

Good morning, my name is Robert L. Temper. I represent the Ozark Fly Fishers. We wish to thank you for the opportunity to address the subject of gravel mining rules.

Ozark Fly Fishers has a membership of 300. While we are based in the St. Louis area we have members that live all over the state. I am the current Director of Conservation for the club. Some of goals of the organization are to:

- Support all efforts for improvement of outdoor environment, particularly our streams and lakes;
- Limit our kill and not kill our limit. Release the majority of fish caught.
- Advise, educate and assist in promoting the art of fly fishing.

Ozark Fly Fishers endorses the Land Reclamation Commission in establishing rules for gravel mining. This will be a positive step in protecting the natural resources of our state. With effective rules in place there is continued opportunity for everyone to realize positive gains from the resources available without sacrificing the future of those resources for any one interest.

The gravel is a resource, but so are the streams where it is located. Neither need be sacrificed for the other. Rules are the standard by which all are measured and held accountable. Anglers have rules for action on the stream. There are open and closed seasons as well as size and harvest limits and restrictions on methods of fishing and public access. These rules are to protect the fishery for our collective future. Why then should there not be rules to protect the streams and the future health of the gravel mining industry in our state. The Missouri Conservation Department is regarded as one of the best in the nation but it is ultimately at the mercy of the resources of land and stream management. You have an opportunity to establish workable rules that will provide for gravel mining while protecting the resources for other uses as well.

Gravel mining can adversely affect stream resources in many different ways. It effects the physical characteristics of the stream itself, its inhabitants and the adjacent wildlife community. The mining activity can capture the stream altering flow both upstream and down. It can effect water quality. It can cause turbid water during or following the mining process. The process can have an impact on oxygen level, sediment in spawning areas, water temperatures, in-stream and stream side vegetation and bank erosion. It can have a long lasting effect on the aesthetics of the surrounding area. With effective rules these potential problems can all be prevented.

Several studies have been conducted that document the impact of in stream gravel mining. Those of the state of Arkansas are the most closely related to the Missouri Ozark streams. I encourage you to learn what you can from those studies to assist you in your process to establish rules to prevent problems before they occur.

Numerous studies have addressed the deleterious effect of removing gravel from the active stream channel. With all the technical information available, it is painful to see a

resolution from the County Commissioners Association. Their resolution presents many unfounded statements and as such presents a negative philosophy. There is no need to have gravel removed from streams. It can be obtained without taking it from the stream. Bank erosion is a product of poor land management and lack of bank stabilization, not gravel. There is a benefit to being able to use gravel as a resource when and where its removal does not have a negative impact on the ecosystem. Converting the previous guidelines to rules promotes the efficiency of seeing that gravel mining can be accomplished in an appropriate manner without additional expense to the industry or the state.

The United States Geological Survey (USGS) data presented to the work group indicated that over half of all gravel mining sites in the state were not operated under permit. Even permit operations are difficult and expensive to pursue for corrective action through the court system. Rules provide an opportunity for prevention of problems without having to wait for gross injustices.

On a personal note, prior to my retirement I was Director of Transportation for Mallinckrodt, a manufacturer and distributor of laboratory chemicals and medical diagnostics products. I was deeply involved in the regulatory process and can appreciate the task ahead of you. I participated frequently in federal rulemaking processes and realize guidelines have little value in prevention or compliance. Clear, definitive, measurable rules are the basis for prevention and compliance.

In today's society rules are necessary. On my way here today I was reminded of that on the highway. Speed limits are frequently posted. If the speed limit was just a guideline, I could drive at whatever speed I considered appropriate for me. Should an error in judgment result in putting others in danger or an accident it would be up to the officials and affected individuals to press for resolution in the courts. This is hardly an efficient process. By having the rule (speed limit) in place and posted for everyone to see it is a more efficient process to protect my rights and the rights of other individuals. The posted speed limit and a process for penalizing offenders keeps everything within reason.

All industry understands this process. Good luck in your effort to develop meaningful rules that will provide leadership for the gravel mining industry and protect the resources of the state.