

The Right of Way Perspective Balancing Biology, Reality, and Sustainability

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In light of current economic conditions that exist in most places, but especially here in California I think the theme for this year's CWSS is most fitting. I'm going to focus on the "reality" portion of the title. A fellow named James Baldwin once said,

"Not everything faced can be changed, but nothing can be changed until it is faced."

I meet people from many walks of life in my job. Some work for various agencies such as federal, state, county and city governments. Others work for districts of various types. I work with weed management organizations, business interests and interested members of the public. One thing they all have in common is a fundamental misunderstanding of what Caltrans is, what it is allowed to do, and when it comes to managing weeds, how few resources are dedicated to it. Caltrans is a state agency consisting of roughly 21,000 employees. For comparison purposes the department of corrections has triple that number of employees. The maintenance division of Caltrans, where ninety nine percent of all weed management takes place, has only 25% of all Caltrans employees. In the maintenance division well under 1000 employees are fully dedicated to vegetation management and only a fraction of them are full time weed management personnel.

Caltrans is an organization run by Engineers. Unless you are an engineer (or in a few cases, an architect) you can only promote to low level management. Engineers exhibit certain traits that give Caltrans a distinctive feel. Engineers like to design concrete, steel and asphalt solutions and tend to lose interest in mundane maintenance issues. In fact maintenance personnel feel as if engineers look down on them.

Caltrans maintenance has changed fairly dramatically over the past few years in the face of the ongoing state budget crisis. As with many governments, maintenance is often the first thing cut. Caltrans maintenance crews have been reduced over the last five years by 50% and over the last ten years by up to 70%. Currently there is a hiring freeze and in District 4, the nine Bay Area counties, there are 100 openings in field maintenance and another 20 in various office positions. As if this isn't enough of a challenge the average age of a Caltrans employee is fifty years of age.

Maintenance headquarters in Sacramento has its own set of challenges. The Office of Roadsides has multiple openings and the Statewide Landscape Program Administrator position has not been filled in well over 2 years. Issues once addressed at state level are now often addressed at district level, so the overall vegetation program doesn't have the uniform feel it once had. This isn't necessarily bad because we have some good vegetation managers and PCA's at the district level.

Maintenance workers with Caltrans are literally where the rubber meets the road. These men and women are the people who implement the Caltrans vegetation management program. They are much maligned and very much misunderstood. It takes a certain personality type to handle what these folks do on a day to day basis. Because the job is so dangerous and the fact that these are relatively low paying jobs, maintenance employees tend to have no more than a high school education. Maintenance workers tend to be very deliberate, cynical and tend not to trust anyone wearing a tie or holding a Blackberry in their hand. To get things done with these people you must understand them. They need to be shown that a new method or technique works....not told. Once you have their trust these people make excellent friends and allies.



Work on or near the highway is inherently dangerous. Every year there are thousands of deaths and injuries on California highways. On average more than one Caltrans maintenance employee is killed each year and many are injured.

Due to California's unique geographical layout and large population, much of the freight moved is done so by semi truck. Trucks are massive, carry tons of weight and travel at relatively high speeds. Trucks and passenger vehicles often don't coexist very well and when you have to slow them down or move them over in a Caltrans work zone, problems result. In the latest information I can site, there were 70 fatalities in Caltrans work zones in 2008.

Because Caltrans work zones are dangerous to both the public and Caltrans employees, maintenance employs strategies to save lives and reduce injuries. Caltrans uses massive vehicles with articulated crash cushions to absorb the energy of an impact. We also use early warning vehicles to notify motorists of an upcoming work zone and shadow trucks in the immediate vicinity of any work being performed on the roadway or a narrow shoulder. It takes three trucks and three employees to spray a four foot fire control strip. Safety will always trump the expense of using multiple people and equipment to perform any operation. Worked performed in the roadside environment such as mowing, is considered safer and requires fewer safety precautions. Caltrans utilizes many specialty vehicles which have been adapted to perform routine maintenance duties for safety and efficiency reasons. Once requested it can take several years to finally take possession of one of these vehicles. Obviously you can't purchase one of these

vehicles off the shelf. The base vehicle is purchased at the headquarters level and sent to a location in Sacramento where it is outfitted to Caltrans specifications. Due to resource reductions and furloughs this process takes years and often the supervisor who requested the vehicle has moved on and another supervisor with different needs has taken their place. Often the recipient of the new equipment has to request a modification at the local level further adding to the time an old or obsolete piece of equipment must be used.

The Shop owns all vehicles and maintenance personnel are not allowed to modify the equipment. This is problematic as the Shop is understaffed and furloughed. It can take weeks just to have basic maintenance performed on a vehicle. Anything more serious can take months. Obviously this is a problem for a spray crew attempting to put down a preemergence herbicide during a narrow weather window when they have equipment problems. Backup vehicles are not an option due to equipment reductions over the past five years. Contracting out repair work is performed on rare occasions with emergency justification only due to Union restrictions.

Politics play a big role in any public service job at any level of government and with Caltrans maybe even more so. Governors can issue executive orders which can supersede any plans you may have at the local level. The Caltrans Director is an appointed position and serves at the pleasure of the governor. With the current governor's appointee this will be the fourth Caltrans director in the last four years. Caltrans Directors can issue orders which supersede your planned duties. This lack of experience and continuity at the top can cause indecisiveness at lower levels, but also gives competent managers at lower levels a little more freedom.

The California legislature can have an effect on what we do as well. In 2010, 750 new bills were passed and signed into law. The total number of laws in California exceeds 57,000. This creates scenarios where after some time we find out that a law has changed and we were late adopting it. With personnel shortages at all levels the information flow isn't what it was.

Another department that influences what we do is Caltrans legal. As you might expect, Caltrans is a big legal target. We get sued not only by outside interests but by our own employees as well. Depending on risk management factors, legal can dictate policy to stem the loss of money paid out in legal rulings. This can work in our favor. In the case of wildfires, we were given the ability to use more herbicides contrary to what our EIR allows. Previous legal decisions have had a big influence on Caltrans policies.

There are a variety of outside interests who have had an influence on Caltrans policy. Anti chemical groups have impacted the vegetation management policy of Caltrans: In the early 1990's Caltrans was sued by a group concerned with Caltrans' over-reliance on herbicides for vegetation control. Caltrans hired a consultant to study the situation and craft an environmental impact report. In 1992 Caltrans adopted the consultant's recommendations. The highlights of the 1992 EIR included adoption of an IVM approach, the reduction of herbicide use by 50% by the year 2000 (which was met) and by 80% by 2012. In addition Caltrans agreed to a reduction of total acres treated.

The 80% reduction by 2012 may have already been achieved depending upon one's interpretation of the original report. The original draft did not include herbicides used for landscape weed control, but have been included in the reductions ever since. Surfactant usage was included as well.

Almost 20 years later and two things are clear. Caltrans ability to address the issues of wildfire management and the spread of noxious weeds in our right of way has been limited. The EIR stated that the ability of Caltrans to adopt certain IVM tactics was resource dependent. Resources have been greatly reduced since 1992 and hopefully decisions made in 2012 will recognize this fact and allow us more flexibility. The EIR resulted in some positive results. Oversight is necessary, so is the ability to adapt.

I've just pointed out some of the challenges we at Caltrans face in getting our job done. Now I'd like to focus on what we can do and what you can do to reach our common weed management goals.

Due to resource limitations which I'm certain are permanent, future weed related accomplishments will have to be done in a spirit of cooperation. Communication will be the key to getting anything done. On the Caltrans side we must do a better job of intra department communication. We are not currently very efficient at working together as an agency. Design, Construction, and Maintenance need to get on the same page, if we are to be successful at structural weed control. For example, weed control mats have been specified for all new guardrail installation statewide. My guess is not even 1% of new guardrail installations receive these mats. Construction is not being held to the standard, but Maintenance doesn't have any recourse other than to complain. This needs to change.



Caltrans needs to do a better job of keeping up with the latest methods and techniques. Due to resource reductions, personnel in some locations are not allowed to travel for training or meetings. In my opinion this is the time we need to maximize efficiency by keeping abreast of the most current methods of getting the job done. Not all landscape specialists were able to attend this meeting due to travel restrictions in their

districts. Due to lack of advocates for our position in Sacramento, this sort of situation is difficult to remedy.

Better communication between Caltrans and county agriculture commissioner's offices would greatly improve weed control statewide. Weed Management Area (WMA) meetings are excellent vehicles for accomplishing this. Caltrans responds to organized letters of concern, especially when many parties are involved. For example, if the Ag Commissioner's office is concerned about Yellow star thistle on Caltrans right of way and another letter was produced from a fire management district with fuel load concerns, Caltrans headquarters may allow the district PCA to use more herbicide than they have been allotted. If herbicides were an issue perhaps additional mowing would be authorized.



In addition to various counties, WMA, and landowner concerns, working together helps to deal with political groups with axes to grind. A united front makes for a less inviting target for those who just like to complain. Not all complaints are baseless. Efforts need to be made to mitigate legitimate concerns. One tool we have is the Adopt-A-Highway program. We have used this program to allow groups concerned about pesticide use to maintain a defined area in a manner they can live with. This program is underutilized.

Property owners adjacent to Caltrans right of way have an underused option at their fingertips. The Property Owners Roadside Vegetation Act of 1991 allows property owners to work on our right of way to control vegetation. Due to limits on how many acres we can treat with herbicides or mow, landowners are often dissatisfied with levels of weed control we obtain between the roadway and the fence separating their property from ours. Landowners may have legitimate concerns about the potential spread of noxious weed seed and wildfire onto their land. Encroachment permits can be issued to owners after consultation with a Landscape Specialist.

Working with the private sector is an underutilized avenue for getting things done. If it were not for some chemical representatives, we would not have met our training obligations in 2010. The prolonged budget impasse made it impossible for us to pay for our DPR approved training classes. Dow AgroSciences recognized our plight and paid the DPR fee so we could proceed with our goal of providing continuing education for our certified personnel. Other industry assistance was received from DuPont, Wilbur-Ellis, Helena Chemical, and Target Specialty Products for other matters.

I've mentioned many challenges Caltrans faces in general and specific to weed management as well as some solutions to keep us moving forward. In conclusion I'd like to say that it is challenges that make us increasingly more efficient, as long as the challenges don't overwhelm our capacity to change. My fellow PCAs and I are a stubborn bunch and I liken us to the Black Knight in Monty Python's Search for the Holy Grail. We won't easily admit defeat and if we can't win, we'll call it a draw!