



## **Texas Silvicultural BMP Education and Implementation Project**

### **FINAL REPORT**

Funding provided by the Texas State Soil and Water Conservation Board  
through a Clean Water Act §319(h) Nonpoint Source Grant from the  
U.S. Environmental Protection Agency

TSSWCB PROJECT #12-03

*PREPARED FOR:*  
Texas State Soil and Water Conservation Board

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## Executive Summary

Between October 2012 and September 2015 \$328,134 of EPA 319(h) funds and \$295,660 of Texas A&M Forest Service (TFS) matching funds allowed the TFS Water Resources program to:

- Prevent 11,007 tons of sediment per year from entering East Texas streams
- Prevent 83,353 tons of erosion per year from occurring on East Texas forestlands
- Monitor 150 tracts for BMP implementation, storing and compiling data in an Access database, and mapping data in ArcView GIS format
- Conduct 27 BMP workshops across East Texas for loggers, foresters, and TFS field personnel reaching 450 people
- Coordinate 9 Sustainable Forestry Initiative® (SFI) sponsored landowner workshops reaching over 700 people
- Develop a new cooperative Land Stewardship Workshop for Central and South Texas contractors
- Create an online land operation planning application hosted on the Texas Forest Information Portal
- Provide innovative outreach on forestry BMPs through an online BMP pictorial directory and demonstration videos
- Set up the informative BMP display with literature at various locations reaching thousands of individuals
- Publish and mail 7 issues of the *Texas Water Source* newsletter to 2,060 landowners in the Attoyac Bayou and Middle Trinity watersheds
- Publish and mail 9 issues of the *Forest Stewardship Briefings* newsletter to 1,330 natural resources-related professionals throughout Texas
- Publish numerous BMP and water related articles in county forest landowner newsletters, the Texas Forestry Association newspaper, the Texas Logging Council magazine, newspapers, and on social media
- Produce educational materials and deliver technical assistance on post-fire erosion control measures
- Effectively coordinate project efforts with numerous partners, cooperators, and stakeholders.

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## **TASK 1: Project Administration**

**Objective:** To effectively administer, coordinate and monitor all work performed under this project including technical and financial supervision and preparation of status reports.

**Subtask 1.1** TFS will prepare electronic quarterly progress reports (QPRs) for submission to the TSSWCB. QPRs shall document all activities performed within a quarter and shall be submitted by the 15th of January, April, July, and October. QPRs shall be distributed to all Project Partners.

- **TFS submitted electronic quarterly reports to TSSWCB throughout the project.**

**Subtask 1.2** TFS will perform accounting functions for project funds and will submit appropriate Reimbursement Forms to TSSWCB at least quarterly.

- **TFS submitted quarterly invoices to TSSWCB.**

**Subtask 1.3** TFS will host coordination meetings or conference calls, at least quarterly, with Project Partners to discuss project activities, project schedule, communication needs, deliverables, and other requirements. TFS will develop lists of action items needed following each project coordination meeting and distribute to project personnel.

- **Project leader regularly contacted TSSWCB to discuss project activities.**
- **Hosted a TSSWCB site visit in Lufkin on April 9-10, 2013.**
- **Conducted project coordination meetings with TSSWCB on January 16, 2013.**
- **Conducted periodic staff meetings to discuss project tasks, deliverables, and timeline.**



*The TSSWCB site visit included a tour of an active forest harvesting operation.*

**Subtask 1.4** TFS will attend and participate in meetings as appropriate in order to communicate and coordinate project goals, activities, and accomplishments to interested parties. Such meetings may include, but not limited to, Clean Rivers Program Basin steering committees, TMDL and Watershed Protection Plan stakeholder meetings, NPS management, SWCD meetings, professional and trade associations, and other appropriate meetings of critical watershed stakeholders groups.

- **Attended watershed coordination, planning and TMDL implementation meetings**
  - **Attoyac Bayou Watershed Protection Plan**
  - **Lake O’ the Pines TMDL Implementation Plan**
  - **Lampasas River Watershed Protection Plan**
  - **Lampasas River Texas Watershed Steward workshop**
  - **Lower Trinity River Stakeholder Meeting**
  - **Nolan Creek Watershed Protection Plan**
  - **Orange County TMDL Implementation Plan**
  - **Plum Creek Watershed Partnership Stakeholders meeting**
  - **Upper Llano River Watershed Protection Plan**
  - **Southeast and South central Texas Regional Watershed Steering Committee**
  - **Texas Watershed Planning Short Course**
  - **Watershed Coordinator’s Roundtable**
  - **Adams and Cow Bayou TMDL meeting**
- **Attended water development, regulatory, and restoration meetings.**
  - **2014 H2O 4 Texas Conference in Fort Worth**
  - **TWDB SWIFT meeting in Conroe**
  - **2014 Fort Worth District Corps Regulatory workshop**
  - **Urban Riparian Workshop**
  - **Texas Riparian Association Annual Meeting**
  - **Trinity Land and Water Summit**
  - **2014 Southwest Streams Restoration Conference**
  - **Urban Water and Drainage Seminar**
  - **Regional Water Planning Group meetings**
  - **Water is Life Conference in Sonora**
- **Exhibited at the 2013 Annual TSSWCB District Directors Meeting in Fort Worth.**



*TFS exhibited at the 2013 Annual TSSWCB District Directors Meeting in Fort Worth.*

- **Attended sustainable forestry/BMP/and water meetings**

- **TFA Annual Meetings in Nacogdoches, Conroe, and Lufkin**
- **TFA SFI and Environmental / Regulatory Affairs committees**
- **Texas Logging Council State Meeting in Nacogdoches**
- **2013 SFI Annual Conference in San Antonio**
- **TSAF Annual Meetings**
- **2012 SAF National Convention in Spokane, Washington**
- **Lufkin/Nacogdoches Chapter TSAF**

**Subtask 1.5** TFS will develop the Final Report.

- **TFS developed an electronic and hard copy FY 12 Final Report.**

**Deliverables:**

- Quarterly progress reports in electronic format

**Electronic quarterly reports were submitted throughout the project.**

- Reimbursement Forms and necessary documentation in hard copy format

**Appropriate reimbursement forms were submitted throughout the project.**

- List of action items from project coordination meetings

**See Appendix A.**

- Notices, agendas, meeting materials, attendance lists, and summaries from all meetings attended

**See Appendix A.**

- Final Report (electronic copy and 3 hard copies)

**Electronic and hard copies of the Final Report were submitted to TSSWCB.**

**TASK 2: BMP Implementation Evaluation**

**Objective:** To assess the voluntary adoption of Texas’ recommended BMPs by forest landowners, managers, and contractors.

**Subtask 2.1** TFS will map silvicultural operations in East Texas using Digital Aerial Sketchmapping and/or Remote Sensing technology to identify sample sites for BMP implementation monitoring.

- **TFS utilized GIS and satellite imagery to identify over 540 silvicultural operations for possible monitoring.**

**Subtask 2.2** TFS will conduct 150 BMP implementation evaluations on tracts in East Texas that meet suitability criteria.

- **150 silvicultural operations were randomly sampled from the selection pool and evaluated for BMP implementation.**



**Subtask 2.3** TFS will create and maintain a BMP GIS database for twelve digit HUCs

- **A BMP database was created and maintained to store implementation monitoring data, including geographic coordinates and Hydrologic Unit Codes.**

**Subtask 2.4** TFS will prepare and distribute a BMP Implementation Rate Evaluation Report to landowners and other interested entities.

- **The Round 9 BMP Implementation Monitoring Report was published, distributed, and posted to the TFS website. See Appendix B.**

**Subtask 2.5.** TFS will analyze and compare BMP implementation data collected during this project to past TSSWCB projects (FY02, FY05, and FY08) to identify future educational outreach needs.

- **TFS compiled and analyzed BMP implementation monitoring data collected during this project with data collected from past TSSWCB projects (FY02, FY 05, FY 08).**
- **Future educational outreach needs identified from this analysis include continued emphasis on implementing forest road, stream crossing, and site preparation BMPs.**

**Subtask 2.6.** TFS will monitor 35 agency installed wildfire suppression firebreaks for

compliance with the firebreak BMP/rehabilitation guidance in the state fire operations plan. Results from firebreak monitoring will be included in the project final report.

- **Developed and tested a new field monitoring form for wildfire suppression firebreaks.**
- **The unpredictable weather during the course of the project prevented TFS from completing all of the evaluations. Wet weather and flooding reduced fire activity significantly followed by drought with extreme fire activity, extended containment and suppression operations, and overall unsafe conditions for personnel to conduct monitoring. This task will be completed, though not in time for this final report.**

**Subtask 2.7.** TFS will quantify load reductions resulting from BMP implementation. This will be done utilizing the Forest Land Erosion Evaluation for East Texas methodology. Other methods, such as Texas BMP Evaluation Tool (TBET), for quantifying load reductions will be investigated.

- **Load reductions were quantified using the Forest Land Erosion Evaluation for East Texas method. See Appendix B.**
- **Met with USDA ARS and TSSWCB in Temple to discuss the ability of the Texas BMP Evaluation Tool (TBET) to quantify load reductions from forestry BMP implementation. Since this tool is primarily an agriculture based model, current applicability is limited.**

### **Deliverables**

- 150 site BMP implementation evaluations  
**150 site evaluations were conducted.**
- BMP Implementation Rate Evaluation Report  
**See Appendix B.**
- Load reductions resulting from BMP implementation  
**See Appendix B.**

### **TASK 3: Education and Outreach**

**Objective:** To increase water quality / BMP awareness to forest landowners, natural resource professionals, and the general public throughout Texas. Specifically, TFS will focus on the following priority watersheds: Lake O' the Pines, Adam's and Cow Bayou, Attoyac Bayou, Sabine River Basin, Middle Trinity River Basin, Cedar Bayou, Lampasas River, Plum Creek, Geronimo Creek, Upper Llano River, and Leon River.

**Subtask 3.1** TFS, in cooperation with project partners, will conduct a minimum of 4 BMP training workshops for loggers, foresters, and landowners per year for the promotion of

conservation practices. Trainings may include, but are not limited to, core logger BMP workshops, forest road BMP workshops, stream crossing BMP workshops, and other appropriate workshops that promote BMP implementation.

- **A total of 27 BMP training workshops were conducted, reaching 450 people, including:**
  - **Regular logger BMP workshop (7)**
  - **Logger/Industry BMP Refresher workshop (9)**
  - **BMP and Natural Resources class for TFS (9)**
  - **BMP / Water Resources field day for TFS (1)**
  - **BMP Dozer Operations Course for TFS (1)**
- **BMP training was also provided to the following:**
  - **Campbell Global**
  - **Hancock Forest Management personnel and contractors**
  - **MeadWestvaco**
  - **TPWD Biologists**



*BMP training session for Georgia Pacific procurement foresters.*

- **Conducted a BMP session at the Professional Logger Occupation Training School (PLOTS) in Nacogdoches to individuals wanting to enter the logging workforce.**
- **Participated in the TSSWCB funded *Texas Riparian and Stream Ecosystem Education Program* project administered by Texas Water Resources Institute.**
  - **2013 Plum Creek Riparian Workshop (Lockhart)**
  - **2013 Upper Llano River Riparian Workshop (Junction)**
  - **2013 TRA and TXSER Riparian Workshop (Junction)**
  - **2013 Carters Creek Riparian Workshop (College Station)**
  - **2014 San Bernard River Riparian Workshop (Wharton)**
  - **2014 Cedar Bayou Riparian Workshop (Mt. Belvieu)**
  - **2014 Upper Guadalupe River Riparian Workshop (Kerrville)**
  - **2014 Double Bayou Riparian Workshop (Hankamar)**
  - **2015 Dickinson Bayou Riparian Workshop (LaMarque)**

- **2015 Leon River Riparian Workshop (Hamilton)**
- **2015 Proper Functioning Condition workshop (Belton)**

**Subtask 3.2** TFS will distribute quarterly newsletters (4/year) to forest landowners (*Texas Water Source*) in select priority watersheds and natural resource professionals (*Forest Stewardship Briefings*) across the state providing information on sustainable forestry and water resource protection. TSSWCB must approve all project-related content in any informational materials and promotional publications prior to distribution.

- **Seven quarterly issues of *The Texas Water Source* were published and mailed to landowners in the Attoyac Bayou and Middle Trinity watersheds.**
- **Nine quarterly issues of the *Forest Stewardship Briefings* newsletter were published and mailed to approximately 1,330 natural resource professionals, state representative and senators, county commissioners and judges, and others statewide.**

**Subtask 3.3** TFS, in cooperation with project partners, will coordinate a minimum of 3 county landowner association workshops per year to promote sustainable forestry and water resource protection during forest operations.

- **Project foresters coordinated and presented at numerous forest landowner workshops. These meetings focus on the importance of using BMPs and practicing sustainable forestry. Presentations were made at the following meetings:**
  - **2012 Rusk/Smith County (Overton; 30 attendees)**
  - **2012 Polk County (Livingston; 60 attendees)**
  - **2013 Montgomery/Harris County**
  - **2013 Harrison/Gregg/Panola (Marshall; 75 attendees)**
  - **2013 Houston County (Crockett; 95 attendees)**
  - **2014 Jasper/Newton County (Jasper, 98 attendees)**
  - **2014 Tyler County (Woodville, 130 attendees)**
  - **2014 East Texas Timberland Owners (Jefferson; 87 attendees)**
  - **2015 Angelina/Nacogdoches Counties (Nacogdoches; 68 attendees)**



SFI-spons

owners.

**Subtask 3.4** TFS will develop and provide educational information to absentee forest landowners on sustainable forestry and water resource protection through activities that may include, but are not limited to, semiannual out of state, absentee landowner newsletter (*Forest Landowner Briefings*), project blog, presentations at landowner association meetings, online BMP picture gallery, and appropriate use of social media (i.e., Facebook). TSSWCB must approve all project-related content in any informational materials and promotional publications prior to distribution.

- **Published three editions of the annual *Forest Landowner Briefings* newsletter to 1,900 out of state absentee landowners to raise BMP and sustainable forestry awareness.**
- **Created a new [Forestry BMP Pictorial Directory](#) to show examples of properly implemented BMPs. Information in this directory was distributed to hunting clubs throughout Plum Creek Timber Company’s southern land holdings.**
- **Posted numerous water and BMP related messages on Facebook, Twitter, and the [TFS Water Resources blog](#).**
- **Created a new Water Resources program display and fact sheet.**
- **Coordinated and led the Teacher’s Conservation Institute, Phase III.**
- **Developed the Water Resources section of the *Texas A&M Forest Service: History in the Making* Centennial exhibit at the George Bush Presidential Library.**
- **Edited the Aquatic Science Education Guide developed by the Meadows Center for Water and the Environment for Texas Parks and Wildlife Department.**
- **The BMP display was exhibited at numerous events, including:**
  - **2013 Texas Wildlife and Woodlands Expo in Conroe**
  - **2013 Austin Water Science Expo**
  - **2013 TPWD Outdoor Fool’s Day in Athens**
  - **2014 Forest Family Fun Day and Logging Equipment Show**
  - **2014 Texas Wildlife and Woodlands Expo**
  - **2015 Texas A&M AgriLife Conference Opening Reception**
  - **2015 Texas Wildlife and Woodlands Expo**
  - **2015 Water Week for Houston ISD**



*A new forest land infiltration and runoff model was developed and displayed at the 2014 Texas Wildlife and Woodland Expo in Conroe.*



*Texas A&M Forest Service displayed an exhibit at the Austin Water Science Expo.*

### **Deliverables**

- Notices, agendas, meeting materials, attendance lists, and summaries from all meetings hosted and attended

**See Appendix C**

- Quarterly newsletters

**See Appendix C**

- Educational materials for absentee landowners, as developed and disseminated

**See Appendix C**

### **TASK 4: Technical Assistance**

**Objective:** To provide technical assistance to foresters, landowners, loggers, and other interested groups on the proper implementation of BMPs.

**Subtask 4.1** TFS will provide BMP technical assistance during implementation monitoring evaluations (Task 2) to loggers, landowners, and foresters, if applicable.

- **Project foresters invited all involved parties to participate in BMP implementation monitoring evaluations. This provided an excellent opportunity to deliver technical assistance on BMPs.**

**Subtask 4.2** TFS will provide direct technical assistance on Texas BMP guideline interpretation, implementation, and financial incentive programs (Farm Bill) for water quality protection to individual forest landowners, foresters, and loggers with an emphasis on the priority watersheds

- Project foresters provided valuable and timely technical assistance to numerous landowners through phone conversations, emails, and site visits.
- Presented at the 2014 NCASI Symposium on Forestry BMP Effectiveness
- Presented on BMPs through an American Tree Farm System webinar - “Green and Blue: Best practices for water resources on your Tree Farm.”
- Presented the results of the Texas Forestry BMP Effectiveness Monitoring Project to the Louisiana SAF Annual Meeting.
- Presented on [Forests, Watersheds, and Drinking Water](#) at the Prairie View A&M University Spring Semester 2015 seminar series.
- Participated in the NRCS State Technical Advisory Committee Water Quality Subcommittee
- Conducted BMP field laboratories for Stephen F. Austin State University Forest Ecology and Hydrology students.
- Presented *Forests, Riparian Areas, and Watershed Protection* at the HGAC Riparian Buffer Workshop. Approximately 75 landowners, natural resource professionals, and members of the general public were in attendance.
- Presented [Forests, Watershed, and Riparian Area Protection](#) at the HGAC Clean Water Initiative Agriculture Programs and Invasive Species workshop.
- TFS participated in the HGAC Riparian Buffer Tool planning meeting. This proposed tool would help prioritize stream segments for riparian conservation or restoration.
- Presented at the 2014 TCEQ Public Drinking Water Conference in Austin.
- Presented [Forested Wetlands](#) at the Texas Coastal Watershed Program’s Wetland Economic Benefits workshop.
- Provided technical assistance to the Turtle Bayou Technical Advisory Group.

**Subtask 4.3** TFS, in cooperation with project partners and the Southern Group of State Foresters Water Resource Committee, will develop a web-based, GIS pre-harvest BMP planning tool to help protect water resources during forest operations.

- Developed the [Plan My Land Operation](#) application on the Texas Forest Information Portal. This application enables users to map a custom area, identify sensitive areas (streams, wet areas, steep slopes), add custom buffers to streams, determine watershed area and culvert size for a point along a stream, determine the elevation profile of a linear feature, and generate a land operation planning report with BMP recommendations.

**Subtask 4.4** TFS will produce a minimum of 2 video clips demonstrating proper implementation of common forestry BMPs, which may include, but are not limited to, installation of waterbars, wing ditches, culverts, logging slash, and other appropriate practices that protect water quality during forestry operations.

- Produced two video clips and posted on [YouTube](#) showing proper implementation of water bar and wing ditch construction.

## Deliverables

- Web-based, GIS pre-harvest planning tool

See Appendix D or <http://tfsfrd.tamu.edu/planmylandoperation>

- 2 Video clips of BMP installation

See Appendix D or [YouTube](#)

## **TASK 5: Technical Assistance / Education / Outreach – Emerging Issues in Forestry**

**Objective:** To increase water quality / BMP awareness and provide technical assistance to landowners, natural resource professionals, and the general public on emerging issues.

**Subtask 5.1** TFS will promote land stewardship in Central Texas to prevent water quality impacts through education, outreach, and technical assistance. Activities may include, but are not limited to, stewardship planning, riparian restoration, environmental awareness training, and other appropriate outreach methods.

- **Provide technical assistance on soil erosion, wetland restoration, and watershed management to Central Texas landowners.**
- **Developed fact sheets on *Managing Riparian Areas* and *Operational Planning and Layout* for the Central Texas Land Stewardship Workshop.**
- **Participated in a WSEP stakeholder meeting in Junction regarding a proposal developed by the Aquifer Group.**
- **Assisted with the Elm Creek Restoration reforestation survival assessment in Bell County.**
- **Provided BMP recommendations for the Parrie Haynes Fuels Project located in the Lampasas River Basin**
- **Provided technical assistance to the Miller Springs Alliance on managing invasive species within riparian areas**
- **Attended the NRCS Conservation Planning course.**
- **Attended a meeting hosted by The Meadows Center for Water and the Environment and Institute of Renewable Natural Resources to discuss ideas for a publication focusing on impacts to water resources from changes in Texas land trends.**
- **Attended and participated in the Lampasas River Texas Watershed Steward workshop.**
- **Attended Riparian Management workshop in Oakalla, TX.**

**Subtask 5.2** TFS will provide education and technical assistance on soil erosion control practices to prevent water resource impacts from occurring after wildfires. Brochures, fact sheets, and technical guides will be developed and distributed. TSSWCB must approve all project-related content in any informational materials and promotional publications prior to distribution.

- **Conducted an interview on “Soil Erosion Control After Wildfire” for the Meredith Corporation and Learfield Communication’s *Living the Country Life* radio program.**
- **Developed BMPs for fuel reduction / wildfire mitigation projects.**
- **Collected and analyzed SMZ regeneration data collected from field plots on sites burned during the 2011 wildfire season in Nacogdoches County.**
- **Conducted a soil erosion field inspection and participated in the initial rehabilitation project development discussion at the University of Texas property at the Davis Mountains.**
- **Attended the Oasis Fire Recovery Tour for natural resource professionals.**
- **Exhibited and facilitated discussion at Oasis Fire Recovery Landowner workshop.**
- **Participated in Lake Granbury Fuels Mitigation-Fire Risk planning meeting.**

**Subtask 5.3** TFS will coordinate a minimum of 4 workshops/tours and provide technical assistance on land stewardship and wildfire rehabilitation.

- **Conducted 3 Land Stewardship Workshops for Contractors, reaching approximately 70 people.**
  - **Buchanan Dam – January 2014**
  - **Goliad – October 2014**
  - **Junction – February 2015**



*The first Central Texas Land Stewardship Workshop for Land Contractors was held in Buchanan Dam in January 2014. Despite the poor weather, attendees were engaged and gave positive reviews.*

- **Conducted educational landowner workshops focused on land stewardship and water resource protection in the Cross Timbers ecosystem**
  - **Weatherford**
  - **Decatur**
- **Conducted a field tour of the Bastrop County Wildfire Complex at Bastrop State Park for multiple groups**
  - **72<sup>nd</sup> Annual Meeting of SWCD Directors**
  - **SGSF Forest Management Committee**
  - **National Fire Protection Association**
  - **Cohort III, AgriLife Advanced Leadership Program**
- **Conducted field tours of the Parrie Haynes Ranch for TFS staff to support stewardship plan development.**
- **Presented on “Land Management and Water Resources” at the Bell County Stewardship Expo**
- **Conducted a Woodlands, Wildlife, and Drought workshop in Franklin for Leon and Robertson County landowners.**



*Woodlands, Wildlife, and Drought workshop to Leon/Robertson County landowners.*

### **Deliverables**

- Educational materials including brochures, factsheets, and technical guides, as developed and disseminated

**See Appendix E**

- List of water resource meetings attended

**See Appendix E**

## **TASK 6: Regional Inter-agency / Cooperator Coordination**

**Objective:** To effectively coordinate project efforts with natural resource agencies and project participants.

**Subtask 6.1** TFS will host annual Wetland / BMP coordinating committee meetings.

- **TFS hosted 2 Wetland / BMP Coordinating Committee meetings.**
  - **(2014) Bastrop**
  - **(2015) Waco**



*The 2014 Wetland / BMP Coordinating Committee was held in Bastrop.*

**Subtask 6.2** TFS will work with local media which may include but not limited to, cooperating agency publications, trade magazines, newspaper, and other appropriate means to promote project activities

- **Presented a webinar on *The Importance of Forests to Water Resources* for the National Rural Water Association’s Water University.**
- **Published 21 BMP Q&A format articles in the magazine *Texas Logger*, the quarterly publication of the Texas Logging Council.**
- **Worked with a writer for a story on sustainable forestry, BMPs, and water resource protection in the Texas Department of Agriculture’s *Go Texan* magazine.**
- **Published a four part series of articles with the Texas Rural Water Association’s magazine “Quench” regarding the importance of forests to water resource protection.**
- **Conducted a media event recognizing the 3000<sup>th</sup> logger to attend the core BMP workshop.**



*TFS recognized the 3000<sup>th</sup> logger, Ryan Arwine, to attend the BMP training workshop. Pictured from left: Charlie Gee (TLC Coordinator), Hughes Simpson (TFS), Ryan Arwine, Tim Rodrigues (TLC President)*

**Subtask 6.3** TFS will participate and assist in the coordination of the 2013 four-state BMP meeting in Louisiana. This meeting is conducted biennially and brings together a broad group of stakeholders from Arkansas, Louisiana, Oklahoma, and Texas.

- **TFS hosted the 2013 Four State meeting in Longview.**



*The 2013 Four State Forestry BMP conference included a field tour. Participants viewed BMP implementation on a wildfire salvage harvesting operation.*

**Subtask 6.4** TFS will actively participate in the Southern Group of State Foresters Water Resource Committee.

- **Participated in SGSF Water Resource Committee annual meetings and conference calls:**
  - (2013) Savannah, GA
  - (2014) New Orleans, LA
  - (2015) San Antonio, TX
- **Presented a poster on the water quality protection efforts of the SGSF Water Resources Committee at the 2012 SAF National Convention.**
- **Participated in the BMP Policy Panel concurrent technical session at the 2012 SAF National Convention. Presented information on non-regulatory state forestry BMP programs.**
- **Provided updated water resources / BMP content for the SGSF website (<http://www.southernforests.org/water>).**
- **Represented SGSF Water Resources Committee on planning committee for 2014 Forestry BMP Symposium at Virginia Tech.**

#### **Deliverables**

- Notices, agendas, meeting materials, attendance lists, and summaries from all meetings attended

**See Appendix F**