Digitization

The final map mylars were scanned digitally at a resolution up to 650 dpi (dots per inch) after which the pixel file was converted to recognizable lines and points by a raster to vector conversion program. WAMS (wetland analytical mapping software) was used interactively to assign wetland, riparian and upland attributes to each polygon, linear and point feature. WAMS also builds data topology and calculates polygon areas and linear feature lengths. This complete process creates a digital database in GIS form for computerized data analysis. This includes types and acreage statistics for all wetland, riparian and upland data and allows the production of ancillary products such as color-coded maps. Established Service procedures and protocols were followed as described in "Digitizing Conventions for the National Wetlands Inventory" (USFWS 1994).

Quality Control

Many quality control steps were performed throughout the mapping process from the original field work to correlate photo signatures to specific vegetative types and land use patterns to final quality control checks on the digital data. Photo interpretation delineations and classifications were checked. Draft maps were checked against the original photo delineations for accuracy in transfer of linework and labels. Digital data were processed through a series of verification programs including logic checks of wetland attributes for improper labels. In addition the resulting digital data consisting of attributes and acreage statistics was put through one final check for possible errors. Still, as with any remotely-sensed, computer generated data, there may exist errors although these should be insignificant in relation to the entire project.

Wetland (PFOA) and riparian (Rp1FO) forest along the Yellowstone River (R3UBH).