EXECUTIVE SUMMARY

A Best Management Practices (BMP) monitoring program, which evaluated the level of compliance and effectiveness of forestry BMPs based on the program used in a FY90 EPA Section 319 Grant to the Texas Forest Service, was implemented. A total of 135 sites on which silvicultural activities occurred were evaluated between September, 1992 and November, 1995. These sites were a representative sample of the forestry activities that occurred in East Texas during that time period.

Overall BMP compliance of the sites monitored was 87.4%. To be considered "in compliance," a site must be rated Fair, Good, or Excellent. Compliance with BMPs varied by forest land ownership, type of operation, landowner and silvicultural contractor knowledge of BMPs, level of forester involvement, and other site factors. Generally, compliance was highest on sites:

- managed by forest industry or USDA Forest Service
- where a forester was involved
- where the landowner and silvicultural contractor were familiar with BMPs.

Compliance was generally lowest on sites:

- owned by non-industrial private forest (NIPF) landowners
- where a forester was not involved
- where the landowner and silvicultural contractor were not familiar with BMPs.

Major deficiencies noted during the evaluations were:

PERMANENT ROADS

• Failure to stabilize stream crossings

TEMPORARY ROADS

- Lack of waterbars or other diversion structures
- Incorrect stream crossings
- Failure to restore and stabilize stream crossings

STREAMSIDE MANAGEMENT ZONES

- Lack of SMZs where needed
- Thinning excessively in SMZs

Compliance monitoring was also helpful in evaluating BMP effectiveness. When implemented correctly, BMPs are effective in controlling nonpoint source pollution. Failures observed were generally due to lack of use or improper installation of BMPs, not because of correctly installed BMPs that were ineffective. One weakness identified was lack of specific BMP guidelines for forest wetland areas. Therefore, a new set of guidelines, *Texas Best Management Practices for Forest Wetlands* was created and distributed.

While overall BMP compliance (87.4%) during this "Round 2" monitoring appears to decline slightly from the results of "Round 1" (88.2% - See the Texas Forest Service October, 1992, publication *Voluntary Compliance with Forestry Best Management Practices in East Texas*), a higher proportion of NIPF sites and a lower proportion of industry sites were monitored. Sites under NIPF ownership generally have a lower rate of compliance than industry sites. BMP compliance on forest industry sites increased in "Round 2" to 95.1% compared to 89.6% compliance in "Round 1".

Likewise, compliance on public sites increased, from 93.3% in "Round 1" to 100% in "Round 2." The major weakness in compliance is on NIPF sites. Results show, however, that compliance is higher when both logging contractor and landowner are familiar with BMPs. Continued education is clearly the key to improving compliance in this ownership category.