Savage River State Forest

Annual Work Plan

Fiscal Year 2011

Prepared:

WF
(Forest Manager)

Reviewed:

(Regional Manager)

Reviewed:

(land Acquisition & Planning)

Approved:

(Environental Specialist)

6/29/10

6-30-10

7/9/10

7/13/10
Savage River State Forest
Fiscal Year 2011 Annual Work Plan Proposals

A. FOREST OVERVIEW

Savage River State Forest is approximately 54,446 acres in size and is situated in the northeastern quadrant of Garrett County of Western Maryland. It is a second growth mixed hardwood forest dominated by oak species, sugar and red maple, black cherry, hickory and ash. Owing to high rainfall and certain geographic and/or topographic features, Savage River State Forest contains many excellent quality growing sites stocked with superior quality trees. The forest contains approximately 4000 acres of conifer plantations, established in the 1940’s following state acquisition. Red pine is the dominant tree species within these plantations but other conifers include white pine, Norway spruce, larch, and Scotch pine. These plantations were established as nurse crops to rehabilitate abandoned and depleted farm fields, with the long-term goal of conversion back to native hardwoods as appropriate.

Savage River State Forest has been intensively managed for over 60 years. Forest harvest and grooming operations are undertaken to thin overstocked stands, to effectively deal with public safety concerns, to harvest mature or diseased/dying trees, to improve habitat for certain wildlife species, to assist and provide for certain research needs, to address aesthetic concerns, and to increase the proportion of age/height diversity of forested stands. The benefits of these treatments are evident and are substantial – including improved wildlife habitat, abundant mast yields, and a forested landscape that is healthier, more biologically diverse, and more resistant to disease and insect attack. Gypsy Moth defoliations were heavy in 2006 and very heavy in 2007, denuding approximately 25,000 acres which is half the forest. The spray suppression program was boosted to over 30,000 acres in 2008 and a very wet spring and summer assisted via fungal infections of the caterpillars to apparently wipe this destructive insect out. In the aftermath of these defoliations, tree mortality among the preferred species is very high in those areas which were defoliated two consecutive years. The areas of heaviest tree mortality are the Middle Fork Wildland, Big Savage Wildland, Parts of Meadow Mountain, Fairview Road vicinity, and the upper slopes above Monroe Run and Poplar Lick. Salvage of dead trees will take place where practical and permissible. Much of the heaviest tree mortality has occurred in areas restricted from timber harvest administratively or in areas of steep and restrictive terrain. Accessible areas will be salvaged as markets permit. It is anticipated that fuelwood cutters will aggressively harvest dead trees which are accessible from the roadsides, and in fact this trend has already begun.

B. ANNUAL WORK PLAN SUMMARY

The FY-2011 Annual Work Plan for Savage River State Forest was formulated during the fall and winter of 2008/2009. It contains projects to be undertaken in the areas of Silviculture, Maintenance, Special Projects, and Recreation.

Savage River will harvest approximately 0.750 million board feet of hardwood sawtimber through implementation of the FY-11 Annual Work Plan. The plan involves three proposed hardwood silvicultural projects within the General Management Zone of the forest. Harvest areas
range from 20 acres to 60 acres, with the average being 38 acres. The program involves Commercial Thinnings on 74 acres, Deferment Harvests on 105 acres, and Regeneration Harvests on 50 acres.

The following requirements are pertinent to all silvicultural treatments. In effect, these are “Best Management Practices” and are taken into account when preparing a sale, supervising an ongoing operation, closing an operation or otherwise embodied within the contract itself.

- Continue to drain, revegetate, and stabilize all haul roads, skid trails and landings
- Gate or otherwise close forest access roads to public use following completion of each operation.
- Provide standard sediment control (filtration strips), such as “buffers” adjacent to streams, wetlands and other drainages and prohibit cutting within
- Restrict operations to 50% or less slope and provide wildlife corridors as appropriate.

C. MAINTENANCE PROJECTS

This category involves a complex mix of land management duties which require a considerable commitment with respect to manpower as well as equipment. Staff and budget reductions have limited maintenance work to the most critical areas such as boundary maintenance, some trail work, minimal road repair, and campsite maintenance. It is our intention to continue the refocusing of efforts this year on forest road upgrades to include brush hogging berms and surface repair on twenty miles of roadway. Campsites will be revitalized with fire rings and new picnic tables as necessary. The gates located throughout the forest will be analyzed for sufficiency and upgrades will be made as necessary. The state forest shooting range is very popular and will be maintained in an appropriate manner. State forest trails will be addressed as resources permit. Many of these are in need of clearing due to regrowth following the ice storm of 2002. The Big Savage Trail is, and has been, the focus of special attention due to tree mortality induced by extensive ice damage followed by severe gypsy moth defoliations. Vegetative regrowth along much of the trail is so aggressive that locating the trail itself is often difficult even following annual brushing out by the MCC Crew as well as in house staff. Also, the use of herbicides will be explored to minimize mowing along roads and trails as well as in front of difficult to mow areas such as overlooks.

D. RECREATION PROJECTS

Overview

Management of recreational opportunities within the Savage River State Forest cover an extremely broad spectrum of issues related to public land management. Issues continually change and evolve as a result of new recreational forms, changing land use strategies, and changes necessitated by the changing natural world. The lands within the Savage River State
Forest continue to provide visitors with a wide variety of recreational opportunities. Camping, trail use (ORV, mountain bike, X-C skiing, hiking), and day use activities take up the bulk of our time and energies in terms of planning and routine maintenance just to meet the current levels of use. Demand for expansion of the ORV opportunities is unprecedented but environmental concerns over even the existing level of use are significant. Other recreational activities such as hunting, fishing, bird-watching, and nature appreciation are substantial in terms of numbers of users but normally require little more than maintenance of parking areas and distribution of informational literature and appropriate signage. The following is a listing of currently planned recreational actions and programs, which will be occurring within the FY 2011 and subsequent work plan efforts. All of these projects are open for public comment through the annual work plan process. Some of the more complex projects will require extended periods and processes of environmental review, or may require regulatory changes. Most of the areas referenced in this section can be examined in the maps within the appendix section.

For organizational purposes this section of the annual work plan is broken down into three subsections as follows:

I. Recreation management in developed areas
II. Recreation Management in undeveloped areas
III. Interpretive efforts pertaining to Stewardship and Conservation.

Recreation Management in Developed Areas

Camping

Camping remains a popular activity within Savage River State Forest (55+ sites). The campsites within Savage River State Forest are primarily primitive in nature. Normally they consist of a table and fire ring set at an appropriate location. However, given evidence of resource degradation due to over use, we are beginning to develop a system of closure/rehabilitation for the more heavily used campsites. Summer weekends with good weather will see most of these sites filled. Certain hunting seasons as well as fall color peaks will also give rise to high rates of occupancy. Typically campers prefer to camp along streamsides. Additional sites were installed during the summer of 2008 while others were closed to partially offset this demand. Unfortunately, soils and plant life in these areas are fragile, and we must actively work to educate the public as to the damage they are doing through poor or improper camping techniques. In addition the disposal of human waste as a result of camping intensity is becoming more and more problematic. Our staffs are becoming more actively involved in expounding Leave No Trace (LNT) ethics to the public. It is our hope that the public will be open to the LNT message and will adapt their camping practices to better protect the area's natural resources. In this process they will also likely become more sensitive and better informed users of our natural resources. Signage, interpretive efforts and visitor handouts will provide LNT informational pieces to the public.
Recreation Management in Undeveloped Areas

Trails

Trail usage, planning, and management will likely be a key focus for at least the next 5 to 10 years within the framework of our recreational management strategies. Currently planning exercises are underway to look at the best opportunities to incorporate existing trails into more fully functional trail systems to better meet public demand. Public interest and user trends all point to a renewed emphasis on and need for well planned and properly maintained trail systems to support a wide variety of recreational uses in an environmentally responsible manner. Additional consideration must also be given to the timing of trail usage and guidelines for maintenance so that we do not create unreasonable conflicts for wildlife populations. One of our greatest desires is to work with organized trail groups in a cooperative manner to improve our trail systems. We continue to make some headway each year, but sense that there are still untapped opportunities in this area which could greatly assist in making our trails much more attractive and useful to the public.

Off-Road Vehicles

Off road vehicle trails continue to be a topic of discussion in terms of the proper format and facilities which will be necessary to accommodate their use. The discussion is compounded by the wide variety of vehicle types included under this category. Jeeps and large four-wheel drive trucks, snowmobiles, trail bikes, and smaller four wheel drive ATVs each form a potentially separate and distinct group of users who seek different types of riding experiences. Our greatest challenge in meeting the needs of these groups is first to educate the public as to the proper methods and conditions under which they may utilize our state forest lands. We are continuing to evaluate existing ORV trails to determine their appropriateness for continued use, as well as investigating potential new opportunities to improve offerings to these user groups. It is becoming more apparent that the forest cannot withstand long term recreational activities which damage vegetation and soils, and cause excessive sources of sediment and erosion in and along local streams. We do desire to continue to provide opportunities to those individuals and groups who motor slowly and passively through the forest, utilizing hardened rocky areas to challenge themselves and their vehicles, or simply riding at a leisurely pace to enjoy scenery and wildlife. This issue is currently under study to determine the future of ATV's on State Forests. The project is being headed up by the director of the MD Wildlife and Heritage Service.

In light of these issues and conditions we will continue in this and future work plans to implement improvement to the existing ORV trail systems utilizing approved Recreational Trail Grant Funds as follows:

Meadow Mountain Trail - The northern section of this trail requires relocation around private property along the East Shale Road to avoid future conflicts. Long term plans are to route the trail further to the east along Meadow Mountain utilizing existing spur roads and some short new connectors to alleviate the conflict problems. Additional work along the trail will entail light grading, placement of stone aggregate over soft areas of the trail, improved signage, improved gating, and rehabilitation of drainage structures. At the southern end of the trail is the site of the
former Bittinger Fire tower. There once was an observation deck at this location so visitors could be afforded a better view of the Monroe Run Valley. It is our intention to construct a new observation deck at this location in the near future.

**Poplar Lick Trail** - Evaluation of this trail will continue. The area remains an enjoyable recreational destination for a wide variety of users; however maintenance costs and evidence of resource degradation are increasing to the point where some difficult decisions are going to need to be made. The resource impacts may ultimately require foot traffic only use at some future point in time. Campsites along this section of trail have become overused and abused by illegal activity. Bridging along the trail will also need to be replaced in the next several years. To contain costs and minimize resource degradation we are considering a size limit on vehicles on this trail. This will allow us to reduce overall maintenance costs and to minimize negative resource impacts. Additionally, most of the highly damaging illegal activity is attributed to larger vehicles involved in late night/early morning use of campsites as party areas. Our goal is to utilize existing trail funds to stabilize certain sections of the trail, reconfigure the trail entrances to eliminate passenger vehicle traffic, repair bridge structures, improve educational signage, and renovate campsites.

**Negro Mountain Trail** - This section of trail has seen some major efforts over the past several years to reduce illegal riding and harden the site to minimize erosion and sediment run off. Our plan for this site is to continue these efforts, increase our control of access from adjoining private properties, and expand our educational signage. Improved gating of the area will also be pursued to reduce problems of illegal use, trash dumping, etc. In addition, there are some opportunities to provide challenge obstacles in this area that will better meet the needs of groups using this area for authorized nature tourism programs.

**Margroff Plantation Trail** - Recreational trail funds have been approved to allow for improved signage of this area, closure of unauthorized accesses, and stabilization of soft areas. Given the snowmobile only designation for this trail, the area has great potential for mountain bike use (see mountain bike item below). In addition the area may be considered for possible equestrian use or limited nature tourism outings utilizing ATVs. Therefore special attention will be given trails in this tract.

**Future Opportunities/ Investigations** - It has been suggested that while we consider the closure of some trails, we also consider some possible alternative sites for future development for group/led passive ORV use. One suggestion is to connect the Red Dog Road on Big Savage Mountain with the forest access road that traverses Compartments 37 and 38 to provide a linear trail with challenge pull-offs that are stone and rock based obstacles. A major step in the direction of accomplishing this link was completed via a recent timber sale which extended the St. Johns Rock Roadway south to the power line, a mere .3 mile east of the terminus of the Red Dog Road. Similar opportunities may be available along certain power-line right of ways that lie on state lands. Finally, there are also some possible connections to be considered in the Negro Mountain block to connect the Margroff Plantation with the Negro Mountain Trail and Collier Place to allow for limited activities such as Fall Color Tours and other seasonal highlight activities by nature tourism vendors.
Illegal use by ORVs will continue to be a challenge that will be addressed by strategic patrol of problem areas and educational efforts to increase public awareness and reporting of violators. We will also be involved in discussions to determine the need for requirements such as rider safety courses similar to hunter and boater safety classes, as well as the bolstering of laws to increase fines and/or permit seizure of vehicles being used illegally on state lands.

**Mountain Bike Use**

Mountain bike use continues to show increasing levels of activity and demand. Many of our ORV trails and forest roads are being utilized by bikers in a relatively compatible fashion. Initiatives are being set in motion within Garrett County to expand connections between communities to allow for greater ease of cycling access between areas which will similarly increase interest toward recreational trails systems within our state forest and park boundaries. We are continuing to work with local biking groups such as GAMBO to look at improvements to existing trails via single track connections to improve the usability of the trail system. Most of the current work is focused on the Margroff Plantation. GAMBO members have been successful in obtaining recreational trail grant funds to improve educational and maintenance efforts on this site. This work will include enhanced signage, blazing of trails, gating of illegal accesses, and improved partnership with volunteers. These efforts will likely continue throughout into the FY 2011 work plan for Savage River.

**Hiking**

Trail inventory and assessment work will be ongoing as we continue to determine the best possible system of trails to accommodate long-distance hikers and backpackers seeking a 3-7 day outing, intermediate hikers looking for a 5-8 mile loop, and those who just want to stretch their legs for a mile or so to experience the forest. Short loop trail opportunities are in shortest supply at this point. As such, we will be looking at upgrading and utilizing existing forest road and trails in the Compartments 26 and 17. Inventory work will continue in hopes of providing a longer 3-5 day loop to augment the attractiveness of the Big Savage Trail. Cooperative activities with Outward Bound and the Sierra Club for trail maintenance and upgrading of water sources along trails will also be pursued. Owing to the 2002 ice storm as well as recent Gypsy Moth defoliations, the Big Savage Trail is in very poor condition. The Maryland Conservation Corps staff has been a huge asset in complimenting our staff in keeping this trail open for the time being.

**Equestrian**

Equestrian use of the forest has been minimal in the past. Normally we receive only one or two requests each year as to the availability of facilities. We encourage these people to investigate areas such as the Margroff Plantation, but have received very little interest with regard to organized trail groups or the desire to work with us to improve equestrian opportunities.

**Boating**
Boating and canoeing access on the Savage River Reservoir remains under the control of the Upper Potomac River Commission. Access is via boat launch areas at the Weather Station, Dry Run, and at Big Run State Park. Problems with the release gates built into the breast of the dam will require extensive repairs sometime within the next several years. This repair will require the complete drainage of the Savage River Reservoir which, most certainly, will disrupt boating as well as many other forms of recreational activities in the area.

**Hunting**

Accommodation for recreational hunting will consist primarily of maintenance of hunter parking lots, opening and closure of roads to facilitate access, and posting of informational and regulatory signage. Interaction with staff of the MD Wildlife Service in all silvicultural activities is aimed at enhancing the diversity of available habitat in the hope of benefiting a wide variety of wildlife species.

If funds and resources are available, additional work will be pursued to improve offerings for handicapped hunters. Most of this work will center on the evaluation of existing sites to determine their suitability and modifications necessary to enhance their use by intended populations while discouraging their improper use by others. We may need to look at various gating systems and habitat manipulation, along with improved signage.

**E. SPECIAL PROJECTS**

We have begun stand level analysis for third party certification and to be able to ground truth the satellite work that was done on the forest in 2007. We also will be monitoring regeneration work 5 and 10 years after harvest.

**F. SILVICULTURAL PROJECTS**
Asa Durst Homestead
Hardwood Thinning

<table>
<thead>
<tr>
<th>Compartment: 17</th>
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<tbody>
<tr>
<td>Area: 60 acres</td>
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<tr>
<td>Age: 92</td>
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<tr>
<td>Forest Type: Northern Hardwood</td>
</tr>
<tr>
<td>Trees/Acre: 166</td>
</tr>
<tr>
<td>AGS: 74 Square Feet/Acre</td>
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<tr>
<td>Total Basal Area: 151 Square Feet/Acre</td>
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<tr>
<td>Stocking: 130%</td>
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<tr>
<td>Growth Rate: 3.2%</td>
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<tr>
<td>Soil Type: Dekalb and Gilpin very stony loams, 0 to 25% slopes</td>
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<tr>
<td>Site Index: 75</td>
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<tr>
<td>Composition: Red Maple 29%</td>
</tr>
<tr>
<td>Red Oak 24%</td>
</tr>
<tr>
<td>Sugar Maple 18%</td>
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</tbody>
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Silvicultural Description:
This proposal is located in the northernmost section of Compartment 17 and lies east of the upper reaches of Laurel Run. It is a diverse stand that contains a large number of mature trees. The proposal involves the harvest of mature and defective trees and a thinning to approximately 65 square feet of basal area per acre. The northernmost section of this proposal was a part of the FY-03 Annual Work Plan with a proposed access off the West Shale Road. Access for this proposal will be off New Germany Road through private property.
Compartment: 9 and 10  
Area: 51 acres  
Age: 87  
Forest Type: Mixed Oak  
Trees/Acre: 145  
AGS: 48 Square Feet/Acre  
Total Basal Area: 115 Square Feet/Acre  
Stocking: 95%  
Growth Rate: 3.3%  
Soil Type: Meckesville very stony silt loams, 0 to 25% slopes  
Site Index: 75+  
Composition: Red Maple 29%  
Red Oak 17%  
Black Cherry 14%

Silvicultural Description:  
This mixed hardwood stand is a fairly recent acquisition by MD DNR. It is a very productive site with two-age characteristics. This proposal involves a commercial thinning to remove the mature and defective trees and generally thin the remaining stand to redistribute growth essentials to the residual stand. Access to the area will be via an existing access road which proceeds north off the Bowman Hill Road.
Silvicultural Description:
This is a mature stand of hardwood dominated by northern red oak, red maple, and black cherry. This proposal involves regenerating the stand by removing all overstory trees and allowing full sunlight to impact the forest floor. Regeneration will be dominated by black cherry and red maple with a northern red oak component. Access will be via the northern portion of East Shale Road.

Compostion: Red Oak 35%
Red Maple 31%
Black Cherry 23%
OTHER SILVICULTURAL PROJECTS

WILDLIFE: Wildlife populations benefit most from habitats which most closely meet their specific requirements. In order to provide a more enhanced habitat mosaic it is important to initiate the development of a wide variety of forest age classes. Since acquisition of these lands in the 1930’s this diversity has been obtained and maintained through the sale of forest products in a carefully planned and executed silvicultural program. These ongoing treatments foster plant species diversity as well as diversity among forest age classes in addition to providing diverse vertical structure among plant communities. The net result is a more enriched forest habitat regimen and the associated wider variety of inhabitants.

Additional habitat work is undertaken as time and resources permit and as opportunities become apparent. Recent accomplishments reflect this commitment. Several blocks of open land have been converted to warm season grasses in order to enhance habitat for grassland species. Apple orchards are pruned and released in areas throughout the forest to enhance fruit production. As these orchards yield heavier crops they are frequently severely damaged by bears. A red spruce stand has been developed to provide a long-absent habitat type for certain forest birds. Bird nesting boxes are installed and maintained to increase nesting options for cavity dwelling bird species. A grassland habitat benefits many species and is a habitat type that is in critical shortage on public lands. Most of the existing grassy areas are mowed to revitalize and maintain them for the long term benefits they provide. Much credit must go to staff of the MD Wildlife Service at Mt. Nebo for the hands-on work they conduct throughout Savage River State Forest. This cooperative and mutually beneficial arrangement has greatly benefited wildlife as well as those individuals who enjoy the results of sound wildlife management.

RED PINE: Several thousand acres of red pine were planted on Savage River State Forest throughout the late 1940’s and 1950’s. The long-term goal with this species was to rehabilitate degraded lands, to establish native hardwood species within the stands through regular silvicultural treatments, and to eventually convert the stands back to native hardwoods via a regeneration harvest. This methodology is sound and has worked very well in the past and, as resources become available, will be continued. Specific areas of work may occur along West Shale Road, Fairview Road, Westernport Road, Bowman Hill, Savage River Road, Keyser’s Ridge, Fort Hill, Turkey Lodge, and Poplar Lick. In light of recent findings regarding the use of pine stands by Goshawks for nesting sites, silvicultural work in these stands will be delayed pending the receipt more information.

ORCHARD MAINTENANCE: As mentioned previously, this work involves the revitalization of fruit orchards which are original or remnants of the old original orchards established by occupants prior to state acquisition. It involves pruning and release from hardwood competition. Specific areas of work may involve West Shale Road, Fairview Road, Westernport Road, Bowman Hill, Savage River Road, Keyser’s Ridge, Fort Hill, Turkey Lodge, Margroff Plantations, and Poplar Lick.
FOREST HARVEST REVIEW SUMMARIES:

COMPARTMENT 17, ASA DURST HOMESTEAD
A commercial thinning in a 60 acre stand located west of New Germany Road. Access has been granted over private property.

ID TEAM: The Heritage staff recommends that this sale be deleted from the AWP because of the unique nature of the stand and because of the presence of Taxus spp. in part of the stand. The suggestion was made that this stand would be a “representative sample area” under FSC certification.

ADVISORY COMMITTEE: After visiting the site and talking with the Heritage staff, the Advisory committee agreed that the stand should be dropped from the AWP.

PUBLIC INPUT: No specific comments.

FINAL PROPOSAL: This sale will be dropped from the AWP.

COMPARTMENT 9 & 10, BOWMAN HILL
A commercial thinning in a 51 acre stand located south of Interstate 68 and west of Amish Road.

ID TEAM: No site visit was made to this site, but the proposal was accepted as presented.

ADVISORY COMMITTEE: No specific comments.

PUBLIC INPUT: No specific comments.

FINAL PROPOSAL: Proceed as planned incorporating all appropriate BMP’s.

COMPARTMENT 15, EAST SHALE ROAD
ID TEAM: No site visit was made to this site, but the proposal was accepted as presented.

ADVISORY COMMITTEE: No specific comments.

PUBLIC INPUT: No specific comments.

FINAL PROPOSAL: Proceed as proposed, after re-examining advanced regeneration levels.

OTHER COMMENTS:
ID TEAM: Did not approve of the idea of installing a pavilion and vault toilets at the group campsite area near Bear Pen Run. This proposal has been dropped.
ID TEAM: Cautioned that herbicide work to control invasives along the roadsides and mile-a-minute weed on Gleason Hill should be done with care and definitive weed identification. Ms. Kerry Kyde was recommended as a resource person. This proposal will move forward after contacting Ms. Kyde to develop a plan of action and potential invasive training program.

PUBLIC COMMENTS: Comments were made from the public supporting our 4-Wheel drive efforts on the forest. Compliments were made on our use of National Recreation Trail Grants to maintain the surfaces of these trails. The request was made to continue with our current trails and develop more of them along powerline right-of-ways. The Poplar Lick trail was noted as an especially desirable trail.
Savage River State Forest
Fiscal Year 2011 Annual Work Plan Review
August 5, 2009

Attendance:
Larry Maxim
Scott Campbell
Ed Thompson
Jim Kale
Bob Webster
Jack Perdue
Jim Mullen
Wade Dorsey
Alan Klotz
Rob Feldt

Notes:

Compartments 41, 43 and 44 (see attachment)
The 33 acre block of this proposal will be regenerated due to the dense oak regeneration.
The 220 acre site has been reduced to exclude areas of which Heritage had some
concerns. It has been reduced to approximately 139 acres. The ID Team had no concerns
with this revision.

Asa Durst
The Heritage staff wants to review this proposal since it has a plant species, Taxus, of
interest nearby. The ID Team visited this site. The group decided by vote to remove the
site north of the powerline from the annual work plan. The Heritage Program will
consider this area for inclusion as a Representative Sample Area under the Forest
Stewardship Council certification standards. Without the northern section of this
proposed harvest it may make this proposal unable to carry a sale with the southern
portion alone.

Herbicide Use
Savage River State Forest now has a truck-based spray system to apply herbicides to
assist with the control of roadside invasive plants. While controlling invasives is desired
there is some concern there may be some confusion between native and exotic species.

Bear Pen
There has been some consideration to installing a pavilion and vault toilets in this area.
The ID Team didn't think a pavilion was a good idea for this area. Vault toilets have been
used successfully in some areas but others have proved problematic and do require
maintenance. MDE stated these will require a permit but the application fee is waived.

Gleason Hill
This area will be treated for mile a minute weed. There is also an interest to remove the tower (overlook). It was suggested that Savage River staff work with Kerry Kyde of the heritage program for site specific treatment recommendations. It may be possible to include herbicide treatment in forest harvest contract.
All three work plans obviously are the result of many hours of hard work. The silviculture portions of these plans all reflect very careful consideration of all potential issues and outcomes. No complaints.

I am very pleased to see all three forests taking advantage of the Recreational Trail Program for grant money. Naturally, I would like to see more consideration for recreational four wheel drive access.

**Green Ridge State Forest**- There has been massive improvements on this forest over the years. It appears the new manager will keep moving forward with this trend. I do recommend that the state keep researching potential sites for an ORV/OHV park, to ease the ATV/Motorcycle pressure from the forest. With that being said, We would want to see an increase in recreational four wheel drive opportunities. This can be done with very little effort. Temporary openings (or longer term if deemed feasible) of timber sites right after the completion of a given project and roads that have sustained flood or washout damage. While that sounds unusual, if offers an enjoyable experience with minimal impacts to the resource.

As per use openings of some typically closed roads can make for an enjoyable outing, and if during the right time would have minimal impacts.

The group camping sites have been a huge plus on this forest. The vault toilets are an excellent plan. They work.

We are 100% in favor of the habitat enhancement you have in the plan. An excellent strategy.

**Potomac State Forest**- This forest continues to be a favorite location for many of our group. Personally, it is my annual get away. It offers a very unique setting and experience. Continued encouragement of volunteer assistance is a win-win. Using some snow mobile routes as multi-use routes under controlled conditions is an excellent way to go and should be a part of the plan.

A thought for future plans would be some established foot paths to the Potomac River for access to some prime trout fishing. Much of the access is rather dangerous given the Rattle Snake potential.

Increased law enforcement day and night from time to time would be appreciated. Irresponsible ATV users tend to detract from an otherwise perfect experience. Not all users are a problem. Some are just rude, though.
We even had a small tent stolen from one of our sites last year and another camper set up on it. In the nearly 40 years of going to this forest, I never had anything close to that happening before. While controlling soil movement is very important. On an OHV/ORV route, rutting should not be a big concern, if the water is diverted from the road bed from time to time. Driving on bed rock does help to keep speeds and dust down. Of course, culverts are a must.

Savage River State Forest- There is so much potential there. In the past, controlled access to the Negro Mountain area was some of best four wheel drive experiences in Maryland. It was extremely popular with the four wheel drive community. The fall foliage outings were a combination of volunteer conservation work with some outstanding camping, four wheel drive and site seeing experience. Often, DNR staff attended these outings and offered some great education for all, especially the youth.

The winter February snow events were a complete win-win. Often we filled the Casselman Inn, typically when they need it the most. This was quite a needed boost to the local economy. The wheeling, due to the conditions had nearly no impacts to the resource and there has never been any user.

With the funds available from the Recreational Trails Program trail marking and conservation measures are certainly obtainable. The Poplar Lick Trail is very popular, as stated in the plan. Thus, closure does not make any sense. This would make excellent future grant projects. Again, additional law enforcement would go a long way in helping to preserve a pleasant experience.

Establishing some group sites would be a positive improvement.

We would appreciate being informed of any new or potentially new four wheel drive access. Organized four wheel drive can assist with some of the concerns with items like stream crossings, by placing rocks on the banks and stream beds. It works. Multiple Use of established snowmobile routes makes a lot of sense, as well.

A thought would be to establish some new campsites on other areas of the forest and removing a few from Poplar Lick.

The Middle Atlantic Four Wheel Drive Association very much appreciates the efforts put into these plans and the experiences afforded to our membership, in the past.

Respectfully Submitted,
Preston Stevens
Director of Conservation/Land Use Middle Atlantic Four Wheel Drive Association

Preston Stevens
4928 Old Hanover Road
Westminster, Md. 21158
410-346-6029
Dear Jack Perdue,

Through an email from Middle Atlantic Four Wheel Drive Association, I was made aware of the request for public comments on the 2011 annual work plans for the State Forests. I scanned the plans for all 3 forests (Green Ridge, Potomac, Savage River) looking for the items particular to four wheel drive recreation to see what is planned. I am encouraged to see that in the Savage River plan is mentioned of the needs and desired riding experience of the 4WD recreationalist. I have been involved in organized 4WD trail riding both through PA Jeeps and Baltimore 4WD clubs for over 15 years. I have been trail riding in both Savage River and Green Ridge State Forest although these were numbers of years ago. Organized 4WD trail rides are looking for exactly what is inferred in the document, slow paced travel through the forest (on designated trails) with occasional driving challenges in hardened areas (low impact). For me the riding experience is more about seeing the forest, wildlife and overlooks and enjoying family camping. So, I am in favor of the work that is planned for the improvement and maintenance needed to support those aspects of 4WD recreation. I also like to hear that there is the potential of increasing riding options on powerline and or gasline right of ways. These ROW's provide ample driving challenge in areas that need to be accessed and maintained on a regular basis regardless. Thank you for the opportunity to connect with the forest. Please keep up the good work!

Sincerely,

Dave DeChristopher

45 N Church St SW

Ephrata, PA 17522

717-859-1702

Member of PA Jeeps, MAFWDA, UFWDA
G. Watershed Improvement Projects

The MD Department of the Environment has undertaken to enhance water quality in the Casselman River via mitigation of acid effects in a spattering of tributaries, many of which fall on Savage River State Forest. Currently, the selection of candidate tributaries is underway via sampling and mapping. Mitigation will be undertaken using limestone leach beds to raise water pH in these selected tributaries and provide all the benefits thereof throughout the watershed.

The Savage River Watershed Association (SRWA) is a group of concerned citizens interested in the health of the Savage River Watershed. Over the next year they will be walking every mile of the waterway to survey for problems and to make recommendations to bring about improvements. We will be working closely with this group and will assist in any way possible.

H. Ecosystem Restoration Projects

The Savage River Watershed Association has also endeavored to battle the invasive Japanese spirea within the Bearpen Watershed and has been busy destroying specimens of this invasive for several years. The obvious benefit of this project is to permit native plant species to re-colonize the areas formerly occupied by this invasive. This same group is working to establish red pine of a native seed source at several locations in Savage River within Riparian Zones. The idea is to establish a desirable conifer which may fill the void created as Hemlock Wooly Adelgid reduces the abundance of native Hemlock Trees.

I. Monitoring Projects/Research

Monitoring projects involve determinations of overall forest health and productivity as well as the forests ability to provide a non-declining flow of recreational benefits. As such, various agencies and educational institutions regularly monitor the populations of forest pests, fisheries health and population dynamics, recreational degradation to the landscape, wildlife population dynamics, etc.

Savage River State Forest has historically been the site of extensive research. Scientists from nearby institutions (WVU, UM, FSU) have taken advantage of the area's diversity of habitats to learn more about the natural world. Management here has always fostered the use of State Forests as research centers. Research is underway here to learn more about silvicultural practices (crop tree release done by the USFS Morgantown, WV), bobcats/fishers (undertaken by FSU faculty and graduate students to learn more about the population dynamics of these species), the establishment of Umbrella Leaf (by Jesse Belamore of Cornell University to see if a more southern species can survive in a more northern climate to test global warming parameters), water quality (ongoing studies being undertaken to monitor water quality and its ability to support sensitive species such as native Brook trout), and the American Chestnut and the pathogen that destroys it (a long term series of studies being undertaken by Prof. Wm. McDonald of WVU to examine a wide variety of related issues). It is assumed that this long standing cooperative position with regard to research will continue long into the future.
J. Budget

The Budget for Savage River State Forest is $672,507. Of that amount, $274,526 goes to fund classified salaries and benefits for four employees and $108,142 goes to fund contractual employees and approximately $175,000 goes to Garrett County in lieu of property taxes and is based on 25% of revenue generated, leaving $114,839 for operating expenses. Savage River has for many years generated revenue that exceeds its cost of operation. The majority of revenue is obtained from the sale of forest products. Successful marketing by selling the mix of species and grades of wood products that the market most demanded has contributed substantially to successful revenue generation over the years.

Operational Management

1. Introduction

   This section of the plan is designed to cover the annual cost and revenues associated with the operational management of Savage River State Forest (SRSF). It is the Department’s intent that all revenues generated from SRSF will be used to pay for the management and operation of the Forest. The numbers expressed in this section are only estimates and averages of annual expenses and revenues. These numbers will fluctuate each year based on management prescriptions, economic conditions and public use of the forest.

   The following information is a breakdown of Revenues and Operational costs associated with SRSF. These figures are only estimates that are based on projected revenues and operational expenses. Yearly changes in timber markets and weather conditions can severely affect revenues. Operational expenses will vary from year to year and the numbers below are based on the budget request submitted for FY-2010

2. SRSF Funding Sources: Estimated - $750,518

   State Forests in Maryland are funded from several sources. The first is the general fund. This is money generated from taxes. It is use in state forests primarily to fund classified (permanent) employee salaries and benefits. $274,526

   The second source is revenue generated by the forests. These funds are deposited in the Department of Natural Resources’ Forest or Park Reserve Fund and must be appropriated by the General Assembly through the annual budgeting process before being spent. The state forest budget is prepared approximately one year before the beginning of the fiscal year in which it will be spent. The budget then goes through the legislative approval/review process along with all other state operating budgets. Once adopted, the budget goes into effect the first day of the fiscal year (July 1st). Revenue generated by the state forest is designated special fund revenue. There may be special funds provided from the Department of Natural Resources’ Forest or Park Reserve Fund that are not generated by this particular forest or there may be less special funds shown in the budget than was generated on this specific forest. $425,992
In addition, SRSF is included in the Maryland Forest Service’s Off Road Vehicle (ORV) Budget. This separate budget is based on revenue generated from ORV permit sales statewide and is allocated back to the state forests through the budgeting process. ORV funds generated as permit sales at SRSF do not necessarily reflect funds allocated back to the SRSF operating budget. These funds must be appropriated before being spent. ORV funds are a restricted special fund and can only be spent for ORV Trail related expenditures. $17,585

Another source of funding at SRSF is Recreational Trail Grants. These grants are competitive and are generally limited to $30,000 per year per grant. The source of this funding is the Federal Department of Transportation administered through the Maryland Department of Transportation, State Highway Administration. These funds are designated reimbursable funds. $35,000


Operational expenses are those costs paid directly out of the SRSF operational budget by the State Forest Manager. The Forest Manager prepares a proposed operational budget for the forest based on instructions provided approximately one year in advance of the fiscal year. The FY-2010 budget proposal was prepared in July of 2008.

- **Classified Salaries, Wages and Benefits:** $274,526
  This cost is associated with General Funds which are state tax revenues provided annually. These funds are used to pay SRSF Maryland Classified Employee Salaries.

- **Contractual Staffing:** $108,142
  This cost is associated with contractual staffing associated with operations of the state forest. Contractual personnel are responsible for conducting work outlined in the annual work plan, managing the daily activities on the forest, including boundary line work, maintenance of trails, forest roads, maintaining primitive campsites, a public shooting range, overlooks, wildlife habitat areas, and implementing all maintenance, recreational, silviculture, and ecosystem restoration projects.

- **Land Operation Cost:** $114,839
  This includes expenses for office and field equipment, vehicles, gates, gravel, signs, boundary paint, roadwork contracts and construction, trash removal from illegal dumping, boundary line work & surveying, tree planting, site preparation, control of invasive species, non-commercial thinning and other forest management practices. These costs vary greatly from year to year based on the activities identified in the Annual Work Plan.

- **County Payments:** $175,000
  These are revenue payments to local county governments which will vary every year. Payments are made on an annual basis to Garrett County based on 25% of the gross revenue generated from SRSF. These payments come out of revenue generated from timber sales and recreation. These payments are used to help the counties offset the loss in property tax revenues which are not paid on state owned lands.

4. Summary
This is the general breakdown on Revenues and Operational Costs associated with the SRSF. As described, these figures will vary from year to year.

Total Revenue  $750,518
Total Expenditure  $672,507
APPENDIX – MAPS

The following maps convey a great deal of information regarding the management and natural resources of Savage River State Forest. The first conveys the locations of Primitive Campsites and puts their locations in perspective to other geographic and recreational resources such as the Savage River Reservoir. The reservoir itself is administered by the Upper Potomac River Commission. Two somewhat primitive launch areas are available – one at Dry Run and the second near the breast of the dam below the Weather Station. The campsites are scattered along Big Run, Savage River, Poplar Lick, and Westernport Roads with additional sites down Blue Lick Run. They are generally 75 feet or more off the road and offer a picnic table, a fire ring, a flat area to pitch a tent or park a tent trailer and a place to park several vehicles. The sites are on a first-come first-serve basis and reservations are not an option. A relatively new feature is self-registration for all Savage River campsites, and the locations of the self-registration sites are indicated on the map via a small green square with a white “$” within. In most cases, you’ll pass one on the way to the camping areas. Campers can visit one of these sites, fill out the relevant information on the envelope, deposit the appropriate payment within ($5.00 per night), remove the flap as the on-site permit, and deposit the envelope/payment into the secure stand pipe located at each site and registration is complete. Just keep the envelope flap (the camping permit) with you at all times while camping. The registration sites are located such that any State Forest Campsite is no more than a ten minute drive from the nearest one.

Campsites are monitored closely to assure their environmental integrity is not compromised due to excessive “wear” from camper use. Sites that begin to show the effects of overuse such as soil compaction or tree damage are closed on a rotational schedule for three or more years to allow rehabilitation to naturally occur. Corrective measures such as seeding/mulching may be undertaken in extreme cases, but it is preferred not to risk the introduction of exotic species via seed mixes which may not be as pure as advertised. Human waste has also been a concern at the primitive sites as no comfort facilities are offered due to the dispersed nature of the sites. Campers are encouraged to practice a “Leave No Trace” ethic with regard to human waste and either remove it from the area or bury it according to accepted guidelines.

The High Rock Fire Tower is also a feature on this first map. It can be assessed via a gravel roadway which travels westward off the Westernport Road about a mile north of the intersection with Aaron’s Run Road. It’s located within the Big Savage Wildland so vehicular access is not permissible. The hike is about one mile uphill with the average gradient being about 20 percent. High Rock is one of the few remaining Fire Towers in the area. Constructed during the 1930’s, it served as one in a network of towers with overlapping views, used to triangulate the location of forest fires during a time of poor detection capabilities. Just west of the tower (100 feet) is the standing chimney and footers of what once was the overnight cabin used by the person who kept watch at this site during periods of high fire danger. The steps to the cabin can be seen carved directly into the Pottsville Sandstone Ridge Rock (very hard and weather resistant). The views here are spectacular but remember – “Leave No Trace”.

The remaining maps convey the locations of the main designated trails within Savage River State Forest. There exists many additional old roads scattered throughout the forest which are used by hunters, fisherman, and other forest recreationists. The Negro Mountain Trail is basically a
Snowmobile Trail with additional uses. It is popular with hikers, bikers, and especially hunters. The western edge of this trail system has undergone extensive improvements to facilitate the completion of forestry practices. The gates on this trail as well as those on many others are opened seasonally to allow for firewood harvesting as well as for hunter access during the various fall/winter hunting seasons.

A considerable trail network exists at the Margroff Place just east of Accident in Compartment #14. The road system therein was originally developed to serve the seven gas wells which were developed and maintained by the Texas Eastern Corporation but expanded to include mountain bikes, as well as other uses.

The Big Savage Hiking Trail is the trademark trail of the trail system here at Savage River State Forest. This 17-mile route begins at St. Johns Rock in the north and the Savage River Reservoir to the south. Unfortunately, the devastating ice storm of 2002 and the gypsy moth defoliations of 2006 and 2007 resulted in widespread tree mortality and induced much difficulty in maintaining this trail. The additional sunlight hitting the forest floor through the tops of the dead trees has initiated forest regeneration, which essentially is unconducive to an enjoyable hiking experience nor to proper trail maintenance.

At the northern end of the Big Savage Hiking Trail is the St. Johns Rock area or Management Compartment #38. A recent acquisition placed "the Rock" in State ownership and the view there of Frostburg and points East is just spectacular but remember – Leave No Trace. Also near the trailhead is the Braddock Military Road. Carved deeply into the hillsides, this roadway saw the passage of General Braddock's Army on its ill-fated trek northward to encounter the French and Indians. This is the longest remaining intact section of the Braddock Trail in Maryland.

The Meadow Mountain Trail is a Snowmobile Trail with an ATV component. The northern section of this trail, approximately six miles, serves as an ATV Trail during the warmer months and reverts back to a Snowmobile Trail for the winter months. Several sections of this trail are seasonally converted to a Handicapped Hunter Roadway to provide enhanced hunting opportunities to those who are mobility impaired. The first section is located in a loop just north of Otto Lane and the second is a stretch from Maynardier Ridge Road to the Frank Brenneman Road.

The Monroe Run Hiking Trail follows an old CCC Roadway along a native trout stream of outstanding water quality and hiking this trail requires the hop-skip-jump method of crossing in six locations. This road originally connected the Savage River CCC Camp located currently underwater at the Savage River Reservoir with the Meadow Mountain Camp which currently is the location of the Meadow Mountain DJJ Youth Center.

Several overlooks are strategically located above the Monroe Run Valley to afford a glimpse at this spectacular watershed. The first is along the New Germany Road and the second is located along Dry Run Road. A third overlook offers an even more spectacular view of this valley but is virtually unknown. This one is located off the Frank Brenneman Road to the south about a mile or so along the trail which runs the ridgeline of Meadow Mountain to the site of the former Bittinger Firetower.
The trail network in the southwest portion of this map is located in the Margroff Place, or compartment #14 of Savage River State Forest. Texas Eastern Corp. has multiple natural gas wells in the framework of this multi-use trail system. Other interconnecting links in the system are used and maintained by mountain bikers. The Negro Mountain Trail system is located in the northeast quadrant of the map and lies within compartments 6, 7, and 9 of Savage River State Forest. This trail system is designated as a snowmobile trail and also serves as a hiking and mountain biking trail. The western edge of this trail system is a roadway used frequently to remove forest products and is opened seasonally for firewood cutting and hunter access. These trails receive yearly maintenance in the form of brush hogging and or road repair. Bike trails at the Margroff Place receive bike club attention while the access roads there receive attention from the Texas Eastern Corporation.
This trail traverses seventeen miles of the Big Savage Mountain from the St. Johns Rock on the north to the Savage River Reservoir on the south. It is a rugged trail that generally runs along the ridge line. A devastating ice storm in 2002 caused extreme damage to many trees in the vicinity of much of this trail. Subsequent back-to-back gypsy moth defoliation in 2006 and 2007 have resulted in high tree mortality along much of the trail. Consequently, in spite of annual trail maintenance by staff and volunteers, forest regeneration has left the trail very difficult to follow when leaves come out. This trail receives yearly maintenance in the form of brush clearing, fallen log removal, and repainting of trail blazes and sign replacement.
The Meadow Mountain Trail runs northeast to southwest approximately eleven miles from Chestnut Ridge on the northern end to the Frank Brenneman Road on the south. The trail is multi-use, with the northern section a designated ORV/ATV trail and the entire trail designated for snowmobile use after December 15. It offers amazing views and glimpses of the foothills to the east. The trail continues south of Frank Brenneman as a foot path only. If one continues in this direction another 1.5 miles, a stunning view of the Monroe Run valley can be seen at the "Upper Lookout." This trail is mowed yearly and fallen logs are removed. Also, wet spots will be hardened with crushed limestone.
Savage River State Forest offers two Handicapped Hunter Roads, both are located along Meadow Mountain and both incorporate sections of the Meadow Mountain Multi-Use Trail. The northern section loops off of the West Shale Road while the southern section runs between the Maynardier Ridge and Frank Brenneman Roads. Hunters utilizing these roadways must be in possession of the special permit which allows the holder to hunt from a vehicle. No other vehicles are permitted in these areas during this time. Being a component of the Meadow Mountain Trail, these sections will receive annual mowing.
Overlooks Big Run Campsites Monroe Run Hiking Trail

This map shows the foothill section between Meadow and Big Savage Mountains. The rugged nature of the terrain is covered by the undulating nature of the very close contour lines. To the east is the Big Run valley showing nineteen primitive campsites scattered along Big Run Road. Primitive campsites offer a picnic table, fire ring, parking area and level pad area but no other facilities. The red line central to the map is the Monroe Run Hiking Trail. At just under six miles, the trail follows the old C.C.C. road that connected the Savage River and Meadow Mountain camps in the 1930's. It offers pristine views and numerous jump-as-you-can stream crossings. The star to the left is Monroe Run Vista located along the New Germany Road. It offers a spectacular view of the Monroe Run valley in a very rustic setting. The star to the south is the Dry Run Road Vista, which offers an excellent cross section view of the Monroe Run valley. Herbicides are occasionally applied to the areas in front of these vistas to control woody vegetation on the steep terrain.