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## *Recommendations on Sustainable Forestry and Wood Chip Mills*

North Carolina's economy has long been dependent on the forest products industry for both jobs and consumer goods. Indeed, some suggest that the origin of its Tar Heel State moniker was the tar that got stuck on the feet of workers in the piney woods, producing tar, pitch, and turpentine for naval stores. And the hard truth is that this same forest products industry relies heavily on a ready supply of wood chips to produce a broad range of consumer goods. But the proliferation of satellite wood chip mills in recent years (from two to 18 since 1980) should give state policymakers pause.

While they are rarely operated at full capacity, the 18 chip mills in North Carolina have the potential to consume vast numbers of trees. Yet the state may not face the sort of moonscape destruction that some environmentalists suggest. That's because the majority of the state's forest lands are held in private ownership. The sheer number of individual property owners (some 700,000) argues against the likelihood of wholesale clear-cutting to feed chip mills. But there are reasons beyond the prospect of a mountains-to-sea denuded landscape that the state should be cautious about any policy that encourages the chipping of more trees than is necessary to sustain both the state's forest products industry and its forests.

Here are a few of them: additional chip mills may encourage additional timber harvest, including clear-cutting. Poorly managed sites—whether clear cuts or selective cuts—create sedimentation and erosion as well as visual blight. Clear-cutting alters the diversity of and perhaps the number of plant and animal species on a harvested site, perhaps to the detriment of rare or endangered species. While clear-cutting may have its place in a continuum of forest management practices, most people would agree that too much clear-cutting is not a good thing.

But it is important to place clear-cutting in

the context of overall forestry management. Poorly managed sites where selective cutting takes place can also create soil erosion, loss of wildlife habitat, and visual blight that hurts the recreational value of forests. There also is danger in taking too much timber without reseed-ing and without allowing enough trees to grow to maturity. What is most important to the state is to adopt policies that encourage sustainable forestry so that the state's forest resources are not depleted. *The goal should be to replenish trees as fast as they are cut.* In addition, state policy should encourage longer rotations between harvests to preserve the state's stock of saw timber. To these ends, the Center offers the following recommendations:

- 1. The legislature should repeal the tax credit for exporting wood chips or at least allow it to expire when it sunsets in 2001.** The Center acknowledges that wood chips are primary to the forest products industry and that a ready supply is necessary to keep the industry healthy. Yet a state policy that encourages the chipping of more wood than is necessary to sustain the forest products industry flies in the face of efforts to sustain the state's forests. Providing a tax credit for wood chips and other commodities exported through the North Carolina ports distorts market pricing and may encourage additional chipping. This is not to suggest there should be no export market for forest products. If the state's forests can sustain exports while adequately supplying the domestic market, there is no reason not to have them. However, the state should not provide an *incentive* to export, as this could tip the balance. An inducement to export could lead to depletion of the state's forest resources, damage to the environment, and inadequate supplies of both chips and saw timber for domestic industry. This is too high a price to pay just to prop up the state's ports. If state ports need help, that should be considered on its own merits and not in a way that could exact a second environmental price.

Woodlot Management—a New Challenge for Smokey,” *North Carolina Insight*, Vol. 6, No. 1, (June 1983), pp. 24–51 for a thorough review of the state of forestry in North Carolina in the early 1980s.

<sup>6</sup>David Brown, *Roundwood Pulpwood from North Carolina Processed at Satellite Chip Mills in 1997*. Available from N.C. Division of Forest Resources, Raleigh, N.C., p. 1.

<sup>7</sup>Unpublished summary by Rex Schaberg to the Advisory Committee of the North Carolina Wood Chip Study, January 26, 1999, p. 22.

<sup>8</sup>W. Scott Burselson and Frederick W. Cabbage, *North Carolina's Forests 1938 to 1990*, Tables and Figures. Available from the Department of Forestry, North Carolina State

University, Raleigh, N.C., January 1999, Figure 48.

<sup>9</sup>*Ibid.*, Figure 53.

<sup>10</sup>Under N.C.G.S. 105-151.12 and N.C.G.S. 105-130.34.

<sup>11</sup>Danna Smith, *Chipping Forests and Jobs: A Report on the Economic and Environmental Impacts of Chip Mills in the Southeast*, available from the Dogwood Alliance, P.O. Box 4193, Chattanooga, TN, 37405, p. 30.

<sup>12</sup>Brown, *Ibid.*, p. 3. The 1998-99 projected figure was provided by the North Carolina Ports Authority in a telephone interview with the Center.

<sup>13</sup>N.C.G.S 105-151.22(b).

<sup>14</sup>Group Charter, North Carolina Wood Chip Production Study Advisory Committee, as amended 11/19/98, available

2. The legislature should amend the Sedimentation Pollution and Control Act to make Best Management Practices mandatory on all commercial timber harvests. Best Management Practices are intended to preserve water quality during forestry activities through such practices as maintaining streamside buffers, prohibitions against leaving debris in streams that would obstruct flow, and keeping access roads and skid trails away from streams or using culverts or portable bridges where crossings are necessary. Thus far, the forestry industry has been exempted from the state's Sedimentation Pollution Control Act on the condition that Best Management Practices are followed, as outlined in the state's *Forest Practices Guidelines*. Industry officials say that Best Management Practices are thus already mandatory. If that is true, they shouldn't mind this being clarified in state statutes and regulations.

Official accounts from the N.C. Division of Forest Resources boast of sample surveys, the latest in 1996, showing a compliance rate of up to 95 percent. Unofficial accounts beg to differ. Mickey Henson, who conducted the surveys in his role as hydrologist with the Division of Forest Resources but has since resigned, says the survey sites were not representative. "My surveys were skewed in that they took place after the jobs were complete and did not include many sites where water ran through the property," says Henson. "I would guess that total compliance with BMPs is probably 30 to 40 percent during on-going operations."

If Best Management Practices are implicitly mandatory, the industry should not mind if observance of Best Management Practices is mandated explicitly in the Sedimentation Pollution Control Act. This will aid both in compli-

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ance with and enforcement of these guidelines. Increased sedimentation of the state's streams and rivers is one of the greatest environmental threats posed by the increased clear-cutting brought on by stand-alone chip mills. Increased observance of Best Management Practices can mitigate the risk and thus should be made mandatory.

3. The General Assembly's amendments to the Sedimentation Pollution Control Act should include a requirement that commercial timber harvesters notify the Division of Forest Resources of intent to harvest to aid the task of water quality inspectors. Mandatory notification is imposed by Virginia as part of its Silvicultural Water Quality Act and provides a good model for North Carolina to follow. As long as state agencies are assigned the task of education, inspection, and enforcement of water quality laws, they need to know where and when timber harvesting is taking place. Currently, the Division of Forest Resources employs six water quality foresters and is hiring a seventh. Division officers at the county level also conduct site inspections. More than 3,700

from Natural Resources Leadership Institute, Raleigh, N.C.  
<sup>15</sup> N.C.G.S. 113A-50.

<sup>16</sup> Report of the Governor's Task Force on Forest Sustainability, June, 1996, p. 7. Available from N.C. Division of Forest Resources, Raleigh, N.C.

<sup>17</sup> 33 U.S. Code Section 1311 et seq.

<sup>18</sup> *Final Environmental Impact Statement, Chip Mill Terminals on the Tennessee River*, Tennessee Valley Authority, U.S. Army Corps of Engineers, and U.S. Fish and Wildlife Service, TVA/RG/EQS-93/92.

<sup>19</sup> 16 U.S. Code 1531-1543.

<sup>20</sup> 15 N.C. Administrative Code 11.0101- .0209.

<sup>21</sup> Mickey Henson, *Best Management Practices Implemen-*

*tation and Effectiveness Survey on Timber Operations in North Carolina*, N.C. Division of Forest Resources, Raleigh, N.C., 1996, p. 17. Available from N.C. Division of Forest Resources, Raleigh, N.C.

<sup>22</sup> 1999 Va. Acts 10.1-1181.2.

<sup>23</sup> *Kentucky Forest Conservation Act* (Ky. Rev. Stat. Ann. sec. 149. 330-355), fact sheet available from Kentucky Division of Forestry, 627 Comanche Trail, Frankfort, KY 40601.

<sup>24</sup> 16 U.S. Code Section 2103a.

<sup>25</sup> *Woodland Owner Notes No. 23: Enrolling in North Carolina's Forest Stewardship Program*, available from the N.C. Cooperative Extension Service, N.C. State University, College of Agriculture and Life Sciences, Raleigh, N.C.

sites were inspected in 1997-98. Division officials do not know what percentage of actual harvests these inspections represented since notification of harvest is not required. As few water quality inspectors as North Carolina has in the field, their job should be made as easy as possible. Notification of harvest would give the Division of Forest Resources the opportunity to contact the landowner about desirable forest management practices and it would allow for timely inspection of the harvest site.

Virginia law requires loggers to report the location of any harvest of more than 10 acres within three days of beginning work. The state has set up a toll-free number where loggers can call in and leave a message. The number receives about 140 calls per month. Informing the Division of Forest Resources of intent to harvest in order to protect water quality seems a prudent step that would not impede harvests in any appreciable way.

**4. The N.C. Division of Forest Resources should develop a plan for enhancing its reforestation program to further the goal of sustainable forestry. The Division should seek funding for the plan, and the governor should include this in the budget proposed for 2001.** The only state policy that directly applies to sustainability and reforestation is the Forest Development Program, which provides qualifying private landowners with up to 40 percent cost-sharing for replanting seedlings after a timber harvest. In order to qualify, landowners must comply with Forest Practices Guidelines after a timber harvest. As a first step, the Division of Forest Resources should develop a strategy for assuring that all landowners know about the re-seeding program, perhaps by requiring that before commencing a cut, loggers notify landowners in writing of the program's existence.

But it may be that more is needed to sustain the state's forest resource for future generations. Among the possibilities is encouraging longer timber rotations by increasing the percentage of cost-share for replanting for those landowners who are willing to retain the majority of trees on a tract for 40 to 50 years. Such a program would allow some cutting during this time period so the landowner could maintain a stream of income. Yet another idea might be similar to the old federal land bank for farmers—provide qualifying timber owners a cash payment every decade or so for not removing more than a certain percentage of trees. This is not to suggest an age limit for harvesting trees—merely incentives to encourage longer rotations.

These four recommendations will not make chip mills palatable to everyone. They will, however, guard against the threat of wholesale decimation of the state's forests. Ending the tax credit for exporting will insure against the unintended consequence of depleting a precious resource to help the state's ports. Bringing logging operations under the Sedimentation Pollution and Control Act will guard against the worst environmental degradation from poorly managed logging sites. And enhancing the state's reforestation program will assure a ready supply of timber for future generations. Meanwhile, the state must continue to monitor and evaluate stand-alone chip mills to assure that the visual blight created by clear-cutting remains contained and the harvest of timber does not begin to outstrip supply. Should timber harvests exceed a sustainable level, the state will need to revisit the issue of additional regulation of wood chip mills.

—Mike McLaughlin