
File Code: 1950
Date: September 27, 2016

Dear Interested Public:

Fiscal Year 2016 (FY16) has been a busy one within the *Indiana Bat Habitat Restoration Project* area. If you have just a few moments, I'd like to update you on what we—with help of great partners—were able to accomplish during the third year of this 12-year project. I've attached a few photos showing some of the work we've done.

Two maps are also attached. The first map shows treatment unit locations for the activities completed in FY16 and described below. The second shows the vicinities of activities planned in FY17 (October 1, 2016 -September 30, 2017); please be aware that on this map, activities will not occur on every acre of the areas shown. Treatment unit boundaries and individual burn blocks have not been determined yet. Additional work in other parts of the project area may be planned as funding, weather and personnel permit.

Comparison of Alternative 2 and Alternative 3 within the Sylamore Experimental Forest:

We will begin implementing management activities in FY17 for the side-by-side comparison of Alternative 2 (the selected alternative currently being implemented throughout the project area) and of Alternative 3 which limits herbicide use to control of non-native invasive plants. Over the next six years we will compare the effectiveness of these alternatives at achieving this project's objectives.

Forest Road 1140 divides the Sylamore Experimental Forest into east and west sides which will serve as management focus areas. The entire area is approximately 4,280 acres; the west side is 2,405 acres and the east side is 1,875 acres. Stand exams have been conducted on the entire area and the baseline for average canopy closure within the Sylamore Experimental Forest has been determined to be 80 percent.

Alternative 3 will be implemented on the east side of Forest Road 1140; herbicide use will be limited to treating non-native invasive plant infestations. For FY17, 229 acres of commercial thinning are planned as part of the Blue Steer Timber Sale. In addition to the commercial timber harvest, there are approximately 1,200 acres of wildlife stand improvement work planned on the east side of Forest Road 1140.

Alternative 2 will be implemented on the west side of Forest Road 1140. We are still wrapping-up activity planning for this management focus area, but should be ready to begin implementing before next spring. Planned work will include commercial timber harvest using the thinning and shelterwood harvest methods, as well as wildlife stand improvements, timber stand improvements, and site preparation for natural regeneration.



Prescribed Burning and Associated Actions:

Conditions were more favorable for prescribed burning operations than they were in FY15, and we were able to complete burns on 5,051 total project area acres. One 918 acre unit was burned the first week of April; the remaining burning operations occurred between December and March. Approximately 1.3 miles of new mechanical fire containment line were constructed to protect adjacent private property for a burn in the vicinity of the Bethel Springs community; existing roads and natural features were utilized for the remaining operations.

Mechanical work to modify fuel structure was completed on 35 acres in FY16; areas for mechanical fuel work in FY17 have not been selected at this time.

Burn units for FY17 are shown on the attached map of planned activities. Needs for mechanically constructed prescribed fire containment line to implement these burns are currently being assessed.

Silvicultural Treatments and Associated Actions:*Timber Harvests*

In FY16, five commercial timber sales were offered and sold. The sales occurred on a total of 1,799 acres with 1,434 acres in thinning cuts and 365 acres in regeneration cuts.

Following this fiscal year's regeneration cuts, approximately 5 percent of the project area's forested acres will be in the 0-10 year age class. Previously approved regeneration cuts that were in progress when this project was initiated and were completed this year contributed toward this total.

National Forest System roads specified in the aforementioned timber sale contracts totaled 10.3 miles; these roads will be maintained to Forest Service standards by the respective timber purchasers. Other road work associated with FY16 harvest operations included 2.2 total miles of temporary road construction to reduce the length of skid trails to specified haul roads.

No road reconstruction was required to facilitate timber extraction in FY16, and we do not anticipate any road reconstruction will be required for this purpose in FY17.

In FY17, timber sales will be offered from within the areas shown on the attached map of planned activities. Lay-out of individual sale area boundaries has not been completed and specified haul roads have not been identified at this time.

Site Preparation

Site preparation with chemical for natural regeneration was accomplished on 121 acres in FY16. In FY17, 700 acres of site preparation with chemical is tentatively scheduled to occur within the areas shown on the planned activities map.

Timber Stand Improvements

No timber stand improvement treatments (TSI) with herbicide were implemented in FY16, but 1,579 acres of TSI with saws was accomplished. The felled stems were left on site.

Areas where TSI treatments are planned for FY17 are shown on the attached vicinity map. They will include 749 acres of chemical tree release and weeding, 454 acres of tree release and weeding with saws and 9 acres of pre-commercial thinning with saws.

Reforestation

No planting was done in FY16, and no planting activities are planned for FY17.

Non-native Invasive Plant Treatments:

This year we made an error. I feel responsible to disclose to you that due to an issue with contractor scheduling and an administrative error, the total number of acres that were treated with herbicide to control non-native invasive plant treatments in FY16 exceeded our annual implementation cap for this activity by 250 acres.

The reason for this overrun was an administrative error. We simply issued contracts for too many acres. In FY15 some of our contract applications were not completed because the contractor started too late in the year. We proceeded in FY16 by issuing additional contracts, and lost sight of the additional FY15 hold-over treatments which contractually had to be completed in FY16. The result was the FY16 and hold-over FY15 treatments were all accomplished this year for an excess of 250 acres above the treatment threshold of 1,100 acres per year I promised.

I have reviewed our process and feel confident that an error such as this will not happen again. I would like to point out that our average for FY15 and FY16 is 1,025 acres, which is below the threshold for herbicide application. All treatments have been monitored and were successful. Additionally, water quality monitoring indicates no negative effects, as would be expected from proper application.

Wildlife Stand Improvement Treatments:

Forest Service personnel completed 58 acres of mechanical wildlife stand improvement (WSI) work in FY16. Though a contract to complete 275 acres of mechanical wildlife stand improvements (WSI) treatments within degraded glade habitat was awarded in FY16, none of that work will be implemented before the end of this fiscal year. That work is tentatively scheduled to be done sometime this fall.

With FY17 funding, additional mechanical WSI treatments (cedar removal) are planned within same area as non-native invasive plant treatments will be done. We have not identified specific treatment units for the WSI work yet, but the total number of acres to be treated would include the 275 acres of mechanical WSI treatments carried forward from the FY16 contract and will not exceed the annual implementation cap of 2,000 acres set for this project. Because these treatments are consistent with those of glade restoration strategies, increases in species diversity and other benefits for glade-dependent plant and animal species are also expected.

Activities to Protect Hibernacula from Human Disturbance:

Corrosion of the locking mechanism and other parts on the only Indiana bat hibernaculum gate that existed prior to this project's development was found. To ensure the hibernaculum entrance was protected, that gate was removed and replaced. The replacement gate's design was approved by the US Fish and Wildlife Service and the AR Game and Fish Commission.

Monitoring:

Mist Netting Surveys

Each summer, mist netting surveys are conducted in areas where tree cutting and prescribed burning activities are planned to determine presence or probable absence of Indiana bats in those vicinities. Cutting trees five inches or more in diameter at breast height and prescribed burning activities are restricted to December 1- March 31 for two years within a 0.6 mile radius of any capture site.

The final report detailing results of mist netting surveys done this summer has not yet been provided by the contractor; we have been informed, though, that no female Indiana bats were captured.

Canopy Closure

During the first year of project implementation, we established 100 randomly selected permanent monitoring points for the purposes of measuring average canopy closure of the project area every three to five years. The average baseline measurement from these points disclosed in the FY14 project update was 87 percent. Next summer, average canopy closure measurements will again be taken at the permanent monitoring points. The results will give us an idea if we are moving toward meeting Forest Plan standards for average canopy closure within the Indiana bat conservation zone or if adjustments will be required. We will disclose the results in next year's project update.

Regeneration

In naturally regenerated stands, stocking surveys show stocking rates meet levels required by the Forest Plan for species of management interest.

Effectiveness of Treatments to Control Non-Native Invasive Plants

Areas treated in FY15 were revisited this year. Treatment efficacy ranged from approximately 80 percent along roadsides and 70 percent in glade habitats to 60 percent within a treatment unit in Compartment 54.

I consider our ability to control non-native invasive plants key to project success, and this year non-native invasive plant control proved to be a very difficult problem. My field staff is working very hard to control many non-native invasive plant species. We are noticing that despite very good success with killing many individual plants, sericea lespedeza in particular, keeps coming back from seed. Areas which were treated seemingly successfully this spring are again invaded this fall. While the treatment efficacy is good, it may not be enough to adequately control non-native invasive plant infestations. This

year's abundant rainfall coupled with more canopy gaps created by management have bolstered the spread of non-native invasive plants more than we anticipated; it has me considering if this project's annual implementation limit for non-native invasive treatments is sufficient to effectively control them. If I find that limit is not sufficient, I will either initiate a supplemental NEPA analysis to amend the project's decision with regard to this activity or initiate a new NEPA analysis to address this matter separately.

Herbicide in Streams

Per the protocol outlined in the *Ozark-St. Francis National Forests' Herbicide Monitoring Plan for Water Quality*, water samples are collected from a water course in close proximity to treated areas and sampling sites are selected to incorporate multiple application units above the site.

Analysis results of FY15's water samples had not been received when I reported that year's activities; they are described below. Water samples for FY16 have been collected, but the analysis results have not yet been received.

Glyphosate was used on the majority of acres treated in FY15. Triclopyr was only used on 100 of the 690 total acres treated; therefore, water samples were collected for analysis from streams near glyphosate application units. The impact threshold set for glyphosate with this project is 0.35 parts per million. This threshold was not approached in any of the samples collected in FY15. One sample had a glyphosate concentration of 1.51 parts per billion (=0.00151 parts per million), and concentrations of the remaining samples were below detectable limits (<0.500 parts per billion).

If you have questions:

If you have any questions about this project or any other project we're working on, or if you or your organization is interested in working with us, please let me know. I'd be more than happy to speak with you or meet with you in person. My work often takes me away from the desk, but I you can always reach me by email at jrmccoy@fs.fed.us.

Sincerely,

/s/ Jim McCoy

JIM MCCOY
District Ranger

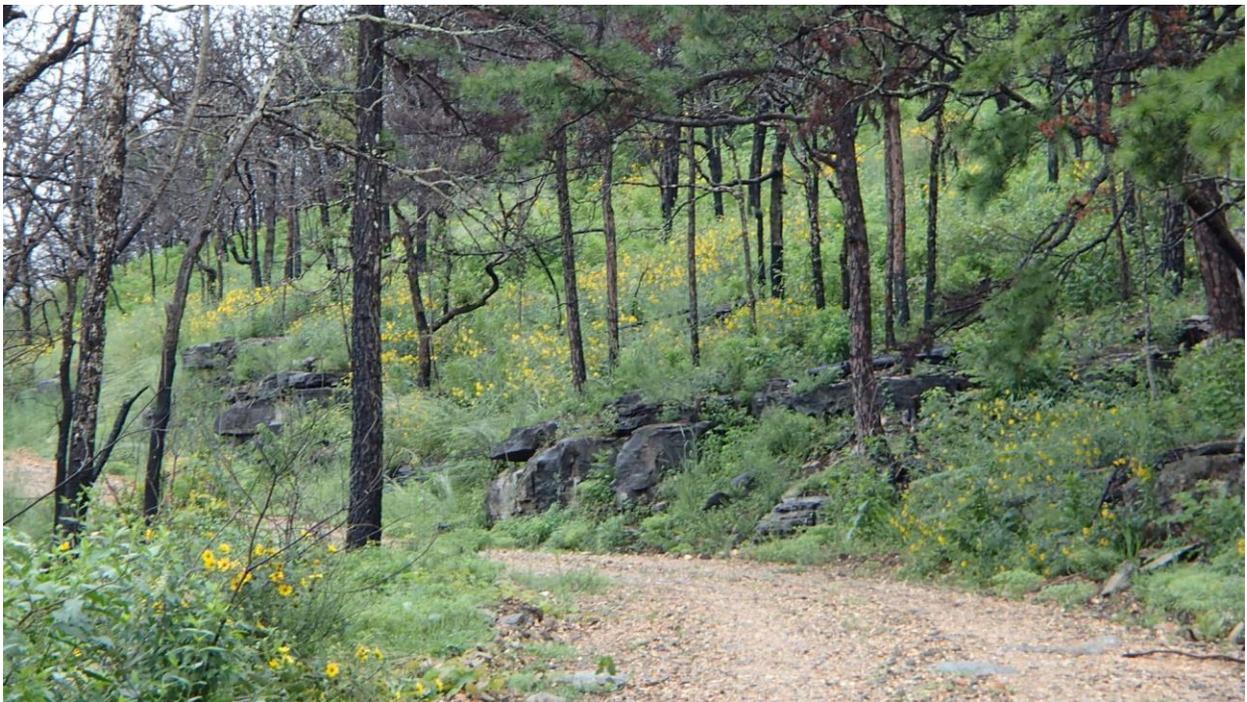
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Attachments (3)

Attachment 1

Photos from the Indiana Bat Habitat Restoration Project Area



Native plant response to prescribed fire and non-native invasive plant control



Native wildflower response to cedar removal, prescribed burning and non-native invasive plant control



Sericea lespedeza control along a roadside



Contract non-native invasive plant treatment



An example of mechanical cedar removal on Panther Mountain. Cut cedar are shown laying on the ground.



Native plant response to mechanical treatments, non-native invasive plant control and prescribed fire.

Indiana Bat Habitat Restoration Project

Ozark-St. Francis National Forests
Sylamore Ranger District
Stone and Baxter Counties, Arkansas

- Major Streams
- Highways
- Project Area
- Sylamore District Boundary

Project Activities Accomplished in FY16

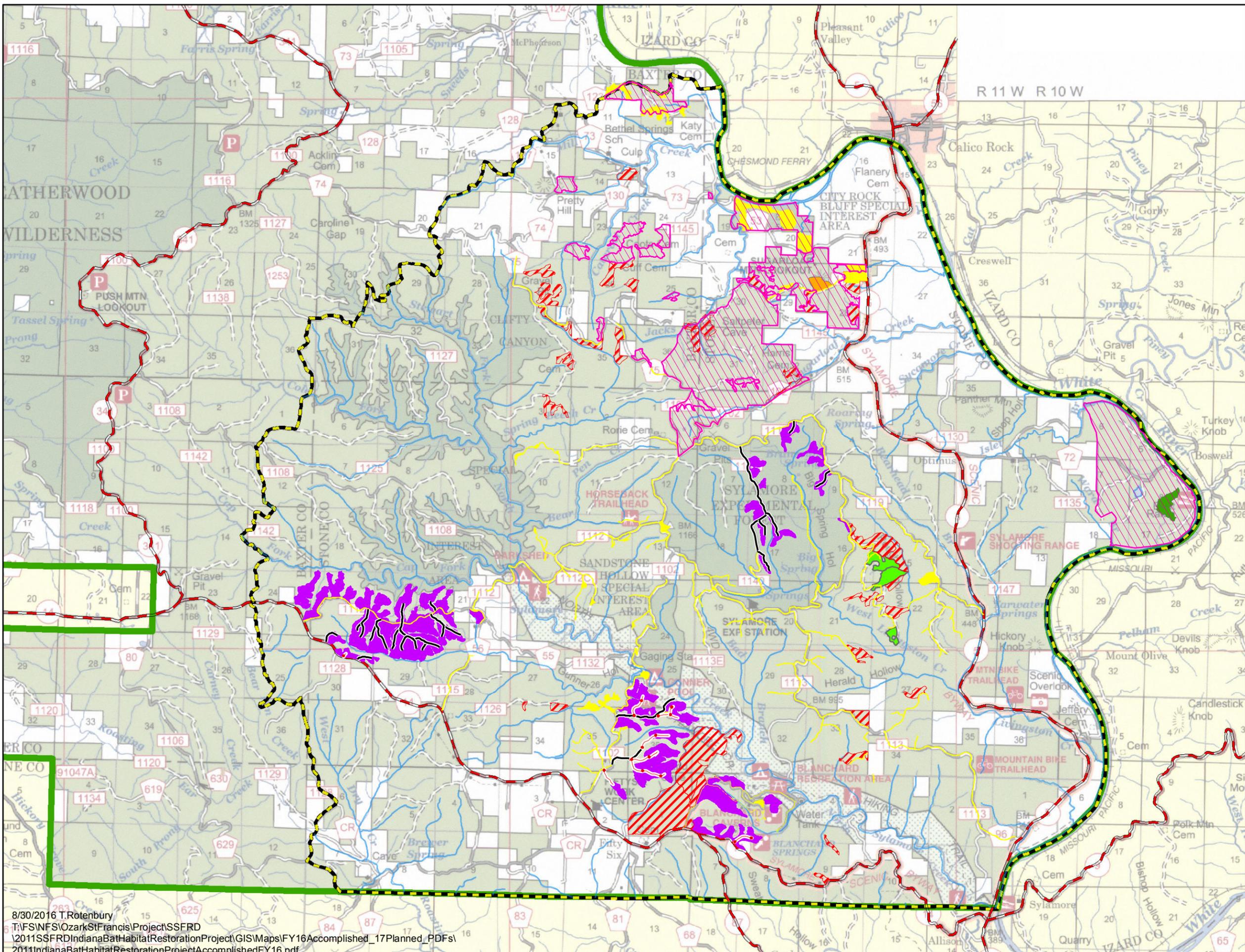
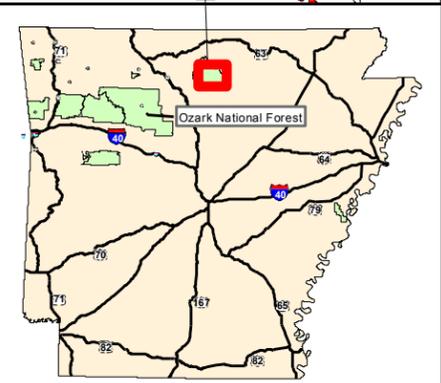
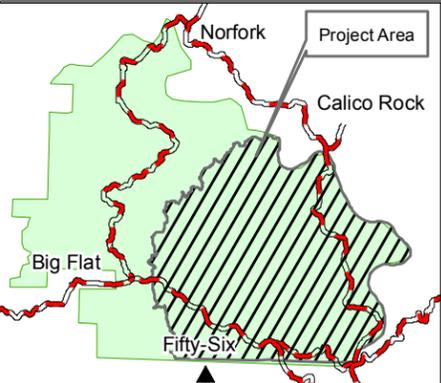
- FY16 Timber Stand Improvement with Saws - 1,579 Acres
- FY16 Site Prep with Herbicide - 121 Acres
- FY16 Prescribed Burning - 5,051 Acres
- FY16 Non-Native Invasive Plant Treatments with Herbicide - 1,350 Acres
- FY16 Timber Sales - 1,799 Acres
- FY16 Wildlife Stand Improvement Mechanical - 58 Acres
- FY16 Mechanical Treatment to Modify Fuel - 35 Acres
- FY16 Purchaser Haul Road Maintenance - 10.3 Miles
- FY16 Temporary Road Work - 2.2 Miles

0 1.5 Miles

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The Forest Service uses the most current and complete data available. GIS data and product accuracy may vary. The map may be developed from sources of differing accuracy, accurate only at certain scales, based on modeling or interpretation, incomplete while being created or revised, etc. Using GIS products for purposes other than those for which they were created, may yield inaccurate or misleading results.

The Forest Service reserves the right to correct, update, modify, or replace GIS products without notification. For more information, contact: Ozark-St. Francis National Forest, 605 West Main, Russellville, AR 72801-3614, (479) 964-7211



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*Vicinity of Activities for FY17

- FY17 Planned Wildlife Stand Improvement
- FY17 Planned Prescribed Burns
- FY17 Planned Timber Sales
- FY17 Planned Timber Stand Improvement
- FY17 Planned Site Preparation for Natural Regeneration - Chemical
- FY17 Planned Non-Native Invasive Species Treatments

*Note: Only portions of the areas shown for Timber Sales, Wildlife Stand Improvement & Non-native invasive plant activities will receive treatments.



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