

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE SPECIFICATION**

RIPARIAN HERBACEOUS COVER

(acre)

Code 390

GENERAL SPECIFICATION

Procedures, technical details and other information listed below provides additional guidance for carrying out selected components of the named practice. This material is referenced from the conservation practice standard for Riparian Herbaceous Cover and supplements the requirements and considerations listed therein.

HABITAT

The habitat containing riparian herbaceous cover is found in several types of land cover. Wetlands dominated by herbaceous cover are known as cienegas and usually contain grasses, sedges and rushes. Many are dominated by alkali sacaton or giant sacaton with other plants which thrive with increased water content in the soil. Playas, found in eastern New Mexico, are seasonal wetlands dominated by forbs, sedges or rushes. Riparian herbaceous cover is also found along streams, the edges of lakes and ponds. Many meadows contain grasses, sedges and forbs. These plants may be aquatic, riparian or upland.

These areas are the prime nesting zone for waterfowl, shorebirds and others. It is also where many wildlife species rest, loaf, feed, give birth, breed and carry on essential life functions. In the southwest US, the riparian zones are where 60-75% of all wildlife species spend some part of their lives.

The habitat could be a corridor or strip of vegetation along the stream or there may be patches of different vegetation making up a mosaic of patches. There could also be larger areas of similar habitat called a matrix. The continuum of patches, mosaics, matrix and corridors in the riparian system is what holds the system together. The habitat controls

accelerated erosion, clarifies water, builds and maintains floodplains, reduces flood damage, provides wildlife habitat, aquifer recharge and extends the flow regime of the stream. Isolated patches and corridors will not perform these functions to keep the system healthy, only the continuum from top to bottom of the watershed can accomplish the maximum benefits possible for all purposes.

The microclimate created by the riparian community may have some influence on the climate and weather in the local area.

HYDROGEOMORPHOLOGY

If the riparian area is associated with a stream, it must be classified by some method such as Rosgen's to determine essential hydrogeomorphological parameters to be used in planning vegetation and possible structures for management. A interdisciplinary team must be convened to assess the functioning condition of the stream using the interagency Proper Functioning Condition (PFC) method. Items such as width/depth ratio, bottom type, slope, sinuosity, kinds of vegetation along the banks, presence of beavers, and other criteria, indicate the type of stream and if it is functioning properly.

The riparian zone is linked to uplands, wetlands and the aquatic zones and is influenced by disturbances to these other areas. Vegetation must be able to withstand stream power, i.e. velocity, quantity, timing. Vegetation will influence patterns of pools and riffles as well as temperature, pH, carbon dioxide, oxygen, etc. Riparian herbaceous cover best contributes to bank stability along streams and lake shores, pond edges and wetland borders. Sediment deposition occurs over vegetation and is essential to floodplain development and maintenance. Point bars in

<p>Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.</p>
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the channel formed as a result of deposition of sediment is where the first plants begin to stabilize the banks. The channel bottom should be neither aggrading nor degrading. These soils determine the vegetative community. Vegetation determines the nutrients cycling in the system. Native plants such as sedges, and rushes will hold the soils in place along the banks better than shallow rooted grasses. Plant species of the following genera are important:

- Carex, Eleocharis, Cyperus, Scirpus, Juncus, Deschampsia, Glyceria, Polygonum, Hippuris, Alisma, Bidens, Sporobolus, Panicum, Polypogon, Leptochloa, Tripsacum.

Plants in this riparian herbaceous community may be aquatic, upland or bottomland types.

WATER QUANTITY/QUALITY

Water storage in depressions on the floodplain as well as bank storage is what makes the stream flow for extended periods of time beyond the period of rainfall or snow melt events. This slow release of water only occurs after it has been filtered through the banks and contributes to high quality water. Extended time during which the stream flows will increase usable quantity of water.

MANAGEMENT

Management of the riparian zone is needed in order to maintain the functioning of the system. In New Mexico, human values like flood control, clean water, irrigation water can only continue if the functions of the stream are kept in tact.

Assess the functioning condition of the riparian herbaceous zone to prioritize management.

A major consideration is to manage for adequate cover on the banks, floodplains and the edges of wetlands. The following are important:

- One must determine the annual flood season, and select plants accordingly.
- Manage grazing, recreation, roads, pests.

- Replace, restore or enhance the riparian continuum in as much of the watershed as possible.
- Manage brush and trees to keep the herbaceous cover in tact on those sites where it should flourish.
- Allow the stream to use it's floodplain, which may require restoration of the channel. (See Restoration and Mangement of Declining Habitat – 643.)
- Use moist soil technique to manage water to inundate at appropriate times to encourage desirable plants. This may not be possible in many situations.

PLANS AND SPECIFICATIONS

Classification of streams and assessment of proper functioning condition of the riparian area are mandatory parts of plans and specifications for each site. Plans must also include evaluations of upland watershed conditions and off-site up stream or down stream factors which may preclude on-site restoration, enhancement, or maintenance. Structures may be needed along with offsite management adjustments.

Planting can be done by broadcast seeding, drilling, or sprigging of plants.

OPERATION AND MAINTENANCE

Operation and Maintenance is dependent on proper management for long term sustainability. Any structures may require annual inspections.

REFERENCES

Rosgen, D. 1985. A Stream Classification System. In: Riparian Ecosystem and Their Management; Reconciling Conflicting Uses. Preceedings of the First North American Riparian Conference, April 16-18, Tucson, Arizona. GTR-RM120, pp. 91-95.

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