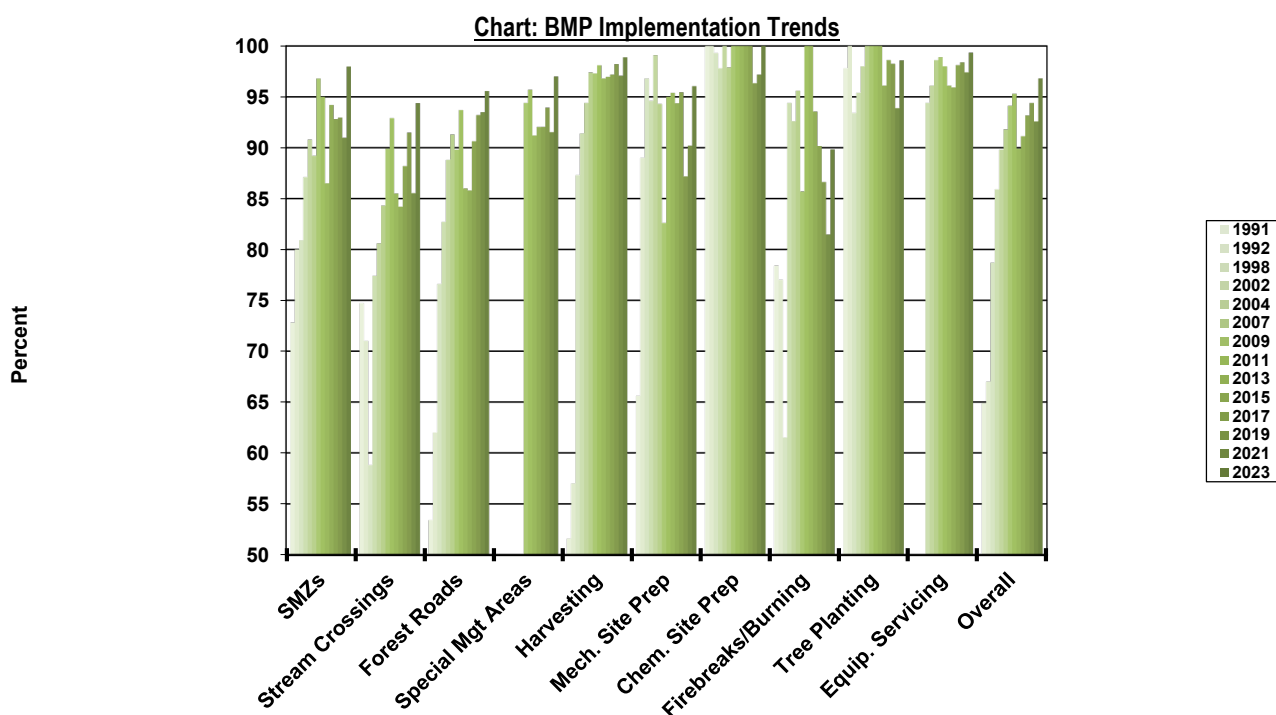




## 2023 Forestry Best Management Practices Implementation Survey Highlights

### General Best Management Practices (BMP) Survey Results

The Georgia Forestry Commission (GFC) has completed its 2023 Forestry BMP Implementation Survey covering 266 randomly selected sites statewide. These 266 sites consist of 56,477+ acres, which include 268.61 miles of forest roads, 129.88 streams miles, and 150 stream crossings. By ownership, 170 of the sites were on non-industrial private forest land (NIPF), 59 sites were corporate land, and 37 sites were public land. **Overall, statewide BMP implementation for GFC's 2023 BMP Survey is 96.81%, a new high score.** The BMP implementation rate is the percentage of fully implemented BMPs compared to the total number of necessary/applicable BMPs at the tract level, the practice level, and the overall level. This represents a 4.23 percentage point improvement from GFC's 2021 BMP Survey result of 92.58%. BMP implementation results were also calculated for each applicable category of practice for each tract. Categories of practice include Streamside Management Zones (SMZs), Stream Crossings, Forest Roads, Special Management Areas, Harvesting (outside SMZs), Mechanical Site Prep, Chemical Site Prep, Firebreaks/Burning, Tree Planting, and Equipment Servicing, as well as an Overall category. BMP implementation results for each category are shown in the chart below, along with the results from the last 13 BMP surveys for comparison where available. BMP implementation for 2023, shown in the darkest shade on the right side of each category/grouping in the chart, improved for every category graded by 1.81 to 8.85 percentage points from the 2021 scores. The biggest improvements were in the categories of Stream Crossings (up 8.85 points), Firebreaks/Burning (up 8.36 points), and Streamside Management Zones (up 7.00 points). Good improvements were seen for Mechanical Site Prep, Special Management Areas, Tree Planting, Chemical Site Prep, Forest Roads, Equipment Servicing, Timber Harvesting, and Overall. This is especially notable since the scores from 2021 were generally good as well.



The summary table on page 2 provides a review of the actual BMP Implementations scores for each category graded for 2023 and 2021, along with the number of actual Water Quality Risks (WQRs) found for each category in 2023 and 2021. As has been the case for many years now, it is important to note that the few WQRs found were concentrated on just a relatively small number of sites. For 2023, out of 9093 possible risks where a WQR might have been noted on the survey inspections, only 29 instances were found, and those were located on just 15 of the 266 total survey sites. This means that 251 (94.36%) of the 266 total sites inspected had absolutely no WQR risk found. This again supports the previously documented fact that where the BMPs are implemented well, there should not be any risk to water quality. Most of the categories have at least some minor room for improvement, as well as continued education delivery. However, the main categories in which educational efforts need to be focused seem to be Stream Crossings, SMZs, Special Management Areas, Timber Harvesting (specifically skid trail stabilization), and Tree Planting, due to their instances of actual WQRs. Firebreaks/Burning also need some attention due to a lower relative implementation score, but with a good score maintained and no WQR found, this category appears to be less problematic.

Our educational efforts will continue to address these categories to maintain good scores. There is always some room for improvement, especially on critical areas where we have seen issues in the past. We plan to concentrate our educational efforts wherever needed. In particular, educational opportunities include:

- Stream Crossings
  - ✓ Stream crossing approach design and stabilization
  - ✓ Proper removal and rehab of temporary crossings
  - ✓ Culvert crossing design, installation, and planning
  - ✓ Basic stream crossing design needs, including storm flow and aquatic migration requirements
  - ✓ Temporary portable bridge use

- Streamside Management Zones (SMZs)
  - ✓ Maintaining recommended minimum SMZ widths
  - ✓ Maintaining recommended minimum residual basal area within SMZs
  - ✓ Maintaining streambank trees
  - ✓ Keeping logging debris out of stream channels
  - ✓ Proper water diversions for firebreaks when tied in at the SMZ margins
  - ✓ Properly tying firebreaks into streams with low impact methods
  - ✓ Minimizing soil disturbance in SMZs
- Firebreaks/Burning Outside of SMZs
  - ✓ Proper firebreak planning and water diversion installation
  - ✓ Proper tie-in with roads and other sensitive areas such as ephemeral areas
- Forest Roads Outside of SMZs
  - ✓ Proper water diversion design and placement
  - ✓ Proper closeout needs following harvest activities
- Timber Harvesting Outside of SMZs
  - ✓ Skid trail stabilization requirements
- Mechanical Site Preparation Outside of SMZs
  - ✓ Avoidance of bedding directing surface runoff to roads and road-ditches
- Special Management Areas
  - ✓ Keeping debris out of canals/ditches
  - ✓ Avoiding interference with natural flow in ephemeral areas
  - ✓ Avoidance of direct tie in from road and firebreak diversions into ephemerals and gullies
  - ✓ Using low impact methods for firebreaks
  - ✓ Identifying and preserving the Special Management Area features
- Artificial Regeneration Outside of SMZs
  - ✓ Machine planting on the contour
- Equipment Servicing
  - ✓ Proper disposal of oils, lubricants, containers, and/or trash

### Summary Table

<b>Practice or Category</b>	<b>2021 IMPLEMENTATION % BMPs Implemented and (# WQRs)</b>	<b>% Point Change from 2021</b>	<b>2023 IMPLEMENTATION % BMPs Implemented and (# WQRs)</b>
Stream Crossings	85.53% (33WQRs)	up 8.85	94.38% (20 WQRs)
Forest Roads	93.49% (0 WQRs)	up 2.08	95.57% (0 WQRs)
Timber Harvesting	97.08% (1 WQR)	up 1.81	98.89% (2 WQRs)
Mechanical Site Preparation	90.20% (0 WQRs)	up 5.85	96.05% (0 WQRs)
Chemical Site Preparation	97.19% (0 WQRs)	up 2.81	100.00% (0 WQRs)
Firebreaks/Burning	81.47% (0 WQRs)	up 8.36	89.83% (0 WQRs)
Artificial Regeneration (Tree Planting)	93.89% (0 WQRs)	up 4.70	98.59% (1 WQRs)
Equipment Servicing	97.41% (0 WQRs)	up 1.94	99.35% (0 WQRs)
Special Management Areas	91.53% (6 WQRs)	up 5.48	97.01% (2 WQRs)
Forest Fertilization	100% (0 WQRs)	NA	NA
Streamside Management Zones (SMZs)	90.98% (18 WQRs)	up 7.00	97.98% (4 WQRs)
<b>Weighted Overall Average</b>	<b>92.58%</b> (58 WQRs on just 29 of 260 site) 88.85% of all sites had 0 WQRs	<b>up 4.23</b>	<b>96.81%</b> (29 WQRs on just 15 of 266 sites) 94.36% of all sites had 0 WQRs

### **What's the REALLY GOOD overall news for the 2023 survey?**

The overall BMP Implementation score is very good at 96.81%, which is an all-time high in GA, a solid A-grade. This includes improvements for all categories. All categories scored about 90% or better. The percentage of stream and road mileages in full compliance was found to be 98.98% and 96.88% respectively. There was a solid 50% reduction in WQRs, and the relatively few WQRs found were all again concentrated on just a very small number of sites, as has been the norm for most of the last 17 years, indicating the vast majority of forestry sites have no WQRs. In conclusion, the overall trend continues to be good at the close of 2023. Further details can be found in the full 53-page report on the 2023 Forestry BMP Survey from the GA Forestry Commission.