



**DECISION NOTICE AND
FINDING OF NO SIGNIFICANT IMPACT
WALNUT CREEK CENTER FOR EDUCATION AND RESEARCH AND
SOUTHWEST EXPERIMENTAL GARDEN ARRAY
U.S. FOREST SERVICE
CHINO VALLEY RANGER DISTRICT, PRESCOTT NATIONAL FOREST
YAVAPAI COUNTY, AZ**

DECISION

Based upon my review of the Walnut Creek Center for Education and Research (WCCER) and Southwest Experimental Garden Array Environmental Assessment (EA), I have decided to implement the Proposed Action. The Proposed Action will authorize Northern Arizona University, Arboretum at Flagstaff, and Prescott College to use the Walnut Creek administrative site and adjacent 275 acres of National Forest and to install a Southwest Experimental Garden Array. These permits will authorize use of the facilities and lands for research and education, and to establish two five-acre research gardens for the purpose of evaluating the interactions of genetics and climate change on plant genotypes, species, communities, and ecosystems.

The Administrative Site includes a historic house and barn and additional outbuildings. The WCCER partnership has played a key role in maintenance and protection of this property and will continue to do so. The partnership would continue to employ on-site managers who will live in the house and oversee the facilities. The Administrative site is run as a small field station hosting research, education and outreach activities. Groups generally do not exceed 40 people. The permit for the surrounding 275 acres is intended for class and outreach use, monitoring of marked plots and trees, and other minimally invasive research and teaching use.

The proposed 10 acres of garden area will have perimeter fencing for 5 acres on each of two plots. Final fencing plans will be designed in consultation with the Arizona Game and Fish Department to minimize hazard to wildlife. The fencing will need to exclude elk, deer, javelina, and livestock. Within a site, individual experiments may use additional fencing and exclusion methods to prevent the consumption of plants by rodents and other small animals. The garden site will be connected to the existing water system used for the administrative site. New solar power sources will be added to the site. Some clearing of vegetation will occur depending on individual research protocols. Most clearing will consist of cutting a few juniper trees which may interfere with research results. Both of the proposed garden sites have been disturbed in the past by clearing, pasturing, or farming.

DECISION RATIONALE

THE WALNUT CREEK CENTER FOR EDUCATION AND RESEARCH

Since 1999 WCCER has operated as a remote field station. The site has hosted many undergraduate courses, several K-12 outreach activities, numerous research projects, and provided area information to the public. The WCCER partnership has worked closely with the PNF to preserve and maintain the historic character of the site. This proposed action would enable these activities to continue. Research activities included under this permit include non-destructive measures, marking plants or plots in the field, and sampling on plants, soil and insects on the 275 acre project area.

The combined Walnut Creek Center and Southwest Experimental Garden Array will:

- 1) promote research on sustaining landscapes that will inform management to maintain desired landscape conditions on the Prescott National Forest and particularly develop understanding of the impacts of global change on vegetation,
- 2) provide educational opportunities for regional students and institutions
- 3) provide a presence at the Walnut Creek Center that enables public contact and outreach,
- 4) Assist the Prescott National Forest with the maintenance of the historic properties at the Walnut Creek Ranger Station.

The Walnut Creek Center for Education and Research and Southwest Experimental Garden Array EA documents the environmental analysis and conclusions upon which this decision is based.

PUBLIC INVOLVEMENT

This action was originally listed as a proposal on the Prescott National Forest Schedule of Proposed Actions and updated periodically during the analysis. People were invited to review and comment on the proposal through a scoping letter that was released to the public on September 5, 2012. No public comments were received. The National Science Foundation contacted relevant Arizona-based tribes in a letter sent on April 8, 2014. There have been no responses from the tribes. A copy of the EA was posted for public comment in the Prescott Courier on December 2, 2014. No public comments were received. The EA lists agencies and people consulted on page 8.

FINDING OF NO SIGNIFICANT IMPACT

The significance of environmental impacts must be considered in terms of context and intensity. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human and national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. In the case of a site-specific action, significance usually depends upon the effects in the locale rather than in the world as a whole. Intensity refers to the severity or degree of impact. (40 CFR 1508.27)

CONTEXT

The Walnut Creek Center for Education and Research, a partnership of Prescott College, Northern Arizona University, and The Arboretum at Flagstaff, proposes a suite of three activities centered around the Historic Walnut Creek Ranger Station on the northwest section of the Prescott National Forest. One component is the continued operation of the Walnut Creek Ranger Station Administrative site (~5 acres, including buildings and infrastructure) as a WCCER partnership field station. The second component is the use of the surrounding 275 acre section for low impact research and teaching to include such activities as surveying, sampling, marking, and collecting of soils (<1 cu. m), plants, and invertebrates. The third component is the use of up to 10 acres for a research site for the Southwest Experimental Garden Array for the study of genetics and climate change. The purpose of the research to be supported by this site is to understand climate change impacts on native ecosystems and use knowledge of genetics and community interactions to mitigate those effects. This research site will be one in a network covering an elevation gradient across northern Arizona to enable testing of the impacts of varied temperature conditions on plants and associated communities. Walnut Creek Forest Service infrastructure will be maintained and some additional research infrastructure will be added of a nature similar to the infrastructure already in place (water, fencing, solar power, weather and environmental sensing). Some existing plants will be replaced with intentional experimental plantings over 5-10 acres over 10 years, but it will not substantially alter the vegetation of the Walnut Creek area.

INTENSITY

Intensity is a measure of the severity, extent, or quantity of effects, and is based on information from the effects analysis of this EA and the references in the project record. The effects of this project have been appropriately and thoroughly considered with an analysis that is responsive to concerns and issues raised by the public and resource specialists. The agency has analyzed the environmental effects using relevant scientific information and knowledge of site-specific conditions gained from field evaluations. The finding of no significant impact is based on the context of the project and intensity of effects using the ten factors identified in 40 CFR 1508.27(b).

With the invasive species Best Management Practice plans in place this project will not have significant impacts on the environment. Minor changes in plant removal and replacement with experimental plantings and fencing of up to 5 acres will have no significant impacts on biological or human environmental resources. Continuation of WCCER activities on site may have a beneficial effect on public safety and recreational use in the area. This analysis includes all related activities in the area and no cumulative effects are anticipated. The action will enable continuation of maintenance of the historic ranger station used by WCCER and will not cause loss or destruction of significant scientific, cultural, or historical resources. The action will have no effect on endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973 because none are present. The action does not violate Federal, State, or local law or requirements imposed for the protection of the environment.

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. Consideration of the intensity of environmental effects is not biased by beneficial effects of the action.

The degree to which the proposed action affects public health or safety. There will be no significant effects on public health and safety. Activities will be overseen by the permittees, such as potable water testing and facility maintenance, with compliance reviews conducted by the National Forest. These reviews will consider public and permittee health and safety.

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. There will be no significant effects on unique characteristics of the area. There are no Inventoried Roadless Areas (IRAs) within the permit area. There are no eligible or designated Wild and Scenic River reaches.

The degree to which the effects on the quality of the human environment are likely to be highly controversial. The effects on the quality of the human environment are not likely to be highly controversial. There is no known credible scientific controversy over the impacts of the proposed action. This environmental analysis is tiered to the Land Management Plan (LMP) Environmental Impact Statement (EIS). Forest-wide effects of LMP's standards were disclosed in that EIS. The selected alternative with the identified resource protection measures meets LMP standards. In addition, extensive scoping was completed during the analysis in order to identify areas of potential controversy. The scoping activities are identified in the EA, this Decision Notice, and the project record. There has been no information presented that would demonstrate that the action would cause adverse impacts that could not be mitigated. I conclude that it is very unlikely that the environmental effects associated with the action will be highly controversial.

The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks. The Agency has considerable experience with actions that are similar to the selected alternative. The analysis shows the effects are not uncertain, and do not involve unique or unknown risk.

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. The action is not likely to establish a precedent for future actions with significant effects because it is a stand-alone decision. Major follow-up actions will not be necessary. I conclude that this action does not establish precedent for future actions.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. The cumulative impacts have been displayed in this analysis in both the EA and in specialist reports contained in the project record. The EA discusses the combined effects of the project with other past, current and reasonably foreseeable future actions. Based on the discussions in the EA, specialist reports, and information identified during public review, I have concluded that there are no significant, cumulative impacts.

The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed, 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 action will have no significant adverse effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places. Areas proposed for ground-disturbing activities have been surveyed and all cultural resources or historic sites will be avoided. Consultation with the State Historic Preservation Officer (SHPO) under Section 106 of the National Historic Preservation Act was completed prior to signing this decision.

The permit area is known to contain cultural resources of both prehistoric and historic periods. The decision to permit these activities will have no adverse effect on the heritage properties since the construction of gardens will avoid cultural resources. There will be some noticeable increase of development within the general area of the Historic Walnut Creek Station, but this will not detract from the overall historic appearance because the activities located to the west and mostly off the main site of the historical buildings.

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. There are no Federally-listed Threatened or Endangered species or habitat within the project area. The Wildlife, Fisheries, and Rare Plants Report serves as the Biological Evaluation and documents the effects on species and habitat.

FINDINGS REQUIRED BY OTHER LAWS AND REGULATIONS

The action will not violate Federal, State, and local laws or requirements for the protection of the environment. This project is fully consistent with the Prescott National Forest Land Management Plan and the National Forest Management Act (NFMA), Clean Water Act, and the Federal Land Policy Management Act of 1976.

After considering the effects of the actions analyzed, in terms of context and intensity, I have determined that these actions will not have a significant effect on the quality of the human environment. Therefore, an environmental impact statement will not be prepared.

ADMINISTRATIVE REVIEW (OBJECTION) OPPORTUNITIES

36 CFR §218.4 Proposed projects and activities not subject to objection.

Proposed projects and activities are not subject to objection when no timely, specific written comments regarding the proposed project or activity (see §218.2) are received during any designated opportunity for public comment (see §218.5(a)). The responsible official must issue a statement in the Record of Decision or Decision Notice that the project or activity was not subject to objection.

No substantive comments were received during scoping or the comment period for this project, therefore it is not subject to an objection.

IMPLEMENTATION DATE

The project may be implemented immediately upon signing.



CONTACT

For additional information concerning this decision, contact: Jim Gilsdorf, Chino Valley District Ranger, Prescott National Forest 735 N. Hwy. 89 Chino Valley, Arizona 86323 (928-777-2230).

Teresa A Chase

3-11-15

Teresa Chase

Date:

Forest Supervisor

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