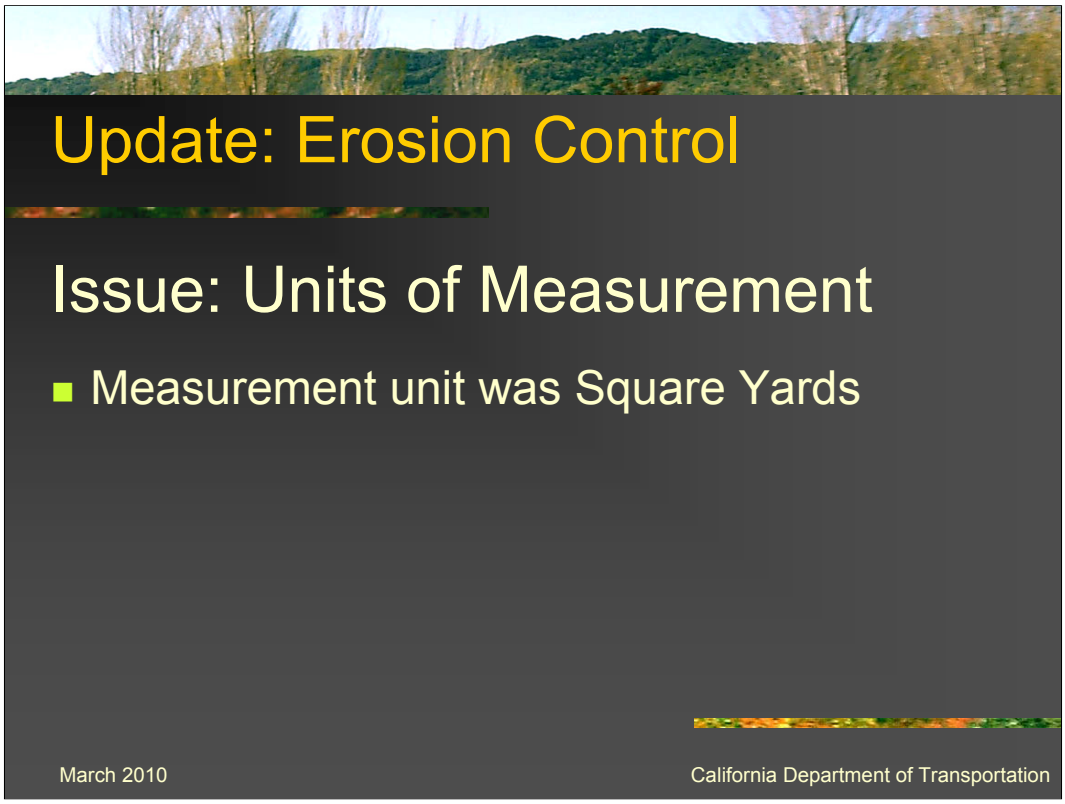
July 2009 Changed Specifications once again.

Now - bid the areas shown on the plans – not the disturbed areas in the field.

Disturbed areas are still required to be treated, however by our stormwater permit.

You asked for it.

Feedback?



Past Feedback – Problems Bidding EC Work.

Frequent bust between areas shown in the PS&E and the field.

Units of measure didn't match industry standard.

Update: Erosion Control

Action: Changed SSP Measurement to Square Foot/Acre

MEASUREMENT AND PAYMENT **New 2009 Language**

Erosion control (Hydroseed) will be measured by the square foot or by the acre, whichever is designated in the Engineer's Estimate. The area will be calculated on the basis of actual or computed slope measurements.

March 2010 California Department of Transportation

2008 – Changed to require pre-measurement per your request.

2009 – received positive feedback.

2010 – Feedback?

You mentioned the following problems with the BFM specification.

Update: Erosion Control

Action: Specification Changes

1. Apply bonded fiber (fiber and tackifier) in the first application according the following rates:

First Application

Slope Rate	Pounds Per Acre[1] (Slope Measurement)
Flatter than 3:1(horizontal:vertical)	1,100
From 3:1 to 2:1(horizontal:vertical)	1,500

[1]Application rates of bonded fiber must be increased by 500 pounds per acre for surfaces roughened by techniques such as sheepsfoot-rolled, ripped, tracked, and imprinted.

2. Combine seed, organic fertilizer, and bonded fiber (fiber and tackifier) for the second application according to the following spread rates and apply the mixture within 60 minutes of adding seed to the mixture:

Second Application

Material	Pounds Per Acre[1] (Slope Measurement)
Seed	
Commercial Fertilizer	
Organic Fertilizer	
Bonded Fiber (Fiber and Tackifier)	500

[1]Application rates of bonded fiber must be increased by 500 pounds per acre for surfaces roughened by techniques such as sheepsfoot-rolled, ripped, tracked, and imprinted.

Current Specification

March 2010

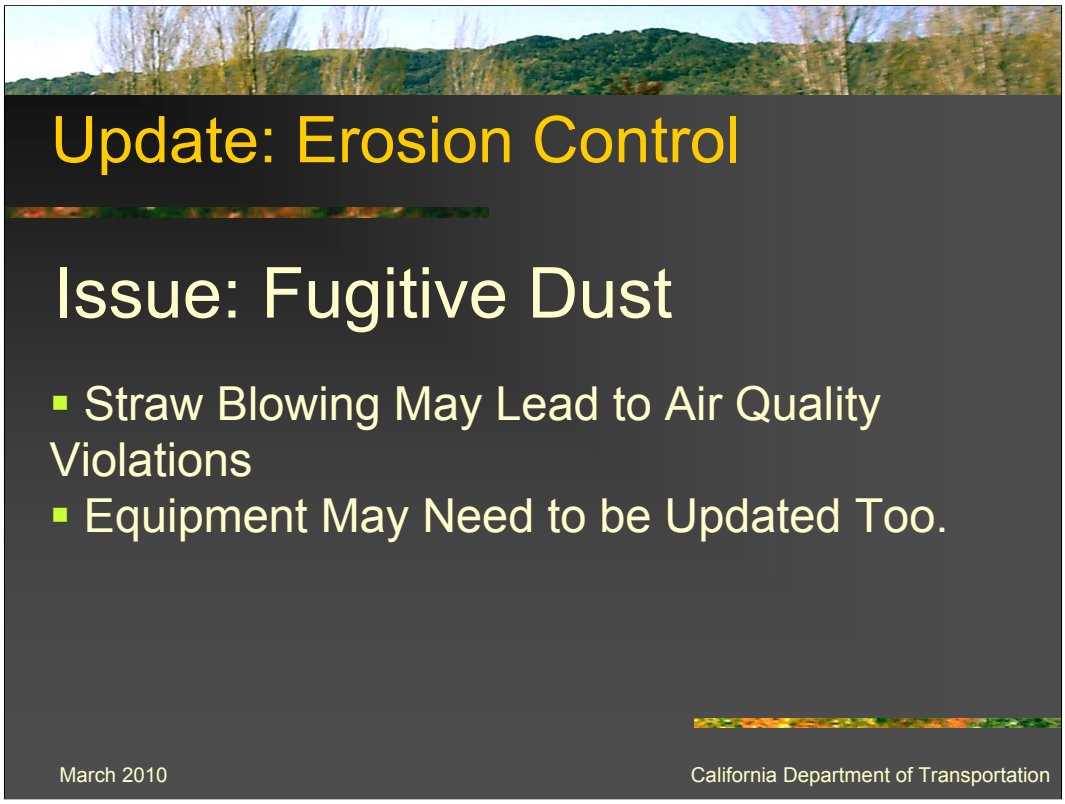
California Department of Transportation

July 2009 – We instituted the following changes to the BFM spec

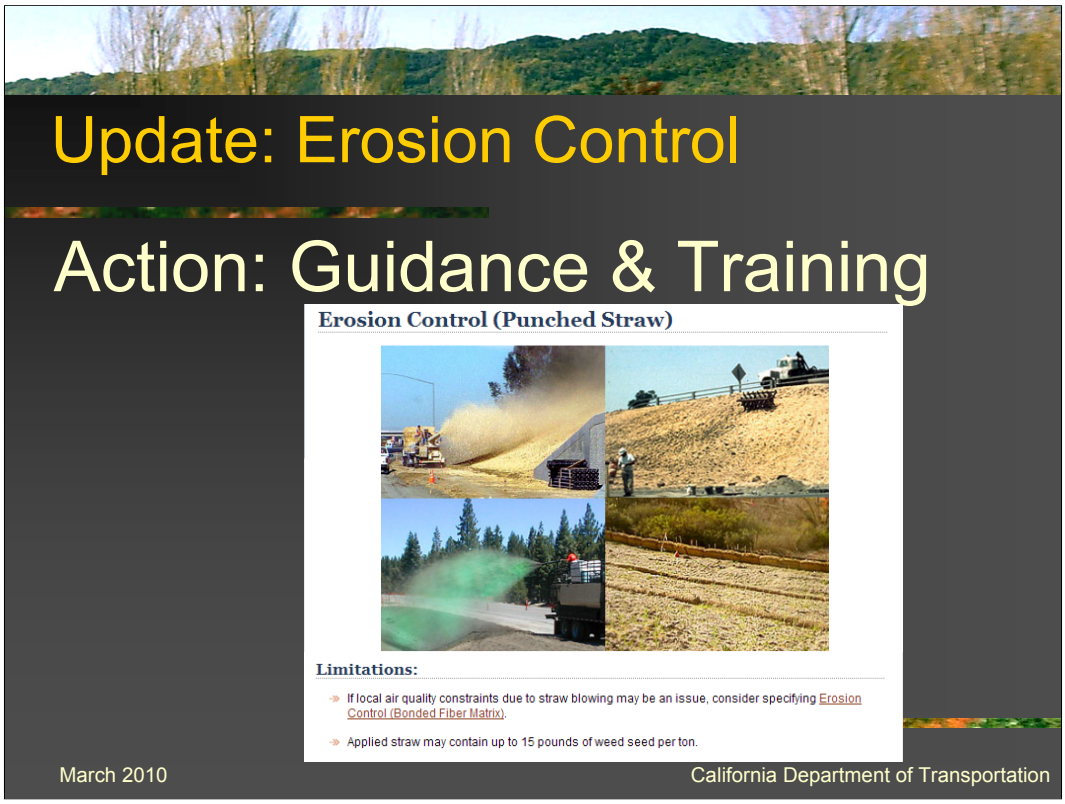
2010 PLV – More on this later – Sequence or Order of Installation is described on the plans – total flexability.

Directs the application of seed to be in the second application.

Feedback?

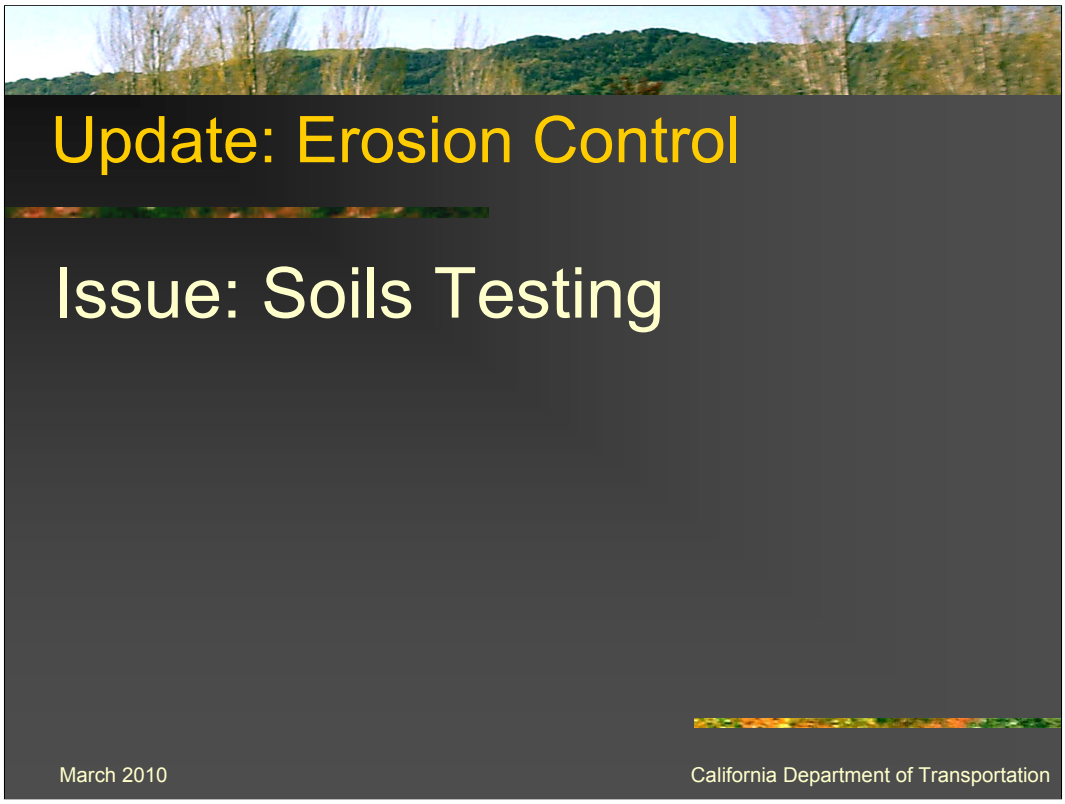


You mentioned the following problems with Fugitive Dust and Air Quality violations last year.

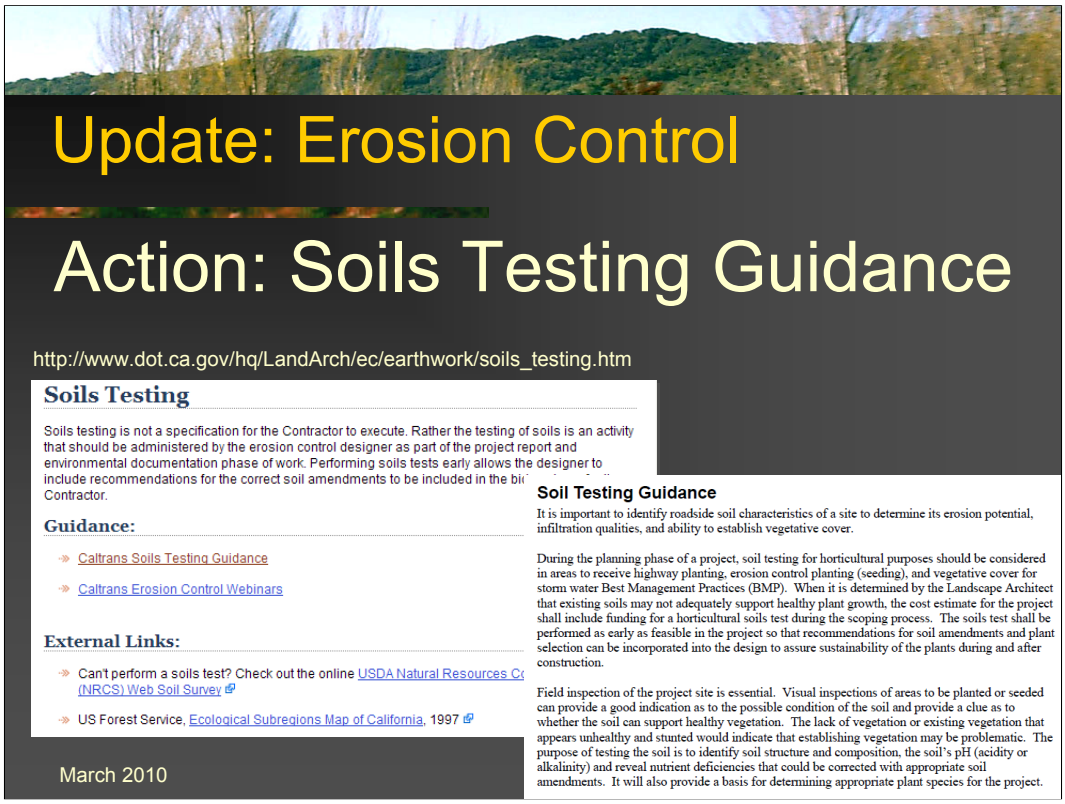


Specifications can't fix this problem, so we took the following actions:

1. Added the guidance shown to our new Erosion Control Toolbox website.
2. Included the guidance shown in our statewide Erosion Control Training.
3. Initiated dialog with the State and Regional Air Quality Board(s)
4. Heads Up – CAPCOA is active statewide to enforce air quality.

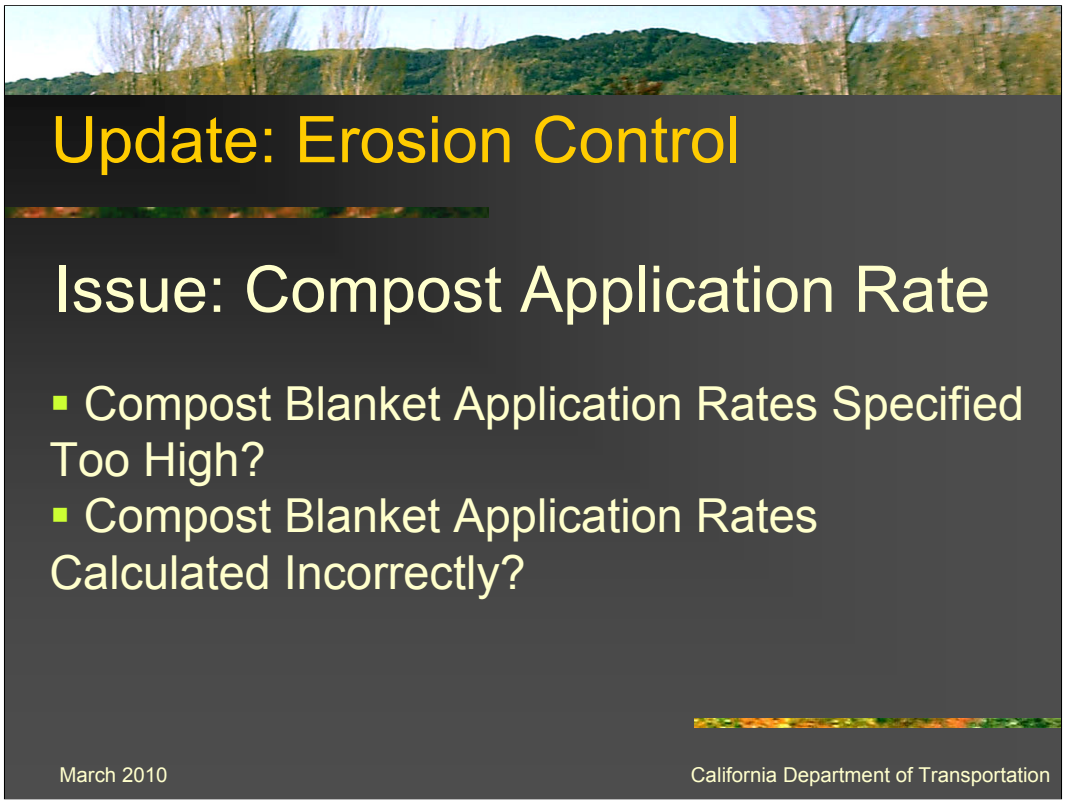


Feedback was that Caltrans needed to do more SOILS testing.

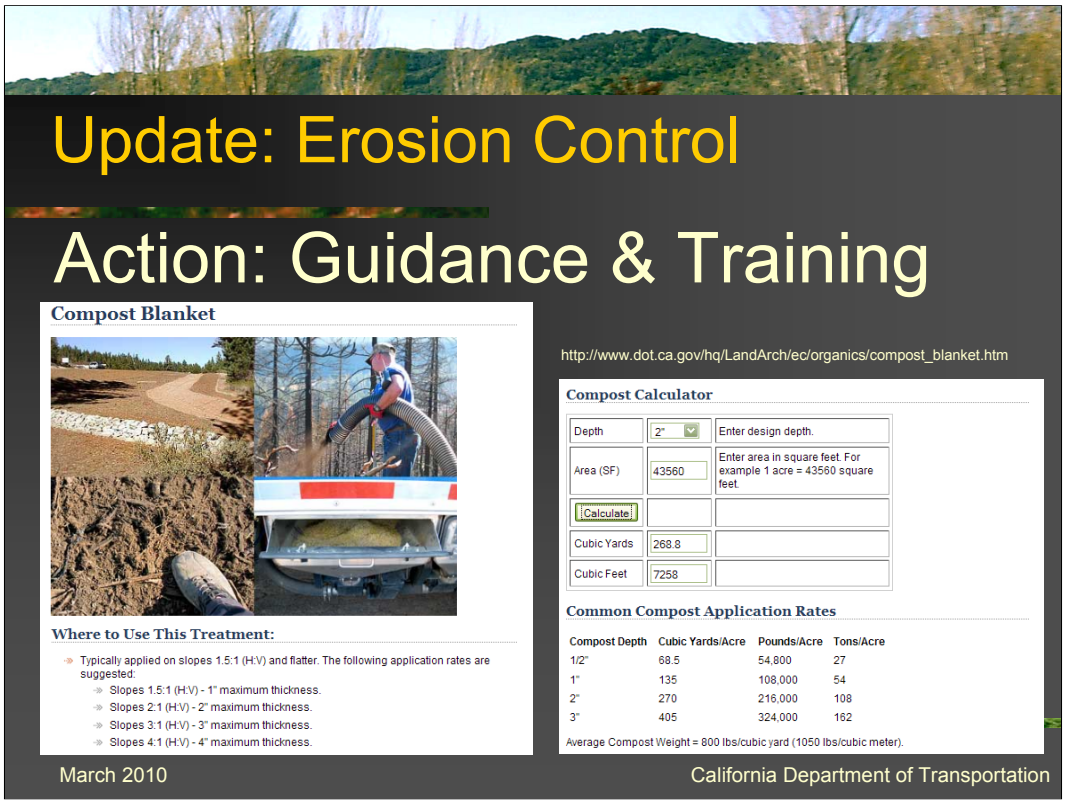


Specifications can't fix this problem, so we took the following actions:

1. Erosion Control Toolbox website provides a method to test soils used successfully for years in District 11.
2. Erosion Control Toolbox website also provides OTHER resources to indentify possible soil (or subsoil) tyoes.
3. Erosion Control Training discusses soil testing in depth as an appropriate BMP.

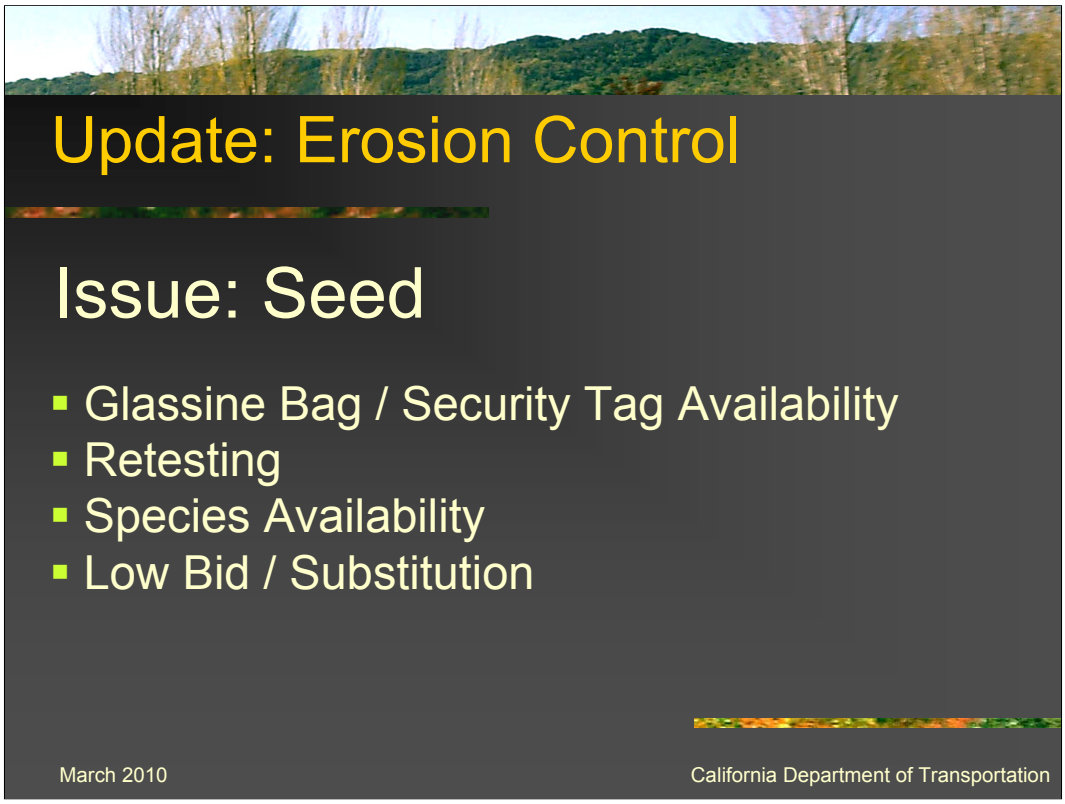


You mentioned the following problems with compost application rates.



Specifications can't fix this problem, we took the following actions:

1. Added the guidance and Compost Calculator to our new Erosion Control Toolbox website.
2. Discussed compost application rates in our statewide Erosion Control Training.
3. Website also states that compost and seed can be applied simultaneously to help ensure germination – correct moisture/light levels.

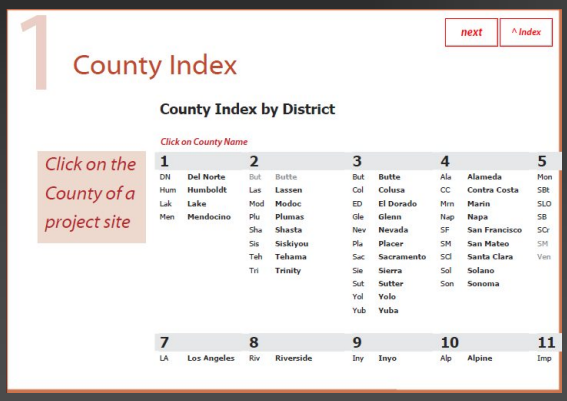


Erosion Control SEED has posed a number of issues over the past few years.

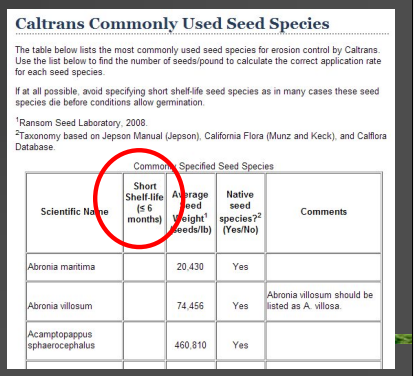
We require re-testing for both purity and germ every year to help ensure that the seed content at the bottom of the bag is still good – ie – not too much chaff.

Update: Erosion Control

Action: Guidance & Training



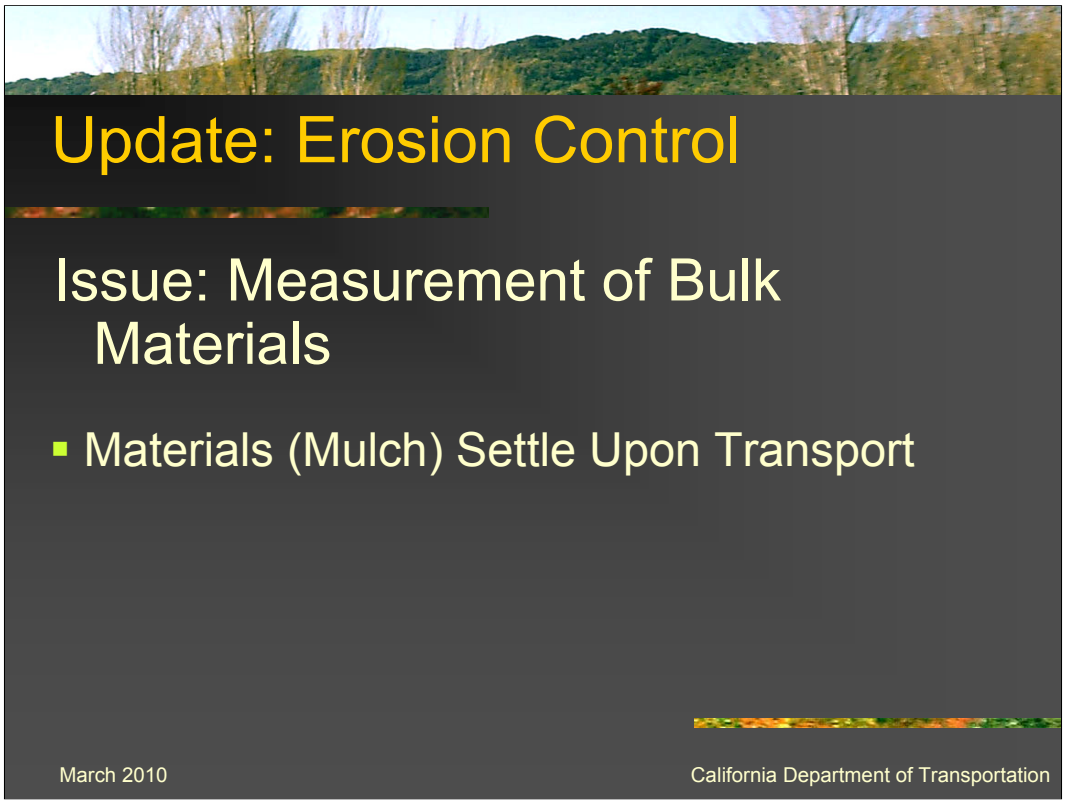
http://www.dot.ca.gov/hq/LandArch/transplant/



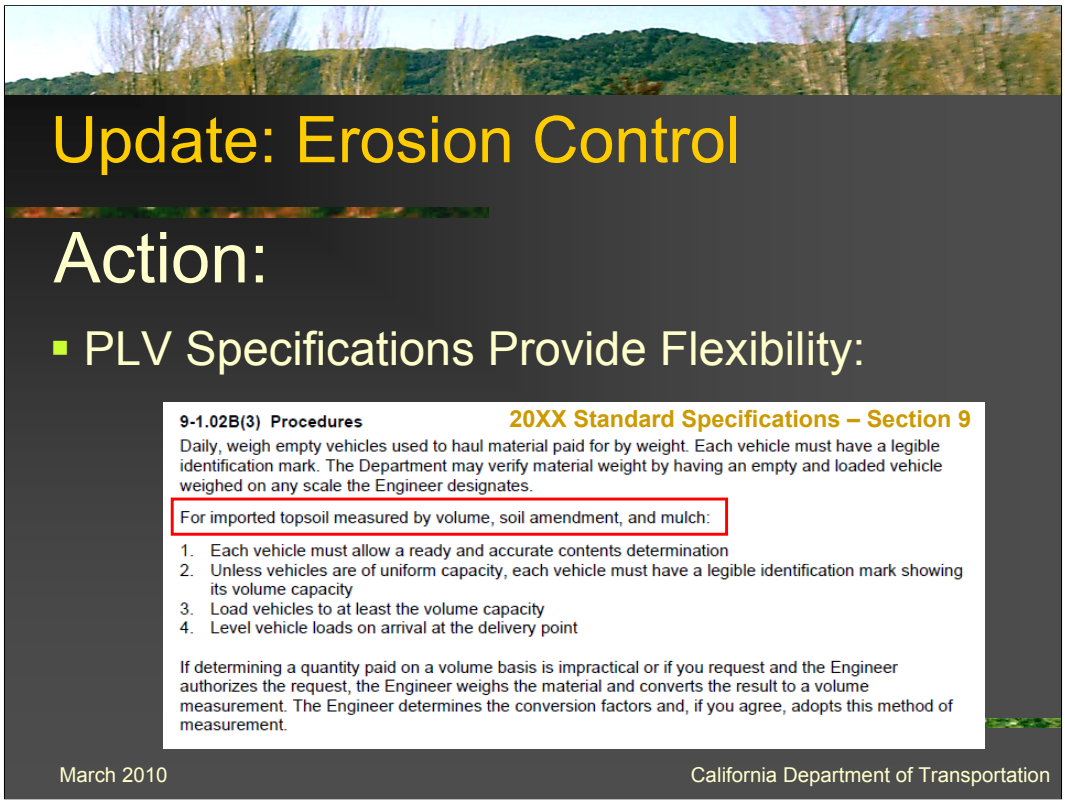
March 2010

California Department of Transportation

Designers should be better able to specify the best seed species with our Seed Plant Calculator application and the Commonly Used Seed Species list that also highlights short shelf-life species.



Bulk materials settle 10% during transport – yielding 10% less material measured and paid for at the job site.



2010 PLV Specifications for (Imported Topsoil and Mulch) allows the Contractor to request measurement by weight in lieu of measurement by volume.

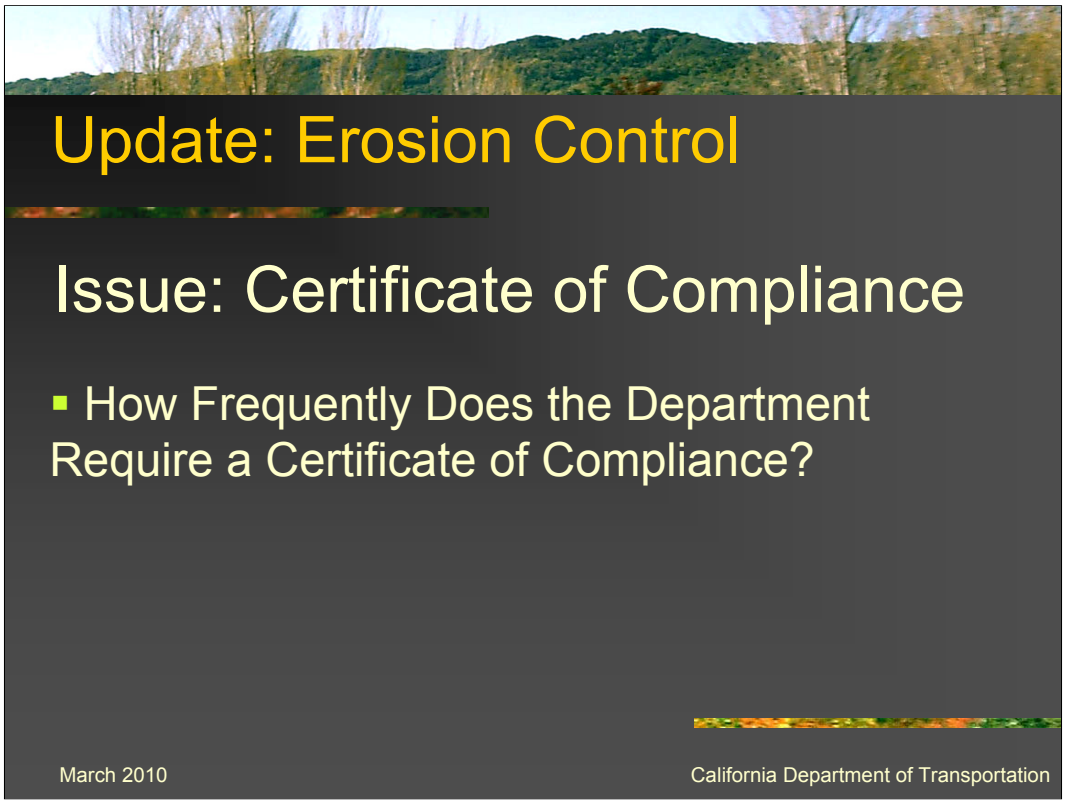
Many bulk materials measured by WEIGHT.

Per the specifications above, topsoil, soil amendment and mulch are to be measured by volume in the truck.

OPTIONALLY – If the Engineer agrees you can measure by weight and then convert to volume.

Proper moisture content may be calculated by the RE and additional weight due to water might be deducted.

Feedback?



Question raised at last year's Contractor meeting.

Update: Erosion Control

Action:

- Plain Language Specifications Require a Certificate of Compliance for Each Lot.

6-3.04E Certificates of Compliance **20XX Standard Specifications – Section 6**

Section 6-3.04E applies to a material specified to be furnished with a certificate of compliance.

Submit the certificate before its incorporation into the work.

The certificate must be signed by the producer of the material and must state that the material complies with the Contract.

Submit a certificate for each lot of the material. Identify the lot on the certificate.

Submit a certificate for any material produced outside the U.S.

March 2010 California Department of Transportation

Here is the proposed language in the 2010 PLV specs.

These specifications require a Certificate of Compliance for EACH LOT of material.

Feedback?