

FUTURE FISHERIES IMPROVEMENT PROGRAM

Design Information Guidelines for Application Submittal

This outline is intended to provide assistance to applicants submitting project proposals to the Future Fisheries Improvement Program. The intent of the outline is to provide applicants a list of essential design information that should be included in their application to the Future Fisheries Improvement Program. The design information provides the citizen review panel a consistent level of information needed for them to evaluate the soundness of proposed projects. This outline specifically applies to restoration projects involving stream channel reconstruction, stream habitat re-naturalization and stream channel/bank stabilization. *Please keep in mind that this list is the minimum and the level of design information should always be commensurate with the size and scope of the proposed project.*

1. Provide a narrative description of the present baseline conditions of the stream and riparian area. Provide a map showing the location of the proposed project. Identify stream type (ephemeral, intermittent, perennial) and stream classification (Rosgen or Montgomery-Buffington methodologies). Provide existing bank-full channel dimensions (width and depth; slope on larger scale projects). Provide photographic documentation of the existing channel, including a photograph of the existing typical channel substrate with an associated ruler for scale.
2. Identify the cause(s) of existing impairments on the proposed project reach and describe how the project would restore appropriate conditions.
3. Provide an estimate of design discharge and note the method(s) of estimation. If the proposed design is based on a reference reach, provide specific descriptive information (channel type, bank-full width, and bank-full depth; slope on larger scale projects) and explain applicability to the proposed project reach. Identify the location of any or all reference reaches on a map. Provide photographic documentation of the reference channel.
4. Provide a plan view drawing for the entire reach, showing placement of all structures and proposed treatments (including fencing).
5. Provide typical drawings for all proposed structures.
6. Describe proposed and future land use activities within adjacent riparian areas.

The following sites can be downloaded to obtain information on terminology and design methodologies:

Stream Restoration: A Natural Channel Design Handbook

The North Carolina Stream Restoration Institute

North Carolina State University

Can be downloaded from:

http://www.bae.ncsu.edu/programs/extension/wqg/sri/stream_rest_guidebook/sr_guidebook.pdf

Stream Channel Reference Sites: An Illustrated Guide to Field Technique.

USDA Forest Service, 1994. General Technical Report

RM-245. C. Harrelson et al. Rocky Mountain

Forest and Range Experiment Station, Ft.

Collins, CO

Can be downloaded from:

<http://www.stream.fs.fed.us/publications/PDFs/RM245E.PDF>

Stream Corridor Restoration: Principles, Processes and Practices

National Technical Information Service (NTIS)

5285 Port Royal Road

Springfield, VA 22161

Chapters can be downloaded from:

http://www.nrcs.usda.gov/technical/stream_restoration/copies.htm