Weed-Free Material Programs Discussion Group

Moderators: Peter Beesley (PG&E) and Martin Hutten (NPS)

Topics to discuss

- 1. Federal agency coordination and consistency
- 2. Stakeholder engagement/education
 - a. Equestrians need to be included
- 3. Update the MOU
- 4. Leveraging existing programs and successes
- 5. Increasing demand to pressure companies to use BMP
- 6. Contract specifications
- 7. Monitoring project sites (erosion projects)
- 8. Corporation yards: vehicles transporting seed
- 9. Infrastructure building
- 10. Cal-IPC support
 - a. BMP manual
 - b. Website ,Cal weed talk
- 11. Protocols
 - a. Preferred
 - b. Minimum
- 12. Argentine Ants and protected species in materials
- 13. Supporting and educating the industry
 - a. Hay growers
 - b. Aggregate materials
 - c. How to approach the companies and foster relationships
 - d. Regulations and zoning
- 14. Procurement recommendations and BMPs
- 15. BMPs supply chain/ full chain of custody
- 16. Go beyond North American Weed Management Association standards

Discussion:

Communication:

- Getting the word out: CalWeedTalk list-serv (cal-IPC's list-serv) is a forum to get a message out to people about stores. Nationals forums as well.
- Have gotten encouraging feedback and support and interest from CA and nation-wide.
- Weedy Stockpiles Taking a picture of the problem and showing this to them had a good impact. Visual was convincing.

Inspection Issues:

- What do you look for? Seeds? They are tiny.
- Project in 2004 with CDFA lab testing gravel coming out on the highway- stopping trucks and doing inspections. Didn't pull any seed, but they had documentation of movement of diffuse knapweed, but sampling didn't work.
- Even with low infestation rate per load, risk of eventually transporting weeds is high, for example, in weed-free forage. You can't do post-harvest inspection. You really need to

see the source. CA allowed for post-harvest inspection. You are allowed to break open a small amount, but it's like finding a needle in the haystack.

- Must inspect at the source; at the quarry and even that is difficult, but worth it.
- Corporation yards-vehicles transporting seeds
- Infrastructure building (prior)

Best way to inspect or Best management practices (BMP)- Protocol Comments

- Phenological time issues- the need for gravel doesn't always match best time to inspect. Sometimes inspections come up at phenologically wrong time. This is a common issue. There is a proper phonological time to do this. Contracting deadlines, and fiscal year boundaries often interfere. The botanist is supposed to go out and inspect, but to do this efficiently and safely is difficult. Have to try to get there at the opportune time. I feel good about being there at the right time. Next step is certification and relationship with operators. Pit A vs. B, which is OK?
- Certification of pits would allow us to investigate in advance to have an idea of which to go to in a rush.
- Compliance agreements Like growers who ship to other countries, the vendor signs an agreement in which they agree to maintain clean pits either by inspecting themselves, or using contracted inspectors to do the regular inspections for them. This may work here, along with random inspections to keep them "honest."
- Consistent inspection: Pair self-policing with regular monitoring, especially when some are done under emergency basis projects. Need for constant monitoring, though, as new seeds can come in at any time. There needs to be a reporting of disturbance, infestations between CalTrans, DOT, contractors, CDFA etc. to identify priorities on major corridors.
- When the fill was needed in an emergency situation and inspection may not have been at a good time to find plants- pair it with post project monitoring. But weeds found post-project monitoring may be due to multiple sources: pit, vehicles and recreational use.

Example of Importance: (For those who are not convinced) At a Modoc County drilling operation at 6000 ft., clay was brought in for clay-line sumps. After the operation, they found a listed vernal pool plant growing among sumps. The clay pit at the plateau down below was the source of the seeds. Client couldn't do much more with site since the site had a rare plant in it!

Argentine Ants- spread via soil like plants- What if you have materials that are supposed to be sterile, e.g. rock and sand. Do people apply pre-emergent herbicides?

Answer: There is no specific chemical used to treat bulk soil. You would have to lace the whole load, which is not cost-effective. This may be inappropriate since you are moving the fill somewhere else to, say near water, and you may have the wrong chemical in it. Basically, due to uncertainty as to where the gravel will end up i.e. next to water. Heat sterilization would be an alternative. Some of these are places that sit for years, and then are suddenly dynamic and then fill is moved out to projects. Businesses are designed to move product.

Example: Project south of Yosemite. Inspected a site/pit. Movement and within-pit operations were well-organized. However, the buffer of pit was terrible; over-run with weeds. The pit operator asked if they could spray the gravel as it came up on the belt. At least they were

willing to consider some solution. (This was not a good idea due to feasibility, reporting requirements, cost of using so much herbicide etc.)

Why is there a problem?

Why are some pits overrun with weeds?

- It is a disturbed environment, and they also have a lot of dust. They use glyphosate on weeds, and it will be bound up almost immediately by dust in the pits.
- They (gravel companies) want to be good stewards so if managers do outreach in a way to help them (deliver a service to them) they can be educated and willing to do the right thing. WMA's could be critical in this. Approach it as this is how I can help you do it at a lower cost and this is a more effective way of doing it.
- What about a requirement that gravel orders cannot include the top few inches of soil?

Communication with Operators

- Example: WMA field trip to gravel pits by operators. They were excited to learn about how to control their weeds- very positive feedback from recommendation. There is a role to play and a natural relationship that can be built on. Not 'weed police' but trained botanists and professionals, and we can deliver a service to them. This is how the interest should be communicated. Talk to the manager of the pit. Great progress can be made when appropriate recommendations are given.
- Make the contact as a service, e.g. "this will help your bottom line, since compliance will be required for weed-free materials, here is some advice about how to do this economically."
- Increase demand but also the means of doing it right (education + demand = better quality pits). Small groups – work with a larger agency to create the demand level that will push the gravel company to make changes.
- Much of infrastructure and gear (e.g. rig for spraying) is already there; they often just need proper recommendations to address problems (right time, with follow-up).

Other Specific Issues

- Material drawn from 10-15 sites sometimes. Contractors will bid on projects. Not necessarily nearest-three pits. Material may come from a hundred miles away. Sometimes the pit has not been inspected, since there was no need before. Material is trucked around farther than you think.
- Outreach to DOT: They mentioned that they don't purchase erosion control materials directly. The contractor will go and get materials, but there seem to be no specific requirements. District Biologist can put in restrictions, but not sure how frequent that is. Also there are standards for seeding and landscaping. But we need to be supporting ability of industry to do the right thing. PG&E, utilities, DOT's, Counties- if there is a demand, there will be more people available to provide that. Park service is small potatoes here
- Get Cal-Trans on board, and things may change. Need more demand. If it's only small outfits that want it, that's not enough to drive demand.

Key Issues to advance (and how can Cal-IPC facilitate this effort?)

1) Supporting and educating industry, being able to communicate value of stewardship and sustainability. Give them tools and recommendations to be able to advance this, in terms of people are interested in purchasing, how they can go about doing it.

- Identify quarries in WMA, educate them about top 3 weeds. What about prioritizing certain weeds?
- This is too fine a point, since there are different weeds that are important in different areas, and to different agencies. List will change based on where you are. NAWMA list as minimum compliance includes, e.g. *Avena*, wild oats.
- How are weeds going to be prioritized? Gravel pit operators need direct, concrete recommendations (they are not going to investigate weed risk themselves).

2) Cal-IPC can help bridge communication as a support to WMA's. WMA's have more enduring relationship with operators.

- Maybe they can put together/help produce the materials to help communicate and even give the WMA's advice on how best to approach the organizations.
- County Ag Department and Weights and Measures? Not all counties are that engaged. But they do have the authority to act, with legal mandate; especially for Class A listed noxious weeds. Putting it in the County's hands to regulate will work very well in some places and not at all in others.
- Another tack- use County Zoning laws. Sublet County in Wyoming used zoning laws in order to shut down pits if they are not compliant.

3) Supply-chain management.

- Pit may look pristine, but there is a supply chain- truck, equipment, etc. Distribution and transportation of materials is also important. Need to consider the supply chain: where is the gravel coming from, how clean is the transport and are proper stockpile methods being used at the storage site until used? It possible, order on an as needed basis, but this can get tricky.
- Often some are asked to inspect storage piles where chain-of-custody is not clear. Inspectors are hesitant here, where history is unclear. Will not certify this type of material for exposed applications (e.g. they might certify for use under layers of compacted material).

4) Need for best-management practices advice (especially buffer area guidelines).

- How do you properly stockpile then?
- Most sand and gravel pits- surface layers have been scraped, gravel is 20 feet underneath, so essentially it starts weed-free, and just has to be maintained that way. Sometimes it is a matter of whether adjacent sites are infested and so the stockpile builds up weed seeds as it sits for a few years.
- Strategy: Go on an as-needed basis to the pits, and look at the piles.
- This gets difficult with wind-dispersed species with known capability to spread several kilometers. Importance of buffer areas, and this may differ by region. NAWMA standards provide no guidance on how large the weed-free buffers need to be. For example, is having rush skeleton weed 200 yards from a pile good enough for Sequoia? Yosemite? That's going to be really hard to deal with when the time comes. Need to go

beyond NAWMA standards. Our current requirements for buffer areas is unclear and we need more concise standards that consider wind-dispersed seed.

- Best Management Practices has to look at whole supply chain and how that works.
- Similarly, hay growers should be reached out to in a similar fashion.
- Need to include hay growers in this effort to ensure weed seed free feed is use.

5) Need for examples of what is working and what is not.

- Collect horror stories and stories about what is working. Do bring that camera, that day. Share in-group stories, photos.
- Are there stellar vendors? What's working? (government agents cannot endorse any vendor) Cal-IPC can showcase what sort of vendor that is ideal?
- Nevada- Put into place inspections and they followed-through and Forest Service also got involved. Very successful program, and they found that what was needed was education and outreach. The operators just didn't have the information to make good decisions. It was successful once they understood what they needed to do.
- Success stories often find that the pit managers just needed to be educated about better methods and they were willing to make the change. WMA field trips to gravel pits would be a good way to offer this type of outreach to gravel and hay vendors. Also, get pictures of examples of good vendor practice and the horror stories. These pictures can be use to motivate action.

6) Next Steps

Take the message to the Weed Management Areas. Informational materials from Cal-IPC would be helpful here. Send these materials to pits. WMA can be of service- do a field trip to your site, and you will get expert opinions on some things you might find there and what you need to do.

Current Efforts:

Survey of Ag Commissioners: Contacted 46 County Ag Commissioners in PG&E service territory to see if there are existing certification programs for straw and hay. Most counties have a program in place, and are doing some inspections, although there is not a lot of demand, some are willing to start. When asked about gravel and fill, found there were just a couple who are actively doing this, but there is just not a lot of demand for this. Because of lack of resources, they didn't want to jump into it. However if the community saw this as a need, they would be willing to get behind it.

Outreach to Cal-Trans and Resource Conservation Districts (RCD's). Trying to see if they have information about vendors. Gleaned some information about vendors/sources. Try to identify who these vendors are, share those lists, and coordinate needs. Who are end-users? Connect them up. May be a way to increase demand.

MOU was signed between BLM, Ag Commissioners, CDFA, NPS, USFS

Effort underway to resolve inconsistencies across these different agencies. Also set to expire. Getting this signed again would be good. Maximum MOU time is 5 years for NPS. Quick action would be needed here, especially if the solicitors need to check it over, which might happen quickly only if there were no modifications. However, probably any changes should be made while this is still fresh. Will call Ag Commissioners to make sure folks are making sure this will happen. Parties need to be contacted and pulled back in to re-sign. Who are key players?

Overall continuing efforts:

- Public outreach. Get the information on a website, revisit it a few times a year. Not too many man-hours.
- Who is selling weed-free hay, put this on a map, also NPS, FS areas that require weedfree hay put those on the map. Information about which counties are doing inspections. Something for equestrians visiting the park- where to get the hay, what certificate looks like.

Statewide framework is now on a comment period.

- Can we go to the next level with State certification process?
- It could be more clear, and have more teeth.
- There has been an email regarding this through WMA's, and listening sessions.
- There was nothing in the framework on this (weed-free certification) topic
 - Couch under prevention for all invasive species?

Look at this and provide comments, highlight this issue

- Where would weed-free fit on the document? (it's pretty high-level, so it should be obvious where it should fit)
- Email Peter if you cannot find the document
- This legislation may affect where this falls in the level of priorities
- Entomologists should add to this- Argentine Ants are included, as it is for all species
 - o Landscape materials, dirt and sand problem

Please see Additional Documents/Materials from this session provided by Mr. Hutten and others. Available:

2007 MOU

Weed-Free Material Information from PG&E

Contract specifications and heavy equipment inspections

How they do that in-detail

Survey of Weed-Free regulations in Parks

CDFA Policies regarding Weeds

Adjourn.