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**OFFICE OF THE
NEW YORK STATE COMPTROLLER**

DIVISION OF STATE SERVICES

**DEPARTMENT OF
ENVIRONMENTAL
CONSERVATION**

**STATE FOREST TIMBER
SALES**

Report 2006-S-9

AUDIT OBJECTIVES

Our objectives were to determine whether the Bureau of State Land Management is (1) harvesting its allowable cut and (2) receiving a fair market price for its timber sales.

AUDIT RESULTS - SUMMARY

The Department of Environmental Conservation oversees about 4 million acres of State-owned land, of which about 762,000 acres are classified as State forests. The Department's Bureau of State Land Management (Bureau) is responsible for these forests and regularly cuts down trees to promote forest health and biodiversity, ensure forest sustainability, provide for recreational opportunities, and accomplish other important forest management goals. During the three years ended March 31, 2006, the revenue from these sales totaled about \$15.3 million.

While forests benefit from some harvesting, a forest may not be sustainable if the amount of harvesting is excessive. The Bureau has determined the optimal amount of sustainable harvesting that can be done in State forests each year. However, we found the Bureau is harvesting only about half that amount. As a result, important forest management goals are not being fully achieved. We also estimate that about \$4.85 million a year in potential timber sale revenue has been lost.

The main reason for the low harvest rate is a lack of available staff. The number of Bureau foresters has declined in recent years, while State forest acreage has increased. Also, the foresters have other competing priorities in addition to timber harvesting. Our analysis indicates that additional foresters would be cost-effective. For example, if the Bureau

had employed 17 additional foresters during the three years that we reviewed, it could have harvested its allowable cut. The 17 foresters would have cost the State about \$1.15 million a year, but with an additional \$4.85 million a year in timber sale revenue, the State would have realized \$3.70 million a year in net revenue. We recommend the Department determine how many additional foresters would be needed to both address Department priorities and accomplish forest management goals.

Most timber sale revenue is generated from individual sales of \$10,000 or more. Such sales are subject to formal, competitive bidding requirements. We found the Bureau complied with these requirements, providing some assurance the Bureau received fair market prices for these sales. However, timber sales of less than \$10,000, which are handled by the regional offices, were not generally documented. Thus, there is less assurance the Bureau received market price for these sales. We recommend that regionally administered timber sales of less than \$10,000 be monitored more closely by the Bureau.

The Bureau is also required to appraise the timber's fair market value before it is sold. The Bureau performs such appraisals, but we found they provide little, if any, assurance the timber's market value was estimated accurately. As a result, the Bureau's assurance it is receiving fair market prices is weakened to some extent. We recommend the appraisal process be improved.

Our report contains seven recommendations for improvement. Bureau officials generally agree with our recommendations and have taken steps to implement changes.

This report, dated April 17, 2007, is available on our website at: <http://www.osc.state.ny.us>. Add or update your mailing list address by contacting us at: (518) 474-3271 or Office of the State Comptroller
Division of State Services
State Audit Bureau
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Albany, NY 12236

BACKGROUND

The Department of Environmental Conservation (Department) oversees about four million acres of State-owned land. This includes the Adirondack and Catskill Forest Preserves, other State forests, and various other types of land. As part of its management of this land, the Department may harvest timber from forested areas. Section 9-0505 of the State Environmental Conservation Law authorizes the Department to sell this timber, as long as it does not come from the Adirondack and Catskill Forest Preserves.

The Department's Division of Lands and Forests (Division) is responsible for managing the State-owned land. The Division consists of four bureaus. One of these bureaus, the Bureau of State Land Management (Bureau), is responsible for the harvesting and sale of State-owned timber. The Bureau also has other land management and conservation-related responsibilities. The Bureau manages about one million acres of land, of which about 762,000 acres are classified as State forests.

The Division's other three bureaus manage and protect the 2.7 million acre Adirondack Forest Preserve and the 288,000 acre Catskill Forest Preserve; promote good forest stewardship practices among private landowners, communities and the forest industry; and handle all land conveyance transactions for the Department.

In its management of State-owned land, the Division seeks to accomplish multiple public benefits. Accordingly, the Division is concerned with such issues as watershed management, wildlife management, forest management, recreational management, rare plant protection, and aesthetic appreciation. Since a parcel of State-owned land may provide more than one public benefit (e.g., forests contain wildlife, can be used for recreation, and are aesthetically appealing), these various concerns are often interrelated and efforts by the Division to address any one of these concerns may affect others. For example, timber harvesting is an important part of forest management and, according to the Bureau's State Forest Unit Management Planning Handbook; forest management is the method of choice for accomplishing most of the multiple use objectives of State forests.

As of March 31, 2006, a total of 33 foresters were assigned to the Bureau. These individuals were expected to perform various forest management activities across the State, such as conducting tree inventories in State forests, overseeing timber harvests and sales, planning for recreational uses of forested areas, meeting general forest stewardship needs, conducting long-range planning for State-owned land, and managing conservation easements (parcels of private land on which the State has purchased certain rights and interests).

The Department divides the State into nine regions, and has administrative offices in each region. The Department's Central Office is located in Albany. State-owned timber is harvested in seven of the nine regions. During the three State fiscal years ended March 31, 2006, the revenue from the sale of State-owned timber totaled about \$15.3 million.

AUDIT FINDINGS AND RECOMMENDATIONS

Annual Timber Harvests

We found that the Bureau is harvesting only about half of the timber that is ready to be harvested in State-owned forests. As a result, the Bureau is not fully achieving such forest management goals as promoting biodiversity and forest health, ensuring forest sustainability, and providing recreational opportunities. We also estimate that about \$4.85 million a year in potential timber sale revenue has been lost. The main reason for the low harvest rate is a lack of available staff; the Bureau does not have enough foresters to both address its Department-assigned priorities and harvest more timber. Our analysis indicates that additional foresters would be cost-effective and help the Bureau achieve more of its forest management goals.

Amounts Harvested

The Bureau manages about 762,000 acres of State forests. Forests benefit from some harvesting (i.e., cutting down trees and making use of the timber), however, a forest may not be sustainable if the amount of harvesting is excessive. In 1992, the Bureau determined that the annual sustainable harvest for State forests was 17,675 acres statewide. This amount is referred to as the annual allowable cut, and is considered by Department officials to be an upper limit that can be reached only if conditions are ideal.

To determine how close the Bureau was coming to this upper limit, we reviewed annual harvest totals for the three years ended March 31, 2006. We found that the Bureau harvested only 52 percent, or just over half, of the total allowable cut for the three-year period, as follows:

Year	Acres Cut	Allowable Cut	Percent
2003-04	10,157	17,675	57.5%
2004-05	8,559	17,675	48.4%
2005-06	9,080	17,675	51.4%
Total	27,796	53,025	52.4%

The main reason for the low harvest rate is a lack of staff resources in the Bureau. Forest management activities such as timber harvests are performed primarily by foresters, specially trained employees who are highly skilled in forest management practices. Between April 1, 2001 and March 31, 2006, the number of foresters assigned to the Bureau decreased from 46 to 33 (a decrease of about 28 percent). However, the amount of forested land assigned to the Bureau did not decrease. In fact, it increased: between April 1, 2000 and March 31, 2006, an additional 18,700 acres of forested land was acquired by the State and added to the Bureau's existing workload.

The Bureau hires seasonal hourly staff in an effort to offset its shortage in foresters. However, the seasonal staff are not as skilled as the foresters and thus are not expected to perform all forest management functions. For example, seasonal staff cannot value trees or analyze an area to determine which particular forest management activities (such as timber harvesting) are needed to achieve the desired forest density and mixture of species in the area. Consequently, seasonal staff are either teamed with full-time experienced foresters or assigned less complicated tasks. Bureau officials also told us that, at \$12.50 an hour, they are having difficulty attracting and retaining seasonal staff.

In addition, timber harvesting is only one of many forest management activities performed by Bureau foresters and is not one of the Department's top five priorities for the Division in 2006 which were: (1) helping the

Department meet the Governor's million-acre land acquisition goal; (2) improving the Department's stewardship of its land and conservation easements; (3) improving stewardship in privately-owned forested areas (because of the ecological and economic benefits provided to the State by these areas); (4) expanding the State's Urban and Community Forestry program to improve the quality of life and address other important issues such as global warming and failures to meet clean air standards; and (5) implementing Invasive Species Task Force recommendations relating to State and privately-owned forests. (Department officials replied to our draft audit report that timber harvesting is an integral component of the management of State forests and enables them to achieve many of their stewardship goals for State forests and is included in the second priority listed above. Although we agree that it is part of a top priority, it is only one of the supporting functions within stewardship. Other items included in this priority are the inventories.)

Because of the staffing shortage and the competing priorities, annual harvesting targets established by the Bureau have fallen well short of the annual allowable cut. These targets are established for each of the seven regions in which timber can be harvested and are based on both the number of harvestable acres in the region and forester availability in the region. In the 2003-04 year, a total of 12,882 acres statewide were targeted for harvesting; in 2004-05, a total of 11,969 acres were targeted; and in 2005-06, a total of 11,745 acres were targeted. As was indicated by the preceding table, even these lowered targets were not met. We also determined that, because of other priorities, there had been no timber harvests in one of the regions (Region 5 which contains 30,957 acres of harvestable timber) since the 2003-04 year.

During the three years that we reviewed, a total of 25,229 acres of harvestable timber (an average of 8,410 acres a year) was not harvested. As a result, the Bureau could not fully achieve such forest management goals as promoting biodiversity and forest health, ensuring forest sustainability, and providing recreational opportunities. For example, the following potential consequences of unharvested timber were identified by Bureau officials:

- When forests are properly harvested, it is easier to respond to natural disasters such as ice storms, high winds, insect infestations and plant diseases. Conversely, when forests are not properly harvested, it is more difficult to respond effectively.
- Invasive plant species are more likely to be identified when timber is harvested.
- Harvesting helps prevent insect infestation, because overly mature and stagnating forests are significantly more susceptible to such infestations.
- Harvesting enables foresters to influence the species composition, abundance, age and vigor of regeneration in forests. In the absence of harvesting, these attributes cannot readily be managed.
- Species diversity is enhanced when forests are culled. When forests are not culled, biodiversity decreases.
- Public access roads and other forest infrastructures are more likely to be properly maintained when timber is harvested, because the contractors doing the harvesting must be able to make use of these infrastructures.

In addition, if the 25,229 acres of harvestable timber had been harvested, an additional \$14.6 million in timber sale revenue could have been realized by the State over the three-year period (an average of about \$4.85 million a year). This estimate is based on the average price of the timber sold by the Bureau during the three-year period (\$577 per acre).

According to our analysis, it would have been cost-effective for the Bureau to hire the additional foresters that were needed to harvest the 25,229 acres. The Bureau estimates that, on average, one forester, devoted to timber harvesting on a full-time basis, could oversee the harvesting of 500 acres annually. Our estimate is based on the work hours recorded for foresters in the Department's time and attendance system and the harvesting data recorded by the Bureau for the three-year period. At 500 acres per forester, an additional 17 full-time foresters would have been needed to harvest the additional 8,410 acres a year (and 25,229 acres in total) over the three-year period.

We estimate (using 2006 cost data) that the 17 additional foresters would have cost the State about \$1.15 million a year in salaries and fringe benefits. Since the foresters would have enabled the State to realize an additional \$4.85 million a year in timber sale revenue, they clearly would have been cost-effective, as the State would have realized an additional \$3.70 million a year in net revenue.

We therefore recommend the Department estimate its future forest management workload, determine how many additional foresters would be needed to both address its priorities and accomplish its overall forest management goals by harvesting more timber, and add those additional foresters to the Bureau.

In making this determination, the Department should ensure that all the additional foresters would in fact be cost-effective. In our analysis, the additional foresters would have been assigned to timber harvesting on a full-time basis. However, they still would have been cost-effective even if they were assigned to timber harvesting on only a half-time basis, as according to our analysis, during that three-year period, a forester harvesting timber on a full-time basis generated \$4.30 in timber sale revenue for every \$1.00 in salary and fringe benefit costs. Thus, even on a half-time basis, the forester generated \$2.15 in timber sale revenue for every \$1.00 in salary and fringe benefit costs. However, if the time spent harvesting is further reduced, at some point the forester would no longer be cost-effective, as he or she would no longer generate enough revenue to cover his or her costs (in our analysis, this break even point was just below 25 percent: the forester had to be assigned to timber harvesting at least a quarter of the time to be cost-effective).

Department officials have stated they are committed to being a national leader in sustainable forestry. In accordance with this commitment, the Department sought to have its State-owned forests certified as being sustainably managed. Such certification is provided by the Forest Stewardship Council, a not-for-profit organization dedicated to ensuring the responsible management of the world's forests. This certification was obtained in 2000.

However, as part of the certification, annual audits are performed by an independent assessor, and the audit performed in New York State in 2004 identified four corrective actions that needed to be taken if the certification was to be maintained. Two of the corrective actions related to delays in the development of long-range plans for State

forests. In both instances, a lack of adequate staffing was cited as a reason for the delays.

The staffing shortage could be addressed, at least partially, if additional foresters are hired. While the additional foresters would have to spend a certain amount of time harvesting timber, they could also address other forest management needs (such as long-range planning) and still be cost-effective. We also note that, if additional timber was harvested, progress would be made in achieving the Division's number 2 priority (improving stewardship of its land).

As of May 2006 three additional foresters were hired by the Bureau. While these additional staff should help the Bureau in its efforts to meet its various forest management goals, the new staffing level (36 foresters) is still short of what it was in 2001 (46 foresters).

Updated Determinations of Amounts to be Harvested

In 1992, the Bureau determined that the annual sustainable harvest for State forests was 17,675 acres statewide. This determination was based on the size of the trees at that time and their estimated growth rates. The determination was also based on the size of the State-owned forests at that time, which was 698,387 acres.

The Department has acquired additional forested areas since 1992, and as of March 31, 2006, it was responsible for 762,516 acres of State forests, an increase of 64,129 acres (9.2 percent) since 1992. There have also been changes in the composition of the previously owned forests, as some of the trees in those forests have fallen or been cut down, new trees have grown, and the forests themselves have matured.

Despite these changes, the Bureau has not updated the 1992 determination of the annual allowable cut. The determination was to be updated as part of the Bureau's long-range planning process, which was initiated in 1999 and is being implemented on a region-by-region basis. Each region is responsible for developing ten-year unit management plans for each of its "units" of land (each region is responsible for several such units, some of which are State forests). Each of the regions has completed some of its plans, but no region has completed all of its plans.

According to Department officials, the method being used by regional officials in determining the annual allowable cut for each region (an ecosystem management approach) is superior to the method that was employed in 1992, because the new method is more holistic (i.e., it more effectively promotes biodiversity and forest health while ensuring sustainability and providing recreational opportunities). We recommend the Bureau use these new, updated determinations, as they become available, to plan actual timber harvesting activities in State forests.

We note that, when all of the unit management plans for State forests are completed, the new statewide annual allowable cut will be higher than the 1992 determination of 17,675 acres, if only because of the 9.2 percent increase in total forested acres since that time. However, harvest yields in the pre-existing forests also appear to be higher now than they were in 1992. For example, we reviewed seven completed unit management plans for 49,586 acres of State forests that also existed in 1992 and compared current harvesting determinations to the determinations that were made in 1992. In 1992, 776 of the 49,586 acres were found to be harvestable annually. However, in the current determinations, 1,445 of the same 49,586 acres were found to be harvestable

annually - a gain of 669 harvestable acres annually.

As a result of these increases in the number of harvestable acres in State forests, the number of additional foresters that would be needed to harvest the timber that is available for harvesting may be understated in our analysis of Bureau staffing. We recommend the Department use the most current determinations of harvestable acres when determining future staffing needs.

Recommendations

1. Estimate the Department's future forest management workload, determine how many additional foresters would be needed to both address Department priorities and accomplish overall forest management goals by harvesting more timber, and add that many additional foresters to the Bureau (provided the additional foresters would, in fact, be cost-effective).
2. Use the most current regional determinations of allowable cuts when planning timber harvesting activities and determining forester staffing needs.

Market Prices

Most timber sale revenue is generated from individual sales of \$10,000 or more. Such sales are subject to formal, competitive bidding requirements. We found the Bureau complied with these requirements, and as a result, there is some assurance the Bureau received fair market prices for these sales.

The Bureau is also required to appraise the timber's fair market value before it is sold. The Bureau performs such appraisals, but we

found they provide little, if any, assurance the timber's market value was estimated accurately. As a result, the Bureau's assurance it is receiving fair market prices is weakened to some extent. We recommend the appraisal process be improved.

Timber sales under \$10,000 are also subject to competitive bidding requirements. However, we were unable to determine whether these requirements were fully met, because the sales are handled by the regions and important documentation relating to the sale process was not maintained by some regions. We recommend this documentation be maintained. We also recommend these sales be monitored more closely by the Bureau.

Compliance with Bidding Requirements

According to the Environmental Conservation Law (Law), before the Bureau can sell State-owned timber, it must make an appraisal of the timber's fair market value. If the timber is valued at \$10,000 or more, it must be sold in a formal, competitive process governed by requirements contained in the Law. If the timber is valued at less than \$10,000, it is sold in a less formal competitive process governed by Department requirements.

According to Bureau records, during the three years ended March 31, 2006, a total of 1,813 timber sales were made by the Bureau. In 198 of these sales, the timber was valued at \$10,000 or more. These sales generated a total of \$13.5 million in gross revenue (an average of about \$68,182 per sale). In the remaining 1,615 sales, the timber was valued at less than \$10,000. These sales generated a total of \$2.5 million in gross revenue (an average of about \$1,548 per sale). Thus, about 84 percent of the gross revenue was generated by timber valued at \$10,000 or more. The Bureau realized a total of about

\$15.3 million in net revenue from its timber sales.

For timber valued at \$10,000 or more, the Law requires that public notice be provided for the sale of the timber, the sale be advertised, sealed price bids be submitted, and the timber be sold to the highest bidder. Department procedures require that the bids be opened in the Central Office and the sale itself be approved by the Central Office. Department procedures also require that if less than three bids are received for any sale, regional foresters must contact at least five potential bidders that received the invitation to bid, but did not submit a bid, to find out why they did not bid. The sale agreements are formalized in revenue contracts, and the State Finance Law requires that such contracts be approved by the State Comptroller when they exceed \$10,000.

To determine whether these requirements were met, we judgmentally selected a sample of 31 sales totaling more than \$2.9 million from three of the seven regions harvesting timber, and reviewed the regions' files for the documentation relating to the sales. We selected the sample from a population of 336 such sales totaling about \$22.6 million. We found that, according to the documentation in the files, the competitive requirements were met for all 31 sales.

Bureau records also indicated that three or more bids were usually received for timber sales of \$10,000 or more. According to these records, during the period April 1, 2003 through December 1, 2005, there were 180 such sales, and in 103 of these sales, at least three bids were received. In 44 of the remaining 77 sales, two bids were received; in 33 of the sales, only one bid was received.

Timber valued at more than \$500 but less than \$10,000 is to be sold through a less

formal competitive process. The sale is to be publicized, price bids are to be submitted, and the timber is to be sold to the highest responsible bidder. If less than three bids are received for any sale, regional foresters must contact at least five potential bidders that received the invitation to bid, but did not submit a bid, to find out why they did not bid. The Central Office does not get involved in these sales, as the bids are opened by the regions and the revenue contracts are awarded by the regions. If the timber is valued at \$500 or less, the region is responsible for the sale and a less formal process is required.

To determine whether these requirements were met, we judgmentally selected a sample of 34 sales totaling \$80,572 from the same three regions, and reviewed the regions' files for the documentation relating to the sales. We selected the sample from a population of 610 such sales totaling about \$1.13 million.

We found that, in two of the three regions, it was not possible to determine whether certain critical requirements were met, because the regions did not keep documentation showing how many potential bidders were informed of the sales and how many bids were received for each sale. As a result, there was no evidence the sales in these regions were, in fact, competitive.

Department officials indicated they are confident fair market value was received on all local sales. However, they agree that the sales should be fully documented and are reissuing the relevant policies to the regions.

In addition, in the third region and in one of the two regions with poor documentation, we found that certain competitive requirements were not fully met for six of the sales (totaling \$12,780). In one region, four timber sales totaling \$950 occurred at the same or a nearby location over a six-month period. In all four

sales (each of which was under \$500), the buyer was the same individual and the sales were not publicly bid, as is permitted for sales under \$500. Normally, this timber should have been sold in a single, publicly bid sale. Regional officials told us the sale was split into four separate transactions because the individual could not afford to pay for all the timber upfront.

Bureau officials noted that the material being sold was of marginal commercial value, and accordingly, it would not have been in the best interest of the State to combine the four sales into a single sale, because there probably would have been no bidders. In such instances, regional officials are supposed to ask Central Office officials for approval to split the sale into smaller units. Bureau officials stated that, if their approval had been sought in this instance, it would have been granted.

In the other region, a local sale of \$11,830 was split into two sales after the winning bid unexpectedly exceeded \$10,000 (the threshold at which the Central Office gets involved and the approval of the Office of the State Comptroller is required). The region split the sale to avoid rebidding the contract in accordance with the more formal requirements relating to such sales. Bureau officials stated that this was a salvage sale to clean up blown down trees, and the timber might have lost value if the sale had been rebid. However, according to the Bureau's emergency sale procedures, the sale should have been rebid as two local sales.

We note that the Bureau does not monitor whether local sales under \$10,000 are in compliance with Department procedures. Rather, the Bureau only receives statistical information about such sales (e.g., the number of sales, the number of acres in the sale, and the sale amount). We also note that regional

monitoring of the sales is generally informal, mostly through daily interactions with staff. We recommend that a formal monitoring process be developed. Department officials told us they are developing a web-based database which will provide them with information on local sales and thus allow them to monitor compliance with Department procedures.

Appraisals of Fair Market Value

The Law requires the Department to make an appraisal of the fair market value of timber before it is sold. The Law further requires that the timber be sold at not less than the fair market value. Fair market value is defined in the Law as the value fixed by a Department forester or other competent appraiser in a report made after an examination of the materials to be sold, provided the appraisal is approved by the Commissioner of the Department.

We found that Bureau foresters perform such appraisals. The resulting appraisal value is termed the "minimum bid" and is published in the Notice of Sale that is mailed to potential bidders. If any of the submitted bids are below the minimum bid, they are rejected by the Bureau.

However, we question whether the Bureau's appraisal process provides adequate assurance that a reasonable estimate of market value is, in fact, being obtained. The Bureau has not issued specific guidelines to the regions on how minimum bids should be calculated and documented, and three different calculation methods are used in the four regions we examined for these methods. In addition, in two of these regions, the foresters could not provide documentation to support their appraisals. We also found that neither the Bureau nor regional managers monitor how the minimum bids are set.

Table 1
Comparison of Bureau Timber Appraisals to Price Bids Submitted
April 1, 2003 through December 1, 2005

Bids Per Sale	Number of Sales	Appraisals	Low Bids		High Bids	
		Total Dollar Amount	Total Dollar Amount	Percent Over Appraisal	Total Dollar Amount	Percent Over Appraisal
2	44	\$1,656,359	\$1,912,713	15.5%	\$ 2,364,360	42.7 %
3+	103	\$5,240,822	\$5,686,233	8.5%	\$ 8,443,233	61.1 %
Total	147	\$6,897,181	\$7,598,946	10.2%	\$10,807,593	56.7 %

In the absence of such management controls, Bureau managers cannot be assured that the market appraisals are consistent from region to region or that they fairly represent the timber's actual market value. To determine whether the appraisals appeared to fairly represent the timber's actual market value, we compared the Bureau's appraisal to the price bids submitted for all 147 timber sales of \$10,000 or more in which two or more bids were submitted for the period April 1, 2003 through December 1, 2005.

We found that the Bureau's appraisals did not appear to fairly represent the timber's actual market value, as 72 of the 147 appraisals were at least 10 percent lower than the low bid, 107 were at least 20 percent lower than the low bid, and 121 were at least 30 percent lower than the low bid. Only 54 of the appraisals were within 5 percent of the low bid, and four were higher than the low bid. In addition, 51 of the 147 appraisals were at least 40 percent lower than the high (and winning) bid, 96 were at least 90 percent lower, and on average, the 147 appraisals were about 57 percent lower than the winning bid.

For example, in one sale, the Bureau valued the timber at \$95,000. However, the lowest price submitted by a bidder was \$115,960 and the high (winning) price was \$185,581. In another sale, the Bureau valued the timber at \$136,700. However, the lowest price

submitted by a bidder was \$165,000 and the high (winning) price was \$254,384. The results of our comparison are summarized in Table 1.

If the Bureau's appraisals had been fair representations of the timber's market value, they would have roughly approximated the range of bids submitted by the marketplace. However, this clearly was not the case. As a result, there is an increased risk that, in some instances, timber could be sold for less than its actual market value.

In response to our findings, Department officials indicate that there are a number of factors that make it difficult to establish a precise appraisal of market value. These factors include, among others, the effect of predicting logging costs, predicting global and variable markets, and changes in log supplies on the bids that will be received. The officials also noted that, in some instances, when the minimum bid is set too high, they receive fewer bids or no bids at all. For those sales that do not sell, they reduce the minimum bid and put them back up for sale. In some cases, the high bid on the second offering, has exceeded the original minimum bid.

Department officials also noted that it is their position that the market sets the price for timber sales through competition, and they believe they have a process that generates

sufficient competition. The officials further noted that, in their opinion, a relatively low appraisal/minimum bid attracts more bidders and thus increases competition, and the increased competition results in higher prices. The officials are concerned that raising the minimum bids could stifle competition.

We recognize there are many factors that make timber appraisals a complex and difficult task. However, in the absence of adequate management controls (i.e., detailed appraisal guidelines, adequate documentation of appraisals, and monitoring of the appraisal process) Department managers have no assurance the Bureau's appraisals are reasonable. We recommend such controls be implemented.

We also note that, if the appraisals do not provide a reasonable approximation of actual market values (and it appears that they do not), the Department may be violating the provision in the Law that requires such valuations and may, in some instances, be violating the provision that forbids timber from being sold at less than market value. We agree with Department officials that adequate competition ensures fair market prices, and as was previously noted, three or more bids were received for many of the timber sales. However, only one or two bids were received for some sales, and in such instances, if the Bureau's appraisal is not a reasonable approximation of the timber's actual market value, there is an increased risk timber could be sold at less than market value. In light of the consistent disparity between the Bureau's appraisals and the range of actual bids, we believe this risk needs to be addressed.

We therefore recommend the Bureau re-evaluate how timber appraisals are prepared, and as part of this re-evaluation, obtain an independent evaluation of its appraisal

methods. In response to our recommendation, Department officials stated that they had contacted four other states to research their appraisal methods and received information that indicates that the Department's practices in regards to establishing the minimum bid are comparable with those other states. They indicate that they will continue to research other methods and if they find a better method, they will consider employing it.

In addition, the Commissioner of the Department is required by the Law to approve all market value appraisals of State-owned timber before the timber is sold. In the Department's opinion, the Commissioner has met this requirement by delegating her approval authority to the regional foresters. However, when we reviewed the Commissioner's Policy delegating the Commissioner's authority, we found that it only authorizes regional foresters to execute and issue local timber sales contracts. It does not explicitly authorize the foresters to approve the market valuations of the timber, either in the regionally administered sales of less than \$10,000 or in the sales of \$10,000 or more, which are jointly administered with the Central Office. We recommend these explicit authorizations be added to the Commissioner's Policy.

Documentation of Market Prices and Timber Sale Contract Extensions

The Department publishes a bi-annual report (the Stumpage Price Report) showing the price of timber in 12 regions within New York State. The data in the report is obtained from loggers and timber buyers, who are surveyed by the Bureau of Private Land Services. The report is intended primarily for public use, to serve as a guide in the marketing of timber, but it is also used by Bureau foresters in their market valuations of timber.

Since the data in the report is used in the timber valuation process, we attempted to determine whether the data was based on a reasonable number of survey responses and was accurately compiled by the Bureau of Private Land Services. However, we were unable to make this determination in two of the three regions we selected for review, because the survey responses had not been retained by the regions. The responses were retained in the third region, and we determined that they had been accurately compiled. However, only 34 responses had been received by the region, and Bureau officials acknowledged that the response rate is sometimes low because participation in the survey is voluntary.

The Bureau has no policies or procedures for the price survey and data compilation processes. For example, the regions are not instructed to attempt to collect additional responses if the response rate fails to achieve a minimally acceptable level, and are not required to maintain completed surveys. To help ensure that the data in the Stumpage Price Report is as reliable as possible, we recommend the Bureau develop such policies and procedures.

When an allotment of timber is sold by the Bureau, a formal contract is awarded to the buyer. This contract specifies a time period for the timber to be cut by the buyer. If the timber is not cut within that time period, the contract is voided and the timber should be rebid. If the timber cannot be harvested within the specified time period for justifiable reasons (e.g., adverse weather conditions) the contract may be extended. However, the reason for the extension should be justifiable and documented.

To determine whether extensions to timber sale contracts were justifiable, we reviewed

12 extended contracts of \$10,000 or more (totaling \$965,800) and five extended contracts of less than \$10,000 (totaling about \$26,600). We judgmentally selected the two samples from the extended contracts that were awarded during the three years ended March 31, 2006.

We found that all 12 of the larger contracts were extended because of adverse weather conditions, and the extensions were usually (but not always) approved by the designated forester. However, there was no documentation supporting the extensions for any of the five smaller contracts. The regional foresters told us that all five extensions were justifiable, because they were caused by adverse weather conditions. We recommend that Bureau officials, as part of their monitoring of local timber sales, ensure that the reasons for contract extensions are properly documented.

Recommendations

3. Monitor local timber sales to ensure that the Department's competitive bidding requirements are met and compliance with the requirements is adequately documented.
4. Re-evaluate how timber appraisals are prepared, and as part of this re-evaluation, obtain an independent evaluation of the Bureau's appraisal methods. If it is determined that improvements can be made in the appraisal process, make those improvements.
5. Issue specific guidelines to the regions on how timber appraisals should be performed and documented, and monitor the appraisal process to ensure that it (a) provides a reasonable approximation of actual market

values, (b) is fully documented, and (c) is consistent from region to region.

6. Modify the Commissioner's Policy so that the Commissioner's delegation of authority to approve timber valuations is explicitly stated.
7. Develop formal policies and procedures addressing the collection and compilation of data for the Stumpage Price Report, including direction on retention of the surveys collected.

AUDIT SCOPE AND METHODOLOGY

We conducted our performance audit in accordance with generally accepted government auditing standards. We audited Bureau activities relating to the harvest and sale of State-owned timber for the period April 1, 2003 through June 28, 2006. We reviewed the Bureau's management systems related to timber sale contracts and the Department's financial management system, which includes timber sale revenue deposits. We interviewed Bureau and Department officials and reviewed applicable laws, rules and regulations, and policies and procedures.

We also selected a judgmental sample of 31 timber sales of \$10,000 or more to determine whether competitive bidding requirements were met. We selected the sample from three of the regions we visited. The three regions performed relatively, high, low and average in achieving their timber sales targets. During our audit period, the three regions made a total of 93 sales of \$10,000 or more. In each region, we selected ten sales with the highest and lowest percentage difference between the sale amount and the minimum bid amount. Also, in one region, we selected an additional sale because it appeared that the sale was part of a single sale transaction that had been split

into two parts to keep both parts below the \$10,000 threshold.

We also selected a judgmental sample of 34 timber sales of less than \$10,000 to determine whether the applicable competitive bidding requirements were met. We selected the sample from three of the regions we visited, and deliberately included a mix of sales under \$500, under \$2,500, and over \$2,500. In addition, we selected a judgmental sample of 17 timber sale contracts with extensions. They were selected from database for the regions and from contracts we identified as having an extension that were not in the Bureau's database.

We visited five of the seven regions that perform timber sales and interviewed regional officials. In addition, at three of the regions, we selected samples of timber sale contracts and reviewed other documentation relating to timber sales, and at four of the regions, we reviewed the process used in making fair market valuations of timber. We also reviewed how the allowable cut was established and compared that data to the harvesting plans contained in seven unit management plans. We also reviewed regional annual work plans.

In addition to being the State Auditor, the Comptroller performs certain other constitutionally and statutorily mandated duties as the chief fiscal officer of New York State, several of which are performed by the Division of State Services. These include operating the State's accounting system; preparing the State's financial statements; and approving State contracts, refunds, and other payments. In addition, the Comptroller appoints members to certain boards, commissions and public authorities, some of whom have minority voting rights. These duties may be considered management functions for purposes of evaluating

organizational independence under generally accepted government auditing standards. In our opinion, these management functions do not affect our ability to conduct independent audits of program performance.

AUTHORITY

We performed this audit pursuant to the State Comptroller's authority as set forth in Article V, Section 1 of the State Constitution and Article II, Section 8 of the State Finance Law.

REPORTING REQUIREMENTS

A draft copy of this report was provided to Department officials for their review and comment. Their comments were considered in preparing this final report, and are included as Appendix A.

Within 90 days after final release of this report, as required by Section 170 of the Executive Law, the Commissioner of the Department of Environmental Conservation shall report to the Governor, the State Comptroller, and the leaders of the Legislature and fiscal committees, advising what steps were taken to implement the recommendations contained herein, and where recommendations were not implemented, the reasons therefor.

CONTRIBUTORS TO THE REPORT

Major contributors to this report include Carmen Maldonado, Gerald Tysiak, Stephen Goss, Wayne Bolton, Alexander Marshall, Matthew Phillips, Sharon Salembier, Nisha Thomas and Dana Newhouse.

APPENDIX A - AUDITEE RESPONSE

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Office of Internal Audit, 12th Floor
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Denise M. Sheehan
Commissioner

December 4, 2006

Ms. Carmen Maldonado
Audit Director
Office of the State Comptroller
Division State Services
State Audit Bureau
123 Williams Street – 21st Floor
New York, NY 10038

Dear Ms. Maldonado:

The New York State Department of Environmental Conservation (Department) has reviewed the Office of the State Comptroller's (OSC) draft report 2006-S-9, entitled "State Forest Timber Sales" dated November 2, 2006. The attached pages contain the Department's response to the draft report.

Thank you for the opportunity to respond to the draft report. If you need to discuss any of this response, please contact Tom Kulzer at (518) 402-9147.

Sincerely,

Lynette Stark
Executive Deputy Commissioner

cc: Rob Davies
Meta Murray
Tom Wolfe
David Forness
S. McCrea Burnham
Tom Kulzer

The Department's response to the OSC draft report entitled "State Forest Timber Sales," report number 2006-S-9 submitted on November 2, 2006, is presented below and contains three sections as follows:

- General Program Comments
- Comments on Described Conditions and Findings
- Response to Recommendations

General Program Comments

The Department has reviewed the findings and recommendations presented in the report and conclude that, for the most part, the audit and the implementation of its recommendations will help to enhance our State Forest management program. In the following sections, we have noted the portions of the report where we take exception to findings and recommendations. The Department would like to recognize the professionalism of the audit team.

Comments on Described Conditions

The following are specific comments the Department has regarding selected wording contained in the draft report.

Comment #1 - Page 4 - Last paragraph, first sentence: "In addition, timber harvesting is only one of many forest management activities performed by Bureau foresters, and is not considered a high priority by Department management."

Department Response - *The Department strongly disagrees with this statement. Timber harvesting on State Forests is an integral component of the management of State Forests and enables the Department to achieve many of its stewardship goals for State Forests. Timber harvesting is included in the second of the Division of Lands and Forests top five priorities for 2006 (2)" improving the Departments stewardship of its land and conservation easements."*

*
Comments
1, 2

Comment #2 – Page 12 – Fourth full paragraph, second sentence: The data in the report is obtained from loggers and timber buyers, who are surveyed by the Bureau."

Department Response - *In this report, OSC defines Bureau as the Bureau of State Land Management. It should be noted that the Stumpage Price Report referred to in this sentence is developed and provided by the Bureau of Private Land Services rather than the Bureau of State Land Management as implied in the audit.*

*
Comment
2

State Forest Timber Sales (2006-S-9)

1

* See State Comptroller's Comments, page 21

Responses to Recommendations

The following presents the Department's response to each recommendation contained in the draft report.

Recommendation 1: Estimate the Department's future forest management workload, determine how many additional foresters would be needed to both address Department priorities and harvest all harvestable timber, and add that many additional foresters to the Bureau (provided the additional foresters would, in fact be cost-effective).

*
Comment
2

Recommendation 2: Use the most current regional determinations of allowable cuts when planning timber harvesting activities and determining forester staffing needs.

Response to Recommendations 1 and 2: The Bureau is part of a complex Department with a broad mission operating under a large number of Federal and State mandates. To fulfill our mission, the Department balances resources to enhance program delivery, improve services to New York State residents and ensure the protection of our environment and natural resources.

Given the considerable growth in land the Bureau must manage, the Department has taken steps to increase the number and efficiency of Bureau field staff and supplemented their efforts with seasonal staff. The Department continues to explore the possibility of enhancing Bureau resources. A meeting has been scheduled with the New York State Division of Budget to, among other things, discuss staffing issues.

Although probably unintended, the wording in Recommendation 1 could be misleading. The Department has no intention to "harvest all harvestable timber." The allowable cut was originally developed to be an upper limit of harvesting based on environmental conditions, which State Forests could support on a sustainable basis. As a result, the allowable cut should be viewed as the upper limit if ideal conditions existed and should not be viewed a harvesting goal.

*
Comment
2

Recommendation 3: Monitor local timber sales to ensure that the Department's competitive bidding requirements are met and compliance with the requirements is adequately documented.

Response to Recommendation 3: A new electronic reporting and monitoring system has been in the development stage for the past two years. The Department will be going on line with this program within the next 30 days. This new system will provide much more detailed information on every timber sale and will serve as an excellent monitoring tool. A new internal web page has been developed and deployed to provide Department regional staff with electronic access to all Bureau of State Land Management fiscal and timber sale policies and forms.

* See State Comptroller's Comments, page 21

Recommendation 4: Re-evaluate how timber appraisals are prepared, and as part of this reevaluation, obtain an independent evaluation of the Bureau's appraisal methods. If it is determined that improvements can be made in the appraisal process, make those improvements.

Response to Recommendation 4: The Department does not believe that an independent evaluation of the Bureau's appraisal methods would be cost effective or productive. However, the Department believes that there is room for improvement in any process and should look to improve those processes when improvement opportunities exist. The Department recently contacted neighboring states and examined the timber appraisal methods used in these states and will incorporate improvements identified into the Bureau's appraisal methods.

*
Comment
3

Recommendation 5: Issue specific guidelines to the regions on how timber appraisals should be performed and documented, and monitor the appraisal process to ensure that it (a) provides a reasonable approximation of actual market values, (b) is fully documented, and (c) is consistent from region to region.

Response to Recommendation 5: Staff in the Bureau of State Land Management have made enhancements to the Conceptual Approval form, which includes the timber appraisal, to include factors considered when establishing the Fair Market Value on Revenue Sales. The improved form is currently undergoing review by OSC's contract team. Bureau staff will also be developing a comparable appraisal form to be used for Local Sales, based on the outcome of the OSC review. To help insure consistency in the timber appraisal process among regions, Bureau staff is also developing Timber Appraisal guidelines and will distribute these to all regions.

Recommendation 6: Modify the Commissioner's Policy so that the Commissioner's delegation of authority to approve timber valuations is explicitly stated.

Response to Recommendation 6: A new "Delegation of Authority" has been drafted and is under review in the Department. This delegation of authority will specifically delegate the Commissioner's authority to approve timber appraisals for both local and revenue sales to appropriate Department staff.

Recommendation 7: Develop formal policies and procedures addressing the collection and compilation of data for the Stumpage Price Report, including direction on the retention of the surveys collected.

Response to Recommendation 7: Prior to initiation of this audit by OSC, the Bureau of Private Land Services revised the procedures used to develop the Stumpage Price Report. This included development of a standardized data collection report and data compilation system for use by each regional forester with responsibility for collecting stumpage price survey data. In addition, standardized language was developed for inclusion in the

State Forest Timber Sales (2006-S-9)

3

* See State Comptroller's Comments, page 21

survey instructions provided to the pool of potential survey respondents. Further, while staff does not maintain completed surveys, they maintain a compilation of data gained from each survey cycle that includes total number of responses and all data provided by each response.

APPENDIX B - STATE COMPTROLLER'S COMMENTS

1. We agree that timber harvesting falls within the Department's goal to improve stewardship of lands and conservation easements. However, timber harvesting to achieve the allowable cut is not a high priority per se, as evidenced by actual harvest levels and lack of resources devoted to it. Additionally, Department staff told us that staff levels were not high enough to achieve the allowable cut because of higher Divisional priorities.
2. We have revised the report on the recommendation to reflect information in the Department officials' response.
3. We applaud the Department's actions to contact neighboring states to research their appraisal methods. However, we continue to believe that an independent evaluation of the Department's appraisal methods could assist in identifying improvements to the appraisal method.