

V.B.1a. Project Title: Initiative for Upper Great Lakes Healthy Forests

V.B.1b. Project Director: Stephen Shine, 517-284-5606, shines@michigan.gov,
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V.B.1c. Name of lead partner and other collaborating partners:

Michigan Department of Agriculture and Rural Development (Lead) – State government

Weyerhaeuser-OSB Grayling – Weyerhaeuser-OSB is the largest consumer of wood in Michigan and addresses non-industrial private forestland (NIPF) management.

Ruffed Grouse Society/American Woodcock Society – RGS/AWS has a long history of developing wildlife habitat on NIPF.

Wildlife Management Institute – WMI is a professional conservation organization concerned about the dramatic decline of many wildlife populations.

Michigan Department of Natural Resources – State government

National Wild Turkey Federation - NWTF has a long history of developing wildlife habitat on NIPF.

Michigan Association of Conservation Districts – A professional association representing Michigan Conservation Districts, local units of state government.

Michigan Department of Environmental Quality – State government

Michigan United Conservation Clubs – MUCC’s mission is to conserve, protect, and enhance Michigan’s natural resources. MUCC has members statewide, including hunters, anglers, and forestland owners interested in protecting watersheds and managing habitat to benefit fisheries and wildlife populations.

Michigan Forest Products Council – MFPC represents the largest wood consuming mills in the state. They are advocates for NIPF management.

American Bird Conservancy— American Bird Conservancy (ABC) is a non-profit organization whose mission is to conserve native birds and their habitats throughout the Americas.

V.B.1d. Mailing address and telephone number of lead partner:

Michigan Department of Agriculture and Rural Development
P.O. Box 30017
Lansing, MI 48909
517-284-5606 (Stephen Shine)

V.B.1e. Funding pool applying for: Great Lakes Region Critical Conservation Area

V.B.1f. Short general summary of project and description of resource issues to be addressed, including the primary resource concern and how the partner proposes to gauge success and monitor results of the project. Secondary resource concerns may also be included.

The Initiative for Upper Great Lakes Healthy Forests (Initiative) intends to create a distinct funding source for non-industrial private forestland (NIPF) owners to implement practices outlined in the Environmental Quality Incentives Program (EQIP) to increase the number of “young forest” (early successional habitat) acres, increase the implementation of Best Management Practices (BMPs) to eliminate or minimize water quality impacts downstream from managed forests, promote wildlife habitat improvement, and improve forest health and productivity. The primary resource concerns are inadequate habitat for fish and wildlife and sediment loading in waterways downstream from managed forests (water quality degradation). Involved partners will contribute resources, volunteers, and methodology for species-specific monitoring programs, such as drumming surveys for ruffed grouse and banding for American woodcock, to measure Initiative success. Another gauge of success will be increased enrollment in Michigan’s Qualified Forest Program (QFP), a tax incentive program for NIPF owners to

The in-kind contribution from the Michigan Forest Products Council (MFPC) of \$100,000 per year of the five-year project is crucial to leveraging federal funds. The contribution is in the form of Sustainable Forestry Initiative (SFI) training for Michigan loggers. This training improves the quality of logging operations regarding BMPs in a forest setting, which reflects the objective of increasing BMP implementation on NIPF.

Michigan Department of Natural Resources (MDNR) Wildlife Division (WLD) contributes in-kind resources to leverage federal funds through dedicated regional staff time (160 hours at \$31/hour) and personnel expertise to provide strategic planning support, development of habitat goals, and technical guidance to partners and implementation staff in FY 2015 and each year of the project, totaling \$5,000. MDNR will also provide opportunities for collaborative regional training/consultation for FAP foresters. Up to \$62,500 from the Deer Range Improvement **Program funds is made available** to NIPF owners that wish to improve habitat for deer and is available annually as contribution.

The objective of improving forest health is supported, in part, by many of our partners. Any time a practice like Forest Stand Improvement (666) is implemented, dying and diseased trees are removed from a forest stand and the ability of that stand to withstand disturbance from pests or diseases is dramatically increased. This objective is leveraged through the use of the FAP foresters. As stated above, FAP foresters will assist NIPF owners in applying with the NRCS for practices that will directly benefit forest health, productivity, and protection of water sources from runoff. They can also provide on-site evaluations and provide advice to landowners that have forest health concerns.

Michigan United Conservation Clubs and the Ruffed Grouse Society will provide in-kind and cash support, respectively, at \$1,000 annually and \$4,000 annually.

V.B.1j. Form 424A, Budget Information – Non-Construction Programs.

A completed Form 424A is attached.

V.B.1k. Proposed project start and end dates (not to exceed a period of 5 years), and a table showing how much FA and TA funds are being requested from covered programs by fiscal year. TA funds, if requested, should include only those funds needed by the partner to carry out identified activities. Identify the amount of program funding being requested from covered programs each year (ACEP, EQIP, CSP, HFRP, and for CCAs only, watershed authorities). Provide totals for all years and programs as illustrated in the following table.

January 1, 2015 is the proposed start date for the Initiative and will continue for five years. December 31, 2019 is the proposed project end date. See Table 1 attached.

V.B.1l. A budget table, by fiscal year, that describes the activities and resource contributions. This table must include the amount of FA funds needed annually for producer contracts or agreements that will be used to implement the conservation practices and enhancements identified in the previous Part, by activity. If the prater is requesting TA, include the funding requested by activity. Applicants must also clearly state, by project objective, how they intend to leverage federal funds along with partner resources (identify in-kind and cash match).

See Table 2 attached for budget table. See V.B.1i for how the partnership intends to leverage federal funds.

V.B.1m. Describe the intended producer and landowner participants. (See definition of producer in Appendix A.)

This Initiative is focused solely on non-industrial private forestland owners. The properties may vary from small woodlots that may or may not exist on farms to large tracts of forestland.

V.B.1n. Describe the land that will be the focus of the project (e.g., cropland, grazing land, forest land, and incidental land uses.)

Non-industrial private forestland is the focus of the Initiative.

V.B.2. Letter of support from applicable NRCS State Conservationist.

A letter of support from the NRCS State Conservationist is attached.

V.B.3. Natural Resource Objectives and Actions (not to exceed four pages).

V.B.3a. Identify the specific primary natural resource concern and any secondary resource concerns to be addressed through the project. Provide details about the natural resource concerns to be addressed and how they were identified.

Inadequate habitat for wildlife and degradation of water quality are the Initiative's primary resource concerns. Michigan's NIPF owners possess 63.5% of the forestland in the state. This includes thousands of agricultural producers that maintain woodlots on their properties and have tributaries, streams, and rivers adjacent to these lands. The partners understand that there is real opportunity to further engage these estimated 400,000 landowners in creating and maintaining wildlife habitat as well as contributing to the regional forest products industry. The implications to water quality degradation are paramount in assisting landowners to reduce nutrient and sediment loading as a result of forestry practices. Active forest management has many ecological, economic, and social benefits specific to the state of Michigan. The forest products industry in Michigan contributes \$14.6 billion dollars to the annual economy, while improving wildlife habitat, improving forest health and productivity, sequestering CO₂, and contributing to improved water quality.

Many wildlife species require young forest habitat and are experiencing population declines in the region (e.g. American woodcock and golden-winged warbler). A large number of other species rely directly or indirectly on this young forest habitat. Smith et al. (1993) found that 76% of the neotropical migratory birds that are experiencing significant population declines in the eastern U.S. require grassland or young forest/shrub habitats. Probst and Thompson (1996) reported that of 187 species of neotropical migratory songbirds that breed in the Midwest, 95 use shrub-sapling or young forest habitats to some degree during the breeding season. Due to a lack of young forest management, especially on private lands, the species that require this habitat are severely impacted. In addition, invasive species, poor forestry practices, and lack of species diversity are also threatening young forest species. The populations of at least 89 birds, mammals, and reptiles have fallen significantly over the past century because of an ongoing decline in the amount of young forest habitat. This suite of species' existence is dependent on large natural disturbances (wildfire, flooding, etc.) and/or active forest management. Many game species, non-game species, and Species of Greatest Conservation Need depend on this ephemeral stage of forest.

In the Upper Peninsula (UP) of Michigan, roughly one third of the landscape is private ownership. State and federal entities have planning processes in place for guiding forest/habitat management activities. These planning processes involve public input and have long-term habitat and forest metrics. Industrial ownerships are commonly affiliated with sustainable forest management practices through several forest

certification standards. There are currently no comprehensive and systematic landscape approaches to providing guidance on sustainable management to NIPF owners. While some local programs do begin to address these needs in the UP, they lack a coordinated and landscape level approach. NIPF in the region is owned primarily for recreation purposes, and few have undergone a recognized planning process. In many cases, NIPF owners lack the fundamental knowledge or technical ability to manage their lands for sustainable habitat conditions. Often they lack the knowledge of where to begin and fall victim to inappropriate land management practices. NIPF are often the most productive soils as state and federal lands are typically tax reverted in origin. Effectively reaching NIPF owners and engaging them with accurate information is a top priority.

Improving wildlife habitat will have marked impacts on Michigan agricultural producers and consumers through mitigated crop damage and the risk of bovine tuberculosis. Providing white-tailed deer with high quality natural foods and habitat will reduce their utilization of agricultural crops and disperse them across the landscape, making them less susceptible to communicable diseases. Hunting has a large impact on Michigan's rural economy through restaurants, lodging, local sales of ammunition, and license fees. Michigan is annually a top three ruffed grouse state by harvest and the world's number one location for American woodcock harvest. Michigan Department of Natural Resources (MDNR) states ruffed grouse and American woodcock hunters spend approximately 829,000 days afield in Michigan pursuing these species. Other small game species and white-tailed deer thrive in this type of forest. Wild turkeys are relatively new to this landscape, but they provide hunting and wildlife watching opportunities to thousands of Michigan citizens. Young forests and openings associated with active timber management provide hard and soft mast as well as nesting and brood-rearing habitat for turkeys. Non-game species, such as bats and many songbirds, utilize young forests for nesting, cover, or finding insect rich environments for feeding their young. Furthermore, regenerating old oak forests into young stands ensures a future supply of food and cover for game and non-game birds, as well as a prime host for native insects.

Forests serve as buffers to runoff, both sediment and nutrients, from agricultural operations. In a 2000 report entitled, "Water and the Forest Service", the United States Forest Service explains that forests absorb rain, refill underground aquifers, cool and cleanse water, slow storm runoff, reduce flooding, and sustain watershed stability and resilience. These benefits would not exist if landowners do not maintain healthy and productive forests on their private lands. The Initiative ensures landowners maintain their property in forest cover. The installation of BMPs eliminates or minimizes water quality impacts associated with forest management practices and adjacent agricultural use. For example, BMPs to design access roads, stream crossings, and riparian forest buffers can eliminate or minimize soil erosion and the associated impacts to aquatic life and significantly reduce sediment loading into waterways. Not only are these concerns environmental in nature, but they also have economic implications. Michigan's Governor-appointed Timber Advisory Committee set five working goals to increase the sector's economic impact, which was discussed at the Governor's Forest Products Summit:

- Increasing the economic impact of the timber industry on state and regional economies from \$14 billion in 2010 to \$20 billion in 2018;
- Increasing the export of value-added timber products by 50 percent;
- Increasing forest products-related careers by 10 percent;
- Supporting existing industry; and
- Encouraging regionally based industry development.

These working goals will be pursued while ensuring the means reflect sustainable forest management that focuses on improved water quality and wildlife habitat.

Much of the growth in this sector will come from low-quality, undesirable trees. The Initiative provides FA to landowners to harvest these low-quality, undesirable trees that, in turn, provides a new supply of biomass that is attractive to industry. The harvesting of these low-quality, undesirable trees allows for greater stocking of high-quality trees that, over time, increases the value of traditional wood products.

V.B.3b. List the proposed objectives and how they will address the identified resource concerns. Objectives should be specific, measurable, achievable, and results-oriented. Include a timeline for completion and demonstrate cost effective use of agency, partner, and producer resources. Describe how objectives will lead to environmental outcomes and how these outcomes will be measured. Environmental outcomes should consider either local or regional resource concerns and priorities, or both, as appropriate for the founding pool.

The Initiative for Upper Great Lakes Healthy Forests (the Initiative) has four main objectives:

1. Stabilize and reverse the decline of “Young Forest” acres on NIPF in Michigan’s Upper Peninsula (UP) and Northern Lower Peninsula (NLP).
2. Increase the implementation of Best Management Practices (BMPs) to eliminate or minimize water quality impacts, especially excess nutrient and sediment loading on NIPF.
3. Promote wildlife habitat improvement on NIPF in the UP and NLP.
4. Improve forest health and enhance productivity, in industry and tree growth, statewide.

As previously mentioned, many wildlife species require young forest habitat for all or a portion of their life cycle. Wildlife Management Institute (WMI) states, “...the American woodcock has lost much of its habitat as people have converted brushy land into shopping centers, housing developments, roads, highways, industrial zones, and heavily farmed areas.” WMI also states, “In general, across the woodcock’s range little clearcut logging has taken place in recent years, where stands of trees are removed and where sprouts spring up thickly, creating good [woodcock] habitat.” Increased awareness of the benefits of young forest habitat and increased habitat-specific management on the ground is pivotal in achieving the first objective and addressing one primary resource concern of inadequate habitat for wildlife.

RGS/AWS will assist in acquiring data within their area of interest. The data will be analyzed, and trends will be evaluated to describe the success of the Initiative. The MDNR ruffed grouse drummer surveys and American woodcock singing surveys are conducted annually in the project area and will also be used to assess local impacts on young forest species.

The creation of young forest habitat is the first objective of the Initiative. Sustainable management of other forest ecosystems is also a primary concern. Many species that utilize young forest habitat also spend a portion of their life cycle in mature forests. The enhancement and management of that habitat is critical in addressing habitat inadequacies. Forestry practices such as Tree & Shrub Establishment (612) and Forest Stand Improvement (666), while adding value to the stand in the form of traditional forest products, provide habitat in the form of food and cover for the wildlife that utilize that system. These activities also address the primary resource concern.

Deer cooperatives (co-ops) can provide anecdotal evidence to successes in habitat management. These co-ops present a unique opportunity for outreach and education. They provide social capital that can drive more landowner participation from those that are leery about agreements with the government.

Michigan’s Sustainable Forestry Initiative – State Implementation Committee (SFI-SIC) 2015 audit of BMPs on public and private lands will demonstrate current implementation of voluntary BMPs. Local land conservancies and watershed groups will be relied on to conduct water quality sampling and provide data to measure the success of addressing the resource concern of water quality degradation.

Invasive plants and animals and disease are currently having a negative impact on forest health in northern Michigan. The MDNR (2013 Forest Health Highlights) states that invasive organisms like emerald ash borer, beech bark disease, and oak wilt are affecting thousands of acres in Michigan and killing millions of trees. These acres have an impact on the abundance and sustainability of wildlife that eat and live there, as well as soil erosion and water quality. The Initiative serves as one method to combat the issue of terrestrial invasive organisms by allocating resources toward management planning on NIPF. Herbaceous Weed Control (315) and Brush Management (314) can create, restore, and enhance the habitat on their property.

The monitoring work that MDNR does on forest health will be used to evaluate the Initiative in terms of forest pests and diseases. The “Forest Health Highlights”, published every year, summarizes the condition of our forests as it relates to these threats. The document is made public. MDNR also has an online Wild Turkey Observation Report where citizens can voluntarily report turkey sightings and observation detail. The National Wild Turkey Federation (NWTF) will contact volunteers in the project area and encourage them to report all turkey sightings. NWTF and MDNR staff will compile the data. Success equals a positive population level response. With the cooperation of the MDNR Wildlife Division, RGS/AWS members and non-members who annually band American woodcock will supply detailed population monitoring data for the project area. RGS/AWS members and other upland hunters provide annual monitoring data through the MDNR Grouse and Woodcock Cooperators program. Information collected includes population numbers and habitat conditions.

The core objective of the Initiative is to create an opportunity for FA to NIPF owners by helping them access Federal Farm Bill Program FA from EQIP. This opportunity for FA would allow for forestry practices to be ranked only amongst other forestry practices in the project area. This would eliminate competition for funds between traditional agriculture practices and forestry practices that historically, because of the immediate resource concern, has left forestry practices underfunded.

There is not a definite sequence of events compatible to a timeline. All practices will be offered and implemented continuously based on the needs of the landowners. This approach is cost-effective because FAP foresters provide education, outreach, and TA on a daily basis addressing the situations of particular landowners. Prioritizing a timeline of events/practices would not allow FAP foresters to address the immediate needs of the landowners in their respective geographic locale.

V.B.3c. For each objective, identify the actions to be completed to achieve the objective and to address the identified natural resource concern. Note which actions are to be addressed through this project using NRCS program assistance and which actions are being addressed through non-Federal funding sources or other resources provided.

The Conservation Activity Plan (CAP) 106, Forest Management Plan, is the cornerstone of the Initiative. Partners understand and promote the value of managing a forested property according to a written plan. All conservation practices implemented on the ground should be identified in a forest management plan. This assures that practices being proposed for implementation have been properly evaluated. The EQIP practice Early Successional Habitat Development and Management (647) is the main practice aimed at achieving the first objective. This practice affords landowners the opportunity for FA through NRCS as well as a discounted rate of implementation if contracted with RGS/AWS through the use of their CAT mower. Prescribed burning (338) and Brush Management (314) are two additional practices that will be implemented to address the creation of Young Forest acres.

Many practices relate to promoting wildlife habitat improvement on NIPF. Tree & Shrub Establishment (612) and Forest Stand Improvement (666) will continue to be the most widely used EQIP conservation practice for the benefit of wildlife habitat. The promotion of habitat outlined in the third objective is not

limited to the creation of early successional habitat, but rather all-encompassing for forest habitat. This includes the sustainable management of mature forest types. Tree & Shrub Establishment (612) enhances wildlife habitat in many ways. Tree or shrub plantings provide added diversity and structure to forested landscapes, especially in forests hit hard by invasive pests such as emerald ash borer. This provides other means of food and cover for the wildlife that reside there. Forest Stand Improvement (666) positively affects wildlife habitat, forest health, and increases forest productivity. By removing low-quality, undesirable, dying, or diseased trees, forest development can be directed towards optimizing landowner objectives while also promoting healthy, vigorous growth for the residual stand. Stands that have been treated through Forest Stand Improvement (666) practices can be more resistant to maladies such as pest and disease outbreaks or loss from wildfires.

Providing NIPF owners with FA for Stream Crossings (578), Riparian Herbaceous Cover (390), Forest Trails and Landings (655), and Riparian Forest Buffer (391) will address the conflict of excess nutrient and sediment loading downstream from managed forests. Forest management activities have the potential to negatively affect water quality if done irresponsibly. These practices provide habitat benefits for forest wildlife including game species. The Initiative makes available the opportunity for landowners to implement BMPs on their property without the concern of high costs.

V.B.4. Detailed application requirements (narrative must not exceed 12 pages, not including forms, maps, and tables).

V.B.4a. A detailed map, accompanied by a narrative description of the geographic area covered by the application. If submitting the application electronically, the map should be in an electronic portable document file (PDF).

A detailed map is attached. The colored regions represent the project area.

V.B.4a.i. Describe the location and size of the proposed project area.

The project area represents select counties in the Northern Lower Peninsula (NLP) and Upper Peninsula (UP) of Michigan. Forty-nine counties will be covered, in all. The 13 counties represented in the UP account for approximately 4,532,447 acres of private forestland (FIA). The 36 NLP counties contain 4,784,636 acres of private forestland (FIA).

V.B.4a.ii. Briefly describe the major land uses of the area with special emphasis on the lands that will be included in the project.

The major land use of the project area is forests. The landscape is dominated by a mosaic of NIPF, federally-owned forestlands, state-owned forestland, and a contingency of privately owned agriculture lands. Potter-Witter (2010) indicates that 27% of the land in the UP and 44% in the NLP is NIPF.

V.B.4a.iii. Briefly describe why the particular area was chosen, including the scientific basis for choosing the area, and why targeted conservation in this area will contribute to CCA priorities.

This project area was chosen due to the vast amount of NIPF resources that exist and are associated with many of the main tributaries of Lake Superior, Lake Michigan, and Lake Huron. According to Butler (2008) only 3% of eligible owners in the US have adopted a forest management plan. The 49 counties covered are where FAP foresters exist in the Conservation Districts to provide TA and outreach to NIPF owners. Targeted conservation in this region will address the primary resource concern of inadequate habitat for wildlife and water quality degradation, because much of the existing opportunities for the responsible creation of young forest habitat exist within this specific landscape.

V.B.4a.iv. Outline on the map or describe in the application the areas that need conservation treatment, and identify the number of acres involved.

The colored areas on the map represent the project area. Unique colors represent specific services areas for FAP foresters. The 13 counties represented in the UP account for approximately 4,532,447 acres of private forestland (FIA). The 36 NLP counties contain 4,784,636 acres of private forestland (FIA).

V.B.4b. Describe the consideration of cost-effectiveness of the proposed approach in terms of achieving the stated goals of the project. Briefly describe whether and how the application contributes to the efficient use of funding compared to at least one alternative approach, which may include an “as is” scenario describing the cost-effectiveness of current program delivery in the project area. The partner is encouraged to consider other alternative approaches to achieving the stated goals of the project and the relative cost-effectiveness of these approaches, and why the approach described in the application was chosen.

Currently, the Upper Peninsula Region (UPR) Private Lands Biologist collaborates with FAP foresters on a host of regional wildlife habitat issues. In this relationship, the MDNR biologist provides the overarching background, context, and guidance on specific habitat issues that reflects agency goals. The FAP forester as the delivery mechanism has proven very effective. Providing FAP foresters with wildlife management training to accurately contribute information that may influence NIPF owner’s wildlife goals and forest/habitat management decisions has proven mutually beneficial. Building and growing this relationship with the FAP foresters has proven more cost effective than direct outreach by one MDNR biologist and has yielded numerous opportunities to share information at the local level.

In essence, the MDNR provides the overarching big picture guidance and information to the FAP foresters who then carry the message to landowners. Similar GIS analysis has been used before to guide regional efforts (e.g. the Great Lakes Woodcock Initiative, and analysis of aspen availability on state lands as part of the State Forest Planning Process).

The current scenario of EQIP delivery pits forestry practices against traditional agriculture practices to the detriment of wildlife habitat and water quality in forested landscapes. As is, there is no other alternative, outside of EQIP, for NIPF owners to obtain FA to make the implementation of forestry practices possible. This model is not cost-effective. The specific designation of funds for forestry practices is much more cost-effective in addressing the resources concerns at hand. Dollars per acre of conservation values are not available at this time for the project.

V.B.4c. A description of how the partner(s) will collaborate to achieve the objectives of the partnership agreement and the roles, responsibilities, and capabilities of the partner(s). Applications that include resources from other than the submitter of the application must include a letter or other documentation from the other partners confirming this commitment of resources (letters may be in addition to the 20-page limit). Potential partners should also describe whether and how the project will coordinate with other local, State, or national activities, including regional plans adopted by government entities that address resource concerns identified in the project area.

MDARD is the lead agency for this project. The Department will organize periodic meetings with the partners to assess strategies and outcomes, and facilitate making sure the project stays on track.

MDARD, through the FAP’s 20 public service foresters, can contribute \$1.3 million annually in TA to promote the opportunity for this program, educate NIPF owners on forest management and the process of entering in a contract with the NRCS, and help landowners hire contractors to implement practices on the ground through a referral process.

The state of Michigan contributes a 16-mill tax incentive, approximately \$1.2 million annually to NIPF owners participating in QFP. This is considered FA. The acreage cap on QFP is 1.2 million. This means that the opportunity to enroll an additional 970,000 acres still exists (currently near 230,000). This acreage equates to the opportunity of an additional \$970,000 generated in fees for program operation and TA, as well as a \$7,760,000 opportunity for FA. The Department's contribution also includes the salary of a Program Manager, an Administrative Assistant, a Program Coordinator, and five Resource Analysts that oversee FAP. MDARD's 2015 budget included a \$150,000 line item to conduct a one-time audit of the implementation of BMPs on both public and private lands. The audit will be conducted by Michigan SFI-SIC. Findings from this audit will be used to provide project focus.

The MDNR is an active partner with MDARD on the FAP. The MDNR is in the third year of partial funding for the FAP at \$194,000 per year. More than half of these funds are federal funds with \$100,000 per year coming from the United States Forest Service (USFS) (Redesign Grant #12-226). The USFS has agreed to allow their funding to be used as leverage for the RCPP proposals, but it may not be used as match or cost share requirements. The MDNR will continue to invite Conservation District foresters to participate in regular training opportunities. Conservation District foresters are the primary public sector foresters providing direct TA to Michigan landowners to enroll in the Initiative.

The Forest Stewardship Program (FSP) will continue to encourage all of the approximately 75 FSP certified plan writers to inform their clients about the NRCS FA programs in general and the specific funding opportunity related to the Initiative. The Michigan Forest Stewardship Program produces approximately 215 Forest Stewardship Plans annually. There are an estimated 5,000 forest landowners in Michigan who have developed a Forest Stewardship Plan in the past 23 years covering about 800,000 acres spanning 82 of Michigan's 83 counties (all but Wayne County). The NRCS recognizes Forest Stewardship Plans as one of four accepted forest management plans when a landowner enrolls in EQIP for FA to implement a conservation practice on their land. Please note that the funding for the Forest Stewardship Program comes primarily from the USFS.

The MDNR Forest Health team will continue to inform landowners about the NRCS FA programs in general and the specific funding opportunity related to the Initiative. The Forest Health team regularly interacts with private landowners who need to address resource concerns related to insects, diseases, and invasive species. The MDNR Forest Health staff will inform landowners about the potential to use EQIP funding to mitigate those forest health issues.

NIPF owners are often hesitant to have state regulatory agency personnel on site. However, NIPF owners are often quite open to interacting with FAP foresters (often cited as non-threatening from a regulatory standpoint) and view them as a neutral source of expertise. Expanding this symbiotic relationship across the region and developing systematic and specific messaging relating to early successional forests would be the goal of WLD's participation. This process could be replicated for a diverse set of forest/ habitat conditions (e.g. deer yard or winter range deer habitat) or focus species. Currently, the UPR Private Lands Biologist has 160 personnel hours allocated to support this effort.

WLD currently has the Deer Habitat Improvement Partnership Initiative (DHIPI) grant program in the UP. This program is administered by the UPR Private Lands Biologist and designed to use Deer Range Improvement Program (DRIP-hunter generated revenues from each deer license sold) to fund a wide array of deer range improvement projects with partnering organizations. The eligible partners are sportsmen clubs, NGOs, Conservation Districts, and private landowner groups. The program focuses on improving deer range habitat conditions (winter and/or summer range) on private lands across the region. Annually, \$50,000 in DRIP funds is allocated to selected groups through a request for proposals process. Participating partners are required to provide a 25% match through in kind or financial support of approved projects. Partners often exceed the match requirements by 50 to 100%. Grants range in size

from a \$2,000 minimum to a \$10,000 maximum. The total minimum value of this program with match considered is \$62,500 and WLD is willing to leverage this in support of this program. DHIPI projects include hard mast plantings of large tree (2.5 inch diameter at breast height- 12 to 15 foot tall trees) or more traditional under plantings of oak seedlings/saplings, mesic conifer plantings of hemlocks to restore/enhance deer yard thermal cover habitat conditions, wildlife opening creation adjacent to winter range with high nutrition forage species, soft mast trees and wildlife shrub plantings (e.g. apple and crab apple plantings), and scarification to promote natural mesic conifer species regeneration. The DHIPI program has been operational since 2008 and will continue into the future (beyond 2015) with possible expansion as a Division priority.

Weyerhaeuser Company-OSB in Grayling, Michigan, one of the largest consumers of raw material in the state, has agreed to provide promotion for the Initiative and TA through landowner assistance that enables landowners that work with Weyerhaeuser to identify conservation efforts and develop as stewards of their forest.

The Wildlife Management Institute has pledged \$50,000, and potentially up to \$200,000 during the life of this project depending on future funding availability, to lead education and outreach for the Initiative. Michigan United Conservation Clubs (MUCC) will provide regular outreach in the form of blogs, electronic newsletters (over 25,000 email addresses), and social media about the availability of funding for private landowners to help manage their forestland.

MUCC will publish at least one magazine article over the project timeframe in *Michigan OutofDoors Magazine*, which has a circulation of about 15,000 hard copy and 10,000 digital-edition subscribers. MUCC will also apply for grant funds to assist with a larger outreach and education effort in the form of landowner “town hall” style meetings and material creation.

RGS/AWS will provide project coordination through in-kind support from volunteer and staff time use to coordinate the use of the RGS habitat mulching machine. They can also provide in-kind support from time spent on private land young forest habitat improvement projects by RGS regional staff. Also in-kind is staff time for RGS headquarters support staff. Both cash and in-kind support from RGS is included in time spent on forester and wildlife consultant young forest ecology training sessions, membership outreach, and additional educational projects focused on private landowners. The RGS habitat mulching machine works extensively on private lands creating young forest habitat, around 210 acres annually. The fees charged are roughly \$25/machine hour less than what a landowner could find on the private market. This difference in costs is being applied as in-kind support based on the average annual use of the machine.

American Bird Conservancy will assist in training FAP foresters in non-game bird habitat management, especially the golden-winged warbler. Their RCPP proposal, “Improving Forest Health for Wildlife Resources in Minnesota, Wisconsin, and Michigan”, compliments this Initiative greatly. Both partnerships will collaborate to augment the effort on habitat improvement throughout the region.

See Table 3 attached for a breakdown of partner roles and responsibilities.

V.B.4d. A description of the project timeline, not to exceed 5 years in length, and project implementation schedule which details when the potential partners anticipates finishing the project and submitting annual reports and final report.

January 1, 2015 is the proposed start date for the Initiative that will run five years. Based on estimates by 17 FAP foresters that currently and actively work with NIPF owners on participation in NRCS programs, \$2.2 million per year for five years is necessary to implement meaningful conservation that will have an

impact on Michigan's forest resource. FAP foresters will continuously work with NIPF owners to participate in the Initiative throughout the five year project timeline. Annual reports will be completed within one month of the completion of the annual cycle. The project will finish on December 31, 2019. A final report will be crafted and submitted within three months after the completion of the project. All partner reports will be submitted to the lead partner and compiled for use in both the annual reports and the final report.

Wildlife species monitoring is conducted annually by the MDNR and partners. This data will be compiled separately from the annual reports and analyzed to determine trends and success.

V.B.4e. A listing and description of the conservation activity plans, conservation practices, enhancements, wetland restoration activities, easement acquisition activities, and other partner activities to be implemented during the project timeframe and the general sequence of implementation of the project. Include TA efforts that will be made by the partner and those that the partner requests NRCS provide using eligible approved conservation practices and enhancements. List easement acquisition activities to be implemented by the partners and how they will be submitted by the partners/applicants to NRCS for review and approval. Describe any activities that are innovative or include outcome-based performance measures implemented by the partner.

The Initiative uses practices defined by EQIP. Two CAPs will be utilized, as well as number of Conservation Practices. The CAPs utilized are Practice Codes 106 – Forest Management Plan and 112 – Prescribed Burning Management Plan.

The EQIP Conservation Practices utilized are Alley Cropping (311), Brush Management (314), Herbaceous Weed Control (315), Conservation Cover (327), Prescribed Burning (338), Windbreak/Shelterbelt Establishment (380), Riparian Herbaceous Cover (390), Riparian Forest Buffer (391), Firebreak (394), Hedgerow Planting (422), Access Control (472), Mulching (484), Tree & Shrub Site Preparation (490), Stream Crossing (578), Tree & Shrub Establishment (612), Early Successional Habitat Development and Management (647), Windbreak/Shelterbelt Renovation (650), Road/Trail/Landing Closure and Treatment (654), Forest Trails and Landings (655), and Forest Stand Improvement (666).

The expectation is that most landowners participating in the Initiative will first sign up for the development of a forest management plan. As stated previously, the forest management plan is the foundation for which all practices are based and justified. With that being said, it is important to note that not all landowners who wish to participate will have to have a forest management plan developed using funds from this project. Many landowners in the project area already have Forest Stewardship Program plans, which NRCS recognizes as one of the four plan types eligible to receive FA for conservation practices through EQIP. A number of NIPF owners maintain a forest management plan that was previously funded through EQIP and will have practices within that plan that will need to be implemented using the FA made available through this Initiative. Lastly, EQIP funds outside of this project will be available for NIPF owners to take advantage of for the creation of a forest management plan. While forestry practices have been historically underfunded throughout Michigan, EQIP forest management plans have been well funded. It is expected that that trend will continue into the duration of this new project.

Michigan's Qualified Forest Program (QFP) is a tax exemption program that encourages private forestland owners to manage their land in an economically, environmentally, and socially sustainable manner. Landowners receive an exemption from local school operating taxes and/or exemptions from the uncapping of the taxable value of the property in the event of a change in ownership. Since the program's

restructure in June 2013, demand for forest management plans is great. Through QFP, NIPF owners are recognizing the advantages in following a forest management plan and participating in active forest management. New forest management plans through the Initiative are not the only driver behind the implementation of Conservation Practices. The current enrollment also has Conservation Practices that have been prescribed and are in line to be implemented. Forest Management Plans and Forest Stewardship Program plans make up a large portion of the forest management plans within QFP. The statute that governs QFP states that implementing the practices prescribed in one's forest management plan is required to remain in the program.

RGS/AWS owns a mowing machine that has been made available to forestland owners for the creation of early successional habitat. The machine mows down large shrubs and small trees to set back succession. This practice develops prime habitat for wildlife that thrive in young forest conditions. Valuation of the machine works out to approximately \$25 per machine hour and up to \$15,000 per year. This is a tremendously innovative approach to Early Successional Habitat Development and Management (647). Not only will NIPF owners receive FA through NRCS, but they will also receive the contracted work at a discounted rate as provided by RGS/AWS. RGS/AWS staff will also be able to provide TA to partners and NIPF owners in regard to specific early successional forest habitat needs. RGS/AWS also have numerous private contractor contacts that are available to complete early successional forest projects by hand at sites where the machine cannot operate (e.g. very steep slopes).

Under an agreement with the MDNR, MDARD awards grants to Conservation Districts across the state through the FAP to provide education and TA to private landowners and to communities regarding sustainable forest management. The purpose of the program is to assist Conservation Districts in their efforts to help Michigan citizens to better understand, plan, manage, protect, and utilize their forest resources. This program increases the active management of NIPF and NIPF owner outreach and TA.

Conservation Practices, in general, will be funded throughout the project timeframe with no limitations as to when certain practices will be implemented, provided funding through the Initiative remains available. Never before has a sum of money as great as this been allocated specifically forestry practices. This is truly an innovative approach.

V.B.4f. A description of the plans for assessing and evaluating the results of the project along with plans for reporting on progress to achieve the objectives of the application. Priority will be given to projects where the partner can provide resources or services or conduct activities to evaluate effects of conservation practices and activities implemented through the project.

FAP foresters are required to collect data on their daily outcomes in a Work Summary. The Work Summary includes, but is not limited to, number of landowner site visits and the acreage of those site visits, as well as information regarding referrals to the private and public sector. In addition to the Work Summary, FAP foresters collect information in a Referral Summary. The Referral Summary is designed to document the names of landowners that worked with FAP foresters and subsequently were referred to the private or public sector for management planning or plan implementation. Referrals go to a list of natural resources professionals that qualify to complete the work requested. Examples include consulting foresters, qualified logging professionals, and wildlife biologists. The work solicited in the referrals range from the development of forest management plans to timber harvests or cost-share opportunities. These reports evaluate the impact of FAP foresters on NIPF owners, natural resources, and industry in their respective area.

Assessment and evaluation have been highlighted above in sections V.B.3b. and V.B.3c., and includes assistance from RGS/AWS, MDNR, deer cooperatives, MI SFI, land conservancies, and watershed

councils. Results will be reported to MDARD. Periodically, the partnership will convene to discuss outcomes and plans for future focus and project implementation.

V.B.4g. Partners should consider different approaches for evaluating project outcomes and propose the best approach given partner resources and capacity. Approaches may include, but are not limited to, the following: identification of issues of concern and related priority source areas within a watershed, followed by an assessment of relevant conservation implemented in the critical areas to address the identified resource concern(s); monitoring at field or applicable broader scale to document the effects on conservation practices installed; or simulation modeling to estimate practice effects.

There are many different approaches for evaluating project outcomes that will provide an accurate assessment of project success. The chosen approach considers the population levels of certain key wildlife species. As mentioned previously, many species utilize young forest habitat in all or a portion of their life cycle. Species such as ruffed grouse and American woodcock are two that inhabit young forest types and have current, long term, monitoring programs through the MDNR. Observing an increase in the number of these species would suggest general success but the specific numbers reported by the MDNR will give a true understanding as to the effect the Initiative had on this suite of species. Wild turkey populations are also monitored by the MDNR. Population dynamics of turkey in Michigan will provide insight as to the success of habitat improvement throughout the forest types on NIPF. Breeding bird survey data for non-game migratory songbird populations also exists and will be useful for looking at before and after numbers for species such as the golden-winged warbler in the project service area. Combined together, these approaches will provide the best results for evaluating outcomes.

The raw number of early successional habitat acres created on NIPF is a great metric to measure the success of the project as is the implementation of forest management plans NIPF owners who receive management plans and implement an activity in this plan during the project period are very likely to continue following the recommendations and manage for wildlife habitat and water quality improvements in the future. Acres of early successional habitat created, number of management plans written and executed, water quality BMPs installed, and raw numbers of EQIP practices implemented will all be used for evaluation.

The Michigan Department of Environmental Quality (MDEQ) has a number of current monitoring projects as well as projects designed to develop watershed management plans. MDEQ has agreed to share their data to serve a baseline for evaluating Initiative outcomes regarding water quality. Specifically, the projects that are to be use to the Initiative are the Betsie River/Crystal Lake Watershed Management Plan, Flat River Watershed Planning, and Burt Lake-Sturgeon River Watershed Plan. These management plans provide direction on concentrated efforts of BMP implementation. They also provide baseline data for how water quality exists currently, and how we might go about understanding changes to that system.

V.B.4h. Identify potential criteria to be used by NRCS to evaluate and rank agricultural producers' or landowners' RCPP applications in the project area that are linked to NRCS' overarching metrics for judging the success of the program: solutions, contributions, innovation, and participation. Those criteria should reflect local priorities in addressing the primary resource concern as well as local considerations for conservation implementation. For all applications, potential partners should collaborate with the appropriate NRCS State Conservationist or his or her designee to develop these criteria. For approved projects, this joint effort will help NRCS select applications that will best accomplish h the project's intended conservation goals and address priority resource concerns identified by the partner in the application. Additional information regarding the process NRCS uses to evaluate and rank individual applications is fund in each of the authorized programs regulations.

Applications should incorporate some additional priorities that reflect the objectives and success of the Initiative for criteria. The current ranking system will suffice, in part, due to the subset of EQIP practices created by the partnership. Only forestry-related CAPs and Conservation Practices will be eligible for participation in the project. Those particular CAPs and Conservation Practices have been previously listed. The additional criteria for CAPs should consider whether or not the landowner objectives reference the creation of early successional habitat, enhancing other wildlife habitat, or improving water quality. Property that is adjacent to or has flowing water on it should receive a higher score, especially if potential forest habitat improvement practices are planned. Additional criteria for both CAPs and Conservation Practices should consider whether the landowner intends on enrollment in the Qualified Forest Program or seeks MAEAP verification.

V.B.4i. An estimate of the percentage of eligible producers and landowners in the project area who may participate in the project, along with an estimate of the total number of participants located in the project area. Include a description of how the partner will provide for outreach to producers with special emphasis on beginning farmers or ranchers, limited resource farmers or ranchers, socially disadvantaged farmers or ranchers, eligible veteran farmers or ranchers, and Tribal producers and how many are expected to participate. Include a description of the partner or partner' history of working with agricultural producers or landowners to address the conservation objectives to be achieved, any barriers expected in working with landowners to adopt conservation, and how those barriers will be addressed. How will the partner encourage participation to guarantee success of the project? Are there groups of producers who may submit joint applications to address resource issues of common interest and need? Describe how the partner will assist producers in applying for NRCS programs, including acting on the behalf of a producer at the producer's request.

There are nearly 400,000 NIPF owners in Michigan. The vast majority of these landowners live in the UP and NLP. The 13 counties represented in the UP account for approximately 4,532,447 acres of private forestland (FIA). The 36 NLP counties contain 4,784,636 acres of private forestland (FIA). FAP foresters can conduct site visits on approximately 200,000 acres of NIPF annually (based on extrapolation for 20 foresters). This suggests that, over the five year life of the project, that 1,000,000 acres will be provided TA—roughly 11% of that available. There are approximately 284,000 NIPF owners in the project area. One hundred percent (100%) of these landowners are eligible to participate in the Initiative. There is no restriction based on property size class.

One aspect of the FAP is that the foresters assist landowners in completing the NRCS paperwork both in-office and over the phone. The expectation is that FAP foresters work with landowners as intensively as the landowner requires and is comfortable. FAP foresters also facilitate NIPF owners in hiring foresters and/or contractors to do the work for which they are receiving the FA through an online and email referral process.

From regional analysis of where early successional forest types occur, it is possible to develop a list of landowners in a focus area (where supported by field staff delivery—FAP foresters) with a reasonable threshold of influence (e.g. 100 acres with 50% roughly in early successional types) as the target audience. For these NIPF owners, appropriate forest and habitat guidance materials can be provided (e.g. landowners habitat guide, BMPs, etc.) as well as on the ground consultation which provides landowners with the appropriate context information to help them to develop specific habitat goals that reflect the where, how, and why of forest management and the realities of their specific situations. This approach reflects a drill down from the strategic to the tactical level and in the case of WLD's interest in the UPR Private Lands Biologist can begin to fulfill the strategic role (with participation from GIS specialists, forestry, and other a staff, as needed).

The outreach in form of blogs, electronic newsletters, and social media through Michigan United Conservation Clubs will provide an opportunity to reach landowners that may not become aware of the opportunity to participate in this project through current means. The magazine article they will publish in *Michigan OutofDoors Magazine* will provide statewide publicity. As previously mentioned, MUCC is dedicated to applying for external grant funds to assist with a larger outreach and education effort in the form of landowner “town hall” style meetings and material creation.

FAP has been working with landowners on and off for nearly 20 years. The most recent iteration of the program has been working with NIPF owners since 2012. The foresters employed under this program have continually assisted NIPF owners in participating in NRCS programs, especially EQIP. The FAP foresters have encountered barriers in their work, and that is expected to continue throughout the life of the project. Sometimes NIPF owners are skeptical about forest management. They worry that cutting trees is “bad” for the forest. It is the job of the FAP foresters to provide education and insight as to the benefits that forest management can have on a myriad of objectives.

RGS/AWS will also assist with outreach in a variety of ways. First, the Initiative will be promoted through their existing social media, newsletter, banquets, and magazine channels to members and non-members alike. In addition, RGS/AWS has a forester and wildlife consultant training program specializing in teaching young forest ecology and management to professionals and landowners alike. These programs will be used to “train the trainer” and will be periodically given during the entire project time frame. The program is open to all NIPF owner participants and partner employees.

V.B.4j. If applicable, indicate how the project will help producers in the area in “assisting producers in meeting or avoiding the need for natural resources regulatory requirements.” Briefly describe the regulation or potential regulation; the impact or potential impact of the regulation on producers, including any economic impact or impact on production; what mechanism will allow project activities to be considered under regulation.

Forestland owners participating in the Initiative may become qualified for verification under the Michigan Agriculture Environmental Assurance Program (MAEAP) “Forest, Wetlands, and Habitat*A*Syst”. MAEAP is an innovative, proactive, and voluntary program that helps landowners of all sizes, farms and forests, voluntarily prevent or minimize environmental risk. Forestland owners verified under MAEAP have certainty that they comply with all identified environmental regulation and have access to incentives identified in law. Those verified under Forest, Wetlands, and Habitat*A*Syst also meet all eligibility requirements for the American Forest Foundation 2010-2015 Standards of Sustainability for Forest Certification, which serve as the basis for the American Tree Farm System® certification program. MAEAP is supported by over 50 industry, farm and forestry organizations, university groups, conservation and environmental groups, and state and federal agencies. The opportunity for this type of verification will be presented to landowner participants that obtain a forest management plan and implement BMPs on their property.

Currently, forestry in Michigan is not an activity that requires obtaining a permit. BMPs in the state are voluntary—not required by law. A goal of the Initiative is to maintain this status. A permit process for forestry practices on NIPF would dramatically slow the amount of fiber that goes to market, as well as force producers to incur additional expenses. By providing NIPF owners with the opportunity for funds to implement voluntary BMPs the people of the state of Michigan can ensure that water quality and soil erosion controls have been accounted for. Often times in harvest operations, the limiting factor of whether or not a BMP is implemented is cost-driven. This project intends on subsidizing some of the cost necessary to implement worthwhile BMPs.

V.B.4k. A description of any requested adjustments of terms...

N/A

V.B.4l. If the project will request an alternative funding arrangement...

N/A

V.B.4m. If the proposal includes any activities that are not covered by one of the NRCS conservation practice standards...

N/A

V.B.4n. Certifications: SF-424B – Assurances, Non-Construction Programs

A completed Form SF-424A is attached.

V.B.4o. DUNS and SAM registration

DUNS #: 805335577

MDARD is registered with SAM.

Currently, there are approximately 227,000 acres enrolled in QFP.