## Online Endangered Species Act Review using IPaC

The United States Fish and Wildlife Service (USFWS) encourages the use of its "Information, Planning, and Conservation" (IPaC) decision support system for the review of potential adverse effects as they relate to the Endangered Species Act (ESA). IPaC can be found at: <a href="http://ecos.fws.gov/ipac/">http://ecos.fws.gov/ipac/</a>

According to the USFWS IPaC website, "The Information, Planning, and Conservation (IPaC) decision support system is a conservation planning tool for streamlining the environmental review process. It provides you-our partners-with the ability to explore the landscape and help you to site your projects in a way that minimizes conflicts with natural resources. With IPaC's landscape explorer tool, you can view various data layers such as wetlands and USFWS designated critical habitat, in a few limited areas you can now also view GAP land cover and other natural resource map layers. Throughout most of the continental United States you can use IPaC to get a planning species list immediately, and request a USFWS Official Species list to help fulfill the requirements of the Endangered Species Act. Available, too, are links to some species life history information, Recovery Plans, the USFWS Migratory Bird program, Bald and Golden Eagle Protection Act information, information about any national wildlife refuges in the area, and more." The IPaC system allows you to define your project area (e.g., tower location) in the "Initial Project Scoping" (Fig. 1).

The IPaC system also allows you to select an ESRI shapefile from your computer's file system that defines the spatial boundary of your project location. The shapefile should contain a single polygon or polyline shape in geographic coordinate system (srid: 4326): Geographic NAD83 or Geographic WGS84. Note that while the shapefile can contain multiple polygons, one species list will be produced for the entire shapefile, i.e., you will not be able to determine whether an identified species is associated with only one of the shapefile polygons. The shapefile must be a .zip file containing three required and one optional files: main file (.shp), index file (.shx), dBASE table (.dbf), and (optionally) project file (.prj). The maximum size of the .zip file is 20k (approximately 1000 vertices in a polygon). A complete shapefile description is available at: <a href="https://www.esri.com/library/whitepapers/pdfs/shapefile.pdf">www.esri.com/library/whitepapers/pdfs/shapefile.pdf</a>

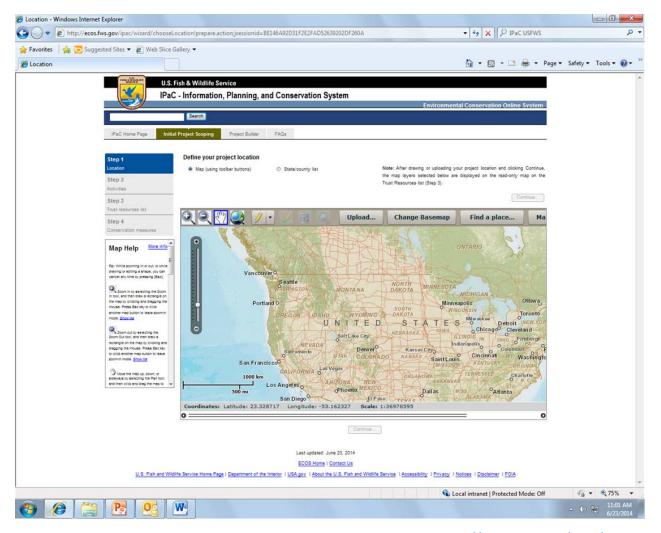


Figure 1. Initial Project Scoping page of the IPaC system website. <a href="http://ecos.fws.gov/ipac/">http://ecos.fws.gov/ipac/</a> on 6/6/2014

The species lists provided by IPaC will be based on the entire area of the shapefile or project area defined on the Initial Project Scoping page. Therefore, if a shapefile includes more than one tower location the IPaC output will include listed species that may be located between the tower locations, as well as species potentially present at specific tower locations. Note that if project sites will be accessed by driving vehicles off of established roads, you should include those access routes in your project polygons.

After you have defined the project area you can select the best description of your project. In most cases this will be "Communications Tower" (Fig. 2).

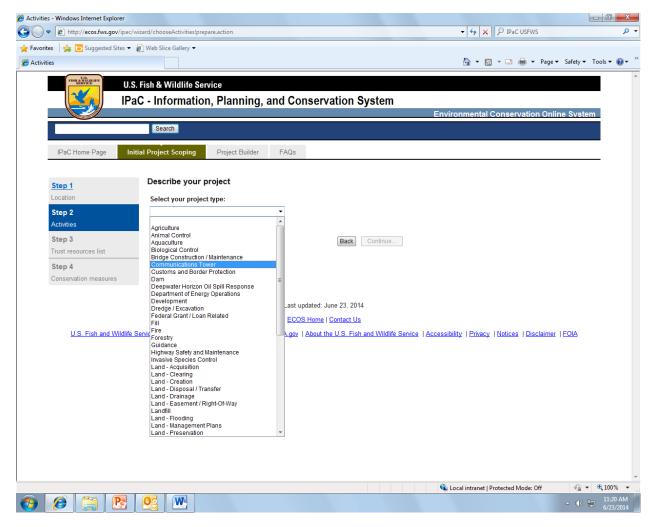


Figure 2. Initial Project Scoping, project description page of the IPaC system website. <a href="http://ecos.fws.gov/ipac/">http://ecos.fws.gov/ipac/</a> on 6/6/2014

According to the USFWS IPaC website, "While IPaC provides project proponents with valuable information; in many cases it may still be necessary to contact USFWS offices directly to complete section 7 consultation or to obtain any needed section 10 permits. On the other hand, unless otherwise specified, an official species list obtained from IPaC is considered to be a USFWS official response. These responses should be printed out and kept on hand in the project proponents' administrative record."

"In most cases, if IPaC provides an official report with no listed species or designated critical habitat it is not necessary to contact the local USFWS office regarding listed species issues unless specified otherwise. However, there are exceptions: (1) if you are aware of unusual circumstances that you believe may change the type, extent, or reach of the potential effects, you should contact your local USFWS office; (2) there may still be the need to contact the local USFWS office to fulfill the requirements of the Fish and Wildlife Coordination Act. In addition, it is important to recognize that at this time IPaC does not address potential impacts to other Federal, State, and local resources that may require coordination with non-USFWS entities. As a

general rule-of-thumb, if in doubt, use the information you receive from IPaC for planning purposes and contact the appropriate local offices to ensure that you have a complete understanding of the information you receive. The IPaC system will provide you with the appropriate USFWS contacts. As is the case with species lists obtained directly from local USFWS offices, official species lists obtained from IPaC are valid for 90 days. After 90 days, project proponents should confirm their results on IPaC as needed."

If the IPaC user's shapefiles include more than one tower location and the IPaC output includes protected species then the user may want to enter each tower individually to determine exactly where potential ESA adverse effects might occur. Another alternative might be to examine the range of the specific endangered species (option available within IPaC) and compare the range to the tower locations within the shapefile.