The Cooperative Forest Management Program: Suggestions for Improvement



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In order for a governmental agency to function most effectively and efficiently periodically it must evaluate its basic goals and objectives, examine its accomplishments and reflect on what future courses of action are appropriate. Proper planning helps insure that programs remain focused and aid in making budget and administrative decisions. This paper is based on a review of the Cooperative Forest Management (CFM) program as administered by the Forestry Division, Missouri Department of Conservation (MDC).

The CFM program is the main link between the MDC and Missouri's private forest landowners. More than 50 foresters located in 17 districts provide landowner assistance. This is an important linkage since some one-third of the state (approximately 12.5 million acres) is in commercial forest, and private owners numbering in the hundreds of thousands hold some 85 percent of the acreage. In addition, our forest lands provide innumerable wildlife, recreation, aesthetic, and water quality benefits. Continued wise management of nonindustrial private forest (NIPF) lands in Missouri is both a practical and a moral imperative.

Two separate analyses of Forestry Division activities were conducted in 1984 and 1985 to provide information that would ultimately improve CFM program delivery to the state's private forest landowners. These analyses provided an appreciation and understanding of the policy mechanisms and operational procedures of the Forestry Division. The first analysis had the express purpose of accumulating appropriate CFM program background data for use by the Forestry Division. The second, follow-up study was conducted in early 1985 with the purpose to examine policy development and decision making within the Forestry Division. This particular study was designed to emphasize input from professional forestry staff members due to their nearautonomy in decision and policy matters. To determine the feasibility of our earlier recommendations as well as to evaluate the effectiveness of the present organizational structure it was important to record perceptions of their role in the policy and decision processes. We will emphasize the comments and suggestions from this latter analysis.

CFM Program Description

The CFM program was designed to assist private forest landowners. The purposes for governmental assistance were set forth in the Cooperative Forestry Assistance Act of 1978 (P.L. 95-313):

- 1. The advancement of forest resources management.
- 2. The encouragement of the production of timber.
- The prevention and control of insects and diseases affecting trees and forests.
- 4. The prevention and control of rural fires.

- The efficient utilization of wood and wood residues, including the recycling of wood fiber.
- 6. The improvement and maintenance of fish and wildlife habitat.
- 7. The planning and conduct of urban forestry programs.

The CFM program, through its activities, provides direct benefits to private forest landholders which in turn provide indirect benefits to society. The primary focus of CFM program activities must be on NIPF owners. What is known from research and practical experience is that individual NIPF landowners possess diverse motivations and objectives. Frequently landowner objectives do not include timber management. In the absence of outside intervention, most NIPF owners will not maximize opportunities for forest management available on their land. From society's standpoint they are underinvesting in forest management. Individual rational behavior often does not result in a socially desirable situation.

Missouri CFM Program Structure

The CFM program in Missouri operates through 17 forestry districts and the central office of the Forestry Division in Jefferson City. Individual districts have primary responsibility for executing the programs of the division, including CFM. They must balance competing demands for work on state lands, CFM, fires and other department responsibilities. The district is supervised by a district forester who oversees personnel and insures that division policies are carried out. Each district has a varying size group of professionally trained foresters as well as support personnel. Districts operate with near autonomy. They are allowed great flexibility in deciding how programs will be delivered. Standardized record-keeping and accounting are some of the only restrictions placed on a district; monthly time and activity reports are submitted to the Central Office detailing work in each program area.

The central office includes staff assistants who concentrate in a single program area. They work with and through the districts in implementing individual programs. There is also the central administration consisting of the state forester, assistant state foresters, and other support staff. The role of the central office relative to the CFM program can be viewed as four-fold. First, it is responsible for overall division planning and policy-setting which mean determining the role of the CFM program relative to other programs. A second responsibility is assisting the districts in implementing programs. Difficulties will arise on the districts that can be solved only through referral to individuals at the central office, such as unusual insect and disease problems. Third, the central office has a role in selecting, training, and supervising personnel. Finally, the central office has a responsibility for information transfer and continuing education of foresters. Changes in

departmental policies, advances in the forestry field, and useful literature need to be monitored and referred to personnel on the districts so they can remain current professionally.

Program Review - 1985

Interviews with professional personnel on each of the districts were conducted in a group format. This allowed for exchange of comments by personnel leading to a consensus on some items, though not all. This portion of the report is comprised of two major sections. The first is an interpretation and discussion of salient points derived from responses to the questions asked during the structured part of the interviews. As such, they serve to define the climate in which program changes must be implemented. The second consists of general suggestions relating to forestry district operations.

Program Comments

A questionnaire format was utilized in the district interviews to maintain consistency of content. (For the sake of brevity questions have been shortened as presented here.) The following topics are directly related to the questions contained in the questionnaire.

- 1. <u>Primary function of district</u>? District personnel recognize their role and its importance in providing forestry services to private forest landowners as well as serving as professional forestry representatives of MDC to the general public. Equally important is their recognition of the unique characteristics of each district. This is vital to the provision of appropriate public services in an effective manner.
- 2. Appropriate CFM activities? There is consensus agreement that "classical forestry" activities are appropriate for inclusion in the CFM program, both for protection and improvement of the state's forest resource and its wildlife resource. A distinct orientation toward timber management activities prevails, partially due to educational background and professional experience but also in recognition of the often short-term viewpoint held by private forest landowners toward their forestland.

Interestingly, group educational activities (seminars, field days, demonstrations, etc.) were frequently stated as being appropriate even though such tasks are on the periphery of general forester field duties. This exemplifies the range of responsibility assumed by district personnel. Among some, the question still remains as to the pertinence of urban and community forestry activities. However, all recognize the value of these efforts in the furtherance of departmental public relations among its urban support base in addition to the opportunities for contact with absentee landowners who are unaware of the services available to them through the CFM program.

- 3. <u>Inappropriate CFM activities</u>? The primary activities voiced as being inappropriate for the CFM program, in general, were activities that did not further the public interest through improved or more productive forests. Most activities mentioned dealt with personal, financial or legal matters that could best be accommodated outside of the public domain.
- 4. <u>CFM activities performed best?</u> District strengths center primarily around forest management and silvicultural activities. The mix of activities is indicative of having to deal with a relatively uninformed clientele who do not always have a long-term management objective for their forestland. They reflect not only the character of each district but also the professional interests and strengths of district personnel. It is necessary that these strengths be recognized as they offer training and specialized service opportunities to other districts that can be capitalized upon within the Forestry Division.
- 5. Strongest professional attributes? Personnel are proud of their individual contributions and accomplishments toward making the CFM program successful. Education, experience and personal interests all play a major role in formation of a professional's ability to perform in a satisfactory fashion. An ability and desire to relate forestry information to private landowners was frequently mentioned as a desirable attribute. This particular attribute is especially important to the success of the CFM program.

The development and subsequent recognition of individual skills is quite relevant. The department affords professional employees the opportunity to establish a professional identity. With this comes confidence, a more positive attitude toward job responsibilities (accompanied by less need for supervision), an increased desire to be more productive and more willingness to accept decision making responsibility. While direct recognition of personal accomplishment is important, indirect recognition, such as requesting input to general policy matters, periodic meetings to review individual and district accomplishments, agency sponsored training sessions and agency supported professional travel foster professional self-development.

- 6. <u>CFM activities that should be increased</u>? Educational efforts and timber stand improvement (TSI) efforts were the two major categories of response to this question. It appears that the responses relate primarily to district characteristics and needs as perceived by the foresters interviewed.
- 7. Constraining factors for CFM program? Demands on time appear to be the most prevalent factors associated with constrained Program effectiveness. Conflicting demands arise from the diversity of both scheduled and nonscheduled activities that require attention and are complicated in some instances from low staffing levels.

- 8. <u>Distribution of effort on district</u>? Most districts feel they are distributing their effort across program responsibilities in an appropriate mix. Only one district, Clearwater, indicated an appropriate mix substantially different from the present one. On this district there is a need for more effort on state forest lands, although, because of district configuration and personnel responsibilities, to bring about such a shift would require additional staffing.
- 9. <u>Allocation of responsibilities</u>? Given the present configuration of districts, staffing locations and responsibilities seem appropriately balanced. With impending retirements and subsequent personnel changes that can be made with no serious personnel disruption, possible redistricting and relocation of satellite offices should be given strong consideration.
- 10. Mix of new and repeat requests? The appropriate mix of new and repeat requests to strive for is obviously subjective because of the trade-off between accomplishment from repeat cooperators and the need to maintain a continuous flow of resource management opportunities through new contacts. Those districts with substantially more than 50% repeat requests might evaluate their request priorities to service a broader group of cooperators. The primary opinion expressed was that encouragement of new requests should be done to enlarge the potential management contact base over more acres.
- 11. Management plan preparation? Forest management plans generally are prepared, exclusive of mandates such as Forestry Improvement Program (FIP) or the Missouri Forest Cropland program (FCL), if it appears to the individual forester that a plan will be useful to a landowner in his forest management efforts. The primary guiding factor mentioned in all cases was landowner interest in forest management. This is a passive approach to program delivery which is probably most efficient at the present time. In the future, though, as ownership fragmentation is responsible for a decrease in average acreage owned, and as absentee ownership increases with a corresponding decrease in number of owners with objectives for timber production, a more aggressive approach may be in order. It may become imperative that some form of plan be developed for all cooperators, essentially as a tool to encourage judicious resource management.
- 12. <u>Problems with lack of reforestation, or planned natural regeneration and/or TSI following timber harvest?</u> Almost all of the districts indicated that reforestation or planned regeneration or TSI following harvest was difficult to achieve. The predominant practices that persist and accentuate low-quality stands are high-grading, a failure to clearcut and/or a general lack of concern for the forest resource by landowners. Lack of owner understanding, attitude toward timber management and a prevailing interest in immediate income are the main factors that contribute to the above.

Various means are used by foresters in achieving regeneration or TSI following harvest. The most prevalent and successful technique involves marking trees to be removed during harvest. This is acceptable to landowners in most instances because a distinct difference in stand composition can be observed immediately following harvest and the landowner achieves a feeling of accomplishment. Positive reinforcement is very important at this point to assure the landowner that the accomplishment has been worthwhile. This is an opportune time for follow-up because the landowner has received cash from sale of his timber and is in the most receptive mood for information regarding forest management.

- 13. <u>State nursery use</u>? Use of the state nursery varies among districts although there seemed to be a general consensus that it provides seedlings primarily for non-timber production uses as a public relations effort.
- 14. <u>Information dissemination</u>? Public dissemination of forestry information is done on a regular basis by some districts and not at all by others. The degree of effort is related to the strengths in informational activities indicated by district personnel. While several districts have ongoing contact with the public through the media or field days or workshops, others indicated a strength in dealing with the public (cooperators) on an individual basis. Such a passive approach to public contact must be monitored carefully since overall agency support and recognition is closely linked to program visibility.

Some concern was expressed that publicizing MDC programs would cause an inundation of requests that could not be accommodated in a reasonable time frame. This is possible, however, only in the short run. Not all requests are so time consuming that they impose a burden on district operations. If a large backlog of requests emerges it should be viewed as an opportunity to develop techniques for mass servicing and categorization of requests in order to improve operational efficiency.

Writing and other media-oriented communications skills were indicated as public information and education techniques in which additional training is needed. In addition, mention was made of the need for prepared spots from the central office that could be taken to local media to publicize agency activities.

15. <u>Interactions with other resource organizations</u>? - University of Missouri Extension, USDA Soil Conservation Service (SCS) and USDA Agricultural Stabilization and Conservation Service (ASCS) were the agencies mentioned most frequently as being utilized in a cooperative manner by district personnel. In those cases where one of the organizations was not included, particularly Extension or SCS, it was apparent that a void existed relative to serving a particular clientele. While close cooperation obviously exists at the staff levels for all three key organizations, efforts should be made to

insure that such relationships continue at the field level in terms of forestry program delivery and assistance.

In the metropolitan areas, arborists and nurserymen are frequently referred to for consultation on urban forestry problems. At the present time, however, general forestry consultants are used by the forestry community only sparingly. Their primary use is for appraisal work and legal matters, work considered inappropriate for agency foresters. They are generally felt to be effective in their work, but there are so few in the state that experience with their use is quite limited.

Most district personnel feel they are in direct competition with private forestry consultants because of the extent of services provided by the agency free of charge. Because of the reluctance of landowners to utilize paid consultant services it is likely that departmental efforts to help forestry consultants become established would be ineffective. This does not negate the role of the consultant, however, in providing services to owners of large acreages who need continuing assistance over prolonged periods of time.

16. <u>Limiting factors in silvicultural practice application</u>? - This question was divided into three parts to allow for greater focus on individual areas that might relate to limiting timber management.

Landowner- Money, primarily practice cost, was the most frequently stated obstacle to getting timber management done on private lands. The long time period involved with timber production, the financial attractiveness of alternate land uses and owner objectives, in many instances, relegate timber to a secondary role. To overcome this obstacle will require market development and program delivery structured around owner attitudes and interests. An educational effort will be necessary to inform landowners of ways in which they can increase the enjoyment derived from their forestland while at the same time increasing its productivity and profitability.

<u>Department</u>- District personnel, generally, felt that additional staffing would be required in order to get more on-the-ground timber management on private lands. Given present budgetary conditions, such a possibility seems unlikely. Some measure of increased productivity can likely be achieved through personnel reassignments and district reconfiguration, although overall gains will likely be small. The greatest potential lies in large-group educational and informational efforts, targeted to specific landowner categories to achieve some prespecified purpose. By necessity, such efforts should be developed and coordinated out of the central office and should include Extension and SCS personnel where possible.

Resource- The predominant resource problem mentioned was low quality sites and/or stands in poor condition. Stand condition was most frequently attributable to a past history of improper cutting practices, grazing or fire. Such abused stands can be used in

comparison with well-managed stands to show the difference in stand condition attributable to care. In some districts encroachment of sugar maple is being noticed. This problem is a topic of current research in the School of Forestry, Fisheries and Wildlife at the University of Missouri - Columbia.

17. Marking of timber sales? - Marking timber for harvest is probably the most significant practice for maintaining and improving stand condition because the possibility of reentry for improvement is generally unlikely. Field personnel agreed that because of the potential for substantial loss through improper marking it is best to not attempt to teach a landowner how to mark their timber for harvest. Conversely, it was generally felt that marking for TSI required less precision and judgement and because of the amount of time that could be required to mark an entire stand it was most appropriate to teach the landowner or a TSI crew how to thin the stand.

Records show a substantial difference between the amount of timber sales marked and forest products harvested. The logical explanations for most of these differences is the lag time between marking and harvest, a period of declining markets and lack of follow-up to determine if timber has been harvested. According to most field personnel, little timber is marked that is not eventually harvested, although some landowners change their mind about selling after they obtain an estimate of their timber's value.

Follow-up after harvest is an especially important function that is all too frequently neglected. This is an excellent opportunity to discuss proper forest management with landowners in an atmosphere where they will be receptive because their attention is directed toward the resource and its capability to produce revenue.

18. Functions relative to wildlife, grazing, recreation? - Wildlife is an integral part of any contact with landowners whether it is just in conversation or is included in a detailed management plan. This is necessary not only because of the multiple-use orientation of the agency but because of the pervasive interest of landowners in wildlife. Recreation, distinct from wildlife, is usually considered separately at the request of the landowner. Woods grazing is discouraged. Foresters view wildlife related work as being complementary to their professional role because wildlife habitat management is an excellent avenue from which the topic of forest management can be broached.

Recognition of this relationship by field personnel is significant because resource management advice must be consistent with owner objectives otherwise it will not be followed. Advantage is taken of non-forestry requests to discuss forestry related topics since a suitable audience exists. Although this is done in a tactful fashion from the standpoint of providing information, such efforts can be very worthwhile. Because of their location and visibility some district offices serve as natural resource information centers. Due to close

cooperation between department divisions, in general, such requests do not impose undue constraints on staff time although their extent should be closely monitored.

19. Order of servicing requests? - The order in which requests are serviced, first-come, first-served, is equitable and efficient. No lengthy delays in contact or an unduly large backlog of requests was reported on any district. Postponement of service is made for requests that are seasonal in nature and in some cases service of a request is delayed until it can be handled efficiently, i.e., serviced jointly with another request, because of its geographic location.

General Suggestions

As a prologue, it is important to identify the criteria under which the suggestions were formed -- suggestions were to be simple, realistic and implementable. In developing the suggestions two points were also taken into consideration. First, each district is unique. Therefore, in order to maintain a level of consistency in program operability among the districts, suggestions are made that can be applied to all districts. Second, given the present level of policy development within the organization, the decision was made to make suggestions that would complement the latitude for decision making and responsibility at the district level. This allows for building upon the strength of the agency by enabling personnel to exercise their professional judgement in a relatively unencumbered manner.

- 1. Hold annual regional meetings with district foresters and their staffs. The intent of this recommendation is to provide an effective, efficient medium for exchange. The regional meeting will provide for periodic, structured contact between central office and district personnel. By utilizing the regional concept some degree of consistency can be maintained between districts with some geographic similarities.
- 2. <u>Develop annual work plans by districts</u>. District work plans serve to guide and direct activities in order to maintain a degree of consistency within program operations. In addition, plans are a useful measure for determining accomplishments and performance relative to program goals. Plans should not be utilized in an overly constrictive manner, nor should they be interpreted in an inflexible fashion. Rather, plans are a basis for overall program direction, identifying program priorities at the district level that have been decided upon in order to provide a high level of professional service to the forestry community.

District work plans should be developed in conjunction with central office staff. This assures the maintenance of program consistency across districts and continuity of program progress as well as an additional forum for structured contact between district and central office personnel.

- 3. <u>District Foresters should schedule time in the field with cooperators</u>. Regular, frequent contact with CFM cooperators is a necessity to insure program success. Without such contacts, the CFM program might be conducted in a mode where the forester only responds to requests, rather than initiating the types of activities that should be undertaken. This will serve to keep them in contact with landowners, their problems, and hopefully their perceptions of issues facing the forestry community. This should not place an undue hardship on anyone and by getting into the field the change in routine may stimulate productivity in other areas.
- 4. Establish written communications within districts. The "backbone" of any organization is effective channels of communications. Communications, to be most effective, should be readily understood with little need for additional interpretation. While verbal communications are perhaps most easy to convey, because of ambiguity, part of their meaning is sometimes lost, or an incorrect interpretation is made. With written communications, because of the effort involved the message tends to be more precise. In addition, an accurate record of the content is maintained.
- 5. Report hours of CFM work by activity and cooperator. A more detailed accounting of time allocated to individual CFM cooperators is imperative to facilitate program planning and/or assessment and to evaluate the adequacy of staffing requirements relative to the CFM program. The present system does not permit workload analysis because it is not possible to distinguish the amount of time spent servicing landowner requests (i.e., one cannot determine the distribution of time within the various categories of the program).

Tracking the hours of time devoted to CFM cooperators will allow for comparisons of time usage and activity between districts. From the standpoint of program planning such information is important because it can be directly related to budgeting and other measures relating to policy decisions.

6. Contact all owners of large (100+ ac.) forested acreages. - To improve program effectiveness by dispensing information to affect a greater number of acres, owners of the larger holdings should be singled out for annual, individual contact to encourage cooperation. This will require a policy decision that will, in part, discriminate against holders of smaller acreages. However, it would seem reasonable that, initially, one forester per district could be assigned to work exclusively with the larger acreages. After establishing a management program for these owners, referral to a consultant could be made.

Owner lists could be developed at the district level then forwarded to the central office for label preparation and mailing of an annual newsletter oriented to their particular needs. Such a newsletter might contain tax, silvicultural practice, cost-sharing, Forest Cropland and other types of information.

7. Develop a means for giving recognition and responsibility to personnel who have achieved a given level of professional competency. - Increased productivity through increased job satisfaction often can be encouraged through recognition of professional achievement, particularly when salary adjustment is not possible. However, additional responsibility in the area of achievement adds meaning to the recognition through the element of individual expression. Personnel who have exhibited the initiative and professional dedication to attain particular skill levels over the norm should be given the opportunity to utilize their developed expertise in special assignments.

Personnel who have achieved professional expertise in relevant specialties or programs can be utilized effectively to develop educational and/or training materials, provide in-service training or special services within the Department or for other agencies. The possibilities for short-term assignments out of the individual's normal duty station, including University Extension and/or undergraduate teaching should be explored. The additional exposure to a different working environment would prove beneficial to all.

Maintenance of professional competency should also be sustained. Attendance at professional meetings, seminars and workshops in the individual's area of interest should be supported. Furthermore, the professional's library must be maintained with current reference material. Attention to an employee's accomplishments as well as their needs can provide multiple payoffs through increased productivity as well as additional services that do not have to be obtained out-of-house.

8. Conduct periodic workshops to explain reporting procedures. - Differences in interpretation exist among district personnel regarding definitions of accomplishments for the Cooperative Forest Management accomplishment reporting (CFM-1) form, in spite of instructions. The most notable differences were found definitions presumed in the reporting of brief/detailed plan preparation and new/repeat requests. Furthermore, nearly all personnel indicated difficulties in completing the ASCS-FIP practice accomplishment form. Instructions were not only vague but they evidently preceded issuance of the form by a substantial time lag.

The above difficulties while relatively minor, represent a source of frustration and in some instances entail extra time used in completing the necessary reports because of ambiguity. An annual briefing at the "all foresters" meetings on definition or form changes and/or reporting procedures should serve well to standardize the process of accomplishment reporting. In addition, thorough coordination with ASCS through the central office might yield more timely distribution of form completion instructions.

9. Modify bid procedures to require both timber seller and buyer representatives to be present at bid openings. - In most districts at least one recent instance had recently occurred where either a timber seller or successful bidder or a bona fide representative was not present at a bid opening. As a result, the timber seller may renege on the deal and sell to a different buyer at a slightly higher price or the buyer may renege leaving the seller with unsold stumpage and no immediate buyers. Consequently, the closed bid process is circumvented. In almost all cases while all parties held ill feelings toward the other, because of its service role the department is held in low esteem, even though all parties had been treated equitably and objectively.

A workable solution would be to require both parties or their representatives to be present when bids are opened. This would insure that all aspects of the transaction are fair, legitimate and objective, at least relative to the department's role. If the seller is not present or represented then the bid opening would be cancelled; if a buyer is not present or represented then their bid would not be opened. While this procedural adjustment adds an extra dimension to getting management applied through timber harvest, the additional precaution provides a safeguard against litigation.

Points to ponder

Three salient points should be kept in mind as the findings are interpreted because they are significant in explaining the high level of excellence that is present within the agency.

- First, it is obvious that all personnel are involved in the policy process. From the most recent employee, up through the organization, a sense of involvement in agency operation was exhibited by everyone. An understanding and feeling of contribution to agency direction by field representatives are important characteristics that highlight this observation.
- Second, the agency is made up of people, not merely employees. It is relevant that agency administrators recognize the potential of employee involvement in policy decisions for program implementation and accomplishments. Noteworthy is that agency administrators have progressed within the organization through successively more responsible line positions; they have experience and are familiar with district-level operations.
- Third, there is implicit recognition given to the fact that policies constrain as well as provide direction. Policies limit the latitude in judgment that a professional needs to exercise in order to function at their highest potential. While some level of policy development must be in force to assure uniformity of organizational operations, a balance must be struck that will not hamper the effectiveness of field personnel who are responsible for direct program accomplishment. Policy development within the Forestry Division is minimal though

sufficient to maintain operational continuity while permitting line personnel to maintain their professional integrity.