

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 West Osage 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, mining influences, dam and hydropower influences, instream flow issues, 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: IMPROVE WATER QUALITY AND MAINTAIN OR IMPROVE WATER QUANTITY IN THE WEST OSAGE RIVER WATERSHED SO ALL STREAMS ARE CAPABLE OF SUPPORTING HIGH QUALITY AQUATIC COMMUNITIES.

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

Guidelines:

Enhance people's awareness of 1) water quality problems (i.e., point and non-point source pollution, poor septic systems, and animal waste runoff, etc.) affecting aquatic biota, 2) viable solutions to these problems, and 3) their role in implementing these solutions.

Update MDNR 303(d) list with impaired stream reaches and work with them to improve problem reaches.

Review NPDES, Section 404 and 401 gravel removal and other permits and recommend either denial or appropriate mitigation for those which are harmful to

aquatic resources, and investigate pollution events and fish kills.

Work with the Missouri Department of Health and MDNR to monitor and reduce contaminant levels in fish.

Work with MDNR to monitor and improve water quality, and ensure compliance with discharge permits.

Conduct water quality research relating watershed nutrient input effects on aquatic communities in streams and reservoirs within the West Osage Basin.

Recommend areas to MDNR Land Reclamation Program for strip-mine reclamation that are impacting streams with acid mine runoff. Assist with the reclamation process as requested.

Serve in an advisory role to citizen organizations and local governments on urban development or water quality issues.

Objective I.2: Maintain base flows in streams within the watershed at or above current levels within the constraints imposed by natural seasonal variations and precipitation to maintain aquatic communities at their current diversity and abundance.

Guidelines:

Establish flow regimes that protect or enhance fish and other aquatic life by collecting data that can be used to project the required flows.

Working with MDNR and USCOE, protect or enhance stream flows through oversight and enforcement of existing water withdrawal permits and other related permits.

Meet with the State of Kansas State Board of Agriculture, Division of Water Resources, State Conservation Commission, Basin Advisory Council and Parks and Wildlife Department to encourage the incorporation of minimum flows into watershed projects and instream flow below Pomona, Hillsdale and Melvern reservoirs.

Support development of water law and an interstate compact/agreement that will address the quantity of water in Missouri's streams.

Encourage Kansas Parks and Wildlife Department and the U.S. Army Corps of Engineers to develop water management plans for Melvern, Pomona and Hillsdale reservoirs which include flows for enhancing the aquatic communities of the

Marais des Cygnes River.

Increase public awareness of and concern for water quantity problems, the affected aquatic biota, and potential solutions.

GOAL II: IMPROVE RIPARIAN AND AQUATIC HABITAT CONDITIONS IN THE WEST OSAGE RIVER WATERSHED TO MEET THE NEEDS OF AQUATIC SPECIES WHILE ACCOMMODATING DEMANDS FOR AGRICULTURAL, DOMESTIC, AND INDUSTRIAL WATER USES.

Objective II.1: Help riparian landowners understand the importance of good stream stewardship and where to obtain technical assistance for sound stream habitat improvement.

Guidelines:

Work with MDC's Outreach and Education Division staff to develop stream management related materials and present related courses for elementary and secondary school teachers.

Establish and maintain stream management demonstration sites.

Promote good stream stewardship through landowner and inter-agency workshops, stream demonstration site tours, and agricultural media.

Provide information to local SWCD, NRCS, and farm organizations on best management practices for streams and watersheds.

Promote the development of a stream program in Kansas to address stream and watershed problems in the Kansas portion of the West Osage Basin.

Objective II.2: Maintain, expand, and restore riparian corridors; enhance watershed management; improve instream habitat; and reduce streambank erosion throughout the watershed.

Guidelines:

Periodically monitor and assess habitat and riparian area conditions on selected streams in the watershed.

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

Provide technical recommendations to all landowners that request assistance.

Improve riparian corridor and watershed conditions by actively cooperating with other agencies on watershed-based projects (e.g., EQUIP, AgNPS, 319).

Recommend that MDNR use the information in this watershed plan for the statewide watershed planning effort currently being developed to address non-point problems.

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

Emphasize proper methods of logging timber from riparian corridors to reduce log jam problems in streams at MDC sponsored workshops.

Objective II.3: Critical and unique aquatic habitats will be identified and protected from degradation.

Guidelines:

Conduct additional fish population sampling to further define and delineate unique and critical habitats.

Collect additional background information from the public and resource professionals to better define critical and unique aquatic habitats.

Acquire, protect, and enhance critical and unique aquatic habitats.

GOAL III: MAINTAIN DIVERSE AND ABUNDANT POPULATIONS OF AQUATIC ORGANISMS 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 and implement a monitoring program for collecting trend data on sportfish populations and angler use in selected stream reaches.

Establish management objectives for catfish, white bass, black bass fisheries once adequate data have been collected.

Continue implementation of the Department's Paddlefish Management Plan, particularly the creel surveys on the Marais des Cygnes River and Osage Arm of Truman Lake.

Identify critical habitat areas for sportfish species and maintain or enhance these areas as needed to improve habitat.

Encourage the emphasis for managing paddlefish, wetlands, and riparian corridors on the Marais des Cygnes River with USFWS and Kansas Department of Parks and Wildlife.

Using regulations, habitat improvement, and other methods to continue to improve sportfish populations.

Cooperate with Kansas Department of Parks and Wildlife personnel on fishing regulations especially paddlefish on streams that traverse state lines.

Increase angler awareness of the recreational potential of fishes such as buffalo, carp, drum, and gar.

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

Guidelines:

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

Implement management strategies outlined in the Missouri Department of Conservation's Guidelines for Promoting Fishery Resources in Missouri Wetlands on all public areas and privately owned wetlands.

Protect or enhance aquatic biodiversity and abundance using regulations, stocking, habitat improvement, and related techniques. Periodically meet with Kansas biologists to determine their plan for stocking fish into watersheds that traverse the state line.

Promote the extension of the United States Fish and Wildlife Service (USFWS) refuge in Kansas along the Marais des Cygnes River into Missouri.

Protect and enhance wetland habitats, oxbow and bottom land lakes, and large continuous tracts of bottom land hardwoods along streams through purchase or

easements.

Educate the public about the need to control exotic aquatic species introductions that may harm native biota (i.e., zebra mussels) into water in the watershed.

Continue public awareness and habitat management efforts related to aquatic species of special concern and consider non-MDC funding for additional inventory work, continued public awareness efforts, and habitat management efforts.

Conduct a public opinion survey of stream problems to residents in the watershed.

Recommend to MDNR select high quality streams be included as Outstanding Resource Water Resources.

Emphasize the importance of managing wetlands for fish and other aquatic organisms at MDC sponsored workshops.

Protect and improve habitats that support populations of aquatic species of special concern by implementing MDC cost share that protect and enhance streams, riparian areas, and springs to be included on NRCS/SWCD docketts.

Participate in species recovery efforts including interstate conferences and recovery team meetings.

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

Objective IV.1: Access sites, bank fishing areas, and trails will be developed and maintained in sufficient numbers to accommodate public use and minimize maintenance.

Guidelines:

Conduct a recreational use survey within the watershed in conjunction with an angler survey to determine existing levels of use and satisfaction with recreational opportunities in the watershed.

Acquire and develop appropriate stream access and frontage sites to minimize maintenance and improve public accessibility.

Improve bank fishing and other aquatic wildlife-based recreational opportunities on public lands.

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

Guidelines:

Working with MDC's Outreach and Education Division staff, use stream and watershed stewardship in aquatic education programs. Identify and develop stream locations appropriate for educational field trips near participating schools.

Promote stream ecology and advocacy to schools in Kansas by involving the national Stream Network, Wildlife Federation, Izaak Walton League, Save our Streams program, or other environmental groups that have affiliation with Kansas schools, landowners, general public or service groups.

Maintain a stream emphasis at the Missouri State Fair and other local public events.

Emphasize stream ecology, good stream stewardship and the Department's Streams for the Future program (using watershed models and the stream trailer where applicable) during presentations at adult and youth organizations.

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

Provide floating information on all prairie streams fifth order and larger in MDC, MDNR, and other agency canoeing-oriented publications.

Incorporate stream ecology and proper watershed stewardship information in COE, MDNR (Prairie State Park), and other government or organization's visitor centers and brochures located in the watershed.

Emphasize the importance of proper watershed stewardship in protecting water quality, habitat and recreational value of Truman Lake.

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.

Promote the monitoring of water quality in selected streams by STREAM TEAMS, schools, and inter-agency cooperative watershed projects.