PERFORMANCE AUDIT
OF THE

QUALITY OF LIFE RECREATION BOND PROGRAM

DEPARTMENT OF NATURAL RESOURCES

December 1997

75-105-96

EXECUTIVE DIGEST

QUALITY OF LIFE RECREATION BOND PROGRAM

INTRODUCTION

This report, issued in December 1997, contains the results of our performance audit* of the Quality of Life Recreation Bond Program, Department of Natural Resources (DNR).

AUDIT PURPOSE

This performance audit was conducted as part of the constitutional responsibility of the Office of the Auditor General. Performance audits are conducted on a priority basis related to the potential for improving effectiveness* and efficiency* .

BACKGROUND

In November 1988, Michigan voters approved two bond proposals. One proposal funded environmental protection projects and the second proposal funded recreation projects within the State. Of the second proposal, $60,000,000 was set aside for improving the infrastructure of Michigan State parks. DNR refers to this as the Quality of Life Recreation Bond Program.

DNR identified more than 190 projects at 64 of the 98 State parks that should be included in the Program. These projects included sewage system improvements, road and parking lot resurfacing, electrical system replacements, and facility renovation and construction.

* *See glossary on page 20 for definition.*

As of March 31, 1997, approximately $59,420,000 had been expended on the Program. Approximately $170,000 of the remaining unencumbered $580,000 is allotted for administrative costs, with the remaining funds to be used for repair or replacement of 10 sanitary system projects.

AUDIT OBJECTIVE AND CONCLUSION

Audit Objective: To assess the effectiveness of DNR's and the Department of Management and Budget's (DMB's) administration of the Quality of Life Recreation Bond Program.

Conclusion: DNR's and DMB's administration of the Program was generally effective. Although we found no material conditions*, we identified four reportable conditions* related to project budgeting and scheduling (Finding 1), reimbursement requests by project management firms* and trade contractors* (Finding 2), project monitoring (Finding 3), and contract change orders (Finding 4).

AUDIT SCOPE AND METHODOLOGY

Our audit scope was to examine the program and other records of the Quality of Life Recreation Bond Program. Our audit was conducted in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States and, accordingly, included such tests of the records and such other auditing procedures as we considered necessary in the circumstances.

Our methodology included examinations of the Program's records and activities for the period January 1, 1989 through March 31, 1997.

To accomplish our audit objective, we analyzed project planning, budgeting, and priority setting processes for the

* *See glossary on page 20 for definition.*

Program and compared them with actual project construction and cost information. We examined files for three project management firms to determine if the firms supplied information required by the project management services contracts. For each firm, we also examined the files of four State parks' projects to determine if the information supplied was sufficient to evaluate contract performance.

We visited three project management firms and reviewed their files to determine if construction supervision was provided during the construction work at the State parks. Also, we analyzed payment and change order requests to determine if sufficient documentation was supplied to evaluate their propriety.

AGENCY RESPONSES

Our audit report includes 4 findings and 9 corresponding recommendations. DNR agreed with 8 recommendations and disagreed with 1 of the 9 recommendations applicable to it. DMB agreed with all 7 recommendations applicable to it.

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Mr. Keith Charters, Chairperson
Natural Resources Commission
Stevens T. Mason Building
Lansing, Michigan
and
Mr. Mark A. Murray, Director
Department of Management and Budget
Lewis Cass Building
Lansing, Michigan

Dear Mr. Charters and Mr. Murray:

This is our report on the performance audit of the Quality of Life Recreation Bond Program, Department of Natural Resources.

This report contains our executive digest; description of program; audit objective, scope, and methodology and agency responses; comment, findings, recommendations, and agency preliminary responses; and a glossary of acronyms and terms.

The agency preliminary responses were taken from the agency's responses subsequent to our audit fieldwork. The *Michigan Compiled Laws* and administrative procedures require that the audited agency develop a formal response within 60 days after release of the audit report.

We appreciate the courtesy and cooperation extended to us during this audit.

Sincerely,

Thomas H. McTavish, C.P.A.
Auditor General

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DEPARTMENT OF NATURAL RESOURCES

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Description of Program

In November 1988, Michigan voters approved two bond proposals which were placed on the ballot by the Legislature. The total of these bonds was $800,000,000. Act 326, P.A. 1988, placed one of the bond proposals in the amount of $660,000,000 on the ballot for the purpose of funding environmental protection projects. These projects were to include toxic site cleanup, solid waste disposal projects, water pollution control projects, etc. Act 327, P.A. 1988, placed the second bond proposal in the amount of $140,000,000 on the ballot for the purpose of funding construction, expansion, restoration, and rehabilitation recreation projects within the State. Of the $140,000,000, $60,000,000 was set aside for improving the infrastructure of Michigan State parks. The Department of Natural Resources (DNR) refers to this as the Quality of Life Recreation Bond Program.

DNR identified more than 190 projects at 64 of the 98 State parks that should be included in the Program. These projects included sewage system improvements, road and parking lot resurfacing, electrical system replacements, and facility renovation and construction. In order to award these projects within a three-year period, DNR, with the assistance of the Department of Management and Budget (DMB), contracted with four private firms to provide project management services for these projects. These project management firms were responsible for contracting with engineering firms for design services and with construction firms (trade contractors) to perform the actual construction work on park projects. In addition, the project management firms were responsible for providing on-site construction supervision, trade contractor payment approval, and change order review and approval. DMB's responsibilities included overseeing the bidding process for project management firms, engineering firms, and trade contractors. In addition, DMB was responsible for monitoring construction progress, authorizing project management firms' reimbursement requests, approving change orders recommended by project management firms, and maintaining construction project files.

As of March 31, 1997, approximately $59,420,000 had been expended on the Program and projects at seven State parks were nearing completion. Approximately $170,000 of the remaining unencumbered $580,000 is allotted for administrative costs, with the remaining funds to be used for repair or replacement of 10 sanitary system projects

which had been previously identified. Most of these remaining projects involve repair or replacement of sewage wet wells, which are a critical part of a State park's infrastructure.

Audit Objective, Scope, and Methodology and Agency Responses

Audit Objective

The objective of our performance audit was to assess the effectiveness of the Department of Natural Resources' (DNR's) and the Department of Management and Budget's (DMB's) administration of the Quality of Life Recreation Bond Program.

Audit Scope

Our audit scope was to examine the program and other records of the Quality of Life Recreation Bond Program. Our audit was conducted in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States and, accordingly, included such tests of the records and such other auditing procedures as we considered necessary in the circumstances.

Audit Methodology

Our audit procedures were performed during the months of September 1996 through March 1997 and included examinations of the Program's records and activities for the period January 1, 1989 through March 31, 1997.

We analyzed DNR's project planning, budgeting, and priority setting processes for the Program and compared them with actual project construction and cost information to determine if the processes were realistic. We reviewed DNR files and met with DNR staff to determine the reasons for differences between planned and actual construction activity and costs.

We examined DNR's and DMB's files for three project management firms to determine if the firms supplied DNR and DMB with information required by the project management services contracts and if such information was sufficient to evaluate contract performance. For each firm, we also examined the files of four State parks' projects to determine if the information supplied was sufficient to evaluate contract performance.

To evaluate whether construction supervision was provided in accordance with the project management services contracts, we visited three project management firms and compared payment requests submitted by the firms with the construction activity of the

projects at the four State parks previously selected to determine if construction supervision was provided during the construction work at the State parks.

We analyzed payment and change order requests for the projects selected for review to determine if DNR and DMB were supplied sufficient documentation to evaluate the propriety of the payment and change order requests.

Agency Responses

Our audit report includes 4 findings and 9 corresponding recommendations. DNR agreed with 8 recommendations and disagreed with 1 of the 9 recommendations applicable to it. DMB agreed with all 7 recommendations applicable to it.

The agency preliminary response which follows each recommendation in our report was taken from the agency's written comments and oral discussion subsequent to our audit fieldwork. Section 18.1462 of the *Michigan Compiled Laws* and DMB Administrative Guide procedure 1280.02 require DNR and DMB to develop a formal response to our audit findings and recommendations within 60 days after release of the audit report.

COMMENT, FINDINGS, RECOMMENDATIONS, AND AGENCY PRELIMINARY RESPONSES

ADMINISTRATION OF THE PROGRAM

COMMENT

Audit Objective: To assess the effectiveness of the Department of Natural Resources' (DNR's) and the Department of Management and Budget's (DMB's) administration of the Quality of Life Recreation Bond Program.

Conclusion: DNR's and DMB's administration of the Program was generally effective. Although we found no material conditions, we identified four reportable conditions related to project budgeting and scheduling, reimbursement requests by project management firms and trade contractors, project monitoring, and contract change orders.

FINDING

1. Project Budgeting and Scheduling

DNR project budgets were inaccurate, and projects were not efficiently scheduled.

In 1988, DNR established a three-phase plan to utilize the Program's $60,000,000 for State park improvements. Under this plan, DNR established a list of the highest priority projects believed to be attainable with the $60,000,000 available. The list was then divided into three phases, with one phase to be completed each year for three years.

We found that DNR significantly underestimated both construction costs and the time to complete program projects. For example, within the first phase of projects, DNR budgeted $5,000,000 for 39 construction projects in the State's Upper Peninsula. The first construction contract for these projects was awarded in April 1991. As of November 1996, 7 projects still were not completed. When those projects are completed, it is estimated that construction costs for the 39 projects will total $9,400,000.

During our review of construction project files and meetings with staff of DNR and project management firms, we noted that some of the reasons for the cost and timetable variances were delays in securing required permits and project changes to meet permit requirements. Because projects were begun before permits were obtained, delays in receiving permits resulted in additional rental charges for idle equipment and additional charges for contractors to leave the site and then come back later to resume construction. Also, projects partially completed when permit conditions became known sometimes required reworking to meet those requirements.

As a result of the cost variances, DNR was not able to award the majority of contracts scheduled for the third year. As a result of the time delays, the project management firms incurred greater inspection costs than budgeted and, correspondingly, reduced their rate of inspections.

RECOMMENDATION

We recommend that DNR improve project budgeting and scheduling.

AGENCY PRELIMINARY RESPONSE

DNR agreed with the recommendation. DNR is pursing ways to improve the design process with technological advances and master contracts for engineering and architectural expertise.

FINDING

2. Reimbursement Requests

DNR and DMB did not ensure that the reimbursement requests submitted by project management firms were accurate and adequately documented.

According to the contracts between the State and project management firms, project management firms are responsible for submitting reimbursement requests for their services as well as those of the trade contractors. Reimbursement requests for project management services are to be supported by a detailed breakdown of hours charged by employee. Trade contractor reimbursement requests are to be supported with a spreadsheet detailing information about the

request. Project management firms must maintain supporting documentation for each trade contractor's reimbursement request.

Our review of reimbursement requests for three project management firms and all the trade contractors involved with projects at four State parks disclosed:

a. Two project management firms overbilled the State for project supervision by charging for the same hours on two reimbursement requests. This resulted in the firms overcharging the State $950 and $1,760, respectively.

b. One project management firm overcharged the State an estimated $2,400 as a result of charging 32 hours in a 24-hour period for two employees reportedly to cover air fare costs incurred by these employees to visit project sites. According to the project management firm's contract, these costs are to be included in the hourly rate charged by the project management firm. This firm had not provided a detailed breakdown of hours charged by each employee which would have allowed DNR and DMB to identify the overcharge.

c. Supporting documentation for five trade contractor reimbursement requests submitted by one project management firm could not be found at DNR, DMB, or the project management firm. The total of these reimbursement requests exceeded $1,090,000. Six trade contractor reimbursement requests submitted by the same project management firm could not be found, even though the State had reimbursed all six requests. The total of these six reimbursement requests exceeded $154,000. Although the amounts reimbursed were in accordance with the amounts provided for in the trade contractors' contracts, neither DNR nor DMB could evaluate the propriety of the payments without supporting documentation.

RECOMMENDATIONS

We recommend that DNR and DMB enhance monitoring of reimbursement requests for project management firms' services.

We also recommend that DNR and DMB pursue collection of the identified overcharges.

AGENCY PRELIMINARY RESPONSE

DNR agreed with the recommendations. DNR has assigned a budget control team consisting of professional accountants and budget analysts to each division. Each team will be given the responsibility to work with DNR's new contract administrator to ensure proper contracting procedures. Further, DNR has added a number of internal auditors in the past year, and the Office of Internal Audit will be charged with conducting follow-up work on contract administration.

If DNR were to pursue this type of project in the future, it will designate a program manager specifically assigned to oversee this type of endeavor. The program manager will work with the budget control team, DNR accountants, and the project administrator in DMB.

Regarding reimbursements, DNR will take steps available to recoup the overcharges.

DMB agreed with the recommendations and will comply with them by December 31, 1997. Future project management agreements will include a required independent audit of compliance with contractual requirements by the project management firms. The findings will be fully researched and substantiated overcharges will be collected.

FINDING

3. Project Monitoring

DNR and DMB did not monitor the supervision provided to projects by the project management firms.

One of the main responsibilities of the project management firms was to provide on-site supervision of projects at State parks. The contracts with project management firms required that they maintain daily inspection reports of construction progress and problems. The daily inspection reports were to be retained by the project management firms and made available to DNR and DMB for review; however, neither DNR nor DMB reviewed them.

During our field visits to three project management firms, we compared daily inspection reports of projects at four State parks with employee time sheets used to support the firms' monthly reimbursement requests for project supervision. We noted that all three firms charged more time for project inspections than was documented on daily inspection reports. For example, of 158 instances in which one firm's project inspectors charged 4 or more hours to a park's projects, only 62 (39%) were supported by daily inspection reports.

Our comparison of time sheets, daily inspection reports, and project management billings at the second firm disclosed that the firm charged the State for more hours of project management services than were reported on the employee time sheets. This resulted in the State being overcharged more than $21,500.

We noted similar conditions from our comparison of employee time sheets and daily inspection reports at the third firm we visited. As a result, we could not ascertain the propriety of the hours that project management firms charged for project inspections or whether adequate on-site supervision was provided to the State park projects.

DNR and DMB could improve monitoring of project management firms' on-site project supervision by requiring firms to supply DNR and DMB with monthly summaries of daily observations noted on daily inspection reports along with the corresponding number of hours charged to the respective projects for each day's inspection. This would allow DNR and DMB to review the progress of individual projects and to compare project inspections with monthly reimbursement requests to evaluate the propriety of the requests.

In addition, DNR could use its park managers to assist in monitoring construction progress. According to DNR management, park managers provided informal feedback regarding project progress during the current park construction program. However, this feedback was not used to verify information supplied by project management firms. By formalizing the park managers' monitoring responsibility, DNR could gain valuable construction oversight at no additional cost and would have a means of verifying information supplied by project management firms.

RECOMMENDATIONS

We recommend that DNR and DMB require project management firms to supply daily inspection information and employee time sheets with each month's reimbursement request.

We also recommend that DNR and DMB pursue collection of the identified overcharges.

We further recommend that DNR and DMB compare daily inspection information with monthly reimbursement requests to evaluate the propriety of the requests.

In addition, we recommend that DNR utilize its park managers to supplement the monitoring of project construction provided by the project management firms.

AGENCY PRELIMINARY RESPONSE

DNR agreed with the first, second, and third recommendations and disagreed with the fourth recommendation. A program manager, working in conjunction with the budget control teams, will allow better monitoring of daily inspection information and employee time sheets. The Parks and Recreation Division chief recognizes the importance of this function and will stress its importance to parks staff.

However, the Parks and Recreation Division does not believe it would be an appropriate use of park managers' time to monitor construction and project management services. The Division currently is exploring the possibility of placing engineering technicians or construction technicians in the field to monitor construction and assist in project management.

DMB agreed with the recommendations and will comply with them by December 31, 1997. Future project management agreements will include a required independent audit of compliance with contractual requirements by the project management firms. The independent audit will substantiate the accuracy of contract service billings. The findings will be fully researched and substantiated overcharges will be collected.

FINDING

4. Contract Change Orders

DNR's and DMB's review of contract change orders processed by project management firms did not ensure that the contract change orders were proper and accurate.

During construction of projects at State parks, changes in the scope, as well as unforeseen conditions, required the issuance of contract change orders. The project management firm would request a trade contractor to quote what it would cost to perform the work specified on the contract change order. If the cost of the contract change order was acceptable, the project management firm would recommend that DNR and DMB approve the contract change order. Once approved, the amount of the contract change order would be added to the trade contractor's contract amount.

We reviewed all contract change orders that three project management firms processed for projects at four State parks:

a. Two project management firms negotiated contract change orders with three trade contractors to avoid delaying the project and threatened legal action. These change orders resulted in the State reimbursing trade contractors separately for services that had already been included in the original contract.

b. One project management firm did not detect errors that a trade contractor made in calculating one change order. This resulted in the State overreimbursing the trade contractor for more than $5,000 for pump equipment associated with a water well at one State park. In addition, the project management firm did not require the trade contractor to supply requested information from a subcontractor and, therefore, may have overreimbursed the trade contractor for drilling costs associated with the same well.

RECOMMENDATIONS

We recommend that DNR and DMB improve their review of contract change orders processed by project management firms to ensure that the contract change orders are proper and accurate.

We also recommend that DNR and DMB pursue collection of the identified overreimbursement.

AGENCY PRELIMINARY RESPONSE

DNR agreed with the recommendations. DNR is exploring placing engineering technicians in the field to monitor construction and assist in project management, which would provide better control and review of contract change orders from DNR's perspective. Also, DNR will initiate substantive discussions with the DMB Office of Facilities on how to best resolve those sorts of issues in the future as the Office of Facilities reengineers its processes.

DMB agreed with the recommendations and will comply with them by December 31, 1997. The independent audit of the project management firm will validate the correctness of change orders processed. The findings will be fully researched and substantiated overcharges will be collected.

Glossary of Acronyms and Terms

DMB	Department of Management and Budget.
DNR	Department of Natural Resources.
effectiveness	Program success in achieving mission and goals.
efficiency	Achieving the most outputs and outcomes practical for the amount of resources applied or minimizing the amount of resources required to attain a certain level of outputs or outcomes.
material condition	A serious reportable condition which could impair the ability of management to operate a program in an effective and efficient manner and/or could adversely affect the opinion of an interested person concerning the effectiveness and efficiency of the program.
performance audit	An economy and efficiency audit or a program audit that is designed to provide an independent assessment of the performance of a governmental entity, program, activity, or function to improve public accountability and to facilitate decision making by parties responsible for overseeing or initiating corrective action.

project management firm	A private firm responsible for contracting with engineering firms for design services and with construction firms to perform actual construction work on State park projects.
reportable condition	A matter coming to the auditor's attention that, in his/her judgment, should be communicated because it represents either an opportunity for improvement or a significant deficiency in management's ability to operate a program in an effective and efficient manner.
trade contractor	A private construction firm that contracted with a project management firm to perform actual project construction work on a State park project.