Mapping Conventions

Conventions are necessary to ensure consistency in riparian mapping efforts throughout the western United States. The present conventions were developed by the Service to be used for the preparation of riparian maps. These conventions provide specific instructions for application of the riparian mapping system and are in concert with the Cowardin et al. (1979) classification system used for wetland mapping. Wetland mapping, based on the Cowardin et al. system, uses detailed photointerpretation conventions (USFWS 1995), cartographic conventions (USFWS 1994a), and digitizing conventions (USFWS 1994b). The Cowardin et al. system is the Federal standard for wetlands mapping.

Riparian delineation using remotely-sensed data involves limitations such as scale and date of the imagery, and hydrologic conditions. As with wetlands, the identification of riparian areas from aerial photographs is best accomplished with ground truthing on a project-specific basis.

Riparian maps are 1:24,000-scale and based usually on the same photography used for production of NWI wetlands maps (Figure 2a).

NWI maps are based primarily on 1:58,000-scale, color infrared emulsion. Riparian areas, as in the identification of wetlands, are subject to errors of omission and comission consistent with data collected through remotely sensed technologies. Riparian maps have no effect on existing NWI wetlands maps. The final riparian product will be a wetland-riparian map. Once digitized, wetland-riparian maps can be provided in a variety of formats including color-coded maps (Figure 2b).

Minimum mapping units will be established for specific projects based on funding, scale and quality of aerial photographs, and agency needs. Photointerpreters will make every effort to identify all observable riparian areas, if not by polygon, then by either point or single line features.

Woody riparian areas associated with lotic systems (perennial or intermittent) are the predominant features of the mapping effort. This is consistent with the classical concept of riparian areas, facilitates a high degree of map accuracy, and identifies most of the riparian areas in the western United States. However, emergent cover and/or lentic riparian areas may be mapped if the imagery allows identification of these features.

Figure 2a. Portion of standard NWI map showing wetland and riparian classifications along the Tongue River, Wyoming.

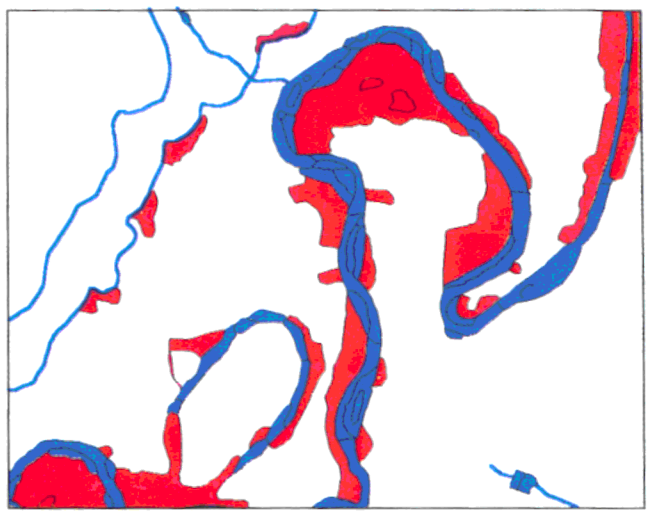

Figure 2b. Digitized and color coded NWI map (wetland is blue; riparian is red) of the same area shown on the left.