



IN COOPERATION WITH:

WV GIS Technical Center, WVU Department of Geology & Geography, West Virginia University Office of Kentucky Nature Preserves (OKNP)

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-Casey Shrader

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I. INTRODUCTION

The NRCS provides technical and financial assistance to clients primarily through various programs and entities. Acceptance of this assistance is voluntary on the part of the client. NRCS does not have authority to make client decisions on private land and should provide the client with technical assistance and guidance. This handbook outlines the standard operating procedures for use and application of the Kentucky Interagency Coordination Tool (KICT) located at: http://kict.mapwv.org/kict/

The concept of the KICT was born out of the need to streamline and simplify the compliance process for Natural Resources Conservation Service (NRCS) field offices. Compliance with some of the executive orders and laws is extremely difficult for field staff for a variety of reasons including the lack of a cohesive process, time constraints, the lack of information, privacy issues, knowledge of the law and confusing regulations. There are also limitations in the ability of State and Federal agencies to share locations of protected resources or other information. The KICT is essentially a planning tool that allows conservation planners to Inventory Resources and Analyze Resource Data in one centralized location (i.e. NRCS conservation planning Steps 3 and 4).

The KICT is a screening tool designed to determine the probability of existence and proximity to protected resources. It analyzes the impacts to those resources based on applications of conservation practices. Every effort has been made to predict frequently encountered situations in which conservation practices would be utilized in various settings and situations. However, it is impossible to predict every situation. In most instances, predetermined avoidance measures and considerations approved through programmatic agreements or other methods are provided to planners. It is important to realize that the ultimate responsibility to determine the presence or absence of resources and the effects to them ultimately lie with the planner and responsible federal official. Therefore, the KICT should only be considered as a screening tool.

In some cases, benefits to those protected resources can also be provided based on the application of conservation practices. The KICT is designed to be continually updated through the development of various modules that correspond to the Special Environmental Concerns (SECs) found on the NRCS Environmental Evaluation (EE). This part of the EE is historically one of the most difficult for planners to complete. Each module can provide a separate report to a field planner regarding a specific SEC and serves as documentation of investigation and proof of compliance with the National Environmental Policy Act (NEPA). This allows conservation planners a one-stop-shop to complete this portion of the EE, depending upon the number of available modules. The instantaneous result that is provided saves time and review from outside agencies, state specialists, and ensures compliance with policy. Planners save exponentially more time as more modules are available. The tool also has functionality that allows planners to view actual locations of certain resources which may alert them to their presence thus avoiding further impacts.

This handbook refers to version 4.0.1 of the KICT. It will be modified to reflect updates and future versions as the KICT evolves. This handbook does not constitute NRCS policy but outlines methodology to comply with NRCS policy in the General Manual (GM) sections dealing with SEC compliance and NEPA.

II. PRIVACY INFORMATION

Client records are confidential except for those that are subject to the Freedom of Information Act. NRCS policy on the Freedom of Information Act and the Privacy Act are contained in National Instruction 120-310 and General Manual 120, Part 408. Section 1619 of the Farm Bill prohibits the Secretary of Agriculture and its employees from disclosing certain information that has been provided by agricultural landowners and producers to participate in the U.S. Department of Agriculture's (USDA) programs, except as necessary for delivering technical assistance. This section also prohibits the release of information that falls into certain categories. Information that has been provided to USDA by an agricultural producer or owner of agricultural land concerning the operation, practices, or the land itself to participate in USDA programs is not to be disclosed by any USDA employee. Geospatial information is also prohibited from disclosure when it has been maintained by the Secretary and concerns the land which an agricultural producer or owner has provided information to participate in a USDA program.

Information that has been provided to NRCS by an agricultural producer to participate in an NRCS program includes information directly provided to an NRCS employee, or information developed by the Agency based on information obtained from the property of the producer. An example of documents that may be withheld under Section 1619 include, but are not limited to, conservation plans, wetland determinations, Highly Erodible Land Determinations, acreage amounts, assistance notes, National Resources Inventory point data, flood damage surveys, and program contract information.

Geospatial information includes maps, surveys, and charts. Aerial photographs may be considered geospatial information only if they contain data identifying characteristics of the agricultural land. Section 1619 provides a limited release of information that would be otherwise protected as previously noted. If USDA determines information will not be subsequently discussed, the Secretary is authorized to disclose information that has been provided by an agricultural producer or owner to a person, Federal, State, local, or tribal agency working in cooperation with USDA when technical or financial assistance is being provided to the agricultural operation or when responding to a disease or pest threat to an agricultural operation. Providing technical and financial assistance includes evaluation of programs, conservation practices, and outreach for USDA programs.

Compliance with some environmental laws may require NRCS to share site-specific information about agricultural operations, farming or conservation practices, or the planning area itself. Such information may be protected from disclosure under the Privacy Act of 1974 (5 U.S.C. Section 552a) and section 1619 of the Food, Conservation, and Energy Act of 2008 (7 U.S.C. Section 8791). Before initiating site-specific consultation, NRCS must obtain the written consent of the landowner and land user (when the land user provides written indication of having complete control over the land, the landowner's consent is not required). This written consent along with all other pertinent correspondence relevant to the consultation should be maintained in the "administrative file" that is kept with the client's conservation plan.

Therefore, the reports generated by the KICT are non-transferable and are the sole property of the landowner because they include geospatial information and information that may be used to participate in USDA programs. Reports are considered private and confidential. No release of the report information should occur to third parties unless authorized by the landowner in writing and the reports are not available through the Freedom of Information Act.

III. GETTING STARTED WITH THE KICT

How the KICT Modules Function

The KICT is a web-based geospatial application maintained by the West Virginia University GIS Technical Center. Users outline an area of interest and enter planned practices and quantities. Conservation planners receive information on impacts and avoidance strategies based on that information. The KICT performs this task by running an initial analysis comparing listed resources within a predetermined distance. The KICT then runs several subsequent comparisons in other data layers to determine any potential impacts. At the end of the process a list of resources that are likely to exist are produced. These processes are run in the background and are never visible to the user. The tool then returns results of potentially affected resources dependent upon the GIS information available.

This information is then compared to a matrix database in which recommendations are formed to provide avoidance, management recommendations or benefits depending upon practices selected. Once these tests are performed, the program then creates a report and notifies the user that the results are ready to be viewed. An email is sent to the user at which point they may log into the tool and view, save, or print the report.

KICT Modules

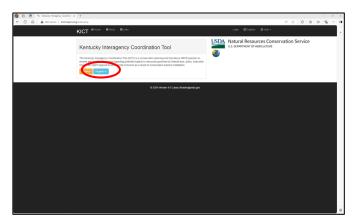
The concept of the KICT is to utilize the tool as a coordination of data analyses using GIS principles. The same processes that enable the tool to assess screening of various resources, federally listed species for example, works the same for cultural resources, floodplains, riparian areas, etc. if the conservation practice-to-resource interaction is defined. Therefore, the tool is designed to be configured with various modules that assist with completion of the Environmental Evaluation. Development of modules is dependent upon availability of resources and data. It should be mentioned that the results provided by the KICT are not the definitive answer to all the special environmental concerns. Since many of the avoidance measures in modules require thoughtful planning on the ground or timing of practice implementation, this tool should be run as early in the NRCS planning process as possible and should serve primarily as a screening mechanism for various resources. Sound conservation planning principles, judgement, and on-site knowledge should always be used. Data obtained from the KICT should be considered and utilized as screening for various steps in the conservation planning process (e.g., Step 3 - Inventory Resources).

Registering an Account in the KICT

This section of the handbook describes the correct procedure to register an account, perform a query, generate a report, and interpret the results of that report. Note that the screenshots or button labels shown for illustration may be slightly different depending upon the level of permissions provided to the user. Figures shown are usually from the basic permission level perspective (*User Level*). The overview is as follows:

Detailed Procedure

STEP 1 - Open the link to: http://kict.mapwv.org/kict/ and click the Register link on the page located beside the login box (Fig.1). It is recommended to bookmark this site in your browser for quick access.



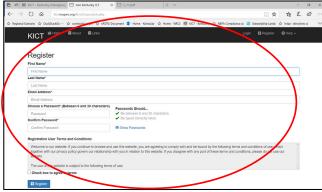


Figure 1. The first page the user encounters upon opening the link. Click the "*Register*" link circled in red to register a KICT account.

Figure 2: The registration page for the new user to create an account. The red circle shows the details required to be completed. Check the box for agreement of terms to register.

Complete the details on the following page. Utilize your USDA or approved government email account as the email address (e.g. John.Doe@usda.gov). The address specified will be used to notify you of completed reports. Personal email addresses that are not approved domains will receive a message that their login is not authorized for registration in the KICT. If you have questions regarding the registration process, contact the KICT Administrator.

Select and enter a password. Passwords may be between six and thirty (6-30) characters in length and should include at least one non-alphanumeric character (such as !@#\$%^*). Passwords do not expire. Complete the remaining details (Fig.2) and click the box to agree to the terms. Click Register. The tool will inform the user that their account is awaiting approval. The user will be notified by email once the account has been approved. At this point users may run reports but will not receive them until the approval process is complete. Once the account is approved, the reports will become visible.

FROM: donotreply@mail.wvu.edu
To: Shrader, Casey – NRCS, Lexington, KY

Subject: KICT – Account Activated

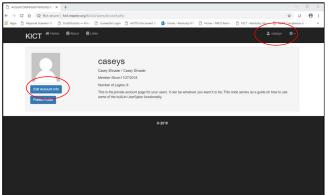
Your account is now activated. You can now log in at: http://kict.mapwv.org/kict

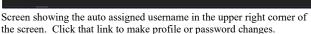
Sincerely,
The KICT

step 2 - Once the account is approved, the user will receive an email notification. Approvals will be granted based on the need for one of three levels: *User*, *Super User* and *Administrator*. Functionality, information, and KICT access will vary depending upon the level of permission granted.

STEP 3 - The user should then log back into the tool. The reports that the user runs will be stored and viewed on the user's page.

If users need to update their profile information (phone number, address, etc.) for any reason; log into the KICT and simply click your username in the upper right-hand corner of the screen and complete the required changes.

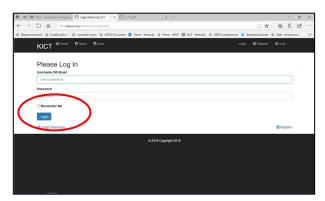




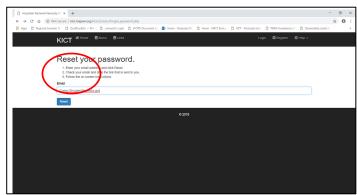


Screen showing information required to complete prior to receiving account permissions.

STEP 4 —From this point forward, the user may use the credentials that were entered in Step 1 to access the tool. If you forget your password, browse to the tool and click the link to Login. Click the link that says Forgot Password near the bottom of the page and follow the instructions to reset your password. Users should avoid making duplicate accounts. Utilize the forgot password tool provided prior to reenrolling.



Login and Forgot Password buttons



Instructions to reset your password

Performing a Query in the KICT

The following is the standard operating procedure for determining potential effects of NRCS practices on some of the SECs in the Environmental Evaluation. During the planning process the planner should review and be familiar with applicable SECs that occur in Kentucky and in their region of responsibility. The KICT is a screening tool, and the planner has the final responsibility to determine the potential effect of a conservation practice on a resource unless the SEC is based on a programmatic agreement. Refer to

the Kentucky Field Office Technical Guide (FOTG) Section II for available material for each SEC. Upon obtaining a user account and launching the tool, follow the steps outlined below to run reports in the KICT. The overview is as follows:

Step 1 – Name the project

Step 2 – Identify the client (first and last name)

Step 3 – Identify the program authority

Step 4 – Identify the location name (Farm & Tract number or Other)

Step 5 – Locate your site and draw a polygon or upload a shapefile

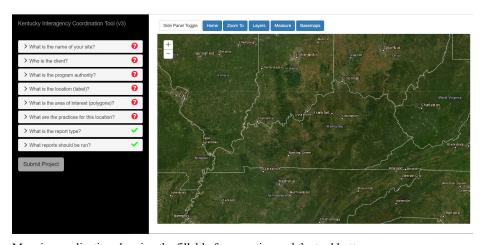
Step 6 – Select the NRCS practices and associated quantities

Step 7 – Select the alternative

Step 8 – Select the desired report(s)

Step 9 – Submit the project

Login using the appropriate protocols and user credentials at: http://kict.mapwv.org/kict/ and launch the tool by selecting the Create Report>>> button on the landing page.



Mapping application showing the fillable form portion and the tool buttons.

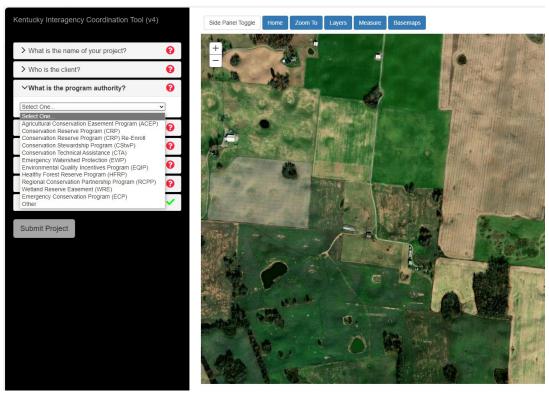
STEP 1 — On the left-hand side of the screen, click on the dropdown sections to enter a project name in the fillable form where indicated. This name can be anything that the user deems as an appropriate identifier such as farm name, or project identifier, etc. If the client is a business, this is the appropriate place to indicate that. Avoid the use of special characters including periods, hashtags, colons, asterisks,

etc. These characters may cause errors in retrieving maps tied to the reports. The name selected should be readily identifiable to the end user for future ease of retrieval. (Field offices, areas, work units, and planners should consider having uniform naming conventions). As the dropdown field is completed the field changes from a red? to a green \checkmark for each following step.

STEP 2 – In the client drop down button, enter the client's name. This field should contain both the first and last name of the client or decision maker. If the client is an entity such as a business, it should be entered in step one.

STEP 3 – In the program authority dropdown box, select a program or authority for which the query is being run. Selection of the proper authority is important if the project requires state level review. The options include Agricultural Conservation Easement Program (ACEP), Conservation Reserve Program (CRP) and CRP Re-Enroll, Conservation Stewardship Program (CSP), Conservation Technical Assistance (CTA), Environmental Quality Incentives Program (EQIP), Emergency Watershed Protection (EWP),

Healthy Forest Reserve Program (HFRP), Wetland Reserve Easement (WRE) and Emergency Conservation Program (ECP). If the authority or program is not available under the listed options, select "Other".



Drop down menu that lists the program authorities the conservation plan will be utilizing.

STEP 4 – Click on the location (label) dropdown menu button. The location drop down expands to offer two fillable options: Farm# & Tract#, and Other ID. Enter either the Farm and Tract number **OR** some other identifying indicator if a farm and tract number is not available. Farm and Tract should be completed together, or users may designate another alphanumeric ID under the "Other ID" selection (e.g. EWP DSR number). Multiple farm and tract numbers separated by commas may be entered in the boxes. In most instances the planner will not have an "Other ID" and it will remain blank. However, all three fields may be filled if required. Avoid the use of special characters (period, colon, hashtag, etc.) These characters may cause errors in retrieving maps and reports.

STEP 5 – Zoom to the desired area of the map by simply dragging the map and double clicking on a selected area, thereby reducing the scale of the map until you can identify your AOI. Users are also able to use the +/- scale tool located on the upper left side of the map to quickly scale the size of the map. No specific map scale is required, but always select a scale that displays the entire AOI. The AOI should include the planning unit to which practices will be installed, planned, or considered according to NRCS policy (this may be the property boundary of the client or a portion of a field). All planned practices submitted must be planned within the polygon drawn.

Planner's Note:

Refer to the section of this handbook entitled Tool Button Functions for information regarding selection of maps, map location, supplemental layers and other tools that aid in selecting the area of interest.

Click on the dropdown link that says, 'What is the area of interest (polygons)?'. At this point the user has two options. The user may upload an existing shapefile, or the user may draw a polygon.

To draw a polygon, select the <u>Draw Polygon</u> link and then select the <u>Click to Draw Polygon</u> button. After locating the area of interest on the map, click a point somewhere on the boundary of the AOI. Continue along the boundary of the AOI clicking once on key areas to anchor the point of the polygon until the initial starting point is reached. Double click to close the shape. If the shape drawn is not suitable, click <u>Erase drawing</u> to clear and redraw the shape. Note that you are unable to pan the map with the cursor when in drawing mode. If you need to redraw or re-center the map, click the <u>Click to Zoom/Pan</u> button (this button has changed from the <u>Click to Draw Polygon</u>).

To upload a file, select the <u>Upload Shapefile</u> link. Click the 'Browse' button to select an existing zipped shapefile (.zip) from a device. There may be limitations with uploading files from networked devices due to security firewalls. If this is an issue try saving the file to your desktop or from a safe non-networked device.



There are two methods to determine an area of interest (AOI) for investigation. Select the option shown on the left to manually draw a polygon; or select upload shapefile to load an existing zipped shapefile as shown on the right.

IMPORTANT: Planners should **only use one polygon for each query**. Do not attempt to upload files that contain multiple polygons for one query. If multiple polygons are drawn or entered, the tool may not function, and any results returned will not be reflective of all polygons.

Project AOIs that Contain Multiple Locations on Scattered Land Units

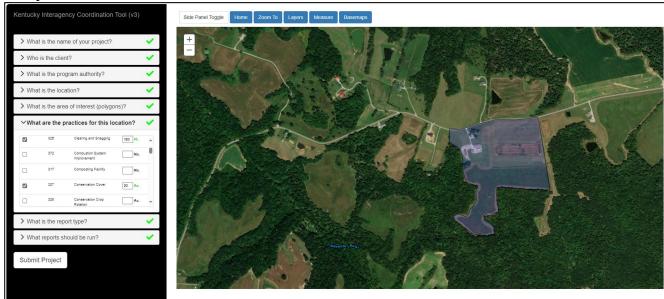
Occasionally there are times when planners may have a project that contains geographically scattered land units for a single project. For example, a landowner may have multiple fields that are being planned as (340) Cover Crop on various tracts. Those fields/tracts may or may not be in close proximity to one another. If those areas are within a "reasonable distance" and can be captured by drawing a single polygon while still maintaining a reasonable scale, users should draw the polygon to include all the multiple areas. It is acceptable to include areas between the land units that are not owned or to be considered in the project. Users may also creatively modify the drawing of the AOI to make the area between multiple polygons as small as possible but still capture as many other areas as required (see below). If it is not possible or reasonable to create a polygon to capture all the required areas, it may be necessary to run multiple reports for the same project. In those instances, planners must take into consideration any cumulative effects and ensure that if a review is required, the state level reviewer understands the scope and context of the project

and the AOI. This will lessen the review time if ESA, tribal or cultural resources review is required. Also see the section of this Handbook entitled *Cumulative Effects*.



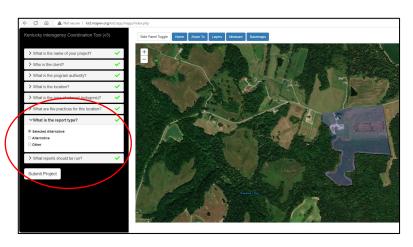
A creatively drawn AOI that includes multiple fields that are not immediately adjacent to one another. The amount of area that is not included in the project is minimal.

STEP 6 – Once the shape is complete, select all the practices that are planned within the AOI by clicking a \checkmark in the box adjacent to the practice and enter the size/quantity of the practice. The user can place a \checkmark in the appropriate practice and enter the quantity; or simply enter the quantity and the checkbox will autocomplete.



The user has drawn the area of interest (AOI) and selected the practices and quantities to be implemented.

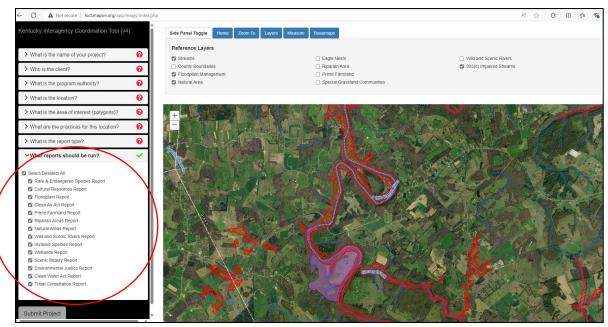
STEP 7 — Select the Report Type dropdown menu that allows planners to indicate the type of query that is being submitted. This allows planners and users to distinguish between alternatives that are not selected by clients, or queries that were used for screening, testing or other purposes. This is helpful when clients have been presented multiple plan alternatives and have a need to compare effects to multiple SECs; or determining the selected alternative for queries that have been submitted on the same AOI containing different practices. This also allows KICT administrators to differen-



Select the type of report to be run. These roughly equate to the alternatives evaluated on the Environmental Evaluation.

tiate implemented alternatives from other queries when creating reports. Dropdown options include Selected Alternative, Alternative, and Other. These selections correspond to the Environmental Evaluation.

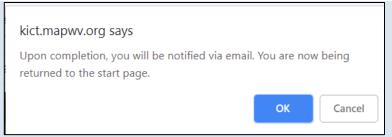
STEP 8 - The planner may select which reports to run depending upon the KICT modules available. All report types are selected to be run by default. Deselect the reports that are not desired. If all reports are required, proceed to step 9.



Select or deselect the types of reports to be run. All reports are selected by default.

STEP 9 – Once the desired reports and alternatives have been selected, click the **Submit Project** button.

The tool will indicate that it is processing the information by a spinning icon. Do not continue to click the submit button as this may result in report errors or multiple reports. A message will appear letting the user know that the information will be submitted for analysis. There may be a few seconds of delay prior to receiving this message. Click OK to initiate the query and the user will be redirected back to the KICT homepage.



Upon submission of a request, the KICT notifies the user that the report is being processed. The appearance of this message may vary depending upon the web browser used.

There will be a period before the system notifies the user via email that the query is complete. The length of this period will vary depending on several factors including the number of users logged in, the time of day, size of the request, and so forth. However, most reports are completed in ten minutes or less. Once you are notified that the report is complete, log back into the KICT or refresh the homepage and review the report.

Planner's Note:

Note that browser messages shown in this handbook are only examples. Actual message appearances and syntax may be different depending on the browser and version used to access the KICT

Navigating the KICT

There are multiple functions of the KICT that assist planners in visually locating or assessing resources within an AOI. The following pages explain the various functionality of the tool and how to utilize features within the KICT.

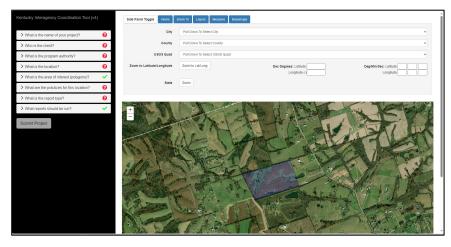


The blue tool buttons are located along the top of the map screen. Utilize these buttons to enable various functions in the tool.

Tool Button Functions – A series of six buttons are located across the top of the map. Utilize these buttons to quickly locate areas, add or remove various informational layers, measure areas and distances, or select basemaps. Additional buttons may be added as the tool develops. Below is a summary of the button functions.

Slide Panel Toggle – This button moves the fillable portion of the KICT out of the screen view so that the map display is enlarged. Click the button again to show the fillable portion of the screen.

Home – Selecting this button will take the user back to the landing page of the tool where reports are stored.

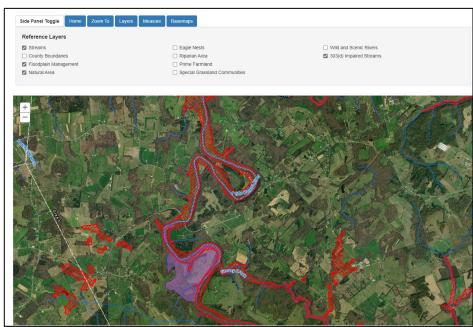


The expanded **Zoom To** view where you can select an area of interest using topographic quads, cities, counties or enter GPS coordinates.

Zoom To – use the 'Zoom To' button to rapidly move the map to a geographic area. Drop down menus contain information such as county, city, or topographic quad. Not all cities in KY are listed, but major towns and cities can be selected. Planners may also find sites by coordinate systems using latitude and longitude, decimal degrees or the degree/minute/second formats. To close the tool, click the 'Zoom To' button again.

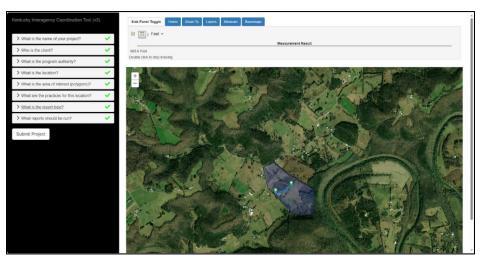
Layers – Planners may turn on and off various reference layers to assist with determining resources within or near the AOI including eagle nests, floodplains, natural areas, prime farmlands, 303(d) impaired streams, stream layers, special grasslands, wild and scenic rivers and NRI segments, and county boundaries. Note that some of this information, once activated, may not be visible until the user zooms into a specific scale. This section may include layers and other information that is relevant only to specific mod-

ules. To view these layers, click the blue Layers button and select the information by placing a check in the appropriate box. It is not necessary for these layers to be enabled for the KICT to consider them during evaluation. To turn off a layer, remove the check mark from the box. Close the layers tab by clicking the Layers button again. If any layers are selected as visible when the report is submitted, they will appear on the final report.



Select any available layers near the AOI to aid in determining effects.

Measure – Another feature of the KICT is that it allows users to apply measuring tools and distance markers. Click the 'Measure' button to open the tool. Click the ruler icon to measure linear distance and then select the unit of measurement desired. Single click to begin drawing a line. Subsequent single clicks will add a segment marker for measuring segmented linear distances. Double click when the desired end-



KICT measurement tool showing distances.

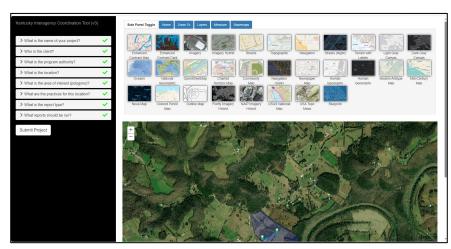
point is reached. The distance will be displayed in the Measure tab. To measure an area, use the tool indicated by the polygon and ruler and select the unit of measurement. Draw out the area using single clicks to create sides of the polygon needed. Double click when finished. The measurement tool is very useful when attempting to determine the approximate distances from specific landmarks such as eagle nests,

approximating the length or area of various planned practices, or considering the amount of a particular practice.

To erase the measurement polygon or line drawn, simply click the measurement icon again and the drawing will be cleared. To close the measuring tools, click the blue 'Measure' button again. Do not use the measurement tool as method to draw a polygon for report queries. These polygons will not be reviewed by the tool.

Basemaps – Users have the option to select different map types. No certain map style is required but aerial photography is recommended. Users should always select maps that show the AOI at the best prac-

tical scale. For example, some topographic maps may not utilize a scale that is the best for conservation planning. Click the 'Basemaps' button to open the Map choices include aerial photography (with and without labels), roadmaps, various topographic maps, gray scale terrain maps and several others. Once a map has been selected, close the menu by selecting the 'Basemaps' button again. The default base map is aerial photography with labels and should serve most conservation planning needs.

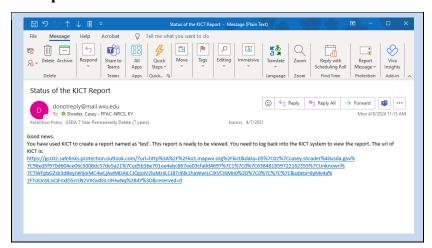


The Basemaps button is selected showing the KICT map options. Aerial photography is usually recommended and is the default map.

Viewing KICT Reports

The following is the process for viewing reports once a query has been submitted and processed. KICT reports are available to view once the system has processed the query and the user receives a notification email. All modules selected to be run will be incorporated into one report. For more information regarding the format of the KICT report, refer to the section of this handbook entitled *KICT Reports & Format*.

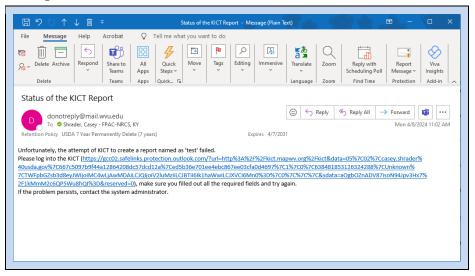
Example



To ensure that your email reader program can receive email from the KICT, remember to adjust junk mail settings to allow mail from the KICT domain (mail.wvu.edu). Contact the IT area representative to assist you in adjusting those settings if needed.

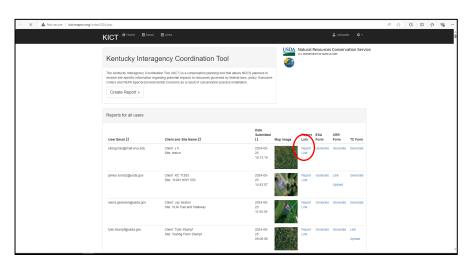
If a malfunction in the tool occurs or data is absent from a submitted query, the user may receive an email similar to the example below. Users should attempt to run the report again. If the problem persists, please contact the KICT administrator. To review successful reports, follow the process outlined below.

Example



- STEP 1 Navigate to the homepage of the KICT and login.at: http://kict.mapwv.org/kict/
- **STEP 2** Once logged in, the reports available for review appear on the user's front page. Reports are stored in a table showing the Client and Site Name, the date submitted, a map image and the Report Link. Users may sort reports in reverse order by name or date by clicking on the header of the table.
- **STEP 3** –Click on the corresponding Report Link on the right side of the browser window to view the report. A new window containing the report will open in Adobe Acrobat Reader format. Note that Acrobat Reader must be installed on the computer to view the document.

Reports are stored in order of the date in which they were submitted (latest to earliest) by default. Reports can be identified by the client and site name, the date they were submitted. The options to sort and review reports will vary based on the administrative privileges the user has been assigned. A thumbnail of the AOI is shown to the left of the link to view the report.



After the user logs into the KICT, view reports by clicking on the report link shown.

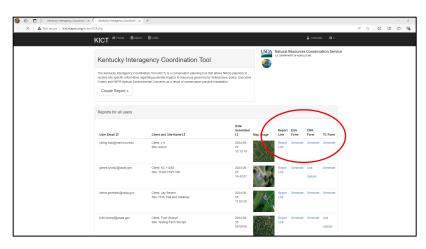
Specialist Review

Some special environmental concerns may require further evaluation by State level specialists. Among these are the Endangered Species Act, Tribal Consultation, and Cultural Resources. In the past, this has required the planner to complete a separate excel or .pdf form outside the KICT and separate emails for submission of the required information. Beginning in KICT version 4.0 the specialist request form is integrated into the tool and pulls redundant information from the query already submitted. This information will be pre-populated in the form that is sent to the reviewer. Additional information is often required to be entered such as the rationale for requests, geospatial shapefiles, implementation timing, or other specific information the reviewer may require. Once entered, the form is submitted via the KICT to the appropriate specialist and the form is stored on the KICT website alongside the report link on the user's homepage. For more information regarding the completion of a specialist review form, refer to the module in this handbook that requires review.

To complete the specialist review request (ESA, CR or TC) follow the process outlined below.

STEP 1 – Navigate to the homepage of the KICT and login.at: http://kict.mapwv.org/kict/

STEP 2 – Once logged in, the reports available for review appear on the user's front page. Reports are stored in a table showing the Client and Site Name, the date submitted, a map image and the <u>Report Link</u>. Users may sort reports in reverse order by name or date by clicking on the header of the table.



Specialist request forms are stored within the KICT in the column shown.

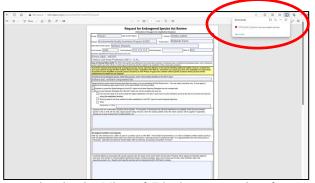
STEP 3 – Select an existing report that requires specialist review by locating the columns on the far right of the table for specialist review of Endangered Species (ESA Form), Cultural Resources Review (CRR Form), or Tribal Consultation (TC Form). Select the "Generate" link the planner wishes to have reviewed for the report in question.

STEP 4 – Complete the requested information and click the submit button within the form. Remember to include any attachments such as .zip shapefiles or photos. Specialists will upload completed signed forms back into the KICT once those forms have been processed. **IMPORTANT:** If attaching shapefiles, users must select the appropriate shapefile <u>and</u> then select the "Upload" button in order to attach and send the file. Once the review is completed by the State Level Specialist, a "Final" link will appear adjacent to the report under the appropriate review form.

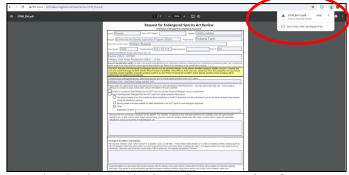
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Screenshots of ESA and CRR and TC generation forms. Most information is pulled directly from the KICT report. This information is sent to the reviewer and converted into the official review form. Planners may have to enter some information and attach shape files.

STEP 5 –To retrieve a reviewed/signed copy of the form, click the "Final" link under the appropriate form. If the planner requires a copy of the form for documentation in files and other software (i.e. Conservation Desktop) planners should save a copy to their local device. NOTE: Depending on the browser used to access the KICT the process to save the form may be different. In addition, some users may encounter a warning that the download is not secure. In this instance use the browser settings to allow the download.



Screenshot showing Microsoft Edge browser warning of an unsecure download. Click the three dots and then select "Keep".



Screenshot showing Google Chrome browser warning of an unsecure download. Click the three dots and then select "Keep".

For **Microsoft Edge** users, after selecting the location to save the file and receiving the insecure download warning, click the 3 dots (...) and then click "Keep". This will save the document to the location specified.

For **Google Chrome** users, after selecting the location to save the file and receiving a warning regarding insecure download, click "Keep". This will save the document to the location specified.

KICT Permissions and Administrative Privileges

The KICT was constructed to have layers of administrative control to allow oversight and quality control of reports generated.

KICT ADMINISTRATIVE LEVELS

- User (non-registered or unapproved users)
- User (registered)
- Super User
- Administrator

The *User (non-registered or unapproved user)* is granted to users upon registration and before approval. This level allows the user to login however they will not receive reports until the user is approved by a Super User or Administrator.

The basic level, *User (registered)*, allows planners to query and review reports that the user has performed under their login. Every conservation planner must have at least this level of administrative privilege. It is automatically received upon the approval from the *Administrator* or *Super User* of a KICT account. Planners will not have access to certain portions of the website with this level of administrative privilege and are able to review only the reports created by the user.

In addition to the privileges described above, the *Super User* privilege can authorize and deactivate accounts as well as review previously submitted reports for all users. This level of administrator can access the entire KICT website and various levels of functionality, generate reports, and view specific areas of the website. Typically, the State Biologist and Cultural Resources Specialist, or those responsible for state-level NEPA compliance, should have Super User and Administrator privileges.

The *Administrator* level can perform all functions listed above and has access to change and manipulate all levels of the tool and website. This level of privilege is reserved only for those responsible for technical operation. Starting in version 3.1, this level of permission also allows the administrator to run various reports and can review the number of times a practice and resource interact, number of queries, programs, users, counties, acreages and other rudimentary information. This allows for reporting to regulatory agencies on successful implementation of programmatic agreements and provides other useful statistics to managers. Contact the KICT administrator for more information.

IV. KICT REPORTS & FORMAT

The KICT generates one report displaying the results from the selected modules queried by the planner. The total length of a report varies depending on the number of active modules selected, the number of practices, the complexity of the project, and the number of resources encountered. Note that the only way to verify the potential effects to resources is by activating that module. A typical report is usually 12-18 pages in length if all modules are activated. It is created in portable document format (.pdf). and Adobe Acrobat [©] Reader is required to view these documents. They may be printed or stored electronically with other customer files and are around 110kb in size. This allows them to be easily sent through conventional email accounts if necessary.

Reports are stored and retained for viewing on the KICT website for a period of time. Sensitive metadata compiling the report is not stored. However, some data resulting from report inquiries is stored to allow for reporting to regulatory agencies in accordance with programmatic agreements. The length of storage will depend on various factors including space available within the tool, the number of reports ran annually, and maintenance issues. Contact the KICT state administrators for more information. It is advisable to either save a local copy of all final queries to maintain them at the local level or to print the final report (double sided) and attach to (or store with) the Environmental Evaluation worksheet or other NEPA documentation for proof of compliance.

NRCS field and area offices are encouraged to establish their own protocols and/or naming conventions for KICT reports. The naming conventions used should be easy and consistent to avoid any possible confusion should the need arise to retrieve or locate reports from the website at the state or area level.

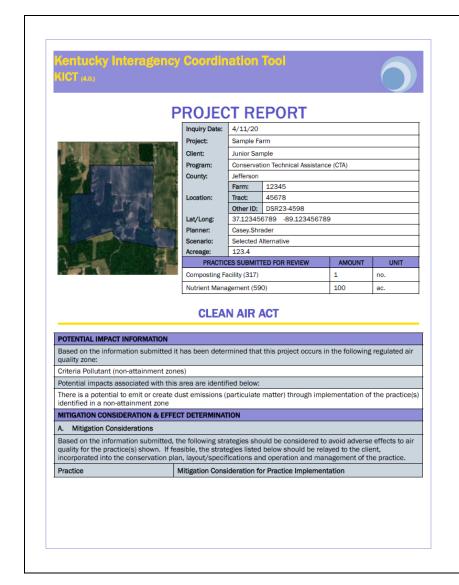
Planners may provide copies of the KICT report to the landowner since it is part of their conservation plan; however, this is <u>not recommended</u> without a complete and thorough explanation of its meaning and context. Individuals other than landowners should not be provided copies of the report unless directed to do so in writing by the client/landowner. The information contained in the report should be treated with the same regard for privacy as the rest of the conservation plan information. If utilizing the Document Management System (DMS), planners should upload KICT reports as supporting documentation to the Environmental Evaluation. If possible, when uploading reports, select the option in the DMS for *Internal View Only* located on the document upload page so the report is not viewable in Client Gateway. Refer to the section of this document entitled *Privacy Information* for more information regarding privacy.

Planner's Note:

For ease of explanation, the examples and excerpts shown in this handbook for each module are mockups. Actual reports may vary slightly in appearance or grouping of recommendations and alternative strategies.

General Information Section

The general information portion of the KICT report is listed once at the top on the first page of each report. It is referenced by each subsequent module. This section contains information that is gathered from the user such as the client's name, the location, the polygon outlined on the location map, the program or authority, practices planned and the extent of each conservation practice. The details are outlined below.



Map: A map appears on the upper left-hand side of the page containing the outlined area of interest (AOI). The map may be overlain with other layers that the user has enabled such as floodplains, riparian areas, eagle nests, etc.

Inquiry Date: This is the autogenerated date in which the query was submitted through the KICT.

Project: This is usually the farm name or a name familiar to the planner. In most instances it is something such as *Smith Farm*. However, this field could be utilized if the planner is working with a business, LLCs, or similar entities.

Client: Identifies the first and last name of the landowner whom the planner is working.

Program: This identifies under which program or authority the query is being submitted (i.e. EQIP, CRP, CSP, CTA, etc.)

County: This is the county in Kentucky in which the majority of the AOI exists (autogenerated).

Location: This is utilized to identify a tract and/or farm number or other unique identifier such as an EWP DSR, contract number, etc. Planners may enter multiple farm and tract numbers by entering numbers separated by spaces or commas; but refrain from using special characters such as slashes, etc. to avoid report processing problems. At least one of the identifiers is required, *Farm and Tract* or the *Other* field. If a farm number is entered, then the tract must also be entered and vice versa.

Lat/Long: This is the centroid point of the polygon submitted for review shown in decimal degrees. It is automatically generated during report processing. This is useful if further review of the AOI is needed and helps locate the area quickly for state level review.

Planner: This is the username of the planner who submitted the query. The name is autogenerated upon processing.

Scenario: This indicates in which status the report was run (*Selected Alternative, Alternative,* or *Other*). It allows planners to separately submit queries for different scenarios on the same AOI and differentiate the results for screening or when multiple alternatives may need to be presented to clients. This is important when the selection of a preferred alternative may depend upon the outcome of potential impacts to special environmental concerns or when planners want to compare the effects of different practices. In addition, this feature allows administrators to differentiate the reports that were most likely implemented versus reports that were run for testing or other purposes.

- **Selected Alternative** This option represents the alternative selected by the client and will be the alternative implemented.
- Alternative Use this designation for potential alternatives that may be implemented by clients or as a comparison of the final alternative.
- Other This designation should be utilized when planners are training or experimenting with the tool or for other purposes not associated with official conservation planning activities. It is mostly utilized for administrative purposes and testing of the KICT.

Acreage: The autogenerated acreage of the AOI drawn or uploaded by the user and rounded to the nearest tenth of an acre.

Practices Submitted for Review: The conservation practices, extents, and appropriate units submitted for review by the KICT.

The remainder of the report is broken down into individual module results. The modules selected will dictate the results in the report. Each module is identified by a heading (e.g., Clean Air Act) and the results for the module are listed below it. Every module except the Categorical Exclusions Module results are broken into the following sections:

- 1. Potential Impact Information
- 2. Considerations
- 3. Mitigation Considerations or Required Avoidance Measures & Effect Determination
- 4. Management Considerations
- 5. Potential Benefits

Note: The Categorical Exclusions Module results do not contain any of the five sections listed above. Refer to the Categorical Exclusions Module for a more detailed explanation of the report. Also, not all the report sections are applicable to every module or report. For example, not all reports will contain *Management Considerations* or *Potential Benefits*.

Potential Impact Information

This section of the module report identifies two important items to the planner. First, is the presence or absence of a resource such as a non-attainment zone under the Clean Air Act, or the presence of a federally listed species like the Indiana bat, under the Endangered Species Act. This will vary depending upon the module report. If no resource is identified, this section may simply state *None* or *N/A*, depending upon the module. The second item lists potential adverse impacts that the resource may encounter by the conservation practices listed in the General Information Section. This provides the rationale for any required

avoidance or mitigative considerations that follow in the report. There may be several potential impacts listed. If no impacts are anticipated by installation of the conservation practices, this section may simply state None or N/A.

Required Strategies & Effect Determination – Section A

Reports may have any of the following headings identified under Section A:

- Required Avoidance Measures
- Avoidance Measures
- Required Strategies
- Avoidance
- Considerations *

An asterisk indicates that these statements <u>are not</u> required to be implemented.

Section A within each module of the KICT report is critical to conservation planners. If a query results in potential impacts, this section lists the actions that the planner must ensure are implemented to avoid potential adverse impacts. Some of the strategies are required and some are only considerations for planners. If avoidance is required, these strategies must become part of the specifications of conservation plans. If the word "consideration" occurs, this refers to a method or consequence of implementation that should be scrutinized by the planner and/or landowner. Considerations are not required to be implemented.

Required Strategies & Effect Determination – Section B

Reports may have any of the following headings identified under section B:

- Effect Determination
- Effect Determination (tentative)

This section of the report gives the planner the *Effect Determination* of the query assuming any required additional strategies for practice implementation are implemented. Some modules provide a tentative effect determination because (1) it requires further scrutiny regarding practice placement and resource presence within the AOI; or (2) it requires a final opinion by the planner or a resource specialist pending review. The wording of this section will vary depending on the results of the query and module.

Depending upon the module, the determination provided may be shown in this section as the following:

- 1. No Effect (NE)
- 2. May Affect (MA)
- 3. Not Likely to Adversely Affect (NLAA)
- 4. May Adversely Affect (MAA)

Note: Not all determinations are applicable to every module. For example, not all reports will contain *NLAA or MAA* determinations.

Determination results are explained in greater detail within each module description of this handbook. Generally, No Effect (NE) determinations mean that the practice(s) have no effect to a resource or there were no resources found in or near the AOI. May Affect (MA) can mean that a resource and practice(s) combination would be detrimental, beneficial or both. The Not Likely to Adversely Affect (NLAA) determination may mean that the practice(s) and resource combination will affect the resource. However, the result will likely not be adverse and could even be completely beneficial. This determination usually requires avoidance measures to be implemented. Finally, a May Adversely Affect (MAA) determination means that there exists a resource/practice combination that may cause adverse effects if implemented and will require further consideration by the planner or specialists.

Planners that receive an MAA determination should note that in most instances this can be avoided at the field level through alternative avoidance methods, alternative practice selection, coordination, or some other method. In addition, there is a good chance that there are alternative measures, situations, and methods that have not been anticipated during KICT development. It will take time to encounter these situations and develop strategies that avoid adverse determinations. It is anticipated that as the KICT evolves, additional alternative strategies will be included, deleted, and/or revised through field verification and planner experience. Planners should consider using alternative practices that may solve resource concerns but not have adverse effects. If those alternative practices exist, re-evaluate them through the KICT. Planners do not have the ability to directly alter the final determination of any query. Refer to the specific modules for more information regarding determinations of effect.

Management Considerations

Some of the KICT reports may contain additional management recommendations. As with the case of the ESA module, these are made by the resource agencies identifying alternatives that clients may voluntarily elect to incorporate into their conservation plan. Recommendations in these sections are not required to be implemented. The Wild and Scenic Rivers module also lists management considerations for the Kentucky Special Use Waters. These may correspond or refer to the Clean Water Act or other special environmental concern requirements. Many module reports will not have management recommendations associated with them.

Considerations

Some reports have statements that inform planners that in some instances the application of a practice could have adverse effects. While not mandatory, the considerations provided by the KICT inform planners of the potential effects and a thought process to avoid those effects if applicable.

Potential Benefits

One of the KICT functions is that it can potentially identify some situations where benefits may be realized from installation of a conservation practice. Where a potential benefit section is provided, those benefits realized are subject to scrutiny by the KICT user. Not all benefits apply to every practice evaluated. The purpose, type of installation, and exact location will factor heavily into the applicability of the benefit.

Refer to the individual module document for explanation of benefits for conservation practices and the resources affected.

Presently there is not a way for the tool to determine under what circumstances practices are applied without a substantial increase in user input. NRCS planners are currently under no requirement to track the benefits reported by the KICT. However, it is suggested that local field offices have an awareness of broad benefits realized by conservation practices within their areas of responsibility. For some resources, the KICT can help determine if conservation practices planned and applied through Farm Bill programs do provide benefits to listed resources. Questions regarding potential benefits are common in most Farm Bill ranking criteria for resources such as T&E species and Air Quality. In the past, this question was often subjective and may not have been applied uniformly among field offices throughout the state. Using the benefits listed in the KICT report, it may be possible to determine if practices influence these resources and if it would be appropriate to utilize as justification for giving ranking points to a Farm Bill application. If a field office chooses to utilize this justification of benefit to rank a client for program participation, the report must then be retained and implemented according to the avoidance measures. It is recommended that conservation assistance notes be recorded as to the application of which benefits apply and the supporting rationale. Also, to claim benefits, the avoidance measures identified in the report must be implemented by the client.

Cumulative Effects

A cumulative impact is defined as "...the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." Cumulative effects include the direct and indirect effects of a project together with the effects from reasonably foreseeable future actions of others. For a project to be reasonably foreseeable, it must have advanced far enough in the planning process that its implementation is likely. Reasonably foreseeable future actions are not speculative, are likely to occur based on reliable resources and are typically characterized in planning documents.

Frequently planners will evaluate alternatives that involve multiple tracts or land units. For example, a client may have a tract on the east end of the county and one in the southern part of the county that are participating in a farm bill program. Both tracts may be planned and contracted under one federal action. There is currently not a method to evaluate multiple polygons simultaneously through the KICT. This requires the planners to submit queries through the tool individually. Planners must evaluate each AOI individually and then review the reports to determine their cumulative impacts to SECs.

An example of cumulative effects to the Wild and Scenic Rivers special environmental concern could be a planned two-acre clear-cut on a tract located within a designated Wild and Scenic River watershed; and a second clear-cut of three acres on another tract within the same watershed. Both tracts are contracted under one farm bill program contract and therefore a single federal action. While singularly the cuts are not considered adverse, cumulatively they have an impact of five acres. Five acres could be much more significant in the scheme of the scenic attributes and could therefore potentially adversely impact the area. This evaluation should be reviewed by the Responsible Federal Official and documented in the cumulative effects portion of the Environmental Evaluation.

Intended Use & Disclaimer

At the end of each report there is a section that places the information contained in the report in context.

INTENDED USE: This document is to be utilized for planning and documenting compliance with NRCS policy for certain special environmental concerns. These include the Endangered Species Act, the Baid and Golden Eagle Protection Act, Section 106 of the National Historic Preservation Act, the Clean Air Act, The Wild and Scenic Rivers Act, Farmland Protection Policy Act, Executive Orders 11988, 11990, et. al. In compliance with the National Environmental Policy Act (NEPA) and NRCS policy. It is specific to activities in which NRCS staff is providing individual conservation technical assistance and/or funding under various Farm Bill programs; or for purposes of ranking to enroll in USDA programs. Projects that are larger in scope are not to utilize this methodology and will continue to follow NRCS policy and procedures as stated in GM Title 190, Part 410 - Compliance with NEPA and 190-VI-National Environmental Compliance Handbook (NECH).

Discialmer: The information provided in this report is based on the best current data available to NRCS. It is provided by the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, Office of State Archaeology, Kentucky Heritage Council, The State Historic Preservation Officer and The Kentucky State Nature Preserves Commission, KY Division for Air Quality and others. Data is also provided through NRCS internal methods (i.e. Soils Datamart). Errors or gaps in information and data may occur. Therefore, planners should always field-verify the site to determine the exact locations, suitability of habitats and presence of resources through on-site analysis. Occurrences of protected resources could be located within the identified area of interest that is not included in this report Responses provided by the KICT indicating the absence of resources may indicate that the area has not been surveyed or unknown data exists, rather than confirmation that the area lacks protected resources. Upon discovery of protected resources or modification to original plans and designs, further coordination may be required. If protected resources are identified during implementation or construction, immediately cease the activity and contact the agency representative responsible for activities under NEPA. This information is relevant only for the practices/activities identified and does not constitute formal consultation or permitting under any regulatory agencies. This document does not grant permission or act as an authorization for any activity. Planners should always check with local authorities and local governments to determine if permits are needed. The information contained herein should not be distributed to third parties without the written consent of the landowner. If you feel the information contained in this report is erroneous, please contact the KICT local or state administrator.

The intended use of the report provided by the KICT is to be utilized for planning and assisting with the documentation of compliance with NEPA special environmental concerns (SEC) and NRCS policy. The KICT evaluates those SECs specific to Kentucky and listed within the Environmental Evaluation. These include:

- Bald and Golden Eagle Protection Act
- Clean Air Act
- Clean Water Act & Waters of the U.S.
- Endangered Species Act
- Floodplains Executive Order 11988
- Wetlands Executive Order 11990/ NRCS Policy
- Environmental Justice Executive Order 12898 / NRCS Policy
- Invasive Species Executive Order 13112

- Farmland Protection Policy Act
- National Historic Preservation Act Section 106/Historic Properties
- Tribal Consultation (*Pilot*) NRCS Policy
- Natural Areas NRCS Policy
- Riparian Areas NRCS Policy
- Scenic Beauty NRCS Policy
- Wild and Scenic Rivers Act
- Categorical Exclusions

The results provided in the reports are specific to activities in which NRCS staff is providing individual conservation technical assistance and/or funding under various Farm Bill programs. It may also be utilized for purposes of qualifying resource benefits to enroll in USDA programs. Projects that are larger in scope are not to utilize the KICT and will continue to follow NRCS policy and procedures as stated in GM Title 190, Part 410 or other applicable guidance (i.e. watershed projects).

The information provided in the reports is based on current data available to NRCS and should be used as a screening assessment. Data is provided by a variety of agencies and sources including the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, Office of State Archaeology, Kentucky

Heritage Council, The State Historic Preservation Officer, Office of the Kentucky State Nature Preserves Commission, KY Division for Air Quality, and others. Data is also provided through NRCS internal methods (i.e., Soils Datamart). Errors or gaps in information and data can occur. Therefore, planners should always field-verify the site to determine the exact locations and presence of resources through on-site analysis. Occurrences of protected resources could be located within the identified area of interest that are not included in this report. Responses provided by the KICT indicating the absence of resources may indicate that the area has not been surveyed or unknown data exists, rather than confirmation that the area lacks protected resources. Upon discovery of protected resources or modification to original plans and designs, further coordination may be required. If protected resources are identified during implementation or construction, immediately cease the activity, and contact the agency representative responsible for activities under NEPA. The information provided in the report is relevant only for the practices/activities identified and does not constitute consultation or permitting under any regulatory agency. The report document does not grant permission or act as an authorization for any activity. Planners should always check with local authorities and local governments to determine if permits are required for a particular activity. The information contained within KICT reports may not be distributed to third parties without the written consent of the landowner.

V. CLEAN AIR ACT MODULE (CAAM)

Clean Air Act Module (CAAM) Description

National NRCS policy should always be followed when handling resource issues. Refer to the policy located in eDirectives (usda.gov) (NECH) Section 610.21 – Air Quality and the Clean Air Act.

Potential impacts to air resources protected under the Clean Air Act in Kentucky are described fully in the document in Section II of the Field Office Technical Guide entitled *Kentucky NRCS Conservation Practice Effects on The Clean Air Act - Regional Visibility Degradation & Non-Attainment Zones for Conservation Planning and Program Implementation*. These impacts were determined as the ways air quality in non-attainment or maintenance zones could be affected by the methods in which the practice was installed, operated, or maintained.

Conservation planners must determine if planned conservation practices will influence any areas that are considered air quality resources in Kentucky. Their findings are to be documented on the NRCS Environmental Evaluation (EE). To help conservation planners, the Clean Air Act Module (CAAM) was developed to assist in determining the effects of conservation practices within sensitive areas. The report generated is proof of investigation under NEPA requirements of the Clean Air Act. This information may be utilized to document *de minims* effect or benefit as applicable.

This module identifies potential impacts to known air quality resources. The tool uses known locations of resources within the Commonwealth and compares the location of those areas to a matrix of predetermined data. The air quality resources in Kentucky are Class I Regional Visibility Areas, Louisville Metro Areas and various non-attainment criteria pollutant areas that are regulated by the US Environmental Protection Agency.

Interpreting the Clean Air Act Module Results

Once a query is returned, planners should determine if a project is:

- located in a sensitive air quality area;
- the potential impacts associated with the identified conservation practices;
- identify any mitigative measures for the project; and
- recognize and document any potential benefits provided by conservation practices.

To implement the results of the KICT, planners must be able to interpret the information provided and, if necessary, convey that information to the client by incorporation into specifications, designs, or maintenance of conservation practices. The final determinations the KICT produces are included to allow planners and clients to understand why the avoidance strategies (if any) are required. The following are examples of possible outcomes in **Section I** of the KICT report.

Clean Air Act Potential Impact Information

Potential adverse impacts to air quality are grouped into four broad categories by the KICT. Any of these impacts may apply to any of the air quality zones. Multiple impacts may apply to a single area, and several may apply to multiple practices. The basic impacts are as follows:

- 1. potential to emit or create dust emissions (particulate matter)
- 2. potential for smoke creation by implementation, operation, and/or maintenance of the practice(s)
- 3. potential for VOC (volatile organic compound), NOx (ozone precursors), or ammonia emissions by implementation, operation, and/or maintenance of the practice(s)
- 4. potential to temporarily reduce visibility in a regionally sensitive area

Below are examples of each type of impact results the KICT provides in the Clean Air Act Report.

If the query results determine that the project is not located in sensitive air quality area, the Potential Impact Information section of the report will state the following:

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project occurs in the following regulated air quality zone:

None

Potential impacts associated with this area are identified below:

N/A

This output indicates that the project is not in a non-attainment zone, regionally sensitive (Class I) area, or Louisville Air Pollution Control District. There will be no impacts under the Clean Air Act. The planner may document and proceed.

If the Potential Impact Information section of the report identifies that a sensitive air quality zone is affected by installation of one or more conservation practices, the report will list all possible adverse effects.

Example

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project occurs in the following regulated air quality zone:

Criteria Pollutant (non-attainment zones)

Potential impacts associated with this area are identified below:

There is a potential to emit or create dust emissions (particulate matter) through implementation of the practice(s) identified in a non-attainment zone

If there are no potential adverse impacts identified, the report will simply state "None". Planners should refer to other sections of the report for more information.

Clean Air Act Mitigation Measures

NRCS policy requires planners to comply with federal, state, and local air quality laws, regulations, and standards and avoid or minimize pollution potential in sensitive air quality (non-attainment) zones. The mitigation measures listed in the *Mitigation Consideration & Effect Determination* section are best management practices that assist planners in knowing how to minimize the potential for air pollution.

If mitigation considerations are outlined, these strategies should become part of the specifications for conservation practices (i.e., conservation plan). How these specifications are provided to the client is up to the conservation planner. One strategy would be to incorporate them into the customization of Implementation Requirements (IR) used in conservation planning. These measures could be listed in the "Additional Recommendations" or "Additional Notes" sections of those documents. Also, consider documenting how these strategies were provided to clients in either the conservation assistance notes and/or the EE.

Most of the strategies required by the KICT are clear and concise. Typical mitigation consideration measures may require covering or minimizing disturbance of large bulk material piles; a permit may be required in extreme instances. Often the mitigation considerations are geared toward management or operation of the conservation practice.

Example

MITIGATION CONSIDE	MITIGATION CONSIDERATION & EFFECT DETERMINATION	
A. Mitigation Conside	A. Mitigation Considerations	
Based on the information submitted, the following strategies should be considered to avoid adverse effects to air quality for the practice(s) shown. If feasible, strategies listed below should be incorporated into the conservation plan, layout/specifications and operation and management of the practice.		
Practice	Mitigation Consideration for Practice Implementation	
Composting Facility (317)	Handling and disturbance of large bulk material piles or lagoons can result in the entrainment of particles or the release of gases due to the exposure of a greater surface area of the material to the air and airflow/wind. Minimizing the disturbance of large piles or lagoons, such as covering the area, limiting the surface area from which material is removed, and limiting the number of times the material is handled, and the duration of disturbance helps to mitigate these issues.	

In this example, the conservation practice Composting Facility (317) has a mitigation consideration that is necessary for operation and maintenance to minimize the potential for pollution. Planners may then proceed to the other sections of the report for additional guidance.

There may be instances when the mitigation considerations for practice implementation notifies the planner to document the need for a landowner to obtain special permissions or a permit (see CAAM Mitigation Consideration and Permit Requirement Protocol below). This would occur when the KICT recognizes a practice-air quality zone combination(s) that could have significant potential adverse effects to air quality. Planners should always document this in the conservation assistance notes and, on the EE.

Portions of two counties surrounding the Louisville metro area have additional requirements for certain conservation practices and may result in the need for air quality permits.

Example

MITIGATION CONSIDERATION & EFFECT DETERMINATION	
A. Mitigation Considerations Based on the information submitted, the following strategies should be considered to avoid adverse effects to air quality for the practice(s) shown. If feasible, strategies listed below should be incorporated into the conservation plan, layout/specifications and operation and management of the practice.	
Prescribed Burning (338)	Agricultural fires for weed, disease, or pest control and controlled burns for forest, orchard, native grassland, or wildlife management may require a permit in the Louisville Metro Area. The materials to be burned are limited to brush, timber, wood, grasses, and other plant materials. Approval by the local fire protection district and, in some cases, the Soil & Water Conservation District may be required. A burn plan is required for controlled burns that do not qualify as agricultural burns; and no fires shall be conducted when the average wind speed is greater than 15 miles per hour.

In this example, Prescribed Burning (338) has the potential to adversely affect air quality in a sensitive air quality zone. The mitigation consideration informs the planner that a permit is required for specific actions and dictates how the controlled burn should be conducted. See **Section B** of the report for more information.

Section B - Effect Determination of the report is the determination of the project based on practice implementation and application of any mitigation consideration. There are two possible determinations:

- No Effect
- May Affect

1. No Effect (NE)

This finding occurs under two circumstances. The first is when the KICT determined that the project is not located within a sensitive air quality zone and informs the planner to document the investigation according to policy. In the second possibility, the project is located within a sensitive air quality zone, but the practices selected and evaluated do not affect air quality. When this is the final determination, there will be no mitigation considerations identified in **Section A**.

Example

B. Effect Determination

The activities described have a **No Effect (NE)** determination on areas protected under the Clean Air Act. This determination should be considered and recorded in all environmental documentation. If other practices are added or quantities, locations, or other significant changes occur prior to installation, conservation planners should revise and resubmit this data accordingly.

2. May Affect (MA)

This effect determination indicates that there are potential effects (adverse or beneficial) due to installation of one or more conservation practices. Mitigation considerations may or may not be associated with this type of report.

Example

B. Effect Determination

The activities described have a **May Effect (MA)** determination on areas protected under the Clean Air Act. This determination should be considered and recorded in all environmental documentation. If other practices are added or quantities, locations, or other significant changes occur prior to installation conservation planners should revise and resubmit this data accordingly.

CAAM Mitigation Considerations and Permit Requirement Protocol

Occasionally, planned practices may require a permit prior to implementation. The KICT report will inform planners if a conservation practice requires a permit when it occurs in a sensitive air quality zone. If conservation planners encounter this situation, the field office protocol is as follows:

Example

MITIGATION CONSIDERATION & FEFFCT DETERMINATION	
MITIGATION CONSIDERATION & EFFECT DETERMINATION	
A. Mitigation Considerations Based on the information submitted, the following strategies should be considered to avoid adverse effects to air quality for the practice(s) shown. If feasible, strategies listed below should be incorporated into the conservation plan, lay out/specifications and operation and management of the practice.	
Prescribed Burning (338) This activity may require a permit during certain times and under certain condition ents should check with local air quality regulations to ensure this activity meets air standards, regulations and local laws.	

- 1) Determine if there are any other available alternatives that achieve the same purpose to avoid permitting actions via practice substitutions, differing locations, or other appropriate method.
- 2) Inform the landowner that a permit must be obtained to implement or maintain the identified conservation practice.
- 3) Provide the landowner with appropriate contacts including: https://eec.ky.gov/Environmental-Protection/Air/Pages/default.aspx
- 4) Document the method of transferring the information to the client in the assistance notes. It is the responsibility of the client to obtain necessary permits prior to implementation. In most instances practices should not be implemented without the necessary permit(s).
- 5) Continue planning.

Example

MITIGATION CONSIDERATION & EFFECT DETERMINATION A. Mitigation Considerations Based on the information submitted, the following strategies should be considered to avoid adverse effects to quality for the practice(s) shown. If feasible, strategies listed below should be incorporated into the conservation, layout/specifications and operation and management of the practice.	
Practice	Mitigation Consideration for Practice Implementation
Prescribed Burning (338)	Agricultural fires for weed, disease, or pest control and controlled burns for forest, orchard, native grassland or wildlife management may require a permit in the Louisville Metro Area. The materials to be burned are limited to brush, timber, wood, grasses, and other plant materials. Approval by the local fire protection district and, in some cases, the Soil & Water Conservation District may be required. A burn plan is required for controlled burns that do not qualify as agricultural burns; and no fires shall be conducted when the average wind speed is greater than 15 miles per hour.

If this mitigation consideration occurs, and no alternatives are feasible or available, document the possible need for a permit in the conservation assistance notes. Inform the client to visit: https://louis-villeky.gov/government/air-pollution-control-district for more information. Document this information in the conservation assistance notes and proceed with planning.

Potential Benefits to Air Quality

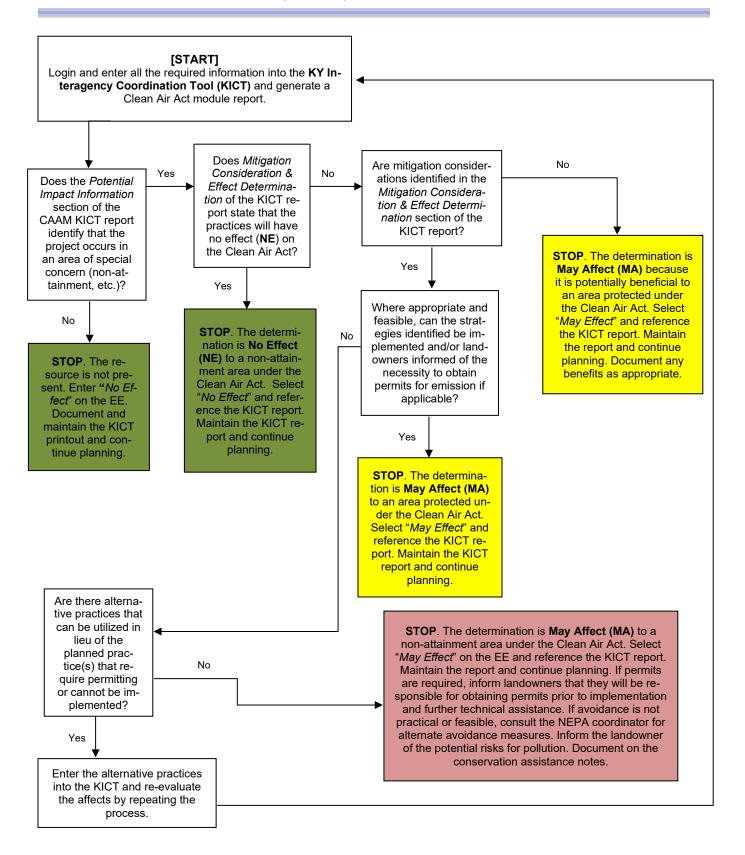
The *Potential Benefits to Air Quality* section of the report lists possible benefits to air quality that could be realized by the submitted conservation practices. A benefit to air quality is defined in this module as reducing current emissions or assistance in maintaining levels of attainment under current air quality standards. Not every benefit may be applicable to every instance of a resource-practice combination. Planners will need to determine which benefits apply to which circumstances. Sometimes multiple benefits may apply to a single practice, while other times no benefits may apply. Because planning conditions and resource concerns are so varied, the benefits are expressed as generalized statements and leave their interpretation open to the user. It is important to remember that potential benefits are contingent upon proper application and maintenance of practices according to the NRCS standard and implementation of any mitigation considerations.

Example

	POTENTIAL BENEFITS TO AIR QUALITY	
	If mitigation considerations are implemented as outlined, the following practices may provide beneficial contributions to air quality in the air quality zone identified in this report:	
Н	Practice	Potential Benefit
	Nutrient Management (590)	This practice could result in the reduction of emissions of PM, VOC, and/or NOx in areas that are currently in zones of non-attainment or other sensitive areas.

In the example above the practice provides a potential benefit by potentially reducing a criteria pollutant in a sensitive air quality zone.

CLEAN AIR ACT MODULE (CAAM) REPORT DECISION PROCESS



VI. CLEAN WATER ACT & WATERS OF THE U.S. MODULE (CWAM)

Clean Water Act Module (CWAM) Description

National NRCS policy should always be followed when handling resource issues. Refer to the policy located in NRCS National Environmental Compliance Handbook (NECH) Section 610.22 – CWA and Waters of the United States.

Potential impacts to water resources protected under the Clean Water Act in Kentucky are described fully in the document in Section II of the Field Office Technical Guide entitled *Kentucky NRCS Conservation Practice Effects on The Clean Water Act & Waters of The U.S.* These impacts were determined as the ways waters could be affected by the methods in which a practice was installed, operated, or maintained.

Conservation planners must determine if planned conservation practices will impact any waters that fall under the jurisdiction of the Clean Water Act Section 303(d), 401, 402, and 404. Their findings are to be documented on the NRCS Environmental Evaluation (EE). To help conservation planners, the Clean Water Act Module (CWAM) was developed to assist in determining the effects of conservation practices when producers may need to obtain permission from regulatory authorities or permitting is required. The report generated is proof of investigation under NEPA requirements of the Clean Water Act. This information may be utilized to document *de minims* effect or benefit as applicable.

This module uses known locations of water resources within the Commonwealth and compares the location of those areas to a matrix of predetermined data. The result is a narrative of likely outcomes of implementation, management or maintenance of that practice and its potential effects on the water resources where the likelihood of needing to obtain regulatory permissions are high.

The purpose of this document is to streamline NRCS planning activities when practices could be reasonably ascertained to have no effect, the effects were wholly beneficial, or when the circumstances for avoidance of impacts were straightforward. This module acts only as a screening tool to determine if potential interactions with the CWA exist and and/or where no adverse effects are realistically present or where no known adverse effects exist. This process is not meant to usurp or replace standard procedures found in any NRCS regulations or procedures. The results may not represent actual field conditions. In no way does this constitute a formal delineation, determination or application or permission for any law including the NFSAM or the Clean Water Act. A formal determination/delineation for those purposes must be made using other methods, procedures, and protocols. There may be instances when individual review and permits may be required, and those circumstances have been identified in this document. It is important to remember that avoidance of adverse effects is a priority whenever NRCS practices are being implemented.

Therefore, the purposes of this module are:

1. Define the primary sections of the CWA that are most relevant to the NRCS and the installation of conservation practices.

- 2. Provide a screening process for potential obvious instances of discharge into Waters of the United States (WOTUS) in areas of conservation planning for field staff.
- 3. Identify practices that could have an obvious potential adverse effect when implemented within proximity or within WOTUS or other listed waters
- 4. To find ways to avoid or minimize adverse effects to WOTUS and other listed waters;
- 5. Identify potential positive effects of practices (potential benefits to water quality) to WOTUS and other listed waters
- 6. Provide this information to conservation planners in a clear, concise method allowing documentation of the NEPA process on the EE in conjunction with decision makers and conservation planning for the CWA and WOTUS.

Planner's Note

This module serves only as a screening tool. Planners should always seek guidance from specialists if the necessity for permits is unclear. It is also important to remember that it is ultimately the landowner's responsibility to obtain any required permits. NRCS may assist landowners in providing guidance or information but should never act on behalf of the client in obtaining permits. Please contact the NEPA Coordinator for more information.

Interpreting the Clean Water Act and WOTUS Module Results

The following sections detail and provide examples of how the CWAM reports will be provided to planners. To implement the results of the KICT, planners must be able to interpret the information provided and, if necessary, convey that information to the client by incorporation into specifications, designs, or maintenance of conservation practices, or permits. This is information will be vital to determine the documentation required to follow the NRCS & NEPA process.

Clean Water Act Sections 401, 402, and 303 are the sections that most often affect NRCS activities. Close coordination throughout the planning process can prevent significant delays in processing any needed permit application.

- 1. CWA Section 404: Regulates the discharge of dredged or fill material into WOTUS is prohibited unless the action is exempted or is authorized by a permit issue by the Corps or by the State.
- 2. CWA Section 402: Establishes the National Pollutant Discharge Elimination System (NPDES) Program, which the States also administer. This is commonly called a stormwater permit utilized mostly for construction activities.
- 3. CWA Section 401: Requires that before a 404 permit can be issued for an activity, the State (or Tribe) must certify that the activity will not violate State water quality standards (Section 401 State Water Quality Certification).
- 4. CWA Section 303: Requires States, territories, and Tribes to identify "impaired waters" and to establish total maximum daily loads (TMDLs).

Potential Impact Information

The CWA module will identify the potential impacts a practice may have under each section of the CWA. If there are no known potential impacts within or near the AOI, the KICT output in Section I of the report will state the following:

Example

POTENTIAL IMPACT INFORMATION

The area submitted for review may contain waters that are subject to regulation under the Clean Water Act under the following sections.

None

Based on the information submitted, the installation of one or more conservation practices could be regulated due to the following:

None

The output above indicates that there appears to be no sections of the CWA that could potentially be impacted by the practices and the planner may document and proceed with planning.

This output indicates that there appears to be a section of the CWA (Section 303(d)) that could potentially be impacted by the practices, and it could potentially affect water quality by some form of pollutant. The planner will need to proceed to the remainder of the report to determine any required actions from the planner or client. It is not uncommon for multiple sections of the CWA to be listed in this line of the report.

Example

POTENTIAL IMPACT INFORMATION

The area submitted for review may contain waters that are subject to regulation under the Clean Water Act under the following sections.

Section 303(d)

Based on the information submitted, the installation of one or more conservation practices could be regulated due to the following:

There is a potential for one or more conservation practices to adversely affect water quality in designated 'Impaired Streams' or 'Soon to be Impaired Streams' through introduction of animal waste, livestock, pesticides, sediment, or other various pollutants.

CWA Avoidance & Effect Determination

The next section of the report provides a breakdown of the practices and any avoidance or required strategy based on the section of the CWA that applies. The tool provides recommendations for Sections 303(d), 404, 401, and 402.

If there are no avoidance measures or required conditions that apply for a given section of the CWA, the result will appear as below.

Example

REQUIRED STRATEGIES & EFFECT DETERMINATION			
A. Required Strategies			
Based on the information submitted, the following information may be required to avoid adverse effects to resources. If applicable, clients should be made aware or requirements from regulatory authorities.			
CWA Section 303(d) Listed Impaired Streams			
Practice	Avoidance Measures or Required Conditions		
None	N/A		
CWA Section 404 WOTUS and 401 State Water Quality Certification			
Practice	Avoidance Measures or Required Conditions		
None	N/A		
CWA Sections 402 National Pollutant Discharge Elimination System (NPDES)			
Practice	Avoidance Measures or Required Conditions		
None	N/A		

The output above indicates that no practices require specialized strategies or permits. The planner will need to proceed to the remainder of the report to determine the tentative effect and any benefits the practice may potentially produce.

If there are strategies that are required for any of the sections of the Clean Water Act those practices and avoidance measures or required conditions will appear under the relevant heading on the report.

Example

A. Required Strategies	
	ed, the following information may be required to avoid adverse effects to re- uld be made aware or requirements from regulatory authorities.
C	WA Section 303(d) Listed Impaired Streams
Practice	Avoidance Measures or Required Conditions
Nutrient Management (590)	Animal Feeding Operations (AFOs) and Concentrated Feeding Operations (CAFO) may require a Kentucky Pollutant Discharge Elimination System (KPDES) permit.
Nutrient Management (590)	AFO's with liquid manure waste handling systems must obtain a 'Kentuck No Discharge Operational Permit' (KNDOP) to legally operate and is valid for five years. Dry waste systems are not required to have this permit.
CWA Section	404 WOTUS and 401 State Water Quality Certification
Practice	Avoidance Measures or Required Conditions
None	N/A
CWA Sections 40	2 National Pollutant Discharge Elimination System (NPDES)
Practice	Avoidance Measures or Required Conditions
None	N/A

This output shows that the practice (590) Nutrient Management has two measures that may be required if applicable under the Clean Water Act Section 303(d). Other relevant sections of the CWA do not have requirements listed. It is not uncommon for one or all the sections to have requirements depending on the practice being analyzed.

In this instance this strategy is reminding the planner that AFOs and CAFOs will require permitting and that dry waste systems do not require it. It is up to the planner to determine the applicability of the strategy and relay that information to the landowner. Proceed to the remainder of the report to determine the tentative effect and any benefits the practice may potentially produce.

Section B - Effect Determination (*Tentative*) of the report is the determination of the project based on practice implementation and application of any required strategies. There are two possible determinations:

- No Effect (NE)
- May Affect (MA)

Note that these determinations are tentative. This means that if the conditions apply (i.e. fill will be required or a discharge will occur) then the determination of effect is accurate. However, if the conditions do not cause fill or a discharge or the project does not somehow affect a jurisdictional water, then the determination of effect shown may not apply. Note that the tool will always assume that work is or will occur in a water within the area of interest.

1. No Effect (NE)

This finding occurs under two circumstances. The first is when the KICT determines that the project is not located in proximity to a WOTUS or other listed water and informs the planner to document the investigation according to policy. In the second possibility, the project is in proximity to a WOTUS or other listed water, but the practices selected and evaluated do not affect any section of the CWA. When this is the tentative effect determination, there will be no required strategies identified in Section A.

Example

B. Effect Determination (Tentative)

If all the required additional strategies listed above are implemented, the activities described have a **No Effect** (**NE**) to a Water of the United States in one or more sections under the Clean Water Act. If alternative practices are available, enter those practices and generate a new report. Otherwise, ensure that the client contacts the appropriate regulatory agency prior to practice implementation to avoid any adverse effects and obtain any permits if applicable. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly.

IMPORTANT: This report does not grant or constitute permission or permitting in any manner. Due to the scale, size and other limitations, this information is for resource screening purposes only and should not be considered final. Resources or activities may occur that are not taken into consideration by this report. Always field verify the presence or absence of water resources through on-site analysis and field verification. Therefore, the final determination shown above may differ. Document the determination, rationale and effects in conjunction with on-site analysis on the Environmental Evaluation.

2. May Affect (MA)

This finding also occurs under two circumstances. The first is when the KICT determines that the project is in proximity to a WOTUS or other listed water and informs the planner. However, there are no listed required strategies but there are potential beneficial effects (i.e. the practice is completely beneficial). In the second possibility, the project is in proximity to a WOTUS or other listed water, and the practices selected and evaluated affect one or more sections of the CWA. When this is the tentative effect determination, there will also be required strategies identified in Section A.

Example

B. Effect Determination (*Tentative*)

If all the required additional strategies listed above are implemented, the activities described have a **May Affect** (MA) to a Water of the United States in one or more sections under the Clean Water Act. If alternative practices are available, enter those practices and generate a new report. Otherwise, advise the client to contact the appropriate regulatory agency prior to practice implementation to avoid any adverse effects and obtain any applicable permits. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly.

IMPORTANT: This report does not grant or constitute permission or permitting in any manner. Due to the scale, size and other limitations, this information is for resource screening purposes only and should not be considered final. Resources or activities may occur that are not taken into consideration by this report. Always field verify the presence or absence of water resources through on-site analysis and field verification. Therefore, the final determination shown above may differ. Document the determination, rationale and effects in conjunction with on-site analysis on the Environmental Evaluation.

Permitting Notes

It is very important to remember that the product produced by the KICT does not grant any permission for any activity. The report also may be in error and is designed to only provide an awareness of the potential need for a permit or permission from regulatory authorities. The CWA Module has the following disclaimer on each report generated.

This report does not grant or constitute permission or permitting in any manner. Due to the scale, size and other limitations, this information is for resource screening purposes only and should not be considered final. Resources or activities may occur that are not taken into consideration by this report. Always field verify the presence or absence of water resources through on-site analysis and field verification. Therefore, the final determination shown above may differ. Document the determination, rationale and effects in conjunction with on-site analysis on the Environmental Evaluation.

It is not the responsibility for NRCS to obtain permits for clients or landowners to implement practices. However, navigating the regulatory hurdles and providing as much information as possible to landowners is highly advisable. This includes notifying them that a permit could be required and providing information regarding their project that may assist in obtaining the permit. Items that might be required to obtain a CWA permit may include specifications, designs, photos, endangered species analysis, and other data that may aid in the regulatory decisions. However, NRCS must not provide information directly to these authorities. If any information is required, the client should request it from NRCS and then the client should provide that information to the requesting agency. If regulatory authorities request information directly from field staff, the field staff should refer them to the Area or State Office for assistance. Field staff should never provide information to a third party without the consent of the landowner.

Protocol for Obtaining a CWA Required Permit

Planners should be cautions when notifying clients about the necessity of obtaining permits. Always use sound judgement and knowledge of the practice to determine the need for regulatory permissions. If planners are unsure that a water resource will be regulated under the CWA, they should contact their supervisor or technical area resource conservationist. If regulatory permission is determined to be required, the following steps should be taken:

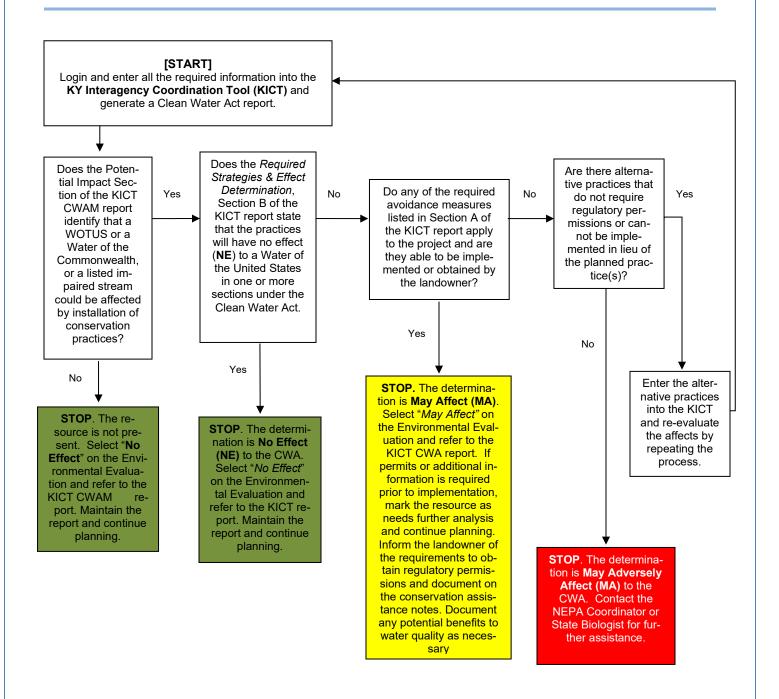
- 1) Ensure that the practice could be regulated under the CWA. Contact the Technical Area Resource Conservationists or the State Biologist if assistance is needed.
- 2) Notify the client that one or more of the practices planned may need permits for various sections of the CWA. Document this conversation in the Conservation Assistance notes.
- 3) Document on the Environmental Evaluation and mark as further action is needed until the permission is granted.
- 4) Provide any technical information to the client to provide to the regulatory agency as requested. Note that NRCS will not provide that information directly to regulatory agencies. Planners should provide information such as designs, specifications, implementation requirements, etc. to the landowner only. The landowners may then provide the information to the regulatory agency.

Potential Benefits to Water Quality

The *Potential Benefits to Water Quality* section of the report lists possible benefits to water quality that could be realized by the submitted conservation practices. A benefit to water quality is defined in this module as conditions when a practice may beneficially affect water quality under specific circumstances and locations. Not every benefit may be applicable to every instance of a resource-practice combination. Planners will need to determine which benefits apply to which circumstances. Sometimes multiple benefits may apply to a single practice, while other times no benefits may apply. Because planning conditions and resource concerns are so varied, the benefits are expressed as generalized statements and leave their interpretation open to the user. It is important to remember that potential benefits are contingent upon proper application and maintenance of practices according to the NRCS standard and implementation of any required strategies.

POTENTIAL BENEFITS TO WATER QUALITY	
If the required strategies are implemented as outlined, the following practices may provide beneficial contributions to water quality:	
Practice	Potential Benefit
Nutrient Management (590)	This practice may be beneficial if it is installed for the purpose of, or results in the reduction or elimination of animal wastes, sediment, pesticides, or other pollutants from a WOTUS or other protected waterway.

CLEAN WATER ACT MODULE (CWAM) REPORT DECISION DIAGRAM



Note: Contacts for regulatory agencies may be found under the section of this handbook entitled KICT Assistance & References.

VII. NHPA CULTURAL RESOURCES MODULE (CRM)

Cultural Resources Module (CRM) Description

Cultural resources refer to historic, aesthetic, and cultural aspects of the human environment and can include historic or archaeological sites. It is broader than 'historic properties' and may incorporate broader cultural or natural elements of the human environment. National NRCS policy should always be followed when handling cultural resource issues. Refer to the policy located at: GM_420_401 - Part 401 - Cultural Resources (Archeological and Historic Properties).

Potential adverse impacts to cultural resources are described fully in the programmatic consultation document in Section II of the Field Office Technical Guide entitled *Kentucky NRCS Conservation Practice Effects on Cultural Resources for Planning and Program Implementation*. These impacts were determined as the ways cultural resources could be negatively affected by the methods in which the practice was installed, operated, or maintained.

Conservation planners must determine if planned conservation practices will impact any cultural resources. Their findings are to be documented on the NRCS Environmental Evaluation. To help conservation planners in making these determinations, the Cultural Resources Module (CRM) was developed to determine the effects (based on a programmatic agreement) to known cultural resources and areas that have high potential for the existence of cultural resources. The report generated is proof of compliance with the National Historic Preservation Act. The information regarding potential impacts may be utilized to document avoidance, as applicable.

It is important to realize that a report indicating a protected resource may be affected by practice installation does not necessarily indicate that the resource is present or adjacent to the AOI. This threshold of suitability is based upon several factors and the best professional judgment and knowledge from all the agencies involved. Likewise, it is important to understand that even if the KICT indicates there are no known cultural resources within the AOI, it does not preclude the existence of such resources. If during the implementation of a conservation plan cultural resources are discovered, all work <u>MUST</u> be immediately stopped and contact the Cultural Resource Specialist (CRS). National NRCS policy requires the CRS to assess inadvertent discoveries and contact the appropriate agencies within 48 hours.

This module identifies potential impacts to known cultural resources which may be located above or below ground. Unlike previous programmatic agreements, which looked at only ground disturbing activities, this module addresses historic resources and landscapes as well. The tool uses known locations of resources and areas within the Commonwealth that have been surveyed based on data from the Office of State Archaeology and the Kentucky Heritage Council. This data is updated regularly and in real time transferred to the KICT.

Resources have been grouped into eight classes that correspond to the type of resource that could potentially be affected. These classes are described in the document *Kentucky NRCS Conservation Practice Effects on Cultural Resources for Conservation Planning and Program Implementation* (see Section II of the FOTG). It is not necessary for planners to be familiar with details of classes, but this information assists with review, if needed, and prevents sensitive information from being disclosed. The class of resource present is identified in the KICT CRM report.

Interpreting the National Historic Preservation Act & Cultural Resources Module (CRM) Results

The following sections detail and provide examples of how cultural resource reports will be provided to planners. To implement the results of the KICT, planners must be able to interpret the information provided and, if necessary, convey that information to the client by incorporation into specifications, designs, or maintenance of conservation practices. This is information will be vital to determine the documentation required to follow the NRCS NEPA process.

Cultural Resources Potential Impact Information

Potential adverse impacts to cultural resources are the basis of the Final Determination the KICT produces and are included to allow planners and clients to understand why the avoidance strategies (if any) are required. They are grouped into four broad categories by the KICT. Any of these impacts may apply to any of the eight classes of identified cultural resources. Multiple impacts may apply to a single resource because of practice installation, and several may apply to multiple practices. The basic impact categories are as follows:

- 1. crushing, trampling, or direct disturbance through earthmoving or other activity
- 2. physically altering, defacing, disturbing, or damaging an existing surface
- 3. visual obscurement
- 4. landuse change or conversion

One or more of these potential impacts could appear on cultural resource reports. The following are examples of possible outcomes on the KICT report.

If there are no known cultural resources or potential adverse impacts affecting the AOI, the KICT output in Section I will state the following:

Example

POTENTIAL IMPACT INFORMATION

The area submitted for review may contain the following classes of cultural resources:

None

Based on the information submitted it has been determined that one or more of these cultural resource classes could be affected as a result of installation of one or more conservation practices.

None

This output indicates that there are no known cultural resources potentially affected by the practices and the planner may document and proceed.

Cultural resources are identified as potentially affected as follows:

Example

POTENTIAL IMPACT INFORMATION

The area submitted for review may contain the following classes of cultural resources:

Class 1, 4

Based on the information submitted it has been determined that one or more of these cultural resource classes could be affected as a result of installation of one or more conservation practices.

There is a potential to adversely affect a surface or subsurface cultural resource(s) through direct or indirect crushing via earthmoving, fill placement, trampling or disturbance by human activity, livestock, or equipment.

This example shows that there are two known classes of cultural resources with a potentially adverse impact associated with the installation of the practice(s). Planners need to proceed to the following sections of the report to determine how to avoid this potential impact.

Example

Cultural resources are identified and the KICT output does not identify any potential impacts:

POTENTIAL IMPACT INFORMATION

The area submitted for review may contain the following classes of cultural resources:

Class 7

Based on the information submitted it has been determined that one or more of these cultural resource classes could be affected as a result of installation of one or more conservation practices.

None

This indicates that there are cultural resources within or near the APE. However, the practice(s) selected have no potential adverse effect to the resources. Planners should proceed to subsequent sections of the report to review any other relevant information.

Cultural Resources Avoidance Measures

It is critical that planners and landowners understand that the strategies listed in *Required Strategies & Effect Determination*, Section A **are required** to receive federal technical and financial assistance. These strategies are avoidance measures to prevent or minimize the risk for adversely affecting cultural resources in a location.

If avoidance measures are required, these strategies must become part of the specifications for conservation practices (i.e., the conservation plan). How these specifications are provided to the client is up to the conservation planner. One strategy would be to incorporate them into the customization of job sheets used in conservation planning. These measures could be listed in the "Additional Recommendations" or "Additional Notes" sections of those documents. Also, consider documenting how these strategies were provided to clients in either the conservation assistance notes and/or the Environmental Evaluation.

It is important to realize that in most cases where cultural resources are indicated as potentially present, potential adverse effects are likely to occur when practices involve ground disturbing activities, creation of new agricultural lands, or large and broad scale projects such as landuse change.

Most of the strategies required by the KICT are clear and concise. Typical avoidance measures may require planners to place practices a certain distance away from an area or may require further consideration by the Cultural Resources Specialist. The additional strategies for practice implementation are found in the *Required Strategies & Effect Determination*, Section A of the KICT CRM report as shown below. Planners may then proceed to the other sections of the report for additional guidance.

Example

REQUIRED STRATEGIES & EFFECT DETERMINATION		
A. Required Avoidance Measures		
Based on the information submitted, the following strategies are required to be implemented to avoid adverse effects to protected resources. The strategies listed below must be incorporated into the conservation plan, layout and/or specifications.		
Required Strategies for Practice Implementation		
None		

If the KICT determines that there are strategies required to be implemented to comply with Section 106 of NHPA, the table lists practices in the left column and the required strategy(s) adjacent to the practice. All strategies **must** be implemented as applicable.

Example

REQUIRED STRATEGIES & EFFECT DETERMINATION	
A. Required Avoidance Measures	
Based on the information submitted, the following strategies are required to be implemented to avoid adverse effects to protected resources. The strategies listed below must be incorporated into the conservation plan, layout and/or specifications.	
Practice	Required Strategies for Practice Implementation
Pond (378)	This practice shall not be implemented within 100 feet of the edge of any rock overhangs, caves or similar rock outcroppings. This includes placement of fill and/or debris resulting from this or other associated practices.

In this example, the conservation practice Pond (378) would have an avoidance measure that is necessary for implementation. In general, if any avoidance measure cannot be performed, contact the Cultural Resources Specialist (CRS) for further guidance.

There are instances when the *Required Strategies for Practice Implementation* requires that planners contact the CRS. This would occur when resources are identified and the KICT recognizes a practice-resource combination(s) that could have significant potential adverse effects that may be unavoidable. In these instances, coordination with the Cultural Resources Specialist would be required.

Example

Example		
REQUIRED STRATEGIES & EFFECT DETERMINATION		
A. Required Avoidance Measures		
Based on the information submitted, the following strategies are required to be implemented to avoid adverse effects to protected resources. The strategies listed below must be incorporated into the conservation plan, layout and/or specifications.		
Practice	Required Strategies for Practice Implementation	
Livestock Pipeline (516)	This practice shall not be implemented within 100 feet of the edge of any rock overhangs, caves or similar rock outcroppings. This includes placement of fill and/or debris resulting from this or other associated practices.	
Wetland Creation (658)	Coordination with the Cultural Resources Specialist is required prior to practice implementation.	

In this example, a created wetland has the potential to adversely affect a resource. Therefore, unless alternative practices are available, coordination with the CRS is required. This message may often occur with other avoidance strategies identified for other conservation practices. All avoidance measures for the other practices must be implemented in addition to the coordination required with the CRS. However, the CRS may alter or remove the requirement based on other information. See the Effect Determination (tentative), Section B of the report for more information.

Effect Determination (tentative) **Section B**

This section of the report is the official Effect Determination. The determination is only tentative because while the KICT will identify an effect, the final effect determination provided by the CRS may differ and would supersede the KICT determination. This section of the report is the Effect Determination based on practice implementation and application of any required avoidance measures. There are four possible determinations. They are as follows:

- 1. No finding
- 2. No effect (NE)
- 3. Not likely to adversely affect (NLAA)
- 4. May adversely affect (MAA)

Planner's Note:

It should be noted that regardless of the finding in Section B of the report, if protected cultural resources are discovered or identified during implementation or construction, the Effect Determination must be re-evaluated. this determination is not effective. Planners must immediately cease the activity and contact your agency representative responsible for activities under NEPA the Cultural Resources Specialist (CRS).

1. No Finding (of resources)

When there are no resources found near or within the AOI, the *Effect Determination*, Section B of the KICT CRM report will state the following:

Example

B. EFFECT DETERMINATION (TENTATIVE)

No further requirement under the National Historic Preservation Act is necessary at this time. Proceed with planning and implementation. Maintain a copy of this report as documentation of investigation according to NRCS policy. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly.

NOTE: If resources are discovered during implementation, immediately cease activities, and contact the Cultural Resources Specialist.

2. No Effect (NE)

If resources are found near or within the AOI, but the practices do not affect the resource, the following finding will occur in the report:

Example

B. EFFECT DETERMINATION (TENTATIVE)

It has been determined that the activities described are considered to have **No Effect (NE)** to known protected cultural resources. No further requirement under Section 106 of the National Historic Preservation Act is necessary at this time. Proceed with planning and implementation. Maintain a copy of this report as documentation of investigation according to NRCS policy. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly.

NOTE: If resources are discovered during implementation, immediately cease activities, and contact the Cultural Resources Specialist.

3. Not Likely to Adversely Affect (NLAA)

Example

B. EFFECT DETERMINATION (TENTATIVE)

If all the required additional strategies listed above are implemented, the activities described are considered **Not Likely to Adversely Affect (NLAA)** any known protected cultural resources. No further requirement under Section 106 of the National Historic Preservation Act is necessary at this time. Proceed with planning and implementation. Maintain a copy of this report as documentation of investigation according to NRCS policy. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly.

NOTE: If any of the required strategies listed above cannot be implemented, or the strategy specifically requires coordination with the NRCS Cultural Resources Specialist the proposed practice is determined as May Adversely Affect (MAA). Contact the Cultural Resources Specialist prior to proceeding with implementation. If resources are discovered during implementation, immediately cease activities and contact the Cultural Resources Specialist.

In this example, the KICT has identified a class of cultural resource(s) that could have potential adverse effects by installation of one or more conservation practices. However, if the avoidance measures identified in the report are implemented those adverse impacts may be avoided. Planners should document the evaluation according to policy and ensure that the avoidance measures are incorporated into plans and specifications provided to landowners. Planners may proceed with the planning process. If avoidance measures cannot be incorporated or alternative practices implemented, coordination with the Cultural Resources Specialist is required.

4. May Adversely Affect (MAA)

Example

B. Effect Determination (Tentative)

One or more planned practices **May Adversely Affect (MAA)** a known cultural resource. If alternative practices are available, enter those practices and generate a new report. Otherwise, contact the Cultural Resources Specialist prior to practice implementation to avoid adverse effects. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly.

NOTE: Contact the NRCS Cultural Resources Specialist; this determination may change.

This *Effect Determination* indicates that there are practice and resource combinations that need to be reviewed by the CRS prior to implementation. An avoidance measure is shown in Section A of the report as *Coordination with the Cultural Resources Specialist is required prior to practice implementation*. Therefore, unless alternative practices are available, coordination with the CRS is required. This determination may often occur with other avoidance strategies identified for other conservation practices. Where reports are generated that include other avoidance measures and the requirement for CRS coordination, the CRS may review and waive all or part of the requirements on the report or may provide further requirements or guidance. Planners should follow the review process outlined below.

Cultural Resource Specialist Review and Consultation Screening Protocol

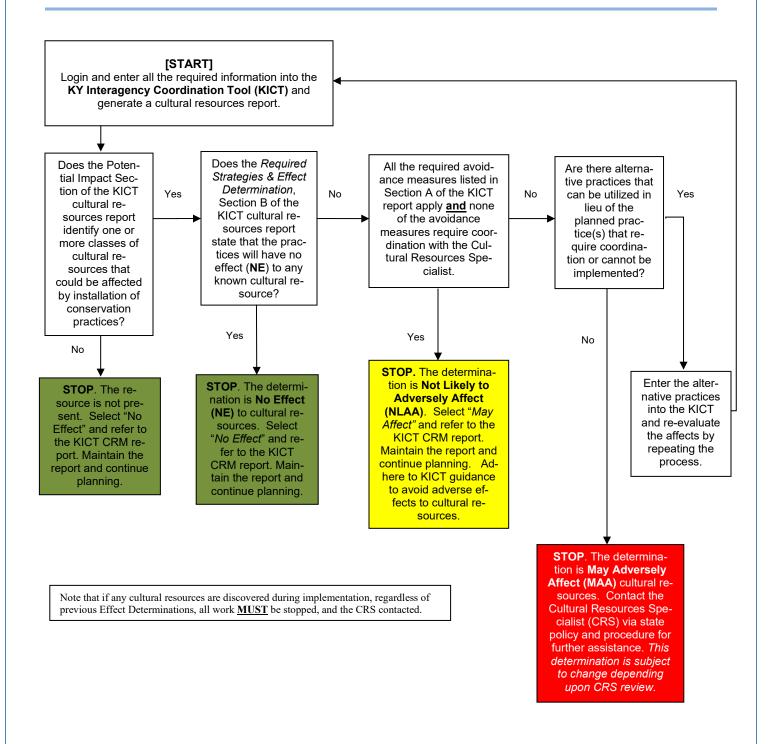
By NRCS policy, the State Conservationist conducts consultation regarding compliance with the NHPA. The CRS is designated by the State Conservationist to address cultural resource issues, compliance in those issues, and be the liaison for consultation. The CRS works with conservation planners to determine what coordination is necessary to meet NRCS obligations under the NHPA. Therefore, the KICT may require the planner to contact the CRS. When conservation planners encounter this situation, the field office protocol is as follows:

- Determine if there are any other available alternatives to avoid consultation via practice substitutions, differing locations, or other appropriate method.
- After alternative practices have been exhausted, or if they are not available, or if the avoidance measure specifically requires consultation, stop the planning process.
- The field planner will complete the KICT Cultural Resources Review Request form by logging into the KICT website at Kentucky Interagency Coordination Tool (mapwv.org). From the homepage, select "Generate" under the **CR Form** column adjacent to the report that requires consultation. Complete all the information required on the form. Pay particular attention to the addition of zipped shapefiles (lines, points, and polygons) or any other required information such as photos. Make sure to select "Upload" after selecting the shapefiles to upload files to the KICT. Note that most of the form is auto populated from the report. Once complete, click the submit button. **NOTE** that the link under the **CR Form** has changed to "Link". Subsequent clicks will return you to that completed form.
- An email to the CRS is generated that contains the form, shape files and other relevant information.
 Once this form is received, the CRS may take one or more actions including scheduling a site visit
 with NRCS/landowner or decision maker, approving the project through discussion with SHPO,
 or other appropriate action including consultation. If consultation is required, the CRS will work
 directly with the planner to determine next steps. (See note below.)
- Once a final determination is made, the CRS uploads the signed documents to the KICT and the link on the KICT changes to "Final". An email is sent to the planner that review/consultation is complete, and the form may be printed or saved into the appropriate location (i.e. document management system, file, etc.). The form will always remain stored on the KICT. Implement any requirements as outlined in the form and or the CRS.

NOTE: If the CRS and SHPO issue cannot be resolved, and official consultation is required:

- CRS works directly with the planner and begins consultation with State Historic Preservation Officer (SHPO) as applicable
- If it is determined that an adverse effect cannot be avoided, the SHPO works with NRCS to develop a MOA to resolve any adverse effects to cultural resources
- Other appropriate action as determined in the consultation process

CULTURAL RESOURCES MODULE (CRM) REPORT DECISION DIAGRAM



VIII. TRIBAL CONSULTATION MODULE (TCM) – 2024 PILOT

Tribal Consultation Module (TCM) Description (Pilot)

This module was developed as a test/pilot module to determine the feasibility of automating to the extent possible tribal ancestral lands consultation. Tribal consultation is required on all NRCS planning activities. To date, Kentucky does not have Tribal Trust or Reservation lands located within its boundary. However, there are sixteen federally recognized tribes that claim ancestral lands within the Commonwealth. Ancestral lands are areas, whether discrete or continuous, that Indian Tribes or their members have affiliation. They are areas that have cultural, historical, spiritual, subsistence, or ceremonial significance ascribed to them. Ancestral lands are defined by Indian Tribes or NHOs based on their knowledge of their history and connections with that area. Currently, there are sixteen tribes that claim parts of Kentucky as ancestral lands. They are as follows:

Absentee Shawnee Tribe of Indians of Oklahoma

Cherokee Nation

Chickasaw Nation

Choctaw Nation of Oklahoma Delaware Nation, Oklahoma

Eastern Band of Cherokee Indians
Eastern Shawnee Tribe of Oklahoma

Miami Tribe of Oklahoma

Muscogee (Creek) Nation

Osage Nation

Peoria Tribe of Indians of Oklahoma

Quapaw Nation

Santee Sioux Nation, Nebraska

Seneca Cayuga Nation

Shawnee Tribe

United Keetoowah Band of Cherokee Indians

The following information is to be used as a screening tool to determine those projects that fall within the scope of requiring ancestral lands consultation. This module is a pilot to determine the types of information that Tribes want to review, and to set a precedent for additional Tribes to consult and determine their interest in review of projects in the future. This pilot will also help set a process going forward to develop coordination among tribes and NRCS in Kentucky.

It is anticipated that this pilot module will be revised frequently as tribes become more familiar with the types of projects NRCS conducts in Kentucky and as our government-to-government relationship is strengthened, leading to fewer projects requiring direct review It is anticipated that each Tribe will be interested in differing projects and will want to review different conservation practices over time. Therefore, this module will change as tribes are added and practices are reviewed. In this context the following are the purposes for this module:

- 1. To identify the tribes that claim ancestral lands within the Commonwealth.
- 2. Insomuch as possible, streamline the consultation process for routine Farm Bill and Conservation Technical Assistance projects.
- 3. To identify which practices, have the greatest and least potential for impacts to ancestral lands;
- 4. To open dialogue with all Tribes to the potential for impacts regarding NRCS programs and practices; and
- 5. To provide this information to conservation planners in a clear, concise method allowing documentation of the NEPA process (EE) in conjunction with decision makers and conservation planning.

Interpreting the Tribal Consultation Module Results

To implement the results of the KICT, planners must be able to interpret the information provided and if necessary, convey that information to state level specialists or the Tribes. This portion of the handbook outlines guidance for application for the KICT Tribal Consultation module.

Tribal Consultation Impact Information

Potential adverse impacts are the basis of the Final Determination the KICT produces and are included to allow planners and clients to understand why Tribes may be required to review practices on Tribal ancestral lands. They are grouped into four broad categories by the KICT. The basic impact categories are as follows:

- 1. There is a potential to cause ground disturbance in both installation, management and/or maintenance.
- 2. There is a potential to cause ground disturbance during installation only.
- 3. There is a potential to cause ground disturbance during management and/or maintenance.
- 4. There is not a potential to involve ground disturbance during installation, management, and/or maintenance.

One of these potential impacts may appear on tribal consultation reports. The following are examples of possible outcomes on the KICT report.

If the project AOI is not located within an area Tribes have identified as ancestral lands, the KICT output will state the following:

Example

POTENTIAL IMPACT INFORMATION

The area submitted for review is a location in which the following Native American tribe(s) claim as ancestral lands:

None

The tribe(s) listed above has identified at least one of the practices as having the following impacts and require review.

N/A

This output indicates that additional tribal consultation is not required, and no practices are considered as impactful to an ancestral land identified by a Tribe. The planner may document and proceed.

If a Tribe has claimed ancestral lands in which the AOI is located, the KICT will list the Tribe(s) and the potential impacts associated with the practices. The KICT report will appear similar to the following:

Example

POTENTIAL IMPACT INFORMATION

The area submitted for review is a location in which the following Native American tribes claim as ancestral lands:

Quapaw Tribe, Osage Nation

The tribe(s) listed above has identified at least one of the practices as having the following impacts and require review.

There is a potential to cause ground disturbance in both installation, management, and/or management

This output indicates that there are Tribes that may require some form of consultation. Proceed to the following sections of the report to determine the practices that require review.

Required Tribal Coordination/Consultation

Section A. Required Consultation

This section of the report identifies all the practices that will require consultation with Native American Tribes. If no practices are required to be submitted the report will state the following:

Example

REQUIRED COORDINATION/CONSULTATION		
A. Required Tribal Consultation		
The following list of practices must be submitted to the Cultural Resources Specialist for submittal to the Native American Tribes indicated above for review.		
Practice	Practice Description	
None	N/A	

If practices do require review by the Tribes, the report will appear as follows:

Example

REQUIRED COORDINATION/CONSULTATION A. Required Tribal Consultation		
The following list of practices n American Tribes indicated above		
Practice	Practice Description	
(317) Composting Facility	(317) Composting Facility is a structure or device to contain and facilitate the controlled aerobic decomposition of manure or other organic material by micro-organisms into a biologically stable organic material that is suitable for use as a soil amendment. Construction and installation of this practice is typically locally ground disturbing to varying shallow depths. However, it is not ground disturbing in management and/or maintenance.	

Section B. Effect Determination (tentative)

This section of the report is the official determination. The determination is only tentative because while the KICT will identify an effect, the final effect determination provided by the Cultural Resource Specialist (CRS) may differ and would supersede the KICT determination. This section of the report is the Effect Determination based on practice implementation and the geographic are of the project. There are two possible determinations. They are as follows:

- 1. No effect (NE)
- 2. May affect (MA)

If the KICT determines that tribal consultation is not required, the section entitled Effect Determination will appear as follows:

Example

B. EFFECT DETERMINATION (*Tentative*)

The practices identified above have a determination of **No Effect (NE)** to Tribal Consultation/Cultural Resources. If tribal consultation is required above, submit this project for review and follow the guidance provided by the specialist. If practices are added, quantities, locations or other significant changes occur prior to installation, planners must revise and resubmit this data accordingly. If other practices are added, quantities, locations or other significant changes occur prior to installation, planners must revise and resubmit this data accordingly.

NOTE: If coordination with the NRCS Cultural Resources Specialist is required, this determination may change.

At this point the planner may document on the EE that tribal consultation is not required due to ancestral heritage lands and proceed with planning.

If the KICT determines that tribal consultation is required, the section entitled Effect Determination will appear as follows:

Example

B. EFFECT DETERMINATION (*TENTATIVE*)

The practices identified above have a determination of **May Affect (MA)** to Tribal Consultation/Cultural Resources. If tribal consultation is required above, submit this project for review and follow the guidance provided by the specialist. If practices are added, quantities, locations or other significant changes occur prior to installation, planners must revise and resubmit this data accordingly. If other practices are added, quantities, locations or other significant changes occur prior to installation, planners must revise and resubmit this data accordingly.

NOTE: If coordination with the NRCS Cultural Resources Specialist is required, this determination may change.

At this point the planner will need to submit the project for review to the CRS for submittal to the appropriate tribe. Planners should log onto the KICT website and follow the process outlined below.

Tribal Consultation Review and Screening Protocol

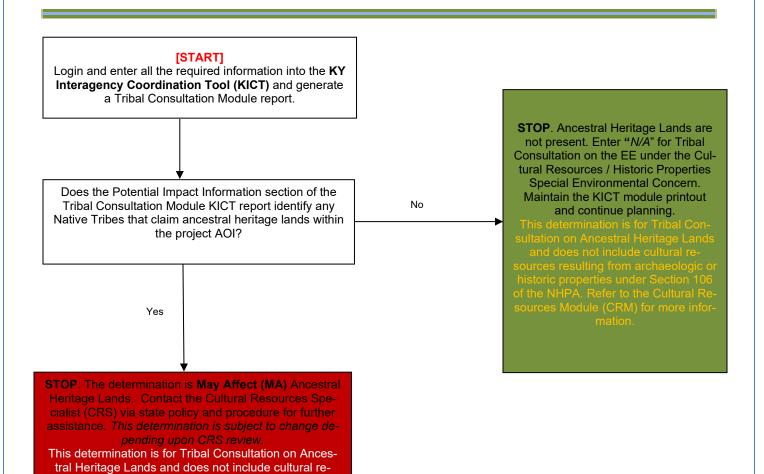
Note that there is a minimum response time of 30 days allowed to tribes for a response to projects. If this wait-time has the potential to impede project implementation, please contact the CRS as soon in the planning process as feasible.

By NRCS policy, the State Conservationist conducts consultation regarding Native American tribes. The CRS is designated by the State Conservationist to address issues, compliance in those issues, and be the liaison for consultation. The CRS works with conservation planners to determine what coordination is necessary to meet NRCS obligations under these requirements. When planners encounter this situation, the protocol is as follows:

- 1. Log onto Kentucky Interagency Coordination Tool (mapwv.org)
- 2. Select the Tribal Consultation Form link adjacent to the report from the homepage that requires consultation.
- 3. Complete the information required on the form. Pay particular attention to the addition of zipped shapefiles (lines, points, and polygons) or any other required information such as photos. Note that most of the form is auto populated from the report. Once complete, click the submit button.
- 4. An email to the CRS is generated that contains the form, maps, a project description, and a cover letter that is to be sent to the tribe. Planners need not take any action until the review is final. This information is relayed to the CRS along with a map to the Tribal Historic Preservation Officer for review. Reviews may consist of a request for additional information from the CRS, site visit or other appropriate requested action.
- 5. Once a final response from the tribe is received, the CRS uploads the signed documents and/or letters from the tribe to the KICT and the link changes to Final. An email is sent to the planner that consultation is complete, and the form may be printed or saved into the appropriate location (i.e. document management system, file, etc.). This determination should be documented on the EE. The form will always remain stored on the KICT.

TRIBAL CONSULTATION (TCM) REPORT DECISION DIAGRAM

sources resulting from archaeologic or historic properties under Section 106 of the NHPA
Refer to the Cultural Resources Module (CRM) for more information.



IX. ENDANGERED SPECIES ACT AND BALD & GOLDEN EAGLE PROTECTION ACT MODULE (ESAM)

Endangered Species Act Module/Bald and Golden Eagle Module (ESAM) Description

The ESA module was designed to provide reports to users based on several criteria. First, the planner identifies an AOI and inputs conservation practices and the extents of those practices. The KICT then compares this data to other information which includes known locations of species, the potential impacts of practices, habitat suitability, and agreed upon avoidance measures and requirements. The KICT then provides a printable report to the user which outlines a conservation and avoidance strategy.

Through partnership with the Frankfort Field Office of the USFWS and the Office of Kentucky Nature Preserves (OKNP) a programmatic consultation for the federal-listed species that could be encountered during planning and other non-project activities was developed. During this process, all conservation practices in Kentucky were reviewed for their potential effects on current federal-listed species in the State. Determinations were made as to whether the practices were likely to have no effect, an adverse effect, or a beneficial effect, and in the cases of potential adverse effects, how those effects could be avoided.

The report generated is proof of compliance with the ESA. The information may be utilized to document impact avoidance or benefit as applicable. It is important to realize that a report indicating a protected resource may be affected by practice installation does not necessarily indicate that the resource is present or even adjacent the area of interest. This threshold of suitability is based upon several factors and the best professional judgment and knowledge from all the agencies involved.

Conversely, a report indicating that there are no known listed species affected by the conservation practices chosen does not necessarily indicate an absence of protected resources. This simply means that there are no known occurrences, or it is unlikely a resource is present, and no resources are likely to be affected. Planners should always exercise common sense and practical knowledge when ascertaining an effect to a known resource regardless of the KICT report information. If in doubt about a potential effect, contact the State Biologist. The information provided in the KICT report is based on the best current data available to the USFWS and the Office of Kentucky Nature Preserves (OKNP). Errors or gaps in this information and data can occur; therefore, planners should always check the site to determine suitability of habitat or resource presence through on-site analysis and best professional judgment. Responses provided by the KICT indicating the absence of species or resources may indicate that the area has not been surveyed, rather than confirmation that the area lacks critical habitat or species. Verification of the report information should always be performed on site.

Interpreting the Endangered Species Act (ESA) and Bald & Golden Eagle Protection Act (BGEPA) Results

To implement the results of the KICT, planners must be able to interpret the information provided and if necessary, convey that information to the client by incorporation into specifications, designs, or maintenance of conservation practices. This portion of the handbook outlines guidance for application for the KICT Endangered Species Act (ESA) and the Bald and Golden Eagle Protection Act (BGEPA) module.

ESA & BGEPA and Potential Impact Information

Potential adverse impacts are described fully in the programmatic consultation document in Section II of the Field Office Technical Guide entitled *Kentucky NRCS Conservation Practice Effects on Threatened, Endangered, Candidate and Eagle Species for Planning and Program Implementation.* These impacts were determined as the basic ways species or habitats could be negatively affected by the methods in which a conservation practice was installed, operated, or maintained.

Potential adverse impacts to listed species (not including eagles*) are grouped into eight broad categories. Any of these impacts may apply to any of the listed species. Multiple impacts may apply to a single species, and several may apply to multiple practices. The basic impact categories are as follows:

- 1. pollution of surface water
- 2. pollution of ground water
- 3. removal or addition of trees or tree cover (including alteration of light regimes)
- 4. crushing, trampling, fire or other direct disturbance
- 5. manipulation of water regimes
- 6. changes in landuse
- 7. chemical toxicity
- 8. introduction of invasives
- * Disturbance to nesting eagles may occur by:
 - audible/visual disturbance
 - permanent landuse, land cover, or similar habitat change
 - application of pesticides, wastes, agricultural byproducts, or chemicals

Potential adverse impacts are the basis of the Final Determination the KICT produces and are included to allow planners the ability to understand why the avoidance strategies (if any) are required. The following are examples of possible outcomes.

Example 1:

Listed in the Potential Species and Impact Information section of the ESA module report, species are identified as potentially affected and will identify the species or list of species as follows:

POTENTIAL SPECIES AND IMPACT INFORMATION

The area submitted for review may contain populations or critical habitat of:

Indiana bat, Northern long-eared bat

The following adverse impacts could potentially occur as a result of installation of one or more of the conservation practices listed:

There is a potential to adversely affect federally listed species by the removal or establishment of trees or tree cover.

This example shows that there is a known potentially adverse impact, tree removal, associated with the installation of the planned practices to two species (Indiana Bat and the Northern long-eared bat). Planners need to proceed to the following sections of the report to determine how to avoid these potential impacts.

Example 2:

Listed species are identified and the KICT output does not identify any potential impacts:

POTENTIAL SPECIES AND IMPACT INFORMATION

The area submitted for review may contain populations or critical habitat of:

Indiana bat, Northern long-eared bat

The following adverse impacts could potentially occur as a result of installation of one or more of the conservation practices listed:

None

This indicates that even though there is a probability that two species (Indiana bat, Northern long-eared bat) exist in or near the AOI however, the practice(s) selected have no potential adverse effect to the species. Planners should then proceed to subsequent sections of the report to review any other relevant information.

ESA & BGEPA Module Avoidance Measures and Required Conditions

It is critical that planners and landowners understand that the strategies listed in Section II of the report are required to receive federal technical and financial assistance. Since the avoidance of listed species may require thoughtful planning on the ground and timing of practice implementation, this process should be run as early in the planning process as possible. Avoidance measures are strategies to avoid or minimize the risk for adversely affecting a species or habitat in a given location. In most instances, if the planner fully complies with NRCS standards, the additional measures outlined in the KICT are easily met. There are over thirty different avoidance strategies that the KICT could require for any given practice for this module.

Avoidance measures are provided to the planner and are for planners to implement. If avoidance measures are required, these strategies must become part of the specifications for conservation practices (i.e. the conservation plan). How these specifications are presented to the client is up to the planner. One strategy would be to incorporate them into the customization of the implementation requirements (IR) used in conservation planning. These measures may be listed in the "Additional Recommendations" or "Additional Notes" sections of those documents and/or in the conservation plan narratives. Planners must document how these strategies were provided to clients in either the conservation assistance notes and/or on the EE.

In most cases where species are indicated as potentially affected, if the practices are installed in existing, active agricultural lands the adverse effects of the conservation practice are usually unlikely to occur and avoidance measures are easily implemented. In fact, many of the required strategies are consistent with the general criteria found in the conservation practice standard. It is more likely for potential adverse

effects to occur when practices involve land clearing activities, creation of new agricultural lands, areas of tree removal, aquatic habitat manipulation and other broad landuse changes.

Most of the strategies required by the KICT are clear and concise. Typical avoidance measures may require planners to place practices a certain distance away from a critical resource or implement them using only a certain methodology (e.g. mechanical vs. chemical application). The list of additional strategies for practice implementation is found in the *Required Strategies and Effect Determination* section of the KICT ESA report.

The following pages show examples of potential outcomes from this module and are in the section entitled *Required Strategies & Effect Determination*.

If the KICT determines there are <u>no additional strategies required</u> for a conservation practice(s), the *Required Strategies* will be shown as below:

Example:

	Example.		
	REQUIRED STRATEGIES & E	FFECT DETERMINATION	
A. Required Strategies			
	Based on the information submitted, the following strategies are required to be implemented to avoid adverse effects to the species listed above. The strategies listed below must be incorporated into the specifications, conservation plan, layout and/or specifications.		
	Practice	Required Additional Strategies for Practice Implementation	
l	N/A	None	

Planners may then proceed to the other sections of the report for additional guidance.

If the KICT determines that there are strategies required to be implemented to comply with the ESA, the table contains practices in the left column and the **required strategy(s)** listed adjacent to the practice. All strategies must be implemented as applicable. If the module recommends avoidance strategies, they must always be included in the plan if they are applicable. It is always prudent to remind clients of the required conditions of practice implementation even if at the time of implementation, the avoidance measures are not applicable. For example, implementation of a practice whose avoidance measure is tree removal, may not initially require tree removal. However, expansion of the practice may require the use of the avoidance measure. Also note that some avoidance measures are time-sensitive; planners will need to guide clients to insure they understand the requirements of an avoidance measure.

Example

REQUIRED STRATEGIES & EFF	FECT DETERMINATION
A. Required Strategies	
Based on the information submitted, the following strategies are required to be implemented to avoid adverse effects to the species listed above. The strategies listed below must be incorporated into the specifications, conservation plan, layout and/or specifications.	
Practice	Required Additional Strategies for Practice Implementation
Composting Facility (317)	Conduct any tree removal associated with this practice between November 15th and March 31st. Trees with a diameter at breast height (dbh) of less than 3 inches may be removed anytime during the year. No trees that exhibit exfoliating bark characteristics such as shell and shag bark hickories and white oak species; or dead and dying trees with exfoliating bark, broken treetops, splintered or split areas; trees with cavities or hollowed areas shall be removed during this period.

Often there may be multiple practices identified to have the same avoidance measures. In the following example, the conservation practice Fence (382) and Livestock Pipeline (516) would both have five requirements or avoidance measures that are necessary for implementation.

Example

REQUIRED STRATEGIES & EFFECT DETERMINATION		
A. Required Strategies	A. Required Strategies	
Based on the information submitted, the following strategies are required to be implemented to avoid adverse effects to the species listed above. The strategies listed below must be incorporated into the specifications, conservation plan, layout and/or specifications.		
Practice	Required Additional Strategies for Practice Implementation	
Livestock Pipeline (516), Fence (382)	The use of construction equipment, green concrete or other pollutants including fuel and oil products within flowing streams or natural waterbodies during construction activities is prohibited. Plan and install appropriate measures to minimize sediment and turbidity during practice installation or application.	
	During practice installation, implement measures to ensure that the transport of excess nutrients, sediments, pesticides or toxic substances to streams, wetlands and adjacent waterbodies does not occur.	
	The placement or application of this practice shall not be within 50 feet of streams, wetlands or other permanent waterbodies.	
	The removal or impacts to existing trees, shrubs or other native vegetation shall be avoided to the extent possible.	

Some strategies restrict implementation to certain areas or landuses. Occasionally, the practice may list multiple landuses in separate strategies. For example, the first strategy of a practice may state to be implemented only in existing cropland. The second strategy may state that the same practice can only be implemented in existing hayland, pastureland, or any grassland system. On the surface, this may seem

contradictory. What this refers to is all the landuses to which the practice may be applied. Therefore, the practice is considered able to be implemented in any of those identified existing landuses and is not limited to one or the other. In this example, the only landuse to which this practice would be excluded is forestland.

Example

_	Lampe	
REQUIRED STRATEGIES & EFFECT DETERMINATION		
	A. Required Strategies	
	Based on the information submitted, the following strategies are required to be implemented to avoid adverse effects to the species listed above. The strategies listed below must be incorporated into the specifications, conservation plan, layout and/or specifications.	
	Practice	Required Additional Strategies for Practice Implementation
	Prescribed Grazing (528)	Practice shall only be installed or applied to existing actively managed cropland and cropping systems.
		Practice shall only be installed or applied in existing actively managed pasture, hayland or other grassland system (this includes farm headquarters areas).

There are a few required additional strategies for practice implementation that need special consideration. There are instances when one of the required additional strategies for practice implementation requires that planners consult with USFWS. This would occur when listed species are identified and the KICT recognizes a practice-species combination(s) that could have significant potential adverse effects to listed species and those affects would be unavoidable. In these instances, consultation is required.

Example

REQUIRED STRATEGIES & EFFECT DETERMINATION	
A. Required Strategies	
Based on the information submitted, the following strategies are required to be implemented to avoid adverse fects to the species listed above. The strategies listed below must be incorporated into the specifications, contion plan, layout and/or specifications.	
Practice	Required Additional Strategies for Practice Implementation
Pond (378)	Coordination or consultation with USFWS is required. Contact the NRCS State Biologist to initiate the consultation process.

In this example, a pond has the potential to adversely affect a listed species or habitat. Therefore, consultation would be required. Planners should then attempt to utilize alternative practices to avoid these potential adverse impacts and run additional queries through the KICT and review the results. If alternative practices are not available or yield the same result, consultation may be required.

This message may often occur with other avoidance strategies identified for other conservation practices. If this message is received this means that the impact is not avoidable and the determination for the project is May Adversely Affect (MAA).

REQUIRED STRATEGIES & EFFECT DETERMINATION

A. Required Strategies

Based on the information submitted, the following strategies are required to be implemented to avoid adverse effects to the species listed above. The strategies listed below must be incorporated into the specifications, conservation plan, layout and/or specifications.

Practice	Required Additional Strategies for Practice Implementation
Prescribed Grazing (528)	The placement or application of this practice shall not be within 50 feet of streams, wetlands or other permanent waterbodies.
Pipeline (516)	During practice installation, implement measures to ensure that the transport of excess nutrients, sediments, pesticides or toxic substances to streams, wetlands and adjacent waterbodies does not occur.
Pond (378)	Coordination or consultation with USFWS is required. Contact the NRCS State Biologist to initiate the consultation process.

B. Effect Determination

One or more planned practices May Adversely Affect (MAA) a known species. If alternative practices are available, enter those practices and generate a new report. Otherwise, contact the NRCS state biologist prior to practice implementation to avoid adverse effects. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly.

NOTE: Contact the NRCS State Biologist prior to implementation for ANY practice that is discovered to require incidental tree removal between April 1 and November 14

Tree Removal Disclaimer

The final ESA determination in Section B of the report also instructs the planner that any incidental tree removal associated with a practice installation is prohibited regardless of that specific avoidance measure identified above. Most practices that could have ancillary tree removal have the avoidance measure identified in Section A. However, there could be tree removal involved in almost any practice installation. If unplanned tree removal is found to be required during practice installation and that practice does not have tree removal normally associated with it, the tree removal is subject to the same restrictions as other tree removal practices.

Consultation Screening Protocol

By NRCS policy, only the State Biologist may conduct consultation on behalf of the State Conservationist. However, coordination may occur frequently via the KICT ESA Review Request Form. If conservation planners encounter a situation where they are required to "Contact the NRCS State Biologist to initiate the consultation process", the field office protocol is as follows:

- 1. Determine if there are any other available alternatives to avoid consultation via practice substitutions, differing locations, or other appropriate methods.
- 2. After alternative avoidance measures have been exhausted, or if alternatives are not available stop the planning process.

- 3. The field planner will complete the KICT ESA Review Request form by logging into the KICT website at Kentucky Interagency Coordination Tool (mapwv.org). Select the *Generate* link under the **ESA Form** adjacent to the report on the homepage that requires consultation. Complete the information required on the form. Pay particular attention to the addition of zipped shapefiles (lines, points, and polygons) or any other required information such as photos. Note that most of the form is auto populated from the report. Once complete, click the submit button. Users should receive a message that their submission was successful. **NOTE** that the *Generate* link under the ESA form has changed to *Link*. Subsequent clicks will return you to that completed form.
- 4. An email to the State Biologist is generated that contains the form, shape files and other relevant information. Once this form is received, the State Biologist may take one or more actions including scheduling a site visit with NRCS/USFWS/landowner or decision maker, approving the project through discussion with USFWS, or other appropriate action including consultation. If consultation is required, the State Biologist will work directly with the planner to determine next steps.
- 5. Once a final determination is made, the State Biologist uploads the signed documents to the KICT and the link on the KICT changes to *Final*. An email is sent to the planner that review/consultation is complete, and the form may be printed or saved into the appropriate location (i.e. document management system, file, etc.). The form will always remain stored on the KICT. Implement any requirements as outlined in the form and or the State Biologist.

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Upload PLU Shapefile (REQUIRED)								
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Upload Photos								
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County: Adair	▼ Dat	te of KICT Report:	mm/dd/yyyy	8	Planner:			
Program:			*	Project Name:				
Client (first and last name):								
Farm Number:	Tra	ct Number(s):		Field Number(s):		Other ID:		
Practices Submitted for Review (with	n amount	and unit):						
Area of Potential Effect (APE):The A	DE 1- III-							
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Request for Endangered Species Act Review Information on this page to be completed by the planner
County: Date of KICT Report: Planner:
Program: Project Name:
Client (first and last name):
Farm Number Tract Number(s) Field Number(s): Other ID Practices Submitted for Review (with amount and unit)
Flactices Submitted for review (with amount and unit)
Area of Potential Effect (APE): The APE is the specific area affected by the conservation practices, including all new or existing borrow/disposal areas, new or temporary access roads 8, any other off-site or indirect ground disturbing activities related to the installation of the conservation practices.
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Threatened and endangered species, State listed species, and/or critical habitat identified on the KICT report:
Dease select the option below that best describes the reason you are submitting the EGA Review form. You may select more than one. If more apply or soldional oriumstances apply select other's and provide details in the bos provider.
Explanation of other
Describe how the conservation practices will be applied. For example, if mechanical and chemical treatments are available under the same practice speedy if one or forbuil the used, target speeds being removed, what the existing habitat looks like where practice will be applied if applicable, indicate any unique components of implementation, etc.
Ecological Condition and Impacts: Will any the removal cour, either as part of a practice (such as with 666 - Forest Stand Improvement) or in order to facilitate another practice (such as with 412 grassed Waterway) where trees may need to be removed as a secondary action to prepare the site)? If so approximately how many trees (acres or includuals), estimated size (Dismeter breast height CBH is represent, and species composition, if known?
If potential effects are associated with aquatic species enter the stream name where where Conservation Practices will be applied and describe adjacent land uses. If the stream is unnamed please describe the stream conditions (shallow, deep, slow moving, fast moving, rodgy substrate, water only seasonally present, bit.) Specify within specific practices will be implemented within 300 feet of a stream.
All fields must be complied and required materials must be included (RICT Report + Shapefiles) when sending this form. Phons and shapefiles on he attached to giff form by clinking the papering on the polytom be left or may be shaded as an enail attachment. If a question does not apply to the project CO IOT loave this sendion black - ener RICT.

Once the *Generate* link has been clicked, the form to upload information from the user appears as above. Be sure to attach any shapefiles or other requested materials and click the green "*Generate and Send*" button.

Copy of the autogenerated *Request for Endangered Species Act Review* form. Much of this form is auto populated by the KICT.

Inspection for Existing Mussel or Darter Populations for Stream Crossings or Other In-Stream Practices

Special considerations may be necessary for some stream crossings and streambank protection measures. These activities have the potential to be some of the most beneficial NRCS conservation practices for many aquatic species, particularly native freshwater mussels. However, if crossings are improperly located or improperly designed in streams that contain mussels, they can be detrimental. Frequently, crossings are planned in an area of the stream where the streambed is the most stable and able to withstand frequent livestock or equipment traffic. Unfortunately, these are often favorable areas to find existing mussel populations. For that reason, it was decided to require inspection by trained personnel prior to implementation for these conservation practices.

The KICT will provide an avoidance strategy requiring the planner to have the area inspected prior to implementation as follows:

Example

1		
REQUIRED STRATEGIES & E	FFECT DETERMINATION	
A. Required Strategies		
Based on the information submitted, the following strategies are required to be implemented to avoid adverse effects to the species listed above. The strategies listed below must be incorporated into the specifications, conservation plan, layout and/or specifications.		
Practice	Practice Required Additional Strategies for Practice Implementation	
Stream Crossing (578)	Contact the State Biologist using the ESA review process. Inspection for listed species populations is required prior to practice installation; and project must be constructed and implemented in a manner to avoid existing populations.	

Required Inspection Protocol for Darter or Mussel Populations

For the current version of the KICT, if this avoidance strategy is encountered, the protocol will be as follows:

- 1. Determine if there are any other available alternatives that accomplish the objectives to avoid consultation via practice substitutions, differing locations, or appropriate methods.
- 2. After alternative avoidance measures have been exhausted, or if alternatives are not available stop the planning process.
- 3. The field planner will complete the KICT ESA Review Request form by logging into the KICT website at Kentucky Interagency Coordination Tool (mapwv.org). Select the *Generate* link under the **ESA Form** adjacent to the report on the homepage that requires inspection. Complete the information required on the form.
- 4. An email to the State Biologist is generated that contains the form, shape files and other relevant information. Once this form is received, the State Biologist may take one or more actions including scheduling a site visit with NRCS/USFWS/landowner or decision maker, approving the project through discussion with USFWS, or other appropriate action including consultation. The State Biologist will work directly with the planner to determine next steps.

5. Once decisions are made, the State Biologist uploads the signed documents to the KICT and the link on the KICT changes to *Final*. The State Biologist will notify the planner that review is complete, and the form may be printed or saved into the appropriate location (i.e. document management system, file, etc.). The form will always remain stored on the KICT. Implement any requirements as outlined in the form and/or by the State Biologist.

Access Control and Fencing near Caves, Sinkholes and other Openings

In instances where cave dwelling species exist, an avoidance measure like the one shown below may appear on the report.

Example

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REQUIRED STRATEGIES & E	FFECT DETERMINATION	
A. Required Strategies		
Based on the information submitted, the following strategies are required to be implemented to avoid adverse effects to the species listed above. The strategies listed below must be incorporated into the specifications, conservation plan, layout and/or specifications.		
Practice Required Additional Strategies for Practice Implementation		
Access Control (472)	If exclusion practices are planned at cave entrances or open throated sinkholes, contact the NRCS biologist to coordinate the timing and implementation of this and any facilitating or component practices.	

This avoidance measure is concerned with the placement of a structure that might inhibit the ability of a species to enter or exit the opening and/or alter the internal environment of the opening (airflow, water regimes, etc.). Usually, fences have no effects to these openings once constructed unless it is immediately in front of the entrance. However, construction dates may need to be determined to coincide with periods of inactivity for the species (i.e., November to March for bats). More elaborate structures may require additional measures. These structures are considered *near* if the site is within 50 meters of the opening.

If planners receive this avoidance <u>and</u> caves or other openings are within 50 meters of the construction site, complete the KICT ESA Review Request as previously outlined. Depending upon the situation, the State Biologist and USFWS will provide alternatives, approve the project without modification, or other appropriate action. Depending upon workload, this may take time to complete so it should be submitted as early as possible in the planning process.

Practices within 2.5 Miles of a Maternity Colony or within 5 Miles of a Hibernaculum

Some practices planned within two and one-half miles of an Indiana or northern long-eared bat maternity colony, or 5 miles of a hibernaculum, require special consideration. Practices that require tree removal (actual direct disturbance and felling of trees) and are implemented near documented roost sites will trigger this alternative. The KICT will determine the proximity of the planned practices to known maternity colonies and hibernacula and provide a required alternative strategy that may instruct the planner (not the landowner) to contact the USFWS prior to implementation or "precautionary" coordination to avoid these sensitive sites.

REQUIRED STRATEGIES & EFFECT DETERMINATION			
A. Required Strat	A. Required Strategies		
Based on the information submitted, the following strategies are required to be implemented to avoid adverse effects to the species listed above. The strategies listed below must be incorporated into the specifications, conservation plan, layout and/or specifications.			
Practice	Required Additional Strategies for Practice Implementation		
Firebreak (394)	This practice occurs within an Indiana and/or northern long-eared bat maternity colony or hiber-naculum area. The USFWS must be contacted prior to any tree removal associated with this practice. Additionally, any approved tree removal shall only be conducted between November 15th and March 31st. Coordinate with the KY NRCS State Biologist to avoid important trees/areas prior to removal.		

Hibernaculum and Maternity Review Protocol

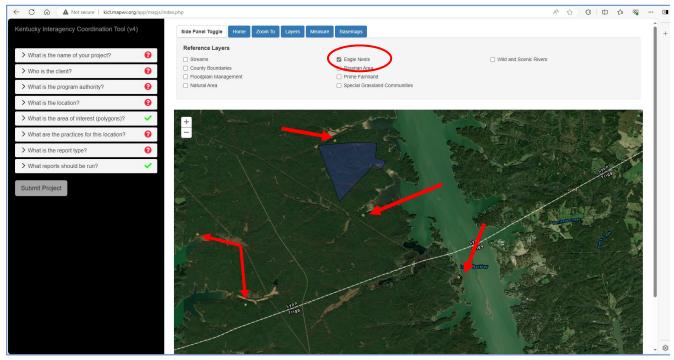
For the current version of the KICT, if this avoidance strategy is encountered, the protocol will be as follows:

- 1. Determine if there are any other available alternatives to avoid tree removal via practice substitutions, application methods, differing locations, etc.
- 2. After alternative avoidance measures have been exhausted, or if alternatives are not available stop the planning process.
- 3. The field planner will complete the KICT ESA Review Request form by logging into the KICT website at Kentucky Interagency Coordination Tool (mapwv.org). Select the *Generate* link under the **ESA Form** adjacent to the report on the homepage that requires review. Complete the information required on the form.
- 4. An email to the State Biologist is generated that contains the form, shape files and other relevant information. Once this form is received, the State Biologist may take one or more actions including scheduling a site visit with NRCS/USFWS/landowner or decision maker, approving the project through discussion with USFWS, or other appropriate action including consultation. The State Biologist will work directly with the planner to determine next steps.
- 5. Once decisions are made, the State Biologist uploads the signed documents to the KICT and the link on the KICT changes to *Final*. An email is sent to the planner that review is complete, and the form may be printed or saved into the appropriate location (i.e. document management system, file, etc.). The form will always remain stored on the KICT.

Working with Eagles (BGEPA)

Technically, eagles do not fall under the ESA but are subject to the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA). For consistency in the KICT, eagles are considered in the same way as species under the ESA. The recommendations provided by the tool are derived from the National Eagle Management Guidelines. This is a set of broad national recommendations used to advise landowners, land managers, and others who share public and private lands with bald eagles when and under what circumstances the protective provisions of the BGEPA may apply to their activities.

When launching the KICT tool, the layer that shows the eagle nest locations is turned off by default; it is not necessary for the layer to be turned on for eagles to be considered by the tool. The tool utilizes the locations even though the layer is turned off and not visible to the user. To display eagle nest locations within the tool, click the Layers button and select *Eagle Nests*. The user may be required to zoom in and reduce the scale to see the yellow dots that represent known eagle nest sites.



Note the yellow icons indicating known eagle nesting sites. These may be turned on and off by using the blue LAYERS button.

Eagle management guidelines are based on known nest locations. If practices are submitted that could affect a known eagle nest, the KICT will require additional strategies. These strategies are designed to avoid audible or visual disturbance during the nesting season. If a query is performed and the report indicates that an eagle nest has the potential to be disturbed, the map should be utilized to determine the exact location of the nest. Strategies required by the KICT will reference distances from the location indicated on this map. This location should be transposed (where applicable or feasible) to any conservation plan maps. The strategies required should then be incorporated into plan specifications. *Note the location of the eagle nests on the map above. In this example the known nests are north, south and west of the AOI*.

Most often the avoidance measures for eagles consist of altering the timing of practice installation. Since breeding and nesting occurs in the winter and early spring the implementation of common agricultural practices should not be affected. For the most part, conservation practices that are not directly in sight lines or cause audible disturbance within a specified distance from nests need not alter their implementation. The measuring tool in the KICT may be useful to determine the nest distances from the planning unit. The most drastic alternative strategy is the creation of some permanent or temporary buffer between the practice and nest site using trees or other natural or man-made barrier. This type of avoidance measure should be extremely rare.

If practices or activities are determined to cause disturbance to eagles, the protocol for May Adversely Affect (MAA) to eagles will be the same for species listed under the ESA. If the disturbance is unavoidable, refer to the consultation screening protocol for KICT ESA reviews.

Example

Baumpie		
REQUIRED STRATEGIES & I	EFFECT DETERMINATION	
A. Required Strategies		
Based on the information submitted, the following strategies are required to be implemented to avoid adverse effects to the species listed above. The strategies listed below must be incorporated into the specifications, conservation plan, layout and/or specifications.		
Practice	Required Additional Strategies for Practice Implementation	
Forest Trails and Land- ings (655)	No clear cutting or removal of overstory trees within 330 feet of the nest at any time. Avoid timber harvesting operations, including road construction and chainsaw operations during the breeding season within 660 feet of the nest. All selective thinning and other silviculture management practices should be undertaken outside the breeding season (Eagle breeding season occurs February 1 through June 1).	

ESA Final Effect Determinations

The final Effect Determination is the end-result of the KICT query process. It is in an enclosed box at the end of Section B in the module report entitled *Effect Determination*. Planners do not have the ability to directly alter the final determination of any query. The results are based on individual analysis of conservation practices in conjunction with a species or habitat. In Kentucky, there are three possible final Effect Determinations of any ESA/BGEPA query:

No Effect (NE)	
Not likely to Adversely Affect (NLAA)	NLAA & MAA are official ESA determinations where
May Adversely Affect (MAA)*	resources or species are likely present and/or affected.

^{*} This determination occurs when one or more of the conservation practices submitted specifically requires consultation or one or more of the required strategies cannot be implemented. Eagles may also receive an MAA determination if the practice installation is audibly or visually disturbing to nesting eagles even though they are not subject to the ESA.

Below are examples of the three-possible final *Effect Determination* outcomes from the KICT:

No Effect (NE) – This determination results when a species may be present, but the practices entered have no potential adverse or beneficial effect to that species or habitat.

REQUIRED STRATEGIES & EFFECT DETERMINATION

A. Required Strategies

Based on the information submitted, the following strategies are required to be implemented to avoid adverse effects to the species listed above. The strategies listed below must be incorporated into the specifications, conservation plan, layout and/or specifications.

Practice	Required Additional Strategies for Practice Implementation
N/A	None

B. Effect Determination

It has been determined that if <u>all</u> the required additional strategies listed above are implemented, the activities described are <u>No Effect (NE)</u> to the species or it's habitats. If practices are added, quantities, locations or other significant changes occur prior to installation, conservation planners must revise and resubmit this data.

NOTE: If <u>any</u> of the required strategies listed above cannot be implemented, or the strategy specifically requires coordination or consultation with USFWS the proposed practice is determined as May Adversely Affect (MAA) as a direct or indirect result of implementation and will then require consultation with U.S. Fish and Wildlife Service. Contact the NRCS state biologist for ANY practice that is discovered to require incidental tree removal between April 1 and November 14.

Therefore, there will be no additional strategies listed nor will there be potential benefit for NE determinations. No further ESA considerations are required. However, if listed species are encountered during implementation or practices change prior to installation, the query should be resubmitted.

Not Likely to Adversely Affect (NLAA) – This determination results when a species or habitat is likely to be present or affected and the practices will have an effect, either beneficially or adversely. This determination occurs when either:

- all the listed avoidance strategies can be implemented; and/or
- when no avoidance strategies are required or identified, but the practice(s) provide identified benefits to a species or habitat.

REOUIRED STRATEGIES & EFFECT DETERMINATION

A. Required Strategies

Based on the information submitted, the following strategies are required to be implemented to avoid adverse effects to the species listed above. The strategies listed below must be incorporated into the specifications, conservation plan, layout and/or specifications.

Practice	Required Additional Strategies for Practice Implementation
Pipeline (516)	During practice installation, implement measures to ensure that the transport of excess nutrients, sediments, pesticides or toxic substances to streams, wetlands and adjacent waterbodies does not occur.

B. Effect Determination

It has been determined that if <u>all</u> the required additional strategies listed above are implemented, the activities described are <u>Not Likely to Adversely Affect (NLAA)</u> to the species or it's habitats. If practices are added, quantities, locations or other significant changes occur prior to installation, conservation planners must revise and resubmit this data.

NOTE: If <u>any</u> of the required strategies listed above cannot be implemented, or the strategy specifically requires coordination or consultation with USFWS the proposed practice is determined as May Adversely Affect (MAA) as a direct or indirect result of implementation and will then require consultation with U.S. Fish and Wildlife Service. Contact the NRCS state biologist for ANY practice that is discovered to require incidental tree removal between April 1 and November 14.

Planners should ensure that if additional strategies are identified, they can be implemented and are agreed to by the client. Therefore, this process should be run as early in the planning process as possible. Also, make sure that one or more of the required additional strategies does not specifically require consultation with USFWS. The report should then be incorporated into the EE and filed as supporting documentation of compliance with ESA and NEPA.

This determination is common. Often it means that conservation of listed species is being accomplished as opposed to potential destruction of habitat. Review the strategies listed and determine if they are reasonable and appropriate. If there are still concerns about practice impacts or requirements contact the KICT Area Representative.

May Adversely Affect (MAA) – This determination results when a proposed practice is likely to adversely affect a listed species or its habitat as a direct or indirect result of implementation. Usually, consultation with USFWS is required. The KICT does not provide a direct final determination for May Adversely Affect (MAA). This determination occurs when one or more of the conservation practices submitted:

- specifically requires consultation; or
- one or more of the required strategies cannot be implemented.

REQUIRED STRATEGIES & EFFECT DETERMINATION

A. Required Strategies

Based on the information submitted, the following strategies are required to be implemented to avoid adverse effects to the species listed above. The strategies listed below must be incorporated into the specifications, conservation plan, layout and/or specifications.

Practice	Required Additional Strategies for Practice Implementation		
Prescribed Grazing	The placement or application of this practice shall not be within 50 feet of streams, wetlands or other permanent waterbodies.		
(528)	Practice shall only be installed or applied in existing actively managed pasture, hayland or other grassland system (this includes farm headquarters areas).		
Pipeline (516)	During practice installation, implement measures to ensure that the transport of excess nutrients, sediments, pesticides or toxic substances to streams, wetlands and adjacent waterbodies does not occur.		
Pond (378)	Coordination or consultation with USFWS is required. Contact the NRCS State Biologist to initiate the consultation process.		

B. Effect Determination

It has been determined that if <u>all</u> the required additional strategies listed above are implemented, the activities described are <u>May Adversely Affect</u> (MAA) to the species or it's habitats. If practices are added, quantities, locations or other significant changes occur prior to installation, conservation planners must revise and resubmit this data.

NOTE: If <u>any</u> of the required strategies listed above cannot be implemented, or the strategy specifically requires coordination or consultation with USFWS the proposed practice is determined as May Adversely Affect (MAA) as a direct or indirect result of implementation and will then require consultation with U.S. Fish and Wildlife Service. Contact the NRCS state biologist for ANY practice that is discovered to require incidental tree removal between April 1 and November 14.

Less than seven percent of all possible species-practice combinations require coordination and/or consultation. Planners should consider using alternative practices that may solve resource concerns but not have adverse effects to species requiring coordination and/or consultation. If those alternative practices exist, re-evaluate them through the KICT.

If the KICT report results in a May Adversely Affect (MAA) determination, the planner is to stop the planning process and follow the procedure outlined in the ESA Consultation Screening Protocol. Until a resolution can be established, no further financial or technical assistance may be offered to the client. The exception to this policy applies to HEL and WC planning only. In this case, NRCS should inform the landowner that protected species may be impacted and continue to provide planning assistance. The landowner is solely responsible for obtaining any permits. Planners should document how the information was presented to the landowner in the technical assistance notes.

Multiple Species Findings and Determinations

It is possible (and likely) that multiple species may be identified in one query which are potentially affected in different ways thus yielding different final determinations. Some practices submitted may result in a No Effect (NE) on one or more of the species identified while others could potentially be adverse or beneficial to those same species. All species that were identified as potentially affected will appear on the

report. However, the Final Determination and report will reflect only the specie(s) that are likely to be affected (i.e. NLAA or MAA).

For instance, a query could result in Kentucky glade cress, globe bladderpod, and running buffalo clover within or near an AOI. A user has planned three different conservation practices. None of those practices have any effects (beneficial or adverse) on either Kentucky glade cress or globe bladderpod. However, running buffalo clover is affected by one or more of the conservation practices. All running buffalo clover avoidance strategies, benefits, etc. will be identified throughout the remainder of the report. Therefore, running buffalo clover will be listed as Not Likely to Adversely Affect (NLAA) in the final Effect Determination section of the report. Separate determinations for the other species are not provided by the KICT even though they were identified because the practice was evaluated as No Effect (NE) to those species. Practices have different effects to different listed species and a change to one or more of those practices that previously had No Effect may now require an avoidance strategy(s). For this reason, it is important for planners to understand that a KICT <u>query must be resubmitted if planned conservation practices change</u> during the planning process or prior to implementation. This is especially true if the query resulted in multiple species findings.

ESA Management Recommendations

Management considerations are identified in Section III of the KICT report. They are provided to alert the user to other species or information that may affect a planned practice, special habitats or other relevant information within or near the AOI. **This information is not required to be implemented by the client.** As the KICT evolves, this section may provide a wider variety of topics and could include species of concern identified by the State of Kentucky or other information. This section of the module report has the following statement:

The following are considerations that may be used to support conservation activities but <u>are not required</u> to avoid adverse effects. When possible, utilize these recommendations during conservation planning of this area:

The recommendations given are very broad NRCS conservation practice-based statements. This section is specifically designed to remind planners of specific ecotypes or species of interest. As the KICT evolves, this section will list additional resources that could be relevant within or surrounding the AOI, such as prairie remnants, glades, barrens or other rare ecotypes and species. Not all reports will have management recommendations. If they are present, the section then lists a table with the item and the strategy identified in the adjacent column. If there are no management recommendations the report will list the table as **N/A** or **None**.

In the example below, this statement would remind the planner that a fence used to facilitate a buffer and located some distance away from a protected resource would be more beneficial if the buffer width was increased and practices that provide buffers in general are beneficial to this species.

MANAGEMENT RECOMMENDATIONS		
The following are considerations that may be used to support conservation but are <u>not required</u> to avoid adverse effects. When possible, utilize these strategies during conservation planning of this area:		
Practice	Management Recommendations	
Fence (382)	Larger than required buffers are more beneficial to the species and may aid in its recovery.	
Forest Stand Improvement (666)	This area could support the golden-winged warbler. Uneven aged timber management and early successional habitat above 1500 feet in elevation favors habitat for this rare songbird. Contact the KDFWR for information or NRCS for conservation practices that are beneficial to its habitat.	

Some practices could list a management recommendation suggesting inspection of the area for evidence of existing or historic populations as shown below.

Example

MANAGEMENT RECOMMENDATIONS The following are considerations that may be used to support conservation but are <u>not required</u> to avoid adverse effects. When possible, utilize these strategies during conservation planning of this area:	
Prescribed Grazing (528)	If possible, qualified personnel should inspect for evidence of existing or historic populations of listed species prior to installation or application.

This recommendation is not required but provided to inform planners that, as a courtesy, the agencies are requesting more information or require additional data concerning a protected species.

Planner's Note:

This should be a low priority for field offices. If investigation is desired, contact the State Biologist to determine the appropriate method and points of contact. This may be the Farm Bill partner biologist. Planners should always obtain the permission of the landowner to allow investigation. Written authorization from the client for investigation is not required as it is for consultation; but it should at least be documented in the assistance notes.

ESA Module Potential Benefits

The *Potential Benefits* section of the report lists possible benefits that could be realized by the conservation practices submitted. A benefit to a species is defined in this document as an advantage realized by the species in either habitat suitability or potential population growth, occurring within a designated habitat, when the practice was installed for a specific purpose. Not every benefit may be applicable to every

instance of a species-practice combination. Planners will need to determine which benefits apply to which circumstances. Sometimes multiple benefits may apply to a single practice, while other times no benefits may apply. Planning conditions and resource concerns are varied, and the benefits are expressed as generalized statements and leave their interpretation open to the planner. It is important to remember that potential benefits are contingent upon implementation of any avoidance measures and proper application and maintenance of practices according to the NRCS standard.

Example

POTENTIAL BENEFITS	
If all avoidance and required measures are implemented as outlined in this report, the following practices may beneficially affect species or their habitats.	
Practice	Potential Benefits Provided by This Activity
Prescribed Grazing (528)	This practice may be beneficial if it is installed for the purpose of reducing or eliminating animal wastes, sediment, pesticides, or other pollutants from a surface water resource such as a stream or wetland containing listed species or potentially occupied habitat.
Fence (382)	This practice may be beneficial if it facilitates exclusion of people, vehicles, livestock or equipment to resources used by the species or potentially occupied habitats of listed species.

In the example above, two practices provide potential benefits. Depending upon the purpose of the conservation plan the benefits listed may or may not apply.

Presently there is not a way for the tool to determine under what circumstances practices are applied without a substantial increase in user input. NRCS planners are currently under no requirement to track the benefits reported by the KICT. However, it is suggested that local field offices have an awareness of broad benefits realized by conservation practices within their areas of responsibility. But for some resources, the KICT can help determine if conservation practices planned and applied through Farm Bill programs do provide benefits to listed resources. Questions regarding potential benefits are common in most Farm Bill ranking criteria for resources such as T&E species and Air Quality. In the past, this question was often subjective and may not have been applied uniformly among field offices throughout the state. Using the benefits listed in the KICT report, it may be possible to determine if practices influence these resources and if it would be appropriate to utilize as justification for giving ranking points to a Farm Bill application. If a field office chooses to utilize this justification of benefit to rank a client for program participation, the report must then be retained and implemented according to the avoidance measures. It is recommended that conservation assistance notes be recorded as to the application of which benefits apply and the supporting rationale. Also, to claim benefits, the avoidance measures identified in the report must be implemented by the client.

Coordination of Benefits

Benefit coordination refers to situations in which the effects of a practice have been identified, and coordination with USFWS is encouraged but is not required. This assures the practice is implemented to attain the maximum benefit to the species. For example, coordination should occur in situations where practices are implemented for the specific benefit of a species (i.e. habitat restoration). Planners and clients may

also simply choose to coordinate benefits with the USFWS to gain additional knowledge or include other partner resources. This benefit statement is left very broad to cover most of these scenarios. In these cases, the following statement will appear in the Potential Benefits section of the KICT report:

This practice may be beneficial if planned and conducted in coordination with USFWS for benefit of the species. Contact the NRCS State Biologist to initiate these efforts.

In most instances the State Biologist coordinates benefits and reviews practices annually in the conditions of the programmatic agreement. So, it is usually not necessary for field staff to be overly concerned with benefit coordination. Coordination of benefits may mean different things depending on the specie(s) and circumstances involved. Recommendations from the USFWS can vary widely and range from recommending a practice implementation timeframe to simply requesting notification when efforts are being conducted in a certain area.

In most instances the statement means that there could be potential benefits if the practice was installed using special considerations or resources that the USFWS possesses (e.g., the actual population locations, species natural history knowledge, etc.). Additionally, it may refer to the desire of the USFWS to coordinate efforts to protect, enhance, and restore habitats for an area or species. This allows multiple agencies to participate and track efforts to conserve federal listed species and move ultimately toward delisting. Whenever possible, all conservation efforts affecting listed species should be coordinated with partner agencies. Some examples of benefit coordination may include:

- tracking of conservation activities in an area (i.e. watershed) of concern or critical habitat by an agency
- assistance with species of concern (e.g., copperbelly watersnake)
- reporting of progress toward delisting and implementation of a recovery plan item by USFWS
- recommended timing or notification of practice implementation
- specific modification to a conservation practice or specification
- investigation of the area by USFWS biologist to determine local habitat/populations
- additional technical assistance by endangered species and/or partner biologists
- providing existing population location information
- additional/potential financial assistance
- educational benefits

If the coordination statement is listed on the report in conjunction with required consultation with the USFWS, it means that the overall impact to the species will likely be beneficial in most circumstances because of consultation.

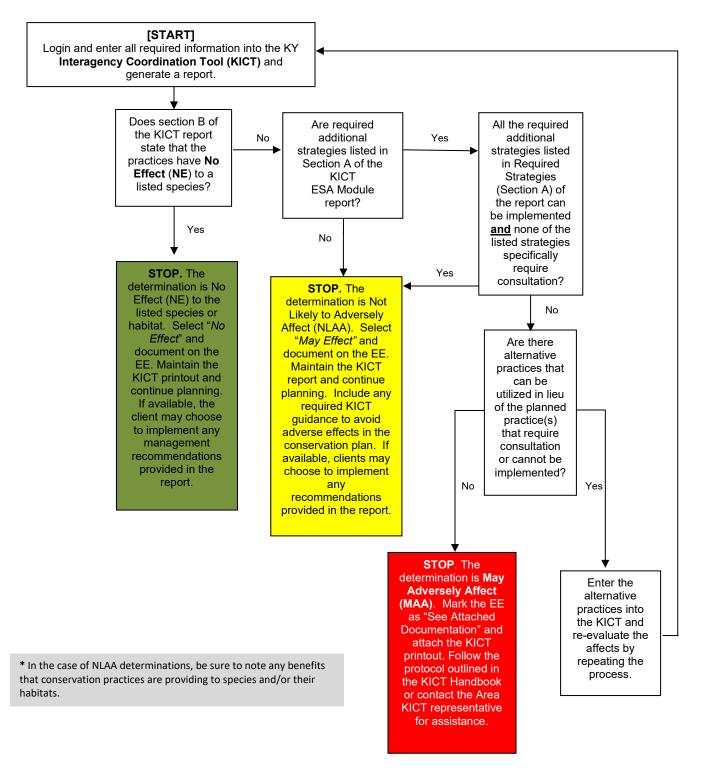
Planner's Note:

Coordination of benefits without formal consultation should be **a very low priority** for field offices. If coordination is still desired or necessary, contact the State Biologist to determine the details of the project and determine if coordination is warranted. Planners should always obtain the permission of the landowner to coordinate benefits beforehand. Written authorization from the client for coordination of benefits is not required as it is for consultation; but it should at least be documented in the assistance notes.

Planning for Species of Concern

There may be some species that are identified within the KICT that are not an officially listed species protected under the ESA. Examples may be State Species of Greatest Conservation Need (SGCN), species proposed for listing, or other species identified as being regionally significant. NRCS has agreed to consider these and other species in conservation planning and to always conserve where possible and avoid when practical. The KICT will provide an ESA determination just as other species even though consultation is not required under the ESA. If planners receive a consultation requirement for a species of concern or a species that is not subject to the ESA, the protocol for review will be the same as for those species listed under the ESA. The difference will be that those KICT review requests will be managed by the State Biologist and returned to the planner without input from the USFWS.

ENDANGERED SPECIES ACT & BGEPA (ESAM) REPORT DECISION DIAGRAM



For HEL and WC planning only, NRCS should inform the landowner if protected species may be impacted and continue to provide planning assistance. The landowner is responsible for obtaining any take permits.

X. ENVIRONMENTAL JUSTICE MODULE (EJM)

Environmental Justice Module (EJM) Description

Environmental Justice is described fully in EO 12898, 190-GM, Part 414.30 and Departmental Regulations. The supporting document for this module is in Section II of the Field Office Technical Guide entitled *Kentucky NRCS Conservation Practice Effects on Environmental Justice - for Conservation Planning and Program Implementation*. This document does not provide policy but a method to comply in good faith with NRCS policy found in 190-GM, Part 414.30.

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation, and the enforcement of environmental laws, regulations, and polices. Historically, low-income, minority and indigenous populations have carried some of the greatest human health and environmental burdens.

In 1994, Executive Order 12898 was issued in order to focus Federal attention on the environmental and human health conditions in these communities with the goal of achieving environmental justice. The primary means to attain compliance with environmental justice considerations for NRCS is:

- 1. Assessing the presence of environmental justice communities in a project area that may experience disproportionately high and adverse human health or environmental effects, and;
- 2. The inclusion of low-income, minority, Tribal, or other specified populations in the planning process where appropriate.

Environmental Justice is often difficult to determine for NRCS since most Farm Bill programs and conservation planning has very localized impacts where participants apply for assistance through voluntary programs and effects are localized to single clients and families. However, it is NRCS' responsibility to ensure that programs and practices are provided on an equal opportunity basis and the opportunity for low income or minority populations to have a voice in the administration of those programs.

One method NRCS has utilized to comply with the requirements under environmental justice is by holding State Technical Committee meetings (and local workgroups) where the public and all interested stakeholder groups are invited to provide input to NRCS practices, projects and efforts. These outreach efforts provide a good venue for input at a broad regional or state scale. However, environmental justice is more difficult to evaluate or determine in context at the planning and field level scales. This module attempts to provide a broad-based context that gives planners some information to make an evaluation of environmental justice at the field planning level.

Interpreting the Environmental Justice Module Results

Kentucky NRCS has identified three components where conservation planning (although localized) is offered, and planners are informed of possible outreach opportunities and methods to comply with policy. These component areas represent identified locales that meet the spirit and intent of the Departmental policy, Executive Order and provide a ready means of identification for planners at the local level. These include:

- 1. Climate and Economic Justice Disadvantaged Communities
- 2. Minority Populations
- 3. Low Access Food Areas (i.e, Food Deserts)

These areas are simply identified to make planners aware that the project they are working with may or may not include populations that are affected by these designations. While this module may make a screening or preliminary determination of effect, the planner and/or Responsible Federal Official is solely responsible for determining the context, scope, and impacts based on experience and professional judgment.

To implement the results of the KICT, planners must be able to interpret the information provided and, if necessary, convey that information to other planners, or the client. Once an Environmental Justice Module (EJM) query is returned, users should determine if a project:

- 1. contains one of the identified Environmental Justice areas;
- 2. determine if the considerations are appropriate at the scale, context and amount at the planning level intended;
- 3. determine if other measures are appropriate such as outreach, specialized marketing or other program considerations; and
- 4. apply any identified measures and document all Environmental Justice outcomes.

This module provides limited impact information along with presence/absence data and a few considerations for application. Results provided by the KICT include data obtained from the US Census Bureau, the US Department of Agriculture, US Environmental Protection Agency, and the USDA – Economic Research Service. The tool looks at the following factors¹:

- 1. Climate and Economic Justice Disadvantaged Communities In January 2021, the Justice40 Initiative (J40) was established under Executive Order (EO) 14008. The EO states that to secure an equitable economic future, the U.S. must ensure environmental and economic justice are key considerations in governance. J40 mandates 40% of the benefits of certain federal investments flow to disadvantaged communities that are marginalized, underserved, and overburdened by pollution. Federal agencies have listed J40 'covered programs,' which are programs that make investments in seven categories: climate change; clean energy and energy efficiency; clean transit; affordable and sustainable housing; training and workforce development; remediation and reduction of legacy pollution; and development of critical clean water and wastewater infrastructure. The NRCS J40 covered programs are: Agricultural Conservation Easement Program, Agricultural Management Assistance, Conservation Technical Assistance, Conservation Stewardship Program, Environmental Quality Incentives Program, Healthy Forest Reserve Program, Joint Chiefs Landscape Restoration Partnership, Regional Conservation Partnership Program, Urban Agriculture and Innovative Production (OUAIP), Watershed and Flood Prevention Operations, Watershed Rehabilitation Program.
- 2. **Minority Populations** are the individuals in a census group who list their racial status as a race other than white alone and/or list their ethnicity as Hispanic or Latino². That is, all people other

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¹ Definitions come from the Environmental Protection Agency EJScreen tool (https://www.epa.gov/ejscreen), the U.S. Census (https://www.census.gov/), and the USDA – ERS Food Access Research Atlas (https://www.ers.usda.gov/data-products/food-access-research-atlas/).

² Race and ethnicity definitions may be found https://www.census.gov/topics/population/race/about.html.

- than non-Hispanic white-alone individuals, with 'alone' used here to denote a single race or ethnicity.
- 3. Food access is access to supermarkets, supercenters, grocery stores, or other sources of healthy and affordable food. **Low Access Food Areas** are a census tract with at least 500 people, or 33 percent of the population, living more than 1 mile (urban clusters or areas) or 10 miles (rural areas) from the nearest supermarket. Urban and rural are defined by the Census Bureau³ where rural areas are sparsely populated areas with fewer than 2,500 people, and urban clusters or areas are areas with more than 2,500 people. Here, a census tract is urban if the geographic centroid of the tract is in an area with more than 2,500 people; all other tracts are rural.

These areas are simply identified to make planners aware that the project with which they are working may or may not include populations that are affected by these designations. In addition, resulting identification of one of these communities does not constitute the eligibility for any special consideration by USDA program participation. Eligibility for these considerations is determined using other processes. While this module may make a screening or preliminary determination of effect, the planner and/or Responsible Federal Official is solely responsible for determining the context, scope, and impacts based on experience and professional judgment.

The following are examples of possible outcomes in of the KICT EJM module report. One or more of these potential impacts could appear on reports.

If there are no special environmental justice areas within the AOI, the KICT output in the first section of the report will state the following:

Example

POTENTIAL IMPACT INFORMATION

The area submitted may occur within or near the following Environmental Justice special consideration area(s):

None

Based on the information submitted, the following potential impacts should be considered:

None

The output above indicates that a special environmental justice area in KY does not appear to be in or near the AOI and that no special emphasis communities would potentially be affected by the practices. The planner may document and proceed. Users must always analyze this finding at the plan level by evaluating the conditions at the local community.

An environmental justice area is identified and the KICT output does not identify any potential impacts:

³ https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural.html

POTENTIAL IMPACT INFORMATION

The area submitted may occur within or near the following Environmental Justice special consideration area(s):

Low Access Food Area, Minority Populations

Based on the information submitted, the following potential impacts should be considered:

None

This indicates that the AOI contains, or is in very close proximity to, an Environmental Justice Area(s) (Low Access Food Area and Minority Populations) and the practice(s) selected have no potential adverse effect to them. Planners should proceed to subsequent sections of the report to review any other relevant information.

Potential Adverse Effects

While there is some potential for adverse effects to Environmental Justice at the scale and scope of conservation planning, the likelihood of adversely affecting communities is relatively low since application of most conservation practices are localized and selected based on site conditions and ownership. However, there are practices that when implemented have the potential to affect offsite conditions. It is important to realize the scope and context of implementation of conservation plans and practices as well as their potential effects. The awareness of the community type and how the practice affects the larger picture is important to understand. Practices that have impacts in three important areas are more likely to have adverse effects depending on the context. These are:

- practices that facilitate landuse changes and conversions
- practices that have a potential for broad scale or complex scope of impacts
- practices that are implemented or have the potential to be implemented in a controversial manner

The KICT will alert planners of the potential of some of these practices in certain settings. However, it is the responsibility of the planner to ultimately determine the impacts and their effects as any practice could potentially have adverse effects to environmental justice under the right circumstances and conditions.

Shown below, the AOI contains, or is near special environmental justice areas and the potential adverse effects are identified as follows:

POTENTIAL IMPACT INFORMATION

The area submitted may occur within or near the following Environmental Justice special consideration area(s):

Low Access Food Area, Minority Populations

Based on the information submitted, the following potential impacts should be considered:

There may be a potential for landuse changes and conversions.

There may be a potential for broad or complex scope of impacts

This example shows that there is a potentially adverse impact associated with the installation of the practice(s) to two special environmental justice areas. Planners need to proceed to the following sections of the report to determine if these impacts apply and considerations to address them.

There may be reports generated that have identified a special environmental justice area(s) within or near the AOI, however no adverse impacts are identified. There still may be considerations provided by the KICT to make the planner aware of any potential information that could have an effect on implementation. If there are no potentially beneficial effects provided the report will yield a No Effect (NE) Determination.

Environmental Justice Considerations

Once it has been determined that a practice(s) could impact environmental justice, planners should refer to the *Considerations & Effect Determination* section of the KICT EJM report for measures to consider that would help planners apply conservation with respect to environmental justice. It is critical that planners understand the considerations listed in Section A. The implementation of considerations is not mandatory but should be analyzed to ascertain their applicability based on scope and context. Impacts to environmental justice are more likely to occur when conservation practices have a very broad scope or involve large land clearing projects. The considerations for practice implementation are found in the *Avoidance Measures & Effect Determination*, Section A, of the report.

Example

	CONSIDERATIONS & EFFECT DETERMINATION	
A. Considerations Based on the information submitted, the following should be considered to for the practice(s) shown. Consider the context of installation based on the community or area type and the scale of impact (e.g. local, single farm installation versus regional installation covering several landowners/clients).		
	Composting Facility (317)	Clients in this area may have a difficult time accessing affordable and nutritious food because they live far from a supermarket and/or do not have easy access to transportation. Consider implementing agricultural practices that alleviate clients from total reliance on supermarkets and ensure that healthy foods may be produced locally.

In this example the conservation practice Composting Facility (317) would have a statement that should be considered for implementation. It encourages planners to think about the accessibility of locally grown

foods and practices that could encourage the production of food in an area designated as low access (food desert).

Environmental Justice Effect Determination

The Considerations & Effect Determination, Section B, of the KICT EJM report is a tentative effect determination. It is important to understand that this determination may not be final. The Final Determination may differ depending upon many factors depending upon the quantity location, context, and scope of impacts. Planners must verify these factors based upon the local knowledge and context of the project. Once analyzed in context, the final determination should be recorded in all appropriate environmental documentation. If other practices are added, quantities, locations or other significant changes occur prior to installation, conservation planners should revise and resubmit this data to the KICT accordingly.

This section of the report is the determination of the project based on practice implementation and application of any avoidance measures. This determination should be used to document the effect on the Environmental Evaluation (EE). There are two possible determinations that may result from the KICT EJM report. They are as follows:

- 1. No Effect (NE)
- 2. May Affect (MA)
- 1. No Effect (NE) or there are no Environmental Justice Special Areas within the AOI

Example

B. Effect Determination (*Tentative*)

It has been determined that the activities submitted could have a **No Effect (NE)** determination on Environmental Justice as described in the Executive Order 12898 and 190-GM, Part 414.30. This determination is offered as a screening only and should be reviewed in the context of application and may or may not apply.

In this example, the KICT may have identified an environmental justice special area within or near the AOI, but the practices implemented will have no effect; or there were no environmental justice special area(s) near or within the AOI. Many practices that result in NE determinations could still have an affect based on context and the scope of implementation. Always field verify and evaluate the practice based on the context. The resulting determination should be documented on the EE according to policy.

Note: There may be reports generated that have identified a special environmental justice area(s) within or near the AOI, however no adverse impacts are identified. The KICT may still provide considerations to make the planner aware of any potential information that could have affect to implementation in that special area. If there are also no potentially beneficial effects provided, the report will also yield a No Effect (NE) Determination.

2. May Affect (MA)

Example

B. Effect Determination (Tentative)

It has been determined that the activities submitted could have a **May Affect (MA)** determination on Environmental Justice as described in the Executive Order 12898 and 190-GM, Part 414.30. This determination is offered as a screening only and should be reviewed in the context of application and may or may not apply.

This determination indicates that there are practice and resource combinations that could potentially have an effect on environmental justice. These effects can be entirely adverse, entirely beneficial, a mixture of both or may not apply at all. Planners must verify the applicability of this determination at the field planning level and in all appropriate contexts. The resulting determination should be documented on the EE according to policy.

Environmental Justice Adverse Impact Protocol

The KICT will not provide a final determination of effect for Environmental Justice. As with most modules in the KICT, the determination provided is a screening action that alerts the planner to potential effects caused by practice implementation. It is solely the responsibility of the planner and Responsible Federal Official to analyze the project in context of the setting, scope, and other factors to determine the final effect.

In the opinion of the planner, if there is evidence that an adverse effect to one or more components of Environmental Justice and the planner anticipates that the mitigation considerations offered do not satisfy those adverse effect concerns, the following protocol should be followed:

- 1. If the planner/Responsible Federal Official (RFO) determines that the client's proposed action may adversely affect Environmental Justice and the action(s) have been analyzed in all contexts, the planner should document the rationale thoroughly in the Conservation Assistance Notes and record any other supporting information such as photographs, statements or data.
- 2. Document any potential alternatives attempted to avoid the adverse action in the Conservation Assistance Notes.
- 3. Record *May Affect* on the Environmental Evaluation and any other NEPA documentation. Mark the Environmental Justice Special Environmental Concern as "Needs Further Action" and contact the NEPA coordinator for further guidance and assistance.

Potential Benefits to Environmental Justice

The section of the EJM report entitled *Potential Benefits* lists possible benefits that could be realized by the conservation practices listed. A benefit to environmental justice is defined in this module as conditions when a practice may provide an environmental community benefit under specific circumstances and locations. This benefit may or may not apply depending upon many factors such as scope, context, amount, quantity, and other factors. Not every benefit may be applicable to every instance of a resource-practice combination. Planners will need to determine which benefits apply to which circumstances. Sometimes multiple benefits may apply to a single practice, while other times no benefits apply. Planning conditions

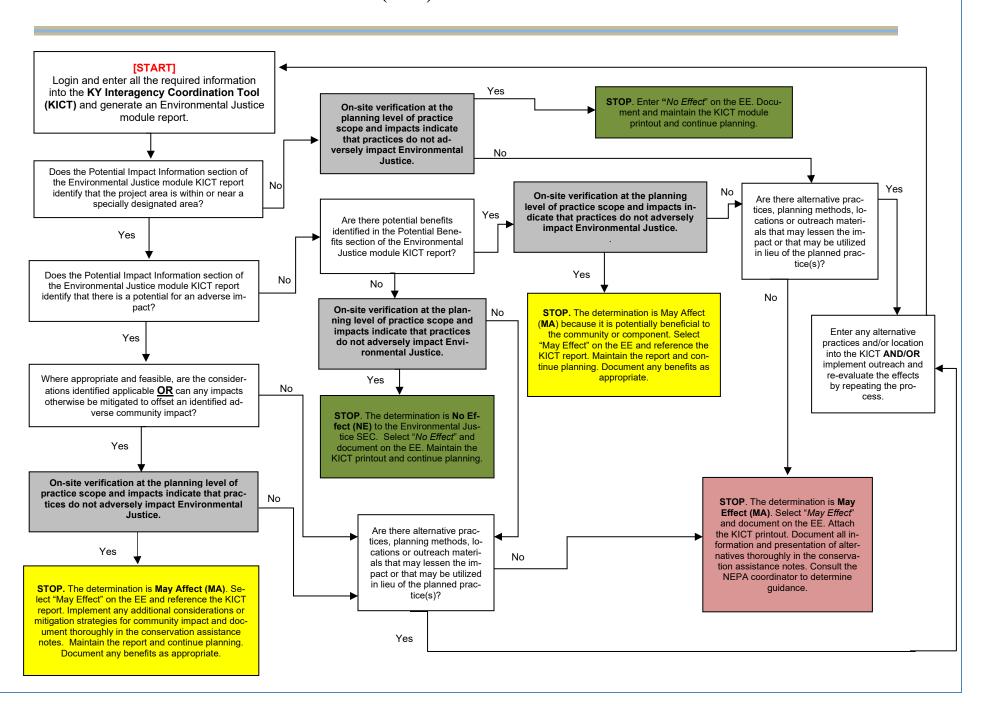
and resource concerns are varied so the benefits are expressed as generalized statements and leave their interpretation open to the planner. It is important to remember that potential benefits are contingent upon proper application and maintenance of practices according to the NRCS standards and quality criteria.

Example

POTENTIAL BENEFITS Some practices that may have potential benefits associated with them are as follows:	
Composting Facility (317)	This practice may have the ability to support or increase local food production and help communities provide additional food sources in an area designated as a Low Access Food Area.

In the example above, the practice may provide a benefit that aids local production of agriculture and the ability to increase production. This benefit may not be applicable for a single client that is not producing food for community consumption. However, if it is installed for the purposes of assisting the community locally (e.g. a local community cooperative) this practice, and benefit combination would be applicable.

ENVIRONMENTAL JUSTICE MODULE (EJM) REPORT DECISION DIAGRAM



XI. FLOODPLAIN MANAGEMENT MODULE (FPM)

Floodplain Management Module (FPM) Description

National NRCS policy should always be followed when handling floodplain resource issues. Potential impacts to floodplains are protected under Executive Order 11988 Floodplain Management. NRCS policy is described fully in the supporting document in Section II of the Field Office Technical Guide entitled Kentucky NRCS Conservation Practice Effects on Floodplains - for Conservation Planning and Program Implementation. These impacts were determined as the way floodplains could be affected by the methods in which the practice was installed, operated, or maintained.

Conservation planners must determine if planned conservation practices will influence base and critical action floodplains in Kentucky. Their findings are to be documented on the NRCS Environmental Evaluation form (EE). To help conservation planners in making these determinations, the Floodplain Management Module (FPM) was developed to assist in determining the effects. The report generated is proof of investigation under NEPA requirements and NRCS policy on floodplains found in 190-GM, Part 410, Subpart B, Section 410.25, and reflects Executive Order 11988 (E.O. 11988). The information regarding potential impacts or benefits may be utilized to document *de minims* effect or benefit, as applicable.

The FPM identifies potential impacts to floodplains and associated aquatic habitats. The tool uses likely locations of resources based on Federal Emergency Management Agency (FEMA) floodplain data within the Commonwealth and compares the location of those areas to a conservation practice matrix of predetermined data.

Potential adverse impacts to floodplains are grouped into six broad categories by the KICT. Multiple impacts may apply to a single area because of practice installation, and several may apply to multiple practices. The basic impacts to floodplains are as follows:

- 1. adversely affect the ecological function of the base floodplain
- 2. land use changes/conversions within the base floodplain
- 3. significant ground disturbance and/or fill within the base floodplain
- 4. development or placement of a structure(s), building, or facility within the base floodplain
- 5. alter the hydrologic function and/or water quality of the base floodplain
- 6. adversely affect the critical action floodplain

Interpreting the Floodplain Management Module Results

Potential adverse impacts are the basis of the final determination the KICT produces and are included in the reports to allow planners to understand why the avoidance strategies are required. To implement the results of the KICT, planners must be able to interpret the information provided and, if necessary, convey that information to the client by incorporation into specifications, designs, or maintenance of conservation practices. Once an FPM query is returned, users should determine if a project:

- 1) contains a base or critical action floodplain
- 2) determine if the landuse is compatible with E.O.11988

- 3) identify any avoidance measures
- 4) recognize any potential benefits provided by conservation practices

FPM Potential Impact Information

Potential adverse impacts to floodplains are grouped into five broad categories by the KICT. Four types apply to base floodplains and one applies to critical action floodplains. Multiple impacts may apply to base floodplains and several may apply to multiple practices. The impact categories are as follows:

A. 100-year interval return (Base Floodplain)

- 1. adversely affect the ecological function
- 2. land use changes/conversions
- 3. significant ground disturbance and/or fill
- 4. development or placement of a structure(s), building, or facility

B. 500-year interval return, (Critical Action Floodplain)

This practice may adversely affect the critical action floodplain (500-year interval return)

The following are examples of possible outcomes in of the KICT FPM module report. One or more of these potential impacts could appear on reports.

If there are no floodplains within the AOI, the KICT output in the first section of the report will state the following:

Example

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project area may occur within or near the following type of floodplain:

None

The following adverse impacts could potentially occur as a result of installation of one or more of the conservation practices listed:

None

The output above indicates that a floodplain does not appear to be in or near the AOI and that a floodplain will not potentially be affected by the practices. The planner may document and proceed. Users may verify this finding by highlighting the floodplain layer in the KICT and overlaying the project area. Always field-verify during planning.

A base or critical action floodplain is identified and the KICT output does not identify any potential impacts:

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project area may occur within or near the following type of floodplain:

100-year interval return

The following adverse impacts could potentially occur as a result of installation of one or more of the conservation practices listed:

None

This indicates that the AOI contains, or is in very close proximity to, a base floodplain and the practice(s) selected have no potential adverse effect to it. Planners should proceed to subsequent sections of the report to review any other relevant information.

The AOI contains, or is near, a base or critical action floodplain and potential adverse effects are identified as follows:

Example

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project area may occur within or near the following type of floodplain:

100-year interval return

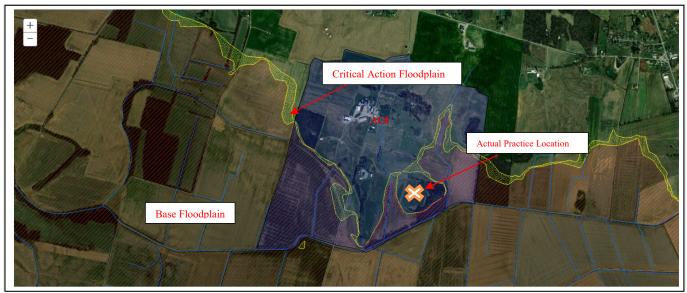
The following adverse impacts could potentially occur as a result of installation of one or more of the conservation practices listed:

There is a potential for activities to result in development or placement of a structure(s), building or facility within the base (100-year floodplain).

This example shows that there is a potentially adverse impact associated with the installation of the practice(s) to a base floodplain. Planners need to proceed to the following sections of the report to determine how to avoid these potential impacts.

Placement of Practices Outside the Floodplain

Often planners will receive an FPM report that identifies a floodplain is present within or near the AOI, however the actual placement of the practice is not located in the footprint of the floodplain. Planners should enable the *Floodplain Management* layer within the KICT to view the location and determine if planned practices are located within and/or effect the floodplain. Planners cannot view the layer until it is enabled.



This example shows that although the report identifies a potential effect to a floodplain, the placement of the practice is outside the critical action and base floodplains and therefore has no effect.

In the above example, the planner has submitted a query for Seasonal High Tunnel (X) in a field that contains a floodplain. However, during the planning process, it has been determined that the placement of that practice will be located outside of the base or critical action floodplain. Systematically verify the locations of any other practices in the same fashion and apply avoidance measures and benefits as applicable. If practices are verified to affect the floodplain, continue to other sections of the report to determine the effects, avoidance, benefits, etc.

It is important for planners to critically assess all the impacts of a practice even though its placement is verified to occur outside the critical action or base floodplains. This should include the impacts of installation, construction, operation, and maintenance. For example, a structure such as a waste storage facility may occur outside the floodplain, but the construction requires a sizeable amount of fill to be placed to facilitate installation. This fill may extend into the floodplain and/or alter the floodplain in some way. The operation and maintenance of the facility may also have impacts that should be considered as well. All these factors must be considered during planning and as such may require floodplain coordination or permits. This example would have a May Effect (MA) determination and should be documented on the environmental evaluation as such.

Floodplain Management Avoidance Measures

Once it has been determined that a practice(s) impacts a base floodplain, planners should refer to the *Avoidance Measures & Effect Determination* section of the KICT FPM report for methods to avoid impacts and the *Final Determination*. It is critical that planners understand implementation of the strategies listed in Section A **are required** to minimize or avoid adverse impacts.

If avoidance measures are presented, these strategies should be very carefully considered and if feasible, become part of the specifications for conservation practices (i.e. the conservation plan). In most instances, the avoidance measures are potential strategies to minimize the effects to base floodplains. It is more likely

for potential adverse effects to occur when practices involve development of structures, ground disturbing activities, creation of new agricultural lands, or large and broad scale projects such as landuse change.

Most of the strategies required are clear and concise. Typical avoidance measures may require planners to relocate practices or consider alternative strategies for fill placement. The additional strategies for practice implementation are found in the *Avoidance Measures & Effect Determination*, Section A, of the report.

If the KICT determines that there are strategies that should be considered to comply with NRCS Policy, Floodplain Management, and E.O. 11988, the table contains practices in the left column and the required strategy(s) adjacent to the practice. All strategies must be implemented as applicable.

Example

AVOIDANCE MEASURES & EFFECT DETERMINATION		
A. Avoidance Measures	A. Avoidance Measures	
Based on the information submitted, the following strategies should be considered to avoid adverse effects plain(s) for the practice(s) shown. If feasible, strategies listed below should be incorporated into the conservation layout/specifications and operation and/or management of the practice.		
Practice	Required Additional Strategies for Practice Implementation	
Composting Facility (317)	If there is a practicable alternate site, this practice shall be located outside the base (100yr) floodplain.	
	This practice should be designed and implemented to avoid and/or minimize the placement of fill within the base (100yr) floodplain.	

In this example the conservation practice Composting Facility (317) would have avoidance measures that should be considered for implementation. It encourages planners to consider and offer the client alternative sites for this practice. It also suggests that if an alternative location is not feasible it should be designed to minimize fills associated with the installation.

There are instances when the avoidance measures for practice implementation could require that planners contact the county floodplain coordinator. This would occur when a practice(s) could create significant disturbance or landuse change and if alternatives are not available, permit(s) may be required prior to implementation.

A. Avoidance Measures		
Based on the information submitted, the following strategies should be considered to avoid adverse effects to flood-plain(s) for the practice(s) shown. If feasible, strategies listed below should be incorporated into the conservation plan, layout/specifications and operation and/or management of the practice.		
Practice	Required Additional Strategies for Practice Implementation	
Heavy Use Area (562)	This practice may require approval from the county floodplain coordinator and other permissions or permits depending upon how it is implemented. Refer to the list of county floodplain coordinators listed in the FOTG Section II.	

In this example, Heavy Use Area (562) has the potential to adversely affect the base floodplain. Therefore, unless alternative locations or practices are available, the client may be required to obtain the county floodplain coordinator concurrence. Refer to the section of this module entitled *Placement of Practices Outside the Floodplain* to verify.

State Floodplain Coordinator Protocol

In Kentucky, the Division of Water (DOW) Floodplain Management Section has the primary responsibility for the approval or denial of proposed construction and other activities in the 100-year floodplain for all streams in the Commonwealth. In addition, activities that result in physical disturbances to wetlands or streams may also require a Water Quality Certification Permit (Clean Water Act Section 401). Refer to information regarding the CWA and other available modules dealing with CWA permitting. Practices that cause *significant* filling of floodplains (1 ft. or more), stream crossings, stream alterations, ponds and other impoundments are activities that may require floodplain coordination. Contact the NEPA Coordinator if there are questions regarding significance.

It is important to note that the avoidance measures provided are simply alerting the planner of the potential for the requirement. It is the responsibility of the planner to use good judgement and common sense to discern if the disturbance or effect to the floodplain is significant or minimal. It is the responsibility of the client to obtain all associated permits and permissions prior to installation.

For more information regarding the permitting process, and the method to contact the floodplain coordinator for a county in Kentucky refer to:

Kentucky Local Floodplain Coordinators Contact List

If permission from the county floodplain coordinator is required, the following protocol should be followed:

- 1. Inform the client of the potential need to obtain permission from the appropriate county floodplain coordinator.
- 2. Provide the client with all appropriate information including the list of coordinators found in Section II of the FOTG. Refer them to the link shown above for the KY Department of Water. **NOTE**:

- The requirement to obtain floodplain coordinator permission is often associated with other permits including the Clean Water Act.
- 3. Document the conversation with the client regarding the need for permissions in the assistance notes and mark "*Needs Further Action*" on the Floodplain Management on the Environmental Evaluation (EE). Continue planning and revise the EE when permissions are received via the client. Document the need for floodplain coordination or permits in on the EE.
- 4. Contact the NEPA Coordinator for additional guidance.

Floodplain Management Effect Determination (Tentative)

The Avoidance Measures & Effect Determination, Section B, of the KICT FPM report is a tentative effect determination. It is important to understand that this determination may not be final. The KICT assumes that actual practice placement is within the floodplain if the AOI contains a floodplain and meets NRCS policy regarding technical and financial assistance. The final determination may differ depending upon placement of practices within the AOI, implementation of avoidance measures, and other factors. Planners must verify the location of the floodplain with respect to actual practice location. The final determination should be recorded in all appropriate environmental documentation. If other practices are added, quantities, locations or other significant changes occur prior to installation, conservation planners must revise and resubmit this data to the KICT accordingly. Notify the client/landowner and document the necessity to obtain any permits prior to implementation.

This section of the report is the determination of the project based on practice implementation and application of any avoidance measures. This determination should be used to document the effect on the Environmental Evaluation (EE). There are two possible determinations that may result from the KICT FPM module report. They are as follows:

- No Effect (NE)
- May Affect (MA)
- 1. No Effect (NE) or no floodplains within the AOI

Example

B. Effect Determination (Tentative)

It has been determined that the activities described have a **No Effect (NE)** determination on floodplain areas protected under Executive Order 11988 and NRCS policy in GM 190 Part 410, Subpart B, Section 410.25.

In this example, the KICT may have located a floodplain within or near the AOI but the practices implemented will have no effect to the floodplain; or there were no floodplains near or within the AOI. Planners should document the report on the EE according to policy.

2. May Affect (MA)

Example

B. Effect Determination (Tentative)

It has been determined that the activities described have a **May Affect (MA)** determination on floodplain areas protected under Executive Order 11988 and NRCS policy in GM 190 Part 410, Subpart B, Section 410.25.

This determination indicates that there are practice and resource combinations that affect the base and/or critical action floodplain. These effects can be entirely adverse, entirely beneficial, or a mixture of both. Planners should document this on the EE according to policy.

Verification of Floodplain Policy

If practices are being placed within the base or critical action floodplains and the practices will have some type of affect, planners are required to verify the following information according to NRCS policy:

- 1. Agricultural floodplains have been used for producing food, feed, forage, fiber, or oilseed for at least 3 of the 5 years before the request for assistance
- 2. Agricultural production is in accordance with any official state or designated area water quality plans

The first statement deals with landuse. NRCS policy was written to ensure that changes in ecological function of floodplains does not occur to make agricultural production possible. It requires planners to verify that the affected floodplain was agricultural prior to assistance by NRCS. This information can be verified through several methods such as FSA documentation, photographic evidence, landowner confirmation, planner knowledge, etc. If landuse is in question, planners should always document the source of verification. The term "…request for assistance" should be considered as the time of application with respect to the area included in the AOI.

The second statement ensures that any local or state water quality plans are being implemented and/or are not in conflict with client objectives. Items that may indicate potential incompatibility with these plans include but are not limited to: identification by a state water quality agency as a point source pollutant, failure to implement nutrient management plans (Ag Water Quality Plans, CAFOs, etc.), planner observation, and other verifiable information. Always document sources as applicable.

NRCS may not provide technical and financial assistance to clients if the results of such assisted actions are likely to have significant adverse effects on existing natural and beneficial values in the base floodplain; and if NRCS determines that there are practicable alternatives outside the base floodplain. NRCS will make a case-by-case decision on whether to limit assistance whenever a client proposes converting existing agricultural land to a significantly more intensive agricultural use that could have significant adverse effects on the natural and beneficial values or increase flood risk in the base floodplain. NRCS will carefully evaluate the potential extent of the adverse effects and any increased flood risk.

If there is evidence that either one or both policy statements above are false, technical and financial assistance may be withdrawn for areas that involve the use of the floodplain in question. If this decision is made, the protocol is as follows:

- 1. If the planner/Responsible Federal Official (RFO) determines that the client's proposed action is within the base floodplain and would likely result in adverse effects, incompatible development, or an increased flood hazard, it is the responsibility of the planner/RFO to determine and point out to the client alternative methods of achieving the objective, as well as alternative locations outside the base floodplain.
- 2. If the alternative locations are determined to be impractical, the planner/RFO will decide whether to continue assistance. If the decision is to terminate assistance for the proposed action, the client and the local conservation district, if one exists, will be notified in writing about the decision. Contact the NEPA coordinator for further assistance.
- 3. If the planner/RFO decides to continue providing technical and financial assistance for a proposed action in the base floodplain, which is the only practicable alternative, NRCS may require that the proposed action be designed or modified to minimize potential harm to or within the floodplain. The planner/RFO will prepare and circulate locally a written notice explaining why the action is proposed to be in the base floodplain. Contact the NEPA coordinator for further assistance.

Potential Benefits to Floodplain Ecology

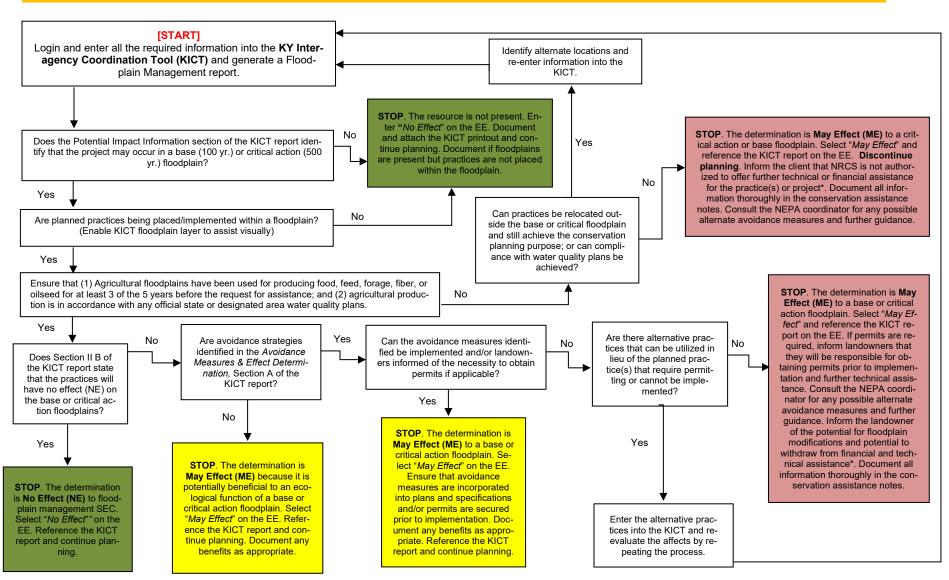
The section of the FPM report entitled *Potential Benefits to Floodplain Functions* lists possible benefits that could be realized by the conservation practices listed. A benefit to floodplain ecology is defined in this module as enhancing or restoring floodplain vegetation, restoration of floodplain connectivity, or exclusion of livestock or people to restore water quality. Benefits may include, but are not limited to, improved/restored/enhanced agricultural and forest production, production of food and fiber, fish and wildlife, temporary floodwater storage and other environmental values. Not every benefit may be applicable to every instance of a resource-practice combination. Planners will need to determine which benefits apply to which circumstances. Sometimes multiple benefits may apply to a single practice, while other times no benefits apply. Planning conditions and resource concerns are varied so the benefits are expressed as generalized statements and leave their interpretation open to the planner. It is important to remember that potential benefits are contingent upon proper application and maintenance of practices according to the NRCS standard and implementation of any avoidance measures.

Example

PRACTICE	POTENTIAL BENEFITS TO FLOODPLAIN FUNCTIONS
Channel Bed Stabilization (584)	This practice may be beneficial if installed for the purpose of restoring hydrology or vegetation and ecological function to floodplains.

In the example above, the practice may provide a benefit if it is installed and restores the hydrology and/or vegetation to an identified floodplain.

FLOODPLAIN MANAGEMENT (FPM) REPORT DECISION DIAGRAM



^{*}According to national NRCS policy If the decision is to terminate assistance for the proposed action, the client and the local conservation district will be notified in writing about the decision. 190-GM, Part 410, Subpart B, Section 410.25 (J)

XII. INVASIVE SPECIES MODULE

Invasive Species Module (ISM) Description

Invasive species Executive Order (E.O.) 13112 directs Federal agencies to "prevent the introduction of invasive species, provide for their control, and to minimize the economic, ecological, and human health impacts that invasive species cause." NRCS policy (190-GM, Part 414) is consistent with this EO and requires that no actions be authorized, funded, or carried out that is believed to or is likely to cause or promote the introduction or spread of invasive species in the U.S. or elsewhere. Policy requires NRCS planners to consider invasive species and document the effects on the environmental evaluation and within the conservation plan. To assist field staff, this module was developed for the following objectives:

- As an identifiable screening method to satisfy policy and EO requirements as stated above;
- To identify known areas that may contain potentially invasive species and practices that could have a potential effect to those species either beneficial or adverse;
- To find ways to avoid or minimize the potential introduction or spread of invasive species;
- To identify potential control measures (potential benefits) to areas that are known to contain potentially invasive species;
- To provide this information to conservation planners in a clear, concise method allowing documentation of the NEPA process (EE) in conjunction with decision makers and conservation planning.

The list of invasive species utilized in this module contains plants and animals that occur on the Federal or State-specific noxious weed list and developed by the Department of Agriculture with their partners and approved by the State Technical Committee which prohibits or cautions their use due to invasive qualities. This list is not all inclusive and many other species may be considered invasive. The current invasive species list that meets all the criteria may be found in Section II of the Field Office Technical Guide (FOTG).

The process outlined in this module is meant to be utilized only as a screening tool and a starting point for conservation planning to help justify and assist activities according to NRCS policy. Invasive species are dynamic, and planners should always assess the presence of species not on the list or not identified within GIS data layers that may adversely affect planning. All determinations should be field verified, and the effect shown on reports will be a tentative determination until field verification is complete.

Since populations of invasive species are dynamic, vary in size and scope and often times ubiquitous, it will be necessary for planners to use sound judgement regarding the requirements and considerations for implementation of conservation practices. Individual specimens of some species may not warrant wide scale, strict control procedures because these species occur frequently on almost all landscapes. In these instances, some occurrence is expected and may be controlled relatively easily (e.g. Johnsongrass). In other cases, a single or very small population of individuals may warrant a broadly based and strict control measures (e.g. giant hogweed, Asian carp).

Data Inputs for Invasive Species

The data available in formats needed for conservation planning are severely lacking. Plant populations are dynamic and always changing, therefore the data is most often inaccurate. Some of the current data is only available on a countywide basis. NRCS staff will have the option of assisting with gathering of this information through the IMap service upon approval and permission from the landowner. Therefore, the data gathered may be further utilized as the data in the KICT is updated. If planners are interested in assisting with this data gathering, contact the State Biologist for instructions and details.

Interpreting the Invasive Species Module (ISM) Results

To implement the results of the KICT, planners must be able to interpret the information provided, confirm the presence absence and, if necessary, convey that information to the client by incorporation into specifications, designs, or maintenance of conservation practices. Once an ISM query is returned, users should determine if a project:

- 1) Contains or is in close proximity to known populations of invasive species;
- 2) determine if the selected practice(s) has effects to those identified areas;
- 3) consider any measures to avoid the propagation, introduction and further spread of those species;
- 4) field verify the existence of those and other species
- 5) note/document any potential benefits to prevent further invasion

ISM Potential Impact Information

Potential adverse impacts to invasive species are grouped into six broad categories by the KICT. Multiple impacts may apply to a practice. The impact categories are as follows:

- 1. ground-disturbing activities and activities where bare soil is exposed;
- 2. disturbance, movement of people, water, soil, livestock or equipment through or near terrestrial or aquatic habitats;
- 3. incidentally creating suitable habitat through alteration of light regimes;
- 4. creation of a suitable habitat through alteration of hydrologic regimes;
- 5. stockpiling mediums such as water, plant material, animal waste or other materials; and
- 6. landuse changes/conversions.

The following are examples of possible outcomes in of the KICT ISM report. One or more of these potential impacts could appear on reports.

If there are no known populations of invasive species within or near the AOI, the KICT output in Section I of the report will state the following:

Example

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project occurs in close proximity to known populations of potentially invasive species that include the following:

None

The following adverse impacts could potentially cause or promote the introduction or spread of invasive species due to installation, maintenance and operation of one or more of the conservation practices listed:

None

The output above indicates that populations of invasive species do not appear to be in or near the AOI and no known populations will be affected by the practices. The planner must field verify this determination. Once verified, document and proceed.

In the next example, a population of an invasive species is identified and the KICT output does not identify any potential impacts:

Example

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project occurs in close proximity to known populations of potentially invasive species that include the following:

giant foxtail, hemlock woolly adelgid

The following adverse impacts could potentially cause or promote the introduction or spread of invasive species due to installation, maintenance and operation of one or more of the conservation practices listed:

None

This indicates that the AOI contains or is in very close proximity to known populations of two species, however, the practice(s) selected have no potential adverse effect to either of them. Planners should proceed to subsequent sections of the report to review any other relevant information.

The AOI contains, or is near, a known population of an invasive species and potential adverse effects are identified as follows:

Example

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project area may occur within or near the following type of floodplain:

giant foxtail, hemlock woolly adelgid

The following adverse impacts could potentially occur as a result of installation of one or more of the conservation practices listed:

This practice may provide a vector or cause the introduction or spread of invasive species through ground-disturbing activities where bare soil and ground disturbance is at least temporarily exposed.

This example shows that there is a potentially adverse impact associated with the installation of the practice(s) to at least one of the known populations of invasive species. Planners need to proceed to the following sections of the report to see the considerations to help avoid potential impacts.

Considerations & Effect Determination

Once it is determined that at least some practices queried may potentially affect invasive species, planners should refer to the *Considerations & Effect Determination* of the ISM report. The KICT provides considerations for planners to implement regarding invasive species. <u>These considerations should be carefully evaluated to determine if they apply.</u>

A. Considerations

The considerations presented by the KICT in this module are suggestions that should be analyzed by the planner and incorporated into practicable alternatives for improving/maintaining and managing threats caused by invasive species. These considerations are management actions that demonstrate controllable

measures and show good faith in adhering to NRCS policy. They may be used in the thought process for planning alternatives for the client and are identified in Section A of the report. If the KICT determines that there are issues that should be considered, the table contains practices in the left column and the consideration(s) listed adjacent to the practice. All considerations and identification of invasive species threats should be field verified. The following is an example of how a consideration will be shown.

Example

CONSIDERATIONS & EFFECT DETERMINATION A. Considerations		
Composting Facility (317)	Ensure that any bare soil is exposed for the shortest duration possible and stabilized in a timely manner to prevent the establishment of invasive species. Avoid unnecessary soil disturbance where invasive plants could rapidly colonize areas of disturbed soil. Consider the use of pre/post emergent herbicides or no-till planting methods where appropriate.	
	When possible during construction, utilize on-site soil material (existing seedbank) and avoid transporting any materials into or out of the immediate project area. If transporting material that may contain invasive sources, dispose of those materials properly on site.	

In this example, a composting facility is planned near known populations of invasive species. The considerations provided are reminding planners that the construction, waste handling and methods of disposal should be performed in a manner that does not promote the incidental introduction of invasive species.

B. Effect Determination (*Tentative*)

Section B of the ISM report is the Effect Determination. This section of the report is the determination of the project based on practice implementation. It is important to remember that the Effect Determination shown is a "tentative determination" and requires field verification of populations of invasive species. For example, if field verification shows the presence of invasive species where the KICT does not have data, the determination on the EE may be different than shown on the report. Conversely, some data in the KICT is indicative of a species that is known throughout an entire region or county and may not necessarily be present in, or even reasonably close to, the AOI. Always field verify and use recommendations as they are relevant.

There are two possible determinations that may result from the ISM module report. They are as follows:

- No Effect or No finding (No Effect)
- May Affect

1. No Finding (no known populations of invasive species) or No Effect (NE)

For projects that do not contain or are in proximity to known populations of invasive species, or the conservation practices installed have no effect to spread or propagation of invasive species, Section B of the ISM report will state the following:

B. Effect Determination (*Tentative*)

The activities described has a **No Effect (NE)** determination to invasive species under Executive Order (E.O.) 13112 and NRCS policy located in 190-GM, Part 414. This determination is based solely on known and reported data held by the Kentucky Nature Preserves Commission and other sources and is not comprehensive. Invasive species are dynamic and not all populations have been identified. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners should revise and resubmit this data accordingly.

Note: This determination must always be field verified. Utilize this determination to screen the area for potential invasive species. There could be undocumented potentially invasive species present on site. Document the determination, rationale and effects in conjunction with on-site analysis. Therefore, the final determination shown above may differ.

In the example above, even though the KICT identified a potential population of invasive species within or near the AOI, the practices implemented will have no effect to those species. Planners must field verify this determination and determine if it is accurate. If accurate, document the report on the Environmental Evaluation (EE) according to policy. If not, determine other actions as appropriate according to policy.

2. May Effect (ME)

This effect determination indicates that there are practice and resource combinations that could affect known populations of invasive species. These effects can be entirely adverse, beneficial, or a mixture of both.

Example

B. Effect Determination (*Tentative*)

The activities described has a **May Effect (ME)** determination to invasive species under Executive Order (E.O.) 13112 and NRCS policy located in 190-GM, Part 414. This determination is based solely on known and reported data held by the Kentucky Nature Preserves Commission and other sources and is not comprehensive. Invasive species are dynamic and not all populations have been identified. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners should revise and resubmit this data accordingly.

Note: <u>This determination must always be field verified</u>. Utilize this determination to screen the area for potential invasive species. There could be undocumented potentially invasive species present on site. Document the determination, rationale and effects in conjunction with on-site analysis. Therefore, the final determination shown above may differ.

Process for Mitigating Potential Invasive Species

Occasionally the KICT may provide a consideration that cautions the planner in the use of a practice in a setting with verified or suspected populations of invasive species.

CONSIDERATIONS & EFFECT DETERMINATION A. Considerations Based on the information submitted, carefully consider the following information when implementing practices in this area. As appropriate, the strategies listed below should be considered during conservation planning and applied when developing layout/specifications and operation and management plans for the practice listed This practice should not be implemented in this setting without confirmation that this species could be affected, and a control strategy outlined. Verified or suspected populations of this species should be reported to the Kentucky Nature Preserves, Kentucky Division of Forestry or Kentucky Department of Fish and Wildlife Resources. Contact the State Biologist to verify and assist with this process.

If a planner receives this response from the tool, complete the following process.

- <u>Field-verify the response</u>. Data in the tool is dynamic and is often wide ranging (i.e. county wide). Planners should ensure that the invasive species identified by the tool is in fact present and will be affected on the site.
- If the species is verified to be present on the site and affected, investigate if the species has been addressed by other methods such as a forest management plan, cooperative extension pest management plan, etc.
- If no mitigation plan is available, and in the opinion of the planner the practice is likely to violate NRCS policy, inform the client that there is a potential to promote, introduce or otherwise further the spread of a potentially invasive species. Document this finding in the conservation assistance notes.
- Contact the State Biologist or NEPA Coordinator to determine additional guidance as necessary.

Potential Control Benefits to Known Populations of Invasive Species

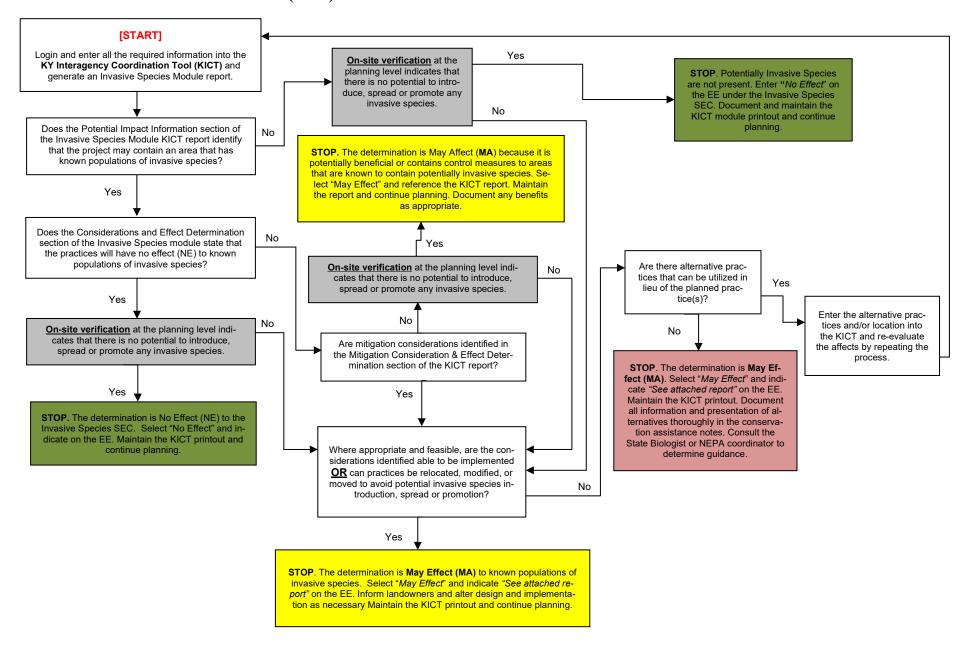
The *Potential Benefits* section of the ISM report lists any potential benefits to controlling the spread or introduction of invasive species. These benefits may be directly or indirectly realized through practice installation, operation, or maintenance.

Example

POTENTIAL BENEFITS TO CONTROL OF INVASIVE SPECIES			
The following practices may assist with prevention, introduction, spread, or promotion of known populations of in sive species:			
Practice	Potential Benefits Provided by This Activity		
Nutrient Management (590)	This practice may prevent introduction, promotion or mitigate the spread of invasive species through proper livestock management.		

In the example above, the practice provides a benefit by potentially eliminating an invasive species vector. If this information is used as justification of benefit or to rank a client for program participation, the report must be retained, and practices implemented according to any required measures outlined in the report. It is recommended that conservation assistance notes be utilized as to the application of which benefits apply and the supporting rationale.

INVASIVE SPECIES MODULE (ISM) REPORT DECISION DIAGRAM



XIII. NATURAL AREA MODULE

Module Description

Natural areas are defined as land or water units where natural conditions are maintained insofar as possible. Natural conditions usually result from allowing ordinary physical and biological processes to operate with a minimum of human intervention. Manipulations may be required on natural areas to maintain or restore features that the areas were established to protect.

Natural areas may be designated areas of Federal government, non-Federal government, or privately controlled land. Designation may be formal, as in Federally regulated natural areas, or by foundations or conservation organizations specifically created to acquire and maintain natural areas. Private landowners may also informally designate a specific area as a natural area and manage it accordingly. Several professional societies concerned with renewable natural resources encourage establishment of natural areas withdrawn from economic uses and recognition of natural areas maintained and managed in economic enterprises.

Natural areas in Kentucky are officially identified by the Kentucky Nature Preserves (KNP). The KNP owns and/or manages a system of dedicated state nature preserves, state natural areas, and conservation easements. These areas encompass 28,022 total acres of ecological communities and natural habitat for rare species across the state. Program activities center around several key focus areas: natural community restoration and management; rare species protection and enhancement; research and education; and passive recreational use by the public. The full description of the effects used in the KICT may be found in the document entitled *Kentucky NRCS Conservation Practice Effects on Natural Areas - for Conservation Planning and Program Implementation* in Section II of the KY NRCS Field Office Technical Guide.

The main goals of this module are:

- 1. locate and identify officially designated natural areas for field staff;
- 2. identify practices that could have a potential adverse effect to officially designated natural areas;
- 3. identify items of consideration when implementing practices adjacent or near officially designated natural areas;
- 4. identify potential positive effects of practices (potential benefits) to natural areas, and;
- 5. provide this information to conservation planners in a clear, concise method allowing documentation of the NEPA process (EE) in conjunction with decision makers and conservation planning.

Interpreting the Natural Area Module (NAM) Results

Potential adverse impacts are the basis of the Final Determination the KICT produces and are included in reports to allow planners to understand why the avoidance strategies are required. To implement the results of the KICT, planners must be able to interpret the information provided and, if necessary, convey that information to the client by incorporation into specifications, designs, or maintenance of conservation practices.

Once a NAM report is returned, planners should determine if a project:

- contains or is adjacent to an officially designated natural area;
- determine if the selected practice(s) has effects to those identified areas;
- consider any measures to compliment those areas
- note/document any potential benefits to natural areas

Natural Areas Potential Impact Information

The following sections show results from the report and will assist planners in making decisions regarding documentation and planning. The first section of the NAM report identifies if the AOI outlined by the planner contains or is adjacent to an officially designated natural area and if there is a potential for adverse effects caused by the selected practices.

If there are no officially designated natural areas within or adjacent to the AOI, the KICT output will state the following:

Example

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project occurs in close proximity to the following designated natural area:

None

Depending upon how the practice is implemented, the placement of practices within or near these areas could have potential adverse impacts as shown below.

None

If there are officially designated natural areas, the KICT will list the type of natural area(s) with any potential adverse impact to them. The report will not provide the name of the area but identify it as an officially designated natural area. Note that the KICT does not take into consideration natural areas that are unofficially designated by private landowners or other entities. Landowners may designate natural areas on their property and planners should consider those areas in addition to those officially designated areas.

Example

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project occurs in close proximity to the following designated natural area:

Natural Area

Depending upon how the practice is implemented, the placement of practices within or near these areas could have potential adverse impacts as shown below.

This project may impact the ecological functions within or immediately adjacent to a designated natural area.

In this example, a natural area occurs within or near the AOI and the practices selected could have an adverse ecological effect. When there is no known adverse effect from selected practices, the last row will state 'None'.

Natural Areas Considerations & Effect Determination

Once it is determined that at least some practices queried may affect a natural area, planners should refer to the *Considerations & Effect Determination* of the NAM report. NRCS is required to provide alternatives to clients whose objectives may conflict with natural area management. The KICT provides considerations for planners to implement for managing natural areas. These considerations should be carefully evaluated to determine if they apply.

A. Considerations

The considerations presented by the KICT in this module are suggestions that should be analyzed by the planner and incorporated into practicable alternatives for improving/maintaining and managing natural areas and/or water quality. These considerations are management actions that demonstrate controllable measures and show good faith in adhering to NRCS policy and may be used in the thought process for planning alternatives for the client. If the KICT determines that there are issues that should be considered, the table contains practices in the left column and the consideration(s) listed adjacent to the practice. The following is an example of how a consideration will be shown.

Example

CONSIDERATIONS & EFFECT DETERMINATION A. Considerations		
Practice	Considerations	
Composting Facility (317)	Consider the methods of operation and maintenance of this practice to avoid adverse impacts to adjacent natural habitats. This may include pesticide handling and application, mechanical treatments, installation of structures, livestock management, water management, etc.	

In this example, a composting facility is planned near or in a natural area. The consideration provided is reminding planners that the waste handling and methods of disposal should be handled and disposed of in a manner that does not adversely affect the adjacent habitat or natural area.

B. Effect Determination (*Tentative*)

Section B of the NAM report is the Effect Determination. This section of the report is the determination of the project based on practice implementation. It is important to remember that the Effect Determination shown assumes that the practices are located within the zone of influence of a natural area. If alternate locations are chosen within the same AOI, or if actual placement of practices are not located within this zone of influence, the determination on the EE may be different than shown on the report. Zones of influence vary for each practice and application of the practice and is the responsibility of the planner to determine. It is important for planners to think of how the practice is implemented and managed to determine if and how a natural area will be implemented.

There are two possible determinations that may result from the NAM module report. They are as follows:

- No effect OR No finding (No Effect)
- May Affect

1. No Finding (no natural areas within the AOI) or No Effect (NE)

For projects that do not contain or are in proximity to designated natural areas, or the conservation practices installed have no effect to the functions or goals of the natural area, Section B of the NAM report will state the following:

B. EFFECT DETERMINATION (*Tentative*)

The activities described has a **No Effect (NE)** determination on natural areas protected under federal regulations (GM 190 Part 410.23). This determination assumes that placement of practices is reasonably near or adjacent to known natural areas. This determination could change depending upon the placement of practices within the area of interest and other factors. Utilize this determination to screen the area and document as appropriate on any environmental evaluations. Planners should determine if there are any other designations of natural areas and determine those effects using on-site analysis.

Note: This determination does not take into consideration natural areas that are unofficially designated by private landowners or other entities. Landowners may designate natural areas on their property. Planners should consider those privately designated areas in addition to officially designated areas.

In the example above, even though the KICT located a resource within or near the AOI, the practices implemented will have no effect to the natural area. Planners should document the report on the Environmental Evaluation (EE) according to policy. Planners must also determine if unofficially designated natural areas exist. These are not considered by the KICT, and the determination may change.

2. May Affect (MA)

This Effect Determination indicates that there are practice(s) that may affect an area, these effects can be entirely adverse, beneficial, or a mixture of both.

Example

B. Effect Determination (Tentative)

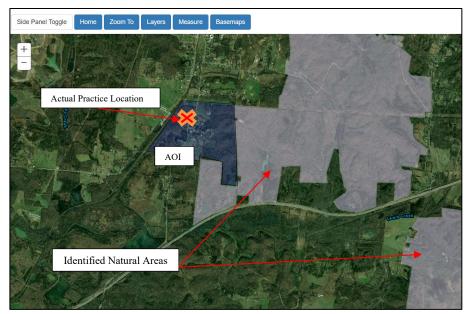
The activities described has a **May Affect (MA)** determination on natural areas protected under federal regulations (GM 190 Part 410.23). This determination assumes that placement of practices is reasonably near or adjacent to known natural areas. This determination could change depending upon the placement of practices within the area of interest and other factors. Utilize this determination to screen the area and document as appropriate on any environmental evaluations. Planners should determine if there are any other designations of natural areas and determine those effects using on-site analysis.

Note: This determination does not take into consideration natural areas that are unofficially designated by private landowners or other entities. Landowners may designate natural areas on their property. Planners should consider those privately designated areas in addition to officially designated areas.

Verification of Placement of Practices Within the Zone of Influence of Natural Areas

Planners may receive a NAM report that verifies a natural area is present within or near the AOI. However, the actual placement of the practice may not affect the ecological functions of the natural area. Each NRCS practice has unique implementation, operation, and maintenance requirements. Therefore, the zones of influence to natural areas will vary depending on many factors. Planners should determine if each practice within the AOI will influence the characteristics of the natural area and/or its influence zone.

To assist planners in determining the zone of influence of a practice, it may be necessary to visually confirm the location of the natural area with respect to the AOI. This may be critical especially when determining the potential to affect a natural area that also has aquatic resources or where management of a conservation practice may encompass a larger footprint. Enable the Natural Area layer button to visually see the known and officially designated natural areas. Note that this layer does not include those natural areas that are unofficially designated or those designated privately. For more information regarding the tool layer buttons refer to the section of this handbook entitled *Layer Buttons*.



For example, the planner has submitted a query for an Agrichemical Handling Facility (309) in an AOI. However, during the planning process, it has been determined that the placement of that practice will be located a considerable distance away from the natural area and will not impact it ecologically through operation or maintenance. Systematically verify the locations of any other practices in the same fashion and apply avoidance measures and benefits as applicable. If all the practices submitted fall out-

side this zone of influence of the natural area(s), document "No Effect" to the resource appropriately. If practices are verified to affect natural areas, continue to other sections of the report to determine the effects, considerations, benefits, etc.

Potential Benefits to Natural Areas

The *Potential Benefits* section of the NAM report lists the possible benefits to the values or characteristics protected under a natural area designation in specific circumstances and locations. Benefits to natural areas may be provided by conservation practice installation, operation, or maintenance. A benefit should be complimentary to the ecology and objectives of the adjacent natural area.

Example

POTENTIAL BENEFITS		
The following practices may provide beneficial contributions to known adjacent natural areas:		
Practice	Potential Benefits Provided by This Activity This practice may be beneficial if it eliminates a pollutant source from a natural area or an adjacent natural area (e.g. sediment, pesticide, etc.).	
Structure for Water Control (587)		
To determine the goals of an adjacent natural area, consider coordinating with the Kentucky Nature Preserves and/or the Kentucky Department of Fish and Wildlife to coordinate activities with adjacent lands at http://naturepreserves.ky.gov/ or call 502-573-2886; or email KNP at naturepreserves@ky.org		

In the example above, the practice provides a benefit by eliminating a potential water quality issue from a natural area.

If this information is used as justification of benefit or to rank a client for program participation, the report must be retained, and practices implemented according to any required measures outlined in the report. It is recommended that conservation assistance notes be utilized as to the application of which benefits apply and the supporting rationale.

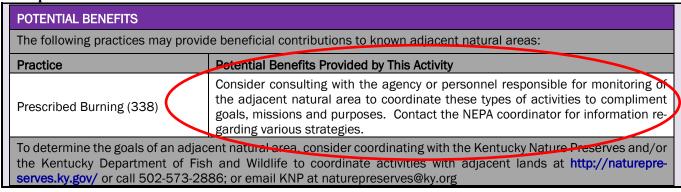
Coordinating Goals and Objectives of Natural Areas

Natural areas managed by the Office of the Kentucky Nature Preserves (OKNP) are governed by one or more goals and objectives for the area. The main goals for existing natural areas are as follows:

- 1. natural community restoration and management
- 2. fire management and reintroduction of fire in natural ecosystems
- 3. rare species protection
- 4. research, education, and/or passive recreation

The KICT may provide a potential benefit narrative that informs the planner that the practices may be beneficial if the goals and objectives of the area are similar.

Example



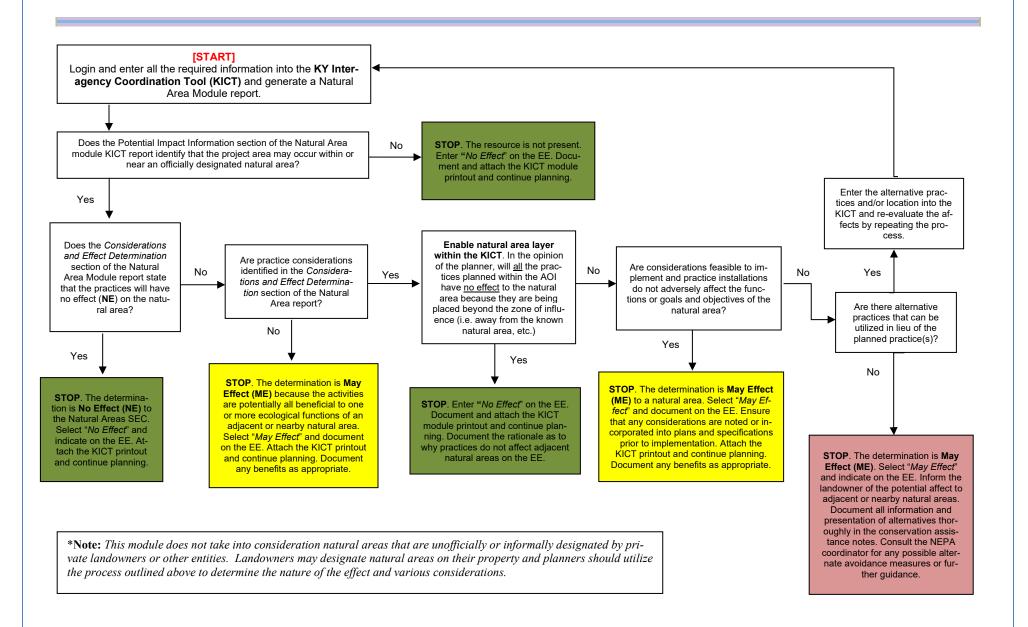
In the example above, the practice Prescribed Burning (338) may provide additional benefits if one of the goals and objectives of the adjacent natural area is restoration or reintroduction of fire in natural ecosystems. This should be a prompt to the planner to coordinate this activity with adjacent natural area managers. Coordination with adjacent natural area goals and objectives is highly encouraged but **not required**.

In order to know what the goals and objectives are of the practices implemented within or adjacent to natural areas, planners will need to have local knowledge of the area or refer to the OKNP map and/or the document entitled *Kentucky NRCS Conservation Practice Effects on Natural Areas - For Conservation Planning and Program Implementation* in Section II of the FOTG.

The process to coordinate goals and objectives should be as follows:

- Determine the location and name of the OKNP managed State Nature Preserve, State Natural Area, or KY Heritage Land Conservation Fund Site by referring to the FOTG, Section II.
- Discuss with the client and document the objectives and goals of coordination in the assistance notes.
- Contact the NEPA Coordinator or State Biologist to determine the goals of an adjacent natural area if the planner does not have information regarding the natural area shown by the KICT.
- Coordinate implementation and operation as necessary.

NATURAL AREA MODULE (NAM) REPORT DECISION DIAGRAM



XIV. PRIME FARMLAND MODULE (PFM)

Module Description

The Farmland Protection Policy Act (FPPA) is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. For FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland, or other land, but not water or urban built-up lands. Congress passed the Agriculture and Food Act of 1981 (Public law 97-98) which contained the FPPA.

The purpose of this module is:

- 1. To identify areas as prime, unique, and statewide important farmlands for field staff;
- 2. To identify practices that could cause irreversible conversion of prime farmlands;
- 3. To encourage planners to find ways to avoid conversion of prime farmlands;
- 4. To provide this information to conservation planners in a clear, concise method allowing documentation on the Environmental Evaluation (EE) process in conjunction with decision makers and conservation planning.

Potential conversions to prime, unique, or statewide important farmlands are described fully in the document in Section II of the Field Office Technical Guide entitled *Kentucky NRCS Conservation Practice Effects on Prime Farmlands - for Conservation Planning and Program Implementation.* These impacts were determined as the way prime farmlands conversion occurred through practice installation, operation or maintenance.

The KICT uses GIS data in combination with soils information to determine the existence of prime farmlands and farmland of statewide importance. This methodology has some limitations including soil mapping scales, mapping errors, etc. Therefore, this information should be utilized as a screening tool and should <u>always be field verified</u>. There is no substitute for on-site verification.

Interpreting the Prime Farmland Module (PFM) Results

Potential adverse impacts are the basis of the determination the KICT produces and are included in the reports to allow planners to understand why the avoidance strategies are required. To implement the results of the KICT, planners must be able to interpret the information provided and, if necessary, convey that information to the client by incorporation into specifications, designs, or maintenance of conservation practices. Once a PFM query is returned, planners should determine if a project:

- contains prime, unique, or statewide important farmlands
- determine if the practice is being installed on prime, unique, or statewide important farmlands
- identify any practices that could cause irreversible conversions and avoidance measures to implement them.

The KICT identifies potential instances when significant ground disturbance or broad based landuse change may cause irreversible conversions of prime, unique, or statewide important farmlands. However, the potential adverse impacts may not actually apply depending upon many factors and the professional judgement of the planner. Therefore, the final effect shown on the EE may differ from the final effect of the KICT

PFM report. It is important to remember that the tentative determination shown in the report should be scrutinized by planners and verified regarding actual practice placement and scope of project. The following pages detail the sections and interpretation of PFM reports produced by the KICT.

Potential Impact Information

The first section of the PFM report identifies if the AOI outlined by the planner contains prime, unique, or statewide important farmlands and if there is a potential for irreversible conversion caused by the practices outlined in the general information section of the report.

If there are no prime, unique, or statewide important farmlands within or adjacent to the AOI, the KICT output will state the following:

Example

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project contains the following important farmlands:

None

Depending upon how the practice is implemented, the placement of practices within or near these areas could have potential adverse impacts as shown below.

None

If there are prime, unique, or statewide important farmlands the KICT will simply list the type of farmland and any potential adverse impact to them below.

Example

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project contains the following important farmlands:

Prime Farmland, Unique Farmland, Farmlands of Statewide Importance

Depending upon how the practice is implemented, the placement of practices within or near these areas could have potential adverse impacts as shown below.

This practice has the potential to cause unnecessary or irreversible conversion of farmland to nonagricultural uses.

In this example prime farmlands occur within or near the AOI and the practices selected could have an adverse ecological effect to it. If the practices selected would have no known adverse effect, the last row would simply state "none". There are only two types of impacts to important farmlands

- 1. Irreversible conversion to non-agricultural practices and;
- 2. Significant ground disturbance and/or land clearing

Avoidance Measures and Effect Determinations - Section A

Policy requires that NRCS avoid **permanent** impacts to prime and important farmlands. The avoidance measures shown in KICT reports are required to be considered and/or implemented whenever practical and

appropriate. Less than ten percent of all conservation practices have the potential to cause irreversible conversion of these lands. However, in most instances these practices may be modified and still be implemented. There are also cases where these practices may be exempt from being considered a conversion (some agricultural structures). Regardless, it is incumbent upon planners to document the rationale used to justify conversion of any type. The following section details how avoidance measures may be provided by the KICT.

There are three avoidance measures that are **required** to be considered/implemented if the project is determined to have impacts to Prime Farmland. They are:

- 1. consideration of siting the practice to avoid impacts
- 2. the consideration of an agricultural exemption for enhancement of agricultural production; and
- 3. the requirement to establish a farmland conversion impact rating score (LESA).

The following is an example of how a required strategy will be shown:

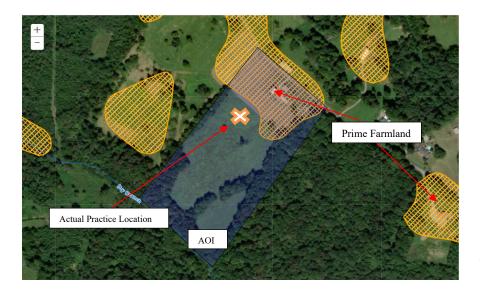
Example

AVOIDANCE & EFFECT DETERMINATION A. Avoidance		
Practice Avoidance Measures for Practice Implementation		
Aquaculture Ponds (397)	Carefully consider the siting and location of this practice. If practical, locate this practice outside the lands identified as prime, unique or statewide important and local farmlands or position the practice as to impact the least amount of prime farmland.	

In this example, the conservation practice Aquaculture Ponds (397) would have avoidance measures that requires consideration for implementation. It encourages planners to consider and offer the client alternative sites for this practice. It also suggests that if an alternative location is not feasible it should be designed to minimize impacts associated with the installation.

Verification of Prime Farmland Map Units & Practice Location

Planners may receive a PFM report that identifies prime, unique, statewide, or locally important farmland as present within the AOI but the actual placement of a practice(s) is not located within these important map units. Planners should enable the *Prime Farmland* layer within the KICT to view the location and determine if those practices will be located within prime farmlands.



For example, the planner has submitted a query for Waste Treatment Lagoon (359) in an area (AOI) that contains prime farmlands. However, during the planning process, it has been determined that the placement of the lagoon will be located on an area of the farm that is not prime farmland. Systematically verify the locations of any other practices in the same fashion and apply avoidance measures. If all submitted practices that have avoidance measures fall outside prime farmland units, document "No Effect"

to the SEC. If practices are verified to affect prime farmlands, implement avoidance measures and protocols as required.

In the example below, the conservation practice Recreation Land Grading and Shaping (566) may have avoidance measures that requires the planner to perform a land evaluation and site assessment (LESA) to establish a conversion score. *This avoidance measure should be very rare* since NRCS is usually engaged in the enhancement of agricultural related practices. In the example provided, this practice has recreation as the primary landuse/activity and does not promote agriculture enhancement. It may cause irreversible conversion depending upon how it is implemented. If this avoidance measure is encountered, planners should verify that irreversible conversion will likely occur and contact the State Soil Scientist and/or the NEPA coordinator for further guidance.

Example

Example		
AVOIDANCE & EFFECT DETERMINATION A. Avoidance		
Practice	Avoidance Measures for Practice Implementation	
Recreation Land Grading and Shaping (566)	The application of this practice may cause irreversible conversion of prime farmlands. A land evaluation and site assessment (LESA) system may be required to establish a farmland conversion impact rating score. This score may be used as an indicator for the project sponsor to consider alternative sites if the potential adverse impacts on the farmland exceed the recommended allowable level. Contact the State Soil Scientist or NEPA coordinator to assist with this process.	

In the example below, a waste treatment lagoon has the potential to cause irreversible conversion of prime farmlands. However, it does enhance agricultural productivity and will most likely qualify for an agricultural exemption. Planners should verify this information and note it on the EE. This avoidance measure

will most likely occur with another avoidance measure informing the planner to locate the planned facility outside prime farmlands (if possible).

Example

AVOIDANCE & EFFECT DETERMINATION		
A. Avoidance Based on the information submitted, carefully consider the following information when implementing practices that may impact prime farmlands. As appropriate, the strategies listed below should be considered during conservation planning and applied when developing layout/specifications and operation and management plans for the practice listed.		
		Practice
	This practice qualifies for an agricultural exemption under the Farmland Protection Policy Act for structures or activities if it enhances agricultural production.	
Waste Treatment Lagoon (359)	Carefully consider the siting and location of this practice. If practical, locate this practice outside the lands identified as prime, unique or statewide important and local farmlands or position the practice as to impact the least amount of prime farmland.	

Agricultural Exemptions for Conversions of Prime Farmlands

Planners should consider what benefits, or consequences are anticipated if the prime farmland is converted. Many NRCS practices may be considered for exemption under the FPPA if they promote or enhance agricultural production.

Examples of activities **not** subject to FPPA include:

- Projects planned and completed without the assistance of a Federal agency
- Projects on land already in urban development or used for water storage
- Construction of on-farm structures needed for farm operations
- Surface mining, where restoration to agricultural use is planned
- Construction of new minor secondary structures such as a garage or storage shed.

If this avoidance appears in the KICT generated report, planners should determine in their professional opinion if the nature of the structure/activity as it relates to agricultural production, use, etc. If the planner determines that it meets the qualifications for an exemption document the rationale on the Environmental Evaluation (EE) and continue planning. If the planner does not feel the structure/activity is exempt, contact the NEPA coordinator or State Soil Scientist for guidance on documentation and procedure.

Effect Determination (Tentative) - Section B

Section B of the PFM report is the Effect Determination. This section of the report is the tentative determination of the project based on practice implementation. It is important to remember that if there are important farmland soils present anywhere within the AOI the effect determination shown assumes that those practices will be located or installed on those areas. Therefore, planners must investigate the actual location or placement of the practice to determine if installation, operation, or maintenance will cause conversion. The determination provided by the tool may be inaccurate and is therefore *tentative*. Additionally,

if alternate locations are chosen within the same AOI the determination on the EE may be different than shown on the report.

There are two possible determinations that may result. They are as follows:

No finding (No Effect) OR No Effect (NE) May Affect (MA)

1. No Effect (NE) (no important farmlands within the AOI) or No Finding

For projects that do not contain areas that are identified as prime, unique, statewide, or locally important farmlands, or the conservation practices installed have no effect to important farmlands, Section B of the PFM report will state the following:

Example

B. Effect Determination (*Tentative*)

The activities described has a determination of **No Effect (NE)** to prime farmlands described under NRCS policy under the Farmland Protection Policy Act and 7 CFR 658.5. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly. Always verify presence or absence of resources on site during the planning process.

Note: If the determination above is may affect, the actual placement of practices within the area of interest may not impact prime farmlands depending upon many factors. Therefore, the final determination shown above may differ. Always document the determination, rationale and effects in conjunction with on-site analysis.

In the example above, even though the KICT located prime farmlands within the AOI, the practices implemented will have no effect or cause irreversible conversion. Planners should document the report on the Environmental Evaluation (EE) according to policy.

2. May Affect (MA)

Example

B. Effect Determination (*Tentative*)

The activities described has a determination of **May Affect (MA)** to prime farmlands described under NRCS policy under the Farmland Protection Policy Act and 7 CFR 658.5. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly. Always verify presence or absence of resources on site during the planning process.

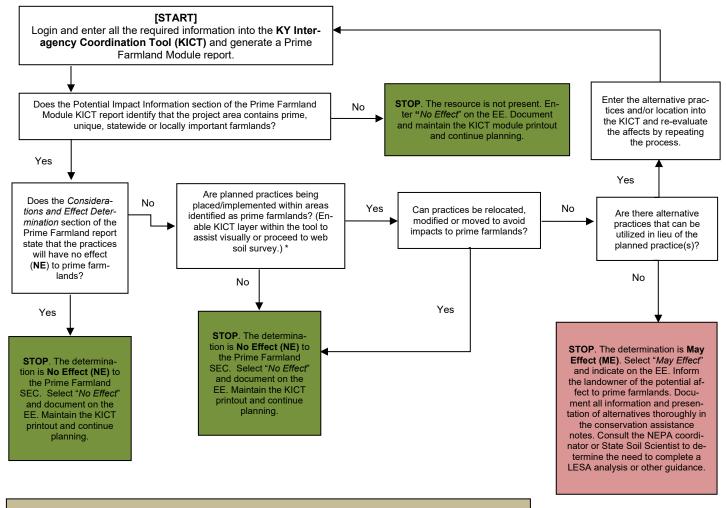
Note: If the determination above is may affect, the actual placement of practices within the area of interest may not impact prime farmlands depending upon many factors. Therefore, the final determination shown above may differ. Always document the determination, rationale and effects in conjunction with on-site analysis.

This Effect Determination indicates that there are practices that may cause significant disturbance or irreversible conversion to prime farmlands. Verify that the placement and implementation of practices impact these lands.

NOTE: The effect determination shown in this section assumes that the practices are located within areas that are identified as prime, unique, statewide, or locally important farmlands regardless of where they occur in the AOI. If alternate locations are chosen (within the same AOI) or if actual placement of practices are not located within prime farmlands, the determination on the EE may be different than shown on the report.

ing the locations of individual practices on the report. If all practices are found to be not associated or prime farmlands, document this on the EE as No Effect (NE), reference the PFM KICT report, and continuous.				nd continue	

PRIME FARMLAND MODULE (PFM) REPORT DECISION DIAGRAM



*Note: Web Soil Survey may also provide the visual assessment of prime farmlands as well as the layer in the tool.

XV. RIPARIAN AREA MODULE (RAM)

Riparian Areas Module (RAM) Description

Riparian areas are ecotones that occur along watercourses or water bodies. They are distinctly different from the surrounding lands because of unique soil and vegetation characteristics that are strongly influenced by free or unbound water in the soil. Riparian ecotones occupy the transitional area between the terrestrial and aquatic ecosystems. Typical examples would include perennial and intermittent streambanks, floodplains, and lake shores. NRCS assistance helps land users make sound resource management decisions, and must strive to provide the best alternatives for the proper use and management of these important natural resources.

Conservation planners must determine if planned conservation practices will influence riparian areas according to policy. Their findings are to be documented on the NRCS Environmental Evaluation form (EE). To help conservation planners in making these determinations, the Riparian Area Module (RAM) was developed to determine the effects to these sensitive areas. The report generated is proof of compliance with the NRCS policy. The information regarding potential benefits may be utilized to document those effects.

The purpose of this module is to provide conservation planners in Kentucky with a consistent and simplified process for determining the potential effects of NRCS conservation practices within riparian areas including the following:

- 1. To identify where riparian areas may exist within an AOI during planning;
- 2. To identify conservation practices that could influence riparian area functions and water quality;
- 3. To ensure planning alternatives are presented that comply with NRCS policy;
- 4. To identify potentially beneficial effects of conservation practices to riparian areas;
- 5. To provide information to conservation planners in a clear, concise method allowing documentation of the NEPA process (EE) in conjunction with decision makers and conservation planning.

Potential impacts to riparian areas are described fully in the supporting document in Section II of the Field Office Technical Guide entitled *Kentucky NRCS Conservation Practice Effects on Riparian Areas - for Conservation Planning and Program Implementation*. These impacts were determined as the ways riparian areas could be affected by the methods in which the practice was installed, operated, or maintained.

For the purposes of this handbook, riparian areas are defined as the transition zone and interface between land and water where the soils and vegetation types are influenced by a specific hydrologic regime through a combination of saturation, flooding, and precipitation. Mature riparian areas in Kentucky are usually forested or in various stages of succession due to disturbance. These areas are important to the ecology of stream systems in the state.

The KICT uses GIS stream layers in combination with soils and other information to determine the potential existence of riparian areas. This methodology has limitations including soils mapping scales, ephemeral streams not mapped, false positives for drainage ditches, etc. Therefore, this information should be utilized only as a screening tool and should always be field verified. There is no substitute for on-site verification.

Interpreting the Riparian Area Module (RAM) Results

To implement the results of the KICT, planners must be able to interpret the information provided and, if necessary, convey that information to the client by incorporation into specifications, designs, or maintenance of conservation practices.

Once a RAM report is returned, planners should determine if a project:

- 1. contains a delineated riparian area;
- 2. determine if the practice is being installed within, or close enough to affect riparian area functions;
- 3. identify any avoidance measures; and
- 4. recognize any potential benefits provided by conservation practices.

Riparian Area Potential Impact Information

Potential adverse impacts are the basis of the final determination the KICT produces and are included in reports to allow planners to understand why the avoidance strategies are required. Potential adverse impacts to riparian areas are grouped into six broad categories by the KICT. Multiple impacts may apply to riparian areas and several may apply to multiple practices. The basic impact categories are as follows:

- 1. breaking hydrologic connectivity to the riparian area and associated floodplain;
- 2. change in filtering sediment and/or nutrients (i.e. cycling);
- 3. impacts to riparian vegetation, or vegetation type;
- 4. adverse effect to water quality (at least short term) through animal waste, livestock introduction, pesticides, sediment, pollutants or various human activities entering or occurring within or adjacent to streams, wetlands, or other surface waterbodies;
- 5. manipulation of hydrologic regimes or the alteration of hydrology through diversion, impoundment; removal, or increased flooding duration or quantity; and
- 6. a change in landuse or land clearing activities.

The following are examples of the possible outcomes in the *Potential Impact Information* section of the KICT RAM report.

If there are not riparian areas within or near the AOI, the KICT output will state the following:

Example

POTENTIAL IMPACT INFORMATION

Based on the information submitted the following resource is present:

None

Depending upon how the practice is implemented, the placement of practices within or near these areas could have potential adverse impacts as shown below.

None

This output indicates that there appears to be no riparian area located in the AOI that could potentially be affected by the practices; the planner may document and proceed. Verify this finding by highlighting the riparian layer in the KICT and overlaying the project area. **ALWAYS** field-verify during planning.

In the next example, a riparian area is identified but the KICT output does not identify any potential impacts:

Example

POTENTIAL IMPACT INFORMATION

Based on the information submitted the following resource is present:

Riparian Area

Depending upon how the practice is implemented, the placement of practices within or near these areas could have potential adverse impacts as shown below.

None

This indicates that the AOI contains or is in very close proximity to a riparian area, however the practice(s) selected have no potential adverse effect to it. Planners should proceed to subsequent sections of the report to review any other relevant information.

The AOI contains, or is near, a riparian area and potential adverse effects are identified as follows:

Example

POTENTIAL IMPACT INFORMATION

Based on the information submitted the following resource is present:

Riparian Area

Depending upon how the practice is implemented, the placement of practices within or near these areas could have potential adverse impacts as shown below.

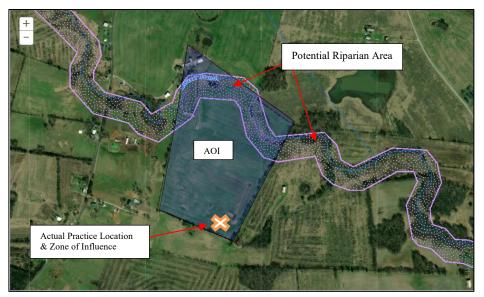
There is a potential to adversely affect riparian function by breaking hydrologic connectivity to the riparian area and associated floodplain.

There is a potential to adversely affect riparian areas through the manipulation of hydrologic regimes or the alteration of hydrology through diversion, impoundment, removal or increased flooding duration or quantity.

This example shows that there are two known potential adverse impacts associated with the installation of the practices to riparian areas. Planners need to proceed to the following sections of the report to determine how to avoid these potential impacts.

Verification of Placement of Practices Outside the Riparian Zone

Planners may receive a RAM report that indicates a riparian area is present within or near the AOI. However, the actual placement of the practice is not located in the footprint or zone of influence of the riparian area. Planners should enable the riparian layer available within the KICT to view the location and determine if those practices will be located within the riparian area or its zone of influence.



Planners should detrmine where the riparian area is within the planning unit and where the practice(s) are being installed.

For example, the planner has submitted a query for Seasonal High Tunnel (325) in a field that contains a riparian area. During the planning process, it has been determined that the placement of that practice will be located outside of the footprint or away from the riparian zone. Systematically verify the locations of any other practices in the same fashion and apply avoidance measures and benefits as applicable. If all practices submitted fall outside the zone of influence of riparian areas, document "No

Effect" to the resource appropriately. If practices are verified to affect the riparian area, continue to other sections of the report to determine the effects, considerations, benefits, etc.

Verification of Riparian Policy

NRCS policy requires conservation plans to maintain or improve water quality/quantity as well as provide fish and wildlife benefits. It also requires the development of alternatives when the client's objectives conflict with the conservation of these areas. Planners should always consider a riparian area's unique position near watercourses or water bodies because of the benefits provided to the water quality and quantity and fish and wildlife. Plans should maintain or improve those benefits. Intermittent and perennial streams transport sediment, water, energy, and propagules across property boundaries and provide fish and wildlife corridors; so, plans must carefully consider downstream and upstream effects of conservation practices and systems. If the landowner's objectives conflict with conservation of the riparian area resources, alternatives must be presented that identify ways to resolve those conflicts.

If the planner/Responsible Federal Official (RFO) determines that the client's proposed action conflicts with NRCS established policy, it is the responsibility of the planner/RFO to determine and point out to the client alternative methods of achieving the objective, as well as alternative locations for practices that impact riparian areas. If the alternative locations are determined to be impractical, or the client refuses to implement alternatives that meet NRCS policy, the planner/RFO will decide whether to continue assistance. The planner should document the conversation and supporting rationale in the assistance notes and any alternatives on the Environmental Evaluation (EE). Contact the NEPA coordinator for further assistance.

Riparian Area Considerations

Once it is determined that at least some practices queried may impact a riparian area, planners should refer to the *Considerations & Effect Determination* of the KICT RAM report. NRCS is required to provide alternatives to clients that have objectives that may conflict with water quality or functions of riparian areas. In the infrequent occasions when client objectives and policy may conflict, it is **not mandatory** for clients to implement the considerations outlined, or even adopt the alternatives developed. However, adoption of alternative strategies is highly encouraged and NRCS policy requires that planners offer those alternatives.

The considerations presented by the KICT in this module are suggestions that should be analyzed by the planner and incorporated into practicable alternatives for improving/maintaining and managing riparian areas and/or water quality. These considerations are management actions that demonstrate controllable measures and show good faith in adhering to NRCS policy. If the planner deems them appropriate and accurate, these strategies may be utilized to develop the alternatives required by policy. In other words, these considerations can be used to assist in the thought process for planning alternatives for the client.

The additional *Considerations for Practice Implementation* are found in Section A of the report. If the KICT determines that there are issues that should be considered, the table contains practices in the left column and the consideration(s) adjacent to the practice. The following pages provide report examples.

Example

2Aum pro		
CONSIDERATIONS & EFFECT DETERMINATION A. Considerations		
Practice	Considerations for Practice Implementation	
Structure for Water Control (587)	Carefully consider the siting and location of this practice. If practical, locate this practice outside the zone of influence of the riparian area. At a minimum, the practice should complement existing functions of adjacent riparian and aquatic habitats.	

In this example, the conservation practice Structure for Water Control (587) would have a consideration for implementation. <u>If it is practical</u>, planners are encouraged to consider alternative sites for this practice if the actual siting is within the riparian area. It may not be practical to locate the practice to another location. In those instances, ensure that the impacts to the riparian areas are minimal and complimentary.

Riparian Area Management Effect Determination (*Tentative*)

Section B of the RAM report is the *Effect Determination*. This section of the report is the determination of the project based on practice implementation. It is important to remember that the effect determination shown in this section assumes that the practices are located within the zone of influence of a riparian area. If alternate locations are chosen within the same AOI, or if actual placement of practices are not located within the zone of influence, the determination on the EE may be different than shown on the report. There are two possible determinations that may result from the RAM module report. They are as follows:

- No Finding (No Effect) or No Effect (NE)
- May Affect (MA)

1. No Finding (no riparian areas within the AOI) or No Effect (NE)

For projects that do not contain riparian areas, or the conservation practices installed have no effect to the riparian area or the riparian are zone of influence, Section B of the RAM report will state the following:

B. Effect Determination (Tentative)

The activities described has a determination of **No Effect (NE)** on riparian areas described under NRCS policy in located in GM 190 Part 411.3. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly. Always verify presence or absence of resources on site during the planning process.

Note: Within the area of interest, the actual placement of practices may not be in sites that influence riparian areas. Verify the location of the riparian area with respect to actual practice location. Therefore, the final determination shown above may differ from the final effect. In addition, there may be riparian zones that do not appear or are too small to be included in this inventory. Always verify effects with on-site analysis.

In the example above, the practices implemented will have no effect to the riparian area. Planners should document the report on the environmental evaluation according to policy.

2. May Affect (MA)

Example

B. Effect Determination (*Tentative*)

The activities described has a determination of **May Affect (MA)** on riparian areas described under NRCS policy in located in GM 190 Part 411.3. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly. Always verify presence or absence of resources on site during the planning process.

Note: Within the area of interest, the actual placement of practices may not be in sites that influence riparian areas. Verify the location of the riparian area with respect to actual practice location. Therefore, the final determination shown above may differ from the final effect. In addition, there may be riparian zones that do not appear or are too small to be included in this inventory. Always verify effects with on-site analysis.

This effect determination indicates that there are practice and resource combinations that could affect a riparian area. These effects can be entirely adverse, beneficial, or a mixture of both.

NOTE: It is important to remember that the effect determination shown in this section is tentative and assumes that the practices are located within the zone of influence of the riparian area. If alternate locations are chosen (within the same AOI) or if actual placement of practices are not located within the zone of influence of riparian areas, the determination on the EE may be different than shown on the report. Verify the location of the riparian area by enabling the riparian layer in the KICT and comparing the locations of individual practices on the report. If all practices that have considerations for implementation associated with them are found to not affect a riparian area function, document this rationale on the EE as No Effect (NE), reference the RAM KICT report, and continue planning.

Potential Benefits to Riparian Ecology

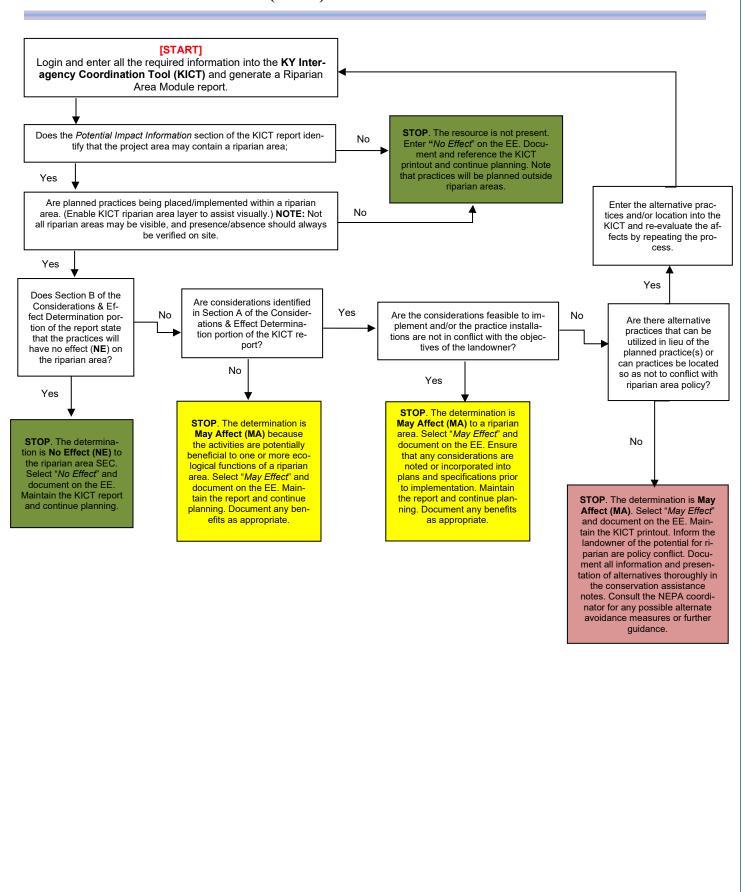
The *Potential Benefits* section of the RAM report lists possible benefits that could be realized to riparian areas by conservation practices installation. A benefit to riparian ecology may include contribution to flood control, stream bank stability, improved nutrient cycling, restoration or increased stream food webs, large wood recruitment to stream channels, pollutant filtering, sediment retention, and wildlife migration corridors. Riparian areas provide fish and wildlife habitat, forage and forest product production, and recreational activities. Local and regional water cycles will affect the size and value of a riparian area.

POTENTIAL BENEFITS		
If avoidance measures are implemented as outlined in this report, the following practices may provide beneficial contributions to riparian ecology:		
Practice	Potential Benefits Provided by This Activity	
Structure for Water Control (587)	This practice may be beneficial by establishing connectivity to streams, riparian areas and/or floodplains.	

In the example above the practice provides a benefit by potentially re-establishing an entrenched stream channel and reconnection of a floodplain with riparian vegetation.

NOTE: The effect determination shown in this section is tentative. It assumes that if riparian areas are present anywhere within the AOI, those practices will affect riparian zones of influence regardless of where they occur. Verify the location of riparian areas by examining the riparian area layer in the KICT and comparing the locations of individual practices on the report. If all practices are found not to impact the zone of influence of riparian areas, document this on the EE as No Effect (NE), reference the RAM KICT report, and continue planning.

RIPARIAN AREA MODULE (RAM) REPORT DECISION DIAGRAM



XVI. SCENIC BEAUTY MODULE (SBM)

Scenic Beauty Module (SBM) Description

The landscape has a consistently definable appearance that can be described by the measurable visual elements of landform, water, vegetation, structures, and sky. These visual elements provide a ready basis for describing the changing landscape as altered by human decisions. Management of the visual landscape is the process of manipulating the physical elements and functions of the landscape to achieve specific resource objectives. When all the elements are combined, patterns or images are formed that uniquely identify a landscape. Even though there are many kinds of landscapes across the country, each landscape can portray a unique sense of place identifiable to everyone who lives there or passes through.

Contributions to scenic beauty are a normal product of NRCS work. Strip-cropping, field borders, wind-breaks, and ponds are examples. Emphasis is given to those soil and water conservation measures that contribute to productive and efficient agriculture, increase the attractiveness of rural America, and are in line with goals and objectives of landowners. This is best accomplished by considering the landscape visual resource when providing planning assistance to individuals, groups and units of government. Scenic beauty can be defined as the viewer's positive perceived value of special, unique and memorable physical elements of a landscape. A beautiful landscape scene has definable visual elements that combine to provide a high-quality visual resource. A landscape with a high visual quality generates emotional impacts within the viewer's mind and links to sense of place and quality of life. Retaining a connection to a beautiful natural environment affects their well-being.

NRCS provides technical assistance with full consideration of alternative management and development systems that preserve scenic beauty or improve the landscape. The agency emphasizes the application of conservation practices having scenic beauty or landscape resource values, particularly in waste management systems, field borders, windbreaks, wetlands and wildlife habitat management, access roads, critical area treatment, design and management of ponds, riparian areas, odd areas, and farmsteads. The siting or positioning of structures and buildings should be in harmony with the landscape while reducing the potential for erosion; using native and other adaptable plants for conservation which enhance scenic beauty and creating diversity while linking beauty with utility.

The purpose of this module is:

- 1. To identify areas in KY that may contribute to scenic beauty and landscape value for field staff;
- 2. To identify sensitive visual priority areas and practices that could have a potential adverse effect to scenic resources:
- 3. To find ways to avoid or minimize adverse effects on areas that contribute to scenic areas;
- 4. To identify potential positive effects of practices (potential benefits) to scenic areas
- 5. To provide this information to conservation planners in a clear, concise method allowing documentation of the NEPA process (EE) in conjunction with decision makers and conservation planning.

Interpreting the Scenic Beauty Module (SBM) Results

Potential adverse impacts form the basis of the final determination the KICT produces and are included in reports to allow planners to understand why considerations may need to be addressed. To implement the results of the KICT, planners must be able to interpret the information provided and, if necessary, convey that information to the client by incorporation into specifications, designs, or maintenance of conservation practices. Potential adverse impacts to visual resources are described fully in the document in Section II of

the Field Office Technical Guide entitled *Kentucky NRCS Conservation Practice Effects on Visual Resources & Scenic Beauty for Planning and Program Implementation.* These impacts were determined as the ways visual resources could be negatively affected by the methods in which the practice was installed, operated, or maintained.

Once an SBM report is returned, planners should determine if a project:

- 1. is located within a high priority visual area;
- 2. has considerations that apply both at the landscape and planning level; and
- 3. incorporate any design modifications or screening practices into plans and designs

Note that even if a high priority visual area is not identified by the KICT, planners should <u>always evaluate</u> the effects to visual resources by installation, operation, and maintenance of conservation practices at the field scale level.

Potential Impact Information

Scenic areas are grouped into three priority areas (High, Medium and Low). Refer to the document entitled Kentucky NRCS Conservation Practice Effects on Visual Resources Scenic Beauty - for Conservation Planning and Program Implementation regarding information on how these areas were determined. Currently this module and corresponding examples only address High Visual Priority Areas. This is not to suggest that there are no other areas where scenic resources would occur. The high priority areas would alert planners to potentially highly visible areas where implementation of practices may be more likely valued for their visual resources at a larger scale. Medium and low priority areas could be utilized in the future versions of this module.

The following are examples of the possible outcomes in the *Potential Impact Information* section of the KICT SBM report.

If there are no high priority visual areas within or near the AOI, the KICT output will state the following:

Example

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project may be located in or near the following: None

Depending upon how the practice is implemented, the placement of practices within or near these areas could have potential adverse impacts as shown below.

None

This output indicates that there appears to be no visual high priority area located in the AOI that could potentially be affected by the practices. However, the planner should ALWAYS field-verify the impact potential to visual resources. If field verification indicates that visual resources will not be affected, document and proceed.

In the next example, a high priority visual area is identified but the KICT output does not identify any potential impacts:

Example

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project may be located in or near the following:

High Visual Priority Area

Depending upon how the practice is implemented, the placement of practices within or near these areas could have potential adverse impacts as shown below.

None

This indicates that the AOI selected is within or is in very close proximity to a high visual priority area, however the practice(s) selected have no potential adverse effect to it. However, the planner should ALWAYS field-verify the impact potential to visual resources. Planners should proceed to subsequent sections of the report to review any other relevant information.

The AOI contains, or is near, a high visual priority area and potential adverse effects are identified as follows:

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project may be located in or near the following: High Visual Priority Area

Depending upon how the practice is implemented, the placement of practices within or near these areas could have potential adverse impacts as shown below.

This practice could potentially adversely affect a high visual priority area.

This example shows that there is a potential adverse impact associated with the installation of the practices to a high visual priority area. Planners need to proceed to the following sections of the report to determine how to avoid or mitigate these potential impacts.

High Priority Visual Area Considerations

Once it is determined that at least some practices queried may impact a high priority visual area, planners should refer to the *Considerations & Effect Determination* of the KICT SBM report. The considerations presented by the KICT in this module are suggestions that should be analyzed by the planner and incorporated into practicable alternatives for improving/maintaining and managing scenic areas. These considerations are management actions that demonstrate controllable measures and show good faith in adhering to NRCS policy. If the planner deems them appropriate and accurate, these strategies may be utilized to develop the alternatives required by policy.

The additional *Considerations for Practice Implementation* are found in Section A of the report. If the KICT determines that there are issues that should be considered, the table contains practices in the left column and the consideration(s) adjacent to the practice. The following pages provide report examples.

CONSIDERATIONS & EFFECT DETERMINATION A. Considerations		
Practice	Considerations for Practice Implementation	
Composting Facility (317)	Consider the vertical height and general appearance of this practice so that it blends with surrounding and similar structures during design and implementation. Consider the appearance of farmhouses, barns, silos, wooden fences, stone walls, windmills and two-lane roads as well as other agriculturally related structures.	

In this example, the conservation practice Composting Facility (317) would have a consideration for implementation. <u>If it is applicable</u>, planners are encouraged to consider the height of this practice when practice siting is in an area where it may look unappealing with surrounding structures. It may not be practical to locate the practice to another location. In those instances, work with clients to implement screening or other measures that may aid in adding aesthetic value.

Scenic Beauty Effect Determination (Tentative)

Section B of the SBM report is the tentative *Effect Determination*. This section of the report is the determination of the project based on practice implementation. It is important to remember that the effect determination shown is tentative because considerations may not apply to the actual practice implementation and the determination on the EE could be different than shown on the report. There are two possible tentative determinations that may result from the SBM module report. They are as follows:

- No Effect or (No finding =No Effect) (NE)
- May Affect (MA)
- 1. No Finding (no high priority visual areas within or near the AOI) or No Effect (NE)

For projects that do not contain high priority visual areas, or the conservation practices installed have no effect to the high priority visual areas, Section B of the SBM report will state the following:

Example

B. EFFECT DETERMINATION (TENTATIVE)

The activities described has a determination of **No Effect (NE)** to scenic areas described in NRCS policy under GM Title 190, Part 410.24. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners should revise and resubmit this data accordingly.

Note: The determination shown may not apply depending on many factors and the professional judgement of the planner. This report may not reflect conditions at the field level. Therefore, the determination shown may differ from the final determination. Planners should always consider the aesthetics of practice implementation regardless of the setting and field verify any determination.

In the example above, the practices implemented will have no effect to a high visual priority area. Planners should evaluate the project at the field level and then document the appropriate finding on the environmental evaluation according to policy.

2. May Affect (MA)

Example

B. Effect Determination (Tentative)

The activities described has a determination of **May Affect (MA)** to scenic areas described in NRCS policy under GM Title 190, Part 410.24. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners should revise and resubmit this data accordingly.

Note: The determination shown may not apply depending on many factors and the professional judgement of the planner. This report may not reflect conditions at the field level. Therefore, the determination shown may differ from the final determination. Planners should always consider the aesthetics of practice implementation regardless of the setting and field verify any determination.

This tentative effect determination indicates that there are practice and resource combinations that may affect a high visual priority area. These effects can be entirely adverse, beneficial, or a mixture of both.

Potential Benefits to Scenic Beauty

The *Potential Benefits* section of the SBM report lists six possible benefits that could be realized to high priority visual areas by conservation practice installation. A benefit to these areas may include the following:

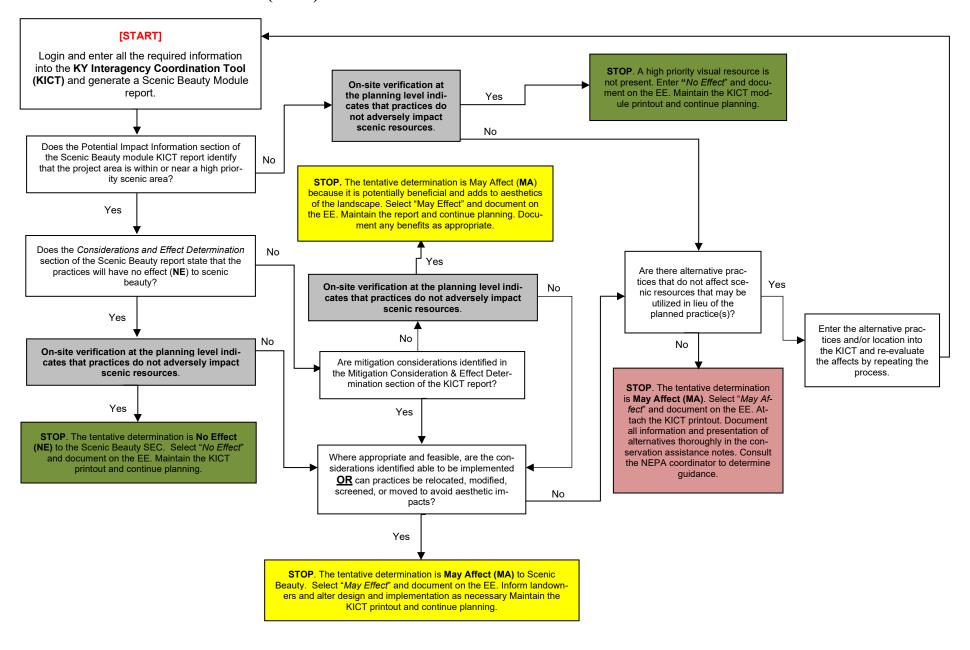
- 1. addition of screening or buffering effect between unaesthetic practices or landuses;
- 2. providing an integral landform element;
- 3. providing an integral water element;
- 4. providing an integral vegetation element or improving the existing vegetation element by adding color shape and texture;
- 5. by providing an integral structural element;
- 6. improving water appearance such as turbidity, algal growth, precipitants, sedimentation or other removal of unappealing visual characteristics.

Benefits listed or identified in the reports should be viewed in the context of the landscape and may or may not apply at the landscape level or at the field planning level.

Aumpte		
POTENTIAL BENEFITS		
This project (when implemented along with any applicable mitigation considerations) could have a bene effect to scenic areas as shown below.		
Practice	Potential Benefits Provided by This Activity	
Composting Facility (317)	This practice could provide additional scenic attributes to agricultural land- scapes and settings by providing an integral structural element to the agricul- tural setting. Carefully consider the setting, visibility and context with respect to placement of this practice.	

In the example above the practice could provide a potential benefit by adding a structural (building) element to an agricultural landscape. It does not consider viewsheds at the field level and must be further evaluated at that level.

SCENIC BEAUTY MODULE (SBM) REPORT DECISION DIAGRAM



XVII. WETLAND MODULE (WM)

Wetland Module (WM) Description

Natural Resources Conservation Service (NRCS) describes wetlands as a critical environmental concern in the agency's rule for the implementation of NEPA (7 C.F.R. 650). NRCS is required to consider impacts to wetlands through other Federal laws including, but not limited to, the Clean Water Act, the Wetland Conservation provisions of the Food Security Act of 1985, in addition to the State, Tribal, and local laws which may also provide protection to wetlands. Other Federal, State, and local laws which may provide wetland protection measures could require NRCS to take actions in addition to actions required under policy.

Wetlands are defined differently within various Federal and State programs for identification, delineation, and classification purposes. NRCS wetland protection policy defines wetlands as areas, natural or artificial, that have hydric soil, hydrophytic vegetation, and indicators of wetland hydrology. Generally, wetlands include swamps, marshes, bogs, many bottomland hardwood areas, and similar areas. Note that this screening tool does not include artificial wetlands, riverine wetlands, or anthropogenic ponds. Farm ponds, artificial and other anthropogenic wetlands should be considered during the field verification and planning process.

The purpose of this module is the following:

- 1. to broadly assess the known potential presence of wetlands within a planning unit and create awareness of areas that could be considered wetlands, and
- 2. assess the effects of implementation, operation, and maintenance of conservation practices within or near these areas.

This module is not a comprehensive inventory and should always be field verified. This screening process is not meant to create a wetland label determination or jurisdictional determination for the National Food Security Act or for the Clean Water Act purposes.

If it is found wetlands will be impacted by a proposed activity, NRCS will identify whether practicable alternatives exist that either enhance wetland functions and values or avoid or minimize harm to wetlands. If such alternatives exist, the client will be given the opportunity to select one of those alternatives. This module is designed to help planners with this thought process.

Wetland Report Format

The Wetland Module (WM) report is formatted much the same as the other modules in the KICT. Refer to the section of this handbook entitled *KICT Reports & Format* for general information regarding report formatting. The report that is generated for this module is formatted into three main sections which include Potential Impacts, Tentative Determination and Potential Benefits. The length of the module report varies depending on the number of practices, potential impacts, avoidance measures and so forth.

Interpreting the Wetland Module Results

Potential adverse impacts are the basis of the tentative determination the KICT produces and are included in reports to allow planners to understand why avoidance strategies are required. To implement the results of the KICT, planners must be able to interpret the information provided and, if necessary, convey that information to the client by incorporation into specifications, designs, or maintenance of conservation practices. Once a WM query is returned, planners should determine if a project:

- 1. potentially contains a wetland;
- 2. determine if the practice is being installed within or near to affect the wetland and assess the potential effects;
- 3. identify and incorporate any required avoidance measures into specifications and/or operation and maintenance; and
- 4. recognize/document any potential benefits provided by implementation of conservation practices.

Potential Impact Information

Potential adverse impacts to wetlands are described fully in the document in Section II of the Kentucky Field Office Technical Guide entitled *Kentucky NRCS Conservation Practice Effects on Wetlands for Planning and Program Implementation*. These impacts were determined as the way wetlands could be negatively affected by the methods in which the practice was installed, operated, or maintained. Potential adverse impacts to wetlands are grouped into four broad categories by the KICT. Multiple impacts may apply to wetlands, and several may apply to multiple practices. The basic impact categories are as follows:

- 1. filling or dredging;
- 2. removal of native woody vegetation (may or may not include stumps);
- 3. introduction of animal waste, livestock, pesticides, sediment, pollutants or various human activities entering or occurring within or adjacent to an existing wetland; and
- 4. manipulation of hydrologic regimes or the alteration of hydrology through diversion, impoundment, removal or flooding.

The following are examples of possible outcomes in the Potential Impact Information section for WM reports.

If there are no wetlands within or near the AOI, the module report will state the following:

Example

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project may contain or be adjacent to an area that is classified as:

None

The placement of practices within or near these areas could have potential adverse impacts as shown below.

None

This output indicates that there are no potential wetlands located in or near the AOI that could potentially be affected by the practices. Proceed to other sections of the report for other information as applicable. Planners must field verify this information. Once verified, the planner may document this information and proceed with planning.

If potential wetlands are present within or near the AOI, the KICT will list the type of waterbody that is present.

Example

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project may contain or be adjacent to an area that is classified as:

Potential Wetland

The placement of practices within or near these areas could have potential adverse impacts as shown below.

None

In this example, the tool identifies that a potential wetland is present. However, there were no identified impacts based on the conservation practices planned. Therefore, the tool listed "None". Proceed to other sections of the report for other information as applicable.

If adverse impacts are identified the tool will identify the impact(s) associated with the potential wetland.

Example

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project may contain or be adjacent to an area that is classified as:

Potential Wetland

The placement of practices within or near these areas could have potential adverse impacts as shown below.

There is a potential to adversely affect water quality through introduction of animal waste, livestock, pesticides, sediment, pollutants or various human activities entering or occurring within or adjacent to an existing wetland.

In this example, a potential wetland was identified as being near the AOI and the impact was identified as potentially having adverse effects to water quality. Multiple impacts may be listed in this section. It is imperative that the planner field-verify these impacts in relation to the actual placement of the practice (zone of influence). Refer to the section of this document entitled Effect Determination for more information.

Wetland Module Avoidance Measures

The KICT provides avoidance measures for planners to implement for areas identified as potential wetlands. **These avoidance measures are required to be implemented.** The following is an example of how a required strategy may be shown.

Example

AVOIDANCE MEASURES & EFFECT DETERMINATION		
A. Avoidance Measures		
Based on the information submitted and if verified, the following strategies should be implemented to avoid adverse effects for the practice(s) shown. If wetlands are found to be impacted, the strategies listed below must be incorporated into the conservation plan, layout/specifications and operation and management of the practice.		
Practice	Required Avoidance Measures for Practice Implementation	
Composting Facility (317)	No spoil or fill resulting from installation of this practice should be placed in areas classified as a wetland.	
	The placement of this practice shall not occur in areas classified as a wetland.	

In this example, a composting facility is planned near or in an area that is a potential wetland. The avoidance measure prohibits the placement of the composting facility in an area that is considered a wetland nor should fill from construction be placed in a wetland. If planners are unsure of the boundaries of these potential wetlands, they should consult area or state specialists for assistance in identification. In preparation of specifications for the practice, the planner/engineer should clearly specify where the structure is to be constructed, and fill is to be placed.

Permitting Protocol for Potential Wetlands

Some activities may adversely affect the values or characteristics of verified wetlands. In those instances, the KICT will provide an avoidance strategy that instructs the planner to obtain permits or authorizations from regulatory agencies that have jurisdiction over wetlands depending upon the designation. An avoidance measure similar to the following will be provided in the report.

AVOIDANCE MEASURES & EFFECT DETERMINATION			
A. Avoidance Measures	A. Avoidance Measures		
Based on the information submitted and if verified, the following strategies should be implemented to avoid adverse effects for the practice(s) shown. If wetlands are found to be impacted, the strategies listed below must be incorporated into the conservation plan, layout/specifications and operation and management of the practice.			
Practice	Required Avoidance Measures for Practice Implementation		
Land Clearing (460)	If alternate sites are unavailable and impacts to existing wetlands are verified, permits and permissions may be required including but not limited to the Clean Water Act and Wetland Conservation Provisions of the National Food Security Act, Floodplain Coordination, etc.		

If this or similar avoidance measures occur, planners should attempt to determine if other locations or practices that achieve the same objectives are available and would not require permitting or regulatory intervention. If alternative practices/locations are not available, utilize the following protocol for resolution:

- 1. The planner should utilize their chain of command to field verify the presence, effects and scope of the impacts to existing wetlands requesting a trained specialist for assistance (Area Resource Soil Scientist, Wetland Biologist, etc.).
- 2. Assess the impacts to wetlands utilizing the existing assessments and protocols (i.e. functional assessments, etc.)
- 3. Determine the necessity for obtaining any permits, including floodplain coordinator permissions, NFSAM, Clean Water Act, etc. and provide agency contacts for those agencies. Also refer to other

module information within the KICT to help determine the possibility of jurisdictional waters (CWAM, WASRM etc.)

- 4. Document all conversations with the client regarding the need for permits, etc. in the assistance notes and mark "Needs Further Action" on the Wetlands SEC in Section J of the Environmental Evaluation (EE). Continue planning and revise the EE when consultations/permits are received via client. Permits are the landowner's responsibility to obtain.
- 5. Document any need for coordination/permitting on the EE if necessary and applicable.
- 6. If permits are not authorized/obtained or the client refuses to obtain or implement permit requirements, discontinue technical and financial assistance until resolution.

Wetland Module Effect Determination (Tentative)

Section B of the WM report is the tentative *Effect Determination*. This section of the report is the determination of the project based on practice implementation. It is important to remember that the effect determination shown is tentative since the area must be field verified and impacts may not apply to the actual practice implementation. Therefore, the determination on the EE could be different than shown on the report. There are two possible tentative determinations that may result from the WM module report. They are as follows:

- No Effect (No finding = No Effect) (NE)
- May Affect (MA)
- 1. No Finding (no identified potential wetlands within or near the AOI) or No Effect (NE)

For projects that do not contain potential wetlands, or the conservation practices installed have no effect to those areas, Section B of the WM report will state the following:

1. No Effect (NE) (or no potential wetland within or near the AOI)

For projects that do not contain potential wetlands, or the conservation practices installed have no effect to wetlands. Section B of the report will state the following:

Example

B. Effect Determination (Tentative)

The activity described has a determination of **No Effect (NE)** to wetlands protected under Executive Order 11990 and NRCS policy located at 190-GM, Part 410, Subpart B, Section 410.26. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly.

Note: This report does not grant or constitute permission or permitting in any manner. Due to the scale, size and other limitations, this information is for screening purposes only and should not be considered final. Wetlands may occur that are not taken into consideration by this report. ALWAYS verify the presence or absence of wetlands through on-site analysis and field verification. Therefore, the final determination shown above may differ. Document the determination, rationale and effects in conjunction with on-site analysis on the Environmental Evaluation. Certain activities may require a Clean Water Act (CWA) permit or other permission. Refer to the CWA information as necessary.

In the example above, either the KICT located a resource within or near the AOI and determined that the practices planned will have no effect to it; or there no potential wetlands identified on or near the AOI.

Planners must <u>always</u> field verify this finding. Due to scale and lack of data, wetlands may occur at the field level that are not identified by the KICT. Once verified, planners should document the finding on the Environmental Evaluation (EE) according to policy.

2. May Affect (MA)

Example

B. Effect Determination (*Tentative*)

The activity described has a determination of **May Affect (MA)** to wetlands protected under Executive Order 11990 and NRCS policy located at 190-GM, Part 410, Subpart B, Section 410.26. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly.

Note: This report does not grant or constitute permission or permitting in any manner. Due to the scale, size and other limitations, this information is for screening purposes only and should not be considered final. Wetlands may occur that are not taken into consideration by this report. ALWAYS verify the presence or absence of wetlands through on-site analysis and field verification. Therefore, the final determination shown above may differ. Document the determination, rationale and effects in conjunction with on-site analysis on the Environmental Evaluation. Certain activities may require a Clean Water Act (CWA) permit or other permission. Refer to the CWA information as necessary.

This determination indicates that there are practice and resource combinations that could have an effect on an area identified as a potential wetland. These effects can be entirely adverse, beneficial, or a mixture of both.

Disclaimer

Wetlands, wetland legislation and the rules governing them are complex. Planners must use caution in the dissemination of the WM report and subsequent KICT determinations to avoid confusion regarding the determination use and purpose. This determination is solely to screen a PLU for any known areas that may be classified as wetlands under one or more Acts for the purpose of completing the EE according to NRCS policy. This determination in no way constitutes a formal delineation or determination for any law including the National Food Security Act (NFSAM) or the Clean Water Act (CWA). A formal determination/delineation for those purposes must be made using other methods, procedures, and protocols. Contact the wetland compliance officer for more information.

The areas identified by this process may or may not have been formally delineated. The areas the KICT uses have been identified using various datasets of NRCS and regulatory agencies, but in no way contain all areas that could be classified as wetlands. Additionally, the planner must verify that practices planned will not affect the wetland in the field. Therefore, every "may affect" and "no effect" determination must be field verified. Planners that have limited or no experience with wetlands should always seek assistance regarding these issues.

Potential Benefits

The *Potential Benefits* section of the WM report lists possible benefits that could be realized to field-verified wetlands by the installation of conservation practices when any required avoidance measures are implemented. A benefit to a field-verified wetland may include providing a buffer or filtering effect, facilitating exclusion of people, vehicles, livestock or equipment, result in a water quality benefit, or restoration and/or

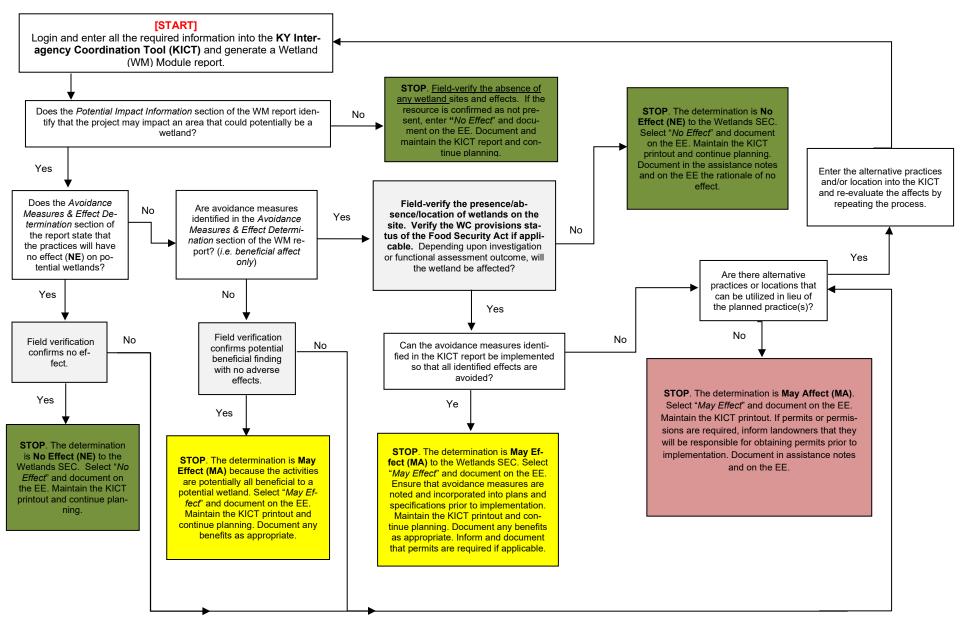
management of aquatic habitats. Potential benefits may be utilized to help determine alternatives that enhance functions or values and may be used to help guide decisionmakers in developing alternatives that are beneficial to wetlands.

Example

POTENTIAL BENEFITS	
If all the required avoidance measures are implemented as outlined in this report, the following practices could potentially be beneficial for any field-verified wetlands.	
Practice	Potential Benefits Provided by This Activity
Composting Facility (317)	This practice may be beneficial to water quality if it is installed for the purpose of reducing or eliminating animal wastes, sediment, pesticides, or other pollutants from an existing wetland.

In this example, the (317) Composting Facility is a beneficial practice if any applicable avoidance measures are implemented, and the practice is installed for the purpose of removing or eliminating a potential pollutant to the field-verified wetland.

WETLAND MODULE (WM) REPORT DECISION DIAGRAM



XVII. WILD, SCENIC AND NRI RIVER SEGMENTS & KENTUCKY SPECIAL USE WATERS (WASRM)

Wild, Scenic and NRI River Segments Module (WASRM) Description

The purpose of this module is to provide conservation planners in Kentucky with a consistent and simplified process for determining the potential effects of NRCS conservation practices in areas designated for protection under the Wild and Scenic Rivers Act and document that impact on the Environmental Evaluation (EE). The protection of these areas is consistent with the NRCS mission and is required for compliance with NRCS policy and NEPA. In addition, this module provides information on Special Use Waters. These are waters of the Commonwealth, most of which have requirements under Sections 404, 403 and 401 of the Clean Water Act. These waters are often classified or designated for the unique resources that they possess and may have additional regulations that are covered more extensively in other modules (e.g. Endangered Species Act or Clean Water Act).

The module will help planners assess whether the area of interest lies within or near a federal and state area designated as a Wild or Scenic River or Nationwide Rivers Inventory (NRI) segment. In addition, it will provide information regarding Kentucky Special Use Waters and provide considerations for planners regarding water quality.

The module provides conservation planners in Kentucky with a consistent and simplified process for determining the potential effects of NRCS conservation practices in these officially designated areas including the following:

- 1. identify where NRI segments and Wild and Scenic official designations may exist within an AOI during planning;
- 2. identify conservation practices that could affect the qualities for which these areas are designated
- 3. identify conservation practices that could affect water quality in these areas;
- 4. identify potentially beneficial effects of conservation practices to officially designated areas;
- 5. provide information to conservation planners in a clear, concise method allowing documentation of the NEPA process (EE) in conjunction with decision makers and conservation planning.

Potential impacts to Wild and Scenic Rivers, NRI segments, and Kentucky Special Use Waters are described fully in the document in Section II of the Field Office Technical Guide entitled Kentucky NRCS Conservation Practice Effects on Wild, Scenic and NRI River Segments & Kentucky Special Use Waters for Conservation Planning and Program Implementation. These impacts were determined as the ways these areas could be affected by the methods in which the practice was installed, operated, or maintained.

Wild and Scenic River & NRI Segment Report Format

The Wild and Scenic River Module (WASRM) reports are formatted much the same as other modules. The exception is the section for Special Use Waters in KY. This section provides additional considerations for waters with special resources. Refer to the section entitled *KICT Reports & Format* for general information regarding report formatting. The report that is generated for this module is formatted into four sections. The length of the module reports varies depending on the number of practices, potential impacts, considerations for implementation, and so forth.

Interpreting the Wild and Scenic River & NRI Segment Results

Potential adverse impacts are the basis of the Final Determination the KICT produces and are included in reports to allow planners to understand why the avoidance strategies are required. To implement the results of the KICT, planners must be able to interpret the information provided and, if necessary, convey that information to the client by incorporation into specifications, designs, or maintenance of conservation practices. Once a WASRM query is returned, planners should determine if a project:

- 1. contains a Wild and Scenic River or NRI segment;
- 2. determine if the practice is being installed within or near to affect the qualities for which the river segment is designated;
- 3. identify any required avoidance measures;
- 4. note any Kentucky Special Use Waters and incorporate any considerations and other module references as applicable; and
- 5. recognize/document any potential benefits provided by conservation practices.

Potential Impact Information

Potential adverse impacts to Wild and Scenic Rivers or NRI segments or Kentucky Special Use Waters are grouped into six broad categories by the KICT. Multiple impacts may apply to WASRM and several may apply to multiple practices. The basic impact categories are as follows:

- 1. dredge and fill activities
- 2. effects to primitive or cultural values
- 3. effects to riparian corridors
- 4. adverse effect to water quality;
- 5. manipulation of hydrologic regimes or the alteration of hydrology
- 6. a change in landuse or land clearing activities.

The following are examples of possible outcomes in the Potential Impact Information section for WASRM reports.

If there are no WASRM within or near the AOI, the module report will state the following:

Example

WILD AND SCENIC RIVERS & NRI SEGMENTS

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project occurs within or near a protected river segment as shown below.

None

Depending upon how the practice is implemented, the placement of practices within or near these areas could have potential adverse impacts as shown below.

None

This output indicates that there are no protected river segments located in or near the AOI that could potentially be affected by the practices. Proceed to other sections of the report for other information and considerations. The planner may document this information and proceed.

If protected river segments are present within or near the AOI, the KICT will list the type of water body that is present.

WILD AND SCENIC RIVERS & NRI SEGMENTS

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project occurs within or near a protected river segment as shown below.

Wild and Scenic River, National River Inventory (NRI) segment

Depending upon how the practice is implemented, the placement of practices within or near these areas could have potential adverse impacts as shown below.

This activity may result in adverse modifications to riparian corridors and associated watersheds adjacent to a Wild and Scenic River, NRI segment or Kentucky Special Use Water.

In this example, the tool identifies two types of federally designated waters and a potential impact that may apply. If waters are present but there are no identified impacts the report will simply state "none". Note that Kentucky Special Use waters are not identified in this section. If these types of waters are present, they will be identified in the report section entitled *Kentucky Special Use Waters*.

WASRM Avoidance Measures

The KICT provides avoidance measures for planners to implement for Wild and Scenic Rivers and NRI Segments. These avoidance measures are required to be implemented. The following is an example of how a required strategy will be shown.

Example

AVOIDANCE MEASURES & EFFECT DETERMINATION	
A. Avoidance Measures	
Based on the information submitted, the following strategies should be implemented to avoid adverse effects for the practice(s) shown. The strategies listed below must be incorporated into the conservation plan, layout/specifications and operation and management of the practice.	
Practice	Required Avoidance Measures for Practice Implementation
Composting Facility (317)	This practice shall only be installed in existing agricultural settings within actively managed cropland, grassland, hayland, farmsteads, etc. New lands must not be cleared to implement this practice.

In this example, a composting facility is planned near or in an area that has a designated stream or river segment. The avoidance measure prohibits new lands from being cleared to install a composting facility.

Consultation Protocol for WASRM and NRI Segments

Some rare activities may adversely affect the values or characteristics of the water body for which it was designated. In those instances, the KICT will provide an avoidance strategy that instructs the planner to consult with another agency. The US Forest Service (USFS) or the National Park Service (NPS) have jurisdiction over a waterbody depending upon the designation. NRCS may be required to officially consult with one or both agencies to determine if the activity complies with the watershed plan and is not in conflict with the natural or cultural values of the water body. An avoidance measure similar to the following will be provided in the report.

AVOIDANCE MEASURES & EFFECT DETERMINATION		
A. Avoidance Measures		
Based on the information submitted, the following strategies should be implemented to avoid adverse effects for the practice(s) shown. The strategies listed below must be incorporated into the conservation plan, layout/specifications and operation and management of the practice.		
Practice	Required Avoidance Measures for Practice Implementation	
Land Clearing (460)	This practice may require consultation with the U.S Forest Service, National Park Service and/or permits from the Kentucky Department of Environmental Protection- Division of Water and other agencies. In addition, Clean Water Act Permits may be required for this activity. Contact the NEPA Coordinator/State Biologist for further guidance and coordination.	

If this or similar avoidance measures occur, planners should attempt to determine if other practices that achieve the same objectives would not require consultation. If alternative practices are not available, utilize the following protocol for initiating consultation:

- 1. Contact the NEPA Coordinator for additional guidance.
- 2. Inform the client of the potential to obtain permission from an outside agency (NPS or USFS) and obtain written permission from the landowner. The NEPA Coordinator will provide a permission form for signature.
- 3. Determine the necessity for obtaining other permits, including floodplain coordinator permissions, Clean Water Act, etc. and provide agency contacts for those agencies.
- 4. Document the conversation with the client regarding the need for permits, consultations, etc. in the assistance notes and mark "Needs Further Action" on the Environmental Evaluation (EE). Continue planning and revise the EE when consultations/permits are received via client.
- 5. Document any need for coordination/consultation on the EE if necessary and applicable.

WASRM Effect Determination

Section B of the WASRM report is the Effect Determination. This section of the report is the determination of the project based on practice implementation. There are two possible determinations that may result from the WASRM report. They are as follows:

- No Effect (NE)
- May Affect (MA)

1. No Effect (NE) (or no designated waterbody within or near the AOI)

For projects that do not contain Wild and Scenic Rivers or NRI segments, or the conservation practices installed have no effect to those water bodies Section B of the report will state the following:

Example

B. Effect Determination (tentative)

The activities described has a determination of **No Effect (NE)** to areas protected under The National Wild and Scenic Rivers Act of 1968 (Public Law 90-542). If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly.

Note: Notify the client/landowner and document the necessity to obtain any permits prior to implementation.

In the example above, even though the KICT located a resource within or near the AOI, the practices implemented will have no effect to the WASRM or values associated with it. Planners should document the report on the Environmental Evaluation (EE) according to policy.

2. May Affect (MA)

Example

B. Effect Determination (tentative)

The activities described has a determination of **May Affect (MA)** to areas protected under The National Wild and Scenic Rivers Act of 1968 (Public Law 90-542). If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly.

Note: Notify the client/landowner and document the necessity to obtain any permits prior to implementation.

This determination indicates that there are practice and resource combinations that could have an effect on a federally designated waterbody area. These effects can be entirely adverse, beneficial, or a mixture of both.

Interpreting the Kentucky Special Use Waters Results (KSUW)

This section of the report provides information regarding KSUW that planners and land managers should consider. Note that the Effect Determination for WASRM does not apply to the KSUW information. **The considerations provided in this section are voluntary and should be used for information only.** However, in some instances these considerations may direct planners to other modules such as the Endangered Species Act or the Clean Water Act because a permit may be required for an activity planned, or there are protected species potentially present within or near the area.

There are six different types of KSUW identified by this module. They are as follows:

- 1. Cold Water Aquatic Habitat (CAH) includes surface waters that will support indigenous aquatic life or self-sustaining and/or reproducing trout populations on a year-round basis.
- 2. Outstanding State Resource Waters (OSRW) are surface waters designated as unique waters of the Commonwealth.

- 3. Outstanding National Resource Waters (ONRW) are waters that meet the requirements for an outstanding state resource water classification and are of national ecological or recreational significance.
- 4. **Exceptional Waters (EXCW)** waterbodies whose quality exceeds that necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water. Sometimes these are referred to as *High Quality Streams*.
- 5. **Reference Reach Waters (R-RCH)** are streams representative of many similar streams within a definable geographic area. Reference reach waters are the least impacted within an ecoregion and provide an estimate of attainable conditions for similar streams within the same ecoregion and watershed. These streams are also included in the list of exceptional waters.
- 6. Portions of nine rivers of exceptional quality and aesthetic character have been designated as **Kentucky Wild Rivers**. Each Wild River is a linear corridor encompassing all visible land on each side of the river up to 2,000 feet. Wild Rivers are designated by the state General Assembly in recognition of their unspoiled character, outstanding water quality, and natural characteristics.

A stream may be designated as more than one of these types and therefore may have multiple listings identified in the report. In addition, the KSUW and the federal designation of WASRM may coincide and have multiple listings. The following is an example of how a KSUW may be identified in this module.

Example

Example		
KENTUCKY SPECIAL USE WATERS (PROVIDED FOR ADDITIONAL CONSIDERATION)		
This project area contains or occurs near the following KY Special Use Waters:		
Outstanding State Resource	Water, Outstanding National Resource Water	
The following information should be carefully considered during practice implementation. Also, verify if dredging or filling within or near these waters is associated with the project. Refer to the clean water act information if available.		
Practice	Considerations	
Composting Facility (317)	Carefully consider the siting of this practice to minimize impacts to streams and surface waters from pollutant runoffs during implementation and operation.	
	This waterbody could contain protected state or federally listed aquatic species. Refer to Threatened or Endangered species information for guidance with these practices and associated waterbodies.	
Note: Notify the client/landowner and document the necessity to obtain any permits prior to implementation.		

In this example, a composting facility is being proposed in an area that is near or contains an Outstanding State Resource Water and an Outstanding National Resource Water. The module informs the planner to carefully consider the placement of the practice to avoid water quality concerns and points to the ESA module as there is a possibility that the stream could contain federally listed species. These considerations are to be implemented where feasible and practical. Many times, this information is simply utilized by planners to help recognize resource concerns and avoid any potential adverse aquatic impacts.

Not all reports will contain a KSUW. In those instances, this section will state the following:

KENTUCKY SPECIAL USE WATERS (PROVIDED FOR ADDITIONAL CONSIDERATION)			
This project area contai	This project area contains or occurs near the following KY Special Use Waters:		
None			
The following information should be carefully considered during practice implementation. Also, verify if dredging or filling within or near these waters is associated with the project. Refer to the clean water act information if available.			
Practice	Considerations		
N/A	None		
Note: Notify the client/landowner and document the necessity to obtain any permits prior to implementation.			

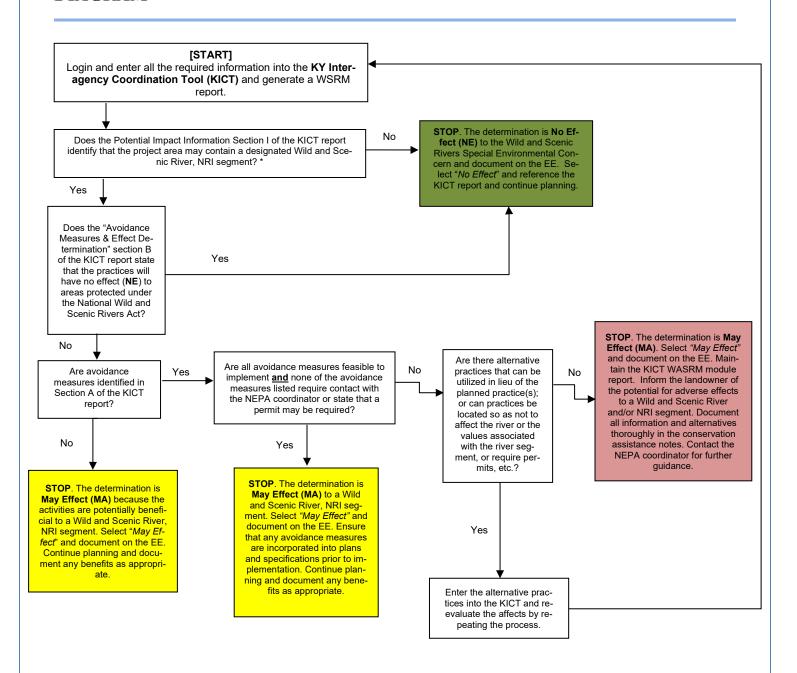
Potential Benefits to Designated Stream Segments

The *Potential Benefits* section of the WASRM report lists possible benefits that could be realized to designated stream segments by installation of conservation practices. A benefit to a stream segment may include contribution to improved water quality, exclusion of livestock and people, and restoration or improvement of values and characteristics of use and viewshed. Benefits may be listed for either KSUW or WASRM.

Example

POTENTIAL BENEFITS	
If avoidance measures are implemented as outlined in this report, the following practices may provide beneficial contributions to riparian ecology:	
Practice	Potential Benefits Provided by This Activity
Composting Facility (317)	This practice may be beneficial to water quality if it is installed for the purpose of reducing or eliminating animal wastes, sediment, pesticides, or other pollutants from a Wild and Scenic River, NRI segment or Kentucky Special Use Water or associated wetland.

WILD AND SCENIC RIVER MODULE (WASRM) REPORT DECISION DIAGRAM



* NOTE: KY Special Use Waters are included in the report as information only. Conservation planners are highly encouraged to implement avoidance measures where feasible and practical; and to inform landowners of potential adverse impacts. Refer to other relevant modules if applicable.

XIX. CATEGORICAL EXCLUSIONS (CatExM)

Categorical Exclusions Module Description (CatExM)

The purpose of this module is to provide conservation planners in Kentucky with a consistent and simplified process for determining the appropriate categorical exclusion for NRCS conservation practices for non-project activities. Categorical Exclusions (CE) are determined by the agency and are a set of preapproved conditions that allow certain activities to be exempt from the development of an Environmental Assessment (EA) or Environmental Impact Statement (EIS). The purpose of this document is to assist field planners with making decisions regarding which categorical exclusions applicable and recommended by the KICT for various practices during conservation planning.

The purpose of the development of this document/module is:

- 1. To develop a consistent method for determining the application of the twenty-one agency categorical exclusions for conservation planning.
- 2. To streamline the selection of the appropriate categorical exclusions.
- 3. To identify categorical exclusions for each practice depending upon the context of application
- 4. To utilize an expedited and automated system to generate the appropriate categorical exclusions during the planning process.
- 5. To provide this information to conservation planners in a clear, concise method allowing documentation of the NEPA process on the EE in conjunction with decision makers and conservation planning.

Note the examples in this module reference the CPA-52 Environmental Evaluation (EE). The documentation of the proper categorical exclusions on the EE may differ depending upon the type of EE NRCS currently utilizes (i.e. CART EE)

Categorical Exclusions Report Format

The Categorical Exclusion Module (CatExM) reports are formatted much the same as other modules. The exception is that there is no determination of effects or potential impacts section. The report that is generated for this module is formatted into three sections: extraordinary circumstances, categorical exclusions, and notes. The length of the module reports varies depending on the number of practices, and the number of categorical exclusions required to cover those practices.

To categorically exclude a federal action from further analysis there can be no extraordinary circumstances which cannot be mitigated. NRCS evaluates each action using its list of special environmental concerns along with the significance factors to determine whether an action has extraordinary circumstances. Action(s) that have potential for significant impacts on the human environment cannot be categorically excluded. Thus, in the absence of any extraordinary circumstances the actions can proceed without the preparation of an environmental assessment (EA) or environmental impact statement (EIS). Where extraordinary circumstances are determined to exist, the categorical exclusion will not apply. *Note that requiring consultation or mitigation for cultural resources or threatened and endangered species does not constitute extraordinary circumstances.

In addition to not having significance or extraordinary circumstances the action must also meet (as applicable) the categorical exclusion sideboards. These sideboards apply to all CEs and are listed on the CatExM report. They are as follows:

- (1) include provisions to mitigate soil erosion, sedimentation, and downstream flooding;
- (2) require disturbed areas to be vegetated with adapted species;
- (3) are based on the principles of natural stream dynamics and processes presented in the Federal Interagency Stream Corridor Restoration Working Group document "Stream Corridor Restoration, Principles, Processes, and Practices;"
- (4) incorporate the applicable NRCS conservation practice standards as found in the FOTG
- (5) do not require substantial dredging, excavation, or placement of fill; and
- (6) do not involve a significant risk of exposure to toxic or hazardous substances.

Interpreting the Categorical Exclusion Results

To implement the results of this module, planners must be able to interpret the information provided and, document that information on the Environmental Evaluation. There are twenty-one approved categorical exemptions for NRCS. Many of the categorical exemptions apply to multiple practices and many cover almost all practices planned in the normal scope of NRCS work. Once a CatExM query is returned, planners should determine if the project:

- 1. meets the specified purpose of the CatEx and involve no extraordinary circumstances;
- 2. meets the over-arching sideboards/criteria identified on the report, and;
- 3. have no adverse (short or long-term) impacts that cannot be mitigated.

Categorical Exclusions Results

The following are examples of possible outcomes in the Categorical Exclusions section for CatExM reports.

Example

Example	
CATEGORICAL EXCLUSIONS	
If none of the extraordinary circumstances listed above apply, it has been determined that this project may be categorically excluded from development of an Environmental Assessment (EA) or an Environmental Impact Statement (EIS) by the following:	
Practices	Categorical Exclusion(s)
Nutrient Management (590) Composting Facility (317)	(19) Undertaking minor agricultural practices to maintain and/or restore ecological conditions in floodplains after a natural disaster <u>or</u> on lands impacted by human alteration. Examples of these practices include mowing, haying, grazing, fencing, off-stream watering facilities, and invasive species control which are undertaken when fish and wildlife are not breeding, nesting, rearing young, or during other sensitive timeframes
The NRCS categorical exclusion(s) listed above is based on the most common utilization of the practices in the most common contexts. Planners should always ensure that the categorical exclusion listed applies in the context and scope of the project. Always use professional judgement and experience to ascertain which categorical exclusion(s) apply in the context of each project. Therefore, the categorical exclusion shown in final environmental compliance documents may differ from the one identified in this document.	

In the example above, a report is submitted that contains two practices. Both practices in the planned alternative fall under one categorical exclusion (19). Therefore, only CatEx #19 needs to be identified on the Environmental Evaluation (EE).

R. Rationale Supporting the Finding		
R.1		
Findings Documentation		
R.2	(19) Undertaking minor agricultural practices to maintain and restore ecological conditions in floodplains after a natural disaster	
Applicable Categorical	or on lands impacted by human alteration. Examples of these practices include: mo wing, haying, grazing, fencing, offstream watering facilities, and invasive species control which are undertaken when fish and wildlife are not breeding, nesting, rearing	
Exclusion(s)	young, or during other sensitive timeframes	
(more than one may apply)	,g,g	
7.050.0 (050.0 (0		
7 CFR Part 650 Compliance With NEPA , subpart 650.6		
Categorical Exclusions states		
prior to determining that a		
proposed action is		
categorically excluded under paragraph (d) of this section,		
the proposed action must meet		
six sidebo ard criteria. See		
NECH 610.116.		

CPA-52 EE showing CatEx #19 selected from the drop-down list.

In the following example, there are three practices planned, one of which falls under a different categorical exclusion. Therefore, both CatEx #19 and #20 must be listed on the EE. Subsequently, if there are more than two CEs that apply, identify those as well.

Example

Example	
CATEGORICAL EXCLUSIONS	
•	ed above apply, it has been determined that this project may be cate- rironmental Assessment (EA) or an Environmental Impact Statement
Practices	Categorical Exclusion(s)
Nutrient Management (590) Composting Facility (317)	(19) Undertaking minor agricultural practices to maintain and/or restore ecological conditions in floodplains after a natural disaster or on lands impacted by human alteration. Examples of these practices include mowing, haying, grazing, fencing, off-stream watering facilities, and invasive species control which are undertaken when fish and wildlife are not breeding, nesting, rearing young, or during other sensitive timeframes
Conservation Crop Rotation (328)	(20) Implementing soil erosion control measures on existing agricultural lands, such as grade stabilization structures (pipe drops), sediment basins, terraces, grassed waterways, filter strips, riparian forest buffer, and critical area planting
The NRCS categorical exclusion(s) listed above is based on the most common utilization of the practices in the	

most common contexts. Planners should always ensure that the categorical exclusions listed applies in the context and scope of the project. Always use professional judgement and experience to ascertain which categorical exclusion(s) apply in the context of each project. Therefore, the categorical exclusion shown in final environmental compliance documents may differ from the one identified in this document.

R. Rationale Supporting	R. Rationale Supporting the Finding		
R.1			
Findings Documentation			
R.2	(19) Undertaking minor agricultural practices to maintain and restore ecological conditions in floodplains after a natural disaster		
Applicable Categorical	or on lands impacted by human alteration. Examples of these practices include: mowing, haying, grazing, fencing, offstream watering facilities, and invasive species control which are undertaken when fish and wildlife are not breeding, nesting, rearing		
Exclusion(s)	young, or during other sensitive timeframes		
(more than one may apply)	,		
	(20) Implementing soil control measures on existing agricultural lands, such as grade stabilization structures (pipe drops),		
7 CFR Part 650 Compliance	sediment basins, terraces, grassed waterways, filter strips, riparian forest buffer, and critical area planting		
With NEPA , subpart 650.6 Categorical Exclusions states			
prior to determining that a			
proposed action is			
categorically excluded under			
paragraph (d) of this section,			
the proposed action must meet six sideboard criteria. See			
NECH 610.116.			

CPA-52 EE showing CatEx #19 and #20 selected from the drop-down list.

Planners should always verify that the categorical exclusions listed are correct in the context and scope of the planned project. Always use professional judgement and experience to ascertain which categorical exclusion(s) apply in the context of each project. If there is a doubt that the listed categorical exclusions are correct, planners are free to utilize others that may be more appropriate. Often, multiple categorical exclusions apply to a single practice. Therefore, the categorical exclusion shown in final environmental compliance documents may differ from the one identified in this document. Contact the NEPA compliance specialist to determine other relevant categorical exclusions.

Planners should take care not to use categorical exclusions to segment federal actions. Segmentation occurs by dividing actions into multiple parts when cumulatively they are interdependent parts of the plan/project. This segments an action into smaller component parts to avoid the requisite and appropriate level of environmental review under NEPA. Likewise, planners should not mix actions. This happens if a proposed project/plan involves actions listed as CatEx's along with other actions that are not included in this list. NRCS may not CatEx the entire non-covered action from review under NEPA.

XX. KICT ASSISTANCE & REFERENCES

The following procedure should be performed if planners feel the tool is not functioning properly or they need assistance regarding the KICT:

- 1. Review the Frequently Asked Questions (FAQ) on the website
- 2. Review the KICT Handbook to make sure the issue is not addressed
- 3. Contact the state level specialist responsible for that module

Planners should always follow their local chains of command to resolve issues. If the tool is not functioning or the website is having problems, please provide that information in detail to the KICT Administrator directly.

Additional Sources of Information

The following section provides other sources of information that are available to planners to seek assistance. Many of these sources are also available online and/or in NRCS technical references.

The material provided for training purposes, including Power Point Presentation used to train field office personnel on the use of the KICT is maintained on the Kentucky SharePoint site. Each module support document is maintained in Section II under NEPA in the FOTG.

For information regarding KICT data housing and GIS metadata, visit or contact the West Virginia GIS Technical Center at http://wvgis.wvu.edu/index.php

Clean Air Act Module - In addition to training materials available on the SharePoint, consult the following sources for information on the Clean Air Act and air quality:

Air Pollution Control District - Air Pollution Control District | LouisvilleKY.gov

Kentucky Division for Air Quality *Annual Report* available at Division for Air Quality – <u>Air – Kentucky Energy and Environment Cabinet</u>

NRCS has developed educational tools that are designed to provide information about air quality and are accessible to the public. To view these online courses please visit: www.airquality.nrcs.usda.gov.

USDA & USEPA - Agricultural Air Quality Conservation Measures Reference Guide for Cropping Systems and General Land Management - October 2012

USDA & USEPA - Agricultural Air Quality Conservation Measures Reference Guide for Poultry and Livestock Production Systems, September 2017

Support Document - Kentucky NRCS Conservation Practice Effects on The Clean Air Act - Regional Visibility Degradation & Non-Attainment Zones for Conservation Planning and Program Implementation (2018)

Clean Water Act & Waters of the United States Module - In addition to training materials consult the following sources for information on the Clean Water Act and Waters of the United States:

Nationwide Permits for the State of Kentucky – Lists all nationwide permits applicable to Kentucky from both Districts of the US Army Corps of Engineers. They are available in Section II of the Field Office Technical Guide under the Section entitled "Laws".

Support Document – The Kentucky Interagency Coordination Tool (KICT) – A Tool for compliance with the Clean Water Act and Waters of the United States for Kentucky NRCS employees. (2024)

Kentucky Division of Water - Division of Water - Kentucky Energy and Environment Cabinet

US Army Corps of Engineers Louisville District - Louisville District (army.mil)

US Army Corps of Engineers Huntington District - Huntington District (army.mil)

US Army Corps of Engineers Nashville District - Nashville District (army.mil)

ADDITIONAL INFORMATION FOR REQUIRED PERMITTING				
Agency	Permit	Fee	Contact Information	
US Army Corps of Engineers	Clean Water Act Section 404	Varies	Louisville District 502-315-6733 CELRL.Door.To.The.Corps@usace.army.mil	
		Varies	Nashville District 615-369-7500 NashvilleRegulatory@usace.army.mil	
Kentucky Division of Water (DOW) Surface Water Permits Branch	Kentucky Pollution Discharge Elimination System (KPDES)	Varies	SWPBsupport@ky.gov 502-564-3410	
	Kentucky No Discharge Operational Permit (KNDOP)	None		
	Stormwater General Permit (KYR10)	None	302-304-3410	
Kentucky Department of Conservation (DOC)	Agricultural Water Quality Plan (AWQP)	None	Johnna.mchugh@ky.gov (502) 564-6940	

NHPA Cultural Resources Module - In addition to training materials and consultations with the State Historic Preservation Officer, consult the following sources for information on cultural resources:

The **Kentucky NRCS FOTG** is available at Field Office Technical Guide (FOTG) | Natural Resources Conservation Service (usda.gov). Refer to Section II of the Kentucky FOTG. Specifically, look under NEPA/SEC/Cultural Resources

Kentucky NRCS Conservation Practice Effects on Cultural Resources for Conservation Planning and Program Implementation — is the official result of the programmatic consultation on effects to cultural resources which the KICT is based. No changes are made to KICT results unless recorded within this document first. The document outlines the practice-resource (aka the matrix) combinations and avoidance measures that were agreed upon during consultation. It is available in a printable format in Section II of the Kentucky FOTG at Field Office Technical Guide (FOTG) | Natural Resources Conservation Service (usda.gov).

GM_420_401 - Part 401 - Cultural Resources (Archeological and Historic Properties): <u>eDirectives</u> (<u>usda.gov</u>) Guidance to NRCS policy and procedures for cultural resources during the planning and implementation of NRCS practices.

The NRCS National Cultural Resources Procedures Handbook (H_190_601- Part 601) is also provided as a reference tool for TSPs and may be found at eDirectives (usda.gov)

The Advisory Council on Historic Procedures in the procedure of the procedu

The **Advisory Council on Historic Preservation**'s web page, Working with Section 106, may be appropriate reference material for most TSPs needing guidance on cultural resources located at http://www.achp.gov/work106.html

Support Document – Kentucky NRCS Conservation Practice Effects on Cultural Resources for Conservation Planning and Program Installation. 2016.

Endangered Species Act Module - In addition to training materials and consultations with USFWS and NRCS biologists, consult the following sources for information on threatened and endangered species:

The **Kentucky NRCS FOTG** is available at Field Office Technical Guide (FOTG) | Natural Resources Conservation Service (usda.gov).Refer to Section II of the Kentucky FOTG. Specifically, look under NEPA/SEC/Threatened and Endangered Species.

NatureServe Explorer – NatureServe Explorer is a collection of species conservation information and data that is provided by State natural heritage programs and other conservation organizations. (Available at http://www.natureserve.org/explorer/)

Species Fact Sheets – These documents provide detailed information concerning T&E species life histories and species descriptions. Species | U.S. Fish & Wildlife Service (fws.gov)

Threatened and Endangered Species List Kentucky (USFWS) – This is the official list (updated periodically) from the USFWS and lists the species and general information regarding location and status. Refer to Section II of the Kentucky FOTG. Specifically, look under NEPA/SEC/Threatened and Endangered Species.

For more information regarding listed or rare species; or to report new information in Kentucky, visit the Office of Kentucky Nature Preserves at http://naturepreserves.ky.gov/.

Kentucky's Threatened and Endangered Species (KDFWR) – This 2001 document provides generalized information and locations of the federal-listed T&E plants and animals that planners in Kentucky would most likely encounter. The document is somewhat dated, and species listings have changed considerably. This list is available in Section II of the FOTG Field Office Technical Guide (FOTG) | Natural Resources Conservation Service (usda.gov).

USFWS Species Recovery Plans – These documents are species-specific reports outlining distribution, biology and recovery strategies of Federal-listed species occurring in Kentucky. Available in Section II/NEPA/SEC/Threatened and Endangered Species of the FOTG Field Office Technical Guide (FOTG) | Natural Resources Conservation Service (usda.gov).

The **Bald Eagle Management Guidelines** website available at: Microsoft Word - Guidelines - June11. 2007.v2.doc (fws.gov)

Kentucky NRCS Conservation Practice Effects on Threatened, Endangered, Candidate and Eagle Species for Planning and Program Implementation – is the official result of the programmatic consultation on endangered species and eagles which the KICT is based. No changes are made to KICT results unless recorded within this document first. The document outlines the practice-species (aka the matrix) combinations and avoidance measures that were agreed upon during consultation. It is available in a printable format in Section II of the KY FOTG at Field Office Technical Guide (FOTG) | Natural Resources Conservation Service (usda.gov).

Support Document – The Kentucky Interagency Coordination Tool (KICT) – A Tool for compliance with the Endangered Species Act and the Bald and Golden Eagle Protection Act for Kentucky NRCS employees. Field Office Technical Guide (FOTG) | Natural Resources Conservation Service (usda.gov).

Environmental Justice Module - In addition to training materials on the SharePoint site, consult the following sources for environmental justice in Kentucky:

U.S. Environmental Protection Agency (EPA), 2019. EJSCREEN www.epa.gov/ejscreen

Environmental Justice Tools - NRCS also uses these initiatives and activities to ensure these communities have access to its myriad programs and services.

- Public-Private Partnerships NRCS staff collaborates with community-based and other organizations whose mission is to improve environmental protection for communities.
- Civil Rights NRCS staff ensures all populations have access to NRCS programs and services and ensures adherence to all civil rights laws.

Outreach – NRCS staff ensure all populations have access to NRCS programs and services nationwide.

White House Council on Environmental Quality, U.S. Digital Service, Climate and Economic Justice Screening Tool, Technical Support Document, Version 1.0. November 2022. (<u>Justice40 Initiative | Environmental Justice | The White House</u>)

Support Document - Kentucky NRCS Conservation Practice Effects on Environmental Justice for Conservation Planning and Program Implementation (2021)

Floodplain Management Module - In addition to training materials on the SharePoint site, consult the following sources for information on floodplain management:

Kentucky NRCS Conservation Practice Effects on Floodplains for Conservation Planning and Program Implementation – outlines the rationales for impacts to floodplains including potential benefits. This document is in Section II of the KY FOTG.

USDA-NRCS – Planning for Floodplain and Riparian Area Special Environmental Concerns, presented by Weber and Goodwin, NRCS Environmental Evaluation Series, July 2013.

USDA-NRCS – Riparian Areas Environmental Uniqueness, Functions, and Value, August 1996 https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/Riparian

Kentucky Division of Water Floodplain Construction - <u>Understand Your Flood Hazards - Kentucky Energy and Environment Cabinet</u>

Kentucky Division of Water - Floodplain Construction Forms - <u>Understand Your Flood Haz</u>ards - Kentucky Energy and Environment Cabinet

Support Document - Kentucky NRCS Conservation Practice Effects on Floodplains for Conservation Planning and Program Implementation (2018)

Invasive Species Module - In addition to training materials on the SharePoint site, consult the following sources for invasive species in Kentucky:

EDDMapS is a web-based mapping system for documenting invasive species distribution. It doesn't require Geographic Information Systems experience. Launched in 2005 by the Center for Invasive Species and Ecosystem Health at the University of Georgia, it was originally designed as a tool for state Exotic Pest Plant Councils to develop more complete distribution data of invasive species. https://www.eddmaps.org/

Support Document - Kentucky NRCS Conservation Practice Effects on Invasive Species for Conservation Planning and Program Implementation (2019)

Natural Areas Module - In addition to training materials on the SharePoint site, consult the following sources for officially designated natural areas in Kentucky:

State Nature Preserve / State Natural Area Directory - <u>Conserving Kentucky's Natural Areas</u> - Kentucky Energy and Environment Cabinet

Kentucky Biological Assessment Tool (KBAT) - <u>ERT HELP DOC.pdf (ky.gov)</u>

Kentucky NRCS Conservation Practice Effects on Natural Areas-for Conservation Planning and Program Implementation – Section II FOTG

General Manual, Title 190 Ecological Sciences, Part 410.23.

Support Document - Kentucky NRCS Conservation Practice Effects on Natural Areas for Conservation Planning and Program Implementation (2018)

Prime Farmland Module - In addition to training materials on the SharePoint site, consult the following sources for prime farmlands in Kentucky:

NRCS website at: https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/landuse/fppa/ Web Soil Survey - Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at the following link: https://websoilsurvey.sc.egov.usda.gov/. Accessed [11/2/2018].

Support Document - Kentucky NRCS Conservation Practice Effects on Prime Farmlands for Conservation Planning and Program Implementation (2018)

Riparian Area Module - In addition to training materials on the SharePoint site, consult the following sources for information on riparian areas:

Kentucky NRCS Conservation Practice Effects in Riparian areas for Conservation Planning and Program Implementation — outlines the rationales for impacts to floodplains including potential benefits. This document is in Section II of the KY FOTG.

USDA-NRCS - Supplemental guidance relating to riparian areas, NRCS/RCA Issue Brief 11 August 1996.

USDA-NRCS – Planning for Floodplain and Riparian Area Special Environmental Concerns, presented by Weber and Goodwin, NRCS Environmental Evaluation Series, July 2013.

Support Document - Kentucky NRCS Conservation Practice Effects on Riparian Areas for Conservation Planning and Program Implementation (2018)

Scenic Beauty Module - In addition to training materials on the SharePoint site, consult the following sources for more information regarding scenic beauty:

Support Document - Kentucky NRCS Conservation Practice Effects on Scenic Beauty for Conservation Planning and Program Implementation (2020)

USDA Soil Conservation Service. 1978. Procedure to Establish Priorities in Landscape Architecture. USDA S.C.S. Tech. Release 65, Washington, DC, 20250

U.S. Department of Transportation Federal Highway Administration. 2013. Guidelines for the Visual Impact Assessment of Highway Projects. Prepared by: ICF International 9300 Lee Hwy., Fairfax, VA 22031. In Association With: Avenue Design Partners 2356 University Avenue, Suite 403 Saint Paul, MN 55114. Contract DTFH61-11-D-0003

Support Document - Kentucky NRCS Conservation Practice Effects on Visual Resources and Scenic Beauty for Conservation Planning and Program Implementation (2020)

Tribal Consultation Module (pilot) - In addition to training materials on the SharePoint site, consult the following sources for more information regarding scenic beauty

Support Document - Kentucky NRCS Conservation Practice Effects for Tribal Consultation – for Conservation Planning and Program Implementation Field Office Technical Guide (FOTG) | Natural Resources Conservation Service (usda.gov).

Title 190 – National Instruction 315-A.1 Part 315 – Tribal Ancestral Lands Consultation Under the National Historic Preservation Act – Guidance for Natural Resources Conservation Service Employees (190-315-NI, 1st Ed., Jul 2018)

See also Cultural Resources Module information

Wetland Module- In addition to training materials on the SharePoint site, consult the following sources for more information regarding wetlands:

Support Document - Kentucky NRCS Conservation Practice Effects on Potential Wetlands for Conservation Planning and Program Implementation (2018)

USDA NRCS General Manual Part 610 – National Environmental Compliance Handbook 610.36 Wetlands

Web Soil Survey - Web Soil Survey (WSS) provides soil data and information produced by the National Cooperative Soil Survey https://websoilsurvey.sc.egov.usda.gov/

USFWS NWI Maps - The Wetlands Mapper is designed to deliver easy-to-use, map like views of America's Wetland resources. It integrates digital map data along with other resource information to produce current information on the status, extent, characteristics and functions of wetlands, riparian, and deep-water habitats. https://www.fws.gov/wetlands/data/mapper.html

National Agricultural Statistics Service (NASS) - https://www.nass.usda.gov/index.php

Wild and Scenic Rivers and Kentucky Special Use Waters Module - In addition to training materials on the SharePoint site, consult the following sources for these specially designated water bodies:

National Park Service - Nationwide Rivers Inventory- https://www.nps.gov/subjects/rivers/nation-wide-rivers-inventory.htm

DEP Special Use Waters Title 401 Energy and Environment Cabinet - Department for Environmental Protection - Special-Use Waters - Kentucky Energy and Environment Cabinet

Support Document - Kentucky NRCS Conservation Practice Effects on Wild, Scenic and NRI Segments & KY Special Use Waters for Conservation Planning and Program Implementation (2018)

Categorical Exclusion Module - In addition to training materials on the SharePoint site, consult the following sources for more information regarding categorical exclusions:

7 CFR 650.6 -- Categorical exclusions.

Agency KICT Technical Contacts

Outside agencies should not be contacted directly by field staff unless directed to do so. When seeking assistance, always follow proper channels and agency policy.

For issues concerning account management or KICT metadata and KICT operation issues contact the appropriate NRCS KICT State Administrator listed below:

NRCS KICT STATE ADMINISTRATORS			
Casey Shrader (All Modules & General Operation) NRCS State Resource Conservationist 771 Corporate Drive Suite 300 Lexington, KY 40503	Phone: (859) 224-7372 Email: Casey.Shrader@usda.gov		
Christy Wampler (All Modules & General Operation) NRCS State Biologist 771 Corporate Drive Suite 300 Lexington, KY 40503	Phone: (859) 224-7456 Email: Christina.R.Wampler@usda.gov		
Tyler Stumpf (Cultural Resources/Tribal Consultation) NRCS Cultural Resources Specialist 771 Corporate Drive Suite 300 Lexington, KY 40503	Phone: (859) 224-7312 Email: Tyler.Stumpf@usda.gov		
Ted Brancheau KICT Data Steward/NRCS Environmental Scientist Office of Kentucky Nature Preserves 300 Sower Blvd. 4 SE WK#34, Frankfort, KY 40601	Phone: (502) 782 – 3198 Theodore.Brancheau@ky.gov		

XXI. GLOSSARY

Planners may encounter the following terms either in this document, reports, supplemental documents or when working with the KICT.

Actively Managed Lands - - Land currently receiving ongoing management treatments which include, but are not limited to grazing, tillage, crop rotation, fertilization, mowing, weed control, etc. (i.e. lands are not cleared to utilize this practice). Lands meeting this definition must have received management treatments three out of the last five years.

Adverse Impact – The result of implementation of a project or practice that negatively affects a resource, species, etc.

Agricultural Lands – Lands used primarily to produce food and fiber. They usually include landuses such as pasture, hayland, cropland, and forestlands.

Area of Interest (AOI) – The boundary outlined and submitted by the planner to query the KICT about species, habitats, and the effects of conservation practices on them.

Avoidance Strategy – A method of installing a conservation practice that avoids or minimizes the risk of adverse impacts. Avoidance measures and **avoidance strategies** are equivalent in meaning in this document and are often used interchangeably. (See also **Reasonable and Prudent Alternatives**)

Bald and Golden Eagle Protection Act (BGEPA) – A federal law protecting golden and bald eagles from harm or harassment.

Bald Eagle Nesting Dates – Nesting dates include various activities including egg laying, incubation, hatching and rearing young. Eagle nesting dates vary by geographic region, but in Kentucky the dates (Eagle breeding season occurs February 1 through June 1).

Base Floodplain - areas with a 1 percent chance of being flooded in any given year, also referred to as the 1 percent exceedance probability or the 100-year return interval. Equal to the "100-year" floodplain (the so-called "1-percent chance floodplain").

Candidate Species – Any species of fish, wildlife, or plant which has been determined to be candidates for listing under Section 4 of the Endangered Species Act of 1973 (amended) and is being considered for threatened or endangered status.

Categorical Exclusions - Some NRCS activities are categorically excluded from the requirement to prepare an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). They are excluded because NRCS or USDA published the categorical exclusions in the Federal Register based on a determination that the activities do not, either individually or cumulatively, significantly affect the quality of the human environment. Since neither an EA nor an EIS is required for categorically excluded activities unless

there are extraordinary circumstances, categorical exclusions reduce paperwork and speed implementation of decisions.

Class 1 Areas - Class I Areas are areas of national or regional natural, scenic, recreational, or historic value that are given special protection under the Clean Air Act (CAA). One of these special protections is preservation of the visibility of scenic vistas within the Class I area. EPA has developed the Regional Haze Rule that directs states to establish goals for improving visibility in national parks and wilderness areas. States are required to develop long-term strategies for reducing emissions of air pollutants that cause visibility impairment. The goals and requirements vary by state and by Class I area.

Clean Air Act (CAA) – The basis of clean air programs in the United States. The original CAA passed in 1970 and was amended in 1977 and 1990. It is comprised of nine sections or Titles that cover, in order, the National Ambient Air Quality Standards, mobile sources, hazardous air pollutants, acid-deposition control, stationary source operating permits, stratospheric ozone and global climate protection, enforcement, miscellaneous provisions, and clean air research.

Clean Water Act (CWA) - the primary federal law in the United States governing water pollution. Its objective is to restore and maintain the chemical, physical, and biological integrity of the nation's waters; recognizing the responsibilities of the states in addressing pollution and providing assistance to states to do so, including funding for publicly owned treatment works for the improvement of wastewater treatment; and maintaining the integrity of wetlands.

Conservation Practice – A scientifically based methodology prescribed to landowners based on a set of minimum criteria (standard) and applied in a specific way to conserve or protect natural resources and address a resource concern.

Conservation Practice Extent – The reach or footprint that a conservation practice will be utilized within a specific region, area or planning unit.

Conservation Practice Unit – The amounts in which a conservation practice is measured. Examples would include acres, number, feet, miles and cubic yards.

Considerations - see Management Considerations.

Consultation – The legal responsibility of NRCS to seek advice, guidance, and counsel from, and confer with, authorized parties on program, project, and policy issues. This is a formal process that is typically outlined in various regulations dependent upon the agency NRCS is tasked with consulting. NRCS policy stipulates the individuals tasked with these duties. For more information on the requirements of consultation, when it is to occur, and who should participate, see the specific modules discussed in this handbook. For questions regarding specific consultations, contact the state staff specialists for the associated modules in this handbook.

Coordination – For the purposes of this document this term refers to the internal review process where NRCS specialists review specific KICT reports, make an Effect Determination, and provide guidance on

how to proceed. In instances were consultation is required, the state level specialist will initiate the process. Each module of the KICT report will indicate who should be contacted for coordination. Additionally, these are the individuals to be contacted when there are resource concerns not clarified by the KICT.

Coordination of Benefits – In the context of the KICT, coordination of benefits refers to situations in which the responsible federal agency has identified the effects of the practice, but coordination with another agency is encouraged (however not required) to assure the practice is implemented to attain the maximum benefit to the resource. Situations in which practices are being implemented for the specific benefit of a resource is an example of when coordination should be implemented. In some instances, this term is used along with consultation. This indicates that although consultation is required, the overall benefit to the resource may likely be beneficial under most circumstances.

CPA-52 – The NRCS worksheet utilized to document the Environmental Evaluation prior to the utilization of the CART EE within conservation desktop. See Environmental Evaluation (EE)

Criteria Pollutants - Any pollutant for which there is established a NAAQS at 40 CFR part 50. The Clean Air Act requires the Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for six "criteria" pollutants in outdoor air. NAAQS are currently set for carbon monoxide, lead, ground-level ozone, nitrogen dioxide, particulate matter, and sulfur dioxide. EPA calls these pollutants "criteria" air pollutants because it sets NAAQS for them based on the criteria, which are characterizations of the latest scientific information regarding their effects on health or welfare."). These pollutants are found all over the U.S.

Critical Action Floodplain - The critical action floodplain is defined as the 500-year floodplain (the 0.2-percent chance floodplain) where certain facilities are present, such as a school, hospital, nursing home, utility, or a facility producing volatile, toxic, or water-reactive materials.

Critical Habitat – Specific geographic areas, whether occupied by listed species or not, that are determined to be essential for the conservation and management of listed species, and that have been formally described in the Federal Register.

Cropland – Land used primarily to produce field crops or orchard crops alone or in association with sod crops. Any lands used to produce a planted crop by tilling of the soil including no-till and similar methods used to produce food or fiber.

CRS – see Cultural Resource Specialist.

Cultural Resource Class – For the purposes of the KICT, resources have been grouped into classes to allow similar resources that are affected similarly to be identified more readily by the tool. There are eight specific classes of cultural resources. The specifics of each group are identified in the programmatic agreement.

Cultural Resources – The term "cultural resources" as used by NRCS is broader than those resources encompassed by the term "historic properties" as defined by the NHPA (16 U.S.C. Section 470 et seq.) and regulations for compliance with section 106 of the NHPA (36 CFR Part 800). Under NHPA, historic properties include any prehistoric or historic district, site, building, structure, or object listed in or eligible

for listing in the National Register of Historic Places (NRHP) maintained by the Secretary of the Interior. They also include all records, artifacts, and physical remains associated with the NRHP-eligible historic properties. They may consist of the traces of the past activities and accomplishments of people. The term "historic property" also includes properties of religious and cultural importance to an Indian Tribe (including Native Alaskan Villages) or Native Hawaiian organization that meet NRHP criteria. As more broadly used, the term "cultural resources," covers a wider range of resources than "historic properties," such as sacred sites, archaeological sites not eligible for the National Register of Historic Places, and archaeological collections.

Cultural Resources Specialist (CRS) – NRCS personnel responsible for compliance with Section 106 of the National Historic Preservation Act in the Commonwealth.

De Minimis - When the total direct and indirect air emissions resulting from a federal action are below the listed *de minimis* level, the action is not subject to a conformity determination. The creation of *de minimis* emission levels limited the need to conduct conformity determinations for federal actions that create minimal air pollution increases.

Department for Environmental Protection (DEP) Special Use Waters — Waterbodies managed under Title 401 Energy and Environment Cabinet — http://water.ky.gov/waterquality/Pages/SpecialUseWaters.aspx. See also **KY Special Use Waters**.

Eagle Nesting Season - Eagle breeding season occurs in Kentucky February through June.

Earthmoving – Excavation, pushing or piling and/or reforming soil and material typically through equipment. See also **Heavy Equipment**.

Endangered Species - The classification provided to an animal or plant in danger of extinction within the near future throughout all or a significant portion of its range.

Endangered Species Act (ESA) – Protects plants and animals that are listed by the federal government as "endangered" or "threatened." Section 7 applies not to private parties but to federal agencies, but it covers their issuing permits for private activities, such as § 404 permits issued by the Corps of Engineers to people who want to do construction work in waters or wetlands. Specifically, § 7 imposes an affirmative duty on federal agencies to ensure that their actions (including permitting) are not likely to jeopardize the continued existence of a listed species (plant or animal) or result in the destruction or modification of critical habitat.

Environmental Evaluation (EE) - When NRCS provides planning assistance, field offices must at a minimum conduct an EE and document the results. It is NRCS's policy to develop an EE as part of every planning activity. The EE provides a basic framework for documenting effects on resources and concerns that are important in the U.S. and Kentucky. The finding of the EE determines the level of environmental analysis to be conducted. It is intended to be utilized mainly for conservation planning activities at the field office level and in conjunction with conservation planning assistance notes.

Environmental Justice - the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation, and the enforcement of environmental laws, regulations, and polices.

ESA – see Endangered Species Act.

Farm Headquarters (also called headquarters or farmstead) – Lands in agricultural operations that may or may not be used for production but utilized principally for operation and support of the production of food or fiber. Examples include feeding areas, barn lots, holding facilities and similar structures including dwellings, pens, corrals, or other facilities used in connection with farm and management operations.

Federal Implementation Plan - In the absence of an approved State Implementation Plan (SIP), a plan prepared by the EPA which provides measures needed to meet the requirements of the Clean Air Act. See also **SIP**.

Federal-Listed Species – Species listed under the Endangered Species Act. A species status may be listed as Endangered, Threatened, Candidate or Proposed Candidate, Proposed Endangered, etc.

Fish and Wildlife Service (USFWS) – United States Fish and Wildlife Service. An agency under the U.S. Department of Interior. This agency is responsible for the administration of the Endangered Species Act (ESA)

Floodplain – An area adjacent to a waterbody that consists of soils formed from fluvial processes and is inundated or ponded for a certain period and frequency. These areas are connected to other landforms hydrologically and serve as transition landscapes in a watershed. The frequency and probability of flooding during a particular timeframe determines the type of floodplain. Floodplains are often classified as 2yr, 100 yr., 500 yr., etc.

Floodplain Zone of Influence – see Zone of Influence

Forested Setting – Areas where the dominant vegetation is trees and other woody species usually consisting of varying age classes, species and densities. These areas typically have soils covered in humus and other decaying vegetated matter including leaves of various stages of decomposition. Forested settings may be large contiguous areas covering vast acreages; or relatively small, isolated patches within a different surrounding landscape such as grasslands. Forested areas may include riparian areas.

General Permits – Types of Clean Water Act permits that are general in nature to reduce the time required for applicants to receive authorization for projects. These are authorized for work typically performed under predetermined requirements and guidelines. These permits consist of Regional and General Permits and Nationwide Permits

Hayland - Land used primarily to produce hay, forage, grasses, legumes, or comparatively fine-stemmed forbs cut and cured for later use as livestock feed. (Annual plants planted for hay, and forage crops in short-term rotation are cropland.

Heavy Equipment – Motorized equipment such as bulldozers, backhoes, excavators or similar bladed equipment is prohibited typically used in earthmoving activities.

Herbicide – See Pesticide.

Hibernacula - A secure area, usually a cave or other den area, used by hibernating bats and other insects or mammals. Bats typically hibernate in areas of caves and mines where temperatures are cold but stable. Most hibernacula are dark and secluded to keep the bats out of harm's way from predators or human disturbance.

High Priority Visual Area – An area in Kentucky identified as potentially susceptible to changes in landscape aesthetics. These areas require greater scrutiny by conservation planners to avoid adverse effects to scenic beauty. Areas may also be classified as medium and low priority. All areas should be reviewed at the planning level to ensure that adverse effect regardless of the priority level. **See also Visual Priority Area (VPA).**

Historic Properties – see Cultural Resources.

Invasive Species – those species that show aggressive properties and are both non-native to the region of interest and cause environmental or economic harm or harm to human health. See also **Noxious or Invasive Species**.

Karst Features - Landscape features distinctive of karst terrain, typically, but not necessarily, formed by solution processes. They are likely to have some relation to subsurface drainage. They include, but are not limited to caves, sinkholes, swallow holes, springs, seeps, soil pipes, fissures, and carbonate rock outcrops.

Karst Topography - landscape shaped by the dissolution of a layer or layers of soluble bedrock, usually carbonate rock such as limestone or dolomite and containing features such as sinkholes, caves and dissolved areas of bedrock.

Kentucky Biological Assessment Tool (KBAT) - The Office of Kentucky Nature Preserves (KNP) developed and maintains the Kentucky Biological Assessment Tool to assist with providing information to help projects avoid and minimize potential impacts to sensitive plant, animals, and natural communities.

Kentucky Heritage Land - A Heritage Land is an area funded by the Kentucky Heritage Land Conservation Fund Board. KNP monitors conservation easements and deed restrictions on these sites and works with our partnering agencies to ensure they are managed appropriately for hiking, paddling, and habitat conservation. For more information, please visit the About Us - Kentucky Energy and Environment Cabinet

Kentucky Interagency Coordination Tool (KICT) – The KICT is a web-based geospatial tool maintained by the West Virginia University GIS Technical Center. It allows NRCS employees to outline an area of interest and enter planned practices. Conservation planners are then able to receive information on impacts (both beneficial and adverse) to listed species or habitats based on that information. In addition, the KICT provides some management recommendations for consideration by the client.

Kentucky Special Use Waters (KSUW) - Special use waters are rivers, streams and lakes listed in Kentucky Administration Regulations or the Federal Register as Cold-Water Aquatic Habitat, Exceptional Waters, Reference Reach Waters, Outstanding State Resource Waters, Outstanding National Resource Waters, State Wild Rivers, and Federal Wild and Scenic Rivers. Not included as special use waters are waterbodies designated by default as Warm Water Aquatic Habitat, Primary Contact Recreation, and Secondary Contact Recreation. See also **DEP Special Use Waters**.

KICT CR Review Request Form – a form utilized to request cultural resources review of a conservation planning project. This form should be completed by planners once the alternatives that avoid impacts to a resource are exhausted or if the KICT explicitly requires the project to be reviewed by the Cultural Resources Specialist. This form is auto generated by the KICT by selection of the link adjacent to the report on the KICT website.

KICT ESA Review Request Form – a form utilized to request review of a conservation planning project. This form should be completed by planners once the alternatives that avoid impacts to listed species are exhausted or the KICT specifically requires consultation or coordination. This form is auto generated by the KICT by selection of the link adjacent to the report on the KICT website.

KICT Tribal Consultation Request Form – a form utilized to request consultation or review of a conservation planning project by a tribe(s) that claim ancestral heritage in Kentucky. This form should be completed as indicated by the KICT to the Cultural Resources Specialist. This form is auto generated by the KICT through selection of the link adjacent to the report on the KICT website.

Landscape Buffer (eagle) – A natural or human made landscape feature that screens eagles from human activity (e.g. strip of trees, hill, cliff, berm, sound wall). – See also **Vegetative Buffer** (eagle).

Maintenance Area - An area under the Clean Air Act that was designated as nonattainment and has been re-designated in 40 CFR part 81 to attainment, meeting the provisions of section 107(d)(3)(E) of the Act and has a maintenance plan approved under section 175A of the Act.

Management Consideration – a recommendation made by the KICT to consider during implementation, maintenance or operation of a conservation practice.

Maternity Colony – congregations of bats in areas where they give birth, raise young and nurse pups. Maternity colonies are often caves where temperatures are warm and stable or groups of trees depending upon the species.

May Adversely Affect – (MAA) – A determination that a proposed practice is likely to adversely affect a particular resource as a direct or indirect result of implementation. See individual modules for guidance on this process.

Measurable Effect (*hydrology*) – Some avoidance measures under the ESA or floodplain modules require no alteration to the existing hydrology. This refers to significant alterations of hydrologic regimes to which a resource may depend. A measurable affect to hydrology would include diversion, drainage, pumping, addition or alteration of the frequency of hydrologic cycles to the point that it measurably affects the amount of water entering on or leaving the site. A spring development that collects water for livestock

from a wetland and then is returned into the wetland through the overflow without interruption constitutes an example of no measurable effect.

National Ambient Air Quality Standards (NAAQS) - (1) The Clean Air Act requires the U.S. EPA to establish National Ambient Air Quality Standards (NAAQS) for specific pollutants. The U.S. EPA has promulgated the current NAAQS in 40 CFR Part 50. (2) The NAAQS are intended to represent the maximum concentration of a pollutant in the ambient air (i.e., locations to which the public has access) that will not adversely impact public health or welfare. NAAQS for a pollutant typically include a primary and a secondary standard. Primary NAAQS are set at levels to protect human health. Secondary NAAQS are set at levels to protect public welfare, including aesthetic, economic, and other nonhealthy effects. (3) The stringency of air pollution regulations in an area is based upon whether that area is in attainment (i.e., is complying) or nonattainment (i.e., is not in compliance) with respect to the NAAQS. Nonattainment areas will typically have more stringent control and permitting requirements than attainment areas. Additionally, nonattainment areas with a more severe level of nonattainment will have more stringent control and permitting requirements than nonattainment areas with a less severe level of nonattainment.

National Bald Eagle Management Guidelines (EMGs) – a set of national broad recommendations to advise landowners, land managers, and others who share public and private lands with bald eagles when and under what circumstances the protective provisions of the Bald and Golden Eagle Protection Act may apply to their activities. These guidelines are reflected within the KICT recommendations and practice-species matrix. See also Eagle Nesting Season.

National Environmental Policy Act (NEPA) – A law passed by Congress in 1969 and signed into law on January 1, 1970. NEPA makes Federal agencies accountable to the public for the environmental impacts of their actions. The Council on Environmental Quality (CEQ) has written regulations that establish the procedures Natural Resources Conservation Service (NRCS) and other Federal agencies must follow to meet NEPA requirements. These regulations require Federal agencies to follow a systematic process when a federal action is proposed. The presence of federal-listed species is one of several categories of resources that the NRCS must evaluate for impacts.

National Register of Historic Places - the official list of the Nation's historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the National Park Service's National Register of Historic Places is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources. https://www.nps.gov/nr/

Nationwide Permits — A type of general permit issued for the Clean Waer Act. A nationwide permit (NWP) authorizes a category of activities throughout the nation that has been determined to have minor impacts. Several of the NWPs require notification to USACE before beginning work, and some require mitigation. In addition, several regional conditions, or section 401 State water quality certification conditions, may apply to the NWP or any part of it within a USACE district.

Nationwide Rivers Inventory (NRI) - This is a listing of more than 3,200 free-flowing river segments in the U.S. that are believed to possess one or more "outstandingly remarkable" values. These segments are subject to regulation under the Wild and Scenic Rivers Act. See also **Wild and Scenic Rivers**.

Native - A native species is one that occurs naturally with respect to a particular ecosystem, rather than because of an accidental or deliberate introduction into that ecosystem by humans.

Natural Area Zone of Influence – The area a conservation practice affects within a natural area. See Zone of Influence

Natural Resources Conservation Service (NRCS) – The Natural Resources Conservation Service (formerly the Soil Conservation Service). A Federal agency within the United States Department of Agriculture (USDA) providing leadership in a partnership effort to help America's private landowners and managers conserve their soil, water, and other natural resources.

No Effect (NE) – A determination meaning that installation of a conservation practice(s) will have no affect either adversely or beneficially to a resource.

Non-Attainment Zone - An area designated under the Clean Air Act as nonattainment under section 107 of the Act and described in 40 CFR part 81. Synonymous to **Non-Attainment Area**.

Not Likely to Adversely Affect (NLAA) – a determination that a proposed practice is not likely to cause an adverse effect. When an NLAA determination is made, planning may proceed. Conditions are often applied to NLAA determinations. They may be made when the proposed practice effects are expected to be discountable, insignificant or completely beneficial. NLAA may also result when the practice can be implemented in a manner that avoids adverse effects.

Noxious or Invasive Species - is defined in this document as a plant or animal that has exhibited invasive characteristics where the presence of that species is detrimental to or interfering with the intended or natural plant community or animal's habitat. Refer to the Field Office Technical Guide for an NRCS "advisory" list of invasive plants and animals.

Office of Kentucky Nature Preserves (OKNP) – Maintains the biodiversity database for the state of KY. The Wildlife Diversity Program's primary responsibility is to conserve the state's nongame wildlife resources through the identification and management of nongame species and their habitats. The OKNP also seeks to inform and educate the public about the resource, and to enhance the recreational opportunities it provides.

Office of State Archaeology (OSA) - a research unit of the Department of Anthropology. Located in the Department's archaeological research facility in Lexington, Kentucky, OSA is responsible for maintaining official archaeological site records for the Commonwealth. OSA is also responsible for issuing permits to qualified individuals for archaeological excavations and the collection of artifacts on land owned or leased by, or any political subdivision or municipal corporation of, the Commonwealth.

Pastureland - Grazing lands composed of introduced or domesticated native forage species that are used primarily to produce domestic livestock. They receive periodic renovation and/or cultural treatments, such as seeding and planting, fertilization, mowing, weed control, and may be irrigated. They are not in rotation with crops.

Pesticide – Any chemical used to control animal and plant pests.

PM 2.5 - Fine particulate matter (PM_{2.5}) is an air pollutant that is a concern for people's health when levels in air are high. $PM_{2.5}$ are tiny particles in the air that reduce visibility and cause the air to appear hazy when levels are elevated. The diameters of this particulate matter that are generally 2.5 micrometers and smaller.

Potential Benefit – A benefit that may be realized by a practice that occurs within a designated habitat or area on a particular resource if utilized for a specific purpose.

Programmatic Consultation - Consultation addressing an agency's multiple actions on a program, regional or other basis.

Proposed Species – Any species of fish, wildlife, or plant that is proposed in the Federal Register to be listed under Section 4 of the Endangered Species Act.

RASPI – (Required Avoidance Strategies for Practice Implementation) – Measures identified in Section II of the ESA module of the KICT report that must be implemented to avoid adverse effects to listed species. This term is synonymous with avoidance measures. See also **Avoidance Measure**.

Reasonable and Prudent Alternatives – Alternative methods of project or practice implementation, offered in a biological opinion reaching a jeopardy or adverse modification conclusion that would avoid the likelihood of jeopardy to the species or adverse modification of critical habitat. The avoidance measures within the matrix of species-practice combinations are reasonable and prudent alternatives. See also **Avoidance Strategy**.

Recovery Plan – A document drafted by the USFWS or other knowledgeable individuals or groups, that serves as a guide for activities to be undertaken by Federal, State, or private entities in helping to recover and conserve endangered or threatened species.

Regional Visibility Degradation (Class I) - The Clean Air Act recognizes the issue of "regional visibility degradation" as excessive concentrations of particulate matter and other pollutants in the atmosphere that cause regional visibility degradation in national parks and other "Class I areas". See also class 1 areas.

Required Condition – A condition in which the planned practice must be implemented to avoid harm to a listed species. These are analogous to reasonable and prudent measures and avoidance strategies. See also **Avoidance Strategy**.

Riparian Area – For the purposes of this handbook, riparian areas are defined as the transition zone and interface between land and water where the soils and vegetation types are influenced by a specific hydrologic regime through a combination of saturation, flooding, and precipitation. Mature riparian areas in Kentucky are usually forested or in various stages of succession due to disturbance. These areas are important to the ecology of stream systems in the state.

Riparian Zone of Influence – This is the distance surrounding a riparian area where implementation of conservation practices may influence the hydrology, soils, water quality, vegetation, function, etc. This distance may vary greatly depending upon the conservation practice implemented. See also **Zone of influence.**

Sinkhole – A natural depression or hole in the surface topography caused by the removal of soil and/or bedrock by water. Sinkholes may vary in size from a few feet to several hundred feet in both diameter and depth and vary in form from soil-lined bowls to bedrock-edged chasms. They may have been formed gradually or suddenly. The terms sinks, swallow holes or swallets are often referred to separately as those features into which a surface stream flows. In Kentucky, there are several areas in which streams flow in and out of these features and are associated with karst topography.

Species of Concern – An informal term that refers to those species which biologists believe might need concentrated conservation actions. Such conservation actions vary depending on the health of the populations and degree and types of threats. At one extreme, there may only need to be periodic monitoring of populations and threats to the species and its habitat. At the other extreme, a species may need to be listed as a Federal threatened or endangered species. Species of concern receive no legal protection and the use of the term does not necessarily mean that the species will eventually be proposed for listing as a threatened or endangered species. Planners are not required to consult with USFWS for these species.

State Historic Preservation Officer (SHPO) - executive director that administers Kentucky's State Historic Preservation Office. The Executive Director reports to a sixteen-member Council, which is appointed by the Governor, and supervises a staff of professional historians, architectural historians, historic architects, archaeologists, and planners. As SHPO, the Executive Director manages the federal preservation program in Kentucky, including the National Register of Historic Places, Historic Preservation Tax Credits, Section 106 Environmental Review, Certified Local Governments and Preservation Grants-in-Aid.

State Implementation Plan (SIP) – A Clean Air Act plan developed by a State, including a set of programs and regulations designed to assure that the NAAQS are attained and maintained.

State Natural Area (SNA) - A state natural area is a site jointly managed as a wildlife management area with the Kentucky Department of Fish and Wildlife Resources (KDFWR). These areas are also dedicated to permanently protect them. They are protected for the same purposes as state nature preserves, but a rule allowing hunting differentiates them from state nature preserves.

State Nature Preserve (SNP) - A state nature preserve is a legally dedicated area that has been recognized for its natural significance and protected by law for scientific and educational purposes. Dedicated state nature preserves are established solely to protect and preserve rare species and the natural environment. Public visitation is encouraged but closely regulated to protect the natural integrity of the preserve so that it may be passed on unimpaired to future generations.

Take (ESA) – Harass, harm, injure or otherwise molest a species listed under the Endangered Species Act.

TEC Species – Federally listed plant or animal species that are either Threatened, Endangered or Candidate. This includes proposed species. See also **Federal** – **Listed Species**.

The Kentucky Heritage Council (KHC) - serves as the State Historic Preservation Office, providing state and federally mandated services and offering diverse programs and preservation expertise to projects across the Commonwealth.

Threatened Species - The classification provided to an animal or plant likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

U.S Army Corps of Engineers (USACE) – An agency under the Department of the Army that provides public engineering services in peace and war to strengthen national security, energize the economy, and reduce risks from disasters. The U.S. Army Corps of Engineers is responsible for protecting many of the nation's aquatic environments including oceans, rivers, lakes, streams, ponds, and wetlands. These areas are referred to by the Corps as **waters of the United States**.

U.S. Fish and Wildlife Service (USFWS) – An agency under the Department of the Interior that is responsible for federally listed species under the Endangered Species Act. The mission of the USFWS is working with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people.

US Environmental Protection Agency (EPA) – Federal agency responsible for administration of the Clean Air Act among other federal laws.

Vegetative Buffer (eagle) – An area surrounding a bald or golden eagle nest that is wholly or largely covered by forest vegetation or other natural ecological characteristics and separates the nest from human activities.

Visual Resource (VR) - the definable appearance of a landscape unit as described by its visual elements: landform, water, vegetation, and structures. These four elements or a combination of elements can be described and measured without reference to quality.

Visual Priority Area (VPA) is derived from adding the numerical ratings given to VRQ, LU and V to determine a combined screening rating for each area. See also High Priority Visual Area.

Waters of the United States (WOTUS) - All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; all interstate waters including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters: which are or could be used by interstate or foreign travelers for recreational or other purposes; or (From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or which are used or could be used for industrial purposes by industries in interstate commerce; all impoundments of waters otherwise defined as waters of the United States under this definition; Tributaries of waters identified in paragraphs (s)(1) through (4) of this section; The territorial sea; Wetlands adjacent to waters (other than waters that are themselves wetlands). Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

Wetland – (as defined by EO 11990) Those areas that are inundated by surface or ground water with a frequency sufficient to support and, under normal circumstances, does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds.

Wild and Scenic Rivers – A river/stream protected under the National Wild and Scenic Rivers Act of 1968 (Public Law 90-542). It was created by Congress to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. A listing of designated streams and stream segments can be found on the National Park Service's Wild and Scenic Rivers website.

WOTUS – See Waters of the United States.

Zone of Influence – An area surrounding, adjacent, or connected to a resource within the AOI to which a conservation practice may have an effect through installation, operation or maintenance. These zones may include the actual footprint of a practice installation, or areas that are complimentary in operation or maintenance such as filtration areas, runoff footprint, vegetative screens or access points. The area size will vary in size depending upon the resource and practice. Zones of influence may be important in determining benefits and effects to various resources and special environmental concerns.

XXII. EXHIBITS

EXHIBITS

Sample KICT Report

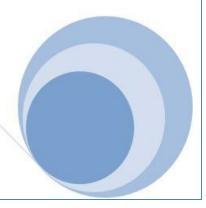
KICT ESA Review Request

Authorization for Release of NRCS Conservation Plan

KICT CR Review Request

Tribal Consultation Request Form

Auto Generated KICT Tribal Form



Kentucky Interagency Coordination Tool KICT (4.0)



PROJECT REPORT



Inquiry Date:	4/11/20			
Project:	Sample Farm			
Client:	Junior San	Junior Sample		
Program:	Conservati	Conservation Technical Assistance (CTA)		
County:	Jefferson			
	Farm:	12345		
Location:	Tract:	45678		
	Other ID:	DSR23-4598		
Lat/Long:	37.123456789 -89.123456789			
Planner:	Chris.Planner			
Scenario:	Selected Alternative			
Acreage:	123.4			
PRACTICES SUBMITTED FOR REVIEW AMOUNT UNIT		UNIT		
Composting Facility (317) 1 no.		no.		

Composting Facility (317) Nutrient Management (590) Amount Unit 1 no. 200 Ac.

CLEAN AIR ACT

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project occurs in the following regulated air quality zone:

Criteria Pollutant (non-attainment zones)

Potential impacts associated with this area are identified below:

There is a potential to emit or create dust emissions (particulate matter) through implementation of the practice(s) identified in a non-attainment zone

MITIGATION CONSIDERATION & EFFECT DETERMINATION

A. Mitigation Considerations

Based on the information submitted, the following strategies should be considered to avoid adverse effects to air quality for the practice(s) shown. If feasible, the strategies listed below should be relayed to the client, incorporated into the conservation plan, layout/specifications and operation and management of the practice.

Practice Mitigation Consideration for Practice Implementation

Composting Facility (317)	Handling and disturbance of large bulk material piles or lagoons can result in the entrainment of particles or the release of gases due to the exposure of a greater surface area of the material to the air and airflow/wind. Minimizing the disturbance of large piles or lagoons, such as covering the area, limiting the surface area from which material is removed, and limiting the number of times the material is handled, and the duration of disturbance helps to mitigate these issues.
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B. Effect Determination

The activities described has a **May Affect (MA)** determination on areas protected under the Clean Air Act. This determination should be considered and recorded in all environmental documentation. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners should revise and resubmit this data accordingly.

POTENTIAL BENEFITS TO AIR QUALITY

If mitigation considerations are implemented as outlined, the following practices may provide beneficial contributions to air quality in the air quality zone identified in this report:

Practice	Potential Benefit
I Nutrient Management (500)	This practice could result in the reduction of emissions of PM, VOC, and/or NOx
Nutrient Management (590)	in areas that are currently in zones of non-attainment or other sensi

CLEAN WATER ACT

POTENTIAL IMPACT INFORMATION

The area submitted for review may contain waters that are subject to regulation under the Clean Water Act under the following sections.

Section 303(d), Section 401, Section 402, Section 404, None

Based on the information submitted, the installation of one or more conservation practices could be regulated due to the following:

There is potential for discharge of a fill, pollutant or combination of pollutants to a 'Water of the Commonwealth'.

REQUIRED STRATEGIES & EFFECT DETERMINATION

B. Required Strategies

Based on the information submitted, the following information may be required to avoid adverse effects to resources. If applicable, clients should be made aware or requirements from regulatory authorities.

CWA Section 303(d) Listed Impaired Streams	
Practice	Avoidance Measures or Required Conditions
Nutrient Management (590)	Animal Feeding Operations (AFOs) and Concentrated Feeding Operations (CAFO) may require a Kentucky Pollutant Discharge Elimination System (KPDES) permit.

Nutrient Management (590)	AFO's with liquid manure waste handling systems must obtain a 'Kentucky No Discharge Operational Permit' (KNDOP) to legally operate and is valid for five years. Dry waste systems are not required to have this permit.	
Nutrient Management (590)	AFOs are required to develop a Nutrient Management Plan (NMP), whether they have a liquid manure waste handling system or not. The plan must be consistent with the AWQP and NRCS conservation practice standard (590) Nutrient Management. Large AFOs, when applying for a construction or an operational permit must submit a NMP with the application.	
CWA Sections 404 WOTUS and 401 State Water Quality Certification		
Practice	Avoidance Measures or Required Conditions	
None	N/A	
CWA Sections 402 National Pollutant Discharge Elimination System (NPDES)		
Practice	Avoidance Measures or Required Conditions	
None	N/A	
P. Effect Determination (Tentative)		

B. Effect Determination (*Tentative*)

If any of the required strategies listed above apply, the activities described have a **May Affect (MA)** to a Water of the United States in one or more sections under the Clean Water Act. Otherwise, advise the client to contact the appropriate regulatory agency prior to practice implementation to avoid any adverse effects and obtain any applicable permits. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly.

IMPORTANT: This report does not grant or constitute permission or permitting in any manner. Due to the scale, size and other limitations, this information is for resource screening purposes only and should not be considered final. Resources or activities may occur that are not taken into consideration by this report. Always field verify the presence or absence of water resources through on-site analysis and field verification. Therefore, the final determination shown above may differ. Document the determination, rationale and effects in conjunction with on-site analysis on the Environmental Evaluation.

POTENTIAL BENEFITS TO WATER QUALITY

If Avoidance Measures and Required Conditions are implemented as outlined, the following practices may provide beneficial contributions to water quality:

Practice	Potential Benefit
Composting Facility (317), Nutrient Management (590)	This practice may be beneficial if it is installed for the purpose of, or results in the reduction or elimination of animal wastes, sediment, pesticides, or other pollutants from a WOTUS or other waterway.

CULTURAL & HISTORIC RESOURCES

POTENTIAL IMPACT INFORMATION

The area submitted for review may contain the following classes of cultural resources:

None

Based on the information submitted it has been determined that one or more of these cultural resource classes could be affected as a result of installation of one or more conservation practices.

None

REQUIRED STRATEGIES & EFFECT DETERMINATION

A. Required Avoidance Measures

Based on the information submitted, the following strategies are required to be implemented to avoid adverse effects to protected resources. The strategies listed below must be incorporated into the conservation plan, layout and/or specifications.

Practice	Required Strategies for Practice Implementation
N/A	None

B. Effect Determination (tentative)

If all the required additional strategies listed above are implemented, the activities described have a No Effect (NE), to known protected cultural resources. Unless coordination with the Cultural Resources Specialist is specifically required or any avoidance measures cannot be implemented, no further coordination under Section 106 of the National Historic Preservation Act is necessary. If coordination with the Cultural Resource Specialist is required above, submit this project for review and follow the guidance provided by the specialist. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly.

NOTE: If coordination with the NRCS Cultural Resources Specialist is required, this determination may change.

TRIBAL CONSULTATION

POTENTIAL IMPACT INFORMATION

The area submitted for review is a location in which the following Native American tribes claim as ancestral lands:

Quapaw Tribe of Indians

The tribe(s) listed above has identified at least one of the practices as having the following impacts and require review.

There is a potential to cause ground disturbance in both installation, management and/or maintenance.

REQUIRED COORDINATION/CONSULTATION

A. Required Tribal Consultation

The following list of practices must be submitted to the Cultural Resources Specialist for submittal to the Native American Tribes indicated above for review.

Practice	Practice Description
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(317) Composting Facility

(317) Composting Facility is a structure or device to contain and facilitate the controlled aerobic decomposition of manure or other organic material by microorganisms into a biologically stable organic material that is suitable for use as a soil amendment. Construction and installation of this practice is typically locally ground disturbing to varying shallow depths. However, it is not ground disturbing in management and/or maintenance.

B. Effect Determination (Tentative)

The practices identified above have a determination of **May Affect (MA)**, to Tribal Consultation/Cultural Resources. If tribal consultation is required above, submit this project for review and follow the guidance provided by the specialist. If practices are added, quantities, locations or other significant changes occur prior to installation, planners must revise and resubmit this data accordingly. If other practices are added, quantities, locations or other significant changes occur prior to installation, planners must revise and resubmit this data accordingly.

NOTE: If coordination with the NRCS Cultural Resources Specialist is required, this determination may change.

ENDANGERED, THREATENED AND RARE SPECIES

POTENTIAL SPECIES AND IMPACT INFORMATION

The area submitted for review may contain populations or critical habitat of:

Indiana bat, Northern long-eared bat, Indiana bat maternity

The following adverse impacts could potentially occur as a result of installation of one or more of the conservation practices listed:

There is a potential to adversely affect federally listed species by the removal or establishment of trees or tree cover.

REQUIRED STRATEGIES AND EFFECT DETERMINATION

A. Required Strategies

Based on the information submitted, the following strategies are required to be implemented to avoid adverse effects to the species or resources listed above. The strategies listed below must be incorporated into the specifications, conservation plan, layout and/or specifications.

Practice	Required Additional Strategies for Practice Implementation
Composting Facility (317)	Conduct any tree removal associated with this practice between November 15th and March 31st. Trees with a diameter at breast height (dbh) of less than 3 inches may be removed anytime during the year. No trees that exhibit exfoliating bark characteristics such as shell and shag bark hickories and white oak species; or dead and dying trees with exfoliating bark, broken treetops, splintered or split areas; trees with cavities or hollowed areas shall be removed during this period.

B. Effect Determination

It has been determined that if all the required additional strategies listed above are implemented, the activities described are **Not Likely to Adversely Affect (NLAA)** to the species or it's habitats. If practices are added, quantities, locations or other significant changes occur prior to installation, conservation planners must revise and resubmit this data.

NOTE: If any of the required strategies listed above cannot be implemented, or the strategy above specifically requires coordination or consultation with USFWS the proposed practice is determined as May Adversely Affect (MAA) as a direct or indirect result of implementation and will then require consultation with U.S. Fish and Wildlife Service. Contact the NRCS state biologist for any practice that is discovered to require incidental tree removal between April 1 and November 14.

MANAGEMENT RECOMMENDATIONS		
The following are considerations that may be used to support conservation but are not required to avoid adverse effects. When possible, utilize these strategies during conservation planning of this area:		
Practice	Management Recommendations	
Nutrient Management (590)	This practice could provide additional benefits when planned around or near sinkholes, or karst areas in counties noted to have the Kentucky Cave shrimp or the Mammoth Cave shrimp.	
POTENTIAL BENEFITS		
If all avoidance and required measures are implemented as outlined in this report, the following practices may beneficially affect species or their habitats.		
Practice	Potential Benefits Provided by This Activity	
Composting Facility (317)	This practice is considered beneficial if it does not involve the removal of existing woody vegetation.	

ENVIRONMENTAL JUSTICE

POTENTIAL IMPACT INFORMATION

The area submitted may occur within or near the following Environmental Justice special consideration area(s):

Low Access Food Area

Based on the information submitted, the following potential impacts should be considered:

None

CONSIDERATIONS & EFFECT DETERMINATION

Considerations

Based on the information submitted, the following should be considered to for the practice(s) shown. Consider the context of installation based on the community or area type and the scale of impact (e.g. local, single farm installation versus regional installation covering several landowners/clients).

Practice	Consideration
Composting Facility (317)	Clients in this area may have a difficult time accessing affordable and nutritious food because they live far from a supermarket and/or do not have easy access to transportation. Consider implementing agricultural practices that alleviate clients from total reliance on supermarkets and ensure that healthy foods may be produced locally.

Effect Determination (tentative)

It has been determined that the activities submitted could have a **May Affect (MA)** determination on Environmental Justice as described in the Executive Order 12898 and 190-GM, Part 414.30. This determination is offered as a screening only and should be reviewed in the context of application and may not apply.

Important: The determination above is a tentative determination. Planners should examine the context of how practices are delivered, the location where the practice is being implemented and the scope of the practice and its effects. Therefore, the effect determination shown above may not be accurate. Planners should use sound judgement in determining the degree and scope of the impact(s) shown. The final determination should be

recorded in all appropriate environmental documentation. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly.

0;		
POTENTIAL BENEFITS		
Some practices that may have potential benefits associated with them are as follows:		
Practice	Potential Benefits Provided by this Activity	
Composting Facility (317)	This practice may have the ability to support or increase local food production and help communities provide additional food sources in an area designated as a food desert.	

FLOODPLAIN MANAGEMENT

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project area may occur within or near the following type of floodplain:

Base (100-Year) Floodplain

The following potential adverse impacts to floodplains include:

There is a potential for activities to result in development or placement of a structure(s), building or facility within the base (100-year floodplain).

AVOIDANCE MEASURES & EFFECT DETERMINATION

A. Avoidance Measures

Based on the information submitted, the following strategies should be considered to avoid adverse effects to floodplain(s) for the practice(s) shown. If feasible, strategies listed below should be incorporated into the conservation plan, layout/specifications and operation and/or management of the practice.

Practice	Required Additional Strategies for Practice Implementation
Composting Facility (317)	If there is a practicable alternate site, this practice shall be located outside the base (100yr) floodplain.

If practices will affect floodplains, NRCS policy requires that conservation planners ensure the following prior to providing further technical and financial assistance.

- (1) Agricultural floodplains have been used for producing food, feed, forage, fiber, or oilseed for at least 3 of the 5 years before the request for assistance
- (2) Agricultural production is in accordance with any official state or designated area water quality plans

B. Effect Determination (tentative)

It has been determined that the activities described have a May Affect (MA) determination on floodplain areas protected under Executive Order 11988 and NRCS policy in GM 190 Part 410, Subpart B, Section 410.25.

Important: The determination above assumes that actual practice placement is within the floodplain and meets NRCS policy regarding technical and financial assistance. This determination may differ depending upon placement of practices within the area of interest, implementation of avoidance measures and other factors. Planners must verify the location of the floodplain with respect to actual practice location. The final determination should be recorded in all appropriate environmental documentation. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit

this data accordingly. Notify the client/landowner and document the necessity to obtain any permits prior to implementation.

POTENTIAL BENEFITS TO FLOODPLAIN FUNCTIONS

If floodplain avoidance measures are implemented as outlined in this report, the following practices may provide beneficial contributions to floodplain ecology in the area identified:

Practice	Potential Benefits Provided by this Activity
(590)	This practice may be beneficial to water quality and floodplains if it is installed for the purpose of reducing or eliminating animal wastes, sediment, pesticides, or other pollutants from a surface water resource such as a stream or wetland.

INVASIVE SPECIES

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project may occur in close proximity to known populations of potentially invasive species that include the following:

giant foxtail, hemlock woolly adelgid

The following practice could potentially cause or promote the introduction or spread of invasive species due to installation, maintenance and operation of one or more of the conservation practices listed:

This practice may provide a vector or cause the introduction or spread of invasive species through ground-disturbing activities where bare soil and ground disturbance is at least temporarily exposed.

CONSIDERATIONS & EFFECT DETERMINATION

A. Considerations

Based on the information submitted, carefully consider the following information when implementing practices in this area. As appropriate, the strategies listed below should be considered during conservation planning and applied when developing layout/specifications and operation and management plans for the practice(s) listed.

Practice	Considerations
Composting Facility	Ensure that any bare soil is exposed for the shortest duration possible and stabilized in a timely manner to prevent the establishment of invasive species. Avoid unnecessary soil disturbance where invasive plants could rapidly colonize areas of disturbed soil. Consider the use of pre/post emergent herbicides or no-till planting methods where appropriate.
(317)	When possible, during construction, utilize on-site soil material (existing seedbank) and avoid transporting any materials into or out of the immediate project area. If transporting material that may contain invasive sources, dispose of those materials properly on site.

B. Effect Determination (tentative)

The activities described has a **May Affect (MA)** determination to invasive species under Executive Order (E.O.) 13112 and NRCS policy located in 190-GM, Part 414. This determination is based solely on known and reported data held by the Kentucky Nature Preserves Commission and other sources and is not comprehensive. Invasive species are dynamic and not all populations have been identified. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners should revise and resubmit this data accordingly.

Note: This determination must always be field verified. Utilize this determination to screen the area for potential invasive species. There could be undocumented potentially invasive species present on site. Document the determination, rationale, and effects in conjunction with on-site analysis. Therefore, the final determination shown above may differ.

POTENTIAL BENEFITS THAT MAY FACILITATE CONTROL OF INVASIVE SPECIES

The following practices may assist with prevention, introduction, spread, or promotion of known populations of invasive species:

Practice	Potential Benefits Provided by this Activity
Nutrient Management (590)	This practice may prevent introduction, promotion or mitigate the spread of invasive species through proper livestock management.

NATURAL AREAS

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project occurs in close proximity to the following designated natural area:

State Nature Preserve / State Natural Area

The following adverse impacts could potentially occur as a result of installation of one or more of the conservation practices listed:

This project may impact the ecological functions within or immediately adjacent to a designated natural area.

CONSIDERATIONS & EFFECT DETERMINATION

A. Considerations

Based on the information submitted, carefully consider the following information when implementing practices within, near or adjacent to natural areas. As appropriate, the strategies listed below should be considered during conservation planning and applied when developing layout/specifications and operation and management plans for the practice listed.

Practice	Considerations
Composting Facility (317)	Consider the methods of operation and maintenance of this practice to avoid adverse impacts to adjacent natural habitats. This may include pesticide handling and application, mechanical treatments, installation of structures, livestock management, water management, etc.

B. Effect Determination (tentative)

The activities described has a **May Affect (MA)** determination on natural areas protected under federal regulations (GM 190 Part 410.23). This determination assumes that placement of practices is reasonably near or adjacent to known natural areas. This determination could change depending upon the placement of practices within the area of interest and other factors. Utilize this determination to screen the area and document as appropriate on any environmental evaluations. Planners should determine if there are any other designations of natural areas and determine those effects using on-site analysis.

Note: This determination does not take into consideration natural areas that are unofficially designated by private landowners or other entities. Landowners may designate natural areas on their property. Planners should consider those privately designated areas in addition to officially designated areas.

POTENTIAL BENEFITS TO NATURAL AREAS	
The following practices may provide beneficial contributions to known adjacent natural areas:	
Practice	Potential Benefits Provided by this Activity
Composting Facility (317)	This practice may be beneficial if it eliminates a pollutant source from an adjacent natural area (e.g. sediment, pesticide, etc.).

To determine the goals of an adjacent natural area, consider coordinating with the Kentucky Nature Preserves and/or the Kentucky Department of Fish and Wildlife to coordinate activities with adjacent lands at http://naturepreserves.ky.gov/ or call 502-573-2886; or email KNP at naturepreserves@ky.gov

PRIME FARMLAND

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project contains the following important farmlands:

Prime Farmland, Unique Farmland, Farmlands of Statewide Importance

Depending upon how the practice is implemented, the placement of practices within or near these areas could have potential adverse impacts as shown below.

This practice has the potential to cause unnecessary or irreversible conversion of farmland to nonagricultural uses.

AVOIDANCE & EFFECT DETERMINATION

C. Avoidance

Based on the information submitted, carefully consider the following information when implementing practices that may impact prime farmlands. As appropriate, the strategies listed below should be considered during conservation planning and applied when developing layout/specifications and operation and management plans for the practice listed.

Practice	Avoidance Measures for Practice Implementation
Aquaculture Ponds (397)	Carefully consider the siting and location of this practice. If practical, locate this practice outside the lands identified as prime, unique or statewide important and local farmlands or position the practice as to impact the least amount of prime farmland.

D. Effect Determination (tentative)

The activities described has a determination of **May Affect (MA)** to prime farmlands described under NRCS policy under the Farmland Protection Policy Act and 7 CFR 658.5. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly. Always verify presence or absence of resources on site during the planning process.

Note: If the determination above is may affect, the actual placement of practices within the area of interest may not impact prime farmlands depending upon many factors. Therefore, the final determination shown above may differ. Always document the determination, rationale and effects in conjunction with onsite analysis.

RIPARIAN AREAS

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that a riparian area(s) are:

Present

Depending upon how the practice is implemented, the placement of practices within or near these areas could have potential adverse impacts as shown below.

There is a potential to adversely affect riparian function by breaking hydrologic connectivity to the riparian area and associated floodplain.

There is a potential to adversely affect riparian areas through the manipulation of hydrologic regimes or the alteration of hydrology through diversion, impoundment, removal or increased flooding duration or quantity.

CONSIDERATIONS & EFFECT DETERMINATION

A. Considerations

Based on the information submitted, carefully consider the following information when implementing practices within or near riparian areas. As appropriate, the strategies listed below should be considered during conservation planning and applied when developing layout/specifications and operation and management plans for the practice listed.

Practice	Considerations for Practice Implementation
Composting Facility (317)	Carefully consider the siting and location of this practice. If practical, locate this practice outside the zone of influence of the riparian area. At a minimum, the practice should complement existing functions of adjacent riparian and aquatic habitats.

B. Effect Determination (tentative)

The activities described has a determination of **May Affect (MA)** on riparian areas described under NRCS policy in located in GM 190 Part 411.3. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly. Always verify presence or absence of resources on site during the planning process.

Note: Within the area of interest, the actual placement of practices may not be in sites that influence riparian areas. Verify the location of the riparian area with respect to actual practice location. Therefore, the final determination shown above may differ from the final effect. In addition, there may be riparian zones that do not appear or are too small to be included in this inventory. Always verify effects with on-site analysis.

POTENTIAL BENEFITS

If avoidance measures are implemented as outlined in this report, the following practices may provide beneficial contributions to riparian ecology:

Practice	Potential Benefits Provided by This Activity
Composting Facility (317)	This practice may be beneficial if it is installed for the purpose of reducing or eliminating animal wastes, sediment, pesticides, or other pollutants from a surface water resource such as a stream or wetland and associated riparian area.

SCENIC BEAUTY

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project may be located in or near the following:

High Visual Priority Area

Depending upon how the practice is implemented, the placement, type or method of installation within or near these areas could have potential adverse impacts as shown below.

This practice could potentially adversely affect a high visual priority area.

CONSIDERATIONS & EFFECT DETERMINATION

A. Considerations

Based on the information submitted, carefully consider the following information when implementing practices that may impact scenic areas. As appropriate, the information listed below should be considered during conservation planning and applied when developing layout/specifications and operation and management plans for the practice listed.

Practice	Considerations for Practice Implementation
	Consider using similar styles and methods of practice installation as existing surrounding structures, vegetation and landscapes.
Composting Facility (317)	Consider the vertical height of this practice to blend in with surrounding and similar structures during design and implementation. Consider the appearance of farmhouses, barns, silos, wooden fences, stone walls, windmills and two-lane roads as well as other agriculturally related structures.
	Consider the vertical height of this practice in high visibility areas to avoid obscuring viewsheds or becoming a potential eyesore from public or neighboring vantage points especially in visually horizontal land-scapes (e.g. cropfields).

B. Effect Determination (Tentative)

The activities described has a determination of **May Affect (MA)** to scenic areas described in NRCS policy under GM Title 190, Part 410.24. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners should revise and resubmit this data accordingly.

Note: The determination shown may not apply depending on many factors and the professional judgement of the planner. This report may not reflect conditions at the field level. Therefore, the determination shown may differ from the final determination. Planners should always consider the aesthetics of practice implementation regardless of the setting and field verify any determination.

POTENTIAL BENEFITS

This project (when implemented along with any applicable mitigation considerations) could have a beneficial effect to scenic areas as shown below.

Practice	Potential Benefits Provided by This Activity
Composting Facility (317)	This practice could provide additional scenic attributes to agricultural landscapes and settings by providing an integral structural element to the agricultural setting. Carefully consider the setting, visibility and context with respect to placement of this practice.

WETLANDS

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project may contain or be adjacent to an area that is classified as:

Potential Wetland

The placement of practices within or near these areas could have potential adverse impacts as shown below.

There is a potential to adversely affect water quality through introduction of animal waste, livestock, pesticides, sediment, pollutants or various human activities entering or occurring within or adjacent to an existing wetland.

AVOIDANCE MEASURES & EFFECT DETERMINATION

A. Avoidance Measures

Based on the information submitted and if verified, the following strategies should be implemented to avoid adverse effects for the practice(s) shown. If wetlands are found to be impacted, the strategies listed below must be incorporated into the conservation plan, layout/specifications and operation and management of the practice.

Practice	Required Avoidance Measures for Practice Implementation
Composting Facility (317)	No spoil or fill resulting from installation of this practice should be placed in areas classified as a wetland.

B. Effect Determination (Tentative)

The activity described has a determination of **May Affect (MA)** to wetlands protected under Executive Order 11990 and NRCS policy located at 190-GM, Part 410, Subpart B, Section 410.26. If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly.

Note: This report does not grant or constitute permission or permitting in any manner. Due to the scale, size and other limitations, this information is for resource screening purposes only and should not be considered final. Wetlands may occur that are not taken into consideration by this report. ALWAYS verify the presence or absence of wetlands through on-site analysis and field verification. Therefore, the final determination shown above may differ. Document the determination, rationale and effects in conjunction with on-site analysis on the Environmental Evaluation. Certain activities may require a Clean Water Act (CWA) permit or other permission. Refer to the CWA information as necessary.

POTENTIAL BENEFITS

If all the required avoidance measures are implemented as outlined in this report, the following practices could potentially be beneficial for any field-verified wetlands.

Practice	Potential Benefits Provided by This Activity	
Composting Facility (317)	This practice may be beneficial to water quality if it is installed for the purpose of reducing or eliminating animal wastes, sediment, pesticides, or other pollutants from an existing wetland.	

WILD AND SCENIC RIVERS

WILD AND SCENIC RIVERS & NRI SEGMENTS

POTENTIAL IMPACT INFORMATION

Based on the information submitted it has been determined that this project occurs within or near a protected river segment as shown below.

Wild and Scenic River, National River Inventory (NRI) segment

Depending upon how the practices are implemented, the placement of practices within or near these areas could have potential adverse impacts as shown below.

This activity may adversely affect water quality in a Wild and Scenic River, NRI segment or Kentucky Special Use Water during installation or operation.

AVOIDANCE MEASURES & EFFECT DETERMINATION

A. Avoidance Measures

Based on the information submitted, the following strategies should be implemented to avoid adverse effects for the practice(s) shown. The strategies listed below must be incorporated into the conservation plan, layout/specifications and operation and management of the practice.

Practice	Required Avoidance Measures for Practice Implementation	
Composting Facility (317)	This practice shall only be installed in existing agricultural settings within actively managed cropland, grassland, hayland, farmsteads, etc. New lands must not be cleared to implement this practice.	

B. Effect Determination

The activities described has a determination of **May Affect (MA)** to areas protected under The National Wild and Scenic Rivers Act of 1968 (Public Law 90-542). If other practices are added, quantities, locations or other significant changes occur prior to installation conservation planners must revise and resubmit this data accordingly.

Note: Notify the client/landowner and document the necessity to obtain any permits prior to implementation.

Kentucky Special Use Waters (Provided for additional consideration)

This project area contains or occurs near the following KY Special Use Waters:

Outstanding State Resource Water, Outstanding National Resource Water

The following information should be carefully considered during practice implementation. Also, verify if dredging or filling within or near these waters is associated with the project. Refer to the Clean Water Act information if available.

Practice	Considerations
Composting Facility (317)	Carefully consider the siting of this practice to minimize impacts to streams and surface waters from pollutant runoffs during implementation and operation.
	This waterbody could contain protected state or federally listed aquatic species. Refer to Threatened or Endangered species information for guidance with these practices and associated waterbodies.

Note: Notify the client/landowner and document the necessity to obtain any permits prior to implementation.

POTENTIAL BENEFITS		
If all the required avoidance measures are implemented as outlined in this report, the following practices could potentially be beneficial for the identified stream types.		
Practice Potential Benefits Provided by This Activity		
Composting Facility (317)	This practice may be beneficial to water quality if it is installed for the purpose of reducing or eliminating animal wastes, sediment, pesticides, or other pollutants from a Wild and Scenic River, NRI segment or Kentucky Special Use Water or associated wetland.	

CATEGORICAL EXCLUSIONS

EXTRAORDINARY CIRCUMSTANCES

All NRCS federal actions require documentation in accordance with 7 CFR §650.6 that address whether extraordinary circumstances are determined to exist. A list of extraordinary circumstances can be found on the Environmental Evaluation (EE). In addition, the categorical exclusions identified below only apply to actions that:

- (1) include provisions to mitigate soil erosion, sedimentation, and downstream flooding;
- (2) require disturbed areas to be vegetated with adapted species;
- (3) are based on the principles of natural stream dynamics and processes presented in the Federal Interagency Stream Corridor Restoration Working Group document "Stream Corridor Restoration, Principles, Processes, and Practices;"
- (4) incorporate the applicable NRCS conservation practice standards as found in the FOTG
- (5) do not require substantial dredging, excavation, or placement of fill; and
- (6) do not involve a significant risk of exposure to toxic or hazardous substances.

CATEGORICAL EXCLUSIONS

If none of the extraordinary circumstances apply, and the action meets the sideboards listed above, it has been determined that this project may be categorically excluded from development of an Environmental Assessment (EA) or an Environmental Impact Study (EIS) by the following:

Practices	Categorical Exclusion(s)
Nutrient Management (590) Composting Facility (317)	(19) Undertaking minor agricultural practices to maintain and/or restore ecological conditions in floodplains after a natural disaster or on lands impacted by human alteration. Examples of these practices include mowing, haying, grazing, fencing, off-stream watering facilities, and invasive species control which are undertaken when fish and wildlife are not breeding, nesting, rearing young, or during other sensitive timeframes
Conservation Crop Rotation (328)	(20) Implementing soil erosion control measures on existing agricultural lands, such as grade stabilization structures (pipe drops), sediment basins, terraces, grassed waterways, filter strips, riparian forest buffer, and critical area planting.

The NRCS categorical exclusion(s) listed above is based on the most common utilization of the practices in the most common contexts. Planners should always ensure that the categorical exclusion listed applies in the context and scope of their project. Always use professional judgement and experience to ascertain which categorical exclusion(s) apply in the context of each project. Therefore, the categorical exclusion shown in final environmental compliance documents may differ from the one identified here.

NOTES

- The identification of categorical exclusions does not relinquish the responsibility of NRCS to comply with the consultation requirements under the National Historic Preservation Act or the Endangered Species Act, their implementing regulations, and any other legal requirements.
- Categorical exclusions cannot be used if the proposed action includes any project elements that don't
 qualify, if dependent or connected actions are segmented by stripping out only the components that
 qualify, or if the proposed action will have significant adverse impacts that cannot be mitigated (Extraordinary Circumstances).

DISCLAIMER

Intended Use: This document is to be utilized for planning and documenting compliance with NRCS policy for certain special environmental concerns. These include the Endangered Species Act, the Bald and Golden Eagle Protection Act, Section 106 of the National Historic Preservation Act, the Clean Air Act, The Wild and Scenic Rivers Act, Farmland Protection Policy Act, Executive Orders 11988, 11990, et. al. in compliance with the National Environmental Policy Act (NEPA) and NRCS policy. It is specific to activities in which NRCS staff is providing individual conservation technical assistance and/or funding under various Farm Bill programs; or for purposes of ranking to enroll in USDA programs. Projects that are larger in scope are not to utilize this methodology and will continue to follow NRCS policy and procedures as stated in GM Title 190, Part 410 - Compliance with NEPA and 190-VI-National Environmental Compliance Handbook (NECH).

Disclaimer: The information provided in this report is based on the best current data available to NRCS. It is provided by the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, Office of State Archaeology, Kentucky Heritage Council, The State Historic Preservation Officer and The Kentucky State Nature Preserves Commission, KY Division for Air Quality and others. Data is also provided through NRCS internal methods (i.e. Soils Datamart). Errors or gaps in information and data may occur. Therefore, planners should always field-verify the site to determine the exact locations, suitability of habitats and presence of resources through on-site analysis. Occurrences of protected resources could be located within the identified area of interest that are not included in this report. Responses provided by the KICT indicating the absence of resources may indicate that the area has not been surveyed or unknown data exists, rather than confirmation that the area lacks protected resources. Upon discovery of protected resources or modification to original plans and designs, further coordination may be required. If protected resources are identified during implementation or construction, immediately cease the activity, and contact the agency representative responsible for activities under NEPA. This information is relevant only for the practices/activities identified and does not constitute formal consultation or permitting under any regulatory agencies. This document does not grant permission or act as an authorization for any activity. Planners should always check with local authorities and local governments to determine if permits are needed. The information contained herein should not be distributed to third parties without the written consent of the landowner. If you feel the information contained in this report is erroneous, please contact the KICT local or state administrator.

Request for Endangered Species Act Review

Information on this page to be completed by the planner

County: Casey Date of KICT Report: 2024-05-10	Planner: Casey.Shrader		
Program: Other	Project Name: Casey Test Farm 2		
Client (first and last name): Casey Shrader			
Farm Number 123 Tract Number(s) 456 Field Numb	er(s): 1,2,3 Other ID N/A		
Practices Submitted for Review (with amount and unit)			
Animal Mortality Facility (316) - 1No. Brush Management (314) - 12 Ac.			
Area of Potential Effect (APE):The APE is the specific area affected by the conservation pro access roads & any other off-site or indirect ground disturbing activites related to the installation			
If the KICT indicates that threatened & endangered species may be adversely affected form and submit it through the KICT website. Please include a shapefiles of the APE (if possible include shapefiles of specific practice locations as well. Photos of typical simplemented are helpful but not required.	i.e. PLU) when you upload your form. PLU shapefiles are required but		
Threatened and endangered species, State listed species, and/or critical habitat identifier Indiana bat, northern long-eared bat	d on the KICT report:		
Please select the option below that best describes the reason you are submitting the ES. additional circumstances apply select 'other' and provide details in the box provided.	A Review form. You may select more than one. If none apply or		
Directed to contact the State Biologist by the KICT report but all other Required Strat	egies can be complied with		
One or more Required Strategies from the KICT report can not be complied with such that the complied with the complied w			
Burning needs to be done outside the dates established in the KICT report to	meet ecological objectives		
Other			
Explanation of 'other' TEST EXAMPLE			
Describe how the conservation practices will be applied. For example, if mechanical and chemical treatments are available under the same practice specify if one or both will be used, target species being removed, what the existing habitat looks like where practice will be applied if applicable,			
indicate any unique components of implementation, etc. TEST EXAMPLE			
Ecological Condition and Impacts: Will any tree removal occur, either as part of a practice (such as with 666 - Forest 5 with 412 grassed Waterway) where trees may need to be removed as a secondary action individuals), estimated size (Diameter breast height- DBH is preferred), and species con	on to prepare the site)? If so approximately how many trees (acres or		
TEST EXAMPLE			
If potential effects are associated with aquatic species enter the stream name where where where we had uses. If the stream is unnamed please describe the stream conditions (shallow, de	ep, slow moving, fast moving, rocky substrate, water only		
seasonally present, etc.). Specify which specific practices will be implemented within 30 TEST EXAMPLE	o reet or a stream.		
All fields must be completed and required materials must be included (KICT Rep- can be attached to pdf form by clicking the paperclip on the tool bar to the left, or			

KICT ESA Review Request Form version 1- March 2023

This form replaces ESAReviewRequest_v2_1

Request for Cultural Resource Review

County: Casey Date of KICT Report: 2024-05-10 Planner Email: Casey.Shrader@usda.gov	
Program: Other Project Name: Casey Test Farm 2	
Client (first and last name): Casey Shrader	
Client (first and last name): Casey Shrader	
Farm #: 123 Tract #: 456 Field #: Other ID: N/A	
Area of Potential Effect (APE) The APE is the specific area affected by the conservation practices, including all new or existing borrow/disposal areas, new or temporary access roal other off-site or indirect ground disturbing activities related to the installation of the conservation practices.	ds & any
Describe previous land use, present land use, and ground cover (% of visible bare earth) within the APE:	_
TEST EXAMPLE	
Planners must include a KICT report. Practices listed on the Kentucky Interagency Coordination Tool (KICT) report should be the same as those below	v.
Planned Practice(s) and Extent:	
Animal Mortality Facility (316) - 1No.Brush Management (314) - 12 Ac.Dam (402) - 1 No.Fence (38) When a planned practice may adversely affect a cultural resource as indicated by the KICT, email this completed form and any supplemental information to Cultural Resources Specialist. If avoidance measures listed in the KICT for cultural resources cannot be implemented, briefly describe why.	
TEST EXAMPLE	
TEST EXAMPLE	
Cultural Resource Observations: (to be completed by the planner)	
Were any artifacts, rock overhangs, caves, mounds, earthworks, cemeteries, stone walls, hand-dug wells, structure foundations (including out buildings), or other cultural material observed within or immediately adjacent to the APE? Please describe.	
TEST EXAMPLE	
Are any structures present within or adjacent to the APE greater than 50 years in age? If so, state how far from the planned practice location the structure is located.	
TEST EXAMPLE	
Is the owner/operator aware of any cultural resources within or adjacent to the APE? (Has they found artifacts? Aware of the remains of a previous homestead? Is a cemetery or other burial type present in the area?) Please describe.	_
TEST EXAMPLE	
2024 05 04	
Date of farm visit: 2024-05-01 Planner(s) present at farm visit: Casey All appropriate fields above must be completed and required materials included (KICT Report + Shapefiles) before sending this form.	<u></u>
All appropriate helds above must be completed and required materials included (Nic) Neport - onapeliles) before sending this form.	

KICT CR Review Request Form version 4.1 - March 2024

This form replaces the CPA52A

Kentucky Interagency Coordination Tool



TRIBAL CONSULTATION REQUEST

Please fill out the following information to submit your Tribal Consultation Request to the Kentucky Cultural Resources Specialist. This form must be filled out in addition to the Cultural Resources Request form when required by the KICT. ALL information must be provided.

n w	nen required by the Kicl. ALL information must be provided.
1.	What is the current land use for the majority of the project area? If you are unsure, please select the land use that is considered >50% of the project area.
2.	What is the proposed land use for the majority of the project area? If the result of this project is a change in land use, please identify if here. If not, select the same as question 1.
3.	Will heavy machinery be utilized to implement this project? If only hand tools will be utilized to implement this project, please select 'no'.
4.	What type of equipment will be utilized to implement this project? Please select the equipment that will causes the GREATEST level of ground disturbance. (Example: If you are utilizing a planter and a disk, select the disk because it will cause a greater amount of ground disturbance when compared to a planter).
	Insert comment box for information to only be sent to me.

Please attach the following shapefiles downloaded from Conservation Desktop. ALL practices must be accounted for within these shapefiles. PLU files are required.

If your project does not include all the variations of shapefile, please include the ones present.

1.	Practice_PLUs (required):	Choose files to upload	Browse Files
2.	Practice_Lines:	Choose files to upload	Browse Files
3.	Practice_Points:	Choose files to upload	Browse Files
4.	Practice_Polygons:	Choose files to upload	Browse Files

^{*}If you have any questions or concerns, please contact Tyler Stumpf, the Kentucky Cultural Resources Specialist at Tyler.Stumpf@usda.gov.

Kentucky Interagency Coordination Tool



TRIBAL CONSULTATION REQUEST



Inquiry Date:	4/11/20		
Project:	Sample Farm		
Client:	Junior Sample		
Program:	Conservation Technical Assistance (CTA)		
County:	Jefferson		
	Farm:	12345	
Location:	Tract:	6789	
	Other ID:	DSR123	
Lat/Long:	37.123456789 -89.123456789		
Planner:	Casey.Shrader		

PRACTICES SUBMITTED FOR REVIEW	AMOUNT	UNIT
Nutrient Management (590)	100	Ac.
Waste Treatment (629)	1	No.
Livestock Pipeline (516)	123	Ft.

PROJECT DESCRIPTION

The project listed above is located within an area designated as Tribal Ancestral Lands by the Quapaw Nation. NRCS providing the following project information, background research, accompanying survey data (if present), and relevant additional information for comment. The conservation practices listed above are described below.

Practice	Practice Description
Nutrient Management (590)	(590) Nutrient Management involves managing the amount (rate), source, placement (method of application), and timing of plant nutrients and soil amendments. Nutrient management may be used on any area of land where plant nutrients and soil amendments are applied. Nutrient management may be used to improve crop productivity and improve soil organic matter while reducing environmental impacts. Sources of nutrients include, but are not limited to, commercial fertilizers (including starter and in-furrow starter/pop-up fertilizer), animal manures, legume fixation credits, green manures, plant or crop residues, compost, organic by-products, municipal and industrial biosolids, wastewater, organic materials, estimated plant available soil nutrients, and irrigation water. This is typically a non-ground disturbing activity during installation or management/maintenance or operation.

Kentucky Interagency Coordination Tool KICT (4.0)



Waste Treatment (629)

(629) Waste Treatment Involves the use of unique or innovative mechanical, chemical, or biological technologies that change the characteristics of manure and agricultural waste. The treatment of manure or agricultural waste is used to improve water quality in surface and groundwater, improve air quality by reducing particulate air emissions and objectionable odors from manure or agricultural waste, and/or facilitate desirable handling and storage properties of manure or agricultural waste. This practice applies to all land uses where manure and/or agricultural waste is being generated and where soils, geology, and topography are suitable for construction of the waste treatment system. This practice is used where surface and groundwater need to be protected as potential sources of drinking water and where degradation of water quality will impact the intended use of surface and ground waters. The practice is also used where improvements are needed to air quality to reduce air emissions and odors. This practice usually has significant ground disturbance associated with it during installation. However, normal management and operation are not ground disturbing.

Livestock Pipeline (516)

(516) Livestock Pipeline is a pipeline and any appurtenances installed to convey water for livestock. Pipelines installed under this practice are generally for livestock management purposes. A single water source can provide livestock water to several locations and be very effective in improving management of a grazing unit. This practice usually has significant ground disturbance associated with it during installation. However, normal management and operation are not ground disturbing.

CONTACT INFORMATION

This information has been auto generated based on a project that is planned for implementation on private lands and funded by the USDA Natural Resources Conservation Service (NRCS). Pursuant to 36 CFR § 800.4(b)(1) of the implementing regulations for the National Historic Preservation Act (NHPA), as a part of the "reasonable and good faith effort" to identify historic properties in each project's area of potential effect (APE), NRCS Kentucky invites the Native American Tribe mentioned above to initiate Government-to-Government consultation on this project. This project will remain open for initial consultation for thirty days upon receipt of this letter. Should the Tribe desire consultation, please contact Tyler Stumpf, Kentucky Cultural Resources Specialist at (859) 224-7312 or Tyler.Stumpf@usda.gov

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Preferred Citation:

Shrader, C., 2024. **Kentucky Interagency Coordination Tool (KICT) Handbook** - A Handbook for Implementation of The KICT & Compliance with the National Environmental Policy Act for Kentucky NRCS Employees (Version 4.0). USDA Natural Resources Conservation Service (NRCS). Lexington, KY, 40503. Data Support & Integration: Lafone, F., Sharma, M., Han, Y., West Virginia University GIS Technical Center. Morgantown, WV, 26505. (255pp).













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