BEFORE THE REGIONAL FORESTER, EASTERN REGION USFS
NOTICE OF APPEAL

This is a Notice of Appeal of the Decision Notice, Finding of No Significant Impact, and Environmental Assessment issued by the Shawnee National Forest entitled "Invasive Species Management." It was signed on May 4, 2011 by Shawnee National Forest supervisor Hurston A. Nicholas. This decision authorizes action across the entire Shawnee National Forest for an unspecified number of years, on vague areas of land. Those actions include heavy-handed vegetation manipulation using chemicals, fire, tree cutting, and other methods. These actions will occur in designated "natural areas" as well as other areas of the Shawnee National Forest.

The appellants are the Regional Association of Concerned Environmentalists (RACE). RACE is an organization based in Southern Illinois with a long history of interest in and involvement in Shawnee National Forest issues. RACE has members that use and enjoy the Shawnee and will be adversely affected by the decision.

Mark Donham and Kristi Hanson are residents of Pope County Illinois. They are landowners and have resided on that land for nearly 31 years. They live near to land that will be subject to the actions authorized, and will be harmed by those actions.

Sam and Geneil Stearns are residents of Pope County Illinois. They are landowners and have resided on that land for over 20 years. They live near to land that will be subject to the actions authorized and will be harmed by those actions.

Tony Jones and Carol Westerman Jones are residents of Jackson County, Illinois. They are landowners and have resided on that land for over 20 years. They live near to land that will be subject to the actions authorized and will be harmed by those actions.

All appellants submitted timely comments giving them standing to appeal.

Although there are many hundreds of "exotic" species, more than a few of which are "invasive," the Shawnee is arbitrarily choosing only 4 such species to target, some of which are not covering large areas of the Shawnee. No rational for choosing only these 4 is presented.

ISSUE # 1. SHAWNEE FOREST PLAN IS ARBITRARY AND CAPRICIOUS

1. The Decision Notice states "Action is needed to put in effect the guidance in the Forest's 2006 Land and Resource Management Plan." The only problem with such an assertion is that the 2006 Shawnee Land and Resource Management Plan has already been found by a U.S. District Court in the D.C. District to be arbitrary and capricious because it is not in accordance with law. The plan was developed in violation of the Federal Advisory Committee Act.

The Record Of Decision for the Shawnee Plan indicates that the Hoosier-Shawnee Ecological Assessment was relied upon repeatedly by the Shawnee in developing some of

the most controversial aspects of the LRMP. For example, the ROD states,

"The 2006 Plan is founded upon the best available science. We analyzed scientific information submitted by the public as well as the findings and recommendations in the 'Hoosier-Shawnee Ecological Assessment. This extraordinary effort to gather and analyze scientific information provded the information necessary to develop, analyze, and compare various alternatives."

In addition, the ROD states,

"Based on the best science available, including the Hoosier-Shawnee Ecological Assessment, the directions in the 2006 Plan is expected to result in ecologically favorable changes in the vegetation patterns and species composition on the Forest over time."

These changes include those brought on by logging, burning, pesticide use, and other activities which are highly controversial aspects of the plan.

The problem with relying on the Hoosier-Shawnee Ecological Assessment is that it was done under contract to a team of mostly non-public, hand-picked scientists, out of the light of public scrutiny and public involvement. This was ruled to be in violation of the Federal Advisory Committee Act, or FACE, by a U.S. District Court in Washington, D.C. (Case 1:02-cv-01898-RWR, DC Dist. 2006) In that order, the court found that,

"FEDERAL ADVISORY COMMITTEE ACT

Congress passed the FACE in part to ensure that the public could remain apprised of the existence, activities and cost of advisory committees. See Public Citizen v. Dep't of Justice, 491 U.S. 440, 446 (1989) (citing 5 U.S.C. app. II § 2(b) (2000)). Enacted in 1972 as a response to the numerous committees, boards, commissions and other groups that had been established to advise officers and agencies in the executive branch of the federal government, one goal of the Act was to prevent wasteful expenditure of public funds. See Public Citizen, 491 U.S. at 453. Additionally, Congress sought to counter the fear that committees would be dominated by representatives of industry and other special interest groups seeking to advance their own agendas. See Cummock v. Gore, 180 F.3d 282, 284 (D.C. Cir. 1999) (citing H.R. Rep. No. 92-1017 (1972)).

"The FACA provides, in part, that:

"Subject to [the FOIA], the records, reports, transcripts, minutes, appendixes, working papers, drafts, studies, agenda, or other documents which were made available to or prepared for or by each advisory committee shall be available for public inspection and copying at a single location in the offices of the advisory committee or the agency to which the advisory committee reports until the advisory committee ceases to exist. 5 U.S.C. app. II § 10(b). Under the FACA, advisory committees must also "file a charter; announce their upcoming meetings in the Federal Register; hold their meetings in public; and keep detailed minutes of each meeting." In re Cheney, 406 F.3d 723, 727 (D.C. Cir. 2005) (citing 5 U.S.C. app. II § 9©); §§ 10(a)(1), (2), (b) & ©); § 11). Finally, the "committee must'be fairly balanced in terms of the points of view represented' and may

'not be inappropriately influenced by the appointing authority or by any special interest.'" Id. (quoting 5 U.S.C. app. II §§ 5(b)(2), (3) & ©)).

> "The FACE defines an advisory committee as "any committee, board, commission, council, conference, panel, task force, or other similar group, or any subcommittee or other subgroup thereof . . . which is . . . established or utilized by one or more agencies in the interest of obtaining advice or recommendations for the President or one or more agencies or officers of the Federal Government." 5 U.S.C. app. II § 3(2).
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> "The Supreme Court has given a narrow interpretation to the words "established" and "utilized." An advisory panel is established when it has been formed by a government agency, and utilized if it is "amenable to . . . strict management by agency officials." Public Citizen, 491 U.S. at 457-58; see also Food Chemical News v. Young, 900 F.2d 328, 332-33 (D.C. Cir. 1990) (finding that a committee is "established" when it is "a government formed advisory committee"). In Food Chemical News, the court found that a panel advising the Federation of American Societies for Experimental Biologies, which in turn advised the Food and Drug Administration on food safety, was not an advisory committee subject to the FACE because the panel was neither established by the FDA nor "amenable to [any] management by [FDA] officials." Id. at 333 (quoting Public Citizen, 491 U.S. at 457 458); see also Byrd v. Envtl. Prot. Agency, 174 F.3d 239, 246 (D.C. Cir. 1999) (finding that a committee providing recommendations to the Eastern Research Group which had contracted to provide recommendations to the Environmental Protection Agency, was not established by the EPA and therefore not an advisory committee subject to the FACE, even though the EPA conceived of the need for the committee).
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> "Unlike the committees in Public Citizen, Food Chemical News and Byrd, which the federal agencies did not directly convene but were aided by, the USFS formed the HSEAC. (Pls.' Summ. J. Mot., Ex. A.) The USFS identified the members of the team, contracted directly with them for their services, paid them, and provided them with initial questions to answer. (Id.) The USFS established the committee within the meaning of the FACA...The USFS initiated the ecological assessment "[i]n order to develop the future Forest Plans and draft [environmental impact statement] for the Hoosier and Shawnee." (Id. ¶ 5, 6; see also Pls.' Mot. to Expedite, Ex. A at 8 (stating that the USFS will use the ecological assessment to inform, modify, and develop its forests plans, and to create an environmental impact statement).) Because the USFS has contemplated that the final ecological assessment would play a leading role in developing the forest plan for the Hoosier and Shawnee Forests, the HSEAC provided information "in the interest of obtaining advice or recommendations for . . . one or more agencies" and is subject to the FACA's requirements. 5 U.S.C. app. II § 3(2)...the HSEAC is an advisory committee within the meaning of the FACA..."

The Shawnee had an opportunity to appeal this ruling, but did not. It therefore, is the law of the land. The plan, including the strategy to undertake

projects and methods such as the ones subject to this appeal, was developed in large part by a group of people meeting in secret, without a charter, with no attempt at being "fairly balanced," in other words, in blatant disregard and violation for the requirements of the FACA.

Had this committee operated in compliance with FACA, meetings would have been noticed in the federal register and locally, would have been open to the public, and subject to some level of public involvement. This could have lead to an entirely different plan. The definition of "Arbitrary and capricious," which is the standard in the Administrative Procedures Act which triggers the authority of the judicial branch to reverse a decision of an agency of the executive branch, includes simply that a decision that is "otherwise not in accordance with law." The Shawnee Plan is arbitrary and capricious, and should be reversed and reopened with full compliance with all public participation laws. This issue has been repeatedly raised by the appellants, yet the Shawnee wants to act like it isn't a big deal or that they can ignore it. That strategy will only work for so long before the truth will out.

ISSUE 2: THIS PROJECT IS A MAJOR FEDERAL ACTION WITH A SIGNIFICANT EFFECT ON THE ENVIRONMENT. THE FINDING OF NO SIGNIFICANT IMPACT IS IN ERROR.

The Shawnee has issued a "Finding of No Significant Impact" with the Decision Notice. This is a document under the National Environmental Policy Act which signifies that a project will not have a significant impact on the environment and thus, is not a major federal action. In this case, the Shawnee is wrong to issue a FONSI, and is using the FONSI process to avoid having to do the detailed impact analysis which the NEPA requires in such cases.

The Shawnee's issuance of a FONSI contradicts the alarmist statements contained in the project documents. For example:

(a) "invasive species are jeopardizing the survival of some ecological communities."

(b) "invasive species….possibly lead to the local extirpation of native plant species, including threatened, endangered and sensitive species."

© "non-native invasive plant species…out compete and eventually replace native species…cause the loss of habitat and food for wildlife, alter soil structure and chemistry, alter plant succession, hybridize with natives…"

There's more, but you can get the idea. Yet, when going thru the NEPA regulation's significance criteria, the supervisor writes that there will only be "minor beneficial effects associated with the control or elimination of priority invasive species." So why bother with poisoning the environment, introducing molecules that don't even exist in nature unless created through a refinery run by humans,into "natural areas" and costing the taxpayers untold dollars for a project

that will only result in “minor beneficial effects?”

But let’s go through the significance criteria one by one to see how the supervisor made errors in his analysis in order to facilitate his FONSI, even though it isn’t supported by the record.

These criteria are listed in the CEQ regs at 1508.27(b). They are as follows:

§ 1508.27 Significantly.

"Significantly,, as used in NEPA requires considerations of both context and intensity:

(a) *Context.* This means that the significance of an action must be analyzed in several contexts such as society as a Whole (human, national), the affected region, the affected interests and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole.. Both short- and long-term effects are relevant.”

The supervisor totally misconstrues this analysis and makes an irrational attempt to downplay the significance with an incorrect analysis of the context of the project. Here is what the supervisor wrote:

“The context here is the limited, focused use of the specified methods to address an altered condition of the natural environment - invasive species - in specific areas of the Forest identified in the EA.”

This isn’t addressing context at all according to the requirements in the regulations. First, there should be an analysis of the setting of the project. That setting is the Shawnee National Forest, which is a large but generally non-contiguous piece of public land in southern Illinois. The project is authorizing work to be done on vague, not well defined areas of land across the entire Shawnee national forest - a “forest-wide” project.

Scattered in amongst the national forest holdings are private in holdings, many of which contain private residences. Impacts on residences from national forest actions leaving the boundaries of national forest property is potentially significant. Furthermore, the locale of some of the actions are in designated “natural areas,” as well as congressionally designated wilderness areas. These areas are supposed to be kept in as natural a condition as possible. Any man-made manipulation into these areas is potentially significant. In addition, this involves over 10,000 acres of public land being treated across the forest. The size and scope of the project itself, thousands of acres of site specific treatment, give rise to a potential for significance. Also, the analysis of the context is to include both short and long term effects. Yet, there is no long term analysis of the effects to put into context.

A context cannot be a use of the land. A context in the NEPA sense is a locale or

a place, a boundary of sorts, in which the impacts of the project will be felt. The context can't be the project itself. In this case, the context is significant. The deciding officer is in error in not recognizing the potential significance of this project.

"(b) *Intensity.* This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:"

The deciding officer writes that his "examination of the expected impacts focused on the ten intensity factors put forth for consideration by the Council on Environmental Quality." Those are listed below, and the appellants will go thru them one by one to show how the deciding officer's examination is in error.

"(1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial."

Again, the deciding officer admits that there will be only "minor beneficial effects." Yet, he fudges repeatedly in truthfully analyzing the adverse effects of the project. This becomes clear as we go through the other criteria.

"(2) The degree to which the proposed action affects public health or safety."

The deciding officer brushes off the impacts on public health by stating that "the analysis determined that there would be no adverse impacts on human health or safety from implementation of the project in compliance with the project design criteria for human health and the environment (EA page 17)."

All the project design criteria provides is certain guidelines that will be followed when the poisons are applied. There is no analysis of what exposure levels could be expected. There is reference to applying the chemicals "during periods of low visitor use" but when is that? And that doesn't address the issue of applying the chemicals in a residential neighborhood, or from people who would regularly drive by a site that is located near a road? What about exposures from the vaporization of the chemicals? The EA doesn't address the potential of airborne exposure. The appellants have provided much information about potential health effects of the poisons proposed for use, and for the agency to just brush off any and all potential for health effects to exposed individuals and say that there is none, zero, not a chance, is false, disingenuous, and arbitrary and capricious.

One of the most serious impacts is the potential hormone disrupting capability of some of the chemicals. Some of the science suggests that these chemicals could be more dangerous at lower doses because at that level they can trick the body into thinking they are real hormones, and cause the body to react in unnatural ways, causing a number of health problems. http://www.ourstolenfuture.org/newscience/lowdose/lowdose.htm

The endocrine society, a scientific society of specialists in endocrine science, released a statement regarding endocrine disrupting chemicals.
http://www.ncbi.nlm.nih.gov/pubmed/19502515

They published a summary page that they called “Key Points.” (attached) Those are:

“ "Endocrine-Disrupting Chemicals: An Endocrine Society Scientific Statement" Key Points
• An endocrine-disrupting substance is a compound, either natural or synthetic, which through environmental or inappropriate developmental exposures alters the hormonal and homeostatic systems that enable the organism to communicate with and respond to its environment.

• Issues key to understanding the mechanisms of action and consequences of exposure to endocrine disrupting chemicals include age at exposure, latency from exposure, the mixture of chemicals, dose-response dynamics, and long-term latent effects.

• Because of the shared properties of the chemicals and the similarities of the receptors and enzymes involved in the synthesis, release, and degradation of hormones, no endocrine system is immune to endocrine disrupting chemicals.

• Effects of endocrine disrupting chemicals may be transmitted to further generations through germline epigenetic modifications or from continued exposure of offspring to the environmental insult.

• The evidence for adverse reproductive outcomes (infertility, cancers, malformations) from exposure to endocrine disrupting chemicals is strong, and there is mounting evidence for effects on other endocrine systems, including thyroid, neuroendocrine, obesity and metabolism, and insulin and glucose homeostasis.

• The Precautionary Principle is key to enhancing endocrine and reproductive health, and should be used to inform decisions about exposure to, and risk from, potential endocrine disruptors.

• Scientific societies such as The Endocrine Society should partner with other organizations with the scientific and medical expertise to evaluate effects of endocrine disrupting chemicals in humans. “

This scientific society states that “The evidence for adverse reproductive outcomes (infertility, cancers, malformations) from exposure to endocrine disrupting chemicals is strong, and there is mounting evidence for effects on other endocrine systems, including thyroid, neuroendocrine, obesity and metabolism, and insulin and glucose homeostasis.”

But these aren’t the only impacts of the chemicals proposed for use by the Shawnee. A university of Pittsburgh study found that roundup herbicide formulations were “extremely lethal” to amphibians.
http://www.chronicle.pitt.edu/media/pcc050411/sci1_pesticide.html That constitutes a threat to public health and safety.

In addition, the herbicide clopyralid is persistent in the environment.
http://ohioline.osu.edu/aex-fact/0714.html Yet the deciding officer says that there aren’t any

persistent chemicals being used, in spite of the fact that this information about clopyralid was provided right to him by the appellants. This means that exposure could take place over a long period of time - a potentially significant threat to the public health and safety.

Picloram, another of the herbicides being used, is widely recognized as being very mobile and a threat to groundwater contamination.
http://www.pesticideinfo.org/Detail_Chemical.jsp?Rec_Id=PC36206
It will be used in and around residential neighborhoods where people use wells and cisterns. This could be a serious problem, yet the deciding officer brushes it off.

Yet, the deciding officer hasn't identified in the NEPA documents whether or not the chemicals being released, both the active and inert ingredients, have endocrine disrupting capabilities, doesn't mention the toxicity of roundup, doesn't mention the persistence of Clopyralid, and doesn't try to give a hard look at whether or not there are any groundwater threats, even though the appellants have told them about potential pathways. How can such a conclusory finding that there will not be significant impacts to human health and safety pass muster? Fact it, it shouldn't. There are going to be forest users as well as residents in nearby residential areas that will be exposed to the chemicals, and just because the exposure may be a low levels, there is still a threat. The deciding officer didn't do his homework, because if he had, he would have seen that the evidence is strong that there is a significant impact on public safety from releasing these chemicals into the environment. The deciding officer is in error in this matter.

(3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, Prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

This finding of no significance in regard to this criteria is particularly erroneous. The deciding does acknowledge that much of the project will occur in 23 designated natural areas, designated because they contain "unique scientific, education or natural values" that are to be managed for "preservation, protection and/or enhancement." Clearly these are ecologically critical areas, although the deciding officer fails to address this. However, the deciding officer does try to brush off this fact by stating that "the activities we plan to implement….will have no significant affect adverse effect" because "the proposed action…will accomplish the intended purpose of managing or controlling invasive species to the benefit of the natural areas."

But the regulation only requires that the deciding officer identify whether or not these are areas have "unique characteristics" with proximity to ecologically critical areas. By any objective analysis, natural areas are ecologically critical areas, and not only are the actions within proximity of natural areas, they are within them! According the significance criteria, this is all that needs to be identified. Yet, the deciding officer, instead of just admitting that there is potential significance simply by the fact that these are ecological critical areas, goes into a rambling explanation of why the benefits of the project outweigh any consideration of the significance of the ecologically critical areas.

In addition, the treatments will occur within congressionally designated wilderness areas. This means introducing completely man-made compounds which do

not exist in nature into wilderness areas. The EA is vague as to how many wilderness areas will be entered and how many acres of wilderness land will be impacted.

But this contradicts the explanation that the deciding officer gave to criteria (1), in which he said that there would be "minimal benefits," and that his "finding of no significant environmental effects is not biased by the beneficial effects of the action." This is exactly what the deciding officer is doing in trying to avoid having to address the potential significance of the fact that this action will take place, in large part, in 23 ecologically critical areas, and in congressional designated wilderness areas, and that in and of itself is significant.

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The deciding officer again avoids the entire subject by claiming that his finding relies "on the determination in the environmental assessment that implementation of the selected alternative will have no adverse effect…on the quality of the human environment." That statement is so far fetched it lacks credibility. For example, the appellants provided information to the Shawnee about how the persistence of Clopyralid was so great, that when it was approved for lawn use, it contaminated many municipal composting facilities because it survived though the composting process at detectable, unacceptable levels. Yet the Shawnee doesn't even address this.

In addition, there is scientific controversy over the level of exposure which triggers effects, in addition to the synergistic effects of additional exposures in combination with ambient pollution levels already in the atmosphere and water. The appellants provided sufficient information to the Shawnee to bring these issues to their attention, but apparently the deciding officer isn't serious about addressing the concerns. Just the fact that the Endocrine Society published it's statement calling for the precautionary principle to be in decisions to release these chemicals runs totally contrary to the agency's findings. This is scientific controversy. In addition, there were more public comments opposed to the project than supporting it.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

This is one of the factors where the deciding officer's consideration in the Decision Notice is so far in error it has to bring into question the judgment of the deciding officer. Just the uncertainty and unknown risks associated with this project are enough to merit an EIS. The deciding officer again brushes off this consideration by stating that he "discern(s) no uncertainty or unique or unknown risks associate with this project." This statement is made even though the appellants brought to the deciding officer's attention in their comments that many scientists do contend that there is great uncertainty about the effect of these chemicals in the environment. In fact, many, including some scientific societies, have called the risk and uncertainty so great that the "precautionary principle" should be applied - meaning that they shouldn't be released into the environment without some overwhelming reason to do so.

The uncertainty comes from several sources. These include but aren't limited to:

(a) the effects of the chemicals planned for release during this project on the hormone system of various living organisms, including humans, at what levels in the environment these effects occur, and what the synergistic effects of these substances are when they mix with other contaminants in the ambient environment.

(b) There is great uncertainty as to what ecological functions the plants being targeted are filling, and what kind of plant community (and how that will affect animal and other communities) will come into the area after the herbicide kills the existing vegetation. There is no comprehensive survey of all of the plants and animals in the areas which will be treated, so we have no idea what will be directly exposed resulting in death or injury.

The Shawnee sets forth no plan for trying to guide what will come after. There are no plans for planting seedlings, seeds, or anything in regards trying to insure that "native" species that would normally be expected in such an environment will be the ones to become established afterward. Without such a plan, the ability to predict and control what vegetation will follow a mass kill is going to be very very iffy. With no plan, it's just up to nature, and just like the so-called "exotics" have come in at that this time, what is going to keep more invasive species from occupying the disturbed territory. There is plenty of science which states that disturbance is a pathway for invasive species to come in, and that's exactly what this project is going to do, opens the door for exotic invasions.
http://water.epa.gov/type/oceb/habitat/pathways.cfm

The risk would be high and there would be much uncertainty even with a plan, but without a plan, there is a high likelihood that the public will pay for the poisons, have their land poisoned, and end up with a problems that could be worse.

http://water.epa.gov/type/oceb/habitat/pathways.cfm (projects such as this identified as pathway for invasive species)
http://www.invasivespecies.gov/global/prevention/prevention_index.html land alterations identified as pathway for invasive species)

(c) There is uncertainty about the effectiveness of the herbicide in eradicating the targeted species, and how many applications of the chemical will be required. Multiple applications could significantly increase the impacts of the chemical.

(d) There is uncertainty as to what non-target organisms will be impacted both by the spraying and the burning. There are not comprehensive ecological surveys presented in the record which indicate what species could be impacted by the proposed action. But an ecology includes more than plants - there are animals, insects, invertebrates, reptiles and amphibians. Many of those could be impacted either by direct impact of exposure to chemical poisons or burning.

(e) There is uncertainty as to the amount of acres to be treated and exactly where these treatments will take place. The EA is very non-specific about exactly where treatments will take place. The site specific location, for example, the proximity to

water or watersheds, will strongly influence the potential impacts of the project. Without knowing the exact locations where treatments will be applied, there is great uncertainty as to the impacts.

(f) There is uncertainty, in fact, great uncertainty, as to what degree these exotic invasions are tied to global climate change. There is no dispute that the global climate is changing, and that human activities are tied to the changes. Could those changes be affecting which species are thriving in a particular area? The Shawnee plan and plan EIS didn't address this, even though appellants repeatedly brought this to their attention. But it is relevant to this project. In addition, what is the carbon balance of using herbicides compared to other alternatives? There is great uncertainty about this.

One of the most significant effects of this kind of action is the scientific uncertainty. To make another conclusory statement that there is not even a possibility of any uncertainty over the effects of this project just indicates that the agency is not serious about giving a hard look at the impacts of this project.

(6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

Again, the deciding officer avoids dealing with the fact that this clearly is a precedent for future actions on the Shawnee, and therefore has significance. There has never been a forest wide project authorizing this level of chemical pesticide use on the Shawnee for this purpose. There has never been a forest wide project which combines the use of fire and pesticides across such a large area of the forest for the only purpose of trying to control certain plant species. The deciding officer says he'll do further analysis before authorizing any other similar projects, but that isn't what the regulation asks. It asks whether or not the project may establish a precedent for future action, and the answer to that is yes. Again, the deciding officer is wrong and is trying to avoid the obvious conclusion that this is a major federal action.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

The deciding officer fails to make a determination about whether or not there could be significant cumulative impacts. He probably fails to address it because an honest determination would be that there are cumulative impacts associated with this project. While the agency claims that they have looked at "all known actions associated with the selected alternative that are likely to occur in the reasonably foreseeable future" and that low and behold, there aren't any significant cumulative effects, this is in error.

It also is unreasonable. On it's face, there are thousands of acres of industrial farmland that are situated around the Shawnee National Forest. Much of those acres, especially those where convention row crops are grown, use herbicides and other

pesticides. The industries in our region emit significant levels of pollutants. Where in the record is there documentation of what the ambient levels of contaminants in the areas where the treatment will occur are? As previously stated, many scientists are concerned about the synergistic effects of chemicals in the environment. Unfortunately, there is a great level of unknown and uncertainty about this, because this field hasn't been thoroughly studied.

In addition, the planning record admits that there will be areas in which herbicides will be applied and then the area burned. There will be cumulative from the burning of the herbicides. Dioxin can be formed by burning treated wood. (see attachment)

Finally, it is nearly impossible for the agency to make any kind of determination about any of the impacts, because there is no plan in the project record for trying to control or manage what the impacts of the treatments will be in terms of the vegetation that comes afterward. There is no guarantee that some other exotic species might not come in to fill the ecological void. If more invasive species come in, that will trigger a whole series of cumulative impacts. That could be the worst of the cumulative impacts. To claim that there will be no cumulative effects is wrong. There is a potential for significant cumulative impacts.

In addition, the Shawnee never has had a cumulative impact analysis on the plan level which passed muster. It was struck down as arbitrary and capricious, and the new plan cumulative impact analysis does not cure the problems, and is under appeal. That makes the significance of the cumulative impacts from this project even greater.

(8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

The deciding officer again tries to brush off the agency requirements by citing to a programmatic agreement on prescribed burning that the agency has with the state historic preservation officer. That agreement, however, was put into developed and put into place with no NEPA analysis, and inadequate public involvement, even though the appellants were very interested and wanting to be involved in the process. The appellants do not consider this agreement to be legitimate, and is controversial, something the agency doesn't want to admit, because then they would have to admit that there is some controversy associated with the project.

But concurrence with the SHPO is only one part of complying with the National Historic Preservation Act. When the agency does an undertaking, which this project is, the agency is supposed to consult with local citizens about the history of the area. In spite of the fact that the appellants live very near to part of the project area, and have tried to tell the agency that there are historic resources that would be impacted by the proposed project, the agency did no consultation with the appellants or anyone else in the neighborhood. Because of that failure to officially consult, the agency is missing the fact that there are significant historical resources, which include cisterns, which could become

pathways to groundwater contamination, directly in an area where some of the strongest plant poisons are to be applied. And this is only one site out of many across the forest. If the agency failed to consult with local residents here, it is likely that it has failed across the forest. So for the forest to claim that there are no potentially significant effects to historical resources on the forest without having followed the consultation regulations is like a person with a blindfold saying that the sun didn't come up on a given day.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

It has been all over the news in the last several years that bat populations in the eastern U.S. are plummeting as the result of a very serious illness that they are contracting in hibernation called white nosed syndrome. http://dnr.state.il.us/orc/wildlife/wns.html The EA doesn't try to go into how many endangered bats have been killed by the white nosed syndrome, or whether or not there has been any canvas of southern Illinois caves for the disease. It has been reported publicly that it has been found as nearby as western Kentucky.

The deciding officer even admits that the U.S. Fish and Wildlife Service determined that the project "may affect" the Indiana and Gray bats. Considering that these species have dropped in its population by tens of thousands over the last several years, any additional affect on the species should be considered potentially significant. There is evidence that chemicals in the environment are weakening bats and making them more susceptible to white nosed syndrome. (see attachment)

(10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

As previously stated, this project, which relies on and is tiered to the Shawnee Plan and EIS, which admittedly relied on information contained in the Hoosier/Shawnee Ecological Assessment, is not in accordance with law because the Ecological Assessment was done by a committee which should have operated in accordance with the Federal Advisory Committee Act, but did not operate under the FACA rules. This is a violation of federal law, and it is significant.

In addition, there is a potential violation of the Wilderness Act. The Wilderness Act requires that an agency use the minimum tool necessarily to accomplish the goals of the project. In this case, it is to reduce the impacts of 4 non-native species. It is not to eliminate them completely, because that will not be accomplished by this project. This goal can be accomplished with methods that do not result in non-natural compounds which are poisons being released into the environment within wilderness areas. This potentially violates the wilderness act.

In addition, this project could violate the Clean Water Act. Some of the streams in the project area are rated as full use, and this project could reduce their rating.

This project threatens the violation of the Illinois Natural Areas Protection Act. It

threatens to alter the land through human activity, something the act was passed to prohibit.

SUMMARY OF SIGNIFICANCE

There is no hard and fast rule when using these 10 criteria to determine whether or not a project may or may not have a significant impact on the environment. It is a balancing act, looking at the overall impact as to it's significance across the variety of considerations. In this case, several of the factors are very significant, including the fact that much of the project will occur on ecologically critical lands, that there is uncertainty of the impacts of very low exposures on hormone disruption, the uncertainty of what plants will replace the plants killed, the cumulative impacts, the fact that this is a precedent because it is the first such forest-wide project using herbicides, that the use of herbicides on public lands is highly controversial, that endangered bats which are reeling from white nosed syndrome, could be impacted, and that the agency did not consult with local residents regarding potential historical resources, along with the fact that this is forest wide and involves tens of thousands of acres across the forest and will occur over a number of years, all indicates significance.

In addition, the out and out errors made by the deciding officer renders this analysis arbitrary and capricious and it should be overturned.

Issue 3: EA RELIES ON OUT OF DATE RISK ASSESSMENT PREPARED BY PRIVATE COMPANY THAT WAS NOT SUBJECT TO PUBLIC REVIEW AT ALL IN VIOLATION OF NEPA

The environmental assessment, FONSI, and Decision Notice all rely heavily for much of their impact analysis of the herbicides on "risk assessments" done by one individual, Patrick Durkin, for a private company, the Syracuse Environmental Research Associates, Inc. These risk assessment were published 8 - 10 years ago. In that regard, they are missing much of the newest information regarding the impacts of hormone disruption.

In addition, these risk assessments were done with no public scrutiny, under contract with the Forest Service. Already the Shawnee has run aground of the law by having private contractors do scientific documentation which is used in planning documents by not having the contractors' work open to the public pursuant to the FACA. The agency's utilization of this company's work without any public scrutiny raises many of the same questions.

NEPA requires that impact analysis be subject to public review. That is a key part of agency's requirement that they give a "hard look" at the environmental effects of their proposals before they implement them. These risk assessments were not included in the environmental assessment except by reference. In addition, they are taken as fact, and used to deflect concerns about potential exposures, even though they have never been subject to public scrutiny.

These risk assessment are nearly a decade old, and do not address many of the issues that have arisen about these chemical compounds. They do not constitute high quality science, and they are not the best available information about the impacts of these chemicals.

This all constitutes a violation of NEPA. In addition, these risk assessment are already stale and out of date, and NEPA requires a higher standard of utilizing high quality, up to date science, not stale, old risk assessments that are not equivalent to impact analysis, and have not been subject to public review.

Issue 4: THERE IS NO PLAN FOR TRYING TO CONTROL THE VEGETATION AFTER THE TREATMENTS KILL THE EXISTING VEGETATION

The only plan set forth in the EA, FONSI, and DN is to use various techniques to kill patches of "exotic species." Those plants are taking up ground, occupying space at the moment. When they are killed, that space becomes open and eventually, either as plants that are resistant to the herbicide, or as the herbicide effects fade, the areas will revegetate. But what will they revegate to?

This is a key question when you get down to the nitty gritty of what the ultimate impacts of this project are. One would think that the agency would have some kind of plan to try and guide the revegetation process to one that would increase the odds that desirable native species would take the place of the plants that the agency thinks are so awful that they have to spray them with poisons.

But there is no plan included in the planning record for any kind of effort post treatment to try and control what kind of vegetation will follow.

`That is because there is ample evidence that disturbance in relatively undisturbed environments can often be the trigger for invasive species to get a foothold. Wouldn't that be about the worst possible outcome for the public? The public money would be spent, the land contaminated, but the problem not solved.

This is one of the biggest flaws of the proposal and it is mysterious in a way. But in another way, it isn't. It's very difficult and time consuming to try to implement a plan which would have a substantial possibility of having "desirable" "native" species reoccupy the space where the poisoned exotics were existing. The agency probably doesn't have the budget for that level of involvement. But, just killing and then letting "nature" take it's course doesn't guarantee or insure anything. By definition, the species with the propensity to colonize in an area first are the "invasive" species. If the areas become reoccupied with some other exotic, or even the same one, or the chemical fails, then what?

Issue 5: THE FOREST SERVICE IS WRONG ABOUT THE PERSISTENCE OF HERBICIDES

The Forest Service claims that the herbicides used are not persistent. That is incorrect. These substances do not immediately disappear from the environment. They go through a degradation process at varying rates, and degrade into various degradation products. That can take weeks or much longer. Detectable traces of the chemicals can be found for many weeks or months after the chemical has been applied.

One of the chemicals, Clopyralid, is so persistent that it has ruined a number of municipal composting facilities by leaving residues. In fact, it was so bad, that the chemical was 3yfybanned from being used as a lawn chemical.
http://www.puyallup.wsu.edu/soilmgmt/Clopyralid.htm

That means that users of the forest, or local residents around treated areas, will be exposed or face the risk of exposure for many weeks or months. In the case of clopyralid, it is common knowledge that the chemical even persists through the composing stage. The EA, FONSI, and DN do not properly give a hard look at the consequences of the persistence of the chemicals.

Issue 6: FOREST SERVICE IN ERROR ON ROUNDUP'S EFFECTS ON WATER AND FROGS

It has been widely publicized that a few years ago researchers from the University of Pittsburgh found that Roundup herbicide was highly toxic to frogs and other amphibians. In addition, just recently, other researchers have found that Roundup is toxic to the placenta and has hormone disrupting characteristics.
http://www.pesticide.org/the-buzz/common-herbicide-linked-with-pregnancy-problems-and-hormone-disruption http://www.disease-treatment.com/showthread.php?t=126595 Yet, the agency claims that no Roundup will get into water because they aren't going to be using it near water. This defies logic and science. Roundup will get into the watershed during rain events. It also could be distributed by air and by animals.

The record does not indicate that comprehensive surveys for frogs or other amphibians was done in the streams near where the treatments are going to take place. To assume that no Roundup will enter the streams is not the hard look under NEPA of what the impacts of Roundup entering the watershed will be, not just on frogs and amphibians, but on the ecosystem that depends on that watersource.

The EA is in error to find no impacts to frogs, amphibians, and other species from Roundup exposure.

ISSUE 7: THIS PROJECT VIOLATES THE ILLINOIS NATURAL AREAS PROTECTION ACT

The Illinois Natural Areas Protection Act protects Illinois nature preserves from being altered by human activity. The appellants assert that applying compounds to the environment in substantial amounts that do not exist in a natural form, do not exist in nature, constitutes human activity that alters the areas. This is in violation of the purpose and function of the INPA, which is for the "preservation and protection" of natural areas.

The 23 "natural areas" on the Shawnee are the legal equivalent of Illinois nature preserves. They met the criteria for being designated as state nature preserves, but instead, were purportedly designated in a prescription that was fundamentally equivalent to the nature preserve designation. This has been a policy of the Shawnee, and this has been reflected in plans and projects, since the earliest days of Shawnee land and resource management planning.

Therefore, not only is this proposal a violation of the state law a significance factor, it should be disclosed and considered in the EA and FONSI. It also is a violation of the agency's own plans and policies.

ISSUE # 8: SHAWNEE PLAN AND EIS DO NOT CONSIDER THE IMPACTS OF CLIMATE CHANGE

Even though appellants brought the issue of climate change and the carbon cycle, and both it's potential to affect the forest, and the forest's management activities' impacts on the carbon cycle and climate, the Shawnee did not consider this issue. The failure of the Shawnee to consider these impacts is under appeal by appellants. That issue is briefed comprehensively in the appellant's plan appeal, and is incorporated by reference, including exhibits in support of their claims.

Now, the Chief of the Forest Service has issued a memo directing the forests to consider climate change in their forest management activities. Yet, the Shawnee has not begun to try and amend the plan, and is not considering climate change or the carbon cycle in this decision. This is a violation of NEPA and NFMA.

CLOSING

This project is full of uncertainty. It has the potential to have a major impact on the Shawnee National Forest, users, and neighbors. It is unwise and expensive. It should be withdrawn, but if the agency is dead set on moving forward, it should do the detailed EIS analysis with full public scrutiny.

Relief sought

(a) That the reviewing officer declare this decision, EA and FONSI arbitrary and capricious, and remand it and declare it null and void;

(b) That if the decision is not withdrawn permanently, that the reviewing officer declare that this is a major federal action requiring the full EIS process.

Respectfully submitted,

Mark Donham on behalf of the Regional Association of Concerned Environmentalists

(RACE) and as an individual
And on behalf of the individuals below
Kristi Hanson
[redacted]

Sam Stearns
Geneil Stearns
Sam & Geneil Stearns
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[redacted]

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