

MANAGEMENT PROBLEMS AND OPPORTUNITIES

The Missouri Department of Conservation (MDC) is charged with the ‘ . . . control, management, restoration, conservation and regulation of the bird, fish, game, forestry and all wildlife resources of the state’ As stated in MDC’s recent Regional Management Guideline documents, ‘The Conservation vision is to have healthy, sustainable plant and animal communities throughout the state of Missouri for future generations to use and enjoy, and that fish, forest, and wildlife resources are in appreciably better condition tomorrow than they are today.’ In order to achieve this vision, efforts to better manage streams and their watersheds will be a continuing priority in the Lamine River watershed.

This section includes strategic guidelines to provide MDC Fisheries Division staff working in the watershed with management direction to address the issues detailed in earlier sections. These issues include point and non-point source pollution, increasing urbanization, loss of riparian vegetation, the effects of large confined animal operations, increasing demands for recreation, and threats to aquatic life within the watershed. The guidelines will be used to address future stream management, public awareness, and public access issues and needs. Efforts specifically related to the management of impounded waters are addressed in detail elsewhere and are not included here.

GOAL I: MAINTAIN OR IMPROVE WATER QUALITY IN THE LAMINE RIVER WATERSHED SO ALL STREAMS ARE CAPABLE OF SUPPORTING NATIVE AQUATIC COMMUNITIES.

Objective I.1: Streams within the watershed will meet state standards for water quality.

Guidelines:

Collect fish for contaminant analysis for the Department of Health and cooperate in advising the fishing public on the impacts of contaminant levels in fish.

Review NPDES, Section 404, and other permits and recommend measures to protect aquatic communities.

Determine the effects of long term point and non-point pollution on the biota of Muddy Creek.

Train and involve Stream Teams in water quality monitoring and advocacy in the Lamine River Basin.

Objective I.2: Increase awareness of local government officials and industrial and residential developers of water quality conditions and problems in the Lamine River basin.

Guidelines:

Determine the extent of public and local institutional knowledge of point and non-point pollution problems.

Inform the public about water quality problems in the basin and promote citizen involvement in reporting

and preventing pollution.

Present workshops to local government agencies and developers on water quality problems in the basin and their role in solving them.

GOAL II: IMPROVE AQUATIC HABITAT CONDITIONS IN THE LAMINE RIVER BASIN TO MEET THE NEEDS OF NATIVE AQUATIC SPECIES WHILE ACCOMMODATING SOCIETY'S DEMANDS FOR WATER AND AGRICULTURAL PRODUCTION.

Objective II.1: Maintain, expand and restore vegetated riparian corridors to meet the cost share guidelines; improve in-stream habitat (pools with woody debris, boulders and/or aquatic vegetation) and stabilize streambanks on all third order and larger streams.

Guidelines:

Cooperate with landowners to install streambank, riparian and in-stream cover improvement projects on private lands using technical assistance and incentives.

Inventory and monitor stream and riparian corridors and recommend habitat maintenance and enhancement projects on the Lamine River and Turkey Kern conservation areas and any new areas acquired with stream frontage in the Lamine River basin.

Cooperate with county Soil and Water Conservation District (SWCD) boards to incorporate stream improvement practices in their cost share programs.

Review all 404, in-stream dredging, bridge construction or other development projects for impacts to streams in the Lamine River Basin to maintain, improve or protect aquatic habitats.

Objective II.2: Increase landowner awareness of local stream resources and good watershed and stream management practices.

Guidelines:

Work with MDC's Outreach and Education Division staff to develop stream management related materials for private landowners.

Establish and maintain stream management demonstration sites.

Promote good stream stewardship through landowner

workshops and stream demonstration site tours.

Ensure that all MDC areas are examples of good stream and watershed management.

Provide technical recommendations to all landowners that request assistance.

Improve landowner stewardship of streams by promoting and implementing cost share programs, including MDC's watershed-based programs, that include streambank stabilization, alternative watering practices, and establishment and maintenance of quality riparian corridors.

Objective II.3: Identify and protect unique Lamine River Basin aquatic habitats from development or degradation.

Coordinate fish population sampling on the main stem Lamine River with universities, MDC-Fisheries Research and Regional Fisheries personnel to further define and delineate unique and critical habitats.

Protect Elk Lick Spring and spawning riffles used by walleye and Missouri River fishes through acquisition, landowner easements or cooperative projects.

GOAL III: MAINTAIN DIVERSE AND ABUNDANT POPULATIONS OF NATIVE AQUATIC SPECIES WHILE ACCOMMODATING ANGLER DEMANDS FOR QUALITY FISHING.

Objective III.1: Evaluate and maintain sportfish populations and maintain sufficient quality and condition of these populations to satisfy the angling public.

Guidelines:

Develop standardized sampling procedures for target species and implement a monitoring program to obtain trend data on fish populations which will be used to determine population objectives for management purposes.

Identify critical spawning and nursery areas for walleye, white bass and other Missouri River fishes and acquire, maintain or enhance these areas as needed to improve the habitat.

Using regulations, stocking, habitat improvement, and other methods, implement population improvement programs for target species once

population objectives have been determined for these species.

Objective III.2: Maintain populations of native non-game fishes, including the Topeka and blacknose shiners, and aquatic invertebrates at or above present levels throughout the watershed.

Guidelines:

Develop standard sampling techniques for assessing fish communities, including the use of indicator species, and implement a monitoring program to track trends in species diversity and abundance.

Use regulations, stocking, habitat improvement and other techniques to implement programs to protect or enhance fish species diversity and abundance.

GOAL IV: IMPROVE THE PUBLIC'S APPRECIATION FOR STREAM RESOURCES AND INCREASE RECREATIONAL USE OF STREAMS IN THE LAMINE RIVER WATERSHED.

Objective IV.1: Develop and maintain access sites, bank fishing areas, and trails in sufficient numbers to accommodate anticipated increases in public use.

Guidelines:

Conduct a recreational use survey within the basin in conjunction with a creel survey to determine existing levels of use and satisfaction with recreational opportunities in the basin.

Acquire public access and/or frontage on Flat, Muddy, Heath, Haw and Lake creeks and the main stem of Lamine River.

Improve bank fishing and other aquatic wildlife-based recreational opportunities on MDC lands in the basin through implementation of recommended strategies in area plans.

Develop a nature trail and a short tour guide of stream improvement projects on the Lamine River Conservation Area.

Objective IV.2: Increase public awareness of stream recreational opportunities, local stream resources, and good watershed and stream management practices.

Guidelines:

Work with MDC's Outreach and Education Division staff to use streams in aquatic education programs. Identify and develop stream locations appropriate for

educational field trips near participating schools.

Maintain a stream emphasis at public events such as the State Fair, area boat shows, etc.

Include the Lamine River in future revisions of "Ozark Waterways," "Floating in North Missouri" and other float-oriented publications.

Include the Lamine River Basin in the publication "Missouri Watershed Survey of Recreational Value and Associated Problems."

Assist in the development of articles, videos, etc. that highlight Lamine River watershed recreational opportunities.

Prepare an annual fishing prospectus for selected streams.

Promote the formation of Stream Teams and Stream Team associations within the watershed.

Distribute information through Stream Teams and related organizations.