Appendix C

Roadless Area Inventory and Wilderness Area Evaluation

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INTRODUCTION

The National Forest Management Act and the 1982 Planning Rule require an evaluation of potential wilderness area designations during forest plan revision. To fulfill this requirement, an inventory and evaluation of roadlesss areas that may be suitable for congressional wilderness area designation is needed. The first step is the inventory in which roadless areas are identified for further evaluation as potential wilderness areas. The second step evaluates the potential addition of the inventoried roadless areas to the National Wilderness Preservation System (NWPS) to determine the mix of land and resource uses that best meet public needs. According to the Eastern Wilderness Areas Act of 1975, areas in the East are considered for wilderness study area (WSA) designation. Any area designated a wilderness study area is subsequently studied to determine its suitability or non-suitability for preservation as a wilderness area, and a recommendation must be submitted to congress within ten years from the date of designation as a wilderness study area.

Appendix C is divided into two parts:

- Part One describes the process and requirements used to inventory roadless areas. All areas inventoried during the Roadless Area Review and Evaluation of 1979 (known as RARE II) and other Allegheny National Forest (ANF) lands were considered in the inventory process for the revision of the Land and Resource Management Plan (LRMP).
- Part Two presents the wilderness evaluations for each of the areas that met inventory requirements in Part One. Part Two discusses in detail the capability, availability and need for wilderness area designation and includes a summary of the current congressionally designated wilderness areas on the ANF.

The planning record contains supplemental data and maps used in the roadless inventory and evaluation.

PART ONE: THE ROADLESS AREA INVENTORY

PURPOSE

The primary purpose of the roadless area inventory and wilderness evaluation is to determine which areas on the ANF have the best potential for inclusion in the NWPS. Potential areas are included in the range of alternatives for recommended wilderness study in the Environmental Impact Statement (EIS). Recommending wilderness areas is one of the six planning decisions to be considered during forest plan revision.

For the inventory process, the ANF reviewed all National Forest System (NFS) lands that could potentially qualify as wilderness areas under the Wilderness Act of 1964 and the Eastern Wilderness Act of 1975. These areas included:

- RARE II roadless areas.
- Roadless Area Conservation Rule (RACR) roadless areas.
- Additional areas requested by the Friends of Allegheny Wilderness (FAW) and the Allegheny Defense Project (ADP).

The inventory is used primarily to determine which roadless areas have the best potential for recommendation for wilderness area designations. Therefore, Regional direction and criteria related to wilderness values are part of the inventory process, as described by the Forest Service Handbook (FSH) 1909.12, Chapter 7.

PREVIOUSLY INVENTORIED ROADLESS AREAS

In 1972 the Forest Service initiated a review of NFS roadless areas known as the Roadless Area Review and Evaluation (RARE) to determine their suitability for inclusion in the NWPS. No areas were identified on the ANF in this review. The second review process in 1979, RARE II, resulted in a nationwide inventory of roadless areas that included 34,358 acres of ANF land. These areas are also RACR areas (as identified in the nationwide Environmental Impact Statement of January, 1979). This rule addresses how to proceed with long-term conservation and management of inventoried roadless areas. No other roadless areas were identified on the ANF in the 1986 Forest Plan or in any other unit plans. The RARE II/RACR inventory includes the following seven areas:

Tracy Ridge	9,188 acres
Cornplanter	3,012 acres
Clarion River	3,440 acres
Allegheny Front	7,424 acres
Minister Valley	1,375 acres
Hearts Content	200 acres
Verbeck Island	14 acres
	24,653 acres

The Pennsylvania Wilderness Act of 1984 (H. Res. 5076) established the Hickory Creek and Allegheny Islands Wilderness Areas and the Allegheny National Recreation Area (NRA), which is comprised of the Tracy Ridge, Cornplanter and Allegheny Front RARE II/RACR areas. National recreation areas or other designated special areas such as scenic areas, research natural areas, or wild and scenic river corridors are not exempt from the roadless area inventory. These other special areas may be recommended for designation as wilderness areas provided they meet inventory and evaluation criteria. All of the RARE II/RACR areas have been re-inventoried as part of the Forest Plan revision process.

INVENTORY CRITERIA

The criteria used to inventory roadless areas for potential designation as wilderness areas follows direction found in FSH 1909.12 and the "*Land and Resource Management Planning Handbook, WO (Washington Office) Amendment 1909.12-92-1 Effective 8/3/92"* provides in Chapter 7 the criteria for roadless inventory as follows:

7.11 Inventory Criteria. Roadless areas qualify for placement on the inventory of potential wilderness if, in addition to meeting the statutory definition of wilderness, they meet one or more of the following criteria:

1. *They contain 5,000 acres or more.*
2. *They contain less than 5,000 acres but:*
    a. *Due to physiography or vegetation, they are manageable in their natural condition.*
    b. *They are self-contained ecosystems such as an island.*
    c. *They are contiguous to existing wilderness, primitive areas, Administration-endorsed wilderness, or roadless areas in other Federal ownership, regardless of their size.*
3. *They do not contain improved roads maintained for travel by standard passenger-type vehicles, except as permitted in areas east of the 100th meridian (sec. 7.11b).*

Section 7.11 states that in addition to meeting the roadless criteria "roadless areas qualify for placement on the inventory of potential wilderness if they meet the statutory definition of wilderness." As defined in Section 2c of the Wilderness Act of 1964, the definition of wilderness is:

> *(c) A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.*

7.11a Criteria for Including Improvements. Roadless areas may qualify for inventory as potential wilderness even though they include the following types of areas or features.

1. *Airstrips and heliports.*
2. *Cultural treatments involving plantations or plantings where the use of mechanical equipment is not evident.*
3. *Electronic installations, such as televisions, radio, and telephone repeaters, and the like, provided their impact is minimal.*
4. *Areas with evidence of historic mining (50 plus years ago). Do not include areas of significant current mineral activity, including prospecting with mechanical earth-moving equipment. The inventory may include areas where the only evidence of prospecting are holes that have been drilled without access roads to the site. Inventoried roadless areas also may include:*
    a. *Areas that otherwise meet the inventory criteria if they are covered by mineral leases having a "no surface occupancy" stipulation.*
    b. *Areas covered by mineral leases that otherwise meet inventory criteria only if the leasee has not exercised development and occupancy rights. If and when these rights are exercised, remove the area, or portion, affected, from the inventory unless it is possible to establish specific occupancy provisions that would maintain the area in a condition suitable for wilderness.*
5. *National Grasslands. National Grasslands may have structures or evidence of vegetative manipulation resulting from past management practices. National Grassland roadless areas containing the following features may be inventoried:*

   a. *Vegetation type conversions that are reverting to native vegetation with minimal evidence of cultivation.*
   b. *Less than 1 mile of interior fence per section.*
6. *Areas of less than 70 percent Federal ownership, if it is realistic to manage the Federal lands as wilderness, independent of the private land.*
7. *Minor structural range improvements (FSM 2240.5) such as fences or water troughs. Exclude areas where nonstructural range improvements are readily visible and apparent. Areas with spray or burning projects are permissible if there is little or no evidence of the project.*
8. *Recreation improvements such as occupancy spots or minor hunting or outfitter camps. As a general rule, do not include developed sites. Areas with minor, easily removable recreation developments may be included.*
9. *Timber harvest areas where logging and prior road construction are not evident. Examples include those areas containing early logging activities related to historic settlement of the vicinity, areas where stumps and skid trails or roads are substantially unrecognizable, or areas where clearcuts have regenerated to the degree that canopy closure is similar to surrounding uncut areas.*
10. *Ground-return telephone lines, if a right-of-way has not been cleared.*
11. *Watershed treatment areas if the use of mechanical equipment is not evident. The inventory may include areas where minor watershed treatment has been accomplished manually, such as small hand-constructed gully plugs.*

7.11b Criteria for Roadless Areas in the East. National Forest System lands in the eastern United States have been acquired over time from private ownership. Criteria for inventorying roadless areas in the East recognize that much, if not all of the land, shows some signs of human activity and modification even though they have shown high recuperative capabilities. Roadless areas east of the 100th meridian qualify for inventory as potential wilderness if:

1. *The land is regaining a natural, untrammeled appearance.*
2. *Improvements existing in the area are being affected by the forces of nature rather than humans and are disappearing or muted.*
3. *The area has existing or attainable National Forest System ownership patterns, both surface and subsurface, that could ensure perpetuation of identified wilderness values.*
4. *The location of the area is conducive to the perpetuation of wilderness values. Consider the relationship of the area to sources of noise, air, and water pollution, as well as unsightly conditions that would have an effect on the wilderness experience. The amount and pattern of Federal ownership is also an influencing factor.*
5. *The area contains no more than a half mile of improved road for each 1,000 acres, and the road is under Forest Service jurisdiction.*
6. *No more than 15 percent of the area is in non-native, planted vegetation.*
7. *Twenty percent or less of the area has been harvested within the past 10 years.*
8. *The area contains only a few dwellings on private lands and the location of these dwellings and their access needs insulate their effects on the natural conditions of Federal lands.*

Sections 7.11, 7.11a, and 7.11b of FSH 1909.12, WO (Washington Office) Amendment 1909.12-92-1, effective 8/3/92, all apply to national forests in the Eastern Region of the Forest Service. Areas included in the inventory must meet all criteria listed in the FSH. However, special attention has been given to section 7.11b that specifically addresses criteria for roadless areas in the East.

Forest Service Region 9 (Eastern Region) GUIDELINES

The R9 Guidelines for Completing Roadless Area Inventories during Forest Plan Revision (August 1997) provides further clarification of the FSH 1909.12 for application to the Eastern Region. The R9 Guidelines provide application guidance for the primary criteria listed in FSH 1909.12. The ANF used these guidelines to aid in the roadless inventory process. The planning record contains a copy of the R9 Guidelines.

INVENTORY PROCESS AND RESULTS

The ANF used a multiple-step process to identify which areas qualify for the updated inventory of roadless areas in the LRMP. In each step, areas of the ANF were analyzed the using the criteria found in FSH 1909.12 to determine if they should be included in the inventory or eliminated. Areas were not eliminated based on not meeting one criterion alone, rather they were eliminated for not meeting two or more of the criteria. The process and results follows.

Step One

Using geographic information system (GIS) data, the ANF initially established analysis areas to be inventoried. The ANF was mapped into polygons of three size groups: 5,000 acres or more, 2,500 acres to 4,999 acres and 1,500 acres to 2,499 acres. The mapped analysis areas were bound by Federal, state, county, township and/or Forest Roads (FR) open and maintained for passenger cars (operation maintenance level 3, 4 and/or 5).

Once these areas were established, they were initially evaluated against 7.11.1 and 7.11.2 criteria.
7.11.1 "They contain 5,000 acres or more."
7.11.2 "They contain less than 5,000 acres but:

a. Due to physiography or vegetation, they are manageable in their natural condition.
b. They are self-contained ecosystems such as an island.
c. They are contiguous to existing wilderness, primitive areas, Administration-endorsed wilderness, or roadless areas in other Federal ownership, regardless of their size."

Application of the Criteria

7.11.1 All areas greater than 5,000 acres are further evaluated in subsequent steps. These areas represent 62 percent of the ANF or 314,237 acres.

7.11.2 All areas greater than 2,000 acres are further evaluated in subsequent steps. These areas represent 21 percent of the ANF or 105,118 acres. All areas between 1,500 acres and 2,000 acres (representing 6% of the ANF, or 32,779 acres) were further evaluated in Step One to determine if they were viable candidates for further evaluation in subsequent steps. Multiple factors were used to further evaluate these areas as they relate to 7.11a and 7.11b criteria and boundaries. As per R9 Guidelines, boundaries should follow natural or relatively permanent human-made features, including:

a. Natural features such as live streams, well-defined ridges or drainages.
b. Human-made features such as roads, trails, dams, power lines, pipelines, bridges, property lines, and state or ANF boundaries.
c. Boundaries should not cross power lines, state/county roads or major access roads.
d. Narrow, elongated, gerrymandered areas are not suitable; the boundary should provide an easily managed area.
e. A cherry-stemming boundary around roads into or through roadless areas is not appropriate.
f. Roadless areas can contain less than 70 percent Federal ownership, but only if it is realistic to manage the Federal lands as a wilderness area, independent of the private land.
g. Locate boundaries to avoid conflict with important existing or potential public uses outside the boundary, which could result in non-conforming demands on the area if it were to become a wilderness area.

All areas less than 1,500 acres were eliminated in this step. This represents 11 percent of the ANF, or 54,338 acres. These areas were primarily assessed in terms of the R9 Guidelines and 7.11.b.3 criteria requiring that *"The area has existing or attainable National Forest System ownership patterns, both surface and subsurface, that could ensure perpetuation of wilderness values,"* and 7.11.b.4 criteria stating that *"The location of the area is conducive to the perpetuation of wilderness values."* Consideration of the relationship of the area to sources of noise, air, and water pollution, as well as unsightly conditions that would have an effect on the wilderness experience (7.11.b.4), was given. The amount and pattern of Federal ownership was also evaluated along with

shape; boundaries; whether or not they are contiguous to existing wilderness areas, primitive areas, Administration-endorsed wilderness, or roadless areas in other Federal ownership, regardless of size; and their close proximity to private lands and associated access. Individual analysis areas were not assigned to these GIS polygons. They were evaluated based on a broad assessment of maps and GIS data. When evaluating a possible expansion of an existing wilderness area (7.11.2c), there should be no improved road, railroad, or utility corridor separating the existing area from the expansion area. If a barrier separated the areas, the wilderness area would not be expanded and the areas were evaluated independently (*R9 Guidelines for Completing Roadless Area Inventories during Forest Plan Revision, 1997*). After a review of these influencing factors, no areas less than 1,500 acres were considered capable of providing conditions that are conducive to the perpetuation of wilderness values. Other considerations in regard to size and location of smaller areas on the ANF follow.

Considerations in Regard to Size and Location of Smaller Areas (<1,500 acres)

A complete assessment of all critical thresholds significant to minimum area or size for wilderness area designation is beyond the state of current knowledge (Haney, J.C., et al. 2000, Gauging the Ecological Capacity of Southern Appalachian Reserves: Does Wilderness Matter? p. 136). Ecosystem size or the ecological capacity (ecological structure and the underlying functional processes that maintain that structure) is dependent on both the characteristics of the area itself and the surrounding landscape matrix (Haney, et al. 2000 p. 128). If either a single unit or the wilderness system as a whole is too small, protection of an ecological or wilderness attribute is likely jeopardized. For example, an area may be too small to sustain viable populations of certain wildlife, or too small to withstand disturbances such as windthrow, ice storms, and/or insect and disease infestations.

An ecosystem, self-contained or otherwise, is one that should contain a minimum dynamic scenario of which all successional stages (early, mid, late, and old growth) are expected to be maintained at all times by natural disturbances. Maintenance of such structural diversity by natural means is dependent on disturbance frequency and spatial extent for the disturbance. Large, rather than small scale, disturbances are more important in relation to the size of an area, because an area large enough to accommodate the most extreme disturbance will automatically accommodate smaller, less catastrophic ones (Haney, et al. 2000). Historical large scale disturbances on the ANF have been caused by both native and non-native insects and diseases, ice storms, fire, windthrow from tornadoes and other high intensity storms, and extensive browsing by deer. Natural disturbance patterns on the ANF can result in interrupted patterns of forest succession, causing instantaneous change from mature forest condition to young forest or non-stocked condition on a large scale (see 3.1.1 Forest Vegetation section of the Final EIS).

As mentioned, another factor affecting minimum dynamic size is the surrounding landscape matrix. Within the proclamation boundary, the ANF is fragmented by large tracts of private land, extensive oil, gas and mineral (OGM) development and thousands of miles of roads and trails. The landbase within the proclamation boundary is 32 percent other ownership and 68 percent NFS lands, and there are over 4,400 miles of roads and over 1,000 miles of trails. Intensive human use of the land, including timber harvest and OGM development, has altered the landscape for more than 100 years and will continue. Also, within this matrix of land is stratification of surface and subsurface ownership with 93 percent, or 478,283 acres, of the ANF subsurface mineral estate privately owned (Lands Status Atlas). Privately owned OGM development is scattered throughout the ANF with an estimated 8,000 wells and 1,250 miles of associated roads. By 2020 an additional 7,680 wells and 3,120 miles of roads are possible (see Appendix F, Final EIS). The edge effect of human influence permeates interior forest areas. In particular, these factors (landscape ownership matrix, location, shape, edge effect, fragmentation, extensive road system, wide-scale human influence, private land , access, subsurface ownership and associated well and road development, and the presence of large scale natural disturbance) affect the ability of smaller areas to function as intact, self-contained ecosystems where human influence would preclude a wilderness experience or value. The shape and location of the area on the ANF (as expressed in 7.11.b.4) was a key factor in determining whether or not these smaller areas are conducive to the perpetuation of wilderness values.

Results

Tables C-1 through C-3 summarize the results of Step One and includes the following information:

- The alpha-numeric labels used to identify the analysis areas and their size.
- Whether or not they are self-contained ecosystems such as an island (7.11.2.b).
- Whether or not they are contiguous to other existing wilderness areas, primitive areas, Administration-endorsed wilderness, or roadless areas in other Federal ownership, regardless of their size. (7.11.2.c)
- Whether they contain an area of special interest.
- Whether or not they are being eliminated.

Table C-1. Summary of Step One (Areas 5,000 acres or more)

Area	Size (acres)	Contiguous to Wilderness	Island	Areas of Special Interest	Eliminate (Yes or No)
1-1	**29,602**	**No**	**No**	**Tionesta**	**No**
1-2	14,916	No	No	No	No
1-3	14,466	No	No	No	No
1-4	13,001	No	No	No	No
1-5	12,976	No	No	No	No
1-6	12,334	No	No	No	No
1-7	11,598	No	No	No	No
1-8	**11,160**	**No**	**No**	**Hickory Creek Wilderness Addition**	**See discussion below**
1-9	**10,651**	**No**	**No**	**Morrison (also known as Chappel Fork)**	**No**
1-10	10,456	No	No	No	No
1-11	**10,002**	**No**	**No**	**Tracy Ridge RARE II**	**No**
1-12	**9,990**	**No**	**No**	**Minister Valley RARE II**	**No**
1-13	8,714	No	No	No	No
1-14	8,714	No	No	No	No
1-15	8,470	No	No	No	No
1-16	8,179	No	No	No	No
1-17	8,085	No	No	No	No
1-18	7,777	No	No	No	No
1-19	7,395	No	No	No	No
1-20	**7,424**	**No**	**No**	**Allegheny Front RARE II**	**No**
1-21	7,127	No	No	No	No
1-22	7,076	No	No	No	No
1-23	7,003	No	No	No	No
1-24	**6,234**	**No**	**No**	**Clarion River RARE II**	**No**
1-25	6,130	No	No	No	No
1-26	5,895	No	No	No	No
1-27	5,744	No	No	No	No
1-28	5,722	No	No	No	No
1-29	5,509	No	No	No	No
1-30	5,477	No	No	No	No
1-31	**5,418**	**No**	**No**	**Allegheny Reservoir**	**No**
1-32	**5,378**	**No**	**No**	**Chestnut Ridge (also known as Sugar Run)**	**No**
1-33	5,351	No	No	No	No
1-34	5,194	No	No	No	No
1-35	5,069	No	No	No	No

Table C-2. Summary of Step One (Areas 2,500 to 4,999 acres)

Area	Size (acres)	Contiguous to Wilderness	Island	Areas of Special Interest	Eliminate (Yes or No)
2-1	4,947	No	No	No	No
2-2	4,860	No	No	No	No
2-3	4,859	No	No	No	No
2-4	4,690	No	No	No	No
2-5	4,546	No	No	No	No
2-6	4,260	No	No	No	No
2-7	4,210	No	No	No	No
2-8	4,116	No	No	No	No
2-9	4,105	No	No	No	No
2-10	3,753	No	No	No	No
2-11	3,642	No	No	No	No
2-12	3,559	No	No	No	No
2-13	3,530	No	No	No	No
2-14	3,354	No	No	No	No
2-15	3,310	No	No	No	No
2-16	3,257	No	No	No	No
2-17	**3,215**	**No**	**No**	**Cornplanter RARE II**	**No**
2-18	3,154	No	No	No	No
2-19	3,098	No	No	No	No
2-20	3,091	No	No	No	No
2-21	2,938	No	No	No	No
2-22	2,836	No	No	No	No
2-23	2,821	No	No	No	No
2-24	2,650	No	No	No	No
2-25	2,806	No	No	No	No
2-26	2,805	No	No	No	No
2-27	2,786	No	No	No	No
2-28	2,749	No	No	No	No
2-29	2,623	No	No	No	No
2-30	2,548	No	No	No	No

Table C-3. Summary of Step One (Areas less than 2,500 acres)

Area	Size (acres)	Contiguous to Wilderness	Island	Areas of Special Interest	Eliminate (Yes or No)
3-1	**2,423**	**No**	**No**	**Hearts Content RARE II**	**No**
3-2	2,411	No	No	No	No
3-3	2,327	No	No	No	No
3-4	2,275	No	No	No	No
3-5	2,102	No	No	No	No
3-6	2,037	No	No	No	No
3-7	1,963	No	No	No	Yes
3-8	1,960	No	No	No	Yes
3-9	1,836	No	No	No	Yes
3-10	1,802	No	No	No	Yes
3-11	1,773	No	No	No	Yes
3-12	1,759	No	No	No	Yes
3-13	1,617	No	No	No	Yes
3-14	1,750	No	No	No	Yes
3-15	1,592	No	No	No	Yes
3-16	1,584	No	No	No	Yes
3-17	1,554	No	No	No	Yes
3-18	**14**	**No**	**Yes**	**Verbeck Island RARE II**	**No**

The Areas of Special Interest column identifies which analysis areas contain the RARE II areas or areas that have been identified by individuals or special interest groups, such as the FAW or ADP. These groups have submitted proposals to the ANF suggesting that these areas be designated as wilderness areas, or in some cases, as an NRA. These Areas of Special Interest can be tracked throughout the process by referring to the analysis area in which they are contained. For example, area 1-1 is a 29,602 acre analysis area and includes the Tionesta Scenic and Research Natural Areas which are 4,131 acres. Maps showing the analysis areas are contained in the project record as well as in the GIS database at the ANF Supervisor's Office in Warren, PA.

There are 83 total mapped analysis areas. There are 35 areas 5,000 acres or more (1-1 to 1-35), 30 areas 2,500 acres to 4,999 acres (2-1 to 2-30), 17 areas 1,500 acres to 2,499 acres (3-1 to 3-17) and the Verbeck Island RARE II area at 14 acres (3-18). All acreage for each analysis area includes only NFS lands. No private lands are included in the acreages shown in the tables above. However, there are many instances where private land is contained within the mapped areas and/or adjacent to areas that often formed ill-defined boundaries.

A total of 11 analysis areas were eliminated in this step (areas 3-7 through 3-17). These areas were not self-contained ecosystems nor were they contiguous to existing wilderness, primitive areas, Administration-endorsed wilderness, or roadless areas in other Federal ownership. These areas were eliminated based on further evaluation of 7.11.b criteria and boundaries, as depicted in Table C-4, Reasons for Eliminating Areas 3-7 thru 3-17.

Table C-4. Reasons for Eliminating Areas 3-7 thru 3-17

Number	Total Acres	Reason(s) Removed *	Supplemental Notes
3-7	1,963	A, B, C, D R, P, W	Contains extensive OGM development and a utility corridor in lower section. Odd, indented, long and narrow shape. Extensive private land to the east. No large topographic features for separation from adjacent private lands. OGM roads in area.
3-8	1,960	A, B, C, D P, W	Contains OGM development and OGM access roads in northeast quarter. Adjacent private lands.
3-9	1,836	A, B, C, D R, P, W	Odd, long, indented and narrow shape. Contains extensive OGM development and OGM roads. Extensive private land and OGM development in surrounding area.
3-10	1,802	A, B, C, D R, P, W	Contains 4 utility corridors dividing area into 6 smaller pieces and contains OGM development in northwest half. Bounded primarily by private land and extensive OGM development.
3-11	1,773	A, B, C, D R, P, W	Odd, amoeba-like shape. Extensive private land adjacent to area with OGM development. Contains extensive OGM development and OGM roads.
3-12	1,759	A, B, C, D R, P, W	Long, linear and narrow shape. Adjacent to area 3-9. Contains extensive OGM development and OGM roads. Adjacent lands also highly developed OGM.
3-13	1,617	E, R, P, W	Long, linear and narrow shape almost divided into two pieces by private land. Utility corridor on far southeast side reducing size further.
3-14	1,750	A, B, C, D W	Contains one utility corridor dividing area into 2 smaller pieces. Contains OGM development and OGM roads and extensive OGM development in surrounding area.
3-15	1,592	A, B, C, D R, W	Contains extensive OGM development, OGM roads and utility corridor in north portion. Odd, amoeba-like shape. Extensive OGM development on adjacent lands east, west and north.
3-16	1,584	A, B, C, D R, W	Contains 2 utility corridors dividing area into 3 smaller pieces and contains OGM development scattered throughout. Extensive OGM development throughout surrounding area.
3-17	1,554	C, D, E R, P, W	Oddly shaped geometric pattern indented with private land in northwest quarter. Surrounded by private land.
*** PRIMARY REASONS FOR REMOVAL FROM FURTHER CONSIDERATION**			
A	Does not meet 7.11.b.1 criteria. Due to development within the area, the natural, untrammeled appearance is modified.		
B	Does not meet 7.11.b.2 criteria. Improvements existing in the area are being affected by the forces of humans rather than the forces of nature and are not disappearing or muted.		
C	Does not meet 7.11.b.3 criteria. The area has ownership patterns, either surface or subsurface, that would not ensure perpetuation of wilderness values.		
D	Does not meet 7.11.b.4 criteria. The location of the area is not conducive to the perpetuation of wilderness values due to amount and pattern of Federal ownership and adjacent or interior private lands.		
E	Does not meet 7.11.b.8 criteria. The area contains extensive private lands and the location of private lands and their effects are not insulated from the natural conditions of Federal lands.		
*** SUPPLEMENTAL REASONS–BOUNDARY CONSIDERATIONS**			
R	Ratio of edge to area is relatively high; long, narrow shape, gerrymandered or amoeba-like.		
P	Not easily separated from adjacent private lands.		
W	Narrow in areas, less than 1 to 2 miles wide.		

Discussion of RARE II Areas and Areas of Special Interest

The 12 RARE II areas and Areas of Special Interest fell within one of the mapped alpha-numeric areas as shown in Table C-5. Additional lands that were contiguous to RARE II areas were included in order to determine the maximum extent of the area which may qualify as roadless. These 12 areas will be given a close examination and consideration throughout this process.

Table C-5. Summary of RARE II and Special Interest Areas

Area	Area Name	Area Size (Acres)	RARE II Size (Acres)
1-1	Tionesta	29,602	Not a RARE II area
1-8	Hickory Creek Addition	1,823	Not a RARE II area
1-9	Morrison, also known as Chappel Fork	10,651	Not a RARE II area
1-11	Tracy Ridge	10,002	9,188
1-12	Minister Valley	9,990	1,375
1-20	Allegheny Front	7,424	7,424
1-24	Clarion River	6,234	3,440
1-31	Allegheny Reservoir	5,418	Not a RARE II area
1-32	Chestnut Ridge	5,378	Not a RARE II area
2-17	Cornplanter	3,215	3,012
3-1	Hearts Content	2,423	200
3-18	Verbeck Island	14	14

Hickory Creek Addition

Area 1-8 was analyzed to determine if there was an opportunity to expand Hickory Creek Wilderness Area from 9,337 acres to 11,160 acres. There is a well-defined and maintained utility corridor that prohibits expansion of this Wilderness Area. As per the R9 Guidelines for this process, expansion of wilderness areas can not occur across utility corridors. Since this area could not be expanded, it became a stand-alone analysis area which is further considered in the steps below.

Allegheny Front

The Allegheny Front RARE II Area, contained within area 1-20, is comprised of two NFS land units: one unit totals 7,217 acres and the other totals 207 acres. The 207 acre land parcel is completely separated from the larger parcel by approximately 1,420 acres of private lands. This 207 acre area is not considered manageable in its natural condition (criteria 2a), nor is it a self-contained ecosystem such as an island (criteria 2b), nor is it contiguous to any existing wilderness areas (criteria 2c). It also does not meet 7.11.b.4 or 7.11.b.8 criteria. The small 207 acre land parcel is being eliminated from further evaluation due this combination of criteria. Area 1-20, Allegheny Front RARE II Area will be further evaluated as a 7,217 acre single analysis area.

Step Two

Using the maps and GIS analysis results from Step One, analysis areas that were not previously eliminated were further analyzed in Step Two against criteria contained within 7.11.a and 7.11.b. The following primary criteria were applied in this step:

7.11.a Criteria for Including Improvements.

7.11.b.1 "The land is regaining a natural untrammeled appearance."

7.11.b.2 "Improvements existing in the area are being affected by the forces of nature rather than humans and are disappearing or muted."

7.11.b.4 "The location of the area is conducive to the perpetuation of wilderness values. Consider the relationship of the area to sources of noise, air, and water pollution, as well as unsightly conditions that would have an effect on the wilderness experience. The amount and pattern of Federal ownership is also an influencing factor."

7.11.b.5 "The area must contain no more than 1/2 mile of improved road for each 1,000 acres and the road is under Forest Service jurisdiction."

Application of the Criteria

These criteria all involve evaluating the extent of development in the areas to determine whether or not there are existing improvements and/or activities that would affect *"potential wilderness values"* (7.11.a), the "*natural untrammeled appearance"* (7.11.b.1), whether the "*the area is being affected by the forces of nature rather than humans"* (7.11.b.2), and if "*the location is conducive to the perpetuation of wilderness values*" (7.11.b.4). Guideline L of the R9 Guidelines (p. 8) was used to help identify improvements that are not allowed in inventoried roadless areas.

Improvements not allowed (R9 Guidelines):

1. Significant current mineral activity.
2. Areas of prospecting with mechanical earth moving equipment.
3. Significant developed recreation sites judged difficult to obliterate and rehabilitate. Recreation developments which would be difficult to obliterate include highly developed campgrounds or other facilities which have paved access, vault toilets, paved parking lots, pavilions, boat ramps or other such constructed features.
4. Active railroads and abandoned railroad beds that have significant cut and fills, old trestles, bridge abutments and cinder surfacing.
5. Pipelines, transmission lines and utility corridors.
6. High standard trails with surfaces difficult to rehabilitate to primitive standards. Trails with paved surfaces or those designated for motorized use by ATV or snowmobile were considered high standard trails. Non-motorized trails which were not paved, such as hiking or cross-country skiing trails were not considered to be high standard trails.

Significant current mineral activity was considered to be a combination of active wells plus roads that access the active wells. An active well alone or a road used to access abandoned or plugged wells was not considered significant current mineral activity. Active wells on the ANF generally have a pump and other developments which have been installed at the site. Roads are used to access subsurface mineral rights and are used for hauling heavy equipment and machinery and for prospecting with mechanical earth moving equipment. Only those wells identified in GIS databases as active were included as long as GIS data also identified associated well access road(s). The combination of active wells plus road access is evaluated to determine significant current mineral activity.

Pipelines, transmission lines and utility corridors are spread across the ANF. These include above and below ground corridors for telephone, powerline and water supply transmission as well as pipeline corridors used to transfer oil and gas. In some areas, where there is significant mineral activity, pipelines are highly concentrated. There are easements or rights-of-way passages granted for the use of these corridors. Development and use of utility corridors would not be conducive to preserving wilderness values.

For the 7.11.b.5 criteria, roads under state, county, townships, or other ownerships are not included in a roadless area since the Forest Service does not have authority to regulate use on those roads. 7.11.b.5 states that "Roadless Areas east of the 100th meridian" shall have "no more than a half mile of improved road for each 1,000 acres, and the road is under Forest Service jurisdiction."

In 1997, the Regional Office recommended the following definitions of an improved road:

"An improved road is any constructed or existing feature or facility created on the land for the purpose of travel by passenger vehicles (four wheeled, 2 wheel drive) which are legally allowed to operate on forest roads or public roads and highways, and vehicles are greater than 50 inches in width. Said facility will have an area for vehicles to travel on and will incorporate some manner for the disposal of surface runoff." (Bill Rees, Regional Office Engineering, 3/26/97)

Improved roads for the ANF include:

1. All maintenance level 3, 4 and 5 Forest Service, state, county or township roads.
2. Some maintenance level 2 roads within areas further analyzed (reconfigured). On a case-by-case basis, level 2 roads were considered to be improved if they are drivable by four-wheeled, 2 wheel drive vehicle and are maintained to legally allow public use by any type of vehicle.
3. Roads that access private land.

The following definitions are the objective maintenance levels for roads on the ANF. These represent the desired maintenance level for the road. The operational maintenance level is the maintenance level the road is being maintained to and may not, in some cases, coincide with the objective maintenance level. The five objective maintenance levels described below defines the level of service and maintenance required for a specific road, consistent with road management objectives and maintenance criteria.

Maintenance Level 1: Assigned to intermittent service roads during the time they are closed to vehicular traffic. The closure period must exceed 1 year. Basic custodial maintenance is performed to keep damage to adjacent resources below an acceptable level and to perpetuate the road to facilitate future management activities. Emphasis is normally given to maintaining drainage facilities and runoff patterns. Planned road deterioration may occur at this level. Appropriate traffic management strategies are prohibit and eliminate. Roads receiving level 1 maintenance may be of any type, class or construction standard, and may be managed at any other maintenance level during the time they are open for traffic. However, while being maintained at level 1, they are closed to vehicular traffic, but may be open and suitable for non-motorized uses.

Maintenance Level 2: Assigned to roads open for use by high clearance vehicles. Passenger car traffic is not a consideration. Traffic is normally minor, usually consisting of one or a combination of administrative, permitted, dispersed recreation, or other specialized uses. Log haul may occur at this level. Appropriate traffic management strategies are either discourage or prohibit passenger cars or accept or discourage high clearance vehicles.

Maintenance Level 3: Assigned to roads open and maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not considered priorities. Roads in this maintenance level are typically low speed, single lane with turnouts and spot surfacing. Some roads may be fully surfaced with either native or processed material. Encourage and accept are appropriate traffic management strategies. Discourage or prohibit strategies may be employed for certain classes of vehicles or users.

Maintenance Level 4: Assigned to roads that provide a moderate degree of user comfort and convenience at moderate travel speeds. Most roads are double lane and aggregate surfaced, but some roads may be single lane. Some roads may be paved and/or dust abated. The most appropriate traffic management strategy is encourage. However, the prohibit strategy may apply to specific classes of vehicles or users at certain times.

Maintenance Level 5: Assigned to roads that provide a high degree of user comfort and convenience. Normally, roads are double-lane, paved facilities. Some may be aggregate surfaced and dust abated. The appropriate traffic management strategy is encourage.

Results

GIS data was used to show the extent and location of improvements. If an area contained improvements that are not allowed, the area was then examined to determine if it could be reconfigured to exclude those improvements that are not allowed. By examining the location and spatial distribution of the improvements, viable analysis areas could still exist, especially within the larger analysis areas. Boundary considerations were based on the R9 Guidelines to “follow natural or relatively permanent human-made features.” Utility corridors, improved roads, private inholdings and natural features were used to reconfigure new analysis area boundaries where feasible. Natural features such as ridgelines, streams or other prominent features were used to draw new boundaries where appropriate and available. The reconfigured areas excluded significant current mineral activity, highly developed recreation sites, railroads, utility corridors, some private lands and high standard trails. Not all areas could be reconfigured due to the location, boundary, shape, topography or amount of improvements in the area. Extensive

flat topography was not conducive for establishing new boundaries around improvements. New acreages were calculated for each reconfigured area. If the areas could not be reconfigured and they contained disqualifying improvements, they were eliminated.

Tables C-6 and C-7 summarize the results of Step Two. The tables display road density (ML 3, 4, and 5 roads only), OGM activity (active wells and roads), indicates whether or not utility corridors were contained within the areas, and whether or not an area was eliminated or reconfigured.

Table C-6. Summary of Existing Improvements (Areas >5,000 acres)

Area	Size (Acres)	Improved Roads (miles)	Road Density (miles/1,000 acres)	Active Wells	Well Roads (miles)	Utility Corridors	Reconfigure	Eliminate	Reason
		A		B					
		Primary Reason for Elimination							
1-1	**29,602**	**29.71**	**1.00**	**377**	**136.02**	**Yes**	**No**	**Yes**	**A**
1-2	14,916	19.19	1.29	187	53.75	Yes	No	Yes	A
1-3	14,446	13.63	0.94	65	27.45	Yes	No	Yes	A
1-4	13,001	0.48	0.04	30	25.71	Yes	No	Yes	B
1-5	12,976	19.56	1.51	291	65.87	Yes	No	Yes	A
1-6	12,334	12.01	0.97	5	4.36	Yes	No	Yes	A
1-7	11,598	8.17	0.70	9	5.92	Yes	Yes	No	-
1-8	**1,823**	**0.00**	**0.00**	**0**	**0.00**	**Yes**	**No**	**No**	-
1-9	**10,651**	**5.94**	**0.56**	**39**	**18.64**	**Yes**	**Yes**	**No**	-
1-10	10,456	9.99	0.96	87	20.55	Yes	No	Yes	A
1-11	**10,002**	**2.33**	**0.23**	**5**	**0.00**	**Yes**	**Yes**	**No**	-
1-12	**9,990**	**0.22**	**0.02**	**0**	**0.01**	**Yes**	**Yes**	**No**	-
1-13	8,714	2.20	0.25	238	66.28	Yes	No	Yes	B
1-14	8,714	9.80	1.12	295	56.44	Yes	No	Yes	A
1-15	8,470	8.15	0.96	149	45.73	Yes	No	Yes	A
1-16	8,179	6.18	0.76	22	25.00	Yes	No	Yes	A
1-17	8,085	3.85	0.48	28	19.47	Yes	No	Yes	B
1-18	7,777	6.08	0.78	2	12.72	Yes	No	Yes	A
1-19	7,395	0.00	0.00	0	0.00	Yes	Yes	No	-
1-20	**7,217**	**0.00**	**0.00**	**4**	**0.88**	**Yes**	**Yes**	**No**	-
1-21	7,127	7.55	1.06	23	3.45	No	Yes	No	-
1-22	7,076	1.48	0.21	20	22.38	Yes	No	Yes	B
1-23	7,003	0.00	0.00	10	7.24	Yes	No	Yes	B
1-24	**6,234**	**0.00**	**0.00**	**0**	**0.00**	**Yes**	**Yes**	**No**	-
1-25	6,130	0.09	0.01	9	12.52	Yes	No	Yes	B
1-26	4,030	2.96	0.73	103	30.75	Yes	No	Yes	A
1-27	5,895	2.72	0.46	7	0.27	Yes	No	Yes	See below
1-28	5,744	0.00	0.00	0	1.20	Yes	No	Yes	See below
1-29	5,722	4.39	0.77	1	0.52	Yes	No	Yes	A
1-30	5,477	2.11	0.39	52	18.24	Yes	No	Yes	B
1-31	**5,418**	**0.00**	**0.00**	**2**	**0.00**	**Yes**	**Yes**	**No**	-
1-32	**5,378**	**0.00**	**0.00**	**4**	**0.04**	**Yes**	**Yes**	**No**	-
1-33	5,351	0.00	0.00	11	6.98	Yes	No	Yes	B
1-34	5,194	9.96	1.92	51	17.18	Yes	No	Yes	A
1-35	5,069	2.23	0.44	1	1.28	Yes	No	Yes	B

A–Does not meet 7.11.b.5 criteria.
B–Does not meet 7.11.b.1 or 7.11.b.2 criteria.

Table C-7. Summary of Existing Improvements (Areas <5,000 acres)

Area	Size (Acres)	Improved Roads (miles)	Road Density (miles/1,000 acres)	Active Wells	Well Roads (miles)	Utility Corridors	Reconfigure	Eliminate	Reason
		A		B					
		Primary Reason for Elimination							
2-1	4,947	2.23	0.45	50	25.55	No	No	Yes	B
2-2	4,860	0.12	0.03	89	15.49	Yes	No	Yes	B
2-3	4,859	4.36	0.90	25	29.75	Yes	No	Yes	A
2-4	4,690	4.28	0.91	0	5.76	No	No	Yes	A
2-5	4,546	2.18	0.48	26	17.63	No	No	Yes	B
2-6	4,260	0.01	0.00	11	3.24	Yes	No	Yes	B
2-7	4,210	0.04	0.01	2	10.31	Yes	No	Yes	B
2-8	4,116	1.17	0.28	13	3.47	Yes	No	Yes	B
2-9	4,105	0.83	0.20	32	12.13	Yes	No	Yes	B
2-10	3,753	0.00	0.00	22	12.35	Yes	No	Yes	B
2-11	3,642	6.58	1.81	6	0.61	No	No	Yes	See below
2-12	3,559	0.00	0.00	8	3.34	Yes	No	Yes	B
2-13	3,530	3.25	0.92	0	4.48	Yes	No	Yes	A
2-14	3,354	0.00	0.00	1	4.44	Yes	No	Yes	B
2-15	3,310	0.28	0.08	1	0.31	Yes	No	Yes	See below
2-16	3,257	3.30	1.01	1	1.21	Yes	No	Yes	A
2-17	**3,215**	**0.00**	**0.00**	**0**	**0.00**	**Yes**	Yes	**No**	-
2-18	3,154	0.00	0.00	9	10.85	Yes	No	Yes	B
2-19	3,098	5.98	1.93	333	26.45	Yes	No	Yes	A
2-20	3,091	0.00	0.00	297	34.79	Yes	No	Yes	B
2-21	2,938	0.00	0.00	64	14.40	No	No	Yes	B
2-22	2,836	0.00	0.00	9	10.19	Yes	No	Yes	B
2-23	2,821	0.56	0.20	15	9.56	Yes	No	Yes	B
2-24	2,650	2.63	1.00	0	0.00	No	No	Yes	A
2-25	2,806	2.37	0.85	22	11.69	Yes	No	Yes	A
2-26	2,805	0.00	0.00	6	5.34	Yes	No	Yes	B
2-27	2,786	1.77	0.63	2	0.72	No	No	Yes	A
2-28	2,749	0.00	0.00	28	11.34	Yes	No	Yes	B
2-29	2,623	1.44	0.55	1	8.14	No	No	Yes	A
2-30	2,548	0.00	0.00	0	0.00	Yes	No	Yes	See below
3-1	**2,423**	**0.07**	**0.03**	**0**	**0.00**	**Yes**	Yes	**No**	**-**
3-2	2,411	0.52	0.22	2	0.00	Yes	No	Yes	See below
3-3	2,327	0.00	0.00	25	10.67	Yes	No	Yes	B
3-4	2,275	0.00	0.00	6	5.49	No	No	Yes	B
3-5	2,102	0.00	0.00	1	1.53	Yes	No	Yes	B
3-6	2,037	2.52	1.24	47	29.01	Yes	No	Yes	A
3-18	**14**	**0.00**	**0.00**	**0**	**0.00**	**No**	**No**	**No**	**-**

A–Does not meet 7.11.b.5 criteria.
B–Does not meet 7.11.b.1 or 7.11.b.2 criteria.

Of the 72 areas inventoried in this step, 24 contained more than one-half mile of improved roads per 1,000 acres and were eliminated based on 7.11.b.5 criteria. Road density for all areas was based on ML 3, 4 and/or 5 roads except area 2-11, where roads were examined on a case-by-case, road-by-road basis. Some maintenance level 2 roads in this area were considered improved and include FR 430, FR 137F, FR 452, FR 452A, FR 532. The road density of these ML 2 roads is 1.81 miles per 1,000 acres. These roads have been constructed with culverts and turnouts and maintained to allow public access for hunting, resulting in hard packed roads, drivable by standard

passenger vehicle. It is part of the Kinzua Quality Deer Cooperative, where roads are used both to improve hunting access and to manage habitat to control and manage deer herds. Because of the road density, it was eliminated.

Another 29 areas were eliminated based on extensive OGM development and associated roads. OGM development is a disqualifying improvement. It affects the natural appearance of the area and these improvements are being affected by the forces of humans rather than nature. As such, these areas did not meet 7.11.a, 7.11.b.1 and 7.11.b.2 criteria. Many of these areas also contained extensive utility corridors that also do not meet 7.11.a criteria and R9 Guidelines.

Areas 1-27, 1-28, 2-15, 2-30 and 3-2 were further evaluated because they contained no or few improved roads and only minor OGM development. For each of these areas, the number of and presence of utility corridors, the pattern of Federal ownership, location, shape and boundaries were considered. These areas were eliminated based on the following reasons:

- Area 1-27 contains minor OGM development (1.2 miles of OGM roads) and several utility corridors that divide it into 4 pieces. Reconfiguration was considered. However, flat topography within the area limited the possibility for well-defined, manageable boundaries. The shape and the location next to private lands and OGM development would not be conducive to the perpetuation of wilderness values. Overall, this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.4 criteria.
- Area 1-28 is an all-terrain vehicle (ATV) trail development area (intensive use area or IUA) established in the 1986 Forest Plan and contains an existing trail system in the northeast quarter. It is also part of the Kinzua Quality Deer Cooperative and contains more than 3 miles of improved maintenance level 2 roads which have been used for management activities and hunting access. It contains a utility corridor that separates the area into one large piece and one smaller piece. Due to the ATV trail and the presence of utility corridors, the area was eliminated. Reconfiguration to one area above the utility corridor and one below was considered during the initial analysis. However, the northern area would contain the existing Willow Creek ATV trail and, due to the placement and scale of this trail, reconfiguration was infeasible. The shape and location of the smaller area next to the ATV trail development area would not be conducive to the perpetuation of wilderness values. Overall, this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.4 criteria.
- Area 2-15 is an oddly shaped area with ill-defined boundaries. It contains 2 private inholdings and has private lands on three exterior sides. Reconfiguration would result in a gerrymandered, ill-defined boundary. The shape and the location next to private lands would not be conducive to the perpetuation of wilderness values. Overall, this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.4 criteria.
- Area 2-24 is another oddly shaped area with ill defined boundaries surrounded by private lands. FR 555 is considered an improved maintenance level 3 road within the area. Reconfiguration would result in a gerrymandered, ill-defined boundary. The shape and the location next to private lands would not be conducive to the perpetuation of wilderness values. Overall, this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.4 criteria.
- Area 2-30 contains a private inholding with access needs and three utility corridors that divide the area into four smaller pieces. Reconfiguration would result in a gerrymandered, ill-defined boundary. The shape and the location next to private lands would not be conducive to the perpetuation of wilderness values. Overall, this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.4 criteria.
- Area 3-2 contains a utility corridor and private lands that divide the land into two smaller pieces which further reduces the size and limits reconfiguration possibilities. Reconfiguration would result in a gerrymandered, ill-defined boundary. The shape and the location next to private lands would not be conducive to the perpetuation of wilderness values. Overall, this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.4 criteria.

All areas were evaluated to determine if they could be reconfigured into potentially viable analysis areas for further inventory. The following select areas represent how all areas were considered.

- Area 1-2 contains more than 19 miles of maintenance level 3, 4 and 5 improved roads with a road density of 1.29 miles per 1,000 acres. There are roughly 187 active wells and over 53 miles of roads used for OGM development. This area also contains several miles of utility corridors and two private inholdings with access needs. It is also surrounded by private lands. Due to the road density, OGM development and utility corridors, the area was eliminated. Reconfiguration was considered. However, the extent of development in the area limited possibilities for reconfiguration. If reconfigured, boundaries would be gerrymandered and ill-defined. The shape and the location next to private lands, roads and OGM development would not be conducive to the perpetuation of wilderness values. Overall this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.4 criteria.
- Area 1-3 contains more than 13 miles of maintenance level 3, 4 and 5 improved roads with a road density of 0.94 miles per 1,000 acres. There are roughly 65 active wells and over 27 miles of roads used for OGM development. This area also contains several miles of utility corridors and has private lands bordering two sides. Due to the road density, OGM development and utility corridors, the area was eliminated. Reconfiguration was considered. However, the extent of development in the area limited possibilities for reconfiguration. The shape and the location next to private lands, roads and OGM development would not be conducive to the perpetuation of wilderness values. Overall this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.4 criteria.
- Area 1-6 contains more than 12 miles of maintenance level 3, 4 and 5 improved roads with a road density of 0.97 miles per 1,000 acres. There are roughly 5 active wells and over 4 miles of roads used for OGM development. This area also contains utility corridors which are primarily on the outer edges of the north and south boundary. There is a private inholding and associated access in the center of the area, and private lands border all sides. Due to the road density and OGM development, the area was eliminated. Utility corridors were not a primary reason for elimination. Reconfiguration to include the area north of FR 221, which is an improved road and an area south of this road, was considered. The north area was then evaluated for the presence of roads. It contained 2.4 miles of maintenance level 3 improved roads and 3.7 miles of maintenance level 2 improved roads. The maintenance level 2 roads in this area were considered improved because they have been maintained to provide access by passenger vehicle for hunting and used to access private lands within the area. Consequently, the road density of this portion of the area exceeded one-half mile per 1,000 acres. The second area to the south could not be reconfigured. This area contains the Beaver Meadows Campground complex. Reconfiguration was attempted in order to eliminate the Beaver Meadows area. Overall, the topography is flat and well-defined boundaries could not be found. Consequently the area was not reconfigured and it was eliminated based on improved roads and OGM development (7.11.b.1, 7.11.b.2, 7.11.b.5. criteria)
- Area 1-15 contains more than 8 miles of maintenance level 3, 4 and 5 improved roads with a road density of 0.96 miles per 1,000 acres. There are roughly 149 active wells and over 45 miles of roads used for OGM development. This area also contains several miles of utility corridors on the western edge and private lands border it. Its shape is also gerrymandered or amoeba-like. Due to the road density and OGM development, the area was eliminated. Utility corridors were not a primary reason for elimination. Reconfiguration was considered. However, the extent of development in the area as well as the amoeba-like shape limited possibilities for reconfiguration. Overall this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.5 criteria. Its location would also not be conducive to the perpetuation of wilderness values and it would not meet or 7.11.b.4 criteria.
- Area 1-17 contains more than 3 miles of maintenance level 3, 4 and 5 improved roads with a road density of 0.48 miles per 1,000 acres. There are roughly 28 active wells and over 19 miles of roads used for OGM development. This area also contains several miles of utility corridors running primarily through the center. Due to the OGM development and presence of utility corridors, the area was eliminated. Reconfiguration was considered. However, the placement and extent of improved roads as well as utility corridors limited possibilities. If reconfigured it would result in a gerrymandered boundary Overall this area does not meet 7.11.b.1 or 7.11.b.2 criteria.
- Area 1-23 does not contain improved roads. However, it did contain significant mineral activity with 10 active wells and over 7 miles of roads used for OGM development in the bottom half. Due to the OGM

development, the area was eliminated. Reconfiguration was considered. However, flat topography limited the possibility for well-defined, manageable boundaries. Overall this area does not meet 7.11.b.1 or 7.11.b.2 criteria.

- Area 1-25 contains significant mineral activity with 9 active wells and over 12 miles of roads used for OGM development. Several miles of utility corridors divide the area into 3 pieces. Due to the OGM development and presence of utility corridors, the area was eliminated. Reconfiguration was considered. However, the placement and extent of utility corridors and OGM development limited possibilities. If reconfigured it would result in a gerrymandered boundary. It also borders extensive private lands. The shape and the location to private lands and OGM development would not be conducive to the perpetuation of wilderness values. Overall this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.4 criteria.
- Area 1-27 contains significant mineral activity and several miles of utility corridors that divide the area into 4 smaller pieces. Due to the OGM development and presence of utility corridors, the area was eliminated. Reconfiguration was considered. However, flat topography within the area limited the possibility for well-defined, manageable boundaries. It also borders extensive private lands. The shape and the location next to private lands and OGM development would not be conducive to the perpetuation of wilderness values. Overall this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.4 criteria.
- Area 1-33 contains OGM development with 11 wells and over 6 miles of OGM roads as well as several miles of utility corridors that cross the area and divide it into 3 smaller units. It also borders extensive private lands. Due to OGM development and the presence of utility corridors, the area was eliminated. Reconfiguration was considered. However, the placement and extent of OGM development as well as utility corridors limited possibilities. If reconfigured it would result in a gerrymandered boundary. The shape and the location next to private lands and OGM development would not be conducive to the perpetuation of wilderness values. Overall this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.4 criteria.
- Area 1-35 is a long, narrow, elongated area less than one-half mile wide. It contains 2.23 miles of improved roads and a utility corridor that divides the area in half. It is also surrounded by private lands on three sides. The location would not be conducive to the perpetuation of wilderness values due to its shape and adjacency to private development and associated activities. The area also contains OGM development. Due to OGM development and the presence of utility corridors, the area was eliminated. Reconfiguration was considered. However, the placement and extent of improved roads and utility corridors limited possibilities. If reconfigured it would result in a gerrymandered boundary. Overall this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.4 criteria.
- Area 2-4 contains more than 4 miles of maintenance level 3, 4 and 5 improved roads with a road density of 0.91 miles per 1,000 acres. It also contained over 5 miles of roads used for OGM development. It borders private lands on the north, south and west. Due to improved roads and the OGM development, the area was eliminated. It could not be reconfigured due to the extent of development. If reconfigured it would result in a gerrymandered boundary. The shape, size and the location next to private lands would not be conducive to the perpetuation of wilderness values. Overall this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.4 criteria.
- Area 2-6 is a long, narrow, elongated area less than one-half mile wide. It contains a utility corridor that divides the area and it borders extensive private lands to the north and southwest. The location would not be conducive to the perpetuation of wilderness values due to its shape and adjacency to private development and associated activities. The area also contains OGM development. Due to OGM development and the presence of utility corridors, the area was eliminated. Reconfiguration was considered. However, the placement and extent of improved roads and utility corridors limited possibilities. If reconfigured it would result in a gerrymandered boundary. Overall this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.4 criteria.
- Area 2-11 contains more than 6 miles of maintenance level 2 improved roads with a road density of 1.81 miles per 1,000 acres. Some maintenance level 2 roads in this area were considered improved and include FR 430, FR 137F, FR 452, FR 452A, FR 532. These roads have been constructed and maintained to allow public access for hunting resulting in hard packed roads, drivable by standard passenger vehicle with culverts and turn outs. It also contained OGM development. Due to improved roads and the OGM development, the area

was eliminated. If reconfigured it would result in a gerrymandered boundary. Overall this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.5 criteria.

- Area 2-14 is an oddly shaped area gerrymandered around private lands on all sides. It contains over 4 miles of OGM roads and a utility corridor that divides the area roughly in half. The location would not be conducive to the perpetuation of wilderness values due to its shape and adjacency to private development and associated activities. Due to OGM development and the presence of utility corridors, the area was eliminated. Improved roads were not a primary reason for elimination. Reconfiguration was considered. However, the placement and extent of improved roads and utility corridors limited possibilities. If reconfigured it would result in a gerrymandered, ill-defined boundary. Overall this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.4 criteria.
- Area 2-24 is an oddly shaped area with ill defined boundaries. It is almost completely surrounded by private lands. Reconfiguration would result in a gerrymandered, ill-defined boundary. It contained 2.63 miles of improved roads and a density of 1.00 per 1,000 acres. Overall this area does not meet 7.11.b.5 criteria.
- Area 2-26 contains over 5 miles of OGM roads. It also contains a utility corridor that divides the area into 3 smaller pieces. It borders private lands. Reconfiguration would result in a gerrymandered, ill-defined boundary. The shape, size and the location next to private lands would not be conducive to the perpetuation of wilderness values. Overall this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.4 criteria.
- Area 2-27 contains 1.77 miles of maintenance level 3, 4, or 5 improved roads with a road density of 0.63 miles per 1,000 acres. It also contained OGM development and borders private lands. Due to improved roads and the OGM development, the area was eliminated. Reconfiguration would result in a gerrymandered boundary. The shape, size and the location next to private lands would not be conducive to the perpetuation of wilderness values. Overall this area does not meet 7.11.b.1, 7.11.b.2, 7.11.b.5 or 7.11.b.4 criteria.
- Area 3-5 contains a utility corridor, private lands and OGM development. It also borders extensive private lands. Reconfiguration would result in a gerrymandered boundary. The shape, size and the location next to private lands would not be conducive to the perpetuation of wilderness values. Overall this area does not meet 7.11.b.1, 7.11.b.2, or 7.11.b.4 criteria.

Reconfigured Areas

Of the 72 areas analyzed in this step, a total of 58 were eliminated, with 14 areas evaluated further. A total of 12 areas could be reconfigured by placing boundaries along utility corridors, roads, private lands or natural features. The Hickory Creek Addition, area 1-8 was not reconfigured; however, it was further evaluated. Reconfigured areas were further analyzed to include all improved roads with maintenance levels of 2 to 5 and roads used to access private inholdings for determining road density. As mentioned, maintenance level 2 roads were evaluated on a road-by-road, case-by-case basis. Only the maintenance level 2 roads, which meet the improved road definition, were included. If the road density of improved roads exceeded one-half mile per 1,000 acres in the reconfigured areas, they were eliminated. Maps and supporting GIS data of the boundary reconfigurations are available in the project record. Table C-8 summarizes the reconfigured areas.

Table C-8. Summary of Reconfigured Areas

Area	Size	Reconfigured Acreage	Improved Roads (miles)	Road Density	Eliminate
1-7	11,598	3,170	2.10	0.66	Yes
1-8	**1,823**	**Not Reconfigured**	**0.75**	**0.41**	**No**
1-9	**10,651**	**2,483**	**0.35**	**0.02**	**No**
1-11	**10,002**	**9,033**	**0.00**	**0.00**	**No**
1-12	**9,990**	**9,145**	**3.70**	**0.41**	**No**
1-19	7,395	6,111	7.6	2.45	Yes
1-20	**7,217**	**6,742**	**0.00**	**0.00**	**No**
1-21	7,127	3,542	3.16	0.89	Yes
1-24	**6,234**	**3,439**	**0.00**	**0.00**	**No**
1-31	**5,418**	**5,277**	**0.00**	**0.00**	**No**
1-32	**5,378**	**5,063**	**0.00**	**0.00**	**No**
2-17	**3,215**	**2,918**	**0.00**	**0.00**	**No**
3-1	**2,423**	**1,263**	**0.00**	**0.00**	**No**
3-18	**14**	**14**	**0.00**	**0.00**	**No**

Roads selected within the reconfigured areas were considered to be improved if they:

- Contain a constructed cross-section, defined as a crowned or outsloped travelway, with discernible ditches, and cuts or fills.
- Used by public for hunting and recreation, drivable by 2-wheel drive, 4-wheeled vehicles. Road maintained for use by the public with drainage structures or improvements, such as culverts, constructed low-water crossings or bridges.
- Contain placed surfacing such as pit run material, gravel, bituminous, oil, or concrete. Such surfacing would have been hauled and placed on the roadbed from some other location.
- NS roads are non-system roads used to access private lands.

The improved roads included in these areas are:

Area	Improved Road	Miles
1-7	FRs 249, 550, 550A and NS22460	2.1
1-19	FRs 263,263A, 263A, 500, 500A, 501, 140 and NS22522	7.6
1-21	FR 212 and NS30010	3.2

Discussion of RARE II Areas and Areas of Special Interest

The R9 Guidelines were used to establish boundaries during the reconfiguration process as follows.

Boundaries should follow natural or relatively permanent human-made features, including:

a. Natural features such as live streams, well-defined ridges or drainages.
b. Human-made features such as roads, trails, dams, power lines, pipelines, bridges, property lines, and state or ANF boundaries.
c. Boundaries should not cross power lines, state/county roads or major access roads.
d. Narrow, elongated, gerrymandered areas are not suitable; the boundary should provide an easily managed area.
e. Cherry-stemming boundaries around roads into or through roadless areas is not appropriate.
f. Roadless areas can contain less than 70 percent Federal ownership, but only if it is realistic to manage the Federal lands as a wilderness area, independent of the private land.
g. Locate boundaries to avoid conflict with important existing or potential public uses outside the boundary, which could result in non-conforming demands on the area if it were to become a wilderness area.

Tionesta (Area 1-1)

This area is bound by State Highway (SH) 6, State Route (SR) 948, and FR 133, FR 195 and FR 152. There were 29 miles of ML 3, 4 or 5 improved roads (1.0 miles per 1,000 acres) within the area and over 136 miles of roads used by OGM operators. Both the Tionesta Research Natural and Tionesta Scenic Areas are contained within this area. Within the Tionesta Research Natural Area, current OGM activity and associated road development is occurring on approximately 35 active wells. This area also contains an extensive network of utility corridors that crisscross the vast majority. One utility corridor centrally divides the Tionesta Research Natural and Scenic Areas from north to south while OGM activity divides it from east to west. The opportunity to reconfigure the area with Tionesta Creek and East Branch Tionesta Creek forming the borders was considered. However, due to the extensive OGM development and placement and number of utility corridors, Tionesta could not be reconfigured to eliminate these improvements. Because of the significant current mineral activity and improved roads that exceed one-half mile per 1,000 acres, Tionesta was eliminated from further consideration as an inventoried roadless area.

Hickory Creek Addition (Area 1-8)

This area is bound by a utility corridor (Warren Electric Cooperative) along the southwest and SH 3005 on all other sides.

Morrison (Area 1-9)

The initial Morrison area of 10,651 acres is bound by SR 59, SR 321 and the Allegheny Reservoir. This larger area contains extensive current mineral activity on approximately one-half to three-quarters of the east side, and recent OGM development is occurring on the west side. This activity is occurring along two primary road systems within the area, FR 266/267 and FR 260 and off of the Rimrock Road and across the Morrison hiking trail system. It also contains the Rimrock recreation site and associated access road on the west. The reconfigured boundary was placed along the Rimrock road on the west and one-half to three miles from the mineral activity on the east along a prominent ridgeline. This eastern boundary replaced the SH 321 boundary. This reduced the potential inventoried roadless area from 10,651 to 2,483 acres.

Tracy Ridge (Area 1-11)

The initial Tracy Ridge area is bound by SR 321, SR 346 and the Allegheny Reservoir. This area contains the Tracy Ridge Campground and a utility corridor that crosses the area on the southern tip. The reconfigured boundary eliminated the campground and was placed along the utility corridor. All other road and reservoir boundaries remained. This reduced the potential inventoried roadless area from 10,002 to 9,003 acres.

Minister Valley (Area 1-12)

The initial Minister Valley area is bound SR 2001, SR 2002, FR 116 and private lands. This area contained a utility corridor along the southern tip. The reconfigured boundary was placed along the utility corridor. All other road and private land boundaries remained. This reduced the potential inventoried roadless area from 9,990 to 9,145 acres.

Allegheny Front (Area 1-20)

The initial Allegheny Front area is bound by private lands, SR 3005 and SH 62. This area contained a minor amount of current mineral activity on the central, east side. This mineral activity is encroaching on the area from outside development on private lands. The reconfigured boundary was formed to eliminate the mineral activity within the area. All other road and private land boundaries remained. This reduced the potential inventoried roadless area from 7,217 to 6,742 acres.

Clarion River (Area 1-24)

The initial Clarion River area is bound by the Clarion River and SR 3002. It contains several small private inholdings, a utility corridor to the west and a large private inholding to the east (approximately 600 acres). This large inholding constricted the area to a narrow strip of land approximately one-quarter mile from the north

boundary which was established along SH 3002. Private access to the inholding also occurs through this narrow strip of land. In order to eliminate the narrow, elongated cherry-stemming effect, the area was reconfigured to eliminate the 600-acre private inholding and the NFS system lands to the west. This boundary location would also help to avoid conflict with access rights to the private land, an important existing private use, which could result in non-conforming demands on the area if it were to become a wilderness area. All other road and river boundaries remained. This reduced the potential inventoried roadless area from 6,234 to 3,439 acres.

Allegheny Reservoir (Area 1-31)

The initial Allegheny Reservoir area is bound by the Allegheny Reservoir and private lands. It contains a utility corridor that crosses the area on the western, southern tip. The reconfigured boundary was placed along the utility corridor. All other reservoir and private land boundaries remained. This reduced the potential inventoried roadless area from 5,418 to 5,277 acres.

Chestnut Ridge (Area 1-32)

The initial Chestnut Ridge area is bound by SR 321, SR 346 and FR 137. It contains a utility corridor that crosses the area on the southern tip. The reconfigured boundary was placed along the utility corridor. All other road boundaries remained. This reduced the potential inventoried roadless area from 5,378 to 5,063 acres. Chestnut Ridge also contains some minor OGM development. Currently there are 2 active wells in the area which are accessed by short roads (approximately 150 feet long) from SH 321. A minor boundary adjustment may be needed to eliminate the OGM development.

Cornplanter (Area 2-17)

The initial Cornplanter area boundary is formed primarily by private lands. It contains the Camp Olmstead access road which provides access to private land that borders the area on the west. The reconfigured boundary was placed along the Camp Olmstead access road to avoid conflict with access rights to the private land, an important existing private use, which could result in non-conforming demands on the area if it were to become a wilderness area. All other private land boundaries remained. This reduced the potential inventoried roadless area from 3,215 to 2,918 acres.

Hearts Content (Area 3-1)

The initial Hearts Content boundary is formed by SR 3005 and State Game Lands. It contains a utility corridor to the north and a State Game Lands access road to the south. The reconfigured boundary was placed along the utility corridor and the access road. This boundary location would also help to avoid conflict with access rights to the public land, an important existing use, which could result in non-conforming demands on the area if it were to become a wilderness area. This resulted in a narrow, elongated area on the north and south. All other road and State Game Lands boundaries remained. This reduced the potential inventoried roadless area from 2,423 to 1,263 acres.

Verbeck Island (Area 3-18)

This area is bound by the Allegheny River. No boundary changes were made.

As a result of reconfiguration, RARE II areas were revised as displayed in the following table.

Area	Name	Reconfigured Size (NFS Acres)	RARE II (Acres)
1-11	Tracy Ridge	9,033	9,188
1-12	Minister Valley	9,145	1,375
1-20	Allegheny Front	6,742	7,424
1-24	Clarion River	3,439	3,440
2-17	Cornplanter	2,918	3,012
3-1	Hearts Content	1,263	200
3-18	Verbeck Island	14	14

Step Three

In this step, the remaining areas were further evaluated against size criteria found in 7.11 and all primary criteria found in 7.11.b. The boundary and the shape was also a consideration in this step. In addition, an evaluation of Clark Island was included. Clark Island, a 16 acre island located on the Allegheny Wild and Scenic River was acquired by the ANF in 2003. Prior to acquisition, Clark Island was used for farming and occasional use as a camping and/or picnic site.

Application of the Criteria

Application of the criteria follows previous treatment of criteria as identified in the steps above. Also included:

7.11.b.3 "The area has existing or attainable National Forest System ownership patterns, both surface and subsurface, that could ensure perpetuation of wilderness values."

Included in the analysis for this criterion is a core area which provides "outstanding opportunities for solitude or a primitive and unconfined type of recreation." According to the R9 Guidelines for Completing Roadless Area Inventories during Forest Plan Revision (August 1997), Recreation Opportunity Spectrum (ROS) classes defined as Primitive or Semi-primitive Non-motorized (SPNM) contain characteristics that meet solitude and unconfined recreation. As defined in the 1986 ROS Book, recreationists in areas inventoried as primitive or semi-primitive have a high to moderate *"probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance...in an environment that offers challenge and risk."* Current ROS mapping protocols require a minimum of 2,500 acres for semi-primitive classifications. The ANF looked at core areas as part of the 7.11.b.3 criterion, and other 7.11.b criteria were primary considerations as well. Tables C-9 through C-12 identifies the core area size for solitude or a primitive and unconfined type of recreation and includes an integrated evaluation of all 7.11.b criteria.

As mentioned, national ROS protocols require a minimum of 2,500 acres for semi-primitive classifications. Based on the National ROS Inventory Mapping Protocol (December 2003), semi-primitive areas are mapped one-half mile from better than primitive roads, railroads, water bodies, rights-of-way, mineral exploration, dwellings, population centers and other notable development. The ANF established core areas by measuring one-half mile from improved roads, significant mineral activity, railroads, the Allegheny Reservoir, utility corridors, highly developed recreation facilities, high standard trails, and from private dwellings where topography was generally flat. In some cases natural features, such as ridgelines or streams, were used to delineate core area boundaries as these features serve to block the influences of exterior developments (roads, railroads, etc.). Where topographic features were used, core areas tended to be larger. The process of analyzing ROS core areas involved drawing core area boundaries onto maps and calculating the maximum core area size available for semi-primitive, unconfined recreation.

Results

The information provided in Tables C-9 through C-12 indicate whether the areas meet the inventory criteria and should receive further evaluation for potential wilderness area designation.

Table C-9. Evaluation of Morrison, Tracy Ridge and Minister Valley

Inventory Criteria	Potential Inventoried Roadless Areas		
	Morrison	Tracy Ridge	Minister Valley
Total Acres	2,483	9,033	9,145
Acres Core Solitude	980	3,174	3,210
Does boundary and shape follow natural or relatively permanent features?	Yes. Defined by roads, well defined ridgelines and Allegheny Reservoir. Shape is relatively uniform.	Yes. Defined by roads and Allegheny Reservoir. Shape is somewhat long and linear.	Yes. Defined by roads and utility corridor. Some minor conflict may occur with boundary on private land in NE corner. Shape is uniform.
7.11.b.1. Area regaining a natural, untrammeled appearance?	No. The area is currently being drilled and roaded for OGM extraction.	Yes. The majority of the area appears natural and untrammeled.	Yes. There are some ML 1 and 2 roads; however, the majority is regaining a natural appearance.
7.11.b.2. Improvements in area are affected primarily by forces of nature and are disappearing/muted?	No. The area contains significant mineral activity.	Yes. Includes hiking trail system and 2 boat-to campgrounds. Tracy Ridge and Willow Bay campgrounds not included.	Yes. Some of the road system is fairly evident. Includes extensive hiking trail system in some areas.
7.11.b.3. Area has existing or attainable NFS ownership patterns, surface and subsurface?	Unknown. Depends on willing seller. Zero surface acres private land. 100% of mineral estate in private ownership. Current proposal for drilling 30 to 100 wells/road access.	Unknown. Depends on willing seller. Zero surface acres private land. 100% of mineral estate in private ownership. Current well and road development package proposed, but no ground disturbance has occurred to date.	Unknown. Depends on willing seller. 95 surface acres private land. 100% of mineral estate in private ownership. No current mineral activity or proposed development packages known.
7.11.b.4. Area location is conducive to wilderness values (Proximity to oil and gas development, private land development, pollution sources or other obvious signs of development)?	No. Area is within and adjacent to extensive oil/gas development. Allegheny Reservoir to SW with high density motorized water based recreation. Rimrock recreation development bordering area to west.	Yes. Area has small amount of private land on NW. Bordered by Allegheny Reservoir with some influence from motorized recreation. Steep topography helps buffer noise from reservoir, but not completely throughout area.	Yes. Area has private land on the north and south; however, the large uniform shape helps buffer interior area from outside influences. OGM development to south.
7.11.b.5. More than one-half mile of improved road per 1,000 acres in FS jurisdiction?	No. Zero miles per 1,000 acres.	No. Zero miles/1,000 acres.	No. 0.4 miles/1,000 acres.
7.11.b.6. 15% or less with non-native planted vegetation?	Yes	Yes	Yes, 3% wildlife openings.
7.11.b.7. 20% or less of area harvested in last 10 years?	Yes	Yes	Yes, less than 10%.
7.11.b.8. Only a few private dwellings or access needs to dwellings?	Yes, no access needs to private dwellings.	Yes, no access needs to private dwellings.	Yes, access needs to private land on edge of area which can be excluded.
Area meets criteria for inventory?	**No**	**Yes**	**Yes**

Table C-10. Evaluation of Allegheny Front, Clarion River and Allegheny Reservoir (South Cornplanter)

Inventory Criteria	Potential Inventoried Roadless Areas		
	Allegheny Front	Clarion River	Allegheny Reservoir (South Cornplanter)
Total Acres	6,742	3,439	5,277
Acres Core Solitude	1,514	958	411
Does boundary and shape follow natural or relatively permanent features?	Marginal. Boundary well defined on west along Allegheny River. Boundary along scattered private lands and roads on remaining sides. Shape is long and linear.	Yes. Boundary defined by utility corridor to east, Clarion River to south, state highway to north and private land access road to east. Shape is uniform.	No. Boundary not well defined and gerrymandered to west along private land. Boundary well defined along Allegheny Reservoir to east. Shape is long, linear and odd.
7.11.b.1. Area regaining a natural, untrammeled appearance?	Yes. The majority of the area appears natural and untrammeled.	Yes. The majority of the area appears natural and untrammeled.	Yes. There are some old abandoned roads and wells. However, these are regaining a natural, untrammeled appearance.
7.11.b.2. Improvements in area are affected primarily by forces of nature and are disappearing/muted?	Yes. There is one hiking trail system in the area.	Yes. Hiking/cross-country trail system within the area is primarily muted.	Yes. Old abandoned roads and wells are disappearing.
7.11.b.3. Area has existing or attainable NFS ownership patterns, surface and subsurface?	Unknown. Depends on willing seller. Zero surface acres private land. 100% of mineral estate in private ownership. Current mineral activity occurring on eastern fringe and encroaching on area.	Unknown. Depends on willing seller. Zero surface acres private land. 100% of mineral estate in private ownership. No current mineral activity.	Unknown. Depends on willing seller. Zero surface acres private land. 100% of mineral estate in private ownership. OGM development proposed in area. No current mineral activity.
7.11.b.4. Area location is conducive to wilderness values (Proximity to oil and gas development, private land development, pollution sources or other obvious signs of development)?	No. Influenced by private land development on east, west and north and across from Allegheny River. Extensive OGM development penetrating/ encroaching on east side of area. Allegheny River to west with motorized use. State highways on east and north. Long, linear shape increases vulnerability from outside influences.	No. Influenced by active railroad and Clarion River to south and state highway and private land to north and east. The area's small size increases vulnerability from outside influences.	No. Area is surrounded by private land and OGM development to the west and motorized recreation on the Allegheny Reservoir to the east. The area's long, linear shape and narrow southern end increases vulnerability from outside influences.
7.11.b.5. More than one-half mile of improved road per 1,000 acres in FS jurisdiction?	No. Zero miles/1,000 acres.	No. Zero miles/1,000 acres.	No. Zero miles/1,000 acres.
7.11.b.6. 15% or less with non-native planted vegetation?	Yes	Yes	Yes
7.11.b.7. 20% or less of area harvested in last 10 years?	Yes	Yes	Yes
7.11.b.8. Only a few private dwellings or access needs to dwellings?	Yes, no access needs to private dwellings.	Yes, no access needs to private dwellings.	Yes, access needs to private land on edge of area which can be excluded.
Area meets criteria for inventory?	**No**	**No**	**No**

Table C-11. Evaluation of Chestnut Ridge, Cornplanter and Hearts Content

Inventory Criteria	Potential Inventoried Roadless Areas		
	Chestnut Ridge	Cornplanter	Hearts Content
Total Acres	5,063	2,918	1,263
Acres Core Solitude	3,038	197	0
Does boundary and shape follow natural or relatively permanent features?	Yes. Boundary follows primarily roads on all sides. Small amount of private land bordering area on north. Shape is somewhat long and linear.	No. East boundary formed by strip of private land along the reservoir. Private land to west not well defined. Camp Olmstead road to south. Shape is long and linear.	No. Boundary bordered by State Game Lands to east and SH 3005 to west. Shape is odd, long, linear L-shaped.
7.11.b.1. Area regaining a natural, untrammeled appearance?	Yes. Overall, area appears natural except along border where some OGM development is occurring.	Yes. Area appears natural.	No. Area contains Hearts Content recreation site.
7.11.b.2. Improvements in area are affected primarily by forces of nature and are disappearing/muted?	Yes. No improvements in area.	Yes. Hooks Brook boat-to campground on the reservoir.	No. Hearts Content development scale exceeds wilderness character.
7.11.b.3. Area has existing or attainable NFS ownership patterns, surface and subsurface?	Unknown. Depends on willing seller. Zero surface acres private land. 100% of mineral estate in private ownership. Mineral activity occurring along border.	Unknown. Depends on willing seller. Zero surface acres private land. 100% of mineral estate in private ownership. No current mineral activity.	Unknown. Depends on willing seller. Zero surface acres private land. 100% of mineral estate in private ownership. No current mineral activity.
7.11.b.4. Area location is conducive to wilderness values (Proximity to oil and gas development, private land development, pollution sources or other obvious signs of development)?	Yes. Area has small amount of private land on northwest. Bordered by roads on all sides. Steep topography and streams help to buffer road noise and development.	No. Surrounded by road based or water based motorized uses. Heavily roaded on east. Webb's Ferry and Camp Olmstead on edge. Long, linear shape increases vulnerability from outside influences.	No. Hearts Content recreation site within area not conducive to wilderness values. Activity and development on State Game Lands to east influence wilderness values.
7.11.b.5. More than one-half mile of improved road per 1,000 acres in FS jurisdiction?	No. Zero miles/1,000 acres.	No. Zero miles/1,000 acres	No. Zero miles/1,000 acres.
7.11.b.6. 15% or less with non-native planted vegetation?	Yes	Yes	Yes
7.11.b.7. 20% or less of area harvested in last 10 years?	Yes	Yes	Yes
7.11.b.8. Only a few private dwellings or access needs to dwellings?	Yes, no access needs to private dwellings.	Yes, no access needs to private dwellings.	No. access needed to State Game Lands.
Area meets criteria for inventory?	**Yes**	**No**	**No**

Table C-12. Evaluation of Hickory Creek Addition, Verbeck Island and Clark Island

Inventory Criteria	Potential Inventoried Roadless Areas		
	Hickory Creek Addition	Verbeck Island	Clark Island
Total Acres	1,823	14	16
Acres Core Solitude	0	0	0
Does boundary and shape follow natural or relatively permanent features?	Yes. Utility corridor and improved roads.	Yes. An island in Allegheny River just below Kinzua Dam.	Yes. An island in Allegheny River (Warren County).
7.11.b.1. Area regaining a natural, untrammeled appearance?	No. Has evidence of past harvest, utility corridors, research plots and roads.	Yes	No. Contains open areas of past farming activities.
7.11.b.2. Improvements in area are affected primarily by forces of nature and are disappearing/muted?	No. Utility corridors and ml 2 roads are improved.	Yes	Yes. No physical improvements on area.
7.11.b.3. Area has existing or attainable NFS ownership patterns, surface and subsurface?	Unknown. Depends on willing seller. Zero surface acres private land. 100% of mineral estate in private ownership. No current mineral activity.	Unknown. Depends on willing seller. Zero surface acres private land. 100% of mineral estate in private ownership. No current mineral activity.	Yes. All surface and subsurface has been acquired.
7.11.b.4. Area location is conducive to wilderness values (Proximity to oil and gas development, private land development, pollution sources or other obvious signs of development)?	No. Contains an additional utility corridor that further reduces the size to approximately 1,500 acres. Is surrounded by well traveled paved roads and/or state routes. Has evidence of past harvest and roads. Due to size, it would be difficult to maintain as wilderness with reasonable certainty that human influence would not preclude a wilderness experience or value.	No. located on stretch of Allegheny River below Kinzua Dam. SH 59 immediately adjacent and can be seen and heard from Verbeck Island. Numerous private developments within visual and hearing distance.	No. Obvious signs of development on State Game Lands and/or private lands to the west. Also, affected by noise and activity from US Highway 62 to east.
7.11.b.5. More than one-half mile of improved road per 1,000 acres in FS jurisdiction?	No	No. Zero miles/1,000 acres.	No
7.11.b.6. 15% or less with non-native planted vegetation?	Yes	No. Extensive non-native invasive species present.	No. More than 15% of area previously used for farming non-native planted vegetation.
7.11.b.7. 20% or less of area harvested in last 10 years?	Yes	Yes	Yes
7.11.b.8. Only a few private dwellings or access needs to dwellings?	Yes	Yes, no access needs to private dwellings.	Yes
Area meets criteria for inventory?	**No**	**No**	**No**

Step Four

In Step Four, all RARE II areas and areas of special interest were provided supplemental analysis as follows:

Table C-13. Supplemental Reasons for Eliminating Areas

Area	Acres	Reasons	Supplemental Notes
Tionesta	29,602	C, D	The area has extensive OGM development and utility corridors. Not conducive for (SPNM) characteristics that meet solitude and unconfined recreation criteria. Does not meet 7.11.b (1), (2), (3), (4) and (5) criteria.
Hickory Creek Addition	1,823	C, D, A, W	Area is separated from Hickory Creek Wilderness by a utility corridor. High OGM development on adjacent lands. Area surrounded by road-based motorized uses. Not conducive for (SPNM) characteristics that meet solitude and unconfined recreation criteria. Does not meet size or 7.11.b (1), (2), (3) and (4) criteria.
Morrison	2,483	C, D, A, W	OGM development on adjacent land is extensive. Current development in area includes 30 to 100 wells and new road construction. Some of area roughly 1 to 1 1/2 miles wide. Not conducive for (SPNM) characteristics that meet solitude and unconfined recreation criteria. Does not meet size or 7.11.b (1), (2), (3) and (4) criteria.
Tracy Ridge	9,033	Not removed	
Minister Valley	9,145	Not removed	
Allegheny Front	6,742	C, R, A, W	Active OGM development occurring on fringe of area and encroaching. High OGM development on adjacent lands. Area surrounded by road-based or water-based motorized uses. Long, narrow shape with some areas less than 1/2 mile wide. Boundary not well-defined in areas adjacent to private lands. Small core area for solitude and unconfined recreation criteria. Does not meet 7.11.b (3) and (4) criteria.
Clarion River	3,439	C, A, W	Area is influenced by road-based and water-based motorized uses. Railroad borders area on south. Private land along eastern border. Small core area for solitude and unconfined recreation criteria. Does not meet size or 7.11.b (3) and (4) criteria.
Allegheny Reservoir	5,277	C, R, A, W	Area is long and linear on southern end and less than 1 mile in some areas. Boundary not well-defined. Not conducive for (SPNM) characteristics that meet solitude and unconfined recreation criteria. Does not meet 7.11.b (3) and (4) criteria.
Chestnut Ridge	5,063	Not removed	Minor boundary adjustment needed to exclude OGM development on border.
Cornplanter	2,918	C, A, W	Long linear shape. Less than 2 miles wide across entire area. Extensive private land and other development surrounding area. Boundary not well-defined. Small core area for solitude and unconfined recreation criteria. Does not meet size and 7.11.b (3) and (4) criteria.
Hearts Content	1,263	C, R, A, W	State Game Lands adjacent to area with varying degrees of development and use. Small area roughly 1 mile wide on average. Boundary not well-defined. Not conducive for (SPNM) characteristics that meet solitude and unconfined recreation criteria. Does not meet size and 7.11.b (1), (2), (3) and (4) criteria.
Clark Island	16	C, R, A, W	Island recently acquired by the ANF. Previously used for farming. Long, narrow shape and adjacency to state highway and developed lands making location not conducive to wilderness values. Does not meet 7.11.b (1), (3) (4), and (6) criteria.
Verbeck Island	14	C, R, A, W	Island on Allegheny River along extensively developed area. Just below Kinzua Dam and not within Allegheny Islands Wilderness Area. Location of area not conducive to wilderness values. Does not meet 7.11.b (3), (4) and (6) criteria.

SUPPLEMENTAL REASONS FOR REMOVAL FROM FURTHER CONSIDERATION	
C	Acres of core solitude not conducive for Semi-primitive Non-motorized characteristics that meet solitude and unconfined recreation criteria.
D	OGM development along with utility corridors and/or OGM access roads.
R	Ratio of edge to area is relatively high; long, narrow shape, gerrymandered or amoeba-like
A	Adjacent land is developed.
W	Narrow in areas, less than 1 to 2 miles wide.

Forest Supervisor Review

The Forest Supervisor reviewed the criteria in October 2005 and provided the following exception: RARE II areas with a total of 5,000 acres or more NFS land will be evaluated for potential wilderness area designation. This resulted in one area (Allegheny Front) being included in the wilderness evaluations and in the MA 5.2 Wilderness Study Area in Alternative D of the FEIS.

Result

The following six areas (9,149 acres total) are not included in the inventory for consideration as wilderness areas because they did not meet the eight criteria for wilderness area designation in the East:

- Morrison 2,483 acres
- Clarion River RARE II area 3,439 acres
- Cornplanter RARE II area 2,918 acres
- Hearts Content RARE II area 200 acres
- Verbeck Island RARE II area 14 acres

There are three areas (23,241 acres total) that met roadless inventory criteria and receive further evaluation for wildernesses area designation:

- Tracy Ridge 9,033 acres
- Minister Valley 9,145 acres
- Chestnut Ridge 5,063 acres

As per Forest Supervisor direction, Allegheny Front (6,742 acres) will also receive further evaluation for wilderness area designation.

PART TWO: WILDERNESS EVALUATION

OVERVIEW

Evaluation of roadless areas east of the 100th meridian as part of the forest planning process yields one of the two following decisions:

1. Manage the area for multiple uses other than wilderness preservation.
2. Recommend the area to Congress as a Wilderness Study Area. (FSH 1909.12)

The ANF evaluated the updated inventoried roadless areas (IRA) for their wilderness designation potential as one of the six planning decisions to be made during forest plan revision. The evaluation of areas for consideration as wilderness study areas considers, in detail, the addition of roadless areas to the NWPS to determine the mix of land and resource uses that best meet public needs.

EVALUATION OF NEW WILDERNESS OPPORTUNITIES

The roadless areas established in the inventory process are evaluated based on another set of national criteria that address the area's wilderness capability, availability and need. Wilderness capability is an assessment of the degree to which that area contains the basic characteristics that make it suitable for wilderness area designation without regard to its availability for or need as wilderness. Wilderness availability is an assessment of the tradeoffs associated with wilderness area designation. To be available for wilderness, the values of the area, both tangible and intangible, should offset the value of resources that formal wilderness area designation would forego. Each roadless area evaluation contains an assessment of *Wilderness Capability* and *Wilderness Availability* as well as a site-specific summary of the potential for wilderness benefits in that area. A *Wilderness Need* assessment considers the desire for additional wilderness areas as a whole and addresses the degree to which wilderness on the ANF contributes to the local and national distribution of wilderness areas. The *Wilderness Need* assessment follows the individual roadless area capability and availability evaluations.

MANAGEMENT Of WILDERNESS

The individual resource topic descriptions found in this section address how those resources would be managed following a wilderness area designation.

Air

The Clean Air Act requires that Federal land managers review new source permit applications that would affect Class I areas, which include 88 NFS wilderness areas and 48 National Parks designated between 1964 and 1977. There are no Class I wilderness areas or proposed wilderness study areas on the ANF. The emerging air resource management programs involve wilderness managers who must decide which resources are to be protected in wilderness areas, and air quality specialists who will inventory and monitor air quality-related values in Class I areas, review Prevention of Significant Deterioration permit applications, provide recommendations to regulating agencies, and coordinate with air regulatory agencies and other federal and state land management agencies. Wilderness areas designated after 1977 are Class II areas.

Water Resources

New dams and water development structures, other than those necessary for range and wildlife, can only be authorized by the President. Existing reservoirs, ditches, water catchments and related facilities for the control or use of water can be maintained or reconstructed if they meet a public need or are part of a valid existing right. Motorized equipment and mechanical transportation for maintenance of water development structures is not allowed unless it was in use before the area was designated wilderness or unless it is determined to be the minimum necessary tool or technique. Restoration is permitted only where human activities have caused soil deterioration or other loss of wilderness values, where watershed conditions could cause unacceptable

environmental impacts or threaten life or property outside the wilderness, and where natural revegetation is insufficient.

Wildlife and Fish

Non-commercial hunting, fishing, and trapping are allowed in most Bureau of Land Management, U.S. Fish and Wildlife Service and Forest Service wilderness areas, and some managed by the National Park Service. States and the Federal government are jointly responsible for management of wildlife and fish species and must work together to meet common objectives. Wildlife species may be introduced and fish species may be stocked in order to perpetuate or recover a threatened or endangered species or to restore a native species that has been eliminated or reduced by human influence. Exotic species may not be stocked. Habitat may be manipulated only when it is necessary to correct conditions resulting from human influence or to protect threatened or endangered species. Research and management surveys are permitted if done in a manner compatible with the preservation of the wilderness resource.

Vegetation

Timber harvest is not allowed in wilderness. Trees and shrubs may be cut for valid mining claims; under emergency conditions such as fire, insect, and disease control; and in the construction and maintenance of authorized improvements, such as trails or bridges, when the necessary material needed to build the improvement cannot be reasonably obtained elsewhere. In the latter case, the cutting is done away from trails or campsites and the evidence of cutting removed as much as possible. Dead and downed material can be cut by wilderness visitors for campfires in most wildernesses, subject to local restrictions. Planting or seeding is allowed only in rare instances to correct conditions caused by human activities or for emergency situations when natural revegetation is insufficient. Native and local species are required, and primitive methods, such as hand planting, are generally used. Only true native species or species that pose no threat to the existing gene pool should be used for emergency rehabilitation. Often a temporary species that will quickly give way to natives without hybridizing is the best way to protect wilderness values and unique gene resources in emergency rehabilitation situations.

Fire

Fire in wilderness is managed to permit lightning-caused fires to play their natural ecological role within wilderness, and to reduce, to an acceptable level, the risks and consequences of catastrophic wildfire and of fire escaping from wilderness. Naturally ignited fires may be used and managed as part of wildland fire use in wildernesses that have approved fire management plans, as long as the fire meets and remains within established criteria. Prescribed fires, ignited by qualified personnel, may be used to reduce fuel buildups within wilderness, when approved in fire management plans. These plans detail wilderness fire management objectives for the area, historic fire occurrence, the natural role of fire, expected fire behavior, appropriate fire suppression action and acceptable suppression techniques, smoke management, and effects on adjacent landowners and wilderness visitors.

Non-native Invasive Species

Management of non-native invasive plants typically includes the components of the Integrated Weed (or Pest) Management Process. If treatment options are pursued, they are done using direction in the Wilderness Act of 1964 to address insect and disease infestations. All options to address non-native invasive plants in wilderness areas are available, including no treatment, hand pulling, herbicides and biological control. Any request to use herbicides in wilderness areas requires the approval of the Regional Forester.

Insect and Disease

Insects and diseases are a natural part of the ecosystem and are not controlled, unless epidemics are expected to cause unacceptable damage to adjacent lands and resources or exotic species are expected to cause an unnatural loss to the wilderness resource. Noxious weeds and invasive non-native plant species may be eradicated by physical means, such as grubbing when the infestations are isolated, and herbicides may be used when absolutely necessary.

Recreation Livestock Grazing

Horses, mules, llamas and other saddle and pack stock used by wilderness visitors may be allowed to graze in wilderness. When forage is inadequate, wilderness managers may require that weed-free feed be packed in. Additionally, each wilderness may set regulations on where visitors with stock can camp, where and how they can tether their pack stock, how much stock can accompany a group of visitors, and the use of native feed and pellets. Wild horses and burros are considered part of the natural environment if populations were established at the time of wilderness area designation. Recreational livestock used by commercial outfitters and guides and their customers may be grazed under permit.

Minerals

The Wilderness Act of 1964, and subsequent wilderness legislation, withdraws lands in designated wilderness from appropriation under the mining and mineral leasing laws, subject to valid existing rights. Prior to wilderness area designation, mining claims may have been made on public lands. Mining operations may continue after designation, subject to strict regulation to protect wilderness characteristics. Holders of valid mineral leases retain the rights granted by the terms and conditions of the specific leases. Holders of valid mining claims are allowed to conduct operations necessary for the development, production, and processing of the mineral resource. Mechanical transport, motorized equipment, and access to utility corridors may be used after a determination that they are the minimum necessary. However, these activities and the reclamation of all disturbed lands must minimize the impact on the surrounding wilderness character. The goal of the Forest Service would be to mitigate impacts of development on wilderness values. Consistent with the valid existing rights, a review and approval of operating plans that incorporate reasonable terms and conditions for the protection of the wilderness character of the area and that provide for restoration as near as practicable of the disturbed lands promptly upon abandonment of operations is warranted (Forest Service Manual (FSM) 2830). Acquisition of the mineral rights is an option available to the Forest Service.

Recreation, Including Tourism

The Wilderness Act calls for "*outstanding opportunities for* solitude *or a* primitive *and* unconfined *type of recreation"* in wilderness areas. The challenge is to provide recreational opportunities while keeping wilderness an area "without permanent improvement or human habitation," an area *"…where man himself is a visitor who does not remain."* Visitors must accept wilderness largely on its own terms, without modern facilities provided for their comfort or convenience. Users must also accept certain risks, including possible dangers arising from weather conditions, physical features, and other natural phenomena, that are inherent in the various elements and conditions that comprise a wilderness experience and using primitive methods of travel. Wilderness visitors enjoy camping, hiking, hunting, horse packing, fishing, climbing, canoeing, and many other wilderness-dependent activities. Only primitive, non-mechanized access and recreation activities are permitted in wilderness, and only those facilities required for the safety of users and protection of wilderness resources are provided. Convenience facilities are not provided. Campsites should not be designated and existing campsites should be relocated or removed to allow maximum opportunity for solitude and to minimize the evidence of human use. Existing opportunities for mountain bicycling would be lost as a result of wilderness area designation. The use of mechanized tools for trail construction and maintenance would be restricted. Existing outfitter and guide services operating within these areas may need to be modified or eliminated to meet wilderness requirements. In many cases, wilderness area designation has served to elevate an area's visibility to the public, increasing its popularity and its recreation use. Increased use can result in increased damage to trails and other resources, as well as reduced opportunities for solitude and other wilderness values.

Wilderness area designation that is advertised and included in a broad tourism planning effort may draw visitors and attract recreationists who seek remote, primitive and unconfined types of recreation and solitude. Wilderness area designation may warrant public use restrictions if visitation begins to threaten wilderness character and values. Limiting visitor use and distribution, including establishment of group size limits to preserve wilderness character, is a management tool often used in wilderness areas.

Heritage Resources

Cultural features, such as archeological sites, historic trails or routes, or structures that have been included within wilderness, are protected and maintained using methods that are consistent with the preservation of wilderness character and values and cultural resource protection requirements. Preservation activities such as salvage rehabilitation, stabilization, reconstruction, restoration, excavation, and intensive inventories are approved on a case-by-case basis, if activities will not degrade the overall wilderness character. Cultural resource sites that appear to qualify are nominated for the National Register of Historic Places. Unless they are needed to provide wilderness benefits or serve administrative purposes, those sites or structures that do not qualify for the National Register of Historic Places could be allowed to deteriorate naturally or be removed or destroyed. Interpretation of sites is done outside of wilderness, except for verbal interpretations by wilderness rangers.

Research

Research is considered a valid and important use of the wilderness resource and is encouraged as long as projects do not degrade the wilderness character and they are wilderness dependent in nature. Research and monitoring devices may be installed and operated in wilderness only when the desired information is essential and cannot be obtained from a location outside of wilderness, and the proposed device is the minimum tool necessary to accomplish the objective safely and successfully. If proposed studies are not compatible with wilderness values, managers work with applicants to find alternative locations or methods of access. Inventory of the physical and biological resources is often needed to provide current baseline information, to serve as a benchmark for environmentally induced change in the future, to support other scientific studies, and to monitor the impacts that recreational uses have on wilderness resources.

Access

State and privately owned parcels of land may occasionally become completely surrounded by wilderness. These lands are termed inholdings. These landowners retain the right of adequate access to their inholding, subject to restrictions that are necessary to insure protection of wilderness values. Restrictions are determined on a case-by-case basis and can include prohibiting certain types of transportation (such as the use of vehicles), prohibiting the use of certain routes by certain types of transportation, or prohibiting the use of certain routes altogether. If landowners are willing and funds are available, the Federal government may purchase such inholdings. The land may also be exchanged for federally-owned land of approximately equal value within the same state.

CONSEQUENCES OF A WILDERNESS OR NON-WILDERNESS AREA DESIGNATION

The individual descriptions found in this section address the environmental consequences of wilderness or non-wilderness area designation. Some effects are the same for all roadless areas. In other cases, non-wilderness area designation outcomes may vary depending on whether or not the management prescription assigned to an IRA allows development activities. These effects are described by resource topic for the general types of management that may occur as a result of designation or non-designation as wilderness areas. Effects have been typically separated into 3 categories:

- Designated Wilderness Areas (MA 5.1)
- Non-wilderness, Non-development (MAs 5.2, 7.2, 8.2, 8.3, 8.5)
- Non-wilderness, Development (MAs 1.0, 2.1, 2.2, 3.0, 6.1, 6.3, 7.1, 8.1, 8.4, 8.6)

Under the Non-wilderness, Non-development scenarios, it is assumed that natural ecological processes will occur. If vegetation management occurs, it would be at levels that would have essentially no effect on the natural succession or undeveloped character of the area.

Air

Effects of Wilderness/Non-wilderness Area Designation: There would be no expected net change to air quality specifically from a wilderness or non-wilderness area designation. Wildland fires result in short-term degradation

in air quality. Neither a wilderness nor non-wilderness area designation would preclude the use of prescribed fire, which may also result in short-term impacts to air quality. Air quality would be more likely to be affected by management outside of wilderness or by sources of ambient air pollutants from outside the ANF.

Soil and Water

Effects of Wilderness Area Designation: The natural functions of watershed systems would be maintained. The risk of human-caused alterations impacting the watershed condition would be primarily limited to localized recreation activities. Water quality would more likely be affected by management outside of wilderness or by sources of water pollutants from outside the ANF.

Additional commitment of the soil resource may occur as a result of the construction of new trails. Additional reductions in soil productivity may occur from soil compaction, displacement, and erosion in areas of concentrated recreation use. These effects would likely be greatest in areas around streams and lakes and where outfitting and guiding operations are based. Additional impacts on soil and water resources from motorized use would be limited to unauthorized encroachment from motorized recreational vehicles. The use of artificial means to rehabilitate areas in degraded condition would be limited to minimum tool techniques.

Effects of Non-wilderness, Non-development: The effects would be the same as described for a wilderness area designation, except that previously authorized motorized uses and related soil erosion would continue.

Effects of Non-wilderness, Development: The natural functions of watershed systems would be affected by development. The threat of soil erosion from associated motorized uses and land disturbing development would increase with the degree of use. However, active rehabilitation efforts could be undertaken to mitigate affected resource areas. Compaction from recreation uses in popular visitation areas would likely continue.

Fish Habitat and Species

Effects of Wilderness Area Designation: Under a wilderness area designation, natural processes would primarily affect fish and their habitat. Natural events and climatic variation would influence sedimentation, riparian vegetation, and nutrient cycles. A wilderness area designation would preclude opportunities to do riparian area restoration/improvements, including streamside vegetation manipulation or direct habitat improvement of a stream. Fish stocking programs would be permitted to continue in areas of historic stocking following either a wilderness or non-wilderness area designation.

Effects of Non-wilderness, Non-development: The effects would be expected to be similar to those described for a wilderness area designation. However, opportunities to do riparian area restoration/improvements, including streamside vegetation manipulation or direct habitat improvement of a stream would be allowed. Continuation of previously authorized motorized uses would be expected to increase sedimentation, with potentially adverse effects to riparian habitat and nutrient cycles.

Effects of Non-wilderness, Development: Natural processes that affect fish and their habitat would be interrupted to a degree commensurate with development activities. Motorized uses, road construction, and other land-disturbing activities may increase sedimentation and potentially adversely affect riparian habitat and nutrient cycles. However, active rehabilitation efforts could be undertaken to mitigate affected resource areas.

Wildlife Habitat and Species

Effects of Wilderness Area Designation: As natural succession progresses, climax vegetation types would dominate favoring those species that depend on late successional habitats. Wildlife species that need openings and immature forest habitats would find that habitat less available. Opportunities to manipulate habitat for the benefit of wildlife species would be substantially reduced. Changes in populations may become more cyclic under a wilderness area designation. Wildlife harassment from motorized uses would not be a concern and habitat fragmentation would be minimized.

Effects of Non-wilderness, Non-development: The effects to wildlife would be similar to that described for wilderness, except that previously authorized motorized uses would likely continue, which could result in some

level of wildlife harassment and possible displacement. Habitat fragmentation would also be minimized due to the lack of development activities.

Effects of Non-wilderness, Development: Vegetation treatments may result in a greater mosaic of habitat types and associated species diversity. Opportunities to manipulate habitat specifically for the benefit of wildlife species would be available. Fragmentation and loss of habitat from road construction may occur with increased development. Opportunities to decommission roads and restore habitat would exist.

Plants

Effects of Wilderness Area Designation: Natural ecological succession would be allowed to continue and, over time, restore ecological conditions under a wilderness area designation. Levels of insect infestation and disease could reach endemic levels as ecological systems move toward their historic ranges of variability. Dispersal of nonnative invasive weeds would generally be limited to along trail systems and river corridors. Plant diversity would be slow to change, but would move towards a dominance of mature trees and late successional habitats.

Effects of Non-wilderness, Non-development: The effects of this designation would be similar to a wilderness area designation.

Effects of Non-wilderness, Development: Natural ecological succession could be interrupted by development activities associated with other resource management objectives. Incidents of insects and disease would still occur, but would be more aggressively prevented or managed through vegetation treatment practices. The ability to detect and treat infestations would be greater than in wilderness areas and thus infestations could be prevented or contained earlier. Plant diversity would depend on the management objectives for the area.

Fire

Effects of Wilderness Area Designation: Because mechanical vegetation management treatments are not allowed in designated wilderness areas, standing vegetation would eventually mature and die, increasing fuel loads and the potential for wildland fire. Wildland fires would be managed according to wilderness fire management plans. Considerations in implementing any action include considerations of firefighter and public safety, cost efficiency, the potential spread of fire to adjacent non-wilderness lands, and air quality impacts. Suppression strategies and tactics would be employed in a manner that reduces impacts of the actions on wilderness values.

Prescribed fire may be used in wilderness to reduce fuel loads. It may also be used to prevent, where necessary, the spread of wildfire to or from a wilderness, or to protect features such as structures. Prescribed fire is only initiated under the direction of approved wilderness fire management plan.

Effects of Non-wilderness, Non-development: The effects would be expected to be similar to that described for a wilderness area designation. However, the tactics available for wildfire suppression would probably be less limited without a wilderness area designation. The effects relative to prescribed fire would be similar to those following a wilderness area designation.

Effects of Non-wilderness, Development: The full range of suppression tactics is most likely to be available for use. The use of prescribed fire might be limited in local areas to protect capital investments and structures, but would generally be used more for ecological restoration.

Non-Native Invasive Species

Effects of Wilderness Area Designation: Management of non-native invasive plants typically includes the components of the Integrated Weed (or Pest) Management Process. If treatment options are pursued, they are done using direction in the Wilderness Act of 1964 to address insect and disease infestations. All options to address non-native invasive plants in wilderness areas are available, including no treatment, hand pulling, herbicides and biological control. Any request to use herbicides in wilderness areas requires the approval of the Regional Forester.

Effects of Non-wilderness, Non-development: The effects would be expected to be similar to that described for a wilderness area designation. All options to address non-native invasive plants are available, including no treatment, hand pulling, herbicides and biological control.

Effects of Non-wilderness, Development: All options to address non-native invasive plants are available, including no treatment, hand pulling, herbicides and biological control.

Insect and Disease

Effects of Wilderness Area Designation: Forest stands in designated wilderness areas would be more likely to age past maturity and provide an environment suitable for potential insect and disease buildup. If insect and disease occurrences build up within protected areas, they may eventually threaten vegetation on adjacent, unprotected lands as well. Generally, no insect or disease control would be permitted within a wilderness area unless other ownership or resources outside the area are threatened. Suppression treatments would then employ the means most compatible with preservation of wilderness values.

Effects of Non-wilderness, Non-development: The effects would be expected to be similar to that described for a wilderness area designation. However, the tools available for suppression of outbreaks would be somewhat less limited than those available for use within a wilderness area.

Effects of Non-wilderness, Development: Response to insect and disease outbreaks can generally be more direct and rapid under this management. A greater range of suppression tools and treatment options would also provide a higher level of success in containing the outbreak and in protecting adjacent resources.

Minerals

Effects of Wilderness Area Designation: Federal land not under lease or having privately owned mineral rights may be withdrawn from mineral exploration and development. Following a wilderness area designation, mineral exploration and development may continue under leases in existence at the time of the designation. Holders of valid mineral leases retain the rights granted by the terms and conditions of the specific leases. Once a lease expires, the land may be withdrawn from mineral exploration and development.

Holders of privately owned OGM rights are allowed to conduct operations necessary for the development, production, and processing of mineral resources. Mechanized equipment, motorized access, and utility corridors may be used. However, these activities and the reclamation of all disturbed lands are typically designed to minimize the impact on the surrounding wilderness character. The goal of the Forest Service would be to mitigate impacts of development on wilderness values. Consistent with the valid existing rights, a review and approval of operating plans that incorporate reasonable terms and conditions for the protection of the wilderness character of the area, and that provide for restoration as near as practicable of the disturbed lands promptly upon abandonment of operations is warranted (FSM 2830). Acquisition of the mineral rights is an option available to the Forest Service.

Effects of Non-wilderness, Non-development: The effects would be expected to be similar to that described for a wilderness area designation.

Effects of Non-wilderness Area Designation: These lands would be open to OGM development except where specifically withdrawn or restricted for other purposes. Although a full range of activities may be allowed and employed, developments and activities would be adjusted to mitigate adverse impacts to other resources where appropriate.

Recreation, Including Tourism

Effects of Wilderness Area Designation: Recreation objectives for wilderness areas provide outstanding opportunities for solitude or a primitive and unconfined type of recreation (FSM 2323.11 (2)). While recreational use of wilderness is generally encouraged and expected, the principal emphasis of wilderness management direction is to manage recreation use to minimize the evidence of human use and provide opportunities for solitude and primitive recreation. Accomplishing this task requires certain restrictions on recreational use within

wilderness areas that are not necessarily needed for the same activities outside wilderness areas. Only primitive, non-mechanized access and recreation activities are permitted in wilderness, and only those facilities required for the safety of users and protection of wilderness resources are provided. Convenience facilities are not provided. Campsites should not be designated and existing campsites should be relocated or removed to allow maximum opportunity for solitude and to minimize the evidence of human use. Existing opportunities for mountain bicycling would be lost as a result of wilderness area designation. The use of mechanized tools for trail construction and maintenance would be restricted. Existing outfitter and guide services operating within these areas may need to be modified or eliminated to meet wilderness requirements. In many cases, wilderness area designation has served to elevate an area's visibility to the public, increasing its popularity and its recreation use. Increased use can result in increased damage to trails and other resources, as well as reduced opportunities for solitude and other wilderness values.

Wilderness area designation that is advertised and included in a broad tourism planning effort may draw visitors and attract recreationists who seek remote, primitive and unconfined types of recreation and solitude. Wilderness area designation may warrant public use restrictions if visitation begins to threaten wilderness character and values. Limiting visitor use and distribution, including establishment of group size limits to preserve the wilderness character, is a management tool often used in wilderness areas.

Effects of Non-wilderness, Non-development: Current recreation uses would likely change the least under this management, except in areas where public motorized use is currently allowed. Access would not necessarily be restricted to wilderness-compliant forms and current activities and practices could continue to the extent to that they didn't adversely affect other resources.

Effects of Non-wilderness, Development: Development activities can reduce the primitive recreational character of a roadless area through a combination of altered recreation settings, experiences, and access. The sights and sounds of human presence are usually increased by development activities. Recreationists seeking a more primitive experience would choose not to visit such an area, and obvious signs of development would cause the area to be removed from the roadless inventory. Development may also provide greater recreational access and increased non-primitive recreation experiences.

Facilities

Effects of Wilderness Area Designation: A reasonable network of trails and campsites are acceptable facilities in a wilderness area, except in areas to be managed in a pristine condition. In fact, trails leading to and within wilderness areas become the principal management tool for achieving management objectives. Existing structures would be evaluated for management needs relative to wilderness and other resources. Non-conforming or unneeded Forest Service structures may be removed.

Effects of Non-wilderness, Non-development: Current facilities and trails would likely change the least under this management and current structures could continue to the extent that they did not adversely affect other resources.

Effects of Non-wilderness, Development: Development under non-wilderness management could have a number of effects on trails and facilities, ranging from enhancement to elimination, depending upon the primary resource objectives for the area.

Scenic Resources

Effects of Wilderness Area Designation: The result of natural succession as it occurs within designated wilderness areas would change the scenic characteristics of the areas over time. This change could be slow, or it could occur quickly as the result of wildfire, disease or insect infestation. The result would most likely be a characteristic landscape mosaic representative of how the areas would naturally appear if relatively unaffected by human activity.

Effects of Non-wilderness, Non-development: The effects would be expected to be similar to that described for a wilderness area designation.

Effects of Non-wilderness, Development: There would be a greater potential for landscapes that exhibit obvious signs of human presence. Scenic Integrity Levels would serve to constrain or modify development to mitigate adverse effects to scenic resources in areas seen from major recreation facilities and use corridors.

Heritage Resources

Effects of Wilderness Area Designation: Potential impacts from ground-disturbing activities, such as road building and timber harvest, would essentially be eliminated.

Effects of Non-wilderness, Non-development: The effects would be expected to be similar to that described for a wilderness area designation except there may be more interpretation opportunities.

Effects of Non-wilderness, Development: Potential impacts from ground-disturbing activities, such as road building and timber harvest, could occur, and mitigation measures would be applied at the project level for resource protection. Project level inventories would increase opportunities to identify undiscovered resources.

INDIVIDUAL ROADLESS AREA EVALUATIONS

The evaluations are a broadly descriptive assessment, which identify the basic natural characteristics of each area, as well as boundary conditions and managerial considerations and trade-offs. The evaluations are based on a somewhat subjective system, and both wilderness advocates and non-supporters would undoubtedly assess the same areas differently based upon their own interpretation of the criteria, flavored with personal opinions and agenda. However, legal decisions and past experience show that there is no purely scientific way of rating something as subjective as wilderness attributes and values. Consequently, the ANF has provided the following evaluations which are intended to provide discernible conditions to help the public and the Responsible Official assess the areas in a meaningful way. Table C-14 identifies the four areas being evaluated.

Table C-14. Areas Evaluated for Wilderness Area Designation

Number	Name	Acres	County or Counties	Ranger District
19001	Tracy Ridge	9,033	Warren and McKean	Bradford
19002	Chestnut Ridge	5,063	Warren and McKean	Bradford
19003	Minister Valley	9,145	Warren	Bradford
19004	Allegheny Front	6,742	Warren	Bradford

ROADLESS AREA 19001 (TRACY RIDGE)

OVERVIEW

Size

(As calculated using GIS data. Actual ground surveyed acres will likely vary.)

Forest Service:	9,033 acres
Private:	none
Total:	9,033 acres

Location, Vicinity, and Access

The Tracy Ridge Roadless Area (RA) is located on the ANF, Bradford Ranger District, in Warren and McKean counties, Pennsylvania. It is currently a part of the congressionally designated Allegheny NRA. Nearby towns include Bradford, Pennsylvania to the west, Russell, Scandia and Warren, Pennsylvania to the east/southeast, and Steamburg and Salamanca, New York to the north. The area is generally bound by the Allegheny Reservoir to the west and by roads to the north and east. Specifically, it is bound on the north below Willow Bay Recreation Area along FR 602 off of SR 346 just below the New York state line. A small parcel of private land also borders the area in the northeast corner along the intersection of SR 346 and SR 321. On the west, it is bound by approximately 7 miles of the Allegheny Reservoir shoreline, on the south by a utility corridor just north of the

Allegheny Reservoir at Sugar Bay and on the west by SR 321 and Tracy Ridge Campground. The Tracy Ridge Campground is not included in the RA.

The area is found within the U.S. Geological Survey Cornplanter Run Quadrangle, PA.-NY. SR 321 and SR 346, FR 602 and the Tracy Ridge Campground and Willow Bay Recreation Area provide major vehicle access from the east and north. The area is also easily accessible by boat from the Allegheny Reservoir to the west as there are 3 major boat ramps within close proximity to the area, Willow Bay, Webbs Ferry and Roper Hollow. There are no improved roads within the RA; however, there are approximately 31 miles of hiking trails which include almost 11 miles of the North Country National Scenic Trail (North Country Trail or NCNST) and 20 miles of the Tracy Ridge/Johnny Cake loop trail system. Approximately 5 miles of the Tracy Ridge Trail are also a designated National Recreation Trail.

There are a number of abandoned roads and facilities from early OGM development and timber harvest, i.e., old roads, railroad grades, pipelines, oil well sites, power houses, rodlines and cleared rights-of-way, which have primarily reverted to natural forest conditions. Many of the abandoned roads were incorporated into the Tracy Ridge/Johnny Cake trail system. There are also two boat-to campgrounds within the RA, Handsome Lake and Hopewell, which are located along the Allegheny Reservoir.

History

This RA has a long history of use and has previously been considered for wilderness area designation and study. Under the Pennsylvania Wilderness Act of 1984 (House Resolution (H. Res.) 5076), Hickory Creek, Allegheny Islands, Tracy Ridge, Cornplanter, and Allegheny Front RARE II areas (Roadless Area Review and Evaluation, 1979) were considered for wilderness area designation. H. Res. 5076 was referred to the Committee on Interior and Insular Affairs (Congress) and resulted in the Hickory Creek and Allegheny Islands wilderness area designations and in Tracy Ridge, Cornplanter and the Allegheny Front becoming the Allegheny NRA.

The RA was used by man beginning in the Prehistoric period (11,000 B.C. to 1600 A.D.) and continuing into the Historical period (1600 to present). About 1000 B.C., the Woodland period began. The Woodland period is characterized by sedentism and dependence upon agricultural crops. Pottery use is seen throughout Pennsylvania during this time period. Early in this period, the Hopewell-Adena cultures flourished, and some evidence of their influence has been observed in the Allegheny floodplain proximal to the RA. Stone artifacts from early to late Woodland period have been observed in and around the area. These have been located in rock shelters and village sites. Pallisaded villages existed in the immediate area and in other parts of the Allegheny Plateau.

The Iroquois people inhabited the Allegheny Plateau during prehistoric time and well into historic and modern time. The Seneca Nation of Indians, part of the Iroquois Confederacy and Keepers of the Western Door, controlled the Allegheny Plateau until the close of the Revolutionary War. Treaties after the Revolutionary War provided two reservations, one along the Allegheny River in close proximity to the RA, known as Cornplanter Grant, and one further north in Salamanca, New York. The Cornplanter Reservation was occupied until the 1960s when the U.S. Army Corps of Engineers flooded the river and constructed Kinzua Dam, creating the Allegheny Reservoir.

Geography, Topography and Vegetation (Including Ecosystem Type)

According to ecological mapping, this area lies in the Allegheny High Plateau Subsection of the Northern Unglaciated Allegheny Plateau Section within the Laurentian Mixed Forest Province. This section is characterized by sharper ridge tops and narrower valleys than the glaciated portions of the plateau to the north and east. From the reservoir, this roadless area climbs steeply to the east forming a ridgeline that breaks into a broad rounded plateau which generally extends along the length of the area. There are approximately 7 miles of shoreline along the reservoir. The area is drained by a dendritic drainage pattern type found throughout the Allegheny Plateau. The Allegheny River and tributaries of intermittent, perennial and ephemeral streams drain this roadless area and the surrounding slopes. The elevation ranges from 1,328 to 2,245 feet. The landscape contains no distinct or dominant rock formations or peaks.

Dominant soil orders include Alfisols, Entisols, Inceptisols, and Ultisols. Soils found within the RA are classified as Buchanan-Hartleton-Hazleton. The Natural Resources Conservation Service (NRCS) describes these soils: "Very deep and deep, somewhat poorly drained to well drained, nearly level to very steep soils; formed in materials weathered from sandstone and shale; on uplands." (NRCS 1983, p. 2)

The ecological landtype association for this area is 212Ga10, Frigid, Mesic, Mixed Oak and Northern Hardwoods. The distinguishing features of this landtype are its steepness, higher general elevations, climate and potential frigid soils. Vegetation associations include white and red oak, black cherry, hemlock, beech, quaking aspen, red maple, yellow birch, sugar maple and open non-forested patches of mostly grass. Although there are a few small openings 1 acre in size or less, the Tracy Ridge area is entirely forested, and all forest cover is considered mature, or greater than 50 years of age, with the majority between 70 and 100 years old. Forest cover types include aspen (<1%), conifer/mixed conifer (10%), northern hardwoods (7%), upland hardwood (6%) and oak (77%). There are 34 miles of stream, which is well distributed across the area, and 34 acres of scattered wetlands, all of which are associated with the Allegheny Reservoir or Nelse Run. A diversity of landform conditions, including plateau, sideslope, and footslope, can be found, and portions of the high plateau west of Tracy Ridge contain large rock outcroppings.

Management Direction and Current Use

This RA is part of the 23,100 acre Allegheny NRA. The NRA is not one contiguous area as it is divided into three separate land allocations including Tracy Ridge RA to the east of the Allegheny Reservoir, Cornplanter to the west of the reservoir and the Allegheny Front south of the reservoir along the Allegheny River. The NRA also includes the Allegheny Reservoir between Tracy Ridge and Cornplanter. The purposes for establishing the NRA include:

1. *Outdoor recreation including, but not limited to, hunting, fishing, hiking, backpacking, camping, nature study, and the use of motorized and non-motorized boats on the Allegheny Reservoir;*
2. *The conservation of fish and wildlife populations and habitat;*
3. *The protection of watersheds and maintenance of free flowing streams and the quality of ground and surface waters in accordance with applicable law;*
4. *The conservation of scenic, cultural, and other natural values of the area;*
5. *Allowing the development of privately owned oil, gas, and mineral resources subject to reasonable conditions prescribed by the Secretary under subsection (c) of this section for the protection of the area; and*
6. *Minimizing, to the extent practicable, environmental disturbances caused by resource development, consistent with the exercise of private property rights.*

In the 1986 Forest Plan, the management area designation for the NRA is MA 6.4. The ANF incorporated standards and guidelines in the 1986 Forest Plan in accordance with the purposes described above and the laws, rules, and regulations applicable to the NFS. The emphasis of this management area is to provide a land condition with vegetation generally progressing through the natural succession process to mature or over mature hardwood forest. The primary purpose is to: preserve and protect the natural scenic, scientific, historic, archaeological, ecological, educational, watershed and wildlife values and to provide enhancement of dispersed semi-primitive motorized and non-motorized recreation. This management area is managed as an NRA, typically without harvest, except to facilitate private and mineral resource exploration and development and/or to achieve wildlife and recreation management objectives. Typically, road construction is not allowed except for roads needed to satisfy private legal rights. Public traffic within the area is not allowed.

Use of motorized off-highway vehicles is not permitted in the NRA except for administrative vehicles, emergency vehicles and use authorized by permit, contract or outstanding private rights. There are no trails designated for ATV or off-highway motorcycle (OHM) or snowmobile use. Equestrian use and mountain bike use on designated trails within the RA are prohibited per Forest Supervisor closure order. However, open or cross-country horse and bike riding is allowed. There are two campgrounds and two boat launches located immediately adjacent to the RA. These include the Willow Bay Campground, Tracy Ridge Campground, Willow Bay boat launch and Sugar

Bay boat launch. There are two campgrounds within the RA located along the Allegheny Reservoir, Hopewell and Handsome Lake which are boat-to/hike-in campgrounds. There are approximately 31 miles of trail in the area linked to three trailhead parking areas: one adjoins Tracy Ridge Campground, another is just outside Willow Bay Campground, and a third is located along SR 321 where Nelse Run enters Sugar Bay. Existing trail within the RA includes 20 miles in the Tracy Ridge/Johnny Cake loop system and almost 11 miles of the North Country Trail. Hopewell and Handsome Lake Boat-to Campgrounds are along the reservoir. They are roughly 6 acres and 7 acres respectively, constructed to development scale 2 (little site modification), contain a concrete single vault toilet, a well with a pump for potable water, and 20 single-use campsites with a picnic table and fire ring at each. Trail and campground maintenance occurs on an annual basis. Volunteers of the North Country Trail Association help with trail maintenance activities.

The primary use of this RA is for recreation associated with the trails, boat-to campgrounds, Allegheny Reservoir, scenery and wildlife. Recreation use is, on average, moderate with higher use on weekends than weekdays. Campground occupancy of the two boat-to campgrounds averaged 60 percent between 1997 and 2003.

Two types of trail users can be found: the long distance hiker or backpacker who hikes between trailhead locations and may camp along the way and the day-use hiker who hikes a portion of a trail to access the reservoir, a vista or one of the boat-to campgrounds. Day hiking is most popular with visitors along the shorter trails that access the reservoir. The RA is used for a variety of additional dispersed activities, including hunting; trapping; nature, wildlife and bird viewing; cross-country skiing; and snowshoeing. Many water based activities occur on the reservoir, including boating, jet and water skiing, fishing, and social gathering on house boats and shoreline. Swimming offshore is generally limited due to a relatively muddy, steep bottom.

Tracy Ridge RA is encumbered by outstanding mineral rights with roughly 94 percent, or 8,491 acres, of the subsurface mineral rights owned by private parties. There is currently no OGM drilling or exploration occurring in the RA; however, drilling has occurred in the past, with 5 well sites still remaining in the RA. These sites appear to be abandoned and there has been no drilling for over 20 years.

Hardwood timber was harvested between the late 1880s and 1940s, and the entire area consists of mid-seral (<150 years) second growth. There has been no large scale timber harvest since that time, and some small scale non-commercial release of aspen occurred prior to 1980. The 1986 Forest Plan allows for timber to be harvested only to achieve wildlife and recreation management objectives. Uneven-aged management or salvage harvest is a management option used to maintain browse and mast production around existing habitat improvements, to maintain continuous canopy in visually sensitive areas, to enhance scenery in recreation travelways and use areas, to maintain or create permanent openings for wildlife and to provide viewpoints for recreationists. While these options exist within the 1986 Forest Plan, no wildlife habitat or scenery improvement work has been conducted in the last 25 years other than bat box installation along the Allegheny Reservoir shoreline at the boat-to campgrounds. Vegetation management has been limited due to this area's status as an NRA. However, pesticide use occurred in the early 1990s to control gypsy moth infestation through the use of *bacillus thuringiensis* (Bt) and Dimilin®.

Appearance of the Area and Characteristics of Surrounding Areas

The Tracy Ridge RA is characterized by steep rugged terrain leading to high plateau uplands set in a wooded landscape intermixed with streams and continuous forest cover. There are no prominent rock formations or peaks. There are eight scenic vistas located atop the plateau along the trail system. Dense vegetation often inhibits views from the vistas.

Within the RA, there are 31 miles of trails which have been maintained to varying standards and two boat-to campgrounds which are maintained to a high standard. The trails and campgrounds are visually evident and influence ecological processes, at a minimum, in the vicinity of the trails and campgrounds. Old roads and facilities from early OGM development and timber harvest still exist in some areas; however, they have regained a mostly natural appearance. Approximately five oil well sites with old pumps still remain. The trail and sections of old road from Nelse Run to the boat-to campgrounds was widened in portions to approximately 20 feet to

accommodate a bull dozer and maintenance vehicles in 2002. This was done as a recreation maintenance activity to accommodate the installation of the vault toilets in the boat-to campgrounds. This activity has altered the more natural appearance of the RA along the trail and old road system for approximately 2.3 miles.

Most of the area timber was harvested in the late 1800s and early 1900s. As a result, approximately 4 percent of the forest is in the 61 to 70 year age-class, 36 percent is in the 71 to 81 year age-class, 35 percent is in the 81 to 90 year age-class, 18 percent is in the 91 to 100 year age-class, and 6 percent is in the 101 to 110 year age-class.

The Allegheny Reservoir is largely undeveloped with little or no facilities or homes existing along the shore or uplands. Chestnut Ridge RA is located immediately to the west; separated from this RA only by SR 321. Chestnut Ridge is similar in character to Tracy Ridge with steep, rugged terrain and natural appearing, wooded landscapes. Chestnut Ridge can also be viewed from the uplands in this RA. Across the reservoir to the east is a continuation of similar natural landforms and vegetation found in the Cornplanter portion of the NRA. To the north, the Allegany State Park offers a similar, undeveloped landscape. The Tracy Ridge area and surrounding landscape provide a vast continuum of natural vegetation characterized by low development and low to moderate human influence.

Key Attractions

The primary attractions within this area are related to the NRA, the Allegheny Reservoir, the trail system, the boat-to campgrounds and the scenery as follows:

- The RA is contained within a congressionally designated NRA that is recognized for having showcase recreation opportunities and scenery.
- The North Country National Scenic Trail and the Tracy Ridge/Johnny Cake Trails cross the area from north to south and connect to the Allegheny Reservoir from the road system east to west. These trails offer both day hikes and long distance hiking.
- The boat-to campgrounds, Hopewell and Handsome Lake, provide camping opportunities along the Allegheny Reservoir and access and staging to the RA.
- Interior vistas along the plateau in higher elevations provide an overlook of the reservoir and vast wooded landscapes in surrounding areas.
- A large, well distributed component of big trees that include species greater than 100 years old.

CAPABILITY

Natural Integrity and Appearance

The scenic integrity level of the Tracy Ridge RA is high. The RA contains eight documented vistas which are located along the trail system in higher elevations. Natural processes are operating within the area, and overall, the area is minimally affected by outside forces except at the boat-to campgrounds where natural processes are affected by human influence and development. The timber harvest and OGM development which occurred in the 1930s have regained a mostly natural appearance and do not compromise the area's natural integrity and appearance. Trail maintenance has affected natural ecological processes; however, the range of influence is limited. Generally, the trail tread is limited to a 24 inch path with a 6 foot center line clearing limit. Trails are compatible with wilderness area designation, but not all maintenance activities are. The 20 foot clearing limits to accommodate the installation of the toilets at the campground has compromised the natural integrity to a moderate extent along this section of trail. The area has regenerated from past harvest and other land uses, and now the forest appears mature to old-aged. Along the RA's southern edge, a utility corridor forms the boundary and when cleared, can appear dominate.

Opportunity for Solitude, Challenge and Primitive Recreation

This RA contains 9,033 acres and is easily accessible with good road and trail access on the north, south and east, and by boat via the Allegheny Reservoir on the west. There are several well-developed boat launches nearby. The RA is divided by an expansive network of trails except for a portion (roughly one-third) in the northeast corner that has no trail development. There are two large campgrounds which border the area, Tracy Ridge to the east and Willow Bay to the north, and two boat-to campgrounds within the RA along the reservoir. The area is at most

3 miles wide and approximately 7 miles long which makes it possible to traverse in a day whether traveling east to west or north to south. The Tracy Ridge RA is judged to have a moderate to high potential for providing primitive recreation and solitude in interior areas and low potential along the road system and adjacent to the campgrounds. The presence of the North Country Trail and Tracy Ridge/Johnny Cake trail system reduce the potential for challenge and solitude; however, at times there is very little or no use on the trails. On busy summer weekends, 50 to 100 hikers are estimated to use the trail system. This periodic high use would sometimes impact the levels of solitude and serenity. The potential for solitude and primitive recreation increases during winter months when the area generally receives low use. Trails are not groomed during winter months, campgrounds are closed and the opportunity for snow based primitive recreation and challenge is high. This information is consistent with a recent ROS inventory that identified the area as having an interior core of 3,174 acres for Semi-primitive Non-motorized recreation and 5,859 acres on the exterior as having a Roaded Natural setting.

Special Features

Scenic: This area is part of a large complex of forested landscapes which offer long distance views of the surrounding area and the Allegheny Reservoir. The RA is a relatively large, unaltered landscape with few modifications from the ridgetops to the shoreline. The Allegheny Reservoir is a key scenic attraction. There is a large component of big trees that also provide a special scenic feature of the RA.

Scientific: There are no designated research natural areas or experimental forests in the Tracy Ridge RA. The entire RA is part of a designated NRA.

Geological: There are no known areas of unique or rare rock formations in this RA.

Ecological: This RA was identified as part of the ANF's 1995 Landscape Corridor Concept of continuous forest canopy for connecting the large forested blocks (wilderness, scenic areas, research natural areas, national recreation areas and roadless areas) to provide higher quality habitat and better ecosystem functions for wildlife. The Tracy Ridge RA is a larger representative core area for connectivity between forest patches being managed for late successional habitats. This area has a large component of late successional forest habitat, especially in comparison to the remaining ANF, which reflects the high importance of this RA for achieving habitat conservation goals for a variety of wildlife species, including neotropical birds and less mobile species, such as reptiles, amphibians and small mammals.

Wildlife and Fish: The most significant characteristic of the Tracy Ridge area lies in the predominance of mature forest conditions combined with the remote, undisturbed nature of the area. Undisturbed and/or undeveloped areas on the ANF are somewhat rare as the ANF contains extensive private development within the proclamation boundary, with over 4,200 miles of roads (FRs, state, county or township roads, and OGM roads) and widespread OGM development. The Tracy Ridge area provides optimum habitat conditions for species that are sensitive to human disturbance, as well as species that require large blocks of mature forest habitat, such as the bald eagle, great blue heron, red-shouldered hawk, black bear, northern goshawk and bobcat. The close proximity of Tracy Ridge to Chestnut Ridge and Allegany State Park in New York provides an important complex of mature, undisturbed forest areas for wildlife. Other key wildlife habitat features that characterize the Tracy Ridge area include the predominance of oak and northern hardwoods (88%) and the hard mast production associated with these forest types. The widespread distribution of oak in particular, greatly influences landscape level wildlife use and provides suitable habitat conditions for the cerulean warbler, which is presently being reviewed for listing under the Endangered Species Act and has been documented in the area during breeding bird surveys. The scattered openings, beaver ponds, apple trees and concentrated mixed conifer/hardwood stands within the North Branch Sugar Run bottom provides the most diverse habitat conditions within the Tracy Ridge area. Due to the close proximity to the Allegheny Reservoir, the remote nature of the area and the presence of superior white pine trees that are preferred for nesting, the Tracy Ridge area provides some of the most desirable bald eagle nesting habitat in the ANF. Although no eagle nests have been identified within the area, eagles have been observed roosting at various locations along the western edge of the area, adjacent to the Allegheny Reservoir.

Rare and Endangered Animals: Although the federally endangered Indiana bat (*Myotis solalis*) has not been documented within the Tracy Ridge RA, suitable oak habitat is widely available. Additionally, a single Indiana bat was captured on private land within approximately 10 miles of the RA and detected on NFS lands within 3 miles of Tracy Ridge. As a result, the Tracy Ridge area is considered occupied Indiana bat habitat. The bald eagle (*Haliaeetus leucocephalus*), which is federally threatened, also occurs within the Tracy Ridge area. Although there are no known nests within the RA, eagles have been observed roosting along the eastern boundary of the RA adjacent to the Allegheny Reservoir. The only RFSS known to occur within Tracy Ridge is the northern long-eared bat (*Motis septentrionalis*) and suitable habitat for this species occurs throughout the Tracy Ridge area. Streams and their biological resources are not unique nor do they have extraordinary fisheries, aquatic invertebrates, or mussel populations. There are no known federally listed threatened or endangered aquatic species.

Rare and Endangered Plants: There have been few or no formal plant surveys within the RA. Currently, there are no known records of state or federally listed rare or endangered plants, Regional Forester Sensitive Plant Species or other plant species of viability concern, nor are there records of rare or exemplary natural communities. There is potential suitable habitat for rare plants in the area.

Heritage Resources: There are two known prehistoric open sites recorded for the Tracy Ridge area. No historic sites have been documented. The Pennsylvania State Historic Preservation Office (SHPO) considers all rock shelters and upland open sites to be eligible for inclusion in the National Register of Historic Places. These sites need further analysis to determine eligibility. Potential for prehistoric and historic sites is moderate to high.

Size, Shape and Manageability

The size and shape of the Tracy Ridge RA makes its preservation for potential wilderness area designation practical. The close proximity of the RA to multiple-use private lands in the northeast quarter may present management challenges near border areas, in addition to the potential challenges near the boat-to campgrounds and the Willow Bay and Tracy Ridge Campgrounds. There may also be management challenges along the Allegheny Reservoir shoreline where motorized boats land to allow access to the uplands. The motorized boat use may not be consistent with wilderness area designation.

Boundary Conditions, Needs and Management Requirements

Most of the property boundary lines are well defined by roads on the north and east, a utility corridor on the south and the reservoir on the west. The boat-to campgrounds contain non-wilderness developments which would be difficult to remove, and the history of developed use in these campgrounds would make wilderness management difficult. Also, there is historic motorized access by boat to the Allegheny Reservoir shoreline which would be difficult to eliminate or restrict. Adjusting the boundary to exclude the boat-to campgrounds and establishing it above the high water mark for boat landings is warranted. Additionally, activities and motorized use within the Willow Bay and Tracy Ridge Campgrounds could impact wilderness users. Boundary adjustments to buffer the Willow Bay and Tracy Ridge Campgrounds may be warranted if this RA is designated as wilderness.

AVAILABILITY

Recreation, Including Tourism

Designation of this RA as wilderness would not eliminate its current designation as an NRA. However, more restrictive wilderness management standards and guidelines would supersede the less restrictive management direction currently established for the NRA. The NRA designation allows for greater recreation use than wilderness area designation and allows for greater alteration of the land when managing and maintaining trails, scenery, wildlife, and forest health conditions. Future planning for the NRA could result in increased opportunities for development of overnight facilities, such as Adirondack shelters and dispersed campsites, and increased trail development opportunities for snowmobiling, mountain biking and horse use. Designation of Tracy Ridge as a wilderness area would eliminate or restrict options for these types of recreation activities and improvements in the NRA.

On the North Country Trail and the Tracy Ridge/Johnny Cake trail system, a wilderness area designation would restrict trail maintenance to non-motorized equipment and non-mechanical transport of supplies and personnel. Historically, chainsaws and mechanical transport have been used to maintain these trails. The restrictions on use of chainsaws and other mechanized equipment would make the maintenance of the trail system more challenging and time consuming. Existing and new trail directional signing and marking would be required to conform to wilderness sign standards.

Wilderness area designation may also warrant restrictions, such as limiting visitor use and distribution, including establishment of group size limits, to preserve the wilderness character of the area, whereas, the NRA allows for greater visitor use and group size limits. Currently, there are no restrictions on group size within the NRA.

The boat-to campgrounds in the NRA would not be compatible with wilderness area designation. Removal of these areas would reduce benefits to other non-wilderness recreationists. Adjusting the boundary to eliminate these areas is an option; however, the campgrounds could still impact some wilderness experiences. The large, developed Willow Bay and Tracy Ridge Campgrounds on the periphery of the RA have a similar effect. Use of these campgrounds may also impact wilderness experiences and values.

The NRA allows for motorized use of boats on the Allegheny Reservoir, for landing and exploration of the shoreline and camping at the designated boat-to campgrounds. Wilderness area designation would allow continued use of motorboats on the reservoir; however, there would be impacts to wilderness users from motorized boats landing on shore. Establishing the boundary above the high water mark would allow this use to continue, but use of boats on the reservoir may still impact some wilderness experiences.

The NRA currently provides many wilderness values, including the opportunity for solitude and serenity, self-reliance, adventure, challenging experiences, and semi-primitive recreation. For many recreationists, primeval wilderness character is less important than protection (Loomis, 1999). The NRA designation was considered an alternative to wilderness area designation with the intended purpose of protecting the undeveloped character of the area. This designation protects the RA from timber harvest, road construction and most road-based recreation.

Wildlife and Fish

Minimal disturbance to the area has occurred due to Tracy Ridge's current designation as an NRA. Wilderness area designation would maintain the remote, undeveloped character of the area which is considered the area's greatest wildlife asset. Wilderness area designation would further restrict human influence and disturbance primarily caused from recreation maintenance activities. Numbers of users and group size may be more limited with a wilderness area designation than with the NRA designation. A minimum tool approach would replace the current option of using chainsaws and other mechanized equipment for trail maintenance. The reduction in human disturbance and noise may benefit some wildlife species. Designation as a wilderness area would benefit those species seeking remote, undisturbed habitats (e.g. black bear, bobcat, northern goshawk) and those that benefit from a mature, continuous forest.

Risks to wildlife habitat include the presence of exotic pests such as gypsy moth and hemlock wooly adelgid. Wilderness area designation would limit intervention and control of disease and pest outbreaks. Suppression of invasive species, where native ecological communities or Federal threatened, endangered, and sensitive species are threatened by their presence, is allowed in designated wilderness areas.

The oak forest type provides important wildlife habitat in this RA, covering approximately 77 percent of the area. Widespread and locally severe oak decline and mortality have occurred throughout the east. Consequently, there is concern for oak on the ANF. Oak regeneration is fire dependent and if it is to be maintained over the long term, intensive management, including periodic under burning and manipulation of the canopy, is required to reduce competition of other hardwoods. Intensive management of the oak forest type has not occurred due to legislation that established this area as part of the NRA. Both wilderness area designation and NRA designation eliminate management activities that promote oak regeneration and mast production.

There are 13 miles of perennial stream, 14 miles of intermittent stream and over 7 miles of reservoir shoreline, all of which provide suitable habitat for cold-water fisheries communities. All streams are dependent on natural reproduction, and due to their small size and accessibility, none are stocked with trout. The ability to use motorized equipment to conduct fisheries surveys would be prohibited with wilderness area designation.

Typically, the ANF has not improved fish habitat on cold-water streams, but relies on natural input of large wood for the creation of habitat diversity. This RA occurs in the NRA where this type of work has not occurred. Wilderness area designation would not change the way fish habitat improvements have been managed in this RA.

Rare Plants and Unique Ecosystems

The NRA designation already limits human disturbance and management practices, such as timber harvest and road construction. Wilderness area designation would further limit human disturbance and management practices; however, impacts from trail maintenance and trampling may continue regardless of designation, as the North Country Trail and Tracy Ridge/Johnny Cake trail system will remain and may pass through suitable habitat. Given the current management practices established for the NRA, wilderness area designation would likely have a neutral effect on potential rare plants and unique ecosystems.

Water Availability and Use

The streams in this RA are not part of a municipal watershed and there are no known water storage needs. No change in water quality is anticipated if the RA is designated a wilderness area.

Livestock, Timber and Minerals

Timber harvest and the associated production of wood products from this RA do not occur as the NRA designation prohibits this use. Timber harvest and production would not occur with wilderness area designation either. Currently, 8,044 acres of the RA are capable of growing commercial crops for timber (ANF GIS Timber Suitability analysis).

Private individual(s) own 94 percent of the subsurface mineral estate. During consideration of this RA for wilderness area designation in 1984, Congress found that the Tracy Ridge area possessed a high quality wilderness resource; however, “matters were complicated” in that the bulk of the wilderness candidate lands in question were underlain by privately owned mineral rights. Available information at that time suggested that the rights underlying the area were likely to be exercised and OGM exploration appeared imminent. Accordingly, the Committee believed that wilderness area designation would be “futile” unless the mineral rights problem could be resolved (refer to H. Res. 5067).

Due to the estimated high OGM values, outright purchase of mineral rights was judged to be too costly. In particular, the mineral estate values in Tracy Ridge, Cornplanter and Allegheny Front were believed to be in the range of or in excess of 10 to 100 million dollars.

Currently, the mineral rights have not been purchased in Tracy Ridge and there are no known willing sellers. Although exploration for oil and gas seemed imminent, no development has occurred since the area was designated an NRA in 1984. In April 2004, interest to drill within the RA to test for the presence of hydrocarbons was expressed, with a 5 to 10 year drilling development program being a potential outcome. Associated with a drilling program is the removal of vegetation and construction of access roads. Test drilling is still pending in this area. This area has been characterized as having a high potential for shallow oil and deep gas production (Legislative Report, H. Res. 5067, PA Wilderness Bill, 1984). Wilderness area designation would not prohibit the exercise of private mineral rights.

There are no livestock operations or potential for such operations.

Heritage Resources

This area has a long history of use beginning in the Prehistoric Period (11,000 B.C. to 1600 A.D.) and continuing into the Historical Period (1600 to present). Additional survey, research and evaluation for prehistoric and historic Native American sites may be warranted. Preservation activities, such as salvage rehabilitation, stabilization,

restoration, excavation and intensive inventories are approved on a case-by-case basis if they will not degrade the overall wilderness character of the area.

Land Uses

No special use permits are currently issued for this RA. There is a utility corridor which forms the border on the southern boundary. There are no encumbrances other than the ownership of OGM rights by private individuals. There currently are no outfitter and guide services operating in this RA. Wilderness area designation would allow for selected outfitter and guide services, but only if services will not degrade wilderness character.

Invasive Species

While there are no widespread invasive species in the RA, the potential for occurrence is high. Onsite observations have identified three populations of Japanese barberry along the North Country Trail within the RA. All options to address invasive species in wilderness areas are available, including no treatment, hand pulling, herbicides and biological control. Any request to use herbicides in wilderness areas requires the approval of the Regional Forester.

Non Federal Lands

There are no private lands located within the RA however there is private land adjacent to the area in the northeast corner. Access is provided along the road system and access through the area is not anticipated.

SUMMARY OF WILDERNESS EVALUATION FOR TRACY RIDGE

There is a mix of opportunity for solitude and serenity, self-reliance, adventure, challenging experiences, and primitive recreation ranging from low to high in the Tracy Ridge RA. These opportunities are high in interior areas away from adjacent roads, the Allegheny Reservoir, developed campgrounds and the North Country Trail and Tracy Ridge/Johnny Cake trail systems. Challenging experiences can be had by testing one's orienteering and survival skills in an area that is unmarked, where only unique landforms or distinct vegetation provide guidance. Primitive recreation opportunities include fishing, cross-country hiking, dispersed camping and hunting. These opportunities diminish the closer you are to the periphery near campgrounds, roads and the Allegheny Reservoir which is often busy with boat traffic and noise, especially in the summer. The majority of the RA however, provides moderate to high potential to provide the wilderness attributes and values appropriate for wilderness area designation.

There are few places on the ANF that offer scenery of as high a quality, natural integrity and wide-scale ecosystem function as the Tracy Ridge RA. This area has a large component of late successional forest habitat, especially in comparison to the remaining ANF, which reflects the high importance of this RA to achieving habitat conservation goals for a variety of wildlife species, including neotropical birds and less mobile species, such as reptiles, amphibians and small mammals. The presence of a significant old tree component enhances the scenic quality of the area for potential wilderness designation.

Due to the current designation of the area as an NRA, there would be no change in terms of timber harvest, road construction or prohibition of ATV/OHM use. Other changes, such as the elimination of motorized equipment for trail maintenance, would occur, and vegetation management activities to achieve wildlife or recreation management objectives would not be allowed. There would be no change in the exercise of private mineral rights if designated a wilderness study area. Areas in the East are recommended to Congress for wilderness study area designation. If this RA is designated a wilderness study area, examination of the mineral rights is conducted as part of the study process and may include consideration of both the potential for development and the acquisition of subsurface mineral rights.

ROADLESS AREA 19002 (CHESTNUT RIDGE)

OVERVIEW

Size

(As calculated using GIS data. Actual ground surveyed acres will likely vary.)

Forest Service:	5,063 acres
Private:	none
Total:	5,063 acres

Location, Vicinity, and Access

The Chestnut Ridge Roadless Area (RA) is located on the ANF, Bradford Ranger District, in Warren and McKean counties, Pennsylvania. It is separated from the Tracy Ridge RA by SR 321. Nearby towns include Bradford, Pennsylvania to the west, Russell, Scandia and Warren, Pennsylvania to the east/southeast, and Steamburg and Salamanca, New York to the north. The area is bound by roads on all sides and contains private lands on the north. Specifically, it is bound on the north below a strip of private lands and SR 346 just below the New York state line. On the west, it is bound by SR 321 and to the east and south by FR 137 and FR 271 respectively.

The area is found within U.S. Geological Survey Cornplanter Run Quadrangle, PA.-NY. SR 321 and SR 346 and FR 137 and FR 321 provide major vehicle access to the area from all directions. However, the strip of private lands bordering SR 346 hampers access to the area from the north along this route. There are no improved roads within the RA nor are there any trails or developed recreation facilities. There is one abandoned road dividing the area and there are no evident signs of OGM development in the area.

Geography, Topography and Vegetation (Including Ecosystem Type)

According to ecological mapping, this area lies in the Allegheny High Plateau Subsection of the Northern Unglaciated Allegheny Plateau Section within the Laurentian Mixed Forest Province. This section is characterized by sharper ridge tops and narrower valleys than the glaciated portions of the plateau to the north and east. This area contains some of the steepest and most rugged topography on the ANF. The elevation climbs above 2000 feet however there are no distinct or prominent rock formations or peaks.

Dominant soil orders include Alfisols, Entisols, Inceptisols, and Ultisols. Soils found within the RA are classified as Buchanan-Hartleton-Hazleton. The Natural Resources Conservation Service describes these soils: “Very deep and deep, somewhat poorly drained to well drained, nearly level to very steep soils; formed in materials weathered from sandstone and shale; on uplands.” (NRCS 1983, p. 2)

The ecological landtype association for this area is 212Ga10, Frigid, Mesic, Mixed Oak and Northern Hardwoods. The distinguishing feature of this landtype is its steepness, higher general elevations, climate and potential frigid soils. Vegetation associations include white and red oak, black cherry, hemlock, beech, quaking aspen, red maple, yellow birch, sugar maple and open un-forested patches of mostly grass.

Chestnut Ridge is 99 percent forested with 97 percent occurring as mature forest greater than 50 years of age. There is no early successional vegetation (zero to 20 years old) and approximately 2 percent of the area occurs as mid successional pole forest 21 to 40 years old. Dominant overstory vegetation includes oak or mixed oak/hardwoods (40%), northern hardwoods (48%), mixed conifer/hardwood (7%), Allegheny hardwood (3%), aspen (1%) and upland hardwoods (1%). A total of 58 acres, or 1 percent of the area, is in openings that include 1 larger opening 13 acres in size and 12 openings less than 10 acres. The area contains a few scattered wetlands, including a larger 8 acre wetland on the plateau in the center of the area and several smaller wetlands along the Willow Creek and Dry Brook drainages. The area contains a diversity of landforms, such as plateau, sideslope, footslope and ridgeline. Over 39 percent of the area is on upper elevations greater then 2,000 feet. There are 4,658 acres of forested land suitable for timber production.

Management Direction and Current Use

This RA is contained within MA 6.1 in the 1986 Forest Plan. MA 6.1's primary purpose is to maintain or enhance scenic quality, emphasize a variety of dispersed recreation activities in a semi-primitive motorized setting, and emphasize wildlife species which require mature or overmature hardwood forests, such as turkey, bear, cavity nesting birds and mammals. Timber management activities are accomplished for wildlife habitat improvement. Seasonal wildlife habitat improvement and maintenance are for such activities as shrub and conifer planting, release treatments and food plot maintenance. Specialized habitats and inclusions within the management area can receive treatments to specifically benefit small game, non-game, indicator species or species of special concern. Recreational opportunities that include dispersed activities, such as cross-country skiing, backpacking, hiking, fishing, hunting and ATV/OHM trail riding, were emphasized in this management area in the 1986 Forest Plan. New road construction and reconstruction was also allowed in this management area.

The primary use of this RA has been for wildlife habitat improvement and dispersed recreation use. Exact recreation use is not known. However, it is estimated that the RA receives low use due to a lack of designated trails or other developed facilities. Primary activities include fishing, hunting, backpacking, hiking, dispersed camping and nature and wildlife viewing.

Between the late 1880s and 1930s, the entire Chestnut Ridge area was harvested, and the area presently consists of second growth mid successional (21 to 150 years old) or third growth forest. In the last 60 years, there has been relatively little management, and only 97 acres, or 2 percent of the area, has been regenerated through timber harvest (1965 to 1980). Since 1980, the only timber harvest that has occurred is 8 acres of salvage treatment associated with gypsy moth defoliation in the early 1990s. Recent management in the area has been almost exclusively associated with wildlife habitat improvement work and has included approximately 10 acres of annual opening maintenance, apple tree prune and release, native conifer and shrub planting and bluebird and wood duck nest box installation.

The area contains about 15 miles of stream, with most of the stream and riparian habitat associated with the North Branch Sugar Run drainage that occurs along the southern boundary and the Dry Brook drainage in the northeast. Other streams include portions of Nelse Run, Whitney Run and Willow Creek. North Branch Sugar Run contains five native species, including brook trout, one wild reproducing species (brown trout) and one stocked species (rainbow trout). Stream surveys have been conducted in the RA, and the rainbow trout stocking occurs each year. As a result of stocking, North Branch Sugar Run and Willow Creek receive considerable fishing pressure.

To date, wildlife surveys conducted within the Chestnut Ridge RA have included yellow-bellied flycatcher surveys, barred owl surveys and mist net surveys for bats during the summer. While yellow-bellied flycatcher nesting has yet to be documented, barred owls, a mature Forest Management Indicator Species, has been documented at the North Branch Sugar Run and Dry Brook drainages for the last 12 years. While no Indiana bats were detected during mist net surveys in the Dry Brook drainage in 2003, the northern long-eared bat, a Forest Sensitive Species, was documented.

Chestnut Ridge RA is encumbered by outstanding mineral rights with 100 percent of the subsurface mineral rights owned by private parties. The Chestnut Ridge area has 2 active wells along SH 321. These occur at the end of short spur roads constructed approximately 150 feet into the area. There is no clear evidence of past drilling within the interior of the area. Past drilling would have occurred 20 or more years ago, and all sites would be currently abandoned.

Appearance of the Area and Characteristics of Surrounding Areas

The Chestnut Ridge RA is characterized by steep, rugged terrain leading to high plateau uplands set in a wooded landscape intermixed with streams and continuous forest cover. There are no prominent rock formations or peaks. The area is fairly uniform with no distinct landforms other than commonly observed plateau and ridgelines. There are no improved roads, developed trails or other facilities nor are there any managed or documented vistas. The area's natural appearance is generally uncompromised by recent human development and activity.

This RA is largely intact and represents one of the most natural areas on the ANF. Management activities have been minimal and have not altered the overall natural appearance of the RA. Most of the area was harvested in the late 1800s and early 1900s and has regained a natural appearance from this activity. One abandoned road divides the area; however, this road is barely perceptible and does not adversely affect the RA's appearance.

Chestnut Ridge RA is located immediately to the east of Tracy Ridge RA, separated by SR 321. Chestnut Ridge and Tracy Ridge are similar in character with steep rugged terrain and natural appearing, wooded landscapes. Within close proximity to the north is Allegany Sate Park in New York. In areas immediately adjacent to the east and south, intensive management activities have occurred including OGM development, timber harvest and ATV/OHM trail construction. To the east lies the Marshburg-Stickney IUA. This is one of five IUAs currently designated on the ANF for ATV/OHM trail development. The IUA currently is 18,000 acres and contains almost 11 miles of ATV trail. Options to construct additional ATV trail within this IUA is being considered in the Willow Creek ATV Trail Expansion Project Environmental Impact Statement. Both the existing and proposed ATV trail systems have a propensity to affect the RA by increasing the sights and, particularly, the sounds of human activity associated with motorized recreational vehicles and equipment.

There is a strip of private land on the northern border of the RA. The activities and development associated with the private land have some influence on the appearance of the area. However, the private lands are located on the fringe and, essentially, do not affect the vast majority of the area.

Overall, the Chestnut Ridge RA is surrounded by a landscape of continuous natural vegetation characterized by low development and low to moderate human influence.

Key Attractions

The primary attractions within this area is scenery and a large, well distributed component of big trees that include species greater than 100 years old.

CAPABILITY

Natural Integrity and Appearance

The scenic integrity level of the Chestnut Ridge RA is high. Natural processes are operating within the area and the area is minimally affected by outside forces. Management activities have not compromised the area's natural integrity and appearance. The area has regenerated from past harvest and other land uses and now the forest appears mature to old aged. Surveys for non-native invasive species (NNIS) have not occurred so the botanical integrity of the area cannot be estimated. Trout fish stocking for recreational sport fishing has occurred within streams that enter this area. The introduction of non-native trout species has compromised the natural integrity of fish species within these streams.

Opportunity for Solitude, Challenge and Primitive Recreation

This RA contains 5,063 acres that are easily accessible by road on all sides. There are no developed trail systems or roads within the interior. The RA can easily be traversed in a day as it is no more than 2.5 miles wide and ranges between 3 and 5 miles long. Due to easy access, the Chestnut Ridge RA is judged to have a moderate potential for providing primitive recreation and solitude. Due to a lack of development, interior areas are judged to have a higher potential than exterior areas. This information is consistent with a recent ROS inventory that identified the area as having an interior core of 3,038 acres for Semi-primitive Non-motorized recreation and 2,025 acres on the exterior as having a Roaded Natural setting.

Special Features

Scenic: This area is part of a large complex of forested landscapes which offer long distance views of the mostly unaltered surrounding landscape. The RA is relatively large with no noticeable, human-caused modifications. This area is recognized as one of most scenic areas on the ANF due to the steep terrain and lush vegetation. There is a large component of big trees that also provide a special scenic feature.

Scientific: There are no designated research natural areas or experimental forests in the Chestnut Ridge RA.

Geological: There are no known areas of unique or rare rock formations in this RA.

Ecological: This RA was identified as part of the ANF's 1995 Landscape Corridor Concept of continuous forest canopy for connecting the large forested blocks (wilderness, scenic areas, research natural areas, national recreation areas and roadless areas) to provide higher quality habitat and better ecosystem functions for wildlife. The Chestnut and Tracy Ridge RAs are part of a larger representative core area for connectivity between forest patches being managed for late successional habitats. This area has a large component of late successional forest habitat, especially in comparison to the remaining ANF, which reflects the high importance of this RA to achieving habitat conservation goals for a variety of wildlife species, including neotropical birds and less mobile species, such as reptiles, amphibians and small mammals.

Wildlife and Fish: The most significant characteristic of the Chestnut Ridge area lies in the predominance of mature forest conditions, combined with the remote, undisturbed nature of the area. Undisturbed and/or undeveloped areas on the ANF are somewhat rare as the ANF contains extensive private development within the proclamation boundary, with over 4,200 miles of roads (FRs, state, county or township roads, and OGM roads) and widespread OGM development. The Chestnut Ridge area provides optimum habitat conditions for species that are sensitive to human disturbance, as well as species that require large blocks of mature forest habitat such as the bald eagle, great blue heron, red-shouldered hawk, black bear, northern goshawk and bobcat. The close proximity of Chestnut Ridge to Tracy Ridge and Allegany State Park in New York provides an important complex of mature, undisturbed forest areas for wildlife. Other key wildlife habitat features that characterize the Chestnut Ridge area include the predominance of oak and northern hardwoods forests and the hard mast production associated with these forest types. The widespread distribution of oak greatly influences landscape level wildlife use and provides suitable habitat conditions for the cerulean warbler, which is presently being reviewed for listing under the Endangered Species Act and has been documented in the area during breeding bird surveys. The area also contains several historic timber rattlesnake (a Forest Sensitive Species) dens, and the dry oak forest community that predominates is characteristic of preferred rattlesnake habitat.

Rare and Endangered Animals: Although the federally endangered Indiana bat (*Myotis solalis*) has not been documented within the Chestnut Ridge RA, suitable oak habitat is widely available. Additionally, a single Indiana bat was captured on private land within approximately 8 miles of the area, and the Indiana bat has also been detected on NFS lands within 2 miles of Chestnut Ridge. As a result, the Chestnut Ridge area is considered occupied Indiana bat habitat. The only RFSS known to occur within Chestnut Ridge is the northern long-eared bat (*Motis septentrionalis*), and suitable habitat occurs throughout the area. Streams and their biological resources are not unique nor do they have extraordinary fisheries, aquatic invertebrates, or mussel populations. There are no known federally listed threatened or endangered aquatic species.

Rare and Endangered Plants: There have been few or no surveys for rare and endangered plants. Currently, there are no known records of state or federally listed rare or endangered plants, Regional Forester Sensitive Plant Species or other plant species of viability concern. However, this area is considered to have suitable habitat for plant species of viability concern.

Heritage Resources: Seven historic era heritage resources have been recorded in the Chestnut Ridge RA. Of these, one is a possible hunting camp, two are possible farm sites or residences, one is a splash dam and three are possible locations of former logging camps marked by open areas and apple trees but with no recovered cultural materials or recorded features. There are no documented prehistoric sites. Potential for additional historic and prehistoric sites is moderate to high.

Size, Shape and Manageability

The size and shape of the Chestnut Ridge RA makes its preservation as a potential wilderness area practical. The close proximity of the RA to multiple-use private lands to the north may present management challenges near this border.

Boundary Conditions, Needs and Management Requirements

Most of the property boundary lines are well defined by roads. Adjusting the boundary to exclude the OGM development that is occurring along SH 321 is warranted. At this stage of analysis, it is not necessary to be concerned with precise boundary descriptions this will come later if the area becomes a designated wilderness area. Setbacks following natural features, such as streams and ridgelines, will be considered to exclude the OGM development.

AVAILABILITY

Recreation, Including Tourism

Designation of Chestnut Ridge as a wilderness area could increase recreation and tourism opportunities for individuals seeking a recreation experience in a classified wilderness area. Wilderness area designation would likely interest those who want to recreate in areas that are protected from timber harvest and road construction and prohibit the use of two and four-wheeled motorized vehicles, snowmobiles and mountain bikes. Although there is no current snowmobile or ATV/OHM use in this RA, management direction in the 1986 Forest Plan allows for a variety of recreational uses, including snowmobile and ATV/OHM use. Wilderness area designation would prohibit any use of motorized recreational vehicles.

Most of the recreational use of the area is non-motorized dispersed use, such as fishing, hunting, hiking and dispersed camping. If the Chestnut Ridge RA is designated a wilderness area, these uses would continue.

Since this RA has no trail or recreational facility development, there would be little impact to the current recreation management. However, trails are allowed in wilderness areas as long as they are constructed and maintained to wilderness standards. The use of motorized equipment and mechanical transport of supplies and personnel would not be allowed to construct or maintain potential new trails. Trail directional signing and marking would also be required to conform to wilderness sign standards.

Wildlife and Fish

The greatest risk to wildlife and wildlife habitat within the Chestnut Ridge RA are from activities that will result in increased human activity, such as road construction and motorized trail development, which increase access, impact wildlife sensitive to disturbance and can increase the spread of invasive plants. Wilderness area designation would reduce these risks and help to maintain the remote character of the area, which is considered one of the area's greatest wildlife assets. Wilderness area designation would benefit those species seeking remote, undisturbed habitats, such as the black bear, bobcat, and northern goshawk, and those that benefit from a mature, continuous forest.

Other risks to wildlife habitat include the presence of insects and disease, such as the beech bark disease complex, the gypsy moth and the hemlock woolly adelgid, which is predicted to appear on the ANF within 5 years. The beech bark disease complex is a significant concern in the RA due to the large northern hardwoods and American beech component. There are presently few activities or treatments that would prevent these impacts from occurring and management is already restricted due to the limited access. Wilderness area designation would further limit management's ability to mitigate impacts from insects and disease and restore habitat conditions. Wilderness area designation would also eliminate existing wildlife habitat improvement work that is associated with openings and apple tree maintenance and preclude habitat improvement work such as native shrub and conifer planting.

Like Tracy Ridge, oak is an important component of this RA, covering 40 percent of the area. Wilderness area designation would restrict regeneration and management activities that maintain or enhance oak for wildlife.

There are approximately 8 miles of perennial stream and 7 miles of intermittent stream, all of which provide suitable habitat for cold-water fisheries communities. Dry Brook, Whitney Run, and Nelse Run have self-reproducing populations of native brook trout, while North Branch Sugar Run and Willow Creek are supplemented with stocked, catchable trout each year. Wilderness area designation of this RA would allow wildlife species to be introduced and fish species to be stocked only if there is a need to restore a native species

that has been eliminated or reduced by human influence. Exotic species may not be stocked. A wilderness area designation would preclude opportunities to do riparian area restoration/improvements, including streamside vegetation manipulation or direct habitat improvement of a stream.

Rare Plants and Unique Ecosystems

There are no known records of state or federally listed plant species, Regional Forester Sensitive Plant Species, or other plant species of viability concern within the RA, nor are there records of rare or exemplary natural communities. There is potentially suitable habitat for rare plants in the area. Wilderness area designation would limit human disturbance and management practices which may reduce impacts to rare plants and unique ecosystems.

Water Availability and Use

The streams in this RA are not part of a municipal watershed and there are no known water storage needs. If the RA is designated a wilderness area, no change in water quality is anticipated.

Livestock, Timber and Minerals

Timber harvest is prohibited following a wilderness area designation. Currently 4,658 acres of the RA are classified as suitable for timber production (capable of growing commercial crops for timber).

Subsurface mineral rights are owned by private individuals for the entire area. Wilderness area designation would not prohibit the exercise of these rights.

There are no livestock operations or potential for such operations.

Heritage Resources

Minimal heritage resource surveys have been conducted in this RA. Additional survey, research and evaluation for prehistoric and historic Native American sites may be warranted. Preservation activities, such as salvage rehabilitation, stabilization, restoration, excavation and intensive inventories, are approved on a case-by-case basis if they will not degrade the overall wilderness character of the area.

Land Uses

No special use permits are currently issued for this RA. There are no other encumbrances other than the ownership of OGM subsurface rights by private individuals. There currently are no outfitter and guide services operating in this RA. Wilderness area designation would allow for selected outfitter and guide services, but only if services will not degrade wilderness character.

Invasive Species

While there are no recorded widespread invasive species in the RA, the potential for occurrence is high. All options to address invasive plants in wilderness areas are available, including no treatment, hand pulling, herbicides and biological control. Any request to use herbicides in wilderness areas requires the approval of the Regional Forester.

Non Federal Lands

There are no private lands located within the RA. However, there is private land adjacent to the area in the north. Access is provided along the road system and access through the area is not anticipated.

SUMMARY OF WILDERNESS EVALUATION FOR CHESTNUT RIDGE

The Chestnut Ridge RA offers a moderately high probability of experiencing solitude and serenity, self-reliance, adventure, challenging experiences, and primitive recreation. These opportunities are especially high in interior areas away from adjacent roads. Challenging experiences can be had by testing one’s orienteering and survival skills in an area that is unmarked, where only unique landforms or distinct vegetation provide guidance. Primitive recreation opportunities include fishing, cross-country hiking, dispersed camping and hunting. Overall, this RA

provides relatively high potential to provide the wilderness attributes and values appropriate for wilderness area designation.

Other than Tracy Ridge, there are few places on the ANF that offer scenery of as high a quality, natural integrity and wide-scale ecosystem function as the Chestnut Ridge RA. This area has a large component of late successional forest habitat, especially in comparison to the remaining ANF, which reflects the high importance of this RA to achieving habitat conservation goals for a variety of wildlife species, including neotropical birds, and less mobile species, such as reptiles, amphibians and small mammals. The presence of a significant old tree component enhances the scenic quality of the area and potential for wilderness area designation.

Vegetation management activities to achieve wildlife or recreation management objectives would not be allowed if this area if it becomes a designated wilderness area. There would be no change in the exercise of private mineral rights if designated a wilderness study area. Areas in the East are recommended to Congress for wilderness study area designation. If this RA is designated a wilderness study area, examination of the mineral rights is conducted as part of the study process and may include consideration of both the potential for development and the acquisition of subsurface mineral rights.

ROADLESS AREA 19003 (MINISTER VALLEY)

OVERVIEW

Size

(As calculated using GIS data. Actual ground surveyed acres will likely vary.)

Forest Service:	9,050 acres
Private:	95 acres
Total:	9,145 acres

Location, Vicinity, and Access

The Minister Valley Roadless Area (RA) lies within the northeast portion of the ANF in Cherry Grove Township, Warren County, Pennsylvania. Nearby towns include Cherry Grove to the north, Sheffield to the east, Tidioute to the west, and Kelletville to the south. The area is bordered by a combination of roads, private land and a utility corridor. The RA is generally bordered by FR 116, SR 2002 and SR 2001 on the east, north and west respectively. A utility corridor and private lands bound the RA to the south.

The area can be accessed by foot from most anywhere along the road system. A portion of the North Country Trail traverses the area from east to west with trailhead access along FR 116 and SR 2001. The Minister Creek Loop Trail also penetrates this RA from the south with trailhead parking and access just below the southern boundary along SR 666. The Minister Creek Campground is also located near this trailhead. There are approximately 4 miles of improved roads and 16 miles of unimproved roads that also contribute to access within the RA.

History

The Minister Valley RA has a long history of use. The area in and around the RA is prehistorically and historically significant, with the earliest archaeological evidence suggesting that prehistoric Native American peoples entered the Minister Valley area circa 3000 B.C. Prehistoric evidence further suggests that these indigenous peoples continued their presence on the landscape until being assimilated or displaced by Euro-American settlement.

From the early and mid-eighteenth century through the early nineteenth century, Euro-American settlement patterns focused on timber resource extraction. The southern portion of the RA was harvested early in the settlement sequence and timber was rafted down Tionesta Creek. The northern portion of the RA was harvested during the Railroad Logging Era, beginning in the late 1880s and continuing to the 1930s.

A portion of the RA was inventoried as roadless under the Forest Service initiated review process known as RARE II. This review was conducted to determine suitability of areas for inclusion in the NWPS. RARE II resulted in a nationwide inventory of roadless areas that included 34,358 acres, or nine roadless areas, on the ANF. Two of the nine areas subsequently became designated wilderness areas: Hickory Creek and the Allegheny Islands. Minister Valley, at 1,375 acres, is one of the seven remaining areas. This area was not considered for wilderness designation and it was released from further consideration during the 1986 planning cycle. For the revision of the 1986 Forest Plan, a re-inventory of roadless areas is required. The re-inventory of the ANF identified three areas for further consideration. The Minister Valley RA was expanded from its original size of 1,375 acres to 9,145 acres. The RARE II area is contained in the southeast quarter of the current Minister Valley RA.

Geography, Topography and Vegetation (Including Ecosystem Type)

According to ecological mapping, the Minister Valley RA lies in the Allegheny High Plateau Subsection of the Northern Unglaciated Allegheny Plateau Section within the Laurentian Mixed Forest Province (McNab and Avers, 1994). The ecological landtype association for this area is 212Ga3, Mesic, Oak and Northern Hardwoods. The most distinguishing feature of this landtype is its oak component. Vegetation associations include white and red oak, black cherry, hemlock, beech, quaking aspen, red maple, yellow birch, sugar maple, white pine and savannas (Ecological Landtype Mapping for the ANF).

The Minister Valley RA exhibits a wide range of topography, site conditions, soil types, drainage systems and vegetation. Dominant overstory vegetation includes Allegheny hardwoods (27%), mixed conifer/hardwoods (23%), oak (18%), upland hardwoods (15%), northern hardwoods (13%) and aspen (1%). Tree species commonly found include black cherry, white ash, tulip poplar, red and sugar maple, black and yellow birch, quaking aspen, white and Norway spruce and hemlock. The RA also contains approximately 59 scattered openings (3%) that range from less than an acre to 50 acres (one opening). The majority of openings are less than 10 acres. These openings primarily consist of lowland shrubs, upland shrubs or fern and grass. Over 90 percent of the area occurs as mature forest greater than 50 years of age, with the largest component between 71 and 80 years (28%). Approximately 9 percent of the RA contains species 100 to 130 years of age. Early successional forest (zero to 20 years) and mid successional forest (21 to 49 years) each occur on 4 percent of the area.

The Minister Valley RA contains a variety of landform conditions with large sideslope (47%), plateau (24%) and footslope (26%) components. Approximately 60 percent of the area has slopes less than 25 percent. The elevation ranges from 1,300 feet in the bottom to roughly 1,800 feet on the plateau. The RA also has a large scattering of exposed rocks and concentrated areas of large (house-sized) boulders. These rocks and boulders are primarily found on the plateau. They provide visual interest and scenic character.

Primary drainages within the RA include Minister Creek (and tributaries), Porcupine Run and Bobbs Creek. There are 23.9 total miles of streams and tributaries, including 13.9 miles of perennial streams and 10 miles of intermittent streams. The majority of Minister Creek (11.5 miles), the upper half of Bobbs Creek (2.5 miles) and the headwaters of Porcupine Creek (2.3 miles) are contained within the RA.

There are three general soil groups found within the RA: Hazelton sandy loams and Hazelton very stony loams (49%), Cockport silt loams, Cockport very stony silt loams, Ernest very stony silt loams, and Wharton silt loams (48%) and Cavode silt loams and Wayland silt loams (3%). For a complete description of these soils, refer to the Soil Survey of Warren and Forest Counties, Pennsylvania (NRCS 1985).

There are 8,108 acres of forested land suitable for timber production.

Management Direction and Current Use

Management Direction

The management area distribution in the 1986 Forest Plan for this RA is 10 percent in MA 6.1, 20 percent in MA 3.0, and 69 percent in MA 6.2. The remaining one percent is privately owned.

MA 6.1 has the following primary purposes: 1) maintain or enhance scenic quality, 2) emphasize a variety of dispersed recreate activities in a semi-primitive motorized setting, and 3) emphasize wildlife species that require mature or over-mature hardwood forests, such as turkey, bear, cavity-nesting birds and mammals. Timber management activities are accomplished for wildlife habitat improvement.

MA 6.2 has the following primary purposes: 1) provide a sustained yield of Allegheny hardwood and oak sawtimber using even-aged management, 2) emphasize turkey and bear in all timber types, and 3) provide a Semi-primitive Non-motorized setting with a variety of dispersed non-motorized recreation experiences. The Minister Valley area is one of four MA 6.2 areas on the ANF. Intensive timber management is administered on each 6.2 area on a rotating schedule. Only one area is entered each decade, with the remaining areas providing a Semi-primitive Non-motorized recreation experience. The intensive timber management decade for the Minister Valley MA 6.2 area was October 1995 to September 2005. Semi-primitive Non-motorized recreation will be provided during the following three decades. During the decade of intensive management, Roaded Natural dispersed recreation opportunities were provided. Roads were managed to either Traffic Service Level (TSL) C or D. All TSL D roads were closed to public traffic, except as specifically documented in a project level Environmental Analysis for the area. TSL C roads were open to public traffic, with restrictions as indicated by forestwide and management area standards and guidelines found in the 1986 Forest Plan. During the 30-year non-intensive management period, all local roads are re-vegetated and closed to all traffic (public and administrative), except as needed for private OGM development.

The Minister Valley RARE II area was divided between MA 6.1 and MA 6.2 in the 1986 Forest Plan. Under MA 6.1, ATV/OHM trails are not designated within the Minister Valley RARE II area, nor is new road construction allowed.

MA 3.0 has the following primary purposes: 1) provide a sustained yield of high-quality Allegheny hardwood sawtimber through even-aged management, 2) provide age class or size class habitat diversity from seedlings through mature timber in a variety of different types, and 4) provide a Roaded Natural setting for all types of developed and dispersed recreation opportunities with an emphasis on motorized recreation activities. A variety of roads may be constructed for transporting forest products and accommodating planned motorized recreation use.

Current Use

The primary use of this RA has been for recreation, wildlife and timber management. The RA is a popular recreation destination, especially with local residents, and draws high numbers of visitors on weekends throughout the spring, summer and fall seasons. Higher use periods include the summer trout season and fall hunting season. Exact visitor use data has not been collected. However, estimates range from 800 to 1,000 people on a single weekend day or during busy summer holidays. Weekend use is generally three to four times greater than weekday use (for every three to four people recreating on a weekend day, there is one person recreating on a weekday).

There are approximately 13 miles of hiking trail in the RA, including 7.3 miles on the Minister Creek Loop Trail and 5.6 miles of the North Country Trail. Day hiking is most popular with visitors along the Minister Creek Loop Trail. The Minster Overlook, located approximately 0.8 miles from the trailhead, is a popular hiking destination and offers panoramic views of Minister Valley. There are large boulders and rocks located along the trail and at the overlook that add scenic interest to the area. The North Country Trail and Minister Loop Trail are interconnected, providing both day hiking and long distance hiking opportunities. Additional hiking occurs on the roads located within the area. Mountain biking and occasional equestrian use also occurs along the roads. There are approximately 4 miles of the 366-mile Allegheny Snowmobile Loop Trail located adjacent to or within the RA. Approximately 2.9 miles of snowmobile trail are located within the RA and 1.3 miles located on roads that bound the RA on the west and north. The snowmobile route does not penetrate the RA as it is located along the fringe, intermittently running parallel and onto FR 116 on the east and SR 2002 on the north.

Minister Creek, located primarily within the RA, is popular for brook trout fishing. Beginning in 2005, the Wild Brook Trout Enhancement Program, a special fishing regulation enacted by the state, limits brook trout fishing to

catch and release only and allows year-round fishing. The purpose of the regulation is to enhance the population and produce larger brook trout. The program will be evaluated on a regular basis by the state.

Hunting is also popular in the RA. FRs are opened to provide motorized vehicle access to hunters. This is allowed on approximately 3.4 miles of FR 250 and FR 420 during the 10-year intensive timber harvest cycle. Once implementation of the 10-year harvest cycle is complete, these roads will be closed to public use. All other roads are closed to motorized access, except for administrative purposes, access to private lands or for OGM development.

Additional recreational activities include nature, wildlife and bird viewing; trapping; and dispersed camping. There are several dispersed camping sites located along FR 116. These sites are located on short spurs that reach to just within the RA. The spurs are maintained and hardened for vehicle access and parking to facilitate car and tent camping opportunities. They also generally contain an installed fire ring. Recreation management activities include trail maintenance and dispersed campsite maintenance.

Timber harvest activities have been occurring in the Minister Valley area since the 1800s. By the early 1940s, the entire Minister Valley area was harvested. Vegetation management, primarily focusing on reforestation treatments, continued through the 1960s and 1970s. In 1985, a large outbreak of tornadoes in eastern Ohio and northwest Pennsylvania resulted in large scale blowdown on the ANF, including within the Minister Valley area. Timber was salvaged to the extent possible, and, to aid in regeneration, large stands were fenced to exclude deer from browsing. By 1997, most of the devastated area had regenerated. Unlike other areas on the ANF, the Minister Valley area has been spared severe mortality caused by the gypsy moth or cherry scallop shell moth (Minister Watershed, Environmental Assessment Appendix, 1997, p. 3).

Roughly 20 percent of the Minister Valley roadless area was designated as MA 3.0 under the 1986 Forest Plan. This area lies to the west of FR 420. Although it was allocated to MA 3.0, extensive timber harvest did not occur, particularly during the last ten years. The USDA Forest Service Northern Research Station has conducted research for over 20 years on an oak research study plot within the MA 3.0 portion of this RA. This study has produced 15 years of data and is the “only research on the ANF concerning uneven-age silviculture in mixed oak stands” (e-mail communication, Susan Stout, Research Project Leader). The study plan for this research expects an 80-year life span with approximately 20-year cutting cycles.

In 1997, the ANF completed the Minister Watershed Environmental Assessment (EA) that would guide management activities within the Minister Valley area for the intensive timber management decade scheduled for October 1995 through September 2005. This EA covered 7,658 acres of the 9,050 acre Minister Valley RA. As of this time, the ANF is in the final implementation phase of this project. According to the EA, final implementation will result in the following activities to have occurred in the Minister Valley RA:

- Recreation improvements that include 1 mile of new hiking trail and 0.35 miles of trail reconstruction.
- Designation of 3,923 acres for improving wildlife connectivity across the landscape and providing old-growth type habitat.
- Wildlife habitat management of 249 acres that includes prune and release of apple trees, fertilizing apple trees, tree and shrub pruning, herbicide application to prepare planting sites, area fencing for shrubs, grass/forb seeding and placement of bird houses.
- Timber and vegetative treatments to include thinning (45 acres), shelterwood seed cutting followed by final harvest (509 acres), crop tree release (150 acres), herbicide application (569 acres), site preparation (475 acres), aerial fertilization (310 acres) and area fencing (120 acres).
- Transportation and road management to include 0.2 miles of new road construction and 4.9 miles of road reconstruction.

Harvest units have generally been small (roughly 5 to 60 acres) and located adjacent to roads. Over the last 10 years, approximately 10 percent of the RA has been harvested.

There are a number of logging and access roads in the RA. There are approximately 3.4 miles of improved road segments split between FR 250 and FR 420. These roads have been maintained for recreation, primarily for

hunting in the fall and to accommodate passenger vehicle traffic. There are approximately 16 miles of unimproved roads that were designed and constructed for transporting forest products and supporting administrative use. An improved road is "*any constructed or existing feature or facility created on the land for the purpose of travel by passenger vehicles (four wheeled, 2 wheel drive) which are legally allowed to operate on forest roads or public roads and highways, and vehicles are greater than 50 inches in width. Said facility will have an area for vehicles to travel on and will incorporate some manner for the disposal of surface runoff." (Bill Rees, Regional Office Engineering, 3/26/97*).

For the 10-year intensive harvest decade, road reconstruction has occurred on FR 251, FR 419 and FR 453; however, prior annual maintenance has not occurred on these roads and once implementation of the 10-year intensive harvest period is over, these roads will be closed, they will not be maintained and they will be re-vegetated naturally and/or mechanically re-seeded. Approximately 7 miles of roads are identified as unknown. These are old road remnants were used early in the 1900s for timber harvest or OGM development. They are primarily re-vegetated with ferns, shrubs and/or scattered overstory. There is a non-system road (NS23650) approximately 0.4 miles long located off FR 116 that accesses a 95-acre private inholding. Table C-14 shows the status of roads within the RA.

Table C-14. Status of Roads within the Minister Valley RA

Road Number	MA	Total Miles	Improved Miles	Status	Uses
FR250 (FR 116 to FR 420)	6.2	1.17	1.17	Open 1996-2006, closed after 2006	Hunting, rock pit source, timber harvest
FR250 (FR 420 to end)	6.2	2.63	0	Decommissioned	Decommissioned
FR420	6.2	2.56	2.17	Open 1996-2006, closed after 2006	Hunting, rock pit source, timber harvest
FR420B (off of FR 420)	3.0	0.73	0	Closed	Timber harvest
FR420D (off of FR 420)	3.0	0.48	0	Closed	Timber harvest
FR251	6.2	1.82	0	Seasonal open 1996-2006, closed after 2006	Timber harvest
FR419	6.2	1.17	0	Seasonal open 1996-2006, closed after 2006	Timber harvest
FR453	6.2	0.81	0	Seasonal open 1996-2006, closed after 2006	Timber harvest
FR 537	6.1	0.70	0	Closed	Recreation
Unknown	6.2	0.59	0	Closed	Old road
Unknown	6.2	6.34	0	Closed	Old road
NS23650	6.2	0.38	0.38	Closed	Access to private land
		19.38	**3.72**		

Roads that are closed are gated and closed to public vehicles but not to hikers or other non-motorized recreational uses. Some roads allow public vehicles on a restricted basis. This includes allowing passenger vehicles behind gated roads during hunting season but not other times of the year. During the 10-year intensive management period, FR 419 and FR 251 will be open only during antlered and antlerless deer hunting seasons. They are open to vehicular traffic for approximately one month per year. FR 250 and FR 453 remain open year-round during the intensive period. During the remaining 30 years of the 40-year rotation cycle, roads within the Minister Valley RA are closed to motorized vehicular traffic.

Wildlife surveys recently conducted within the Minister Valley RA include raptor nest searches and bat summer mist net surveys. To date, 31 stick nests have been found, including the Cooper's hawk, red-shouldered hawk and sharp-shinned hawk nests. The area was surveyed for forest dwelling bats in 1998, 1999 and 2003. No Indiana bats were detected. However, the northern long-eared bat, a Forest Sensitive Species, has been documented.

Minister Valley RA is encumbered by outstanding mineral rights with 100 percent of the subsurface mineral rights owned by private individuals. There is currently no OGM drilling or exploration occurring in the RA; however, drilling has occurred in the past. There are 11 inactive well sites located within the RA (GIS data, ANF). According to district personnel at the Bradford Ranger District, these wells have been abandoned and there has been no OGM development since the 1930s. There is a heightened interest in developing the area due to the high value of crude oil.

Appearance of the Area and Characteristics of Surrounding Areas

The Minister Valley RA is densely vegetated with some modification of the natural appearing landscape due to timber harvest, road construction and trail development. Recent timber harvest has primarily occurred along roads on the boundary, mostly on the northeast fringe, and to varying degrees along the following interior roads: FR 453, FR 251, FR 419, FR 250 and FR 420. The Minister Loop Trail and North Country Trail systems are prominent, human-made features that cover much of the interior, especially on the west side of the area. Overall, the RA appears natural, even though human intervention has occurred over the years.

Lands to the east and west of the RA are designated MA 3.0. Timber harvest, road construction and OGM development has altered the landscape in these areas. The Hickory Creek Wilderness and Hearts Content Scenic Area lie to the northeast of the RA. The scenery and natural appearance of these surrounding areas is high. There are private lands on the northern and southern boundary of the area, with wide-scale site modification and mostly rural farm and housing development.

Key Attractions

- The North Country National Scenic Trail crosses the area east/west.
- The Minister Loop Trail system provides access to Minister Creek and a prominent scenic overlook that offers panoramic views of Minster Valley.
- Large, house-sized boulders add visual interest and heighten the scenic attractiveness of the area.
- The RA is popular for a wide variety of recreation activities, including hiking, hunting, fishing and dispersed camping.

CAPABILITY

Natural Integrity and Appearance

Although there has been extensive harvest and trail and road construction within this RA, the variety of landforms and dense, lush vegetation, including wetland scenery and large boulder fields, makes this area appear natural. Most harvest units have been relatively small. Fencing has occurred within the area to manage deer browsing and to help re-establish seedlings. There are approximately 4 to 5 miles of fencing within the area. In the immediate area of fencing, the natural integrity and appearance has been modified. Once away from fenced areas, the area appears mostly natural.

There are approximately 20 miles of improved and unimproved roads within the RA. Approximately 11 miles of old unimproved roads have regained or are regaining a mostly natural appearance. The primary impact to the natural integrity and appearance of the area has been from road construction and reconstruction on approximately 3.4 miles of improved road segments on FR 250 and FR 420. Other FRs, including FR 251, FR 419 and FR 453, are not maintained or constructed for standard passenger vehicle; however, they have been reconstructed for logging traffic and administrative use. These roads also impact the natural integrity and appearance of the RA. Surveys for NNIS have not occurred, so the botanical integrity of the area cannot be estimated.

Opportunity for Solitude, Challenge and Primitive Recreation

This RA contains 9,050 acres and is easily accessible with good road access on all sides. There is a well-developed network of both improved and unimproved roads and trails throughout almost the entire area. There are campgrounds and dispersed campsites located along the RA. The area can be easily traversed in a single day either going north to south or east to west. It is fringed with developed private land on the north and to the south. Due to the relative accessibility and close proximity to private land, the Minister Valley RA is judged to have an overall moderate potential for providing primitive recreation and solitude. However, there are interior areas away from roads or trails that offer good opportunities to experience solitude and primitive recreation. Rock climbing in interior areas provides for a challenging recreational experience.

The presence of the North Country Trail and Minister Loop Trail systems reduces the potential for challenge and solitude; however, at times there is very little or no use on the trails. On busy summer weekends and during hunting and fishing seasons, the area can become crowded in some places. This periodic high use would sometimes impact the availability of solitude and serenity. The potential for solitude and primitive recreation

increases during winter months when the area generally receives low use. Trails are not groomed during winter months, and the opportunity for snow-based primitive recreation and challenge is high. This information is consistent with a recent ROS inventory that identified the area as having an interior core of 3,210 acres that provide a Semi-primitive Non-motorized recreation experience and 5,840 acres on the exterior that provide a Roaded Natural recreation experience.

Special Features

Scenic: The combination of forested landscape, stream valleys, rock outcrops and plateau create exceptional scenery in this RA. The streams and rock outcrops provide an added element of scenic interest.

Scientific: There are no designated research natural areas or experimental forests in the Minister Valley RA. A long-term oak study is ongoing in an area east of FR 420. This study has collected 15 years of data and is the only research on the ANF concerning uneven-age silviculture in mixed oak stands. The Study Plan for this research includes an 80-year life span with approximately 20-year cutting cycles.

Geological: There are no known areas of unique or rare rock formations in this RA.

Ecological: The ANF identified a portion of this RA (3,923 acres) as an important component of continuous forest canopy to provide higher quality habitat and better ecosystem functions for wildlife in the Minister Watershed EA, 1995. The Minister Valley RA is a larger representative core area for connectivity between forest patches being managed for late successional habitats. The close proximity of Hickory Creek Wilderness to the Minister Valley RA contributes to a large complex of connected late successional forest habitat, especially in comparison to the remaining ANF. This reflects the high importance of this RA to achieving habitat conservation goals for a variety of wildlife species, including neotropical birds and less mobile species, such as reptiles, amphibians and small mammals.

Wildlife and Fish: Due to the natural character of the area, as well as recent management, the Minister Valley RA provides a great diversity of wildlife habitat conditions, including a variety of forest types and age classes, a well distributed non-forest component, a large understory and overstory conifer component, rock outcroppings and a large remote forest component. This combination of conditions results in preferred habitat for a wide variety of wildlife species, including those species that prefer predominantly mature forest and are sensitive to human disturbance, such as the northern goshawk, red-shouldered hawk, Cooper's hawk, sharp-shinned hawk, great blue heron (all ANF species of special concern), bobcat and fisher (re-introduced into the area in the last 10 years). Species that utilize a combination of young and mature forest, including species such as turkey, deer, black bear and ruffed grouse, American woodcock and Swainson's thrush, also are present in the RA. The large plateau component found in this area is particularly important to species, such as the northern goshawk, that require slopes of less than 25 percent for nesting. The rock outcroppings that characterize the southern portion of the area also provide habitat for species, such as the common raven and turkey vulture that nest on rock ledges. Several of these rock complexes are also large enough to provide potential bat hibernacula, although no hibernacula have been documented to date. The combination of oak and rock outcroppings also provides suitable habitat for the timber rattlesnake, a Forest Sensitive Species, and there has been historic and recent documentation of rattlesnakes in the area. The mature oak forest provides suitable habitat for the cerulean warbler, which is presently being reviewed for listing under the Endangered Species Act. The area lies immediately north of Tionesta Creek, which is utilized for foraging by eagles, and the more remote portions of the RA provide suitable bald eagle nesting habitat. Streams and their biological resources are not unique nor do they have extraordinary fisheries, aquatic invertebrates, or mussel populations, with the exception of Minister Creek. The aquatic invertebrate community and water quality rates high enough in Minister Creek for PA Department of Environmental Protection (PA-DEP) to consider it for re-evaluation to Exceptional Value status. There are no known federally listed threatened and endangered species within the proposed wilderness area, but there is one known proposed RFSS in Minister Creek. The collection of a proposed RFSS was made in 1994 (Bier et al. 1997) along this stream. An adult ocellated darner was documented within or near the southern boundary of the RA. During the same time, a mussel survey was also conducted. This survey failed to document any mussels.

Rare and Endangered Animals: Although the federally endangered Indiana bat (*Myotis solalis*) has not been documented within the Minister Valley RA, it has been documented (anabat detection) approximately 2 miles to the east. Considering this documentation and the widespread availability of suitable habitat, the RA is considered suitable occupied Indiana bat habitat. The only RFSS species known to occur within the Minister Valley RA is the northern long-eared bat (*Motis septentrionalis*) and suitable habitat occurs throughout the RA. Streams and their biological resources are not unique nor do they have extraordinary fisheries, aquatic invertebrates, or mussel populations. There are no known federally listed threatened or endangered aquatic species.

Rare and Endangered Plants: There have been few or no surveys for rare and endangered plants. Currently, there are no known records of state or federally listed rare or endangered plants, Regional Forester Sensitive Plant Species or other plant species of viability concern. However, this area is considered to have suitable habitat for plant species of viability concern.

Heritage Resources: Numerous Heritage Resources surveys have been conducted in the RA. The surveys have resulted in the recording of 95 heritage resources. Historic era resources include 4 isolates, 3 scatters, 3 general oil, gas and minerals, 11 former logging camps, 3 sawmills, 2 railroad grades, 2 residence-related, and 1 Civilian Conservation Corps quarry. Prehistoric resources include 2 isolates, 6 open sites, and 58 rockshelters. This area possesses high potential for scientific archeological research for prehistoric resources. It is not known which, if any, of these sites are eligible for inclusion in the National Register of Historic Places as evaluations of site significance have been limited.

Size, Shape and Manageability

The size and shape of the Minister Valley RA makes its preservation as a potential wilderness area practical. The close proximity of the RA to multiple-use private lands on the northeast may present management challenges near this border. The private inholding contained within this RA may also present management challenges. Closures of interior roads that have received historical public use may present management problems or conflicts between those who want wilderness and those who would prefer continued, improved or increased access to the area.

Boundary Conditions, Needs and Management Requirements

The area is bounded by a combination of roads, private land and a utility corridor. The south boundary is a combination of an east/west utility corridor and private lands that jut into the area from SR 666. The RA is bound by FR 116 on the west, SR 2001 on the east and SR 2002 on the north. Private lands abut the RA in two places. One is a small parcel of land (approximately 780 acres) along the northeast corner, just south of SR 2002 and the other is a large expanse of private land along the utility corridor that abuts the RA. There is one private inholding of approximately 95 acres in the area.

The boundary lines are generally not well defined along the utility corridor or where the private lands abut the RA. A land line survey would be needed to distinguish the boundary along the utility corridor and private lands. Access to these private lands is obtained from roads outside the RA, from SR 2002 and SR 666.

Boundary lines along the east, west, and north could be formed along FR 116, SR 2001 and SR 2002. However, excluding the snowmobile trail which parallels FR 116 and SR 2002 is warranted unless the trail can be re-routed outside of the RA. A land line survey could be done to exclude the snowmobile trail if an appropriate relocation could not be found. Adjusting the boundary to exclude the private inholding, which is approximately 0.4 miles from FR 116, should also be considered. This would allow continued motorized access to these private lands and reduce potential conflicts between wilderness users and landowners.

AVAILABILITY

Recreation, Including Tourism

Designation of Minister Valley as a wilderness area could increase recreation and tourism opportunities for individuals seeking a recreation experience in a classified wilderness area. There are no designated ATV/OHM trails or roads in the RA, but some illegal use does occur. There is current snowmobile use. However, it is limited to the fringe near roads on the west and north boundary. Wilderness area designation would preclude the use of

snowmobiles or other motorized recreational vehicles. A boundary adjustment could be made to allow current snowmobile use to continue.

Much of the recreational use of this area is dispersed non-motorized activities, such as fishing, hunting, hiking, rock climbing, nature viewing and dispersed camping. For the last decade, recreationists have been allowed motorized access on roads within the RA on a seasonal or restricted basis for hunting and other dispersed activities. If the Minister Valley RA is designated a wilderness area, all interior roads would be permanently closed and interior motorized access would be eliminated. Access to the area would be from exterior boundary roads. Dispersed non-motorized activities would continue under wilderness area designation.

This RA has fairly extensive trail development and contains managed dispersed campsites, primarily on the exterior fringe along FR 116. Maintenance of the trail and overlook has included the use of mechanized equipment and vehicular access along FR 537 (0.7 miles). The use of motorized equipment and mechanical transport of supplies and personnel would not be allowed to construct or maintain existing or potential new trails. Trail directional signing and marking would also be required to conform to wilderness sign standards.

Wilderness area designation may warrant public use restrictions if visitation begins to threaten wilderness character and values. Minister Valley already receives periods of high use, particularly in the summer fishing and fall hunting seasons. Limiting visitor use and distribution, including establishment of group size limits and permit requirements, may be warranted as a management tool to preserve wilderness character.

Wildlife and Fish

The greatest risks to wildlife and wildlife habitat in the RA are from activities that result in increased development, including road construction and increased access, which impact wildlife sensitive to disturbance and can increase the spread of invasive plants. Wilderness area designation would reduce these risks and help to maintain the remote character of the area. Other risks that would reduce wildlife and wildlife habitat diversity include forest health concerns, such as the loss of beech from the beech bark disease complex, sugar maple decline, loss of hemlock due to the hemlock woolly adelgid (expected to be on the ANF within 5 years), and the possible long-term reduction in oak, which requires fire and canopy disturbance for regeneration. Potential impact from the hemlock woolly adelgid is of particular concern due to the large hemlock component in this area. While there are presently few activities or treatments that would prevent these impacts from occurring, wilderness area designation could limit management's ability to mitigate these impacts or restore habitat conditions. This is especially true in this area because an existing road network is in place that would facilitate access. Because this area has been actively managed for wildlife habitat enhancement, wilderness area designation would also prevent management from manipulating vegetation to provide the desired structure and composition required by many wildlife species. As a result, habitat for many game and non-game species that prefer or require a diversity of forest and non-forest conditions could be reduced as a result of wilderness area designation.

There are approximately 14 miles of perennial stream and 10 miles of intermittent stream, all of which provide suitable habitat for cold-water fisheries communities. All streams are dependant on natural reproduction and none are stocked with catchable trout. These streams provide the angler with the opportunity to fish for native brook trout and most streams are somewhat remote, with the exception of Bobbs Creek. The Minister Creek watershed is very popular with anglers who prefer remote characteristics.

The ability to use motorized or mechanized equipment to conduct fisheries surveys would be prohibited. The ANF currently uses non-motorized units; however, the PA Department of Natural Resources (PA-DNR) uses mechanized equipment to conduct surveys. A coordinated effort would have to be established whenever streams are scheduled for survey by the state or other agencies.

The ANF has not typically improved fish habitat on cold-water streams and relies on natural input of large wood for the creation of habitat diversity. Wilderness area designation would not change this management approach. A wilderness area designation would preclude opportunities to do riparian area restoration/improvements, including streamside vegetation manipulation or direct habitat improvement of a stream.

Rare Plants and Unique Ecosystems

There is potentially suitable habitat for rare plants in the area. Wilderness area designation would limit human disturbance and management practices, which may reduce impacts to rare plants and unique ecosystems.

Water Availability and Use

The streams in this RA are not part of a municipal watershed and there are no known water storage needs. No change in water quality is anticipated if the RA becomes a designated wilderness area.

Livestock, Timber and Minerals

Timber harvest and the associated production of wood products have occurred since the early 1900s. Intensive timber harvest has occurred for a 10-year period as part of a specified 40-year rotation cycle. With wilderness area designation, additional timber harvest would not occur. Currently 8,108 acres of the RA are classified as suitable for timber production (capable of growing commercial crops for timber.)

Subsurface mineral rights are owned by private individuals for the entire area. Wilderness area designation would not prohibit the exercise of these rights.

There are no livestock operations or potential for such operations.

Heritage Resources

Extensive heritage resource surveys have been conducted in this RA. Additional survey, research and evaluation for prehistoric and historic Native American sites may be warranted. Preservation activities, such as salvage rehabilitation, stabilization, restoration, excavation and intensive inventories, are approved on a case-by-case basis, if activities will not degrade the overall wilderness character of the area. Development of heritage interpretive trails and panels would be restricted in order to meet and retain wilderness character. Interpretation of sites is done outside of designated wilderness areas, except for verbal interpretations by wilderness rangers.

Land Uses

There is a 95-acre private inholding located on the western edge of the RA. From FR 116, there is a 0.4 mile non-system road that accesses the property. Additional access to the property has been via FR 250. The Forest Service is required to honor the easement and allow motorized access to the tract. This would make this portion of the RA unmanageable as a wilderness. There is a utility corridor ROW that forms the southern boundary of the RA. Development of the power line easement would not likely be problematic since it forms the boundary. There are no other encumbrances other than the ownership of OGM subsurface rights by private individuals. Drilling and/or OGM development might include road construction and removal of vegetation. This would be problematic for wilderness area management. There currently are no outfitter and guide services operating in this RA. Wilderness area designation would allow for selected outfitter and guide services, but only if services will not degrade wilderness character.

Research

As mentioned, there is a long-term oak study area east of FR 420 within the RA. Wilderness area designation would prohibit vegetation manipulation and other silvicultural treatments, such as thinning, cutting or fencing. Past investments and research conclusions that may benefit oak regeneration may be lost following a wilderness area designation.

Invasive Species

While there are no recorded widespread invasive species in the RA, the potential for occurrence is high. Onsite observations have identified localized populations of Japanese barberry near adjacent private lands and a population of Japanese knotweed near the Minister Loop trailhead, just outside the southeast corner of the RA. All options to address non-native invasive plants in wilderness areas are available, including no treatment, hand pulling, herbicides and biological control. Any request to use herbicides in wilderness areas requires the approval of the Regional Forester.

Non Federal Lands

There is a 95-acre private inholding located within the RA and there is private land adjacent to the area along the north, east and southern boundaries. Access is provided along the road system for private lands on the boundary. Continued access to the 95-acre inholding is anticipated.

SUMMARY OF WILDERNESS EVALUATION FOR MINISTER VALLEY

The Minister Valley RA has moderate potential to provide the attributes and values appropriate for wilderness area designation. The significant use of the area for timber, wildlife and recreation management has lowered the RA's potential for providing wilderness values. Over the long term, wilderness values could increase once the signs of management activities, such as road reconstruction and timber harvest, diminish. Noise and visual disturbance along SR 2001 and SR 2002, near the adjacent private lands and along the adjacent snowmobile trail would adversely affect wilderness character within the sight and sound distances of these edges.

The impacts of wilderness area designation could be significant in terms of other benefits of the RA. The maintenance and character of the existing North Country Trail and the Minister Loop Trail systems would change and become more primitive. There would be a loss of active forest management for diverse habitats, forest products and forest health. There would also be a loss of the long-term research potential in a mixed oak stand that has already been established. Recreational use and access would change as periodic motorized opportunities and access would no longer occur. The impacts to heritage resource management activities could also be significant as inventory, excavation and preservation procedures would become much more limited. This RA contains a rich and varied heritage resource that has not been fully discovered. Opportunities to interpret heritage resources onsite would be restricted.

There would be no change in the exercise of private mineral rights if designated a wilderness study area. Areas in the East are recommended to Congress for wilderness study area designation. If this RA is designated a wilderness study area, examination of the mineral rights is conducted as part of the study process and may include consideration of both the potential for development and the acquisition of subsurface mineral rights.

ROADLESS AREA 19004 (ALLEGHENY FRONT)

OVERVIEW

Size

(As calculated using GIS data. Actual ground surveyed acres will likely vary.)

Forest Service:	6,742 acres
Private:	none
Total:	6,742 acres

Location, Vicinity, and Access

The Allegheny Front Roadless Area (RA) is located on the ANF, Bradford Ranger District in Warren County, Pennsylvania. It is currently a part of the congressionally designated Allegheny NRA. Nearby towns include Warren and Youngsville to the north, Tidioute to the south and Clarendon and Sheffield to the east. The area is generally bound by roads on all sides intermixed with private lands. Specifically, U.S. Highway 62, which is located along the Allegheny Wild and Scenic River, forms the boundary on the west while private lands primarily form the boundary on the north, east and south. SR 405, SR 3005, and SR 3020 also form a portion of the boundary on the lower south/southeast side.

There is one primary abandoned road within the RA. This road was used for early OGM development and timber harvest and also for administrative purposes. It has received very little use and has not been reconstructed for over 25 years. Consequently, it has reverted to a mostly natural forest condition. A 3.5 mile segment of the Tanbark Trail also lies within the area, crossing on a general southeast to northwest trend in the lower portion of the area. There are no other trails or roads within the area.

The area is found within the U.S. Geological Survey Cobham and Youngsville Quadrangles, Pennsylvania. U.S. Highway 62 and SR 405, SR 3005 and SR 3020 provide major vehicle access to the area. The area is also accessible by foot along the Tanbark Trail.

History

Like the Tracy Ridge RA, Allegheny Front has previously been considered for wilderness area designation and study. Under the Pennsylvania Wilderness Act of 1984 (H. Res. 5076), Hickory Creek, Allegheny Islands, Tracy Ridge, Cornplanter, and Allegheny Front RARE II areas were considered for wilderness area designation. H. Res. 5076 was referred to the Committee on Interior and Insular Affairs (Congress) and resulted in the Hickory Creek and Allegheny Islands wilderness area designations and in Tracy Ridge, Cornplanter and the Allegheny Front becoming the Allegheny NRA.

Geography, Topography and Vegetation (Including Ecosystem Type)

According to ecological mapping, this area lies in the Allegheny High Plateau Subsection of the Northern Unglaciated Allegheny Plateau Section within the Laurentian Mixed Forest Province. This section is characterized by sharper ridge tops and narrower valleys than the glaciated portions of the plateau to the north and east. This RA is formed by a relatively level plateau which slopes sharply down to the Allegheny River along its western edge. There are a number of steep-sided intermittent, perennial and ephemeral streams in the area that drain primarily into the Allegheny River. The elevation ranges from 1,927 to 1,144 feet. The landscape contains large rock outcroppings with enormous blocks and formations; however, there are no distinct, dominant rock formations or peaks.

Dominant soil orders include Inceptisols (newer formed soils with few diagnostic features) and Ultisols (old soils with low base saturation). Soils found within the RA are classified as Hazleton-Gilpin-Ernest at lower elevations and closer to the Allegheny River and Hazleton-Cookport-Cavode at higher elevations on the plateau (Warren and Forest County Soil Surveys). Both soils formed in material weathered dominantly from acid sandstone and shale. The lower elevation soils are mainly sloping, steep and very steep soils described as moderately deep and deep, well-drained and moderately well drained. The Hazleton-Cookport-Cavode soils on the plateau are mainly sloping and moderately steep soils described as deep, well drained through somewhat poorly drained.

The ecological landtype association for this area is 212Ga3, Mesic, Oak and Northern Hardwoods. The distinguishing feature of this landtype is its oak component. Landforms are mainly plateau slopes, depressions and drainages. Vegetation associations include white and red oak, black cherry, hemlock, beech, quaking aspen, red maple, yellow birch, sugar maple, white pine, and savannas.

A diversity of landform conditions can be found in the Allegheny Front RA including plateau, side slope, and foot slope; however, the majority of the area is side slope (50%) and foot slope (33%). Only 14 percent is considered plateau. The remaining 3 percent is bottom and shoulder slope. The area consists almost entirely of mature forest greater than 50 years of age. There are little or no forest openings greater than 1 acre in size. Forest cover types include aspen conifer/mixed conifer (20%), northern hardwoods (4%), upland hardwoods (7%) and oak (69%). Almost the entire northern half of the area is comprised of mature oak forest. Most of the non-oak forest occurs in the southern half of the area, with northern hardwoods restricted to drainage bottoms and side slopes. The conifer/mixed conifer and upland hardwoods occur in a variety of topographic positions and aspects. There are approximately 17 miles of perennial and intermittent streams located in 5 primary drainages; all of which drain into the Allegheny River.

Management Direction and Current Use

This RA is part of the 23,100 acre Allegheny NRA. The NRA is not one contiguous area as it is divided into three separate land allocations, including Tracy Ridge and Cornplanter along the Allegheny Reservoir and the Allegheny Front. The NRA also includes the Allegheny Reservoir between Tracy Ridge and Cornplanter. The purposes for establishing the NRA include:

1. *Outdoor recreation including, but not limited to, hunting, fishing, hiking, backpacking, camping, nature study, and the use of motorized and non-motorized boats on the Allegheny Reservoir;*
2. *The conservation of fish and wildlife populations and habitat;*
3. *The protection of watersheds and maintenance of free flowing streams and the quality of ground and surface waters in accordance with applicable law;*
4. *The conservation of scenic, cultural, and other natural values of the area;*
5. *Allowing the development of privately owned oil, gas, and mineral resources subject to reasonable conditions prescribed by the Secretary under subsection (c) of this section for the protection of the area; and*
6. *Minimizing, to the extent practicable, environmental disturbances caused by resource development, consistent with the exercise of private property rights.*

In the 1986 Forest Plan, the management area designation for the NRA is MA 6.4. The ANF incorporated standards and guidelines into the 1986 Forest Plan in accordance with the purposes described above and the laws, rules, and regulations applicable to the NFS. The emphasis of this management area is to provide a land condition with vegetation generally progressing through the natural succession process to mature or over mature hardwood forest. The primary purpose is to: preserve and protect the natural scenic, scientific, historic, archaeological, ecological, educational, watershed and wildlife values and to provide enhancement of dispersed semi-primitive motorized and non-motorized recreation. This management area is managed as an NRA, typically without harvest, except to facilitate private mineral resource exploration and development and/or to achieve wildlife and recreation management objectives. Typically, road construction is not allowed except for that needed to satisfy private legal rights. Public traffic within the area is not allowed.

Use of motorized off-highway vehicles is not permitted in the NRA except for administrative vehicles, emergency vehicles and use authorized by permit, contract or outstanding private rights. There are no trails designated for motorized ATV/OHM or snowmobile use. Equestrian use and mountain bike use on designated trails within the RA is prohibited as per Forest Supervisor closure order, however cross-country horse and bike riding is allowed. There are no campgrounds in this RA. Existing trail within the RA includes a 3.5 mile segment of the 8.8 mile Tanbark Trail.

The primary use of this RA is for recreation associated with the Tanbark Trail. Recreational activities in the area include hiking; backpacking; hunting; trapping; nature, wildlife and bird viewing; cross-country skiing; and snowshoeing. Visitor use data for the Allegheny Front has not been collected; therefore it is not known how much use occurs.

The Allegheny Front RA is encumbered by outstanding mineral rights with roughly 95 percent of the subsurface mineral rights owned by private parties. There is widespread development on adjacent private and NFS lands. Development within the central east side of the Allegheny Front portion of the NRA on approximately 50 to 100 acres of NFS lands is occurring.

The Allegheny Front RA was harvested for hardwood timber between the late 1880s and 1940s. There has been no large scale timber harvest since that time. The last commercial timber cutting occurred in 1966 and primarily included thinnings. The 1986 Forest Plan allows for timber to be harvested only to achieve wildlife and recreation management objectives. Uneven-aged management or salvage is a management option used to maintain browse and mast production around existing habitat improvements, to maintain continuous canopy in visually sensitive areas, to enhance scenery in recreation travelways and use areas, to maintain or create permanent openings for wildlife and to provide viewpoints for public enjoyment. While these options exist within the 1986 Forest Plan, no wildlife habitat or scenery improvement work has been conducted in the last 25 years. Vegetation management has been limited due to this area's status as an NRA.

Appearance of the Area and Characteristics of Surrounding Areas

The Allegheny Front RA is primarily characterized by moderate to steep side slopes that lead from the Allegheny River to scattered small plateaus within the interior. The RA is a wooded landscape intermixed with streams and

continuous forest cover. There are large rock outcrops throughout the area, but there are no prominent rock formations or peaks. Views of the Allegheny River and Hickory Creek Wilderness Areas can be seen at higher elevations. However, dense vegetation often inhibits long distance views. Views of extensively developed lands in adjacent areas can also be seen from plateau areas.

Within the RA, there is 3.5 miles of trail which has been maintained to varying standards. The trail is generally subordinate within the surrounding undeveloped landscape. At a minimum, natural ecological processes in the vicinity of the trail have been influenced by trail construction, maintenance and visitor use. Old roads and facilities from early OGM development and timber harvest still exist in some areas; however, these areas have regained a mostly natural appearance. OGM development has negatively influenced the natural appearance of the area along a large portion of the eastern border. Within interior areas, natural ecological processes have occurred and the majority of the RA has an unmodified, apparent naturalness.

The Allegheny River is separated from the RA by U.S. Highway 62 on the west. Hickory Creek Wilderness Area lies one-half mile to the southeast. The area between the wilderness area and the RA is largely undeveloped; however, the majority of the surrounding area is developed with homes along the Allegheny River and adjacent private lands. Adjacent lands also have extensive OGM development and associated road construction and timber harvest. The surrounding landscape is largely a continuum of development and moderate to high human influence.

Key Attractions

The primary attractions within this area are tied to the NRA. The RA is contained within a congressionally designated NRA that is recognized for having showcase recreation opportunities and scenery. There are large boulders and scattered rock outcrops, which also attract interest.

CAPABILITY

Natural Integrity and Appearance

Natural processes are operating within the area, and overall, the area is minimally affected by outside forces except along the border, where natural processes are affected by human influence, primarily OGM development. Trail maintenance has affected natural ecological processes; however, the range of influence is limited. The area has regenerated from past harvest and other land uses, and now the forest appears mature to old aged.

Opportunity for Solitude, Challenge and Primitive Recreation

This RA contains 6,742 acres which is easily accessible by good road and trail access on all sides. It is a long, narrow, linear area almost entirely surrounded by busy roads, private dwellings and OGM activity. Due to its long, linear shape, it is easily influenced by road based noise and activity. On average, the area is a little over five miles long and two miles wide with some areas approximately one mile from roads, private land and OGM development. It is easily traversed in a day, whether traveling east to west or north to south. Due to the configuration, the area is judged to have a low to moderate potential for providing primitive recreation and solitude in interior areas and low potential along the road system and adjacent private lands. This information is consistent with a recent ROS inventory that identified the area as having an interior core of 1,514 acres for Semi-primitive Non-motorized recreation and 5,228 acres on the exterior as having a Roaded Natural setting.

Special Features

Scenic: The RA is a relatively large, unaltered landscape with few modifications within interior areas.

Scientific: There are no designated research natural areas or experimental forests in the Allegheny Front RA. The entire RA is part of a designated NRA.

Geological: There are no known areas of unique or rare rock formations in this RA.

Ecological: This RA was identified as part of the ANF's 1995 Landscape Corridor Concept of continuous forest canopy for connecting the large forested blocks (wilderness, scenic areas, research natural areas, national recreation areas and roadless areas) to provide higher quality habitat and better ecosystem functions for wildlife.

The Allegheny Front RA is a larger representative core area for connectivity between forest patches being managed for late successional habitats. This area has a large component of late successional forest habitat, especially in comparison to the remaining ANF, which reflects the high importance of this RA to achieving habitat conservation goals for a variety of wildlife species, including neotropical birds and less mobile species, such as reptiles, amphibians and small mammals.

Wildlife and Fish: The most significant characteristic of the Allegheny Front area lies in the predominance of mature forest conditions, combined with the overall undisturbed nature. Undisturbed and/or undeveloped areas on the ANF are somewhat rare as the ANF contains extensive private development within the proclamation boundary, with over 4,200 miles of roads (FRs, state, county or township roads, and OGM roads) and widespread OGM development. The Allegheny Front area provides optimum habitat conditions for species that are sensitive to human disturbance, as well as species that require large blocks of mature forest habitat, such as the bald eagle, great blue heron, red-shouldered hawk, black bear, northern goshawk and bobcat. The close proximity of Allegheny Front to the Allegheny River and Hickory Creek provides an important complex of mature, relatively undisturbed forest areas for wildlife.

Other key wildlife habitat features that characterize the Allegheny Front area include the predominance of oak and northern hardwoods (73%) and the hard mast production associated with these forest types. The widespread distribution of oak in particular greatly influences landscape level wildlife use and provides suitable habitat conditions for the cerulean warbler, which is presently being reviewed for listing under the Endangered Species Act and has been documented in the area during breeding bird surveys.

Rare and Endangered Animals: Although the federally endangered Indiana bat (*Myotis solalis*) has not been documented within the Allegheny Front RA, suitable oak habitat is widely available. The bald eagle (*Haliaeetus leucocephalus*), which is federally threatened, utilizes the nearby Allegheny River. Although there are no known nests within the RA, active eagle nests have been observed approximately one-half mile into State Game Lands and 8 miles south on the Allegheny River. Due to the close proximity to the Allegheny River, roughly 19 percent of the area is considered prime bald eagle nesting habitat. The area contains several historic timber rattlesnake dens (Forest Sensitive Species) and the dry oak forest community that predominates is characteristic of preferred rattlesnake habitat. Streams and their biological resources are not unique nor do they have extraordinary fisheries, aquatic invertebrates, or mussel populations. There are no known federally listed threatened or endangered aquatic species.

Rare and Endangered Plants: There have been few or no formal plant surveys within the RA. Currently, there are no known records of state or federally listed rare or endangered plants, Regional Forester Sensitive Plant Species or other plant species of viability concern. However, this RA is considered to contain suitable habitat for species of viability concern.

Heritage Resources: There are no known prehistoric sites recorded for the Allegheny Front area. No historic sites have been documented. The potential existence of prehistoric and historic sites is moderate to high.

Size, Shape and Manageability

The size and shape of the Allegheny Front RA makes its preservation as potential a wilderness area questionable. The multiple-use private lands along most of the area's boundary may present management challenges.

Boundary Conditions, Needs and Management Requirements

The property boundary line is well-defined by SH 62 to the west, but it is not well defined along private lands to the east, north and south. The activities and motorized use along the area on all sides could impact wilderness users. Boundary adjustments to buffer the highway and private lands may be warranted if this RA is designated as a wilderness area. However, the area is already only about a mile wide in some areas, and additional boundary adjustments may be difficult to impossible.

AVAILABILITY

Recreation, Including Tourism

Designation of this RA as a wilderness area would not eliminate its current designation as an NRA. However, more restrictive wilderness management standards and guidelines would supersede the less restrictive management direction currently established for the NRA. The NRA allows for greater recreation use than wilderness area designation and provides greater alteration of the land to manage and maintain trails, scenery, wildlife, and forest health conditions. Future planning for the NRA could result in increased opportunities for development of overnight facilities, such as Adirondack shelters and dispersed campsites, and increased trail development opportunities for snowmobiling, mountain biking and horse use. Designation of Allegheny Front as a wilderness area would eliminate or restrict options for these types of recreation activities and improvements in the NRA.

Wilderness area designation would restrict trail maintenance on the Tanbark Trail to the use of non-motorized equipment and non-mechanical transport of supplies and personnel. Historically, chainsaws and mechanical transport have been used to maintain this trail. With the restriction on use of chainsaws and other mechanized equipment, maintenance of the trail system will be more challenging and time consuming. Trail directional signing and marking would be required to conform to wilderness sign standards. Existing signs and trail markers would need to be replaced or removed in order to meet wilderness standards.

Wilderness area designation may also warrant future public use restrictions by limiting visitor use and distribution, including establishment of group size limits to preserve the wilderness character of the area, whereas, the NRA allows for greater visitor use and group size limits. Currently, there are no restrictions on group size within the NRA.

Wilderness area designation that is advertised and included in a broad tourism planning effort may draw visitors to the Allegheny Front RA, attracting recreationists seeking remote, primitive and unconfined types of recreation and solitude. However, the NRA currently provides many wilderness values, including the opportunity for solitude and serenity, self-reliance, adventure, challenging experiences, and semi-primitive recreation. For many recreationists, primeval wilderness character is less important than protection (Loomis, 1999). The NRA designation was considered an alternative to wilderness area designation, with the intended purpose of protecting the undeveloped character of the area. This designation protects the RA from timber harvest, road construction and most road-based recreation.

Wildlife and Fish

Minimal disturbance to the area has occurred due to Allegheny Front's current designation as an NRA. Wilderness area designation would maintain the remote, undeveloped character of the area, which is considered the area's greatest wildlife asset. Wilderness area designation would further restrict human influence and disturbance, primarily from changes in recreation maintenance activities and in visitor use restrictions. Numbers of users and group size may be more limited with a wilderness area designation than NRA designation. A minimum tool approach would replace the current option of using chain saws and other mechanized equipment for trail maintenance, which may benefit wildlife species due to reduced human disturbance and noise. Wilderness area designation would benefit those species seeking remote, undisturbed habitats, such as black bear, bobcat, northern goshawk, and those that benefit from a mature, continuous forest.

Risks to wildlife habitat include the presence of exotic pests, such as gypsy moth and hemlock wooly adelgid. Suppression of NNIS, where native ecological communities or threatened, endangered or sensitive species are endangered by their presence, is allowed in designated wilderness areas.

Oak is an important wildlife habitat forest type in this RA, covering approximately 77 percent of the area. Widespread and locally severe oak decline and mortality have occurred throughout the east. Consequently, there is concern to maintain oak on the ANF. Oak is fire dependent, and, if it is to be maintained over the long-term, intensive management including periodic under burning and manipulation of the canopy is required to reduce

competition of other hardwoods. Intensive management of oak has not occurred due to legislation which established this area as part of the NRA. Either a wilderness area designation of the Tracy Ridge area or NRA designation eliminates management activities that promote oak regeneration and mast production.

There are 7 miles of perennial stream and 11 miles of intermittent stream, all of which provide suitable habitat for cold-water fisheries communities. All streams are dependent on natural reproduction and none are stocked with trout due to their small size and accessibility. The ability to use motorized equipment to conduct fisheries surveys would be prohibited with wilderness area designation.

Typically, the ANF has not improved fish habitat on cold-water streams, but relies on natural input of large wood for the creation of habitat diversity. This RA occurs in the NRA where this type of work has not occurred. Wilderness area designation would not change the way fish habitat improvements have been managed in this RA.

Rare Plants and Unique Ecosystems

There are no known records of state or federally listed plant species, Regional Forester Sensitive Plant Species, or other plant species of viability concern within the RA, nor are there records of rare or exemplary natural communities. There is potentially suitable habitat for rare plants in the area. The NRA designation already limits human disturbance and management practices, such as timber harvest and road construction. Wilderness area designation would further limit human disturbance and management practices; however, impacts from trail maintenance and trampling may continue regardless of designation, as the Tanbark Trail will remain and may pass through suitable habitat. Given the current management practices established for the NRA, wilderness area designation would likely have a neutral effect on potential rare plants and unique ecosystems.

Water Availability and Use

The streams in this RA are not part of a municipal watershed and there are no known water storage needs. No change in water quality is anticipated if the RA is designated a wilderness area.

Livestock, Timber and Minerals

Timber harvest and the associated production of wood products from this RA do not occur as the NRA designation prohibits this use. Timber harvest and production would not occur with wilderness area designation either. Currently, 6,628 acres of the RA are capable of growing commercial crops for timber (ANF GIS Timber Suitability analysis).

Private individuals own 95 percent of the subsurface mineral rights. During consideration of this RA for wilderness designation in 1984, Congress found that the Allegheny Front area along with Tracy Ridge and Cornplanter possessed a high quality wilderness resource; however, “matters were complicated” in that the bulk of the wilderness candidate lands in question were underlain by privately owned mineral rights. Available information at that time suggested that the rights underlying the area were likely to be exercised and that exploration for oil and gas resources was imminent. Accordingly, the committee believed that wilderness area designation would be “futile” unless the mineral rights problem could be resolved (refer to H. Res. 5067).

Due to the estimated high oil and gas values, outright purchase of mineral rights was judged to be too costly. In particular, acquisition of the mineral values in Tracy Ridge, Cornplanter and Allegheny Front was estimated to cost 10 million to 100 million dollars.

Currently, the mineral rights have not been purchased in Allegheny Front and there are no known willing sellers. Wide scale exploration for oil and gas within the area has not occurred; however, development along the border is encroaching on the area. New technology and current market trends make the potential for OGM development and exploration throughout the area high. Wilderness area designation would not prohibit private OGM development.

There are no livestock operations or potential for such operations.

Heritage Resources

Although no heritage resource surveys have been conducted in this RA, there is a long history of use beginning in the Prehistoric Period (11,000 B.C. to 1600 A.D.) and continuing into the Historical Period (1600 to present). Additional survey, research and evaluation for prehistoric and historic Native American sites may be warranted. Preservation activities, such as salvage, rehabilitation, stabilization, restoration, excavation and intensive inventories, are approved on a case-by-case basis, if activities will not degrade the overall wilderness character of the area.

Land Uses

No special use permits are currently issued for this RA. There are no encumbrances other than the ownership of subsurface mineral rights by private individuals. There currently are no outfitter and guide services operating in this RA. Wilderness area designation would allow for selected outfitter and guide services, but only if services will not degrade wilderness character.

Invasive Species

Both non-native and native plant species pose a serious threat to the ANF. While there are no widespread invasive species in the RA, the potential for occurrence is high. All options to address non-native invasive plants in wilderness areas are available, including no treatment, hand pulling, herbicides and biological control. Any request to use herbicides in wilderness areas requires the approval of the Regional Forester.

Non Federal Lands

There are no private lands located within the RA; however, there is private land adjacent to the area on all sides. Access is provided along the road system and access through the area is not anticipated.

SUMMARY OF WILDERNESS EVALUATION FOR ALLEGHNY FRONT

There is a relatively low to moderate opportunity for solitude and serenity, self-reliance, adventure, challenging experiences, and primitive recreation in the Allegheny Front RA. These opportunities are diminished due to the long, linear shape of the area, which averages 2 miles in width and 5 miles in length. It is easily accessed from exterior road systems, and there is adjacent development and activity that penetrate the area with the sights and sounds of human influence.

This area has a large component of late successional forest habitat, especially in comparison to the remaining ANF, which reflects the high importance of this RA to achieving habitat conservation goals for a variety of wildlife species, including neotropical birds and less mobile species, such as reptiles, amphibians and small mammals.

Due to the current designation of the area as an NRA, there would be no change in terms of timber harvest, road construction or prohibition of ATV/OHM use. Other changes, such as the elimination of motorized equipment for trail maintenance, would occur, and vegetation management activities to achieve wildlife or recreation management objectives would not be allowed. There would be no change in the exercise of private mineral rights if designated a wilderness study area. Areas in the East are recommended to Congress for wilderness study area designation. If this RA is designated a wilderness study area, examination of the mineral rights is conducted as part of the study process and may include consideration of both the potential for development and the acquisition of subsurface mineral rights.

NEED FOR WILDERNESS ON THE ALLEGHENY NATIONAL FOREST

This section discusses the Need for additional wilderness areas as required in FSH 1909.12, Land and Resource Management Handbook, Chapter 7, Section 7.23.

There are a number of factors to consider in assessing the need for additional wilderness areas. Primarily these factors involve an analysis of the supply and demand for wilderness to protect biodiversity and scientific values as well as ecological services and recreation benefits.

Ecosystem Representation

An important consideration in wilderness area supply and demand is ecosystem representation. The purpose of ecosystem representation is to protect viable examples of the natural diversity of the province, representative of the major terrestrial, marine and freshwater ecosystems, characteristic habitats, hydrology and landforms, and the characteristic backcountry recreational and cultural heritage values of each ecoregion. Wilderness is valued for preserving representative natural ecosystems, diversity of landscapes and for research.

The entire ANF lies within 212, the Laurentian Mixed Forest Province. Cordell (1999) calculated the ratio of designated wilderness areas to ecoregion to determine representation of wilderness. This province contains 2.8 percent of the total U.S. designated wilderness areas in the lower 48 states and 4.9 percent of the total land area, yielding a ratio of 0.57. A ratio of at least 1 would be considered adequate representation. This indicates that province 212 is under represented in the NWPS, and thus there is need for more wilderness area designation within this province.

At the forest scale, the ANF lies entirely within 212G, the Northern Unglaciated Allegheny Plateau Section and entirely within 212Ga, the Allegheny High Plateau Subsection. This section and subsection is represented by the Hickory Creek and Allegheny Islands Wilderness Areas and all four roadless areas.

Geographic Representation

Since passage of the National Wilderness Preservation Act of 1964, Congress has more than doubled the initial designation of 12.2 million acres in the coterminous states (Cordell, 1999). In 1995, the Forest Service managed about one-third of the Federal area in the NWPS. Some 18 percent of the total area of the NFS is classified as designated wilderness areas. Other Federal agencies that manage land in the NWPS include the National Park Service, U.S. Fish and Wildlife Service, and the Bureau of Land Management.

Approximately 3.4 percent of Pennsylvania is managed by Federal agencies, which ranks 36th nationwide. The only designated wilderness areas in Pennsylvania are located on the ANF. Approximately two percent of the ANF, the only NFS lands within the Commonwealth of Pennsylvania, are congressionally designated wilderness areas. This represents approximately 0.03 percent of the wilderness system nationwide and 0.58 percent of the wilderness system in the Eastern Region of the Forest Service.

Wilderness area designation is strongly correlated to how much land is managed by Federal agencies. Table C-15 depicts the distribution and amount of wilderness areas in the Eastern Region, which covers 20 states and over 43 percent of the nation’s population. Of those states, Michigan, New Hampshire, Vermont, West Virginia and Minnesota, with higher Federal ownership and wilderness area designation (acres), are among the highest, with Minnesota having the most acres of wilderness in the East. With 3.4 percent of Pennsylvania in Federal ownership, there are 9,031 acres of designated wilderness areas in Pennsylvania, but there is less federally managed land and more wilderness acreage in Illinois, Indiana, Maine and New Jersey. In this correlation, it appears that Pennsylvania is under represented in the NWPS in comparison with other states in the East. Overall, the entire Eastern United States is poorly represented in terms of wilderness area designation in comparison to the West. About half of the total designated wilderness in the United States is in Alaska; about 40 percent is in the contiguous western states; and 10 percent is in the East (Loomis, 1999).

The overall size (square miles) of each state does not necessarily correlate to how much wilderness has been designated. For example, West Virginia, which ranks 41st in size, Vermont (45th) and New Hampshire (46th) each have more acres of designated wilderness than some larger states, including Pennsylvania (33rd) and Illinois (25th). Again, in this case, West Virginia, Vermont and New Hampshire also have more federally managed lands than do Pennsylvania.

Table C-15. Distribution and Amount of Wilderness in the East

State	Designated Wilderness Areas (acres)	Percent Federal Land	Percent of Wilderness in Eastern Region
Connecticut	0	0.6	0
Delaware	0	2.5	0
Iowa	0	2.1	0
Illinois	32,782	3.0	2.1
Indiana	12,945	3.2	0.8
Maine	19,392	1.7	1.2
Maryland	0	1.2	0
Massachusetts	3,244	2.1	0.2
Michigan	249,218	15.8	16.1
Minnesota	815,952	12.9	52.6
Missouri	71,113	8.9	4.6
New Hampshire	102,932	15.1	6.6
New Jersey	10,341	2.7	0.7
New York	1,363	0.4	0.1
Ohio	77	2.6	.005
Pennsylvania	9,031	3.4	0.6
Rhode Island	0	0.6	0
Vermont	59,421	14.2	3.8
Wisconsin	75,823	7.3	4.9
West Virginia	89,166	13.6	5.7
Total	**1,552,800**		**100%**
Source: wilderness.net. Acres include all lands managed by federal agencies that manage wilderness. Total acres of wilderness nationwide (106,509,199 acres)			

Accessibility

FSH 1909.12, Chapter 7, Section 7.23(b) suggests that accessibility of areas to population centers and user groups may indicate a need for wilderness areas where opportunity for wilderness enjoyment is limited. There may be a need to have a wilderness area within a day's drive (250 miles) of population centers as stated in FSH 1909.12, 7.23b(1).

Currently, there are 18 municipalities (out of 601 nationwide) with populations over 50,000 that are within approximately 250 miles of the ANF boundary (see Table C-16). The municipalities are located in Pennsylvania, Ohio, and New York and represent over 2.5 million people. All of these are within 250 miles of one or more of the following wilderness areas: Hickory Creek and Allegheny Islands (9,031 acres), Lye Brook (15,503 acres), George D. Aiken (5,060 acres), Big Branch (6,720 acres), Peru Peak (6,920 acres) Otter Creek (20,000 acres), Dolly Sods (10,215 acres), West Sister Island (77 acres), Great Swamp (3,660 acres), Brigantine (6,681 acres) and Otis Pike Fire Island High Dune (1,363 acres). These wilderness areas are located in Pennsylvania, Vermont, West Virginia, Ohio, New Jersey and New York. The total acreage available for wilderness enjoyment within 250 miles, by approximately 2.5 million people, is 85,230 acres. This represents approximately 0.03 acres per person.

Of these 18 municipalities, 5 are within 250 miles of ANF wilderness areas as well as several other wilderness areas located in Vermont, West Virginia, Ohio, New Jersey and New York. The population of the remaining 13 municipalities, representing over 1.6 million people, would have to travel greater than 250 miles to reach a wilderness area outside of the ANF. Of these 13 municipalities, 11 could reach additional wilderness areas by traveling between 250 to 300 miles, still within a day's drive. Only 2 municipalities, Buffalo and Niagara Falls, representing roughly 348,000 people, would have to travel distances greater than 300 miles. Currently, these

348,000 people have an opportunity to visit either the Hickory Creek or Allegheny Islands Wilderness Areas by traveling 250 miles or less, indicating that accessibility to wilderness is provided to these population centers and user groups. In this regard, wilderness areas are provided and there may not be a need to provide additional wilderness areas. However, it is uncertain if the current amount of designated wilderness areas on the ANF is sufficient enough to serve this population base, i.e., 9,031 acres for the areas within 250 miles that have 348,000 to 1.6 million people. There may be a need for additional wilderness areas as the population continues to grow. Small areas, such as Hickory Creek and the Allegheny Islands Wilderness Areas may not be able to serve an expanding user base without overcrowding and degradation to resources.

New York, Pennsylvania, and Ohio are among the top seven most populated states. California had the nation's largest population in both 1990 and 2000. Following California, Texas, in 2000, became the nation's second most populated state with 20.9 million residents, followed by New York with 18.9 million and Florida with 15.9 million. After those four states, Illinois with 12.4 million, Pennsylvania with 12.2 million and Ohio with 11.3 million were the only additional states with a 2000 population in excess of 10 million. These 7 states had a combined population of 125.7 million in 2000, 44.7 percent of the nation's total population. Given the close proximity of New York, Pennsylvania, and Ohio to the ANF, visitation pressure on the ANF's wilderness areas, as well as the neighboring wilderness areas in Vermont, New Jersey, and West Virginia is likely. There may be a need for additional wilderness area designation as these heavily populated states continue to expand. With population expansion, natural areas are converted to urban, developed landscapes. Over half (or 53 percent) of all the land area in America's lower 48 states lies in either metropolitan or micropolitan areas, meaning that rural areas now for the first time make up the minority share of the Continental U.S. (Micropolitan America: A Brand New Geography, Robert E. Lang and Dawn Dhavale, *Metropolitan Institute at Virginia Tech, 2004).* Wilderness areas may be needed to ensure protection of natural environments for future generations.

Table C-16. Population Centers within 250 Miles of a Wilderness Area

*Municipality	Size (Population)	Nearest Wilderness Areas	State	Size of Wilderness (acres)	**Distance (miles)
Cleveland, OH	478,403	Hickory Creek, Allegheny Islands	PA	9,031	170
		Otter Creek, Dolly Sods	WV	30,215	270
		West Sister Island	OH	77	100
Pittsburgh, PA	334,563	Hickory Creek, Allegheny Islands	PA	9,031	126
		Otter Creek, Dolly Sods	WV	30,215	140
		West Sister Island	OH	77	233
Buffalo, NY	292,648	Hickory Creek, Allegheny Islands	PA	9,031	117
		Otter Creek, Dolly Sods	WV	30,215	356
		West Sister Island	OH	77	308
Rochester, NY	219,773	Hickory Creek, Allegheny Islands	PA	9,031	182
		Peru Peak, Lye Brook, George D. Aiken, Big Branch	VT	34,203	294
Akron, OH	217,074	Hickory Creek, Allegheny Islands	PA	9,031	144
		Otter Creek, Dolly Sods	WV	30,215	248
		West Sister Island	OH	77	139
Syracuse, NY	147,306	Hickory Creek, Allegheny Islands	PA	9,031	250
		Peru Peak, Lye Brook, George D. Aiken, Big Branch	VT	34,203	215
		Great Swamp	NJ	3,660	226
Erie, PA	103,717	Hickory Creek, Allegheny Islands	PA	9,031	67
		Otter Creek, Dolly Sods	WV	30,215	264
		West Sister Island	OH	77	217
Parma, OH	85,655	Hickory Creek, Allegheny Islands	PA	9,031	164
		Otter Creek, Dolly Sods	WV	30,215	266
		West Sister Island	OH	77	111
Youngstown, OH	82,026	Hickory Creek, Allegheny Islands	PA	9,031	100

Table C-16. Population Centers within 250 Miles of a Wilderness Area

*Municipality	Size (Population)	Nearest Wilderness Areas	State	Size of Wilderness (acres)	**Distance (miles)
		Otter Creek, Dolly Sods	WV	30,215	203
		West Sister Island	OH	77	173
Canton, OH	80,806	Hickory Creek, Allegheny Islands	PA	9,031	162
		Otter Creek, Dolly Sods	WV	30,215	255
		West Sister Island	OH	77	160
Scranton, PA	76,415	Hickory Creek, Allegheny Islands	PA	9,031	250
		Peru Peak, Lye Brook, George D. Aiken, Big Branch	VT	34,203	240
		Great Swamp, Brigantine	NJ	10,341	100/207
		Fire Island	NY	1,363	178
Lorain, OH	68,652	Hickory Creek, Allegheny Islands	PA	9,031	187
		Otter Creek, Dolly Sods	WV	30,215	288
		West Sister Island	OH	77	90
Lakewood, OH	56,646	Hickory Creek, Allegheny Islands	PA	9,031	173
		Otter Creek, Dolly Sods	WV	30,215	275
		West Sister Island	OH	77	109
Lancaster, PA	56,348	Hickory Creek, Allegheny Islands	PA	9,031	250
		Lye Brook, George D. Aiken	VT	20,563	320
		Great Swamp, Brigantine	NJ	10,341	132/172
		Fire Island	NY	1,363	218
Elyria, OH	55,953	Hickory Creek, Allegheny Islands	PA	9,031	181
		Otter Creek, Dolly Sods	WV	30,215	283
		West Sister Island	OH	77	91
Niagara Falls, NY	55,593	Hickory Creek, Allegheny Islands	PA	9,031	140
		Lye Brook, George D. Aiken	VT	20,563	335
Euclid, OH	52,717	Hickory Creek, Allegheny Islands	PA	9,031	147
		Otter Creek, Dolly Sods	WV	30,215	273
		West Sister Island	OH	77	127
Mentor, OH	50,278	Hickory Creek, Allegheny Islands	PA	9,031	135
		Otter Creek, Dolly Sods	WV	30,215	275
		West Sister Island	OH	77	140
	2,514,573				

*Municipality data taken from the 2000 Census: US Municipalities over 50,000: Ranked by 2000 population.
**Distances are approximate calculated driving distances from municipality centers to nearest wilderness access location. For PA wildernesses nearest access locations used were Tidioute, PA for Hickory Creek and Allegheny Islands Wildernesses and Minister Valley roadless area and Bradford, PA for Tracy Ridge and Chestnut Ridge roadless areas. For Vermont wilderness areas, Bennington and Arlington was used for Lye Brook and George D. Aiken, Manchester for Big Branch and Peru Peak and Bristol for Bristol Cliffs and Breadloaf. For West Virginia, Hendricks was used for Otter Creek and Dolly Sods. For Ohio, Toledo was used for West Sister Island. For New York, Fire Island was used for Otis Pike Fire Island High Dune and for New Jersey, Morristown was used for Great Swamp and Beach Haven was used for Brigantine.

Regional Wild and Natural Areas

In Pennsylvania, there are 9,031 acres of federally designated wilderness areas out of approximately 29 million acres. In the north central portion of Pennsylvania, an effort to assess and increase recreation and tourism opportunities is underway and has been branded Pennsylvania Wilds. This area is recognized as a unique market area of the state and includes the ANF. The plan for Pennsylvania Wilds is to conserve and maintain the tremendous resources of the area, make them more accessible to residents and visitors alike, and improve the economic base of the local communities. This area covers roughly 6.5 million acres and includes 8 wild areas and

24 natural areas covering 150,000 acres. These areas are set aside to protect unique natural features for future generations. While these areas are not managed in the same manner as wilderness areas, they do provide values and experiences similar to those of wilderness areas, which include protecting water quality, wildlife habitat, air quality, and scenic beauty and preserving ecosystems. Knowing these areas exist provides spiritual inspiration, recreation opportunities and potential income for the tourism industry, in addition to future options to visit (wilderness values defined by Cordell in How the Public Views Wilderness, International Journal of Wilderness, Volume 4, Number 3).

National Visitor Use Monitoring Project (Wilderness Areas)

Outdoor recreation is another one of the benefactors of wilderness areas and is one of the major drivers of wilderness area demand and management. Visitor pressure or demand for wilderness areas could indicate a need to provide additional wilderness areas on the ANF.

The best estimates of wilderness area visitor use have been collected in accordance with the National Visitor Use Monitoring project (NVUM). The NVUM project was implemented in response to the need to better understand the use, importance and satisfaction associated with NFS recreation opportunities. This level of understanding is required by national forest plans, Executive Order 12862 (Setting Customer Service Standards), and implementation of the National Recreation Agenda. To improve public service, the agency's Strategic and Annual Performance Plans require measuring trends in user satisfaction and use levels.

From October 2000 through September 2001, the ANF conducted in its first NVUM survey. The results of this survey were provided in a report to the U.S. Forest Service, Region 9 in 2002. According to this report, there were 1,411,875 visits to the ANF and of this, 36,815 visits, or 2.6 percent, were to wilderness areas. The average length of stay in wilderness areas on the forest was 15.5 hours. In addition, all visitors were asked how many different days they entered into designated wilderness areas during their national forest visit, even if they were interviewed at a developed recreation site or general forest area. Of those visitors who did enter a designated wilderness area, they entered on 3.4 different days.

Twenty-five percent of the exiting recreation visitors interviewed were asked about the types of constructed facilities and special designated areas they used during their visit. The most used facilities and areas were Forest Service roads, non-motorized trails, scenic byways, developed fishing sites, and designated wilderness areas. Table C-17 shows the use of designated wilderness areas on the ANF compared to use of other facilities and areas.

Table C-17. Percentage Use of ANF Facilities and Specially Designated Areas

Facility/Area Type	National Forest Visits (percentage)
Developed campground	3.5
Swimming area	2.8
Hiking, biking, or horseback trails	20.6
Scenic byway	17.2
Designated Wilderness Area	**6.3**
Visitor center, museum	1.5
Forest Service office or other information site	0.3
Picnic area	3.2
Boat launch	3.8
Designated ATV/OHM area	0.5
Other FRs	54.2
Interpretive site	0.8
Organization camp	0.0
Developed fishing site/dock	7.9
Designated snowmobile area	0.0
Downhill ski area	0.00
Nordic ski area	0.0
Lodges/Resorts on NFS land	0.0
Fire Lookouts/Cabins, Forest Service owned	0.0
Designated snow play area	0.0
Motorized developed trails	2.9
Recreation residences	0.0

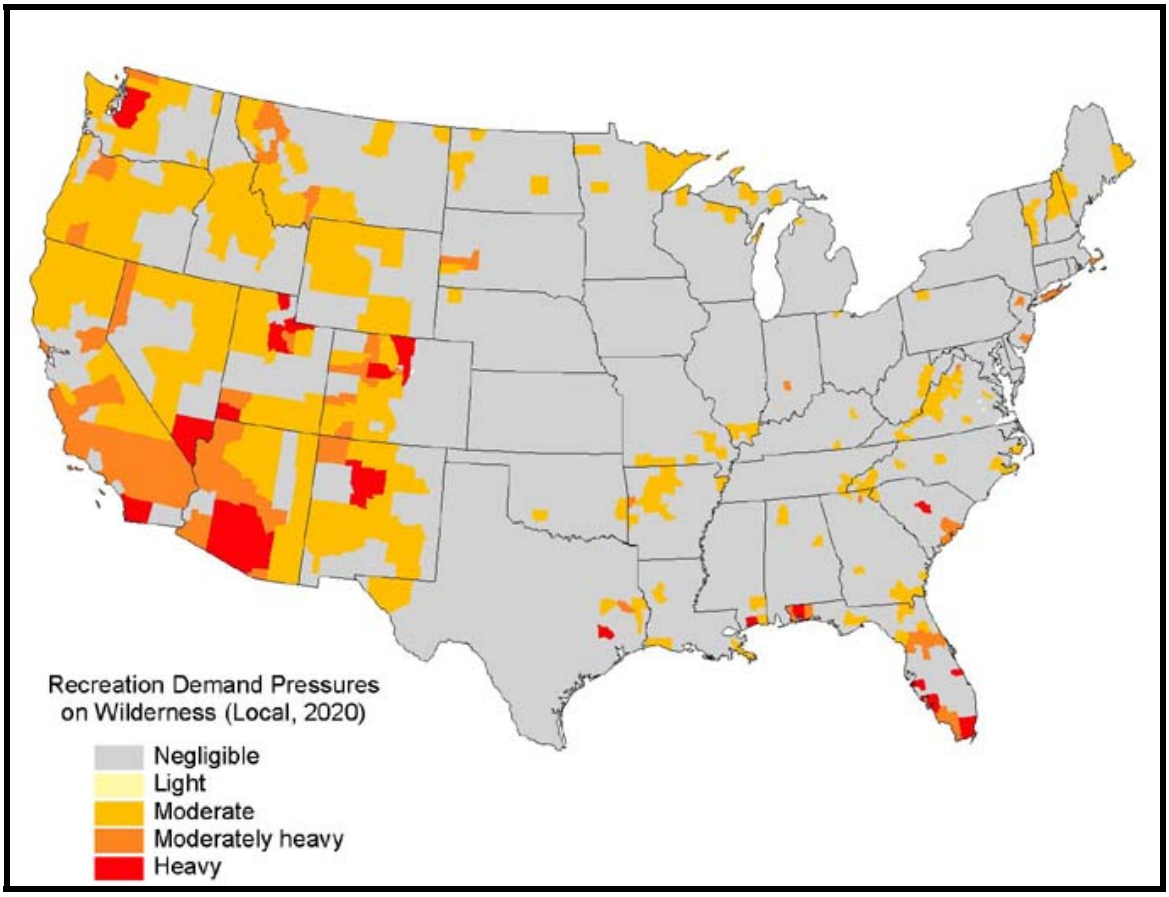
Visitor use of wilderness areas on national forests in the East is forecasted to grow 0.5 percent per year for the next 50 years (Cordell 1999). Given 0.5 percent projected growth per year, wilderness visits for the ANF were projected to year 2030 based on the visits recorded by NVUM (see Table C-18).

Table C-18. Projected Wilderness Visits for the ANF

Actual Use (Visits)	Projected Use (0.5% growth per year) (Visits)		
2002	2010	2020	2030
36,815	38,314	40,266	42,321

There are 9,031 acres of existing wilderness areas on the ANF. Based on current use projected to the year 2030, visits will increase from 36,815 to 42,321. According to wilderness recreation demand pressures developed from the Recreation, Wilderness, Urban Forest and Demographic Trends Research group, Ken Cordell, Project Leader, visitor demand on the current wilderness areas on the ANF is projected to be moderate for the next 10 to 15 years.

Map 1. Recreation Demand Pressures on Wilderness



http://www.srs.fs.usda.gov/trends/wdrec.html

Passive Use Values

Many people who do not regularly visit primitive, roadless or designated wilderness areas still value protection of such areas to maintain the opportunity for visits in the future (option value). People also gain benefits simply from knowing that natural areas exist (existence values) and that their protection today sustains them for future generations (bequest value). The option, existence, and bequest values, when combined, are known as passive use values (Loomis, 2000).

Several studies have shown the importance and value people place on these passive use benefits of wilderness areas (Cordell, 1999). These values or needs are reflected in the National Survey on Recreation and the Environment (NSRE, 2001), finding that 69.8 percent of those surveyed agreed or strongly agreed supported "…designating more federal lands in your state as wilderness." Over 96 percent agreed or strongly agreed with the statement, "I enjoy knowing that future generations will be able to visit and experience wilderness areas."

Public Involvement

There have been numerous comments and responses in regard to wilderness area designation on the ANF as a result of scoping for revision of the Forest Plan. Comments have both strongly supported and opposed additional wilderness area designation on the ANF. In two separate citizen's proposals out of six received, additional wilderness area designation has been strongly supported. These proposals include the *Allegheny Wild! A Citizen's Vision for the Allegheny National Forest* submitted by the Allegheny Defense Project (ADP) and *A Citizen's Wilderness Proposal For Pennsylvania's Allegheny National Forest* submitted by Friends of Allegheny

Wilderness (FAW), 2003. ADP's proposal recommends the "adoption of 45,000 acres of new Wilderness to bring the Allegheny closer to wilderness compositions on other national forests." In this proposal, ADP recommends two of the roadless areas being evaluated, Minister Valley (also known as Minister Creek) roadless area and Chestnut Ridge (also known as Sugar Run) roadless area. They also recommend Clarion River, Tionesta, Chappell Fork (also known as Morrison) and an addition to Hickory Creek Wilderness.

In FAW's proposal, they identify and recommend a total of 54,460 acres in eight different tracts within the proclamation boundary of the ANF for inclusion in the NWPS. The four areas being evaluated, Tracy Ridge, Chestnut Ridge, Minister Valley and Allegheny Front are included in FAW's proposal. However, Minister Valley is recommended as an NRA instead of a wilderness area. If all four areas become recommended wilderness study areas (the maximum of all alternatives) and are designated by Congress, the ANF would add an additional 29,983 acres of wilderness areas.

In a citizen's proposal received from Allegheny Alive titled *"Multiple-Use and Sustained Yield" The Correct Approach for Allegheny National Forest Planning, 2006*, they do not support additional wilderness areas within the ANF and state that wilderness is "unwarranted" and provide seven reasons for not designating additional wilderness areas on the ANF. In two ANF alternatives analyzed and considered, no additional wilderness areas are proposed.

In a citizen's proposal received from the Allegheny Hardwood Utilization Group (AHUG), they recommend that wilderness consideration should only focus on areas unsuitable for timber production. Focusing only on areas that are unsuitable for timber production does not meet the inventory and evaluation criteria established in FSH 1909.12.

Summary of Wilderness Need

Wilderness is an important component of the ANF, for the Region and for the nation as a whole. As indicated by the NVUM survey, visiting a wilderness area is in the top 5 most used facilities/areas on the ANF. According to results from the NSRE, *How the Public Views Wilderness*, the topic of "protecting wildlands" revealed that 44.4 percent of the public report they are aware of the NWPS and of that, almost 56 percent feel we don't yet have enough protected wilderness areas, while an additional 29 percent feel the amount protected is about right. Only 2.5 percent felt we had designated too much wilderness for protection.

The role of a need assessment or supply/demand analysis is to attempt to answer the question, how much do we need? Federal agencies are required to manage their congressionally designated wilderness areas as a part of the NWPS. As such, agency decisions are influenced, in part, by how their recommendations of roadless areas contribute to the overall diversity of the system.

There are 44 states with congressionally designated wilderness areas on federal lands. Of these 44 states, Pennsylvania ranks 41st in terms of total wilderness acreage. There are 9,031 acres of wilderness in Pennsylvania located entirely on the ANF. Approximately 1.8 percent of the NFS lands within the ANF are congressionally designated wilderness areas. No other Federal lands in Pennsylvania contribute to the NWPS. If the additional 29,888 acres of wilderness study areas (the maximum amount in Alternative D) were designated by Congress, Pennsylvania would rank 32nd in the nation in terms of acreage. This assumes that no other areas are added to the NWPS. Also, approximately 6 percent of the NFS lands within the ANF would be congressionally designated wilderness areas. By comparison, the White Mountain National Forest in New Hampshire and the Green Mountain National Forest in Vermont have 14 percent and 15 percent of NFS lands designated as wilderness areas, respectively.

Process for Determining Wilderness Recommendations

The EIS will evaluate an array of alternatives that will include varying amounts of potential wilderness areas (wilderness study areas). Responses received during the public comment period for the Draft EIS have been used to develop the Final EIS and Record of Decision (ROD). The ROD will include recommendations to congress

about which areas, if any, would be appropriate for further consideration as a wilderness study area. Congress will then consider whether or not to introduce legislation proposing additional wilderness study area designation. (Such legislation is actually independent of the Forest Plan Revision process and can occur at any time.)