

Redwood National Park

Santa Monica Mountains National Recreation Area

California

National Park Service
U.S. Department of the Interior



PUBLIC SCOPING COMMENT SUMMARY REPORT

Invasive Plant Management Plan and Environmental Assessment Redwood National Park and Santa Monica Mountains National Recreation Area

January 2014



Appendix A

All Correspondence Received

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 1

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent: 08/29/2013

Date Received: 08/29/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Web Form

Notes:

Correspondence Text

I live near Topanga creek and have removed Arundo Donax in the stream bed by cutting with loppers underground as far as I could and re-cutting underground every three or so weeks, it took 4 or 5 times to revisit and each time there was fewer re-sprouts until final eradication.

I have also volunteered in lower Topanga for the first cutting and then they used round-up that was effective also, but it is not very labor intensive to re-cut the 2nd 3rd 4th 5th times and volunteers could save funds for other areas. I think this method should be used in sensitive areas.

I have found that the below the ground cutting works better and does not leave the dangerous sharp stubs above the ground.

I also have been working on Ivy in the creek and I weed-wack, and pull by hand and have kept it under control but have not totally removed it yet.

I think the use of herbicides should be kept to the very minimum. We still don't know what causes a lot of medical problems in our children and wildlife would be better off also.

I appreciate the opportunity to be a part of this process and am looking forward to more information in the coming months.

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 2

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent: 08/30/2013

Date Received: 08/30/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Web Form

Notes:

Correspondence Text

I am Regional Advisor - Invasive Plants for UC Cooperative Extension in Southern California. I have been a weed scientist and weed practitioner for nearly 40 years. The guiding principle for pest management is IPM (Integrated Pest Management), which can be defined as an adaptive and thoughtful decision making process that incorporates all available pest (e.g. weed) control options and incorporates careful consideration of human and environmental factors and risks of each option. This principle is widely adopted and even codified by many political jurisdictions, such as public schools in CA. Of your three proposed alternatives, the one that provides the most options and has as adaptive management as part of the alternative, alternative three, is the most logical choice.

It is also important to realize that no weed control method is risk free (i.e. soil tillage can lead to erosion, prescribed fire can lead to wildfire, herbicide misuse can lead to non-target impacts), so having an adaptive approach and lots of options is the safest way to manage invasive plants. I would also include a training program and objective (e.g third party) review of your weed management programs.

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 3

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent: 08/30/2013

Date Received: 08/30/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Web Form

Notes:

Correspondence Text

I support the use of chemical herbicides and pesticides that are not toxic to humans and other animals when the National Park Service staff and professional experts advising them have determined that various "organic" means of eliminating seriously invasive plants and lethal disease-carrying or highly destructive insects (and other plant-feeding creatures) have not been successful when previously used.

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 4

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent: 08/31/2013

Date Received: 08/31/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Web Form

Notes:

Correspondence Text

I beg the Park Service to educate yourselves about restoration practices that do not include the use of Herbicides. I am concerned about Herbicide use in our parks. They are not benign as the label states.

Please contact Occidental Arts and Ecology Center in Occidental California. OAEC.org/wildlands-biodiversity.

They are managing and restoring OAEC's 70-acre Wildlands Preserve. Their 3 goals are to help the land restore itself to exhibit the healthy, self-willed ecological processes it had before European settlement brought clear cuts and invasive exotic plants just 130 years ago.

A second goal is to reduce the threat of catastrophic forest fires.

Fulfilling a third goal, they are conducting participatory research and sharing the results of their experience with others.

OAEC is practicing and modeling the restoration of native upland hardwood forests on the OAEC land with a grant from the U.S. Department of Fish and Wildlife.

Their Wildlands Biodiversity Program provides education about effective restoration theory and methods as well as collaborates with various youth service-learning programs and their local West County Fire Safe Council. The Wildlands Biodiversity Program has also been studying the presence of Sudden Oak Death (SOD) and making efforts to protect both infected and uninfected trees.

You can contact Wildlands Program Associate Director Lindsay Dailey at (707) 874-1557 ext. 127.
lindsay@oaec.org

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 5

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent: 09/02/2013

Date Received: 09/02/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Web Form

Notes:

Correspondence Text

Please please please do not use pesticides. there are many other natural solutions to weed control offered right thru these letters you are receiving. There is a natural order and we need to ecosystem to work as it should. The systems teach us, we just need to pay attention and learn. WE manually upset on area we will pay the price and have to keep trying to fix what already works

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 6

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent: 09/10/2013

Date Received: 09/10/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Web Form

Notes:

Correspondence Text

The three preliminary alternatives are appropriate. I recommend maximum flexibility in adopting new methods for invasive wildland weed control.

For reasons of public relations, Alternative 2 should say something other than "Aircraft for herbicide application" which may be misunderstood as aerial spraying. Something like "Helicopters to position applicators".

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 7

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent: 09/10/2013

Date Received: 09/10/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Web Form

Notes:

Correspondence Text

I am in favor of Alternative no. 3 as it affords the greatest flexibility to NPS weed management personnel to handle invasive plant problems as they arise. Invasive plants in wildlands choke out native plants that provide forage and protection for native wildlife. Invasive plants can also act like a cancer and create a monoculture if not eradicated quickly and effectively. In my experience, there are some invasive plants that can only be eradicated using herbicides. If new herbicides come on the market, NPS personnel should be encouraged to test them and use them if they prove effective. That goes for any biological controls that may become available. I believe that NPS should be allowed to use all means necessary to handle invasives on public and non-public lands.

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 8

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent: 09/11/2013

Date Received: 09/11/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Web Form

Correspondence Text

Thanks for taking the direction of curbing the herbicides used in the SMMR.

How many tons for this and other agricultural products are being spread each season in the SMMR. I believe that it is time to begin getting info on what the private vineyards (are the grape vines considered non-native? I think we all know the answer to this question) are spraying on their fields. How many of these vineyards are strictly organic?

Many questions need to be answered. I believe that individuals can do what they want on their properties, but when these products leach into the watershed and affect all others outside their property lines, then all users of this natural wonder that we call The Santa Monica Mountains are affected. Another issue is the use of rodenticides. We all have a lot of work to educate all about our detrimental FOOTPRINT we are leaving in the SMMR

Lets get smart people!!!!

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 9

Author Information

Organization Type:

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Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent: 09/11/2013

Date Received: 09/11/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Web Form

Notes:

Correspondence Text

Mountains Restoration Trust believes in the importance of non-native, invasive plant control in order to restore and enhance the native biodiversity of the Santa Monica Mountains. We are in support of the National Park Service at the Santa Monica Mountains National Recreation Area to expand the Invasive Plant Management Plan to include Alternative Three. Alternative Three, an adaptive and flexible plan, will ensure that the most current science and technology, including herbicides, is used to manage invasive plants found in the Santa Monica Mountains.

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 10

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent: 09/12/2013

Date Received: 09/12/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Web Form

Notes:

Correspondence Text

I urge NPS to change course from destructive chemical use to an offensive mode of restoration.

What are now termed invasive weeds are merely opportunistic plants that take advantage of poorly tended lands.

<http://plants.usda.gov/kata.html>

Kat Anderson is the leading scientist in the field of restoration ecology.

Please contact her for expert leadership and cutting edge, safe, chemical free techniques.

Organization, Title

USDA, NRCS, National Plant Data Team

Ethnoecologist

PLANTS Responsibilities

Ethnobotanical and ecological information

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NRCS State Office

430 G Street #4164

Davis, CA 95616

Phone Number

530/792-5670

M Kat Anderson's book

<http://www.amazon.ca/Tending-Wild-Knowledge-Management-Californias/dp/0520248511>

We call upon the National Park Service to do the right thing and service the parks in the tradition of the best stewards of the past,

while also utilizing modern organic and naturalistic practices. We implore the NPS to realize the disastrous error of

the easy chemical fix. Herbicides are not harmless to animal and human life forms.

Dr. Hans-Wolfgang Hoppe: Glyphosate Found in Human Urine Across Europe

People in 18 countries across Europe have been found to have traces of the weed killer glyphosate in their urine, show the results of tests commissioned by Friends of the Earth Europe.

Find Full Paper Here: gmoevidence.com

Authors: Dr. Hans-Wolfgang Hoppe

Conclusions:

In this study, 182 urine samples received from 18 European countries were analyzed for Glyphosate and AMPA residues using a new GC-MSMS method (see table 2). With a LOQ of 0,15 mg/l, on average 44 % a 36 % other urine samples analyzed were found to contain quantifiable levels of Glyphosate and AMPA, respectively. However the frequency of detection calculated for each individual EU-state ranged from 10% to 90% (see Table 4). The highest Glyphosate concentration was 1,8 mg/L (Latvia 6), the highest AMPA concentration was 2,6 mg/L (Croatia 3). All in all 12 (6,6%) participants of the study significantly exceeded the tentative reference value of 0,8 mg/L for Glyphosate (see section 4).

In general, Glyphosate and AMPA urinary level do not correlate very well. This is due to the finding that the ratio AMPA/Glyphosate (AGR) in human urine is very variable probably reflecting the variable AGRs in diet. A high AGR suggests an additional exposure against Aminopolphosphonate based tensides like ATMT or EDTMP, which easily degrade to AMPA. The results give a first idea to which extent adults in 18 European countries are exposed to Glyphosate. The regional and individual variations are large. Diet seems to be the main sources of exposure. However, more scientific work is needed to distinguish between different exposure situations.

<http://www.globalpossibilities.org/glyphosate-found-in-human-urine-across-europe/>

A study below shows the compound POE-15 used in herbicides like round-up are more toxic than the active ingredient and often not listed or tested.

http://www.criigen.org/SiteEn/index.php?option=com_content&task=blogcategory&id=89&Itemid=132

THE MOST WIDELY USED HERBICIDE IN THE WORLD CONTAINS COMPOUNDS MORE TOXIC THAN DECLARED (1)

Written by Frederique Baudouin

Friday, 22 February 2013

Caen, Feb. 21st, 2013 - In a new research published in the high ranked scientific journal Toxicology, Robin Mesnage, Benoit Bernay and Professor Gilles-Eric Seralini, from the University of Caen, France, have proven (from a study of nine Roundup-like herbicides) that the most toxic compound is not glyphosate, which is the substance the most assessed by regulatory authorities, but a compound that is not always listed on the label, called POE-15. Modern methods were applied at the cellular level (on three human cell lines), and mass spectrometry (studies on the nature of molecules). This allowed the researchers to identify and analyse the effects of these compounds.

Context: Glyphosate is supposed to be the "active ingredient" of Roundup, the most widely used herbicide in the world, and it is present in a large group of Roundup-like herbicides. It has been safety tested on mammals for the purposes of regulatory risk assessment. But the commercial formulations of these pesticides as they are sold and

used contain added ingredients (adjuvants). These are often classified confidential and described as inert. However, they help to stabilize the chemical compound glyphosate and help it to penetrate plants, in the manner of corrosive detergents. The formulated herbicides (including Roundup) can affect all living cells, especially human cells. This danger is overlooked because glyphosate and Roundup are treated as the same by industry and regulators on long-term studies. The supposed non-toxicity of glyphosate serves as a basis for the commercial release of Roundup. The health and environmental agencies and pesticide companies assess the long-term effects on mammals of glyphosate alone, and not the full formulation. The details of this regulatory assessment are jealously kept confidential by companies like Monsanto and health and environmental agencies.

Conclusion and consequences: This study demonstrates that all the glyphosate-based herbicides tested are more toxic than glyphosate alone, and explains why. Thus their regulatory assessments and the maximum residue levels authorized in the environment, food, and feed, are erroneous. A drink (such as tap water contaminated by Roundup residues) or a food made with a Roundup tolerant GMO (like a transgenic soya or corn) were already demonstrated as toxic in the recent rat feeding study (2) from Prof. Seralini team. The researchers have also published responses to critics of the study (3). This new research explains and confirms the scientific results of the rat feeding study. Overall, it is a great matter of concern for public health. First, all authorizations of Roundup-type herbicides have to be questioned urgently. Second, the regulatory assessment rules have to be fully revised. They should be analyzed in a transparent and contradictory manner by the scientific community. Agencies that give opinions to government authorities, in common with the pesticide companies generally conclude safety. The agencies opinions are wrong because they are made on the basis of lax assessments and much of the industry data is kept confidential, meaning that a full and transparent assessment cannot be carried out. These assessments are therefore neither neutral nor independent. They should as a first step make public on the Internet all the data that underpin the commercial release and positive opinions on the use of Roundup and similar products. The industry toxicological data must be legally made public.

Adjuvants of the POE-15 family (polyethoxylated tallowamine) have now been revealed as actively toxic to human cells, and must be regulated as such. The complete formulations must be tested in long-term toxicity studies and the results taken into account in regulatory assessments. The regulatory authorisation process for pesticides released into the environment and sold in stores must urgently be revised. Moreover, since the toxic confidential adjuvants are in general use in pesticide formulations, we fear according to these discoveries that the toxicity of all pesticides has been very significantly underestimated.

This study was conducted in the University of Caen with the structural support of CRIIGEN in the European Network of Scientists for Social and Environmental Responsibility (ENSSER www.ensser.org).

Contact: criigen@unicaen.fr; phone 33 (0)231565684 (France).

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dacted><redacted><redacted><redacted><redacted>

Notes :

- (1) Mesnage R., Bernay B., Seralini G-E. (2013, in press). Ethoxylated adjuvants of glyphosate-based herbicides are active principles of human cell toxicity. *Toxicology* <http://dx.doi.org/10.1016/j.tox.2012.09.006>
- (2) Seralini G. E., et al. (2012). Long term toxicity of a Roundup herbicide and a Roundup-tolerant genetically modified maize. *Food and Chemical Toxicology* 50 (11): 4221-4231.
- (3) Seralini G. E., et al. (2013). Answers to critics: Why there is a long term toxicity due to NK603 Roundup-tolerant genetically modified maize and to a Roundup herbicide. *Food and Chemical Toxicology*

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 11

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent: 09/18/2013

Date Received: 09/18/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Web Form

Notes:

Correspondence Text

Re the joint Invasive Plant Management Plan (IPMP) for the Santa Monica Mountains National Recreation Area:

Please add mine to the chorus of voices opposed to the use of herbicides, pesticides, and other toxic chemicals as a means of combating the spread of invasive and non-native plants.

The use of these chemicals brings too many negative consequences to justify their benefits, poisoning the environment and very likely ultimately contributing to human health problems as well.

Please consider what science has to say about the use of such chemicals, as well as the pleading voices of local residents, and choose alternative means of dealing with the issue.

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 12

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent: 09/24/2013

Date Received: 09/24/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Web Form

Notes:

Correspondence Text

Dear Planners,

Please, please, please reconsider your plan to use chemical defoliant products in the attempt to control the expansion of non-native vegetation.

I regularly run in the Santa Monica mountains and have for fifteen years. I have seen the area evolve as it has been enjoyed by both man with his dogs and horses, as well as by dozens of native birds and animals. The idea that there will be unmarked dangerous areas containing poison flies in the face of why we go to the mountains in the first place. IT IS THE ONE PLACE THAT ISN'T TOXIC AND POLLUTED. Native animals of course can't read signs and will be driven away or killed.

Aerial spraying is completely unacceptable as the problems described requires precision. There are other alternatives. Please do not take the easy SHORT term route of chemical treatment. This is a profitable and quick way to feel like the problem has been addressed but in reality it is a slippery slope that will become increasingly expensive and dangerous. We will now have even less open space to leave to our kids and in the end we will have another mess to clean up with law suits and waste.

You asked for data on the issue but that is the wrong approach.

What you need to do is to ask for wisdom. Please consider the responsibility that you carry. Thank you.

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 13

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent: 09/24/2013

Date Received: 09/24/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Web Form

Notes:

Correspondence Text

I believe that it is the duty of the National Park service to get control of invasive plant species before they take over more of our fragile areas thus impacting the native habitat and its inhabitants. I believe that targeting areas of invasive plants with professionally applied glyphosate products is the safest most effective way to combat the influx of invasive species in the park system. As the furor of Monsanto and their 'round up ready crops' percolates through the mainstream, many have vowed to fight herbicide usage without researching the science behind the products.

This has caused undue malice for a product that has the backing of scientific studies and can be used in a safe manner without affecting non target plants or animals. Applied properly and kept away from watershed sources, it has high soil binding properties and is completely biodegradable while killing the target plant outright.

The alternative safer branded chemicals have yet to be proven and usually require several applications as they only kill the above ground portion of the plant. These alternatives may prove costly not only for the original application but in the man power hours required to reapply when the invasive species resprout.

Please do the native habitat and its inhabitants a favor by removing invasive species safely and completely. Letting our few natural areas sucume to a choking out by invasive species would truly be a shame.

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 14

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent: 09/30/2013

Date Received: 09/30/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Web Form

Notes:

Correspondence Text

We have been building and maintaining trails in the Santa Monica Mountains Natl. Recreation Area for 30 years. We object to aerial proliferation of round-up or other chemicals to get rid of non-natives. We have from time to time used low dosages of round-up for hand spraying and plant removal. But this controls the chemicals so they don't spread in the air to neighboring areas and/or to other native plants, where they will cause harm. Aerial spread of pesticides is too dangerous and harmful. It can be done by hand in low dosages and be quite effective.

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 15

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent: 09/30/2013

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Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Web Form

Notes:

Correspondence Text

Comment on:

Redwood National Park/Santa Monica Mountains National Recreation Area Invasive Plant Management Plan

We are long-time USDA-certified organic farmers who also have had an extensive agricultural consulting practice for the past 35 years. We have been involved in the science and practice of weed control throughout our careers and have taught courses and published works on land conservation, indigenous agro-forestry practices, and organic vegetation management practices.

The focus of our concerns regarding the proposed NPS management plan for the Santa Monica Mountains is:

-the plan should give adequate consideration to the function and ecosystem services provided by the current resident vegetation;

-the plan should employ an Integrated Weed Control approach that gives first and high priority to control methods other than herbicides;

-local residents should be permitted to volunteer hand labor for selective plant removal and local labor should be employed as needed rather than using herbicides; and

-the plan should provide for Native Americans and possibly others to gather plant food and materials.

RESIDENT VEGETATION ECOSYSTEM SERVICES

Invasive species often gain a foothold in disturbed environments. This is not surprising as it is their nature to colonize newly disturbed areas, only later to be followed by successor species and plant communities. A fundamental problem with current invasive species biology is its inability to recognize that these species are filling a void and providing valuable ecosystem services in the process: soil stabilization, nutrient cycling, protection and food sources for small ground dwelling amphibians, arthropods, reptiles, grazers, and insect/small vertebrate-eating birds, mammals, etc. Of special importance in these days of declining honeybee populations is the habitat, nectar and pollen sources provided by these primary colonizer plant species; in short these species can support and sustain native pollinators that then pollinate native species. Just this afternoon we observed native butterflies collecting nectar on Yellow Star Thistle plants discreetly growing in our hedgerow.

The proposed management plan should examine any benefits or ecosystem services now being provided by the existing species. The plan should avoid the fundamentalist, a priori position that all non-natives species are bad and are to be removed. This is a blind-sighted approach that ignores the reality on the ground, that there is a functioning system there in place with perhaps many desirable features that serve both humans and the other members of the community currently present.

We suggest to NPS that the problem of habitat restoration should not be viewed as a winner-take-all war but rather as, how can a management plan move the plant succession along to the desired climax stage?

HERBICIDES

In reflecting on the history of conservation and habitat restoration, it behooves us to reach back to one of its pioneering founders, Aldo Leopold, who purchased abused and degraded land in 1935 in Wisconsin and restored it to a mixed-conifer and hardwood forest over several decades without the use of herbicides.

In more recent times, there are numerous examples of restoration without herbicides. One such restoration site is 75 acres of land owned by Michael Shaw in the Santa Cruz Mountains. I visited this property in 2006 and saw the restored chaparral and open grasslands on this property, all done without herbicides. Another example some miles to the north is Las Sombras Biological Preserve at La Honda, California.

We have as a consulting client, The Nature Conservancy (TNC), which has several offices in the Sacramento Valley and has been restoring both grasslands and riparian forests for several decades. Although TNC does use herbicides in many of its large restoration projects, there are sites where TNC is introducing native forbs without additional herbicides following the initial restoration. Certain soils require only grazing to prepare the fields for planting the native forbs. In other places where there is no grazing, TNC has used mechanical controls (areas < 5 acres where a significant population of native plants emerge). Clearly TNC is exploring no-herbicide restoration opportunities as they present themselves. We urge NPS to do the same.

We ourselves, as organic farmers, have been controlling such "invasive species" as Yellow Star Thistle and Cocklebur on our own 40-acre ranch near Davis, California for many years without the use of herbicides, through a variety of methods including animal grazing, enhancing biodiversity, occasional hand removal, and allowing time for natives to reseed and reintroduce following their reintroduction through the establishment of small colonies that serve as primary/renewing seed sources and dispersal sites. We are successfully reintroducing Blue Wild Rye and Purple Needlegrass this way and similarly establishing populations of Artemesia, Elderberry, Grindelia, Valley Oak, and Asclepias. No herbicides needed, only patience and no soil disturbance.

We note that the National Organic Program requires us as a USDA-certified organic farm to provide wildlife habitat on our lands, and develop and protect biodiversity; this, of course, must be done without herbicides. We have succeeded in doing so.

We urge NPS to closely look at controlled grazing as an alternative to the use of herbicides especially with (though not by any means only with), under-story vegetation including both annuals and perennials. This method of vegetation control and habitat restoration has been scientifically studied for a long time with positive results.

Morgan Doran of the University of California Cooperative Extension has published work on the use of grazing to control undesirable plants on rangelands and vernal pool grasslands. He concludes that targeted livestock grazing can provide ecological benefits such as weed control and wildlife habitat restoration (Doran, Morgan, University of California, <http://www.cal-ipc.org/symposia/archive/pdf/2010/7Doran.pdf>).

A literature study published in 1996 by the Weed Science Society of America discusses the much under-used practice of Integrated Weed Control (IWC). The authors note that forestry weeds are sometimes amenable to control by grazing animals, and that goats will even eat spiny and poisonous brush weeds. Their article gives many examples of weed control by grazing in crops and forestry. Popay, Ian, and Field, Roger, Grazing Animals as Weed Control Agents, Weed Technology Vol. 10, No. 1 (Jan. - Mar., 1996), pp. 217-231 Published by: Weed Science Society of America.

We urge the NPS to give first priority to grazing in its development of the management plan. Advantages of grazing include:

- it is cheap and effective;
- it can be managed closely to get the desired amount of vegetation controlled;
- it recycles plant nutrients, keeping them in a less soluble, organic form;
- it will not lead to soil erosion hazard if properly managed.

VOLUNTEER LABOR

There are many examples of successful volunteer restoration projects, and none closer to our home than the Putah Creek Council, which has been working successfully with hundreds of volunteers for over a decade to restore habitat on Putah Creek in northern California in Yolo and Solano Counties. Lake Berryessa, a Federal Bureau of Reclamation project, empties into Putah Creek. The creek is home to numerous wildlife species including steelhead salmon. See the website at <http://www.putahcreekcouncil.org/restore>.

The benefits of volunteer restoration are not only cost savings to NPS, but also in helping to foster goodwill through local resident's participation in the restoration process. Their concerns are given greater voice and application over the course of the restoration.

PLANT GATHERING

Native Americans once used the land extensively for the foraging of herbs, food and medicinals. Incorporation of this use is essential for the plan to truly reflect aboriginal conditions. An added benefit is the opportunity for NPS to learn and integrate Native American management techniques into this restoration plan. Moreover, the gatherers will provide ongoing vegetation management that will enhance the native plant populations. For details, see Anderson, M. Kat, *Tending the Wild*, University of California Press.

CONCLUSION

We support Alternative 3 - Additional Invasive Plant Management Tools with Adaptive Management, provided that alternatives to herbicides are prioritized, volunteer labor is utilized regularly, and plant materials gathering is allowed.

Adaptive management is an excellent venue for NPS to develop ecologically healthy methods of habitat restoration.

Sincerely,

House Agricultural Consultants
Coco Ranch
1105 Kennedy Place, Suite 1

Davis, CA 95616

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 16

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

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Number of Signatures: 1

Form Letter: No

Contains Request(s): No

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Notes:

Correspondence Text

The alternative 2 in this document should not be an option. Many current peer reviewed scientific research documents clearly show that the inert ingredient POEA in roundup is incredibly dangerous. Thus, many city's have begun phasing out its use entirely. Please consider not using round up.

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 17

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent: 10/01/2013

Date Received: 10/01/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Web Form

Notes:

Correspondence Text

I live in the Santa Monica Mountains National Recreation and I am an environmental issues reporter for a local media outlet with seven years experience covering issues in the SMMNRA. I strongly oppose the proposed aircraft herbicide application in the Santa Monica Mountains National Recreation Area.

Invasive plants are present throughout a complex checkerboard of private and public property and throughout areas that are home to rare and endangered species. Many areas are inadequately studied. Herbicide application by air has the potential to cause serious damage to a host of native species, including lichen and other sensitive plants and organisms. An increasing body of new evidence indicates that herbicides that have been routinely used by the park service and deemed safe are causing serious impacts on bee species, including honeybees and native pollinators.

Herbicides broadcast by aircraft also have a greater chance of negatively impacting water quality throughout the watershed. Research conducted at Penn State and published in 2007, has indicated that at least one common herbicide, Atrazine, contributes to salamander die-offs. Our native amphibian population is already under pressure and diminishing. These animals do not need an additional threat to their health.

Runoff contaminated by widespread herbicide spraying will also have the potential to negatively impact marine life in an area that is designated an area of special biological significance.

Spraying herbicides from the air in the Santa Monica Mountains would be irresponsible and poor stewardship. Please remove this option from the proposal.

I also oppose Alternative 2's proposed use of "additional herbicides" on terrestrial and aquatic plants for the same reasons listed above.

I support Alternative 1, with the addition of the proposal from Alternative 2 for using livestock, preferably goats, or other biological control methods, in limited, specific areas, as the least invasive measure proposed to remove non-native, invasive vegetation.

Thank you for the opportunity to comment.

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 18

Author Information

Organization Type:

E - NPS Employee

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent:

Date Received: 09/18/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Park Form

Notes:

Correspondence Text

I support goats. Harding crew wants more ATVs.

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 19

Author Information

Organization Type:

P - Conservation/Preservation

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent:

Date Received: 08/27/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Park Form

Notes:

Correspondence Text

I am in support of the 2nd and 3rd alternative. It is vital for the biodiversity in the Santa Monica Mountains to remove invasive, non-native plants. Of the 2, I prefer the 3rd the most - it is important to consider all tools including herbicide, and to have a flexible, adaptive management plan. Thank you!

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 20

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent:

Date Received: 08/27/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Letter

Notes:

Correspondence Text

My interest is with the consideration of the pros and cons of leaving the introduced invasive plants such as the tamarisk trees which provide breeding and migratory birds with protected nesting areas and cover from predators. They also harbor a glut of insects as nutritious morsels for feeding opportunities. Their undesirable characteristics are well-known. How do you plan to address this issue? Will there be a percentage of judgement applied? A significant consideration is the diminishing habitat for birds and the disappearing species. Is there no way to control the spread of invasive species or to minimize their impact without attempts to wipe out the ones which have mixed value? I have to apologize for infringing on the obvious plant management plans in advance of public meetings. I just got fired up when I thought about it and I can see that all considerations are being addressed. Since I am mostly home bound I do not believe I'll believe I'll be able to attend.

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 21

Author Information

Organization Type:

O - Civic Groups

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent:

Date Received: 08/27/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Park Form

Notes:

Correspondence Text

My choice: Preliminary Alternative #3 - all traditional, current and emerging techniques should be on the table!

Special attention should be paid to invasion via roadside - county public works seems to introduce new invasives to roadsides - at the very least, could public works be educated/become a partner?

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 22

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent:

Date Received: 08/27/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Park Form

Notes:

Correspondence Text

Leave the choice of tools for invasive plant mgmt to the NPS professionals who know the land, the species, and the full range of options.

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 23

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent:

Date Received: 08/28/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Park Form

Notes:

Correspondence Text

I am concerned about public health in regards to the use of round-up and other herbicides, getting into the water, etc. Also effecting the health of the ecosystem. My vote: no herbicides. Instead, methods such as: hand pulling, and planting more natives that are more likely to out-compete; goats; grazing (perhaps the cost could be offset by selling organic goat milk and yogurt); controlled burning and other methods used by organizations such as Occidental Arts and Ecology Center (www.oaec.org) and Regenerative Design Institute in Bolinas. Thanks. I hope we can find a better way.

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 24

Author Information

Organization Type:

O - Civic Groups

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent:

Date Received: 08/28/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Park Form

Correspondence Text

I would be very interested in a public discussion on how an invasive plant is identified for eradication. Who decides and defines the 25 invasive plants in Calif?

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 25

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent:

Date Received: 08/28/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Park Form

Notes:

Correspondence Text

I am concerned about the types of poison used to clear the invasive plants and their effect on wildlife. I am also concerned about development of too much public use camp-grounds in the S.M. Mountains.

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 26

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent:

Date Received: 08/28/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Park Form

Notes:

Correspondence Text

How much poison are you going to use?

That will affect wildlife, pets and people.

Not happy about this.

PEPC Project ID: 44351, DocumentID: 54793
Correspondence: 27

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent:

Date Received: 08/27/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Letter

Correspondence Text

Letter is attached

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 28

Author Information

Organization Type:

I - Unaffiliated Individual

Correspondence Information

Status: Reviewed

Park Correspondence Log:

Date Sent:

Date Received: 10/01/2013

Number of Signatures: 1

Form Letter: No

Contains Request(s): No

Type: Letter

Notes:

Correspondence Text

Considering the two joint parks together is a strange combination. What will work in one area may not work in the other area or may have to be changed radically.

The scoping newsletter says "Invasive nonnative plants now infest approximately 2.6 million acres in the National Park system". I see a number of major issues in this problem. With this amount of area, how much money is government going to forcibly squeeze out of taxpayers? If manual labor is required, how is government going to attract workers when people are getting lazier and would rather draw easy welfare than work?

Prescribed Fires

Prescribed fire seems like a good plant management technique. Fires have had a very significant influence in keeping exotic non-native plants out of the Santa Monica Mountains and at RNP. Fires eliminate much of the exotic annual grasses, leaving the native perennials. Frequent fires burn away dead branches at the base of trees, such as live oaks, preventing the creation of a pile of fuel which would damage the higher branches.

I used to be able to bum an acre or two of grass thatch around my house. I felt much safer. Since CalFire is usually 42 miles away in Crescent city or 700 miles away in southern California, they are not really interested in structural fires, and I can't pay for unreasonable fire insurance, I don't really need a government bureaucrat to verify that my house burned down. I would burn only a ten-foot by ten-foot patch at a time just after an early rain slowed the burn. The new green grass was prettier than the mildew-blackened thatch. Poppies, brodiaia, and Mariposa lilies would survive, but the exotic grasses, ox-eye daisies, and thistles were eliminated.

Eco-politics has an effect on burning. In the sixties the Los Padres chapter of the Sierra Club accused Santa Barbara ranchers of using fires to increase the amount of grazing land and tried to prohibit prescribed fires. The ranchers pointed out the chaparral used to burn every 5 to 7 years.

In the fifties and sixties mustard was routinely seeded by air on burnt slopes to reduce erosion and mud slides. These seeds are larger than many, but the ranch on Santa Cruz Island noticed a tremendous growth of mustard after it was aerial seeded on the mainland. The mustard was often more of a fire hazard than the other exotic annual grasses.

Chaparral is highly flammable, and once ignited, fires keep burning since there are few fire barriers. The ocean is perhaps the only natural restriction, and about 1950 it was the only barrier, and fires burned all the way to Highway 101 in Malibu. The Trancas fire even jumped 101 and burned more houses all the way to the beach. The Bellagio

fire demonstrated how houses built at the top of these piles of chaparral fuel cannot be protected, even close to extensive fire equipment.

When the chaparral doesn't burn at a natural frequency, the fires burn hotter with abundant fuel, and the heat sterilizes the soil, destroys the top soil, and even converts clay soil to brick. Mud slides are frequently shown on TV, but I used to see many houses with hundreds of one and two-foot pock marks and holes created by the loose boulders crashing down the steep hills. Concrete block walls can't stop the boulders. It looked like a war zone.

Goats

For about ten years I had the help of my seven goats, some 250-pounders. Goats are great helpers in keeping the clearing around my house. Goats are foragers not browsers, and they prefer to eat brush (and blackberries, etc.) rather than grass. They don't need to eat meat. They leave only small pellets rather than big stinky pads. They would be useful both in chaparral and in redwood meadows. I used wethers (neutered males) because the females have udders which can get injured and regular males are obnoxious. I didn't put a rope around their neck because I didn't want them to strangle if they fell. I liked goats with horns because they are much happier, although the horns are not much use against predators. Only once did I have to extricate a goat with his horns caught in a fence. I don't tie them down where they are vulnerable victims of lions, bears, or pet dog packs, and I would take them inside their barn at night. The proliferation of State-protected lions and pet dog packs finally killed all of mine (all killed during the daytime). Government DFG regulations and gun regulations prevent me from protecting my goats adequately, but government is for the benefit of government, not for the benefit of the people. Herds of goats could be hired to create fuel breaks. The goat herder could perhaps help protect the goats from coyotes and pet dogs.

Manual Clearing

The slopes on my property are too steep to mow. A Green-Machine-Weed-Eater is slow, tiring, and is not much help because I fall and slide on the slippery dry grass downhill 20-30 feet into Himalaya blackberry bushes or off a cliff. The State is forcing me to use a lot of Roundup herbicide because government has eliminated all my other options.

There may be plenty of "homeless" people with signs saying "will work for food", but government has plenty of money to provide their necessities. Work used to be an honorable vocation, and people were easy to get along with. Nowadays government and lawyers have made it financially hazardous and regulation-weary to try to hire anybody to help with work. Robots that recognize invasive plants would be a real benefit if they could be programmed to destroy that plant. While parks don't develop such devices, they might buy from private companies.

Prejudicial State race politics have been involved in handling fire losses too. The Crystal Springs fire east of Santa Barbara destroyed many houses, but Governor Jerry Brown didn't declare any emergency because the owners were rich and their losses were covered by insurance. Shortly afterwards, the Baldwin Hills fire destroyed a similar number of houses in another rich (perhaps richer) and insured area. Brown declared Baldwin Hills an emergency, presumably because of race.

Before sixty years ago in L.A. vacant lots were routinely burned to get rid of weeds. The technique was effective and cheaply done. The areas burnt were small, and the stinky pollution soon blew away. Now the out of control fires are much larger, costs for fighting them is out of control, damage is much higher, and the pollution lasts for months. It would be better to have many smaller, more easily controlled prescribed fires, particularly near buildings which cannot be protected in a bigger fire. Fuel buildup would be less. Lawyers prevent using the technique. With fires becoming more expensive to fight, personal losses greater, and insurance companies more dominating, State fire liability laws should be changed in order to not be so intimidating.

When burning was prohibited, the more-level lots and fields were disked. The dust was obnoxious. Mice evicted from the fields were invasive. One time I caught several dozen in an hour outside my back door with spring traps. By the time I set one trap, the last set trap would catch another mouse.

Native plants

The old milk barn at the Davison ranch in RNP and the old apple trees are not on the National Register of Historic Places, but I feel that they have been overlooked from consideration for their local importance by the politically motivated Historical Officer. When RNP initially purchased the ranch I thought some remnant of the many early dairies would be preserved. After all, the ranch had been in one family at the location since about 1850 and was representative of the only local employment. Much has been said of redwood logging, but redwood logging in the Orick area has been only a fairly recent activity, since 1945 or so, and was comparatively only short term.

I contacted the campground managers for RNP and several State Redwood Parks regarding the alleged hazard to visitors from the attraction of the apple trees, but no one was aware of any apple-bear-camper problems. RNP said they were going to spray the Davison apple trees to keep them from setting fruit and attracting bears. In two years the trees which had lived over a hundred years had died and were rotting. The apple trees were not invasive exotic plants, and the "spraying" of the trees sounded suspiciously like herbicides meant to cleanse the park of any signs of early American pioneers and settlers. The Davison's pasture-meadow was named "Elk Meadow", even though there are several other places named, "Elk Meadow" along the coast, apparently to further cleanse away the pioneer's memory. The Davisons were "Americans", not the government's routinely politically-termed "Europeans", and these early American pioneers' memory should be preserved, not eradicated.

What is really considered a "native" plant and what is considered a "nonnative" plant? In the 1980s the Audubon Club proposed forcing the residents of Westchester (in L.A. near LAX) to plant only "native" trees and plants around their homes. At least 20 lawyers were hired by homeowners to attend the public meeting, but they didn't know much other than to threaten back with lawsuits. Audubon demanded a licensed landscape architect. Audubon's list of approved "native" trees were over 75 percent non-native and non-American, such as Brazilian pepper. Even the remaining 25 percent of so-called "native" trees were not found nearby. My daughter and I had made a thorough evaluation of the

various plants in the Ballona and Playa del Rey area, and we were aware of the native and some strange non-native plants. Willows might have been a mile away in the Ballona Creek area, but were not native to the fossil sand dunes of Westchester. Coast redwoods were listed as "native", but would not have grown on the fossil sand dunes with 11 inches annual rain, and the nearest native redwoods were 400 miles away in Santa Cruz.

California Sycamores were eco-strangely promoted for shading the house in summer and allowing sunshine in winter, but Westchester was 10 miles from the nearest sycamores in Rustic Canyon north of Santa Monica, and the mild coastal climate (0 to 2 miles from the cool ocean) did not create a need for shade on the south side. The Audubon Club should have stuck to birds, but expect more eco-groovy-naïve "native" concepts to be promoted.

Even "native" plants are sometimes considered "invasive non-natives". RNP in one of their projects considered Port Orford cedar which had been seeded by a logging company as a "non-native" and was going to cut them all down. Douglas False Cypress (aka Douglas Fir) is an "invasive native" in the oaks on Bald Hills and in the meadows.

Herbicides


Herbicides are useful. They are sometimes much more effective than manual methods, and they may be much less expensive. They aren't, however, automatically the best method.

I've heard several eco-groups try to redefine "herbicide" as a "pesticide", but the redefinition is only meant for political purposes, only confuses the issues, and is pure fakery.

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 29

Author Information

Organization: Topanga Creek Watershed Committee  Official Rep.
Organization Type: O - Civic Groups

Correspondence Information

Status: Reviewed Park Correspondence Log:
Date Sent: 09/27/2013 Date Received: 10/01/2013
Number of Signatures: 1 Form Letter: No
Contains Request(s): No Type: Letter
Notes:

Correspondence Text

The CD Included herewith contains:

o Public Comments from the TCWC and others regarding the NPS' Invasive Plant Management Plan/
Environmental Assessment for the Santa Monica Mountains National Recreation Area and Redwood national Forest

And the following supporting pieces of information:

- o Topanga canyon Blvd Vegetation Management Implementation Plan
- o The Bradley Method of Vegetation Management
- o No More Poison (petition)
- o Living Lightly In the Watershed (booklet)
- o Read Your Weeds (flyer)
- o Non-toxic Alternatives to herbicides and pesticides (flyer)
- o Commendations for the TCWC from Assemblymember Richard Bloom, senator Fran Pavley, Supervisor Zev Yaroslavsky, and Representative Henry Waxman
- o Five (5) photos of centaurea (Yellow Star Thistle) and native insect species
- o One photo of Eucalyptus and native plant species
- o One photo of Pteridium monoculture


A hard, signed copy of the Comments are also enclosed.

Please acknowledge receipt. If there is any difficulty downloading or reading any of these files please get in touch right away. We will be happy to re-send any of this material in whatever format works best for you.

PEPC Project ID: 44351, DocumentID: 54793

Correspondence: 30

Author Information

Organization: Environmental Protection Information Center  Official Rep.
Organization Type: P - Conservation/Preservation

Correspondence Information

Status: Reviewed	Park Correspondence Log:
Date Sent:	Date Received: 11/11/2013
Number of Signatures: 2	Form Letter: No
Contains Request(s): No	Type: Letter

Correspondence Text

I am writing on behalf of the Environmental Protection Information Center ("EPIC"), a nonprofit organization that works to protect and restore ancient forests, watersheds, coastal estuaries, and native species in northwestern California. EPIC is very concerned that Redwood National Park's Invasive Plant Management Plan proposes the use of herbicides, which are toxic to plants, animals and people. Toxic chemicals absorb into the soil and often seep into water sources. They carry poison through the delicate web of life and do not belong in the food chain.

Because the website and scoping newsletter lack key information, including scale of project, target plant species and types of chemicals proposed, our comments are limited in scope. Redwood National Park also manages three other State Parks included within its legislated boundary. Are these parks also included in the proposed action?

We urge you to consider all non-toxic alternatives such as hand pulling, mowing, burning, goats, biological control agents and mulching.

Use of toxic herbicides is a matter of significant public interest, concern and controversy. Therefore, an EIS must be prepared.

- ◆ The public is increasingly concerned about the long-term human and wildlife health impacts of exposure to toxic chemicals especially when applied on protected National Park lands;
- ◆ There is significant scientific and public controversy about these long-term impacts, and
- ◆ Chemicals that may be used in combination and between "active" chemicals and so-called "inert" ingredients/chemicals (including surfactants) can have other, more powerful and largely unstudied and unknown impacts as compared to a single chemical used alone. These impacts are known as "synergistic effects" and they are not addressed on the chemical labels. The particular combinations of chemicals and other ingredients proposed for use and the potential for synergistic effects among these ingredients should be analyzed and disclosed.

The potential for toxic chemicals and surfactants to enter stream courses and other water bodies must be assessed and addressed.

- ◆ The environmental documentation must list all water bodies that are located within the proposed project area as well as the aquatic and riparian dependent species present in

those waters and riparian areas. Assessment of impacts on aquatic and riparian wildlife and ecosystems should include but not be limited to endangered, threatened, candidate and at risk species.

- ◆ With respect to birds, the applicable regional direction is to use the Partners in Flight Plans available from the Pt. Reyes Bird Observatory to assess potential impacts to neotropical migrant songbirds in general and riparian dependent birds in particular. Where ESA listed species are present, evidence of appropriate consultation must be referenced.

- ◆ The environmental documentation should detail what procedures will be in place to assure that toxic substances do not drift or otherwise enter streams. In this regard all mechanisms by which the chemicals could enter a stream, including but not limited to, leaching, drift and accidents should be considered.

- ◆ The environmental documentation should disclose applicable requirements of Regional Water Quality Boards.

A range of feasible alternatives must be considered.

It is increasingly clear that non-toxic alternatives are feasible and effective. Please see the current methods being used by the Salmon River Restoration Council (SRRC.org), an organization within the region that has been identified as a national model for its successful non-toxic weed abatement program. Shasta-Trinity National Forest can demonstrate the same thing with respect to non-toxic transmission line vegetation management. We encourage RNP to do that! An alternative for non-toxic control of the vegetation should be fully developed and fully analyzed.

The potential for human exposure to toxic chemicals must be assessed and disclosed

Redwood National Park is regularly used by humans including elderly, children and sometimes, sick people. For this reason the environmental documentation should:

- ◆ Assess actual use of the National Park by the public including hiking, camping, hunting use, etc. The actual locations where these uses occur should be identified and disclosed.

- ◆ Assess the potential for human exposure to toxic chemicals associated with actual use.

- ◆ Specify signage, closures and other means that will be utilized to eliminate the potential for human exposure to toxic chemicals. The strategies employed to eliminate potential exposure must be tied to the actual sites where there is potential for exposure as required by NEPA.

Significant issues require an Environmental Impact Statement (EIS).

There are multiple significant triggers requiring an EIS: 1.) The action would affect public health and safety, 2.) Unique characteristics of the geographical location, 3.) Using toxic chemical in a national park is highly controversial, 4.) The degree of possible effects on the human environment is uncertain and involves unique risks, 5.) The action may cause loss or destruction of significant scientific, cultural and historic resources and 6.) The action may adversely affect endangered or threatened species and habitat.

Ineffectiveness of herbicides must be addressed.

Non-native weeds have been introduced and spread as a result of cattle grazing, recreation, firefighting, logging, mining, road construction, reconstruction and maintenance and other uses/activities. Given the high mobility of our population and the uses of the public lands, is it possible to control and eradicate the target species? The future NEPA document should articulate how uses on public, private and tribal lands, introduce these non-native plants to sites in the forest.

County and state efforts have been spraying herbicides for many years, which most often has not controlled or eradicated any invasive species. For instance, Siskiyou County has been spraying several plants year after year but has never controlled or eradicated even one non-native plant. Please disclose the rate of success/failure of eradication/control efforts.

The mobility of our population is so high and the uses of national parks and public and private land are so diverse that programs of plant eradication and control are unlikely to be successful unless they have the support and involvement of knowledgeable forest users. Experience and logic indicate that the greatest chance of success is possible through educating resource users and the public in order to prevent introduction and spread of non-native plants. Therefore, please adopt a project that relies primarily on education and prevention.

Inclusions.

Please analyze and disclose: the effectiveness of alternatives, present populations, locations and names of non-native invasive species, potential and cumulative impacts to water, soil, non-target plant and animal species including amphibians and other wildlife. Please be descriptive in describing effects to ESA listed species, including candidate species, and State species "at risk." Please analyze and disclose how park managers are treating the cause of the spread of invasive species. Please include details of consultation with all applicable agencies including Native Tribes.

Please include a thorough discussion of economic issues related to the proposal and alternatives. With respect to indirect costs, costs associated with cleaning up toxic spills are relevant and need to be disclosed. Are you are proposing to transport toxic chemicals on un-surfaced roads or near/across stream and rivers? The risk of spills must be considered significant and the costs of clean up must be disclosed.

Conclusion

Again, we urge park managers to consider a completely non-toxic alternative, which would create jobs and in the long-term would better and safer for wildlife, soils, water, native plants and humans. EPIC, its supporters and members treasure Redwood National Park and would be willing to collaborate and organize volunteer workdays to manually remove non-native invasive plant species.

The land is to be managed for inspiration, enjoyment and education and the use of toxic herbicides is contrary to that. Given the level of controversy and the multiple significant effects, an EIS is clearly in order for this project proposal. Consultation with NMFS and Native Tribes must be initiated and documented. Please be community and forest user sensitive; adopt a nontoxic approach to control/eradication of non-native plants.

I would appreciate receiving a hard copy of future NEPA documents to our Arcata office. What is the current target date for release of a draft? What is the current target date for a decision?

Thank you for your consideration.