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**STONEWALL JACKSON LAKE  
FEASIBILITY STUDY**

**Draft June 1988**

**U.S. Department of the Interior/ National Park Service**

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## SUMMARY

This study of the Stonewall Jackson Lake area in West Virginia has been prepared by the National Park Service in response to directions from Congress in the conference report on the fiscal year 1987 appropriations act. The study was conducted to determine the feasibility of adding Stonewall Jackson Lake to the National Park System. This report includes a survey of the resources in the study area and a discussion of alternatives for management.

The study recognizes the substantial planning and development efforts which had preceded it on this site by the United States Army Corps of Engineers (COE), the West Virginia Department of Natural Resources (DNR), Division of Wildlife Resources (DWR) and the West Virginia Department of Commerce (DOC), Division of Parks and Recreation (DPR).

Throughout the project the National Park Service has striven for open communication with the public and with agencies and organizations having an interest in the area. The principle means of contact with local interests was through the Stonewall Jackson Lake Citizens Committee.

To be eligible for addition to the National Park System, an area must meet certain established criteria:

1. The area must contain nationally significant natural, cultural or recreational resources. For an area to be nationally significant it must be an outstanding example of a particular type of resource, possess exceptional value or quality in interpreting the nation's natural and cultural heritage, offer opportunities for public use or scientific study superior to other similar resources, and retain integrity as a true, accurate and essentially unspoiled example of the resource.

2. The area also must be suitable for public use and feasible to administer for national park purposes. To be suitable, an area must represent themes that are not already adequately represented in the National Park System. Feasibility requires that the area be a size and configuration sufficient to assure adequate protection of the resource and efficient administration.

3. Management alternatives also are considered in evaluating potential new units of the National Park System. Areas that are significant, suitable and

feasible, are not recommended for addition to the National Park System if they can be adequately protected and managed by other Federal, State or local agencies or the private sector.

In accomplishing the resource survey, the study team inventoried the area's resources, evaluated the area based on the NPS criteria for resource significance and recreation potential as outlined in the 1978 "Management Policies," and analyzed the relationship of the area to the natural and cultural themes of the National Park System. The recreational resources of Stonewall Jackson Lake have the greatest importance among the resources being evaluated in this report. Planned construction and operation of public facilities will allow for visitor enjoyment of the area in both intensively developed areas and at low density back-country sites.

To meet the NPS criteria for National Recreation Area, the site must contain outstanding natural and cultural features, it must achieve comparatively heavy recreational use, it must contribute significantly to the recreation needs of urban population, it must provide significant recreational opportunities to assure a national and regional visitation, and the scale of investment, development and operational responsibility must be sufficiently high to assure optimum public benefit.

When fully developed, according to the plans formulated by the Corps of Engineers, the project area will offer a wide range of recreation opportunities that will make an important contribution to the State of West Virginia, and may serve visitors from neighboring areas. However, the natural and cultural resources of the project area are not substantially different from many other state and local parks, wildlife management areas, and other units available for public use in central West Virginia. This study found that the cultural and natural resources of Stonewall Jackson Lake are primarily of local and regional rather than national significance.

The Stonewall Jackson Lake area is located within the Appalachian Plateau physiographic province. Natural resources of this area are currently represented in the National Park System by the New River Gorge National River, Delaware Water Gap National Recreation Area, and Cuyahoga Valley National Recreation Area.

Because the resources of the Stonewall Jackson Lake site are not nationally significant and because the criteria for addition to the National Park System are not met, it is not appropriate for addition to the System. The report describes two management alternatives (1 and 2) that the National Park Service considers appropriate. The report also discusses two alternatives (3 and 4) that respond to local requests and proposals but are not consistent with NPS criteria and guidelines. During our work

with the Citizens Committee the following four distinct management alternatives were discussed:

**MANAGEMENT ALTERNATIVE 1**

To provide a wide variety of recreation programs and facilities that will assure the best possible, sustained public use of resources through existing ownership and State management.

**MANAGEMENT ALTERNATIVE 2:**

To promote a broader regional tourism strategy for the Stonewall Jackson Lake area through additional Federal technical assistance and accelerated funding for development.

**MANAGEMENT ALTERNATIVE 3:**

To provide State and Federal recreation programs and facilities through a cooperative management structure among State and Federal agencies.

**MANAGEMENT ALTERNATIVE 4:**

To provide State and Federal recreation programs and facilities with a maximum level of Federal management.

Alternatives 3 and 4 are similar to proposals by the Stonewall Jackson Lake Citizens Committee and Senate Bill 1753 of September 25, 1987.

Another important option, which can be applied to certain alternatives, is a coordination committee. Such a committee could be established to include participation from all the government agencies which have worked on the site, plus representatives of local governments and citizens. If this group were established more formally it might assume, as its role, the oversight of all planning and development within the area, as well as linkages to other related resources, activities and events throughout the North Central West Virginia region. The formal commission or authority is discussed only for Alternative Two.

This report will be forwarded to Congress for review and a decision on what further action may be appropriate.

## INTRODUCTION

In June 1987 the Congress of the United States directed the National Park Service "to report to the Committees on Appropriations on the feasibility of establishing a unit of the National Park System at Stonewall Jackson Lake or elsewhere in West Virginia."<sup>(1)</sup>

The National Park Service conducted a study of the Stonewall Jackson Lake area between August 1987 and February 1988. The purpose of this study was to determine whether Stonewall Jackson Lake is eligible and appropriate to be added to the National Park System and to prepare a set of alternatives for managing the area.

The project was divided into two parts: 1) a reconnaissance survey, including an assessment of natural, scenic, cultural and recreational resources, a discussion of potential interpretive themes and a determination of national significance; and 2) an examination of the management alternatives. The latter includes a consideration of the government agencies already involved in the ongoing planning and development of the area, and an analysis

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<sup>1</sup> Statement of Conferees, in House Report 100-195, p.56, to accompany H.R. 1827, Making Supplemental Appropriations for Fiscal 1987.

of the management functions necessary for agency performance within each separate alternative.

National significance is determined by a professional evaluation of the area considering criteria outlined in National Park Service management policies. The criteria for evaluation are presented in the "Resource Description and Analysis" section of this report. The procedure for determining national significance requires that the study team and the regional office make an initial professional determination based on criteria established by the National Park Service management policies. This determination is forwarded for review and concurrence by the Washington Office.

## PROJECT INFLUENCES

This feasibility study to determine if the Stonewall Jackson Lake site is eligible and appropriate to become part the National Park System combines a reconnaissance survey with the management alternatives report. This was done to expedite the project completion because no funds were made available to NPS for this study.

The citizens committee expressed its desire for National Park Service involvement at Stonewall Jackson Lake in five ways:

- 1) the site could be West Virginia's "gift to the nation";
- 2) the recreational resources and facilities at the site should be made available to a national audience;
- 3) the National Park Service could provide high quality service and recreational expertise.
- 4) the local economy would be enhanced by a nationwide tourism promotion; and
- 5) that additional Federal involvement would ensure project completion, faced with the uncertainty of the State's financial situation.

The Army Corps of Engineers' recreational development schedule requires cost-sharing with the State of West Virginia. Future Corps construction at the State recreation sites will require additional cost-sharing agreements with the State. It is

possible that financial needs could be met through existing State programs if these programs were funded.

It was important from the outset for the National Park Service to recognize previous planning and development efforts on this site. The work of the United States Army Corps of Engineers, the West Virginia Department of Natural Resources, Division of Wildlife Resources and the West Virginia Department of Commerce, Division of Parks and Recreation formed the basis for much of the analysis and the development of management alternatives described in the study.

## BACKGROUND

Stonewall Jackson Lake is situated on the West Fork River in the Monongahela River watershed, three miles upstream from Weston, Lewis County, West Virginia. The lake is located in the rural, north central part of West Virginia, an area that has retained much of its natural character and contains remnants of past human activities. Sites of the birthplace and boyhood home of Thomas Jonathan "Stonewall" Jackson, a renown military tactician and General in the Confederate Army, are nearby.

For this part of West Virginia, the 1900's have been a period of construction of and improvements to many waterways. The recent construction of interstate highways has improved access into and out of the region. Access from Virginia will be improved following the completion of the proposed Appalachian Corridor H. Corridor H is an Appalachian Development Highway which is now mostly completed. It follows old U.S. Route 33 and West Virginia Route 55 and will eventually connect Interstate 79 in West Virginia with Interstate 81 in Winchester, Virginia.

Authorized by the Flood Control Act as approved on November 7, 1966 (Public Law 89-789, 89th Congress, 2nd Session), the Stonewall Jackson Dam of the West Fork River was recommended by the Chief Engineer of the Army Corps of Engineers in Senate Document 109, 89th Congress, 2nd Session. The Corps has

jurisdiction over the entire project site, an area of approximately 20,050 acres.

The purposes of the project, as stated in the authorizing legislation, are flood protection, water quality control, water supply and recreation. According to the December 1987 Army Corps cost-benefit analysis the order of priorities in the project were: water quality (50%), flood damage (28%), recreation (11%), employment (9%), water supply (1%) and fish/wildlife (1%). The construction of the dam by the Army Corps of Engineers is in accordance with their dam guidelines, following dam regulations and specification manuals. Structure and public safety have been fully considered in planning and construction phases.

The dam was completed in 1986 and since that time the land behind the dam has been cleared. The gates closed in 1988. A year later the lake will be full. The lake itself will cover 2,650 acres, at mean elevation summer pool, making it the second largest lake in West Virginia. Just slightly larger is Summersville Lake at 2700 acres.

The policy of the Corps of Engineers is to support public access at water projects based on the site's recreation potential, with site development scaled to provide those improvements clearly required to meet public use needs. The development and management of large multipurpose recreation areas, such as the

Roanoke Bay area of the Stonewall Jackson Lake site, is preferred by the Corps as opposed to single-purpose boat launching facilities. Potential recreation opportunities at Stonewall Jackson Lake include both active and passive activities. Planned on-site activities include: camping, picnicking, lodging, hunting and fishing, hiking, horseback riding, swimming, boating and cross-country skiing. Other local features in the region, which can be additional attractions for visitors to the site, include: Jackson's Mill and the archeological remains of the Jackson home, the Hacker's Creek area, the Pringle Tree, the architecturally significant State Hospital building, Fort Pickens, Bull Town, Indian Camp Rock, Raccoon Rock, Water Smith State Park, Stonecoal Lake, Lake Riley and many covered bridges. Local events and activities include many Civil War enactments, the State Strawberry Festival, Appalachian arts and crafts and music festivals and other local events.

The Federal Water Project Recreation Act of 1965 requires that the development of recreation potential of a project be subject to a cost-sharing contract with a non-Federal public entity. The Corps entered into a fifty year cost-sharing contract with the West Virginia Department of Natural Resources as detailed in the Corps' Stonewall Jackson Lake Master Plan, July, 1982. The original contract was amended to reflect the change of administration of the Division of Parks and Recreation to the Department of Commerce and to incorporate additional recreation

facilities recently recommended by the Division of Parks and Recreation.

According to the Master Plan, upon completion of facility construction, the Division of Parks would assume responsibility for management, operation and cost-sharing. The governor's office has indicated commitment to fulfill the contract established in the Master Plan. Recent State passage of a privatization bill will allow for increased private sector development of a lodge and cabins to provide additional State revenues.

A group of local citizens became interested in NPS involvement at Stonewall Jackson Lake site to ensure high quality services and facilities to a national audience, to bolster the local economy with nationwide tourism and to obtain financing to complete the project. In July 1987, this group, the Stonewall Jackson Lake Citizens' Committee invited representatives from the National Park Service to tour the project site and presented a proposal which called for the consideration of adding Stonewall Jackson Lake to the National Park System as a national recreation area, national park, or national historical park.

## PUBLIC CONCERNS

As part of any discussion of resources and alternatives for their management and future use, it is important to consider the issues of concern to the local community as well as those which relate to national needs and to the mission of the National Park Service. At a public meeting near Weston, West Virginia on August 28, 1987 the following concerns were raised and discussed by those in attendance:

### 1. Recreational needs:

- o Need for hunting and fishing;
- o Lack of facilities and places for visitors to stay;
- o Possible negative impacts of increased recreation and tourism in West Virginia and the eastern U.S.;
- o Lack of easy access to Stonewall Jackson Lake.

### 2. Need to preserve natural features and wildlife:

- o Need to establish a preservation area;
- o Need to recognize unique topography;
- o Need to protect unique, pristine forest stands;
- o Need to recognize and protect the new waterfowl which the lake will attract.

### 3. Need to recognize and promote the area's civil war and cultural heritage:

- o Need more emphasis on local history in school programs;

- o Lack of recognition of national importance of the frontier period in West Virginia - longest in U.S. history;
  - o Need to tell West Virginia story and local history;
  - o Opportunity to display Appalachian culture, arts and crafts, demonstration farms, logging operations, oil and gas drilling and coal mining.
4. Need to develop and maintain a positive, cooperative working relationship among government agencies and with the private sector:
- o National Park Service, State of West Virginia and the Army Corps of Engineers need to work together cooperatively;
  - o Need to generate and maintain a positive economic impact locally;
  - o Need to encourage diversity in private investment and development;
  - o Opportunity of private land available nearby for development of compatible activities;
  - o Need to consider security in the area.

The Citizens Committee also established a goal and a set of objectives for its involvement in the project. They are:

Goal: To establish a National Recreation Area to provide convenient and accessible year-round recreational opportunities for the eastern United States.

Objective 1: To develop a number of facilities to provide abundant year-round recreational opportunities.

Objective 2: To preserve the area's unique scenic beauty, forests, natural features and wildlife for enjoyment by urban residents across the eastern United States.

Objective 3: To provide activities which will highlight West Virginia's Civil War and cultural heritage.

Related to the community concerns and objectives are a set of issues and questions which must be addressed by NPS as part of this study. They are:

1. Are the natural, scenic and recreational resources of Stonewall Jackson Lake of such quality as to draw visitors both regionally and nationally? Do the resources meet the criteria for national significance?
2. Are the historic and cultural features of the area nationally outstanding or significant?
3. What areas, if any, are there within the National Park System that currently represent the resources found here? Do the resources match thematic needs identified in the

National Park System Plan?

4. Are there sufficient opportunities within and near the area for development of recreational facilities to meet national need?
5. Is additional Federal involvement and funding necessary to realize the full potential of recreational use and interpretation of natural and cultural resources?
6. What management alternatives are available or feasible to preserve, protect, administer and interpret the area for public use and recreation?
7. Can the Army Corps and/or State satisfy the recreation needs identified here?
8. What does the West Virginia State Comprehensive Outdoor Recreation Plan say about Stonewall Jackson Lake?
9. What annual benefits were assigned to various aspects of dam construction and recreation in the original legislation?
10. Will the reservoir be managed primarily for recreation or flood control/water supply?

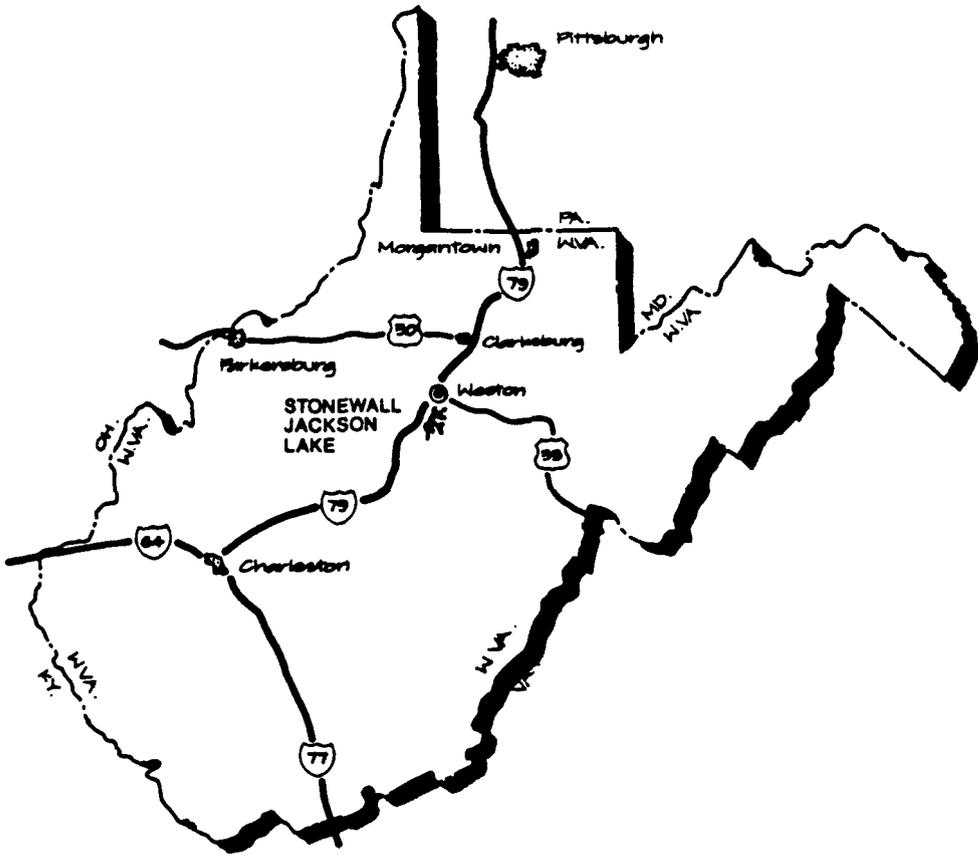
RESOURCE DESCRIPTION AND ANALYSIS:  
DETERMINATION OF NATIONAL SIGNIFICANCE

INTRODUCTION

This survey is one of a number of resource evaluation that have been conducted in the area. Since 1970, several resource studies have been undertaken by private contractors under the direction of the U.S. Army Corps of Engineers. Topics include identification of road and utility relocation needs, evaluation of archeological and historic resources, and an environmental impact statement and review of environmental features. Many of these studies and the "Stonewall Jackson Lake, West Virginia, Master Plan, Design Memorandum No. 7" (Booker Associates, Inc. 1982) were used extensively for the preparation of this survey.

The evaluation procedures within the National Park Service differ from those of other agencies. Therefore, it was important to consider the data within these studies and not simply to rely on the findings. For the purposes of understanding the resources from the National Park Service perspective, an on-site evaluation was also conducted. Personal discussions with local and State officials and individuals have served to update conditions.

Since all previous reports focused on the 20,050-acre project area, it was possible to compile information necessary to conduct this survey within a short amount of time. Regional recreation facilities, as well as cultural and natural resources, were examined to place the Stonewall Jackson Lake project area in a larger context and to relate the significance of the project area to other similar regional resources.



## VICINITY

### STONEWALL JACKSON LAKE RECONNAISSANCE SURVEY

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE



## REGIONAL SETTING

The Stonewall Jackson Lake project area is 125 miles south of Pittsburgh, Pennsylvania, and 85 miles northeast of Charleston, West Virginia, along Interstate 79 on the West Fork River in Lewis County, West Virginia. Clarksburg, 25 miles to the north on I-79, is the largest city in the immediate vicinity of the project area. Weston, the seat and largest town in Lewis County, is three miles from the dam site at Brownsville. The majority of land in the region is covered by small farms.

The transportation system in the region includes I-79 and several State and county roads (US 19 and WV 15, 30 and 44). All State and county roads are maintained by State highway district offices. Clarksburg/Bridgeport (Benedum) and Morgantown airports service the area.

Agriculture is the primary economic activity near the project area; the manufacturing industry employs a small percentage of people in the region. Mining, retail trade, communications, transportation, and public utilities are also important industries.

A larger area than the project location was examined to place it within a regional context for comparison purposes. However, the planned level of recreational development at the Stonewall

Jackson site is more extensive than what is available at any of these other areas.

Eleven major public use areas are within 40 miles of Stonewall Jackson Lake. The primary recreational activities at these areas include camping, picnicking, hunting, fishing, hiking, swimming, and boating. Three of these recreation areas are managed by the Army Corps of Engineers (Sutton Lake, Burnsville Lake and Tygart Lake - also a State Park), five are managed by the West Virginia Division of Parks and Recreation as State Parks (Watters Smith, Audra, Holly River, Cedar Creek, Tygart and State 4H Camp at Jackson's Mill), and three are managed by the West Virginia Department of Natural Resources as public hunting and fishing areas (Pleasant Creek, Elk River and Stonecoal Lake). Stonecoal Dam is owned and operated by the Monongahela Power Company.

There are also several hiking trails within the region. The Weston-Gauley Trail, which historically was the main transportation route between the region's towns, passes through the project area and will be used for recreational purposes.

The 1982 U.S. Army Corps of Engineers Master Plan defined a potential area where most users of the Stonewall Jackson Lake project area would come from. The Army Corps method used to determine visitation was based on comparable sites nation-wide. To adjust for changes in regional visitation patterns, new

figures were calculated based on increases in visitation throughout the State since 1982.

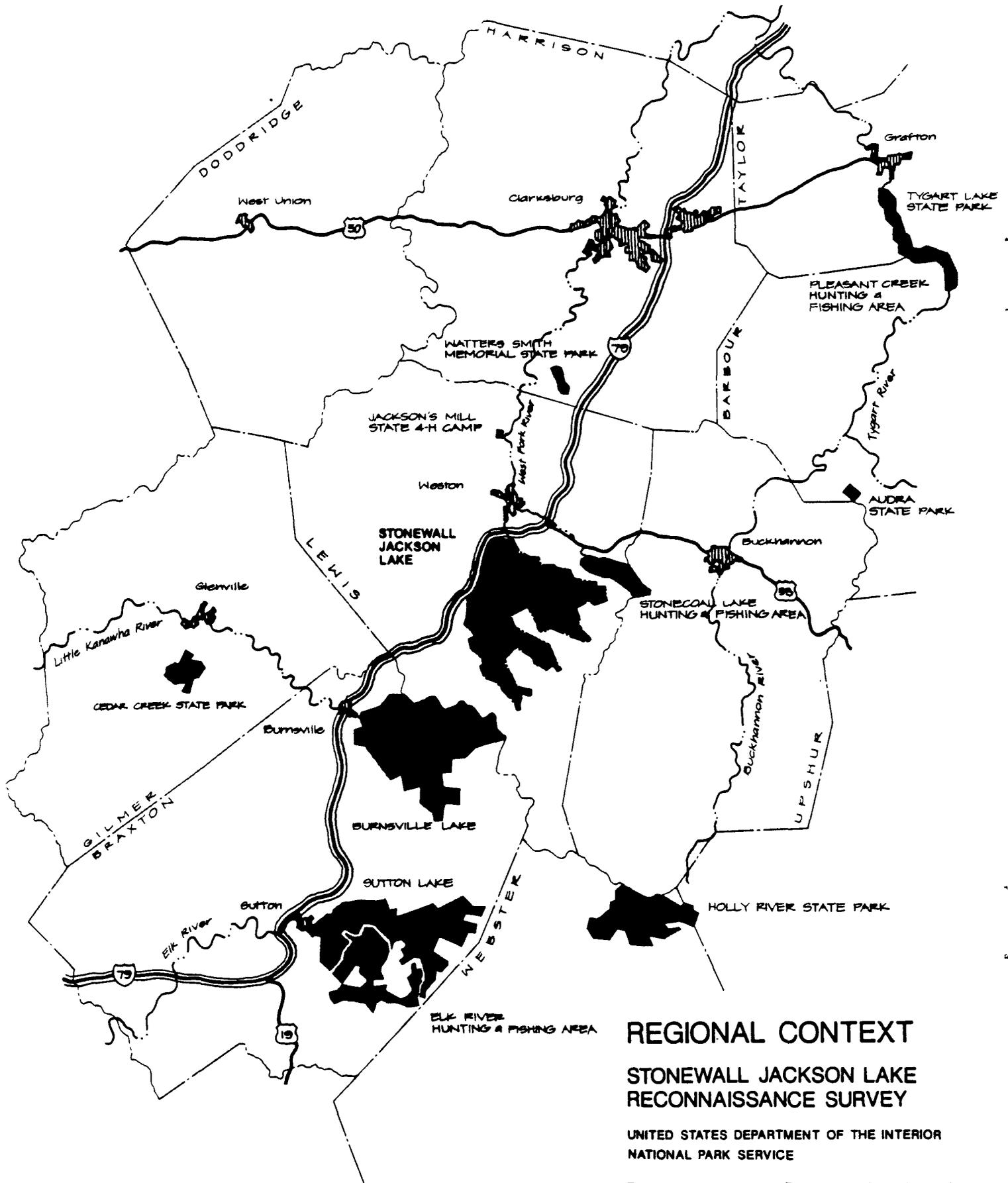
The determination of where visitors originate was based on assumptions in the Corps of Engineers' technical reports that similar projects will have similar visitation rates and characteristics. A primary market area of seven counties, all within 30 miles of the project area, was identified. The seven counties had a combined population of 215,400 in 1980.

Encompassing the primary market area is a larger 33-county day-use market area with a combined 1980 population of 1,478,000 (this includes the seven counties). The projected increase in population for this day-use market area by the year 2000 is 1,730,500. This area extends approximately 75 miles around the project area - elongated to 100 miles along the I-79 highway corridor. Based on experience at other Corps' projects nationwide, if the Corps were to continue to manage the site, ninety percent of the visitors to the Stonewall Jackson Lake would be expected to come from the 33-county area.

The largest share of overnight users would be drawn to the project area from approximately 125 miles away. The overnight use market area includes the population centers of Pittsburgh, Pennsylvania, and Huntington and Charleston, West Virginia. Overnight use is expected to contribute a minimum of eighteen percent of the total annual visitation. Additional private

sector accommodations in the area surrounding the site will increase this percentage.

Within the 33-county day-use market area there are 37 major recreation areas, including Corps of Engineers' lake projects, State Parks and forests, national forests, public hunting and fishing areas, and state and national historic sites. The site is located within 250 miles of many United States population centers, including Pittsburgh, Baltimore, Washington, Richmond, Cincinnati, Columbus and Cleveland. Many local citizens feel that the capability to draw from this population could be affected by site recognition and facilities available. Other nearby recreation sites which provide similar opportunities as those currently being planned and developed at Stonewall Jackson Lake have a regional draw.



## REGIONAL CONTEXT

### STONEWALL JACKSON LAKE RECONNAISSANCE SURVEY

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE



## NATURAL RESOURCES

### Description

The Stonewall Jackson Lake project area is located in the West Fork River Basin of Lewis County in north-central West Virginia. From its headwaters in Lewis and Upshur counties, the West Fork River flows northward approximately 99 miles to Fairmont, West Virginia, where it joins the Tygart River to form the Monongahela River. The West Fork River watershed is approximately 50 miles long, 12 to 24 miles wide and drains 881 square miles. Approximately 76 percent of the West Fork River basin is in Harrison and Lewis counties, and the remainder is in portions of Marion, Taylor, Barbour, and Upshur counties.

The Stonewall Jackson dam will control runoff for the upper 102 square miles of drainage areas. Three major tributaries will account for 56 percent of the lake drainage area: Skin Creek (33 square miles of drainage area), Sand Fork (12 square miles) and Right Fork (12 square miles). The elevation below the dam is 1,008 feet and reaches 1,920 feet on ridgetops at the upper reaches of the lake. Stream gradients upstream of the dam site vary from 3 feet per mile in the main channel to 6-90 feet per mile on lower reaches of the tributaries and 80-200 feet per mile in tributary headwaters.

Geography/Topography. The project area lies within the non-glaciated Allegheny Plateaus section of the Appalachian Plateaus physiographic province (Fenneman 1938). The non-glaciated Allegheny Plateaus, probably the most typical of the province's seven sections, is an ancient table land underlain by relatively flat and uniform geologic strata, such that the present-day topography reflects surface water erosion of the former plateau, and shows little or no influence by geologic structure or stratigraphy. The terrain of the project area is maturely dissected with well-defined dendritic drainage patterns, and characterized by rounded ridgetops surrounded by steep side slopes and gently sloping valleys.

Geology. The geology of the project area formed from sediments deposited in the Appalachian Basin. During the Pennsylvanian geological period, the basin was no more than a restricted embayment or large lake. Extensive peat bogs formed along the margins of the embayment and the freshwater lakes; the peat later became coal, such as Redstone coal. The restricted nature of this basin is demonstrated by the areal distribution of Redstone coal in West Virginia; it is almost exclusively found in Lewis County (McColloch 1986).

The bedrock exposed at the surface in the project area is all of Pennsylvanian or Permian age and of sedimentary origin. The rock strata are gently folded, dipping regionally northwest at

less than 5 degrees. Variations in the dip direction are the result of local anticlines (upwarps) and synclines (downwarps). Rock strata are primarily represented by the Monongahela and Conemaugh group strata of the Pennsylvanian period. A few small hilltop areas near the dam are capped with the Dunkard (Permian) group strata. Because of the northwest dip of the rocks, the Conemaugh strata are increasingly exposed upstream on the West Fork River, such that the southeast half of the project area is nearly all covered by Conemaugh rocks.

Each of these groups consists of sandstone, indurated clays and shales interspersed with several coal seams and minor amounts of limestone (Fedorko 1987). The occurrence of indurated clays and shales creates seepage zones along hillsides and more surface runoff. Soils derived from these indurated clays cause severe sliding of soils, especially on lands with steep slopes. The high percentage of soft, easily erodible red and gray shale units in the Monongahela and Conemaugh groups has resulted in a rounded topography with 500-600 feet of relief. Redstone coal (Conemaugh group) beds contain one of the most significant coal resources in Lewis County with a minable seam in the project area.

These rock groups also contain significant, non-fuel mineral resources in the project area such as salt, limestone, sandstone and clay-shale. Recent studies by the West Virginia Geological and Economic Survey indicate that potentially economic deposits

of the Pittsburgh shale occur in the project area (Kirstein 1987). The eastern portion of the project area has been subjected to intensive strip mining activities.

Oil and Gas. Lewis County has a long and extensive history of oil and gas exploration and production. Over 3,000 wells have been completed in the county. The most productive wells were drilled in the 1950's and early 1960's; some of these have been exhausted, while others are still used for gas storage. Lewis County was the fourth most active county in West Virginia in 1986 for oil and gas exploration, and it is safe to project a continuation of this level of natural gas development in the county (Filer 1987).

Soils. There are three soil types in the project area. Upland soils consist of sandstone, gray shale, red indurated clays and limey siltstone. This soil type covers approximately 90 percent of the project area and produces shallow depth to bedrock, slow permeability, hillside slippage and steep slopes. Terrace soils are old colluvium that are well-drained, clayey soils subject to flooding, severe erosion and hillside slippage. Recent alluvial soils occur in floodplains and represent materials that have eroded from upland and terrace soils. They are moderately deep with high flooding potential and maintain a high water table. Soil erosion is substantial and widespread due, in part, to easily erodible land and present and past land use practices.

Much of the present forest land was used beyond its capacity and, consequently, it does not provide the protection against erosion that would otherwise be expected.

Hydrology. Several of the natural resource characteristics, including a steep topography, impervious shale bedding and lack of forest cover are conducive to rapid runoff during heavy rainfall. Because of this, the West Fork River is generally turbid except at its headwaters. Turbidity is also related to land use practices including surface mining, agriculture and construction on steep slopes. In 1973 the West Fork River was so degraded by mine drainage, domestic wastes and sediment that it was the most highly mineralized large stream in the West Virginia portion of Monongahela Basin (U.S. Army Corps of Engineers 1975). In 1982, water quality at the dam site was rated good, but downstream, acid mine drainage continued to affect water quality (Booker Associates, Inc. 1982). As a result of the Stonewall Jackson Dam, the water quality will be expected to improve.

Vegetation. Forests of the project area are classified as part of the Central Hardwood Forest (in the Eastern Deciduous Forest Biome), which is characteristic of non-glaciated Allegheny Plateaus (Braun 1950). The Central Hardwood Forest can be subcategorized into several associations (i.e., groups of plants growing under similar habitat conditions with a definite floristic composition and uniformity of site characteristics).

The Oak-Pine and Oak-Hickory forests (xeric) are found on dry ridgetops, upper southwest slopes and certain rocky and shallow soil areas. Oak-Hickory forests are the most common association in the project area, occupying about two-thirds of the woodlands. Oak species are the most abundant followed by several hickory species. The Mixed Mesophytic Forest (mesic) typically appears in cove and north-facing lower slopes that provide more available moisture. Some of the more commonly found species are beech, tulip tree, basswood, sugar maple and black cherry. Dominance is shared by a relatively large number of species, suggesting several distinct climax communities. However, dominants are all representative of the mesic climax unit. This association is characteristic of the region in general and is the most complex and oldest association. The Flood Plain Association is limited to the narrow band of trees in the riparian zone of perennial streams. Sycamore, black willow and silver maple are the most abundant trees.

Fish and Wildlife. A variety of game and nongame animals provide potential for both consumptive and nonconsumptive users. Upland game species include cottontails (most abundant), raccoon, opossum, quail, ruffed grouse and grey and fox squirrels. There are also significant populations of red and gray foxes, woodchucks and white-tailed deer. White-tailed deer and wild turkey are the only big game species in the project area. At present, the project area contains the highest deer

harvest of any public land in West Virginia. Furbearing species are present in limited numbers and include, in addition to the above, muskrat, skunk and mink. Muskrat is the principal furbearing animal in the area. A few waterfowl species frequent the area during migration, and wood ducks are summer residents of the project area. The diverse vegetation of the area attracts a wide variety of songbirds.

The West Fork River supports a warm-water fishery with largemouth and smallmouth bass, muskellunge, black and white crappie, channel catfish, flathead catfish and sunfishes. Prolonged periods of high turbidity, sedimentation, generally sluggish flows, periodic extreme flows and water quality degradation from mine drainage and city effluent limit the current fishery resource. After reservoir construction, fishing will occur in both stream and lake habitats; however, fishing will undoubtedly be limited to the West Fork River because the major tributaries periodically run dry. The lake will support larger fish populations than the present stream and the number of fishermen should increase. Sport fish expected to populate the lake will have a similar composition as that described for the West Fork River.

Endangered and Threatened Species. There are no State or Federally listed rare, threatened or endangered species in the project area according to the Heritage Trust Program and

Planning Section of the West Virginia Division of Natural Resources. Two species occurring in the project area that are of interest to the scientific community are the fish, black redbhorse (Moxostoma duquesnei), and the plant, shining ladies' tresses (Spiranthes lucida).

### Significance

There are no natural sites or features in the project area that are listed on the National Registry of Natural Landmarks. Baer et al. (1982) completed an intensive survey of 1,400 potential natural landmarks in the Appalachian Plateaus physiographic province for the National Park Service. They recommended that 91 sites should be further considered as potential national natural landmarks; none of these sites are in the project area.

Tygart Valley, which borders the eastern edge of the West Fork Basin, was one of the 91 sites listed as potential natural landmarks of national significance. The Horner State Game Refuge, located within boundaries of the Stonewall Jackson Lake project site, was acquired by the Army Corps and is no longer a game refuge. The former refuge was noted in the landmarks survey as locally and specially significant, but not warranting national attention. Other locally significant landmarks in the surrounding area exist in Barbour, Harrison, Marion, Taylor and Upshur counties.

The project area's natural resources were evaluated for national significance based on criteria in the NPS "Management Policies." Although natural features and natural areas were found not to meet the criteria of "outstanding", they are spacious and provide important recreational opportunities.

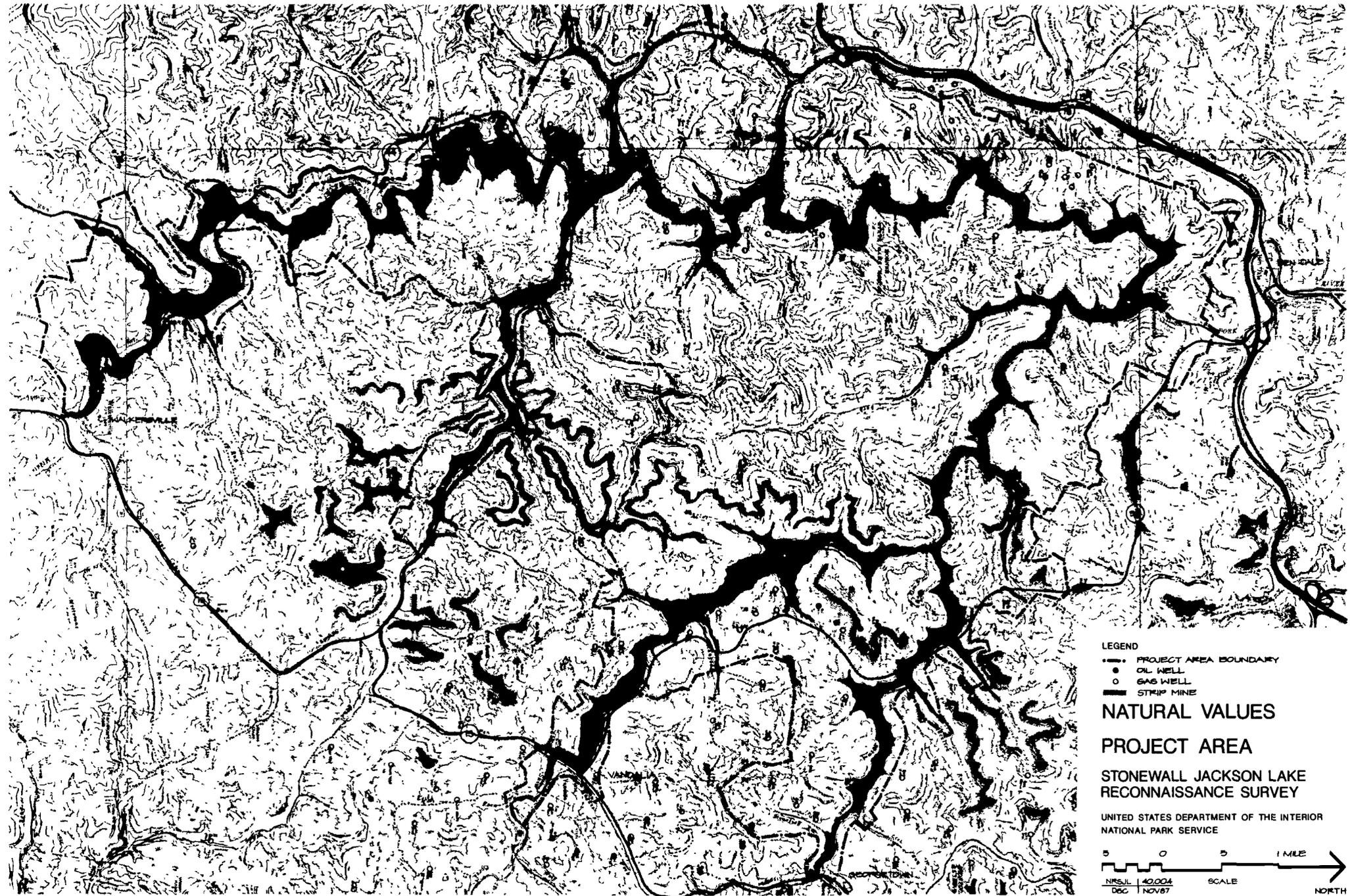
An integral aspect for determining national significance is the integrity of a potential area. Integrity relates to a particular area possessing a true, accurate and essentially unspoiled example of natural history. Because of substantial past environmental disturbances (e.g., strip mining, oil and gas exploration, forest clearing, inappropriate agricultural practices), the project area does not possess this kind of resource integrity.

Suitability as a unit of the National Park System is considered in light of how this type of resource is represented by existing units managed by NPS. The Appalachian Plateaus natural region is represented in the National Park System by the New River Gorge National River in southern West Virginia. Other parks in this physiographic region that contain representative features are the Cuyahoga Valley National Recreation Area and the Delaware Water Gap National Recreation Area (Pennsylvania side). Their characteristics in this theme would also increase representation already existing in the national park system. The Stonewall

Jackson Lake project area would not expand or enhance representation of this region in the National Park System.

### Impacts

Impacts on natural resources can occur during initial recreational development or during the operation of facilities. Recreational development can have effects, such as soil compaction, erosion and effects related to the application of herbicides and insecticides. Planning for construction and use of facilities by the Corps and State consider possible effects on the resources. Oil and gas operation in or adjacent to the area can also affect public safety, visual resources and public use.



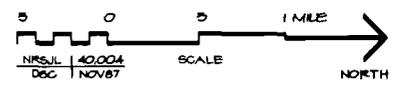
- LEGEND
- PROJECT AREA BOUNDARY
  - OIL WELL
  - GAS WELL
  - ▬ STRIP MINE

### NATURAL VALUES

### PROJECT AREA

STONEWALL JACKSON LAKE  
RECONNAISSANCE SURVEY

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE



## CULTURAL RESOURCES

### General

The cultural resources of the project area were thoroughly inventoried and evaluated by the Pittsburgh District, Corps of Engineers. Two archeological surveys were conducted--one by Robert S. Solecki in 1948 and the other by Michael R. Beckes in 1975. Historic resource evaluations were also undertaken by John Milner Associates and the Carnegie Museum of Natural History.

### Archeology

Description. Archeological surveys indicate that the West Fork River was intermittently inhabited from the early Archaic period (ca. 7000 B.C.) until approximately A.D. 1800. The inhabitants of that early period were family groups of hunters and gatherers, the men hunting while the women and children gathered berries, nuts, and seeds. The sites were only seasonally occupied with inhabitants moving from site to site to exploit the flora and fauna.

Evidence of the succeeding Woodland peoples is relatively scarce, probably because they practiced horticulture. The West Fork River lacks the broad flat valleys that are conducive to

cultivation. Artifacts of this cultural group would have been left by occasional hunting and foraging parties visiting the area.

Significance. In all, twelve archeological sites were located and tested in the Stonewall Jackson Lake project area. None of the archeological resources meet the criteria for inclusion on the National Register of Historic Places.

Impacts. All archeological sites below the high water mark will be lost or severely affected once the lake was formed. Sites above the high water mark will be subject to increased visitation and the damage that often results from increased accessibility.

The Pittsburgh District, Corps of Engineers, contracted with the West Virginia Geological and Economic Survey to inventory and evaluate all archeological sites within the project boundaries under the criteria set forth in 36 CFR 60, "National Register Nominations by State and Federal Agencies."

### History

Description. Although the earliest outposts of pioneer settlement in West Virginia occurred during the 1730's and 1740's, it was not until after the Battle of Fallen Timbers in 1794 that the area was safe for settlement. The upper West Fork

had one occupied dwelling in 1779, but grew rapidly thereafter with the influx of new residents. By 1816 the Virginia legislature, recognizing the size of the population and citizen calls for more local government, created Lewis County with Weston as its county seat.

Despite this growth, the scattered communities of Lewis County existed in economic isolation until midway through the 19th Century when a system of roads was developed to link the county to the outside world. First came the Staunton and Parkersburg Turnpike completed in 1847 which linked Weston to points east and west; this was followed by the Weston and Gauley Bridge Turnpike in the late 1850's. The latter turnpike followed the west bank of the West Fork River south through the project area then roughly southwest along the Elk River to the Kanawha River Valley. Considerable commercial activity developed along these roadways bringing prosperity and access to new markets for local products.

In 1860, the area (present-day Lewis County) had a population of approximately 7,700 whites, 230 slaves and 30 free blacks. Unlike the Tidewater and Piedmont areas of Virginia, slavery was not a major factor in Lewis County. Indeed, slavery was a detriment to the local economy because state taxes were not charged on slaves, yet slaves were counted for population purposes. Lewis County citizens felt that their tax dollars were

being siphoned off for eastern prosperity with little returning for local improvements.

When the Virginia Secession Ordinance was presented to the State's citizens, it was opposed by a margin of 10 to 1 in the region that later became West Virginia in 1863.

Although Weston, the crossroad to two major regional turnpikes, was a fairly important strategic center during the Civil War, no major battles occurred in Lewis County.

"Stonewall" Jackson was born approximately fifteen miles from Stonewall Jackson Lake in Clarksburg, West Virginia. He spent much of his youth at the Jackson farm at what is now Jackson's Mill, a few miles north of Weston. Future plans for Jackson's Mill include the reconstruction of the homestead as Jackson knew it in his childhood. Jackson left the Clarksburg area, went on to graduate from West Point and had an outstanding military career. He is commemorated at several National Park Service areas for his important leadership role during Civil War battles throughout the southern United States.

Following the war, Lewis County remained primarily agricultural with approximately 120,000 acres under cultivation by 1880. Clearing the lands for farming purposes fostered the lumber

industry, which had mills in Roanoke and several other nearby towns.

The railroad arrived in Weston in 1879, and by 1891 a line from Weston to Sutton was constructed, part of which ran along the West Fork River through the project area. Its arrival changed the local economy even more than the turnpikes. Sawmills in the county shipped lumber to outside markets. However, grain from the Midwest could be shipped in more cost effectively than it could be grown locally, causing a decline in land under cultivation and an accompanying loss of flour and grist mills. The farmers shifted to sheep grazing, and the forests reclaimed much of the land.

In October 1899, the first oil well was brought in. When production peaked in 1902, attention switched to natural gas. By 1906, Lewis County was the center of one of the largest gas producing fields in the world. With the availability of natural gas, a considerable glass industry developed. The period from 1900 to 1920 also saw the start of small-scale coal mining operations.

Today the county's population has declined to levels preceding World War I. The railroad that ran from Weston through the project area has been abandoned; the gas fields have been depleted and are now used for storage; and coal mining, although

up in recent years, makes up less than 1 percent of the State's annual coal tonnage. The number of acres farmed peaked at 180,000 acres in 1920 and has declined to around 100,000 acres; likewise, the production of sheep and cattle is down significantly from previous levels.

Significance. All structures within the project area have been evaluated for inclusion on the National Register of Historic Places. A total of 17 historic sites and three historic districts with potential to meet the National Register criteria were identified. Data recordation, consisting of structural documentation, historical records research and oral histories, was completed under contract to the Corps of Engineers on all properties that were to be inundated.

Of the historic structures originally within the project area, only the Mary Conrad house remains. It will be moved to another location in the project area and its National Register eligibility reevaluated at that time. The house is of local significance only as a memorial to a pioneer family, as the birthplace of Mary Conrad, who was a prominent Roanoke postmistress, and as the local station of the Federal military express raided by the Confederate General Imboden in the spring of 1863. The structure could be considered in the historic themes of "America at Work" (Agriculture: Era of General

Agriculture, 1812-60, and Commerce and Industry: Service) and "Major American Wars" (The Civil War: War in the East).

Another property, the Michael Bush house site, is important for its potential historic archeological value. It will undergo extensive data recovery by the Corps of Engineers.

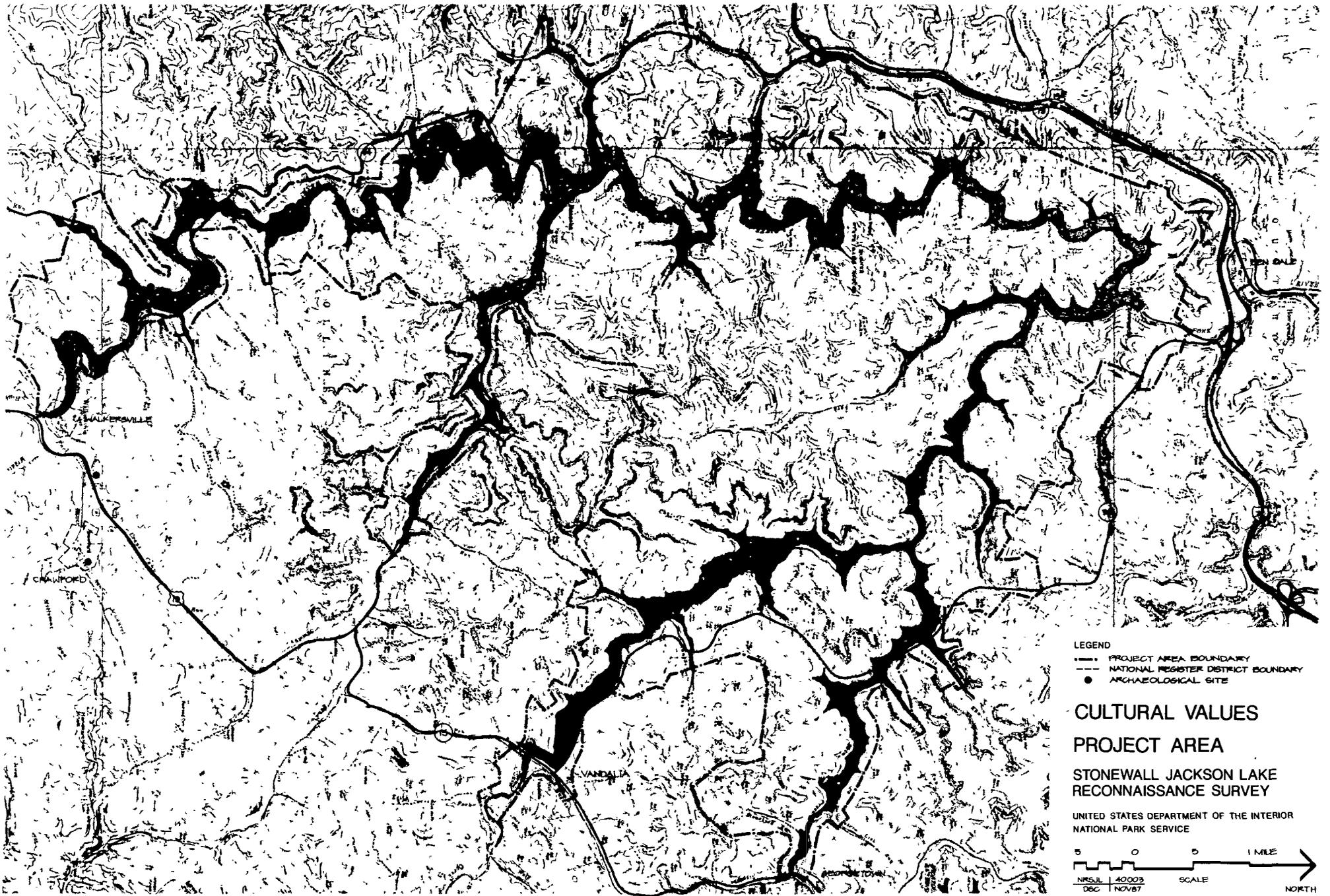
The other historic properties within the project boundaries were offered to the public free of charge with the understanding that they would be removed from the project area. When no responses were received, the structures were demolished.

The old Weston and Gauley Bridge Turnpike is of local significance, does not retain any of its historical character, and is therefore ineligible for inclusion on the National Register. No themes would apply.

No physical features or events related to Stonewall Jackson are in the project area.

Impacts. Since their identification, all historic structures except the Mary Conrad house have been documented and removed following compliance with the Advisory Council on Historic Preservation's regulations for "Protection of Historic and Cultural Properties" (36 CFR 800). The Mary Conrad house, scheduled for relocation elsewhere in the project area, will be used for visitor services by the State of West Virginia. Once

this action has been completed, no new threats to historic properties will occur.

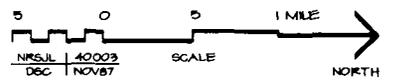


- LEGEND
- PROJECT AREA BOUNDARY
  - - - NATIONAL REGISTER DISTRICT BOUNDARY
  - ARCHAEOLOGICAL SITE

CULTURAL VALUES  
PROJECT AREA

STONEWALL JACKSON LAKE  
RECONNAISSANCE SURVEY

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE



## RECREATION RESOURCES

### Description

Lands in Federal ownership include all lands within the boundary of the Stonewall Jackson Lake project area--a total of 20,050 acres. Of this amount, approximately 2,650 acres will be inundated at the normal summer pool level (elevation 1,073 feet), 4,400 acres have been leased to the State of West Virginia for park purposes, 14,000 acres have been leased to the State for a public hunting and fishing area and 300 acres are managed by the Army Corp of Engineers for administrative purposes and recreation access.

The majority of the 82 miles of lake shoreline will consist of rather steep slopes that extend from the rounded ridgetops to the pool's edge. The lake will be relatively narrow, with an average width of approximately 400 feet, allowing for only a limited portion of the 26 miles of channel length suitable for broad water activities such as sailboating. The lake will provide excellent opportunities for fishing and pleasure boating. Because of the relatively long, narrow character of the lake, an effort has been made to distribute boat launch facilities in different locations. Lake depths will range from approximately 70 feet at the dam area to less than 20 feet along

the upper reaches of the project area. The average mean depth of the lake will be approximately 20 feet at summer pool.

The topography, typical of West Virginia landscapes, is a limiting factor to the development of recreation facilities at Stonewall Jackson Lake beyond what is currently planned. Lands with slopes over 15 percent are generally unsuitable for development without extensive landscape modification. Ten percent of the lands in the project area have a slope of 15 percent or less. The two major recreation areas proposed for development at Stonewall Jackson Lake - Vandalia Bay and Roanoke Bay - include the best consolidated sites of developable slopes.

The fluctuation of the reservoir level is not expected to impact the recreation season, except in the event of extreme climatic conditions. According to the Army Corps, the maximum summer pool will be 2,650 acres and the maximum winter pool will be 2,150 acres. In the event of an extremely dry summer, the pool could drop to 380 acres.

The development of Stonewall Jackson Lake will increase recreational opportunities for residents and visitors of north-central West Virginia. The project area should produce economic effects through new employment and associated recreation-oriented businesses and development.

Recreation demand figures in the 1988 West Virginia Statewide Comprehensive Outdoor Recreation Plan indicate a strong need for swimming facilities, bicycle trails, campsites and picnic units. The majority of facilities will be constructed on a fifty-fifty share basis by the Corps of Engineers and the State, except for marina slips, game courts, swimming pools, and stables, which will be constructed by the State. The intention of recreation facility development at Stonewall Jackson Lake is to address these needs. The Corps has reached contractual agreements with private companies to begin facility development.

Initial development will center on all facilities proposed for Roanoke Bay, a boat launch at Vandalia Bay and boat launches at the three boat access areas. Future development will include the remainder of proposed facilities at Vandalia Bay.

The facilities proposed for construction within the Stonewall Jackson Lake project area are as follows:

Roanoke Bay - Access to the 2,025-acre site is on a newly constructed access road from US 19. This site will be the most intensively developed in the project area, serving local users and regional visitors. Facility development will be concentrated on a limited land area. Facilities that will be constructed by the Corps of Engineers for the State include a picnic area,

overlooks, camping units, boat launches, parking areas, a swimming pool, a marina, game courts and fields, an amphitheater, trails (interpretive, hiking, horse), a lodge and cabins, and administrative and maintenance buildings.

Vandalia Bay - Access to the 1,715-acre site is by WV Route 30. The area will primarily focus on day-use activities and facilities and serve local visitors. Some overnight facilities are also proposed for future development. Facilities to be constructed for the State by the Corps of Engineers include picnic areas, a boat launch, a marina, a group picnic area, camping units, and a maintenance area.

West Fork Dam Area - Access to the 330-acre area is by WV 30. From a recreational standpoint, its purpose will be to provide visitor access to the dam, locations for fishing, and interpretation of the Stonewall Jackson Lake project area. Proposed facilities include an overlook of the dam and lake, a boat launch ramp, a trail, an information center, and an operations/maintenance area.

Glady Fork, Georgetown, and Jacksonville Access Areas - Facilities proposed for construction are a parking area, a floating dock and boat launches. The purpose of these

areas will be to provide lake access to fishing boats and pleasure boats, limiting facilities to small craft and allowing for the separation of boat launching from major recreation areas.

Approximately 55 miles of hiking, interpretive, horse, bicycle, exercise and project boundary trails will be built; eight miles of hiking trails will be in the public hunting and fishing area. The trails will provide diversified recreational opportunities in the project area.

The Weston and Gauley Bridge Turnpike Trail will be developed in conjunction with the Huntington District, Corps of Engineers. The Huntington District has plans to acquire the necessary right-of-way to link the Stonewall Jackson Lake project area with the Burnsville Lake project 3.5 miles to the south. For most of this segment of its length, the old turnpike trail follows abandoned roads and trails. Several miles of new trails will be constructed to knit the turnpike and parts of other abandoned roads and jeep trails into a comprehensive trail system. Adirondack-type shelters and potable water wells are proposed along the trail. Operation, construction and maintenance of the entire trail will be the responsibility of the Huntington District, Corps of Engineers.

Hunting has been an increasing recreational activity in the project area since it opened for public use in 1982. In 1985, 7,000 hunters and trappers from 13 different states and 37 West Virginia counties used the Stonewall Jackson Lake hunting and fishing area. Recreational use of the area by hunters and trappers is estimated at 140,000 days annually. Fishing opportunities are projected to vastly improve over existing conditions. In 1973, the U.S. Fish and Wildlife Service estimated that the West Fork River and its major tributaries annually support 6,200 fisherman days; they project about 46,000 fisherman days annually for Stonewall Jackson Lake.

Based on Army Corps plans and projections (1982) visitation to Stonewall Jackson Lake for day use activities in 1990 would be 718,200. By the year 2000, annual visitation is projected to be 757,000, and by the year 2030, annual visitation is projected to be 900,000. These visitation statistics were calculated based on a regional recreation use pattern similar to other Corps sites nationwide. However, with recognition, many in the local area feel that the numbers of out-of-state visitors would increase.

According to the State of West Virginia Department of Commerce, in the past five years the State has witnessed at least a 10% growth in tourist related employment. The tourism industry saw a change in sales of \$1.38 billion in 1982 to \$1.7 billion in 1985.

Taking into account inflation, this represents a real increase between 6% and 10%.

Hunting and fishing will continue to draw increasing numbers of visitors, as the region around Stonewall Jackson Lake is one of the State's most heavily used public hunting areas. Deer harvest per square mile of habitat is the highest in West Virginia.

### Designation

NPS management policies adopted in 1978 define the criteria for National Recreation Areas. National recreation area designation can be applied to sites managed by the U.S. Forest Service. The criteria for determining eligibility differ somewhat among agencies. The criteria for units within the National Park System are listed below. For the purposes of determining national significance only resources within the site boundary are evaluated. The site must meet all four criteria.

National recreation areas should be spacious areas containing outstanding natural and/or cultural features and providing significant recreational opportunities.

National recreation areas should be located and designed to achieve comparatively heavy recreation use and should

usually be located where they can contribute significantly to the recreation needs of urban populations.

National recreation areas should provide recreational opportunities significant enough to assure national as well as regional visitation.

The scale of investment, development and operational responsibility should be sufficiently high to require either direct Federal involvement or substantial Federal participation to assure optimum public benefit.

When evaluating a potential site it is important to consider the regional context, which differs from one part of the nation to another.

The potential development of recreation resources at Stonewall Jackson Lake has the greatest importance among the resources being evaluated in this report. The project area as a whole is of local and regional importance and is spacious. The area and acreage being evaluated for national significance includes the entire 20,050 acres. Extensive recreational opportunities are planned for development. However, the project area does not include outstanding natural and cultural features.

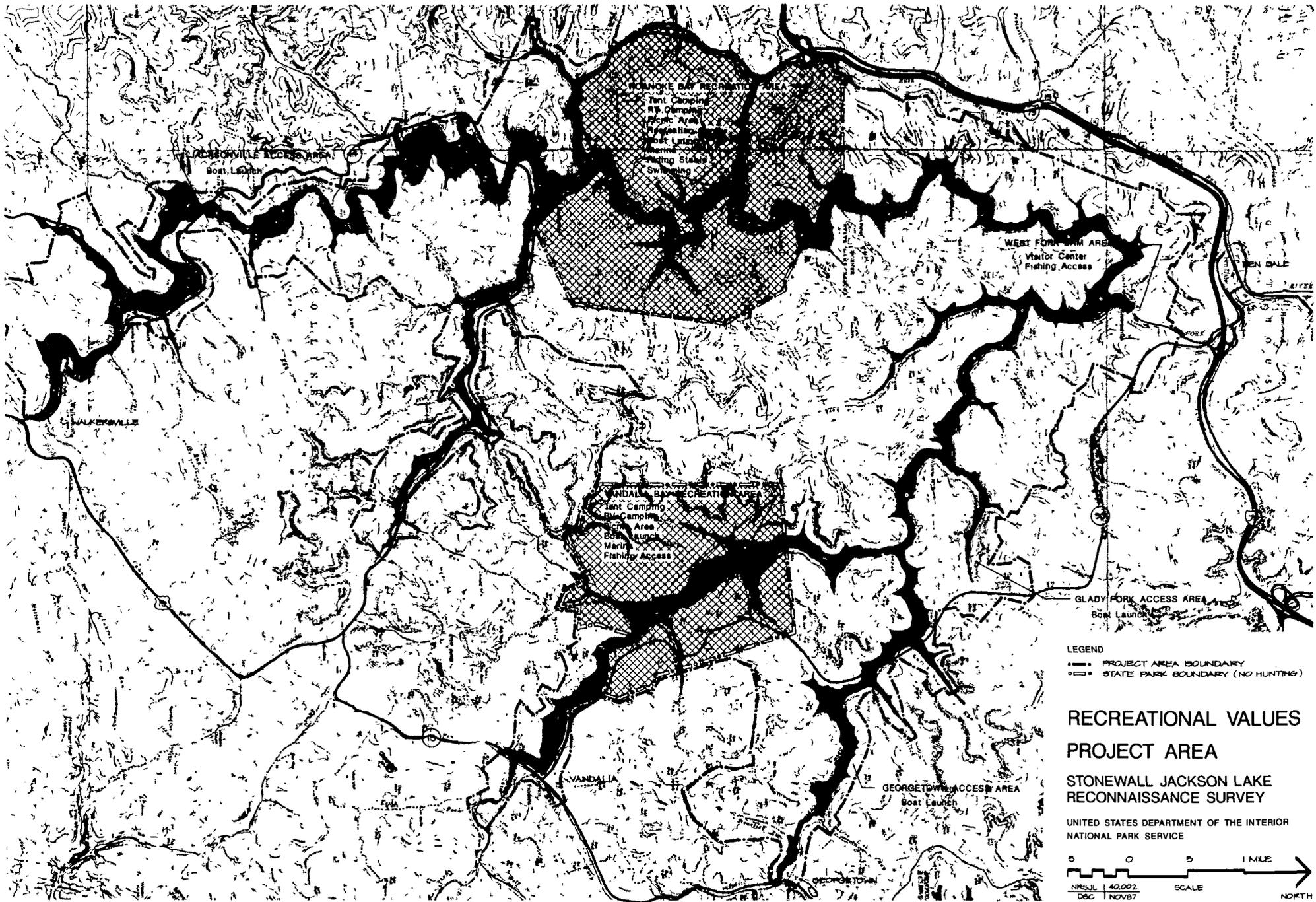
The project area is within 125 miles of several major metropolitan areas. However, access, site constraints, resource characteristics, such as expected water levels and other competing areas closer to major cities indicate that Stonewall Jackson Lake would not independently make a significant contribution to the recreation needs of urban populations. Stonewall Jackson Lake will be one of many recreation areas in the region drawing from the same pool of potential rural and urban visitors. It will be competing with the nine other Corps of Engineers' projects in West Virginia. Resources and development planned are attractive, but not sufficiently unique or outstanding to assure national visitation.

The quantity of land available for development (due to steep slopes over ninety percent of the site and poor soils) could limit additional recreation use. Newly constructed recreation facilities will provide opportunities and facilities needed in the region.

The level of public investment required to assure optimum public benefit depends on the character of the resource. Where site conditions such as steep slopes, a relatively narrow corridor, or seasonal variations in water levels limit the capacity for intense recreational use, recreation opportunities can be provided without extensive investments. In the case of Stonewall Jackson Lake, the planned level of investment in recreation

facilities by the U.S. Army Corps of Engineers and the State appear to capable of producing optimum benefits.

Because each of the four elements of the criteria are not met, the Stonewall Jackson Lake site does not meet the criteria as a National Recreation Area as managed by the National Park Service.



## EXISTING LAND USE AND TRENDS

The primary land use in Lewis County, except for the few developed communities, is agricultural. Most of the land in private ownership in the county (or immediately adjacent to the project area) is in pastures and accompanying farmsteads. All subsurface oil and gas rights are held by private companies and individuals.

The 20,050 acres within the project area have been acquired in fee by the Army Corps of Engineers and cleared of structures and most heavy vegetation. Previous landowners were relocated to new homes on land outside the project area. Due to these relocations, much of the land in the region that was for sale has been purchased.

## EXISTING MANAGEMENT ISSUES AND CONCERNS

The Corps of Engineers has been planning for the development of the Stonewall Jackson Lake project area since 1966. During this period many studies were prepared that addressed all necessary resource compliance issues as well as identified necessary facility development. The result of these plans and analysis has been the ongoing physical changes in the project area and development and management agreements with the State of West Virginia.

All acreage within the project area has been acquired in fee, and easements have been purchased on some adjacent property where this property enhances access to or management of the site. Initially, roads, utility lines and oil and gas well lines had to be relocated. Due to the number and complexity of these features, the last remaining ones are just being moved. Approximately 68 oil and gas wells are in the project area, and are served by 45 miles of access roads. The alignment of the B&O Railroad near Walkerville was moved out of the pool area. The Corps removed and relocated interments in several local cemeteries and landscaped and fenced all cemeteries in the project area. Those cemeteries still used by local families are maintained by local churches/associations, but access to them is maintained by the Corps. Buildings, vegetation and bridges in the pool area have also been removed. The Corps entered into

contractual agreements to achieve all of those actions they could not accomplish themselves.

In order to provide for hunting regulations within the project area, the Corps entered into a management agreement with the West Virginia Department of Natural Resources. Since 1982, permits for deer, wild turkey and small game hunting have been controlled by the Department of Natural Resources. The question of the validity of this agreement continuing between the Corps and the State arises if the National Park Service becomes involved in the management of this area. Different regulations on hunting may apply.

Development plans for recreation facilities in the project area have been planned by the Corps in conjunction with the State of West Virginia Department of Commerce, Division of Parks and Recreation. Locations, types and numbers of units, architectural styles and construction priorities continue to move into the construction phases under agreements by both parties. On a fifty-fifty cost share basis, the Corps will build, under contract, the majority of facilities. Over a time agreed to by the Corps and State, 50 percent of the cost of construction will be paid back to the Corps by the State. The Corps is currently negotiating and entering into contracts to begin construction of facilities. The State is also planning construction of additional recreation facilities. Current

authorizations for this project require that 50 percent of the costs for recreation facilities be contributed by non-Federal agencies.

An issue yet to be resolved is the feasibility of the continuation of oil and gas storage and production under the State Park areas. Existing state law provides for no mineral extraction in State Parks. Oil and gas rights would need to be acquired to eliminate this use from the project area. Mineral exploration and development could conflict with recreation and natural values, regardless of who is responsible for managing the area.

## MANAGEMENT ALTERNATIVES REPORT

### INTRODUCTION TO ALTERNATIVES

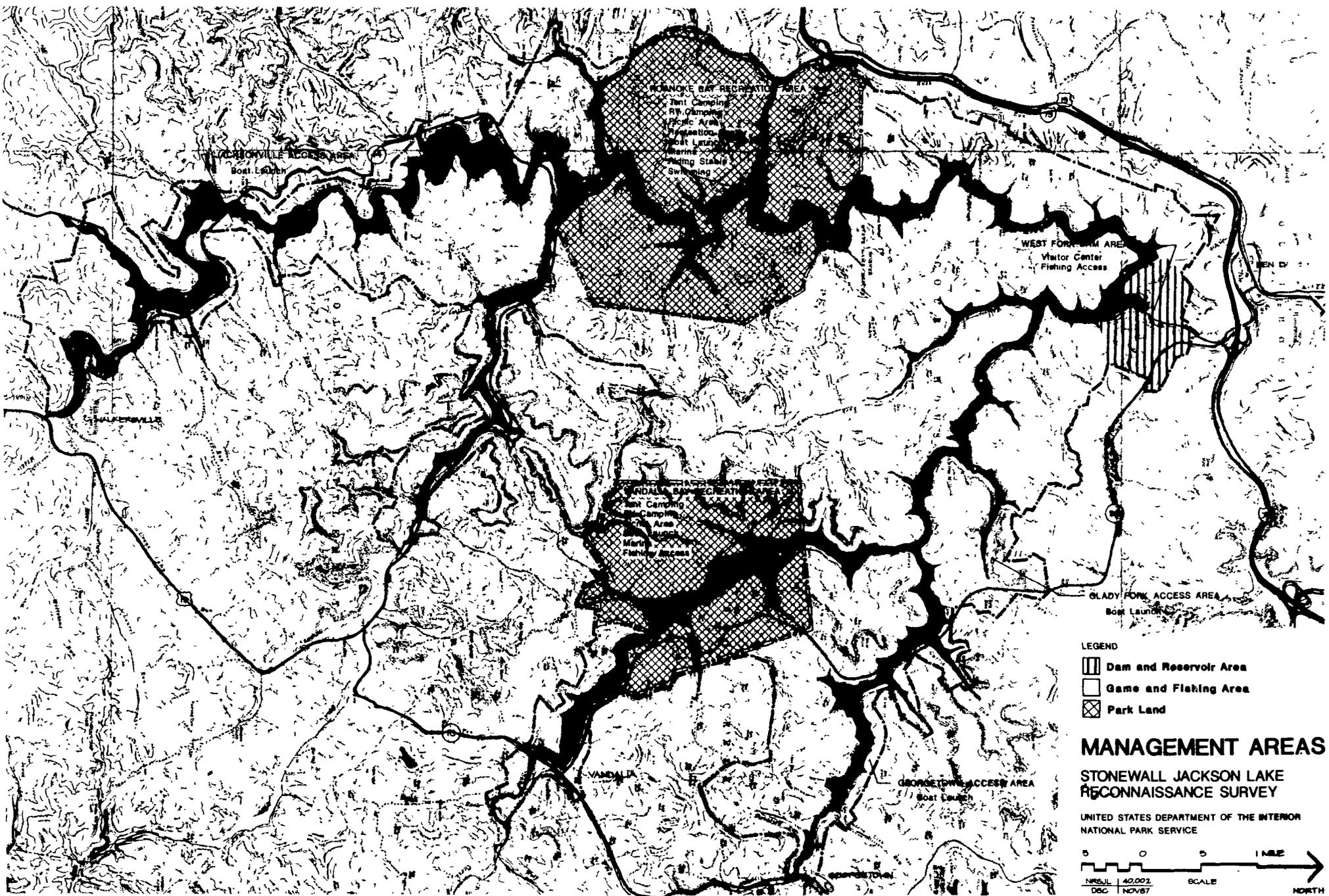
This section outlines the management alternatives discussed during the course of this project. Four distinct arrangements were arrived at in the community involvement process. Each one represents a different level of National Park Service involvement, beginning with no NPS action at all and ending with a maximum NPS presence on site.

Alternatives 1 and 2 assume that the existing development plans for the site would be carried out. In Alternatives 3 and 4, some modification to these plans could be expected if NPS became involved in site management or development. Alternatives 3 and 4 reflect local ideas and desires for management of the area. However, the resources of the Stonewall Jackson Lake site were found not to meet the National Park Service criteria for a National Recreation Area or other units managed by NPS. Alternatives 3 and 4 are not consistent with NPS criteria and policies.

Another important option is a coordination committee. Such a committee could be established to include participation from all the government agencies which have worked on the site, plus representatives of local governments and citizens. If this

group were established more formally it might assume, as its role, the oversight of all planning and development within and around the recreation area. It could also provide a linkage to resources, events and activities throughout the North Central West Virginia region in a comprehensive way. It is suggested only for Alternative 2.

In a meeting among all the government agencies on November 5 and at a public workshop with the Citizens Committee on December 9, a series of alternatives were developed which reflected options for managing recreation at Stonewall Jackson Lake. The four alternatives described in this report are based on the November meeting, the December workshop and on internal NPS review.

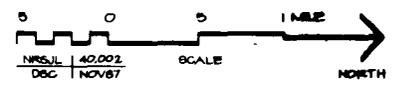


- LEGEND**
-  Dam and Reservoir Area
  -  Game and Fishing Area
  -  Park Land

**MANAGEMENT AREAS**

**STONEWALL JACKSON LAKE  
RECONNAISSANCE SURVEY**

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE



**CHART 1  
MANAGEMENT ALTERNATIVES CHARACTERISTICS**

ALTERNATIVE 1:

ALTERNATIVE 2:

CHARACTERISTICS

ALTERNATIVE 3:

ALTERNATIVE 4:

COE	DOC	DNR	NPS
●	●		
●	●	●	
●			
	●		
	●		
●			
●			
		●	
		●	

COE	DOC	DNR	NPS
●	●		
●	●	●	
●			
	●		
	●		
			●
			●
●			
●			
		●	
		●	

- Recognition of Parkland
- NRA Designation of Total area
- On-Site Presence
- Parkland Ownership
- Parkland Leasing (to)
- Parkland Management
- NPS Funding
- NPS Technical Assistance
- Dam Management/Water Level
- Gameland Ownership
- Gameland Leasing (to)
- Game/Fisheries Management

COE	DOC	DNR	NPS
●	●		
●	●	●	●
●			
	●		●
	●		●
			●
			●
●			
●			
		●	
		●	

COE	DOC	DNR	NPS
●	●	●	●
●	●	●	●
			●
	●		
	●		●
			●
			●
●			
●			
		●	
		●	

Chart 1 describes the essential characteristics - similarities and differences - of each alternative, including recognition, National Recreation Area (NRA), on-site presence, jurisdiction, leasing, funding, technical assistance and land management. Alternative 1 is a requirement of NPS planning guidelines for all studies such as this. It describes a case of "no action" for NPS. The gray-tone areas of Chart 1 are those areas which would not change from their current conditions.

CHART 2A  
**Management Functions**

	ALT. 0				ALT. 1			
	COE	DOC	DNR	NPS	COE	DOC	DNR	NPS
<b>DAM MANAGEMENT/WATER LEVEL</b>								
Administration	●	■	■	■	●	■	■	■
Planning/Design	●	■	■	■	●	■	■	■
Research/Monitoring	●	■	●	■	●	■	●	■
Funding	●	■	■	■	●	■	■	■
Dam/Facility Maint.	●	■	■	■	●	■	■	■
Security/Safety	●	●	●	■	●	●	●	■
Flood Control	●	■	■	■	●	■	■	■
Interpretation/Info.	●	●	●	■	●	●	●	■
Construction	●	■	●	■	●	■	●	■
Road Maintenance	●	■	■	■	●	■	■	■
Surface Regulation	●	●	●	■	●	●	●	■
<b>PARK/RESOURCE MANAGEMENT</b>								
Administration		●				●		
Planning/Design	●	●			●	●		
Research/Monitoring	●	●				●		●
Funding	●	●			●	●		●
Land Ownership/Acquis.	●				●			
Land Leasing		●				●		
Security	●	●	●		●	●	●	
Visitor Safety	●	●	●		●	●	●	
Resource Protection	●	●	●		●	●	●	
Intpretation	●	●	●		●	●	●	●
Recreation Management		●				●		
Construction	●	●			●	●		
Facilities Management		●				●		
Visitor Use Management		●				●		
Concession Management		●				●		
Road Maintenance		●				●		
Trail Maintenance		●				●		
Review	●				●			●
Mineral Ownership	●	●			●			●
Public Relations	●	●	●		●	●	●	●
<b>GAME/FISHERIES MANAGEMENT</b>								
Administration	●	■	●	■	●	■	●	■
Planning		■	●	■		■	●	■
Research/Monitoring		■	●	■		■	●	■
Funding		■	●	■		■	●	■
Land Leasing		■	●	■		■	●	■
Interpretation	●	■	●	■	●	■	●	■
Wardenship/Security	●	■	●	■	●	■	●	■
Mitigation	●	■	●	■	●	■	●	■
Road Maintenance		■	●	■		■	●	■
Trail Maintenance		■	●	■		■	●	■
Review	●	■	●	■	●	■	●	■
Land Ownership	●	■	●	■	●	■	●	■
Public Relations	●	●	●	■	●	●	●	■



Charts 2A and 2B show the management functions arrayed with the alternatives and the agencies which would be involved. It represents the synthesis of both the agency meeting and the workshop. The pattern which stands out on this chart is that NPS presence changes across the range. There is no NPS involvement in Alternative 1, a modest amount in Alternative 2, which increases in shared proportions with the DPR in Alternative 3 and finally a very large role for NPS in Alternative 4.

It was decided that each of the alternatives would be identical in certain aspects: The dam and reservoir management and game and fishing areas management would not change from what is planned today. This is demonstrated by the gray-toned areas on each chart. This left the major focus of the management alternatives analysis to be the recreation and park lands, namely the Vandalia Bay and Roanoke Bay areas (see Management Areas map).

The consensus of all three sub-groups at the workshop was that Alternative 4 (formally numbered "three"), the Federally administered National Recreation Area was the highest priority. The Citizens Committee was clearly in favor of a large role for NPS. Alternative 3, was second and Alternative 2 was third. The idea of a coordination committee (see Elements Common Among Alternatives below) was introduced for the first time at this workshop. It received many favorable comments.

Local residents raised questions about how limiting an influence over recreation activities the NPS might be if they assumed management of the area. There can be no complete answer to this question without developing an NPS General Management Plan, but in general existing NPS policies suggest that management would be more resource-oriented than current recreation plans. NPS areas do not generally include many of the commercial recreation uses that have been planned or proposed such as horse and dog racing, certain recreational and all-terrain vehicle activities, competitive sports, target range development and other types of intensive commercial use.

## ELEMENTS COMMON AMONG ALTERNATIVES

Certain elements within the management alternatives do not vary. These elements are identified here and stand in common among two or more of the alternatives.

### Boundary

The Federal Government holds title to the entire Stonewall Jackson Lake project area. The present boundary is sufficient to meet the project objectives and there has been no indication that further land acquisition would be needed.

### Ownership/Leasing

Under the four alternatives the ACOE would retain land jurisdiction for the dam area, the reservoir and all game lands. Park lands would be owned by the Federal Government and administered by Corps in three of the alternatives, with NPS having jurisdiction over the park lands in Alternative Four.

The West Virginia DWR and DPR would lease their lands from the Corps in the first three alternatives. Jurisdiction would be transferred from the ACOE to NPS on lands which NPS would manage. In the fourth alternative game lands would be leased from the ACOE and park lands would be leased from the NPS. The Corps

leases the land to the State at no cost. Therefore, no further land acquisition or leasing costs would be incurred.

### Recognition

The title of "Stonewall Jackson Lake Public Recreation Area" is suggested for Alternatives 1, 2 and 3 and "National Recreation Area" for Alternative 4. Either title, applying to the entire site, would help promote the area and assist it in becoming more identifiable for tourism.

### Mineral Ownership

Before the DPR can enter into a leasing agreement and become managers of the park lands, private mineral ownership and mineral rights must be extinguished. To meet this requirement the Corps has acquired coal and mineral rights. The estimated cost to acquire gas and oil rights within the park lands is in the range of one-half to eight million dollars. Currently the ACOE owns all mineral rights (including coal), except those of gas and oil.

### West Fork Dam Area Management

Under all four alternatives the ACOE would remain responsible for dam and the lake itself. These responsibilities include

maintaining the dam, controlling and regulating the water level and flow, and managing the lands immediately adjacent to the dam.

#### Public Hunting and Fishing Area Management

Elements common to all of the management alternatives include the continuation of game land management by the DWR and at least the same level of hunting, fishing and trapping opportunities as currently exists. At the present time, the DWR is conducting many ongoing wildlife management programs, making this area one of West Virginia's most heavily used public hunting and fishing areas. The DWR is concerned that a change in designation could result in a reduction of overall hunting, fishing and trapping opportunities if these activities were not given a high priority.

#### Park Area Management

The ACOE is progressing with the planning, development and construction of recreation area facilities as outlined in the project Master Plan in conjunction with the State of West Virginia DPR. Initial development consists of all facilities necessary to meet the primary recreation need. Future development will be implemented as funding allows and as recreation demand is demonstrated.

Financial responsibility for recreation area facilities involves a cost sharing partnership between the ACOE and the State for day use, overnight, and public access facilities and 100% State funding for additional revenue producing facilities, such as a marina, a lodge and cottages. Contract proposals, negotiations and construction agreements are currently underway for the first phase of cost-shared facilities at Roanoke Bay. The State will soon be soliciting bids for the first phase of the 100% State funded recreation facilities. Prior to public use of the recreation area, the first phase of both the cost-shared and the 100% State-funded facilities are scheduled to be completed.

Revenue and Cost Projections

At the request of the National Park Service the DPR provided annual revenue projections for the State Park facilities and operations at Stonewall Jackson State Park. They are (in 1987 dollars):

Entrance fees	\$349,550
Lodge room rentals	68,440
Cottage rentals	13,690
Marina rentals/concessions	34,080
Campsite rentals	<u>249,660</u>
TOTAL	\$715,420

The total annual costs to operate the park are estimated at \$1,405,985. This is based on labor costs assumed to be \$991,270 per year and operations and maintenance costs assumed to be \$337,960 per year, plus the cost of equipment renewal estimated at \$76,755 per year. The \$715,420 in revenue would thus contribute to just over 50 percent of the needed funds for operation.

## MANAGEMENT ALTERNATIVE 1:

### Management Objective

To provide a wide variety of recreation programs and facilities that will assure the best possible, sustained public utilization of resources through existing ownership and State management.

### Description

This alternative reflects the current plans for the site as detailed in the ACOE Master Plan. Under this alternative the ACOE would have jurisdiction over the entire site and would manage all dam and reservoir operations. The West Virginia DWR would manage all game lands and the DPR would manage all park lands. The site would thus be divided into three cooperating management sectors: the dam and reservoir; the wildlife, game and fishing areas and the State Park areas.

### Recognition and Site Allocation

The ACOE operates and manages the West Fork Dam, the area adjacent to the dam and the lake itself, DWR operates and manages the Stonewall Jackson Lake Public Hunting and Fishing Area and DPR manages the State Park lands at Roanoke Bay and Vandalia Bay.

### Land Uses

Within the park land areas, uses would include both active and passive land- and water-based recreation, preservation, interpretation and development. Some of these lands are currently being developed for camping, picnicking, lodging, horseback riding, swimming, boating facilities and marinas, theaters and maintenance and administrative buildings.

### Cost and Funding

All land in the project area is currently owned by the Federal government and administered by the ACOE. No additional lands are needed under this alternative. The Corps leases the land to the State at no cost. Therefore, no further land acquisition or leasing costs will be incurred. All costs associated with this alternative will be related to operations and maintenance by the ACOE and the two State agencies. In addition, the State of West Virginia is under contract with the ACOE to meet 50% of the cost of construction of initial facilities. The total cost is over \$36 million and, with interest, the payments by the State to the Corps will be approximately \$1 million per year for fifty years beginning after 1990.

Costs for this alternative are based on the current Master Plan. That plan, however, was prepared in 1982. Costs have increased since 1982 by 19 percent nationwide due to inflation. Therefore the figures were adjusted using the 19 percent rate. For example the initial cost of equipment in 1982 dollars was \$645,000; in 1987 dollars this becomes \$767,550. Labor costs for the first year in 1987 dollars are \$991,270. Operations and maintenance costs are \$337,960. Adding these figures ( $\$767,550 + \$991,270 + \$337,960$ ) total start-up costs to DRP would be \$2,096,780 in 1987 dollars. The Governor has reiterated the desire meet the State's financial obligations under contract with the Corps of Engineers.

To determine annual costs to operate the park, labor costs are assumed to be \$991,270 per year and operations and maintenance costs are assumed to be \$337,960 per year. Using a standard 10% depreciation, the cost of equipment renewal would be \$767,550 every ten years, or \$76,755 per year (not accounting for increasing costs over 10 years). Adding these figures together ( $\$337,960 + \$991,270 + \$76,755$ ), the annual costs are estimated at \$1,405,985.

## MANAGEMENT ALTERNATIVE 2:

### Management Objective

To promote a broader regional tourism strategy for the Stonewall Jackson Lake area through additional Federal technical assistance and accelerated funding for development.

### Description

Under this alternative the ACOE would continue to have jurisdiction over the entire site and would manage all dam and reservoir operations. The West Virginia DWR would manage all game lands and the DPR would manage all park lands. In order to accelerate the project's development by these agencies, increased funding will be necessary. As an option within this alternative a coordinating authority or commission could be appointed which would focus on tourism and the area beyond the Stonewall Jackson Lake site. The NPS would provide technical assistance and help with coordination to this body if funds were available.

### Recognition

The entire site would be entitled the Stonewall Jackson Lake Public Recreation Area. The dam area, the reservoir and all game

lands would be managed as they are now and consistent with the existing plan.

#### Site Allocation

The ACOE would manage the site immediately adjacent to the dam and the lake itself. The DWR would manage and operate the hunting and fishing Area. And the DPR would manage and operate the recreation areas at Roanoke Bay and Vandalia Bay.

#### Management Responsibilities and Functions

Dam and water level management and game land/fisheries management would not change from present arrangements under this alternative. That is, the ACOE would maintain control of reservoir operations and the DWR would continue to manage all game lands and fisheries. As for the park land the responsibilities would lie in the hands of the DPR, with accelerated financial assistance for facility development.

If an authority or commission were established, such a group could take on the role of oversight of planning and development. It could serve to coordinate activities in and around the overall site. The level of assistance possible from this group would depend on the legislative authorization, staffing and funding. It could be designed to receive, distribute and use

Federal, State and private funds. This group could provide a higher level of coordination than any one of the government agencies thus far involved by linking the Stonewall Jackson Lake site with related attractions, events and activities throughout the North Central West Virginia region. It could work with promotional efforts, marketing, economic development and tourism in a comprehensive strategy.

The NPS would provide technical assistance to the coordinating group. The amount and type of specific areas of technical assistance could include expert consultation for design, planning and development, historic preservation, research projects and visitor monitoring programs, review of action plans and other documents which direct operations on the site, assistance to the site's interpretive program and interpretive training, the promotion of the site through publication of information materials and by consulting in a marketing plan, and/or coordinating local input to the decision-making process.

Administration, research and monitoring, funding, leasing of land, interpretation, recreation management, facilities and concession management and trail maintenance would be primarily the concern of DPR. As mentioned ACOE would continue to have jurisdiction over all park land. The DPR and the ACOE would be involved in planning and design, construction, road maintenance and review of projects. The functions which would include the

ACOE and the two State agencies participation in relation to park land are security, visitor safety and public relations.

#### Land Uses

Within the park land areas land uses would include both active and passive recreation, preservation, interpretation and development. Some of these lands are currently being developed for camping, picnicking, lodging, horseback riding, swimming, boating facilities and marinas, theaters, maintenance and administration buildings.

#### Cost and Funding

All land in the project area is currently owned by the Federal government and under the jurisdiction of the ACOE. No additional lands are needed under this alternative. The Corps leases the land to the State at no cost. Therefore, no further land acquisition or leasing costs will be incurred. All costs associated with this alternative would be related to accelerated development funding, costs associated with the committee, and costs of technical assistance from the NPS. The State of West Virginia is under contract with the ACOE to meet 50% of the cost of construction of initial facilities, however, accelerated funds could be provided to help offset these costs. The total cost is over \$36 million and with interest the payments by the State to

the Corps will be approximately \$1 million per year beginning in 1990.

The National Park Service would provide technical assistance to the committee for planning, research, monitoring, interpretation and public relations related to the tourism strategy. Other technical assistance could be provided for security, visitor safety and resource protection. NPS planning assistance to the committee is estimated to cost \$250,000 over a two-year period.

## MANAGEMENT ALTERNATIVE 3:

### Management Objective

To provide State and Federal recreation programs and facilities through a cooperative management structure among State and Federal agencies.

### Description

Under this alternative the ACOE would continue to have jurisdiction over the entire site and would manage all dam and reservoir operations. The West Virginia DWR would manage all game lands. Management of the park lands would be divided among the West Virginia DPR and the NPS. The site would thus be divided into four cooperating management sectors: the dam and reservoir; the wildlife, game and fishing areas; the State Park areas; and the NPS management areas.

### Recognition

All park lands would be entitled Stonewall Jackson Lake Public Recreation Area. The dam area, the reservoir and all game lands would be managed consistent with the existing plan.

### Site Allocation

The ACOE would manage the site immediately adjacent to the dam and the lake itself. The DWR would remain in place as they are, operating and managing all lands not identified as the dam area or park land (namely, the Vandalia Bay and Roanoke Bay areas) in the existing Master Plan. DPR and NPS would divide management of the park lands in the Vandalia Bay and Roanoke Bay areas in keeping with the interests and policies of each agency. This division of land would be negotiated at a later date based on further planning and analysis by NPS.

#### Management Responsibilities and Functions

Dam and water level management and game land and fisheries management would not change from present arrangements under this alternative. That is, the ACOE would maintain control of reservoir operations and the DWR would continue to manage all game lands and fisheries. As for the park land the key responsibilities would lie in the hands of DPR and NPS.

Administration, research and monitoring, funding, leasing of land, recreation management, facilities and concession management and trail maintenance would be primarily the concern of DPR and NPS. As mentioned ACOE would continue to have jurisdiction over all park land. With the other two agencies ACOE, would be involved in planning and design, construction, road maintenance and review of projects. The functions which would include all

four agencies participation in relation to park land are interpretation, security, visitor safety and public relations.

### Land Uses

Within the park land areas land uses would include both active and passive recreation, preservation, interpretation and development. Some of these lands are currently being developed for camping, picnicking, lodging, horseback riding, swimming, boating facilities and marinas, theaters and maintenance and administration buildings. With the NPS on-site, resource preservation and interpretation would become a stronger priority on the park lands. Special attention would be given to protecting natural and scenic resources in designated areas. Trails and visitor interpretive facilities could be constructed and maintained.

### Cost and Funding

No further land acquisition or leasing costs would be incurred. All costs associated with this alternative would be related to operations and maintenance by the two State agencies and the NPS. It is not possible to determine an estimate of costs or an exact division of land or management roles between the DPR and the NPS since this would require further negotiation and the development of a general management plan for NPS.

## MANAGEMENT ALTERNATIVE 4:

### Management Objective

To provide State and Federal recreation programs and facilities through Federal ownership with a maximum level of Federal management.

### Description

Under this alternative the ACOE would continue to have jurisdiction over the dam, reservoir and game lands. The game lands would be managed by the West Virginia DWR. The NPS would have jurisdiction over the park lands. Management of the park lands would be divided between the West Virginia DPR and the NPS. The site would thus be divided into two jurisdiction sectors: 1) the reservoir area plus the game lands; and 2) the park areas. Management would be divided into four sectors: 1) the dam and reservoir; 2) the wildlife, game and fishing areas; 3) the State park areas; 4) and the national management areas.

### Recognition

All lands, including the dam area, game lands and park lands would be designated a National Recreation Area.

### Site Allocation

The ACOE would manage the site immediately adjacent to the dam and the lake itself. DWR would remain in place as they are, operating and managing all lands except the dam area or park land (the Vandalia Bay and Roanoke Bay areas). DPR and NPS would divide management of the park lands in the Vandalia Bay and Roanoke Bay areas in keeping with the interests and policies of each agency. This division of land would be negotiated at a later date based on further planning and analysis by the NPS.

### Management Responsibilities and Functions

Dam and water level management and game land and fisheries management would not change from present arrangements under this alternative. As for the park land the first responsibility would lie in the hands of the NPS. Secondary responsibility would belong to DPR.

### Land Uses

With NPS jurisdiction a general management plan would be prepared, emphasizing resource preservation and interpretation as a stronger priority. Special attention would be given to protecting natural and scenic resources in designated areas.

### Cost and Funding

It is not possible to determine an exact division of management roles between the DPR and the NPS since this would require further negotiation and the development of a general management plan for the area by the NPS.

## COORDINATION COMMITTEE

As part of any one of the four alternatives, a citizens committee could be established in the interest of coordination, consistency and oversight. Such a committee could be established to include participation from the Department of the Interior, NPS, the Department of the Army, Corps of Engineers, the West Virginia Department of Commerce, DPR, the West Virginia Department of Natural Resources, DWR, local governments and private citizens representatives. The government agencies could serve as ex-officio/technical members of the committee and provide staff and technical help. An important element of the citizens committee's purpose would be to provide and assure local input to the decision-making process.

A more formal group, such as a Federally or State legislated commission or authority, could assume as its role the oversight of all planning and development within and around the Public Recreation Area. Depending on the level of authorization, staffing and funding, the group could receive, distribute and use Federal, State and private funds. The group could review action plans and other documents which direct action and operations on the site. The more formal group would be appropriate only under Alternative 2.

The committee could monitor the progress of implementation of the plans and periodically report to Congress and the Governor's Office. It could help obtain financing to carry out the planning and construction of facilities. It could promote the site through publication of information materials and by preparing a marketing plan. The group could, in addition to this, schedule or sponsor activities at the site, such as craft shows, sporting events, etc. that would draw visitors to the area. It could also link the site with related attractions, events and activities throughout the region. It could bring the many diverse resources in North Central West Virginia under one umbrella for purposes of interpretation, economic development and tourism.

National Park Service participation in this group could be in two areas: membership and helping with technical assistance. The NPS would appoint a representative to attend meetings, providing liaison with the Regional and Washington offices. Technical assistance would be provided in such areas as planning, research, monitoring, interpretation, visitor services and safety, security and promotion.

## ENVIRONMENTAL CONSEQUENCES

Regardless of the alternative which may be selected, compliance with the National Environmental Policy Act will have to be obtained for any Federal actions affecting the environment within the Stonewall Jackson Lake area. The U.S. Army Corps of Engineers has prepared environmental documents which assess the impacts of existing plans for the area.

## COMMUNITY INVOLVEMENT

Throughout the project the NPS has striven for open communication with the public and with agencies and organizations having an interest in the area. The objectives in this were to share information and ideas, to make contact with knowledgeable individuals, to gain advice from the community and to work cooperatively in developing data and alternatives. The principle means of contact with local interests was through the Stonewall Jackson Lake Citizens Committee.

Techniques which were used in the community involvement effort included development of a broad mailing list, holding public meetings, scheduling meetings with cooperating agencies, participating in press interviews and press coverage, preparing and distributing project newsletters, conducting a management alternatives workshop and involving local citizens in the review of this report.

Five meetings were scheduled in Weston, West Virginia under Citizens Committee sponsorship: 1) At the end of August the project team introduced itself to the committee; the purposes and goals of the project were presented and issues and concerns of the community were discussed; 2) At the beginning of October the group met to discuss the resource assessment, to identify important resources in the area and to identify contacts for

resource information and for the project mailing list; 3) In November the public meeting was devoted to presentation and discussion of the work that the DPR and the DWR have been involved with on the site; progress on the study was reported to the group and a list of all major NPS themes was distributed for consideration; 4) In December the project team conducted a workshop with the Citizens Committee and members of the public to discuss and develop alternatives for management of the recreation area; 5) the final meeting with the Committee will be held to receive comments on this draft report in the Spring of 1988.

During the first committee meeting, on August 28, Senator Rockefeller, Delegate Conley and Charlotte Snead, Chairperson of the Citizens Committee, expressed their support for the development of a National Recreation Area with NPS involvement. The project team explained the way that the study would be conducted and asked for the help of the Committee gathering information and making contact with people in the community. Questions were answered about the various designations within the National Park System and a history and description of national recreation areas was presented. Also at this meeting the four criteria for determining national significance were explained (see Resource Description and Analysis). The remainder of the meeting was use to develop a listing of issues and concerns relevant to the community and to the site (see Public Concerns).

A newsletter was mailed out after the meeting to report on the results.

The second public meeting was held on October 1 and it was announced by Senator Rockefeller's staff that legislation was being introduced in the U.S. Congress to designate Stonewall Jackson Lake a National Recreation Area. The National Park Service team reported on a fact-finding meeting with the Army Corps of Engineers. In workshop style the members of the Committee listed many natural, cultural and recreational resources of the area and provided names of individuals who would be knowledgeable about these resources. A second newsletter followed this meeting.

On November 4 the third public meeting took place. It was devoted primarily to updating members of the Citizens Committee, the public and the press about ongoing plans and developments on the Stonewall Jackson Lake site. Charles Spears, Director of the West Virginia DPR, spoke of ongoing planning and construction of recreation facilities, including the camping, picnicking, marina services, horseback riding, multipurpose recreation facilities and administrative/ theater area. The division will manage these facilities as soon as the Corps of Engineers completes construction.

Bob Miles, Director of the West Virginia DWR, reported that his division currently manages all of the Stonewall Jackson Lake project area as a public hunting and fishing area as part of the Master Plan drawn up by the Corps of Engineers. Mr. Miles expressed concern that the current movement to establish a National Recreation Area could result in a reduction of overall hunting, fishing and trapping if these activities were not given a high priority. A newsletter was again sent out to all on the mailing list to report on this meeting.

The fourth public meeting, on December 9, took the form of a workshop to develop management alternatives. A progress report on the resource assessment was presented first. Then the group set to work. A range of alternatives (4 in all), going from no NPS involvement at all to a maximum level of involvement, were developed by the group. Charts with lists of management roles and functions were supplied for each participant.

The group was divided into three sub-groups to identify and recommend which agency should fill each management function in the various alternatives. Each sub-group was asked to discuss the alternatives themselves and suggest any modifications they felt were needed. They were then to set priorities on the alternatives. At the end of an hour the groups reconvened and reported their work. The results were similar from each group and the consensus was strong that alternative four (at that time

it was numbered "three"), with maximum NPS involvement, was the favorite (see Management Alternatives section of this report.)

During the course of the project other meetings were held with the government agencies already working at Stonewall Jackson Lake. In September the NPS team met with representatives of the ACOE in Pittsburgh to gather background information on the project and the Master Plan. At this meeting the first ideas for management alternatives were formulated. The positions of both agencies were explored and a broad range of options was discussed. This led to the decision to hold other meetings among the government agencies to discuss the alternatives for management.

In October the project team met with representatives of the West Virginia DPR and Wildlife Resources in Charleston. Again the meeting was a fact-finding opportunity. The team learned that the State was eager to participate in the project and to continue its role in managing both recreation facilities and wildlife areas. During this meeting Governor Arch Moore requested that the group move to his office for further discussion. The Governor reiterated that the State is prepared to meet its financial obligation, incurred under a contract with the Corps of Engineers. He directed the State officials to move ahead enthusiastically with the existing plans. It was decided that it would be good for the State agencies to meet with the Citizens

Committee and present the status of State involvement on the site to date.

In November, the day after the next public meeting, the project team met with leaders of the two State agencies and the Corps of Engineers. The purpose of this session, as announced at the public meeting, was to frame out a set of alternatives which could then be presented back to the Citizens Committee in December. The exercise, used later in the alternatives workshop, was employed at this meeting. Three alternatives were portrayed on a chart with agencies identified and management functions listed. The chart was filled out during a discussion of the potential roles each agency might perform. The information generated here was presented at the alternatives workshop one month later and formed a basis for outlining the alternatives reported in this document.

This open community involvement approach has been intended to demonstrate what the study process is, to inform citizens of steps in the process in a timely fashion and to elicit support and advice from the community. It has been designed to motivate continuing involvement by citizens in the development of their recreation area. Involvement can help to ensure that the overall experience is a positive and successful one for many generations, for residents and visitors alike.

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