Defining the Area of Potential Effects (APE) for Cultural Resources

Introduction
The National Historic Preservation Act of 1966 (NHPA), as amended, requires that all federal agencies consider the potential effects of proposed undertakings to historic properties. Defining an Area of Potential Effects, or APE, provides both the agency and consulting parties with a basis for understanding the geographic extent of anticipated impacts of the proposed project, which is necessary in order to determine whether the project may adversely affect historic properties. In relation to compliance with NHPA, the APE helps the agency determine where to look for cultural resources based on what areas may be affected.

Does an undertaking require a cultural resources review?

The first step in the process of considering cultural resources within NRCS is to determine whether there is an undertaking. According to the NHPA and the Advisory Council on Historic Preservation (ACHP), an undertaking is defined as

…any project, activity, or program that can result in changes in the character or use of historic properties, if any such historic properties are located in the area of potential effects. The project, activity, or program must be under the direct or indirect jurisdiction of a Federal agency, or licensed or assisted by a Federal agency. Undertakings include new and continuing projects, activities, or programs and any of their elements not previously considered under Section 106 (36 CFR 800.2[o], see also 16 USC 470w[7]).

For NRCS, under this definition, undertakings would include all proposed practices for any project, since the agency is providing assistance.

However, NRCS excludes some practices from cultural resources review because they have no potential to impact cultural resources, even though those practices are technically undertakings. This is possible because of a nationwide Programmatic Agreement between NRCS, the National Conference of State Historic Preservation Officers, and the Advisory Council for Historic Preservation (ACHP). In Florida, we are also fortunate to operate with a State Level Agreement with the Florida State Historic Preservation Office (SHPO), which categorizes NRCS conservation practices according to their potential to adversely affect cultural resources. Under these agreements, Conservation Technical Assistance – wherein NRCS provides no financial assistance or otherwise exercises no control over implementation – is excluded from consideration as an undertaking for the purposes of compliance with the NHPA. Some cost-shared practices such as Nutrient Management and Irrigation Water Management, along with
others that are classified as having “no potential to affect” cultural resources, are also excluded from consideration as an undertaking because of our Programmatic Agreement and State Level Agreement.

Florida NRCS conservation practices and their classifications can be found in Section II(C) of the Field Office Technical Guide as the Classification of Conservation Practices. If all of the practices for a project are classified as “No potential to affect,” there is no need to determine an APE (though there may still be one). If any of the planned practices for a project are classified as “Potential to affect” or “Low potential to affect” the APE will need to be determined before proceeding with a cultural resources review.

What is an APE?

According to the NHPA, the APE is defined as

…the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking (36 CFR 800.16[d])

Important terms in this definition include historic properties, direct effects, and indirect effects.

Historic properties are “any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places maintained by the Secretary of the Interior” (36 CFR 800.16(1)). Historic properties are cultural resources that have been determined to be particularly significant. When possible, NRCS makes an effort to avoid impacts to all cultural resources, not only historic properties. The Cultural Resources Specialist (CRS) is the only person within the state who is qualified under the Secretary of Interior’s Standards to determine whether a cultural resource is a historic property (36 CFR Part 61).

Direct effects are impacts caused by the proposed practices or overall project; this is often the “footprint” of a proposed project. Indirect effects are all other impacts caused by the implementation of a project, and are often those that occur at a later time or which are farther removed from the immediate project area; this sometimes includes a consideration of visual, audible, atmospheric, or hydrologic changes due to project implementation.

For instance, customer Joe Jones is receiving both technical and financial assistance from NRCS to install an irrigation pipeline and center pivot. Direct effects can be anticipated in the footprint of the proposed irrigation pipeline and its immediate vicinity as well as any staging areas and access routes that may be necessary. Indirect effects can be anticipated if the project area had been used for different crops (e.g., if there will be a change from no-till to till crops), since the land use change will presumably occur because of or with the assistance of the installation of the center pivot. Additionally, if the center pivot has an end gun, the spray from that gun should be considered within the APE. Indirect effects can be more difficult to predict, but are important to,
consider. An APE exists regardless of whether previously recorded cultural resources are present within or near the project area.

**Defining the APE**

To determine the APE, the planner should

1. determine and locate on a map proposed practices and practice locations,
2. determine whether the practices constitute an undertaking in relation to the NHPA and the Florida NRCS cultural resources review process,
3. consider whether proposed practices may entail indirect effects and, if so, where these may occur, and
4. include all planning units in which proposed practices that constitute an undertaking are situated as well as all locations in which indirect effects may also occur.

Conservation planning provides a head start and a good first step for determining the APE. For any client, a conservation plan may include many planning units, often in the form of fields. The conservation plan may include long-term goals, including those that cannot yet be implemented or for which NRCS is providing only CTA. To determine the APE for each customer, consider all of the planning units that include proposed practices for which NRCS is providing assistance that have been categorized as having potential to affect or low potential to affect cultural resources.

For example, Sally Smith’s WHIP contract (Field 1) includes maintenance of Firebreaks (Code 394) and Prescribed Burning (Code 338). She also has an EQIP contract that includes one field (Field 2) with Nutrient Management (Code 590) and one field (Field 3) with both Nutrient Management and Fence (Code 382). All three of these fields are technically within the APE; however, because of NRCS’s national Programmatic Agreement and State Level Agreement with the SHPO, Field 2, where Nutrient Management (Code 590) is proposed, can be excluded from further consideration of cultural resources. The planner should, however, proceed with consideration of Fields 1 and 3 to determine whether the undertaking – the proposed practices – has the potential to impact cultural resources. Once the location of Firebreaks and Prescribed Burning in Field 1 and Fence in Field 3 have been mapped, the initial APE is created.

To refine the APE, one should consider whether the proposed practices or their implementation will require any additional space. Will additional equipment be brought to the property and stored there for any length of time, creating the need for a staging area? Is there sufficient access to the project area for all necessary equipment to reach it without removing vegetation or clearing new paths or roads? Will implementation of any proposed practices require the use of additional material for fill, requiring borrow from another location (off-site or on-site)? If so, these locations should also be included in the definition of the APE.

Generally, the potential effects of NRCS practices can be anticipated and are often well-defined, in large part thanks to NRCS’s efforts at defining practice standards. This helps identify and define an initial APE based on anticipated ground-disturbing activities and any associated practices such as staging areas, borrow areas, and access routes.
Complex APEs

In some cases, it may be necessary to consider a more complex set of potential effects, including:

- visual effects
- auditory effects
- sociocultural effects
- secondary or cumulative effects
- effects on culturally significant natural resources

Determining the APE for these effects to cultural resources is the CRS’s duty, and may require including an architectural historian in some cases. If a planner or reviewer determines that the project should be considered in relation to these more complex considerations, submit the project to the CRS for review and further discussion.

Review

An APE is
- at least the footprint of all proposed practices within a project area.
- inclusive of additional areas for staging equipment, access routes, off-site and on-site borrow locations, spoil deposition and storage areas, and any other additional space needed beyond the direct footprint.
- sometimes comprised of multiple, non-contiguous areas.
- the basis of an area that requires a cultural resource surface inspection from the Field Office and a cultural resources review, and, if applicable, a cultural resources inspection from the CRS.
- required both within the agency and during consultation, if consultation is appropriate.
- a basic component of the Section 106 compliance process.
- an outcome of the conservation planning process.

An APE is not
- only located at the intersection of a proposed practice and a previously recorded cultural resource.
- limited to an area in the immediate vicinity of a previously recorded cultural resource.
- the entirety of a field or farm, unless the propose practice(s) covers the entire area.